

Multi-business Firms' Corporate Renewal Decisions: Divestiture Governance Mode Choice of Corporate Spin-Offs and Equity Carve-Outs

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ABSTRACT

The primary functions of corporate headquarters in multi-business firms are for entrepreneurial value creation and administrative loss prevention. A prominent way in which firms can renew their resources and capabilities is through divestitures. While the positive effects of divestitures on parent companies are well documented, we know relatively less about the comparative assessment of different divestiture governance modes. To address this research gap, we focus on a comparative assessment of two divestiture governance modes — corporate spin-offs and equity carve-outs — and examine under what conditions each divestiture governance mode is more likely to benefit the parent company. Five divestiture corporate goals are identified: address business unit underperformance, recover from corporate parent funding deficit, reduce liability risk, parent company's managerial refocus, and respond to third-parties' interactions. We also explore two boundary conditions that influence the corporate parent's divestiture governance

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mode choice, namely potential economic holdup problems between the parent company and the divested business unit, and uncertainty in divested business unit performance. We organize these managerial goals and boundary conditions within four transaction cost economics and real options themes, i.e., adaptability, contract law, incentive intensity, and intertemporal spillovers to explain and predict corporate parents' divestiture governance mode choice, and suggest research opportunities to further join transaction cost economics and real options theory for explaining corporate strategy more generally, and the parent company's divestiture governance mode choice of corporate spin-offs and equity carve-outs, in particular.

Keywords: Corporate strategy, organization and strategy

Introduction

A fundamental focus within the strategic management field concerns adaptation of the multi-business firm (Bowman and Helfat, 2001; Chakravarthy and Doz, 1992; Rumelt *et al.*, 1994).¹ The primary functions of corporate headquarters in multi-business firms are both for entrepreneurial value creation and for administrative loss prevention (Birkinshaw and Lingblad, 2005; Chandler, 1991; Williamson, 1975). Multi-business firms' adaptation and renewal of corporate resources often create value by substantially enhancing innovation and corporate competitiveness (Helfat *et al.*, 2009; Karim and Capron, 2016; Teece, 2007). A prominent way in which corporations can renew their resources and capabilities is through divestitures (Berry, 2010; Capron *et al.*, 2001; Feldman and Sakhartov, 2021). Divestitures, which are the complete or partial separation of a business unit, subsidiary, or division by a parent company, have gained relevance as a reconfiguration strategy that can create economic value for multi-business firms (Feldman, 2016b,c; Karim and Capron, 2016; Lee and Madhavan, 2010). The extant literature provides considerable evidence that parent companies often gain economically from corporate divestitures by refocusing managerial capabilities (Bergh and

¹Key contributions in the strategic management field include: Ackoff (1970), Andrews (1971), Ansoff (1965), Bogue and Buffa (1986), Bower (1970), Chandler (1962, 1977, 1990), Collis and Montgomery (1997), Goold *et al.* (1994), Haspeslagh and Jemison (1991), Hoskisson and Hitt (1994), Learned *et al.* (1965), Mintzberg (1994), Penrose (1959), Porter (1987), Rumelt (1974), and Salter and Weinhold (1979). See also, Drnevich *et al.* (2020), and Feldman (2020).

Lim, 2008; Chang, 1996), redeploying resources to higher growth areas (Kaul, 2012; Sirmon *et al.*, 2011), and reconfiguring resources to tap into innovative opportunities (Capron *et al.*, 2001; Karim, 2009). While the positive effects of divestitures on parent companies are well documented, we know relatively less about the comparative assessment of divestiture governance mode choice.

To address this research gap in the extant literature, we focus on a comparative assessment of two divestiture governance modes — corporate spin-offs and equity carve-outs — and examine under what conditions each divestiture governance mode choice is more likely to be a greater net benefit to the parent company. A governance mode is an organizational framework within which transactions are negotiated, decided, and executed to realize mutual gains (Williamson, 1996, p. 12), and therefore can directly and significantly affect a firm's sustainable competitive advantage (Castañer *et al.*, 2014; Leiblein, 2003; Villalonga and McGahan, 2005). The scope of the current study considers the choice between two divestiture governance modes, corporate spin-offs and equity carve-outs, in the context of the US market and regulations.² Corporate spin-offs and equity carve-outs are divestitures of existing business units that are driven by the parent company's strategic choice to disengage a business voluntarily.³ Our two focal divestiture governance modes also result, post-divestiture, in the creation of separate companies, i.e., the parent and the divested business unit as separate companies. Corporate spin-offs and equity carve-outs are different from sell-off divestitures because they are not acquired by another parent company, and thus there are no matching processes or information asymmetries between sellers and buyers (as there would be with business unit sell-offs). Figure 1 graphically represents the positioning of corporate spin-offs and equity carve-outs within the larger map of the extant research literature on divestiture governance modes.⁴ These two focal divestiture governance modes embody the parent company's strategic choice to divest, and the reduction of information asymmetries by transferring the divested business unit to the capital market as a separate company (Bergh *et al.*, 2008). For the analytical purpose of this study, we therefore focus our inquiry on the *comparative assessment of imperfect*

²Institutional details and regulations for divestitures and divestiture governance modes vary across different countries. For a description and analysis concerning patterns of foreign divestiture activity, see Berry (2010) and McDermott (2010).

³For example, we exclude divestitures that are the result of antitrust enforcement, or employees that depart the parent company to fund a new business without the parent company's consent (e.g., spin-outs).

⁴Note that Figure 1 also suggests that divestiture decisions can be nonlinear. For example, companies divesting their business units can choose a divestiture governance mode depending on the divested business unit's available information and the number of potential buyers, and this information can provide feedback to inform the divestiture decision process.

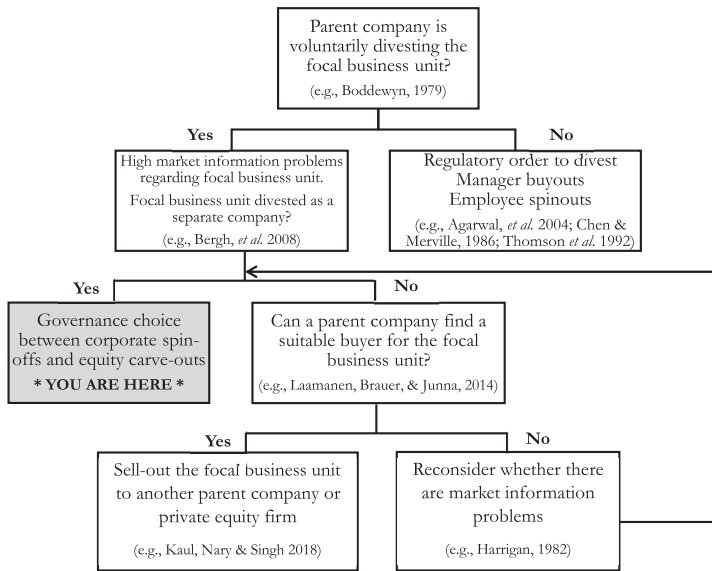


Figure 1: Positioning of corporate spin-offs and equity carve-outs within the larger map of the divestiture research literature.

governance alternatives (Williamson, 1985) of corporate spin-offs vis-à-vis equity carve-outs.⁵

Ownership differs between corporate spin-offs and equity carve-outs (Alchian and Demsetz, 1972; Grossman and Hart, 1986). Specifically, a corporate spin-off is the divestiture of a business unit where the parent

⁵These two focal divestiture governance modes are different from asset disbandment, e.g., when a parent company dissolves or sells the assets of a business unit, in the sense that the divested unit’s business remains as an ongoing business concern, i.e., actively conducting trade or business. Corporate spin-offs and equity carve-outs are also different from other divestiture governance modes, which are beyond the scope of this study. Particularly, spin-outs, university spin-offs, buy-outs, and sell-offs are well-known divestiture governance modes. A spin-out occurs when a parent company is unwilling or unable to support an entrepreneurial initiative that emerges from knowledge generated within the corporation, and a new venture is created by employees (Agarwal *et al.*, 2004). Additionally, university spin-offs result from inventions within universities that are far from commercialization and are spawned as start-ups by academics and external investors (Lockett *et al.*, 2005). A buy-out takes place when a group of investors, which often includes managers of the focal company and/or business unit, buys a business unit (Thompson *et al.*, 1992). Sell-offs occur when parent companies sell a business unit to a buying company (e.g., another corporation or a financial acquirer like a private equity firm), through a private sale or a public auction (where multiple bidders can participate) (Hege *et al.*, 2018). Thus, sell-offs add an additional layer of consideration where the divested business unit needs to have more value to other firms than to its parent company (Mankins *et al.*, 2008). See Moschieri and Mair (2013) for further details on different divestiture transactions.

company distributes its shares in the unit pro-rata to its current shareholders (Gordon *et al.*, 1984; Rosenfeld, 1984). The IRS rules (IRC, section 355) allow corporate spin-offs to be tax-free when parent companies retain no practical control over its divested business unit (i.e., when it retains no interest, or a minority interest ranging from 0% to 20%). Whereas an equity carve-out is the divestiture of a business unit in which the parent company typically holds controlling interest after the divestiture, and sells the remaining stock in an initial public offering (Frank and Harden, 2001; Schipper and Smith, 1986). For both corporate spin-offs and equity carve-outs, corporate parents establish a new separate company, and issue independent traded common stock to represent direct claims over the divested business unit.

The current study reviews divestiture research on corporate spin-offs and equity carve-outs, and highlights conditions under which such spin-offs and carve-outs are more likely to benefit the parent company. From an examination of the extant research literature, five broad divestiture goals are identified.⁶

⁶This study's list of goals for divestiture is not meant to be exhaustive (see, e.g., Weston, 1989). However, we explain here why we exclude a sixth major goal of parent companies, namely, to correct incentive mis-alignments among managers, shareholders, and the board of directors through divestitures (Moschieri and Mair, 2008). Because an increase in managerial incentive alignment will not significantly impact the likelihood that a parent company will choose a corporate spin-off vis-à-vis an equity carve-out, it is not included in our list of propositions. Previous theoretical work suggests that corporate spin-offs and equity carve-outs represent an increase in the information production by institutional investors and an increase in analyst coverage of divested business units (Chemmanur and Liu, 2011). Because multi-business firms face difficulties in establishing common monitoring and incentive mechanisms, divestitures can facilitate independent implementation of improved incentives (Donaldson, 1990; Walsh and Seward, 1990). Before a divestiture the corporate parent's and business unit's managers' incentives are often ascribed to stock market performance of the entire parent company. For parent managers this incentive structure may not be aligned with the time and attention needed to allocate among each individual business unit (Holmstrom and Milgrom, 1991; Makadok and Coff, 2009), and for unit managers this incentive structure may not be aligned with their own business unit's performance (Aron, 1991). Therefore, parent companies may use divestitures to reset the incentive structure of the corporate parent's and business unit's managers. For example, parent companies with inferior control systems to monitor high levels of diversity are more likely to engage in divestitures (Bergh, 1997) because divestitures can align the unit manager's incentives with their own business performance. Particularly, divestitures that separate a business unit into a new company (i.e., corporate spin-offs and equity carve-outs) allow the focal unit to trade publicly, facilitating alignment of business unit managers' incentives and performance (Seward and Walsh, 1996). Consequently, the stock value of these divested business units is a cleaner signal of managerial productivity (Aron, 1991). This lower ambiguity is important for diversified, multi-business, parent companies where social comparison-cost (among different unit managers) can reduce their productivity (Nickerson and Zenger, 2008). Therefore, parent companies in which pay inequality among business unit managers is high, are more likely to engage in divestitures (Feldman *et al.*, 2018). Empirical evidence supports ex-post divestiture adoption of incentive compensation plans based on a business unit's performance for corporate spin-offs (Dahlstrand, 1997; Feldman, 2016c; Seward and Walsh, 1996) and equity carve-outs (Powers, 2003; Schipper and Smith, 1986). This adoption suggests that compensation alignment at the business-unit level can be substantially improved through both divestiture governance modes.

Often, these corporate goals do not surface in isolation and can arise simultaneously. The first corporate parent goal is to address the economic underperformance of a divested business unit in which the parent company considers divestiture governance mode alternatives and their consequences for the corporate parent. To address effectively such economic underperformance, it is often better for parent companies to divest the business unit using a corporate spin-off. The second corporate parent goal is to recover from a funding deficit, by monetizing its investment in the divested business unit, in which case, only equity carve-outs enable parent companies to raise money. The third corporate parent goal is to reduce liability risks at the divested business unit level, in which case corporate spin-offs may be the preferred divestiture governance mode. The fourth corporate parent goal is to refocus its managers' time and attention. Here, the parent company will likely find that a complete separation of the divested business unit via a corporate spin-off more effectively refocuses corporate parent managers. Finally, the fifth parent company goal we consider is the corporate parent's response to third parties' pressures to divest a business unit. A corporate divestiture may be motivated by business partners who do not want to do business with the corporate parent while it holds a controlling position in a business unit. These conflicts and interactions with other business units can be resolved when the parent company cuts all ties with the divested business unit, e.g., through a corporate spin-off.

In addition to the five goals highlighted above, this study considers potential boundary conditions for the strategic choice of alternative divestiture governance modes. We identify two boundary conditions, namely, (a) potential economic holdup problems between the corporate parent and the divested business unit; and (b) the level of uncertainty concerning divested business unit economic performance. Focusing on tensions and opportunities for the parent company, we develop theory and provide propositions as to when corporate parents are more likely to benefit from corporate spin-offs vis-à-vis equity carve-outs. We organize these managerial goals and boundary conditions within four transaction cost economics themes, i.e., adaptability, contract law, incentive intensity, and inter-temporal spillovers (Williamson, 1996). This approach informs us concerning a managers's strategic choice of a divestiture governance mode that creates a separate company for a divested business unit.

This study seeks to contribute to the extant literature in the strategic management field by joining transaction cost economics and real options theory to explain and predict governance mode choice for implementing a divestiture strategy, as well as to analyze divestiture boundary conditions. The following section provides a comparative assessment of the two focal divestiture governance modes, corporate spin-offs and equity carve-outs. Then, we provide seven propositions, based on five strategic parent company goals of divestitures and two contingencies (boundary conditions), to predict the strategic choice between alternative divestiture governance modes following transaction cost

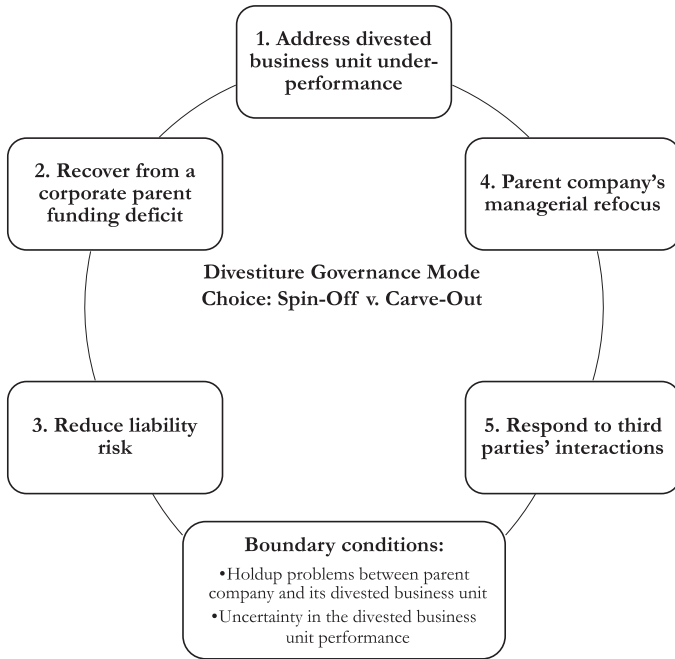


Figure 2: Summary of divestiture goals and boundary conditions.

and real options logic (see Figure 2). Figure 2 presents the managerial goals that, we propose, explain the governance choice between corporate spin-offs and equity carve-outs. This figure also constitutes an examination of the mechanisms present in the governance mode decision for the shaded box in Figure 1. We then provide conclusions and offer suggestions for future research.

Corporate Spin-Offs and Equity Carve-Outs

Prior research on corporate spin-offs and equity carve-outs document positive market returns for parent companies undergoing these restructurings (Schipper and Smith, 1986; Slovin *et al.*, 1995). These positive market returns are consistent with increased organizational efficiencies, better market information regarding individual economic performance of corporate parents and divested business units, and potentially substantive improvements due to dedicated board of directors and managerial teams for divested business units that are separate from that of the corporate parents (Allen, 2001; Eckbo and Thorburn, 2008; Feldman, 2016c). Divestitures that separate a business unit into a

new company, such as corporate spin-offs and equity carve-outs, can correct information asymmetries among the parent company, its divested business units, and the market (Gilson *et al.*, 2001; Krishnaswami and Subramaniam, 1999; Madura and Nixon, 2002). Although there are similarities among these divestiture governance modes, each governance mode entails different levels of decision control rights (Hart, 1995; Kim and Mahoney, 2005) retained by the corporate parent over divested business unit's assets.

A corporate spin-off is a divestiture governance mode that entails the pro-rata distribution of shares in a business unit to the existing shareholders of the parent company (Gordon *et al.*, 1984; Rosenfeld, 1984) resulting in a formal separation between the newly independent business unit and its former corporate parent. The divested business unit becomes a publicly traded company, with a unique ticker symbol and an independent board of directors. Corporate parents must distribute at least 80% of the business unit votes (pro-rata) to the current parent shareholders and retain "no practical control" of the unit after the divestiture to qualify as a tax-free transaction (Internal Revenue Code (IRC), section 355). This (pro-rata) transaction does not generate any cash income for the parent company and must have a "substantial business purpose."⁷

An equity carve-out is a divestiture governance mode in which the parent company offers to the public a fraction of the shares of a wholly owned business unit (Frank and Harden, 2001; Schipper and Smith, 1986), but retains the decision control rights over such a business unit.⁸ On average, the corporate parent retains a controlling interest of almost 80% of the business unit's shares (Allen and McConnell, 1998). After being divested, equity carve-outs have a separate board of directors and management team from its parent company. Nonetheless, the members of the equity carve-out's board can be, and often are, the same as the corporate parent's board members, and its management team is likely to be appointed by the parent company (Anslinger *et al.*, 1999).⁹ Further, equity carve-outs are frequently a way for parent companies to raise cash from

⁷A corporate spin-off cannot be structured simply as a way to save on income taxes, or as a way to distribute the business unit as a dividend. Similarly, the corporate parent or the business unit cannot be re-acquired within two years after the corporate spin-off transaction, or a substantial tax liability at the parent company level will be due. The divested business unit usually commits contractually to pay any future tax liability of the parent company in case the corporate spin-off is re-acquired within two years.

⁸Typically, this fraction is not greater than 20% for three main reasons: (i) Holding at least 80% of the business unit's shares, the parent company has tax control over its business unit; (ii) it guarantees that dividend transfers from a business unit to the corporate parent are tax-free under Dividends Received Deduction, and (iii) financial statements of the business unit and corporate parent can be consolidated for tax purposes, which is beneficial for the parent company as deconsolidation may result in a tax liability.

⁹For example, NYSE, NASDAQ, and other major markets classify equity carve-outs as "controlled entities," in which requirements on board of directors and executives' independence do not apply.

the divested business unit IPO (Nanda, 1991; Nanda and Narayanan, 1999).¹⁰ The divested business unit and corporate parent can consolidate their financial statements for tax purposes. However, US regulation requires that corporate parent's and equity carve-out's financial reports be presented independently. This regulatory requirement implies that, like corporate spin-offs, there will be an increase in the availability of market information for equity carve-out units and their corporate parents, as well as better opportunities for managerial incentive alignment.

Corporate spin-offs and equity carve-outs can have different governance implications for parent companies. Table 1 provides differences among divestiture transactions, and highlights the focus of the current study within the different governance modes of divestiture transactions. Table 2 focuses on similarities and differences of corporate spin-offs and equity carve-outs. The extent to which parent companies divest ownership stakes in their business units influences the control they have over such units. The legal definition of corporate spin-offs stipulates that parent companies need to divest at least 80% of their business unit, whereas there is no minimum divestment requirement for equity carve-outs. In practice, parent companies divest on average 99.2% of their business unit in corporate spin-offs (Semadeni and Cannella, 2011), and only 20%, on average, in equity carve-outs (Allen and McConnell, 1998). Thus, a spun-off unit will not be conditioned to respond to the parent company's management team as their shareholders, as they must respond within an equity carve-out. Furthermore, the extant research literature has suggested that parent companies often do not grant autonomy to carved-out units (Slovin *et al.*, 1995).

Although transactions among parent companies and divested business units, in both corporate spin-offs and equity carve-outs, are subject to contract and not fiat, contracting costs between a parent company and a divested business unit can be lower in equity carve-outs compared to corporate spin-offs. This difference is often the case because although equity carve-outs are held under different legal firms, the parent company and the divested business unit share the parent company's decision control rights. Thus, parent companies face increased contractual hazards, e.g., economic holdups, when they spun-off a business unit, as compared to when the corporate parent chooses the governance mode of an equity carve-out.

¹⁰When structuring an equity carve-out, the shares offered in the IPO may be sold by the business unit as a primary issue, or by the parent company as a secondary issue. If the business unit is the primary issuer, the parent company can also raise cash by requiring the business unit to issue a debt obligation or dividend payable to the parent company. In both cases, the cash proceedings from the divestiture transaction go to the parent company, which is subject to capital gains taxes.

Table 1: Current study focus within the different governance modes of divestiture transactions.

	Definition	Parent voluntarily divests?	Divested unit is a new publicly-traded stock?	Divested unit is a new stand-alone firm?	Divested unit actively conducted trade or business before divestment?	Divested unit is actively conducting trade or business after divestment?
Corporate spin-off	Pro-rata distribution of (majority) new shares in a business unit to the existing shareholders of the parent company	Yes	Yes	Yes	Yes	Yes
Equity carve-out	Public offering of (minority) new shares in a business unit	Yes	Yes	Yes	Yes	Yes
Asset disbandment	A parent company sells certain assets, property or equipment, to another firm	Yes	No	No	No	No
Sell-off	The parent company sells a business unit to another company (e.g., strategic or financial buyer). Sell-offs of business units involve finding a prospective buyer company. This process can occur through private sales, public auctions, single bidders, and multiple bidders	Yes	No	No	Often yes	Not necessarily
Buy-outs	A group of investors that often includes managers of the parent company or unit buys a business unit	No	Not necessarily	Often yes	Yes	Often yes
Spin-out	A new venture is created (as a start-up) by former employees of a parent firm	Not necessarily	Not necessarily	Yes	Often no	Yes
University spin-off	A new venture is created (as a start-up) by academics and external investors. It often results from the development of innovations within universities	Yes	Not necessarily	Yes	Often yes	Yes

Table 2: Similarities and differences of corporate spin-offs and equity carve-outs.

Attribute	Corporate spin-off	Equity carve-out
<i>Similarities</i>		
Lower market information asymmetries	After a divestiture, corporate parents and business units have more accountability and less market information asymmetries (Madura and Nixon, 2002). The parents' and the units' share price conveys market-based information only on each individual (parent and unit) value	
Improved managerial incentive alignment	After a divestiture, units' and corporate parents' managerial incentives can be aligned with their own individual performance (Feldman, 2016c). Reduced asymmetric information, increased accountability, and more effective external monitoring align incentives better	
Tax liability	Usually, a corporate spin-off is tax-free under IRC Section 355. No taxable gain is recognized by the corporate parent or the parent company's shareholders.	Most equity carve-outs are structured as a primary offering by the unit, with a (taxable) transfer of unit's proceeds to the parent. Post-divestiture, equity carve-outs can be consolidated with their parents for tax purposes (e.g., exemptions, tax credits) if parents own at least 80% of the unit
<i>Differences</i>		
Parent control of the divested unit	<p><i>Lower legal control rights:</i></p> <p>There is a cleaner separation between the parent company and the spin-off. Parent firms must spin-off at least 80% of their business units' shares — in practice, parents divest 99.2% on average. Implications from this divestiture are: (i) corporate parents have no control over divested units, (ii) dividend transfers from units to their parents are not tax-free, and (iii) parents cannot consolidate the divested units' statements for tax purposes</p>	<p><i>Higher legal control rights:</i></p> <p>Parent companies carve-out a minority stake of their business units' shares — 20% on average. Implications from this divestiture are: (i) corporate parents have majority control over divested business units, (ii) dividend payments from these units to their parents are tax-free, (iii) parents can consolidate the divested units' statements; and (iv) a shareholder vote is not required for major transactions (e.g., M&As)</p>

(Continued)

Table 2: (Continued)

Attribute	Corporate spin-off	Equity carve-out
Potential parent-unit contracting costs	<i>Higher contracting costs:</i> Holdup problems between parents and spun-off units are potentially higher as both parties may have different benefit functions	<i>Lower contracting costs:</i> Holdup problems between parents and units are less likely in equity carve-outs because their benefit function is better aligned
Parent’s cash proceedings	<i>No cash proceedings:</i> Legally, parent companies cannot raise cash through corporate spin-offs	<i>Cash proceedings:</i> Corporate parents can raise cash from equity carve-outs’ IPOs and keep those proceedings
Parent’s routines disruptions	<i>Higher routine disruptions:</i> There are more routines disruption for corporate parents and business units	<i>Lower routine disruptions:</i> Less degree of separation, e.g., tax reporting can still be consolidated, is associated with routines being less disrupted
Example	Lucent-AT&T spin-off in 1996 (Lin, 2006)	Motorola carved-out Freescale Semiconductor in 2004 (Thompson, 2014)

Access to the cash proceedings derived from the divested unit, IPO will also be different for corporate spin-offs’ parent companies and equity carve-outs’ parent companies. Whereas spin-offs’ parent companies cannot cash any transaction proceedings, due to tax regulations governing corporate spin-offs, equity carve-outs’ parent companies can benefit from the stock sale on the unit’s IPO. We next consider parent companies’ goals for divestiture that can influence their governance choice.

Parent Companies’ Goals for Divestitures

Divestitures encompass governance decisions that can renew the parent firm’s capabilities. We consider five divestiture goals of corporate parents and the underpinning logic of divestiture governance choice to better achieve each goal: (1) address divested business unit underperformance; (2) recover from corporate parent funding deficit; (3) reduce liability risk; (4) corporate parent management’s refocus; and (5) respond to interactions with third parties. It is important to note that the divestiture governance mode decision also varies with such factors as, (a) potential economic holdup problems between the parent company and the divested business unit; and (b) the level of uncertainty

concerning divested business unit performance, which will be examined as boundary conditions in the subsequent section. We organize these managerial goals and boundary conditions within four transaction cost economics themes, i.e., adaptability, contract law, incentive intensity, and inter-temporal spillovers (Williamson, 1985, 1996).

Adaptability

1. Address divested business unit underperformance

The first element of Figure 2 denotes that divestitures can be motivated by a parent company's strategic intent to divest an underperforming business (Duhaime and Baird, 1987; Porter, 1987; Vidal and Mitchell, 2015). Specifically, parent companies may undertake divestitures to exit unwanted businesses (Duhaime and Grant, 1984; Montgomery and Thomas, 1988), and obsolete or declining businesses (Anand and Singh, 1997; Harrigan, 1980), as well as to exit acquisitions that failed to meet performance expectations (Hayward and Shimizu, 2006; Kaplan and Weisbach, 1992). An early conceptualization of divestitures examined this phenomenon as a correction of inefficient growth and diversification strategies that had led to poor economic performance (Jensen, 1989). More generally, business unit underperformance in terms of sales, profits, growth, and market share plays an important role in the corporate companies' decisions to divest their business units (Chang, 1996).

Divested business unit's performance (Duhaime and Grant, 1984; Markides and Singh, 1997; Porter, 1987) and the business unit's corporate standing (Zuckerman, 2000) are the most frequently mentioned divestiture antecedents at the business unit level (Moschieri and Mair, 2008). Business unit's underperformance is particularly relevant during a financial crisis, or other financial contraction times, e.g., parent companies operating in a turnaround process (Harrigan, 1980), because performance market pressure is high, and corporations tend to streamline their business portfolios.

When examining the divested business unit underperformance, we need to consider the tax implications for divestiture governance modes. If a parent company can benefit from consolidating the divested business unit's and the corporate parent's financial statements for accounting or tax purposes, the parent company may consider structuring the divestiture as an equity carve-out. Accounting consolidation and tax consolidations are a possibility only if the divestiture is structured as an equity carve-out. When retaining 50% or more ownership in a divested business unit, a parent company will be able to consolidate the divested business unit's performance on its financial statements

for accounting purposes (FASB ASC, n.d. 810-10).¹¹ If a divested business unit has a strong balance sheet, even if it is economically underperforming with respect to other business units within its corporate parent, the parent company may have economic incentives to keep consolidating the business unit's accounting position in its own financial statements. Moreover, a parent company may benefit from consolidating the business unit's and the corporate parent's statements for tax purposes if the business unit's and the corporate parent's taxable income offset each other — e.g., if the divested business unit generates tax deductions that the corporate parent can use to offset taxes at the corporate level, or if the business unit generates taxable income that can absorb other corporate losses. If the parent company and the divested business unit generate taxable income (or taxable losses) simultaneously, tax consolidation may be less important, and corporate parents may be more inclined to structure the divestiture as a corporate spin-off. Consequently, a key finding from the extant research literature is that the business unit's underperformance is more strongly associated with divestitures when the parent companies have tougher corporate governance mechanisms (Haynes *et al.*, 2003) that keep tax incentives in check with the corporate parent's strategic objectives.

Underperformance at the business-unit level can involve different metrics, not necessarily negative accounting performance. For example, even if a business unit has a positive income, the unit might have lower performance with respect to other (peer) companies in the unit's industry, or with respect to other business units within the same corporate parent, which generates opportunities to unlock economic value. Any one of these types of lower performance might impact divestitures.¹²

¹¹Consolidating financial statements involves combining the divested business unit's and the parent company's income statements and balance sheets together to form one statement. FASB ASC stipulates that all investments in which a parent company controls the majority interest of a business unit (directly or indirectly) must be consolidated. When parent companies retain between 20% and 50% of the divested business unit's interest, they can account for their interest in the business unit on an equity basis (FASB ASC 323-10). The equity method does not combine the accounts of the parent company and the business unit in one financial statement, but it accounts for the parent's investment in the carved-out unit as an asset (e.g., accounts for income received from this business unit). Similar to the consolidation method, the equity method is used when the parent company has the ability to exercise significant influence over the operation of the corporation. One of the legal requisites for corporate spin-offs to classify as tax-free transactions is that parent companies relinquish control over the divested business unit (IRC section 355 and 368), so corporate spin-offs cannot be consolidated (on the statements or an equity method) with its parent company post-divestiture.

¹²We thank a reviewer that pointed out that there can be additional types of underperformance, e.g., with regards to the business unit's same performance in the past, and different types of performance measures (e.g., beta, profits, growth). For example, divestitures are also common in business units that were acquired, e.g., as part of a bundled M&A, and then fail to meet the economic performance expectations of (other business units within) the parent company (Bennett and Feldman, 2017; Bergh, 1997; Karim and Mitchell, 2004). We suggest that our stated propositions would be robust to these various operationalizations of underperformance.

Business Unit Performance with Respect to Other Companies' Respective Units in the Industry

If the divested business unit's economic performance is low in comparison to other companies' respective units in the industry, then the divested business unit's economic performance is lower than the corporate parent shareholder's opportunity cost. A business unit with low economic performance relative to the business unit's competitors might signal that there is substantial room for improvement in the unit's management, raising concerns for parent companies and prompting divestitures (Duhaime and Grant, 1984). For example, PepsiCo used to evaluate each individual business unit with respect to their economic standing with other peer companies in each business unit's industry (Applegate and Schlesinger, 1994). Agency problems between firms' managers and shareholders may prevent parent companies from unlocking shareholder value by divesting certain (low-performing) business units.¹³ Corporate governance mechanisms might enable parent companies to identify those business units and subsequently divest them (Haynes *et al.*, 2003). For example, a parent company's managers can decide to undertake a divestiture when pressured by shareholders (Bethel and Liebeskind, 1993; Chen and Feldman, 2018). Not only are corporate spin-offs more common when outside blockholders own more of the parent company's stock (Bergh and Sharp, 2015), but activist investors' campaigns to divest business units have been shown to generate higher shareholder returns (immediate and longer-term) than divestitures initiated by managers (Chen and Feldman, 2018).¹⁴

¹³Some examples of managerial agency problems that may block divestitures are: (a) empire building, where managers prefer boundary-expanding rather than boundary-contracting strategies (Jensen, 1986); (b) short-term managerial tenure, where executives have less time to learn about and take strategic decisions (e.g., myopia) regarding their portfolio of business units (Buchholtz *et al.*, 1999); (c) escalation of commitment, where managers might hesitate to divest a business unit because divestitures can be interpreted as signals of failed managerial strategies (Boot, 1992; Porter, 1987); (d) diversification preferences, where managers lower their employment risk by having a diversified portfolio of business units (Amihud and Lev, 1981) rather than divesting business units; and (e) political deadlocks and influence activities, where some divestitures might be blocked by opportunistic managers (Leonard-Barton, 1992; Milgrom, 1988; Rumelt, 1995; Shimizu and Hitt, 2005).

¹⁴Extant research has shown that business units may be divested because of their promising resources and capabilities (Moliterno and Wiersema, 2007; Rubera and Tellis, 2014; Villalonga and McGahan, 2005), which would enable corporate parent shareholders to realize higher economic value outside the parent company. These promising opportunities might also include focal business units with low levels of current economic performance but a high degree of (technical and market) uncertainty, which would benefit from more entrepreneurial governance modes and business unit independence (Chesbrough, 2003; Moschieri, 2011). Thus, even when a business unit has positive outcomes, the opportunity cost of the parent company's shareholders (e.g., outside opportunities) might be higher than the (positive) returns of the business unit, opening a possibility for economic value creation through divestitures.

A corporate spin-off will be a more effective divestiture governance mode if the parent company wants to exit completely a business unit that is underperforming in its industry segment because it will sever all governance ties between the business unit and the corporate parent. Corporate spin-offs, compared to equity carve-outs, could warrant corporate parents' shareholders better prospects to pursue their (higher) alternative uses of investments. After a spin-off, corporate parents' shareholders can decide whether to sell or hold the divested business unit stock and the parent company stock, independently. By contrast, equity carve-outs do not provide corporate parents' shareholders with this control over their private portfolio — after an equity carve-out, the ownership and control of the divested business unit is still assigned to the parent company. This likelihood of observing corporate spin-offs vis-à-vis equity carve-outs is expected to be particularly higher when institutions of capitalism, such as strong takeover forces, and mechanisms of governance, such as increased stock options for managers increase pressure for higher shareholder value (Williamson, 1985, 1996). Based on this economic reasoning, our first proposition is that:

P1a: The lower the economic performance of the focal business unit of the parent company relative to that of competitors' economic performance for that business unit, the higher the likelihood that the parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

Business Unit Performance with Respect to Other Units within the Corporate Parent

A business unit's economic performance may be viewed unfavorably not only by reference point to its (external market) competitors' units, but also based on its reference point with other business units within the same parent company. Here, the divested business unit's economic performance is lower than its parent company's alternative uses of its cash flow (Levinthal and Wu, 2010). The divested business units' standing relative to their parent company's performance is important because it signals the strength of the business unit with respect to alternative corporate-resource uses (Duhaime and Grant, 1984; Hamilton and Chow, 1993; Woo *et al.*, 1992). For example, extant conceptual work has shown that when multi-business firms face a positive demand shock that broadens the gap between good-performance business units vis-à-vis bad-performance business units, more of these firms will implement divestiture strategies (Khoroshilov, 2009). Empirical evidence shows that corporate parents tend to keep businesses that are in relatively more economically attractive industries with higher profitability, higher market share, and higher R&D intensity as compared to those businesses they divest (Hopkins, 1991; Markides, 1992).

The divested business unit's economic performance relative to other corporate parent units can have a significant impact on the corporate parent's divestiture decision as well as the choice of divestiture governance mode. Divesting relatively lower-performing business units can improve the average economic profitability of the remaining corporate parent's resources (Vidal and Mitchell, 2018), and lower the parent company's financing costs (borrowing and raising capital). If a focal business unit represents a financial or operational cost burden for the corporate parent, then the parent company can substantially benefit from a corporate spin-off, where there is a complete deconsolidation between the divested business unit and the corporate parent.¹⁵

When business units are performing worse than other units in the parent company's corporate portfolio, the divestiture governance mode that will more likely benefit the corporate parent might be dependent on specific contingencies. For example, if the business unit's low performance is persistent, we expect the parent company to benefit more from a corporate spin-off because this governance divestiture mode represents a complete separation of the corporate parent from a lower-performing business. This complete separation might free some corporate-level resources, while improving average profitability of the corporate parent — financial outcomes will not be consolidated in corporate spin-offs as they are likely to be in equity carve-outs. Thus, with a complete parent-unit separation, corporate parents can redeploy resources from lower-value (divested unit) to higher-value uses.¹⁶

P1b: The lower the economic performance of the focal business unit relative to the other business units' performance of the parent company, the higher the likelihood that the parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

¹⁵Parent companies must be careful when divesting troubled or slow-growing business, sometimes referred to in the law literature as “good company–bad company” deals. Parent managers need to ensure troubled spun-off business units will be solvent following the corporate spin-off to avoid fraudulent conveyance problems with the business unit's creditors (Glover, 2017). Examples of parent companies attempting to divest undesirable business units that then found themselves engaged in litigation are Campbell Soup's spin-off of Vlasic Pickles, and General Motors' spin-off of Delphi Automotive Systems. Thus, divestitures of underperforming business units work better when corporate parent managers can explain why both the business unit and the company's parent, will benefit from the divestiture i.e., what other goals would the divestiture address (e.g., management focus, compensation alignment, and third-parties interactions).

¹⁶However, if the business unit's low performance is sudden or not consistent through time (e.g., due to a negative demand shock or high uncertainty), the corporate parent would likely benefit from a real options lens (Li *et al.*, 2007; Sakhartov and Folta, 2014; Trigeorgis and Reuer, 2017). Equity carve-outs offer corporate parents the option to retain control of the divested business unit's performance in case the business unit's performance uncertainty is favorably resolved.

Potential Economic Holdup Problems Between the Parent Company and Divested Unit

Corporate renewal through business unit divestiture encompasses a set of contingencies that can be applied to a corporate parent's divestiture governance mode choice between corporate spin-offs and equity carve-outs (see Figure 2). These boundary conditions may be viewed as implementation considerations that can arise when parent companies are executing divestitures. This section examines economic holdup problems (Williamson, 1985), which is the first boundary condition illustrated in Figure 2. In their economic value-creation role, parent companies coordinate activities and synergies across their related businesses by orchestrating economic rent-generating activities and transferring knowledge and resources across an organization (Chandler, 1991; Foss, 1997; Sirmon *et al.*, 2011).

The first boundary condition in the current study, potential economic holdup problems, recognizes the contractual risks that parent companies may face when negotiating for key resources¹⁷ with a focal business unit outside an integrated corporate structure (e.g., when such focal business unit has been divested).¹⁸ *Economic holdup problems* can be particularly challenging when parent companies bear one-sided¹⁹ horizontal and/or vertical dependencies with the divested business unit's resources and the cost of accessing (substitute or alternative) markets for these resources is high (Klein *et al.*, 1978; Williamson, 1985). Consequently, these economic holdup problems can create *ex ante* barriers to exit (or lock-in) for parent companies that would have an ongoing (specific) relationship with a focal business unit post-divestiture. For example, the extant research literature has observed that when (economy-wide) transaction costs decrease, and potential economic holdup problems also decrease, divestiture waves are more likely to occur (Bhide, 1990). More generally, interdependencies between a corporate parent and a focal business unit — which include those that may create economic holdup problems — can influence the parent company's decision to divest the focal

¹⁷Some examples of key resources are specific facilities, specialized tools, firm-specific human capital, expertise, and know-how, dedicated assets, relationship-specific investments, complementary assets, and specialized technological resources and processes, among others (Mahoney, 2005; Teece, 1986; Williamson, 1985).

¹⁸Internal restructuring of business units (e.g., structural recombination of business units) within parent companies have shown a positive effect for corporate parents (Karim and Kaul, 2015). Without the downside of economic holdup problems, the internal recombination of business units can spur new business opportunities.

¹⁹Two-sided dependencies, i.e., the parent company depends on its business unit's resources and capabilities, and conversely, the business unit depends on the corporate parent's resources and capabilities, which suggests that the corporate parent's and business unit's resources are *co-specialized* (Teece, 1986). Contracting for these co-specialized resources would be expected to function effectively for corporate parents and business units because mutual dependency aligns economic incentives and safeguards transactions between them to thereby achieve mutual gains (Teece, 1986; Williamson, 1985).

business unit (Duhaime and Grant, 1984) and the divestiture governance mode choice.

The relatedness of the resources of two transacting partners can influence the extent to which these exchange partners are exposed to economic holdup problems, and consequently determine the governance of their relationship (Chatterjee, 1990; Lee and Lieberman, 2010). Extant research has found that divestitures are less likely to take place when business units within a corporate parent are highly related to one another (Zuckerman, 2000), and that parent companies that divest related business units show lower economic performance after the divestiture (Bergh, 1997). This can occur because the synergies to be realized from a transaction depend on the relatedness of the resources between exchange partners (e.g., the corporate parent and the divested business unit) (Markides and Williamson, 1994; Zhou, 2011).²⁰ More synergies often result in greater transactional (joint) value (Zajac and Olsen, 1993). Similarly, less synergies often are the result of higher transaction costs and economic holdup problems. Governing unrelated units will likely incur greater costs than benefits for parent companies because their “dominant logics,” incentive systems, and measures of productivity can be different (Bettis and Prahalad, 1995; Hoskisson and Hitt, 1994).²¹ Because of high organization costs relative to benefits²² (due to low synergies), non-related and non-core businesses may be better off governed independently (Bergh *et al.*, 2008; Chemmanur and Yan, 2004; Kaul, 2012). For example, parent companies tend to spin-off business units that have different technology profiles (e.g., R&D expenditures and intangible assets) as compared to other of the corporate parent's units (John, 1993).

Vertical interdependencies between a parent company and a focal business unit can also give rise to economic holdup problems, which can affect the divestiture governance mode choice. Parent companies are more likely to divest through equity carve-outs (as compared to corporate spin-offs) when there is a vertical relationship between the corporate parent and its focal business unit, and there are relationship-specific resources that could potentially create economic holdup problems (Jain *et al.*, 2011). The logic behind this governance

²⁰Synergies derived from ‘interconnectedness of asset stocks’ (Dierickx and Cool, 1989) stem from resources that can be different as well as similar (Zajac and Olsen, 1993). While different (complementary) resources can be exchanged and recombined to create joint economic value, similar (complementary) resources can strengthen each party's position and speed the joint exploitation of knowledge (Cohen and Levinthal, 1990).

²¹For example, when corporate parents' and business units' operations are not related, the improvement of the alignment in the spin-off managers' incentive compensation with stock market performance is even larger after a divestiture (Feldman, 2016c). The size of this effect could be explained as a larger mis-alignment in the compensation structure of unrelated spun-off business units in the pre-divestiture period.

²²Lower synergies can put cooperation at risk and lead to free-riding and (ex-post) under-investment in the maintenance of (common-pool) related resources (Agarwal *et al.*, 2010; Ostrom, 1990).

choice is that lower transaction costs between carved-out business units and their corporate parents could enable the development of more efficient markets for (specific) resources that parent companies would otherwise *need* to contract with their (spun-off) divested business units, lessening potential economic holdup problems (Williamson, 1985).

Transaction cost economics predicts that when there is room for joint economic value creation between two transacting parties (e.g., through synergies derived from interdependencies), and there are positive transaction costs (e.g., non-existent or inefficient markets for specific resources) divestiture governance modes would be adjusted to resemble hierarchies (Williamson, 1985; Zajac and Olsen, 1993). In our context, this logic suggests that when there are higher potential economic holdup problems, parent companies would prefer a divestiture governance mode that enables them to have more control over their divested business units — e.g., a divestiture governance mode closer to hierarchies, such as an equity carve-out. On the one hand, equity carve-outs, as compared to corporate spin-offs, resemble more a hierarchical arrangement between the corporate parent and its divested (carved-out) business unit because the ultimate equity control belongs to the parent company and internal control mechanisms (such as overlapping board of directors and managers) are more common in carve-out contexts (Anslinger *et al.*, 1999). Corporate spin-offs, on the other hand, raise contracting costs between corporate parents and spun-off business units even further, because each entity is under separate control, making them less desirable when economic holdup problems are more serious.

The concept of resource specificity in transaction cost economics is compatible with the concept of irreversible investments in real options theory in the sense that irreversible investments are specific assets that are non-redeployable. While transaction cost economics emphasizes non-redeployability (Williamson, 1985, 1988), real options emphasizes the value of flexibility. Accordingly, real options theory also supports the reasoning that in the presence of large irreversible (e.g., resource specific) investments, parent companies prefer having the flexibility to opt in or out of [full] divestitures (O'Brien and Folta, 2009). In our context, this logic would be equivalent to choosing an equity carve-out, over a corporate spin-off, because it provides the flexibility to work through potential economic holdup problems derived from irreversible (e.g., resource specific) investments among corporate parents and business units. This transaction cost and real options logic leads to the following proposition.

- P2.** Higher levels of potential economic holdup problems between the parent company and its focal business unit will decrease the likelihood that the parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

Contract Law

2. Recover from Corporate Parent Funding Deficit

The second element of Figure 2 denotes that parent company's financial weakness is an important determinant of divestitures (Berry, 2010; Duhaime and Grant, 1984). This is consistent with a transaction cost economic logic in which there are capital market imperfections (Williamson, 1975). The parent company's funding deficit can raise the pressures on managers of over-diversified companies and trigger resource divestments (Moliterno and Wiersema, 2007). Divesting companies have been shown to have significantly lower cash flow returns as compared to industry peers (Cho and Cohen, 1997), higher debt (Haynes *et al.*, 2003; Hoskisson *et al.*, 1994), and lower economic performance (Hoskisson *et al.*, 1994; Zuckerman, 2000). Corporate parents with funding deficit can use the proceeds from divestitures to repay debt (Brown *et al.*, 1994), issue dividends to shareholders (Bowman *et al.*, 1999), and fund subsequent acquisitions (Bennett and Feldman, 2017). However, the extant research literature has shown that divestitures by financially distressed companies could reinforce their low economic performance patterns because these firms usually take less time to address longer-term strategies and can be primarily motivated by their need to raise immediate financial resources (Vidal and Mitchell, 2015).²³

If the parent company, the business unit, or both are in need of financial capital, and other sources of funds are not readily available, parent companies will most likely want to sell a portion of the business unit's shares in the public market to raise capital.²⁴ Because of tax and regulatory definitions, parents cannot raise cash from their spun-off units' shares. Therefore, parent companies' funding deficit not only can determine the corporate parents' divestiture decisions, but also the divestiture governance modes that these parent companies choose. For example, corporate parents that choose to carve-out their business units, exhibit poor operating performance and high leverage (Allen and McConnell, 1998). Extant literature has shown that parent companies that are smaller, and face more constraints accessing capital markets, are more likely to seek divestiture governance modes that enable them to raise outside funding (Ito and Rose, 1994). Thus, the divestiture governance mode

²³For example, Kodak divested some business units that could have proven strategic for their competitiveness (digital camera, life sciences, and light management) as it attempted to recover from low profitability (Benner, 2007).

²⁴An important consideration for parent companies seeking to raise cash through divestitures is the current strength of capital markets (Williamson, 1975). In times when markets are weak, the demand for the unit's stock may be weak, or the divested business unit's shares might sell at a discount. Thus, we can expect that when capital markets are weak, corporate spin-offs may increase in relevancy.

that would be applicable to raise outside funding and alleviate a corporate parent funding deficit would be an equity carve-out. Following a real options logic, an equity carve-out will also provide parent companies the flexibility to divest as little shares in the divested business unit as needed to cover its funding deficit, and buy such shares at a later time if the funding deficit is lower.²⁵

P3: The higher the parent company's funding deficit, the lower the likelihood that it will choose a corporate spin-off vis-à-vis an equity carve-out.

3. Reduce Liability Risk

Enterprise liability is a type of transaction cost (Cooter, 1991; Williamson, 1996) that affects firm boundaries and internal organization within corporations (Belenzon *et al.*, 2018; Rosenberg and Birdzell, 1986). The third element of Figure 2 denotes that a parent company may be able to reduce its liability risk²⁶ by divesting a business unit. Divestitures can enable parent company's managers to legally separate the liability of a focal business unit and lower overall corporate-level liability exposure. Lower liability risk can impact the parent company's costs (e.g., by lowering insurance costs), incentive systems (e.g., by reducing the complexity of the incentives to configure), and market valuation (e.g., by increasing liquidity and investment resources). Thus, at high levels of business unit liability risk, corporate parents are more likely to implement governance modes that legally separate them from the divested business unit.

Corporate spin-offs can benefit parent companies because they create a clear separation between corporate parents' and business units' liabilities. However, according to a transaction cost logic, parent companies are subject to the *impossibility of selective intervention* (Williamson, 1991). Thus, the parent company's limited liability is weakened when the corporate parent can intervene in the management of its business units, such as in the case of an equity carve-out. Parent companies are more likely to have effective or active control over their divested business units' management decisions in equity carve-outs (Iacobucci and Triantis, 2007, also see Table 3). Consequently, corporate parents could be found liable for equity carve-outs' actions as owners

²⁵We thank an anonymous reviewer for suggesting this application of real options theory to our proposition.

²⁶Examples of such liabilities include personal injury or property damage caused by a product/process defect, environmental claims, health and safety liabilities, credit risk, and labor liabilities (Egan, 2012).

within the corporate veil piercing doctrine (Tang *et al.*, 2019; Thompson, 1990).²⁷

We follow transaction cost reasoning (Williamson, 1991) to make the case that corporate spin-offs and equity carve-outs can be treated as *discrete structural alternatives*. Table 3 compares the discrete differences between a parent company's (post-divestiture) liability risk for corporate spin-offs vis-à-vis equity carve-outs. These differences support the idea that a corporate parent's exposure to its divested business unit's liability risks is greater in the case of equity carve-outs, as compared to corporate spin-offs. Moreover, following a real options logic, when the business unit's liability risk is not high enough to justify a complete separation through a corporate spin-off, the corporate parent can separate the focal business unit (and its liability risk) through an equity carve-out until it has proven its value or reduced its liability — and reacquire the business unit in the future if it is advantageous.²⁸ This comparative transaction cost and real options assessment leads to the proposition that:

- P4.** The higher the liability risk of the focal business unit, the higher the likelihood that a parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

Incentive Intensity

4. Parent Company's Managerial Refocus

Due to bounded rationality, the costs associated with sharing managerial attention and other resources often affect multi-business firms (Joseph and Ocasio, 2012; Simon, 1947; Williamson, 1975). While corporate diversification can enable coordination among multiple businesses, adaptation within each individual business might suffer from this integration (Williamson, 1991).

²⁷US courts have yet to develop a clearer concept of corporate parent responsibility (Fletcher, 2008). Examples of legal restraints that courts can apply to parent companies when holding them liable for their divested business units' actions are fraudulent conveyance law (post-divestiture insolvency of the parent company or the divested business unit), successor liability law (when the corporate parent ceases to exist or transfers virtually all operations to the divested business unit), and the corporate veil piercing doctrine (Tang *et al.*, 2019; Thompson, 1990). There are precedents of shared liability imposing sanctions to carve-out parents (e.g., *Tronox v. Kerr-McGee*, 2009). Furthermore, courts could set aside the separate corporate identities (of corporate parents and equity carved-out business units) to hold a corporate shareholder (parent) responsible. Some conditions to pierce the corporate veil and hold a corporate parent liable are: 'actual control;' improper use of business units to avoid legal obligations; business unit's actions represent 'mere instrumentality;' failure to maintain separate identities (ownership, officers, address, and tax consolidation); and failure to adequately capitalize business units or follow 'corporate formalities.'

²⁸We thank an anonymous reviewer for suggesting this application of real options theory to our proposition.

Table 3: Institutional details to support the claim that corporate spin-offs and equity carve-outs are discrete structural alternatives.

Legal attribute	Corporate spin-offs	Equity carve-outs
<i>Piercing the corporate veil:</i> parents and units shared liability	Shared liability issues are not common in corporate spin-offs. If parents and units can be independently identified (as it is often the case: different names, non-consolidated statements), there can be less shared liability issues. The division of liabilities will often follow the business: separation agreements allocate liabilities associated with the parent/unit, whether they arise before or after the divestiture, as the responsibility of the parent/unit. Parent and unit also agree to indemnify each other against these liabilities	Parents could be found liable for equity carve-outs' actions as owners when the corporate veil is pierced. Courts could dismiss the separate corporate identities of parents and carve-outs to hold a corporate shareholder (parent) liable (pierce the corporate veil) under certain conditions: "actual control"; improper use of units to avoid legal duties; "mere instrumentality" of unit's actions; failure to maintain separate identities (ownership, officers, address, statements' consolidation); failure to adequately capitalize units.
Employee liabilities	<p>* Employee Retirement Income Security Act (ERISA): tests whether "highly compensated employees" are being unfairly benefited. Parents and spun-off units will be tested independently</p> <p>* Consolidated Omnibus Reconciliation Act (COBRA): is an Act regulating terminated employees' medical insurance that applies to large companies. COBRA will be applied to corporate parents and/or spun-off units independently (if applicable)</p> <p>* Business units can redesign compensation packages for its employees, hire/fire employees following WARN Act</p>	<p>* ERISA: corporate parent and equity carve-out employees will be pooled together (as a controlled group) to test whether "highly compensated employees" are being unfairly benefited</p> <p>* COBRA: corporate parent and equity carve-out employees will be pooled together (as a controlled group) to determine whether the number of employees is large enough so that the group needs to comply with COBRA regulations</p> <p>* Business units can redesign compensation packages for its employees, hire/fire employees following WARN Act</p>

(Continued)

Table 3: (Continued)

Legal attribute	Corporate spin-offs	Equity carve-outs
Environmental liabilities	<p>The Comprehensive Environmental Responses, Compensation and Liability Act (CERCLA) establishes that if a corporate parent owned and operated (or controlled) a contaminating site, the parent will retain clean-up liability. That is, any (pre-divestiture) contaminating site will be only the parent's responsibility, even if the site is then transferred to the spun-off business unit</p>	<p>CERCLA rules and clean-up liabilities also apply in the case of carve-outs. Any (pre-divestiture) contaminating site will be only the parent's responsibility, even if the site is then transferred to the carved-out unit. Further, any post-divestiture environmental liability accrued to the carved-out unit will impact the parent if the courts determine that the corporate veil was pierced</p>
Fraudulent conveyance: property transfer not made for a reasonably equivalent value	<p>Spin-offs can raise fraudulent conveyance concerns because parents do not receive payments in return for their property (divested unit). Parent's creditors may hold them liable or challenge the transaction if a spin-off leaves the parent insolvent, or the obligations assumed by the spun-off unit are too large. To avoid this, parents need to request consent from creditors (at least 70% of outstanding debt), negotiate new ratings and pay a consent fee</p>	<p>Fraudulent conveyance is less of a problem in equity carve-outs. To avoid any issues related with conveyance, corporate parents can transfer part of the proceeds to the equity carve-out unit. Creditors will often negotiate debt with the equity carved-out business unit in more amicable terms</p>
Antitrust	<p>Spin-off transactions often satisfy antitrust rulings (e.g., separation decrees) because they alleviate problems of management focus. No filings under the Antitrust Act are required for (pro rata) spin-offs.</p>	<p>Overlapping ownership structures, such as equity carve-outs, often raise antitrust issues and are not likely to satisfy legal decrees requiring the separation of businesses (e.g., carve-out units). Antitrust filings are required for (controlled) carve-outs</p>

Note: The information in this table was collected from Gilson and Gordon (2003), Glover (2017), and LoPucki (1996).

Because managerial time and attention are non-scale free resources, corporate diversification can increase dis-economies in information processing (Berger and Ofek, 1995, 1999; Hoskisson *et al.*, 1993; Levinthal and Wu, 2010), and limit firm growth (Arrfelt *et al.*, 2013; Ocasio, 1997; Penrose, 1959), negatively impacting the effective governance of internal interdependencies in multi-business firms (Tripsas and Gavetti, 2000). For example, corporate-level maladaptation due to resource misallocation among business units and unit managers' opportunism are more severe in companies with weak corporate governance systems (Roe, 1990; Williamson, 1996) and diversified parent companies (Rajan *et al.*, 2000; Scharfstein and Stein, 2000).²⁹ Thus, as indicated by the fourth element of Figure 2, parent companies may divest business units to free managerial resources (e.g., time and attention) that can be redeployed to the remaining parent company's units.

Non-core businesses often receive restricted attention from corporate parents in diversified companies, partly because top managers may have no effective way of managing non-core units that most likely have different "dominant logics" (Prahalad and Bettis, 1986) from other parent company's (core) units (Bergh *et al.*, 2008; Chesbrough and Rosenbloom, 2002; Liebeskind, 2000).³⁰ These concurrent and dissimilar "dominant logics" may preempt managers from adapting to threats, such as new rival technologies, due to their cognitive constraints to process these logics and allocate resources efficiently. Parent companies can reduce complexity and achieve corporate focus by using a "dominant logic" rationale for separating out unrelated business units that do not maintain focus and internal coherence (Cusatis *et al.*, 1993; Daley *et al.*, 1997; Desai and Jain, 1999).

The corporate strategy of divestitures can be motivated by the parent company's goal to restructure the scope of its diversity, and refocus its resources (Donaldson, 1990; Hoskisson and Hitt, 1994; Kaul, 2012) and managerial attention to the remaining corporate parent's businesses (Feldman, 2016a). In fact, highly diversified firms have a higher probability of restructuring their corporate portfolios through their divestitures (Haynes *et al.*, 2003; Hoskisson *et al.*, 1994; Markides, 1992). Furthermore, refocusing divestitures are associated with improvements in the parent company's efficiency of capital allocation (Dittmar and Shivdasani, 2003; Feldman, 2016a; Gertner *et al.*,

²⁹Suboptimal distribution of resources in multi-business firms can occur when resources are not distributed based on economic performance or potential, but rather on performance aspirations (Arrfelt *et al.*, 2015), political compromises (Rumelt, 1995) or equalizing concerns (Bardolet *et al.*, 2011).

³⁰One prominent consequence of parent companies trying to manage and provide incentives for business units with different dominant logics are costs of comparison or envy derived from parent companies' attempts to adjust incentives and compensation only for a specific business unit, which has been associated with a lower propensity of employees to engage in innovation (Argyres and Silverman, 2004; Nickerson and Zenger, 2008).

2002), higher profitability³¹ (Markides, 1995), and larger CEO total compensation post-divestiture (Pathak *et al.*, 2014). By refocusing financial resources and managerial time and attention in the remaining (core) businesses, low-performing corporate parents can free resources to address their low-economic performance,³² and high-performing parent companies can invest in areas to maintain their competitive advantage (Vidal, 2020; Vidal and Mitchell, 2018).

Corporate spin-offs can enable the parent companies to refocus their managers' attention on their core businesses, improving the efficiency of the corporate resource allocation process. Parent companies concerned with increasing their managers' focus can benefit from a complete governance separation — e.g., through corporate spin-offs — between the divested business unit and the parent firm. Because of the control relationship between corporate parents and equity carve-outs, managing the latter will imply higher information-processing demands (as compared to corporate spin-offs) from the parent company.³³ Moreover, case studies suggest that firms attempting to implement “internal hybrids,” do *not* succeed in implementing selective intervention (e.g., Foss, 2003) — equity carve-outs can be thought as a form of internal hybrid where parent companies attempt to reset managerial focus.

Further, because of the impossibility of *selective* intervention, equity carve-outs may prove to be highly unsatisfactory in addressing the problems of management focus. Williamson states that selective intervention “would obtain if bureaucratic intervention between the semiautonomous parts of a hierarchical enterprise occurred only but always when there is a prospect of expected net gain. Because promises to intervene selectively lack credibility, selective intervention is impossible” (1996, p. 379). In contrast, corporate spin-offs will free the time and attention of top managers to be allocated to other (core) uses within the parent company, facilitating a more dedicated and independent analysis of businesses (Feldman, 2016a,c). This economic logic leads to the following proposition.

P5. An increase in managerial focus on core businesses as the parent company's strategic intent, the higher the likelihood

³¹The extant turnaround literature has also shown that diversified firms operating in a turnaround process do not benefit as much from refocusing divestitures. Although the accounting performance of firms with relatively high strategic slack or low environmental constraints benefited from refocusing actions, the performance of firms under Chapter 11 protection does not seem to change significantly (Dawley *et al.*, 2002).

³²Consistent with the Penrose effect (Penrose, 1959), divestitures not only can free financial and managerial capacity, but also reduce constraints to changes in a firm's resource base that can spur the parent company's profitable growth (Levinthal and Wu, 2010; Vidal and Mitchell, 2018).

³³Because carved-out business units are controlled companies, parent companies often cannot use equity carve-outs to escape regulatory orders like antitrust calculations — that will include the corporate parent and equity carve-out unit to reach recommendations —, or rulings requiring the separation of businesses (Glover, 2017).

that a parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

5. Respond to Third Parties' Interactions

The fifth element of Figure 2 denotes that parent firm's managers may be driven to divest a business unit by third parties (e.g., suppliers, alliance partners, and clients) who are unwilling to do business with the corporate parent while it holds a controlling position in the focal business unit. These divestitures can afford corporate parents and business units "freedom of contract" for external resources and exchange relationships (Rumelt, 1995), reducing managerial problems of *governance inseparability* (Argyres and Liebeskind, 1999, 2002) between the parent company and focal business unit. For example, after a complete separation from the divested business unit, parent companies might be able to obtain better financing rates (Jain *et al.*, 2011),³⁴ develop expenditure and liquidity plans independently, and enter in contractual relationships with business unit's competitors, among others. The ability to freely combine, and contract for, resources and capabilities available in the external market in a more flexible way can provide parent companies with potentially beneficial exchanges to expand their markets after a divestiture.

Corporate spin-offs, as compared to equity carve-outs, provide a *de facto* solution for governance inseparability problems between corporate parents and spun-off business units because this divestiture governance mode offers a complete control separation between the corporate parent and the business unit, freeing corporate parents from potential conflicts of interest or complex inter-actions that afflict multi-business firms. This transaction cost logic leads to the following proposition.

- P6.** The higher the conflicts of interest among parent companies, focal business units, and third parties (e.g., suppliers, alliance partners, and clients), the higher the likelihood that the parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

³⁴Combining different types of business in a single firm might impose an economic loss from attempting to govern all businesses within a single capital-structure, which is what corporate parents of equity carve-outs often attempt (Iacobucci and Triantis, 2007). Further, parent companies' managers can choose the financing capital structure of units that have been divested as a separate company, which could provide an incentive to allocate a disproportionately large debt load to the business unit (especially in the case of corporate spin-offs where there is a legal control separation between the business unit and the corporate parent). However, corporate parents need to ensure the financial viability of their divested business units to avoid legal disputes with credit holders. An example of a corporate spin-off plan rejected for this reason was Marriott's attempt to spin-off their real estate holdings in 1992.

Inter-Temporal Spillovers

Uncertainty in Divested Business Unit Performance

The second boundary condition included in Figure 2 denotes that a parent company may wish to separate its businesses from a focal business unit that exhibits high economic performance uncertainty. Under high uncertainty, the current value of the business unit might differ from its future value. If this is the case, and the parent company considers that the focal business unit could still generate economic profits or opportunities for future growth, corporate parents may want to divest this business unit using a governance mode that grants them a potentially highly valuable option of re-acquiring the unit post-divestiture, e.g., a carve-out, after the business unit's economic performance uncertainty has been resolved (Chi, 2000; Damaraju *et al.*, 2015). The real options literature in the context of divestitures has also shown that in the presence of high sunk costs, and performance uncertainty, parent companies might prefer to endure some amount of losses and wait until potential profitability improvement takes place (O'Brien and Folta, 2009). Equity carve-outs offer a divestiture governance mode for parent companies with high sunk costs to wait until some of the performance uncertainty has been reduced.

The business unit's economic performance uncertainty is a particularly important boundary condition for parent companies that have more (less) financial slack and face less (more) pressures to divest. Divestiture decisions can be justified when there is credit rationing (Jaffe and Russell, 1976; Stiglitz and Weiss, 1981) that can lead parent companies that face uncertainty to avoid costly-to-reverse divestitures, such as corporate spin-offs. Previous empirical findings have shown that high performing corporate parents are more likely to pursue partial (as opposed to full) divestitures (Vidal and Mitchell, 2015) (e.g., equity carve-outs). One possible reason for this relationship is that less constrained parent companies might be able to implement a partial divestiture governance mode to wait for the focal business unit's economic performance to improve. Thus, staged-divestiture governance modes, like equity carve-outs, create real options to re-acquire business units in the future when the uncertainty has largely been resolved (Damaraju *et al.*, 2015). This reasoning parallels Kogut (1991), which explains equity joint ventures from a real options lens. This real options logic leads to our final proposition.

- P7.** Higher levels of uncertainty about the economic performance of a focal business unit will decrease the likelihood that the parent company will choose a corporate spin-off vis-à-vis an equity carve-out.

Conclusions and Research Agenda Moving Forward

This review sought to organize the extant research on the strategic choice of corporate spin-offs and equity carve-outs, two divestiture governance modes where parent companies separate a business unit into a new company. We suggest five divestiture goals that corporate parents have when carrying out the focal divestiture modes — address divested business unit underperformance, recover from corporate parent funding deficit, reduce liability risk, parent company's managerial refocus, and respond to third parties' inter-actions. In addition, we highlight two boundary conditions — potential economic holdup problems between corporate parents and business units, and uncertainty in divested business unit performance — that managers might face when divesting. We also provide the theoretical logics for the parent company's divestiture governance mode choice, namely, transaction cost economics and real options theory.

The corporate parent's divestiture governance mode choice of corporate spin-off vis-à-vis equity carve-out is a variation on a transaction cost theme. In particular, transaction cost economics provides a comparative assessment of alternative, feasible, discrete structural governance modes of corporate spin-offs and equity carve-outs (Williamson, 1991, 1996). Factors that distinguish corporate spin-offs and equity carve-outs involve differences in adaptability, contract law, incentive intensity (and bureaucratic cost consequences), as well as inter-temporal spillovers.

Adaptability: Adaptation is the central problem of economic organization. Advantages accrue to equity carve-outs for cooperative or Barnardian adaption, while corporate spin-offs enjoy the advantage for autonomous or Hayekian adaptation, (Barnard, 1938; Hayek, 1945; Williamson, 1996). Parent companies seeking to divest business units with lower economic performance, than other industry peers (Proposition 1a) or other units within the parent company (Proposition 1b), can benefit from more autonomous adaptation through corporate spin-offs. A complete separation from the divested businesses (through corporate spin-offs) can enable parent companies to repurpose resources and managerial time and attention to other higher-value uses. Because of bounded rationality complex contracts are unavoidably incomplete, but bounded rationality does not necessarily imply myopia in terms of adaptation competencies (Williamson, 1996). To the contrary, transaction cost economics posits that exchange parties to a contract are farsighted, and thus if transactions are fraught with economic holdup problems, equity carve-outs as safeguards are predicted (Proposition 2).

Contract law: The alternative governance modes of corporate spin-offs and equity carve-outs differ from each other in discrete structural ways (Williamson, 1991). We show in the current study that each governance mode is supported by, and in significant ways is defined by, a distinctive form of contract law

(e.g., different liability risk exposure and different possibilities to raise funding). A discriminating alignment is one in which the corporate parent chooses the lower-cost governance mode, which mitigates contractual hazards (Williamson, 1996). For example, when a corporate parent seeks to raise funds in the capital markets, the lower-cost divestiture governance mode would be an equity carve-out. The tax costs and regulatory definitions of corporate spin-offs would prove to be a highly inefficient mechanism to raise cash (Proposition 3). Moreover, the lower-cost divestiture governance mode when a parent company seeks to mitigate their liability risk would be a corporate spin-off (Proposition 4). By legally separating the liability of a focal business unit, parent firms can lower overall corporate-level insurance costs, incentive system complexity, and financial costs.

Incentive intensity and bureaucratic cost consequences: Because selective intervention is impossible, everything cannot be organized in one large firm (Coase, 1937; Williamson, 1996). Thus, equity carve-outs, while having Barnardian advantages in cooperative adaptation, also have higher bureaucratic cost consequences because this governance form cannot replicate autonomous adaptation advantages of corporate spin-offs due to the fact that selective intervention is impossible. Corporate spin-offs may serve parent companies better when they seek to refocus the time and attention of their managers to their core business units, and away from the divested units' business, because the control relationship between corporate parents and equity carved-out units can render it "impossible" for parent managers to not intervene in the divested business unit and focus their attention solely on the corporate parent's remaining businesses (Proposition 5). The impossibility of selective intervention in the case of divested business units that have been separated from their corporate parents and constituted as a new company also goes hand in hand with governance inseparability problems between parent companies and their equity carved-out units. A parent company may not be able to contact freely with third parties (e.g., suppliers, strategic alliance partners, and clients) because of potential interdependencies (e.g., governance inseparability) between these third parties and the focal business unit. Equity carve-outs are likely to enact the continuation of these governance inseparability problems post-divestiture because parent companies hold controlling claims over carved-out business units, making corporate spin-offs a comparatively superior divestiture governance mode when such third parties' interactions exist (Proposition 6). Given the advantages and disadvantages of each divestiture governance mode, our study posits a discriminating alignment hypothesis in which we explain and predict the parent company's divestiture governance mode choice of corporate spin-offs vis-à-vis equity carve-outs based on our parsimonious framework of five corporate goals and two boundary conditions.

We concluded our study by introducing real options theory in our final proposition. Higher uncertainty about the economic performance of a focal

business unit can provide economic incentives for parent firms to wait until the uncertainty is resolved, keeping their (real) options open for future value capture of the focal unit's economic returns. Equity carve-outs, as compared to corporate spin-offs, provide better opportunities for parent companies to apply this real options approach to their divestiture governance mode choice (Proposition 7). As the strategic management literature moves beyond the individual transaction as the unit of analysis and considers the costs and benefits of inter-project and inter-temporal spillover effects (e.g., Kang *et al.*, 2009; Mahoney and Qian, 2013) this real options approach has the potential to improve our understanding of different phenomena, including the divestiture of business units that have been constituted as a separate new company.

Extant research has provided strong support for explaining and predicting the strategic choice of divestiture governance mode. Important avenues for future research invite further refinements. First, this review calls for more research studies in strategic management to make comparative assessments between distinct governance modes, including corporate spin-offs vis-à-vis equity carve-outs.³⁵ For example, a core theoretical insight from evaluating the choice between these two different divestiture governance modes, corporate spin-offs and equity carve-outs, is that the parent company's control can have distinct consequences for post-divestiture economic performance, separate from the consequences of increased market information availability and managerial incentive alignment that can be similarly achieved through both divestiture governance modes.

Second, corporate renewal through divestitures is likely to provide benefits not only to corporate firms' managers, but also to their divested business units. More research on the outcomes of divested business units is needed to more fully evaluate the advantages and disadvantages of each governance mode. Studies that address unit-level financial outcomes using corporate spin-off contexts include Feldman (2016c), Moschieri (2011), and Semadeni and Cannella (2011). Examining corporate-level and unit-level outcomes is likely to advance the research literature. Furthermore, examining the long-term effects of divestitures with outcomes beyond financial profitability (e.g., post-divestiture innovation outcomes) is likely to advance our theoretical insights and empirical knowledge concerning the relationship between divestiture governance modes and long-term performance (e.g., innovation).

³⁵To the best of our knowledge there are no prior works in the extant strategic management research literature that provide a parsimonious theoretical framework comparing directly corporate spin-offs with equity carve-outs. Research studies comparing corporate spin-offs and equity carve-outs in the finance literature (Gilson *et al.*, 2001; Jain *et al.*, 2011; Michaely and Shaw, 1995; Milano *et al.*, 2011; Slovin *et al.*, 1995) focus on agency theory explanations (e.g., availability of market information and incentive alignment), but neglect key transaction cost considerations, such as adaptability, contract law differences, bureaucratic costs, and inter-temporal spillovers, which we contribute in the current study.

Third, although transaction cost economics describes governance modes as discrete structural alternatives — e.g., court-ordering for markets, and fiat for hierarchies — (Williamson, 1991), in practice companies face variations (dimensions) in their governance choices that go beyond the governance mode (Foss, 2003; Poppo and Zenger, 1998, 2002). Companies often implement refinements to their discrete governance mode choices by effecting a variety of governance mechanisms. The extant corporate strategy literature has largely focused on investigating the effects of governance modes (Castañer *et al.*, 2014), and the impact of specific governance mechanisms (Oxley, 1999; Reuer and Devarakonda, 2016), but not on the joint choices of governance modes *and* governance mechanisms. This analysis could also be relevant for examining divestitures in contexts outside the US market. Locational implications of business units and parent companies might help address questions about divestiture activity and governance mode (Berry, 2013; McDermott, 2010).

Fourth, the current study presents an opportunity to expand our understanding of divestitures of business units with real options analysis. Our study on the parent company's governance choice of corporate spin-offs vis-à-vis equity carve-outs provides a comparative assessment of two discrete governance modes for implementing a "staged divestment" (Damaraju *et al.*, 2015). Even within the parent company's governance choice of corporate spin-offs vis-à-vis equity carve-outs, a fuller application of real options theory (and capabilities) beyond Proposition 7 would be useful in capturing inter-temporal spillovers (Helfat and Eisenhardt, 2004). Next steps would be to expand our study to include comparative assessments of other governance modes, which can create entrepreneurial value and prevent administrative loss via divestiture. Triangulation via detailed case studies would be complementary (Drnevich *et al.*, 2020; Jick, 1979; Van de Ven, 2007).

Finally, as Bowman and Hurry state: "corporate strategy (i.e., diversification, acquisition, divestiture, and restructuring) centers around the bundle of options" (1993, p. 771). Thus, we suggest that Proposition 7 of our study foreshadows the research opportunities of further joining transaction cost economics and real options theory to have a more complete picture for explaining corporate strategy more generally, and the parent company divestiture governance choice of corporate spin-offs and equity carve-outs, in particular.

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