

**OUT WITH THE OLD, IN WITH THE NEW:  
THE IMPACT OF DIVESTITURES ON FIRM PERFORMANCE**

Elena Vidal  
Zicklin School of Business  
Baruch College, The City University of New York  
Email: Elena.Vidal@baruch.cuny.edu

Will Mitchell  
Rotman School of Management  
University of Toronto

**Version: December 27<sup>th</sup>, 2014**

Keywords: Divestitures, firm strength, resource-based view

**ABSTRACT**

Multiple studies have investigated the relationship between divestiture activity and subsequent performance, and the results are mixed. This paper explores the relationship between divestitures and subsequent performance, the mediating role that firm strength has on said relationship, and the mechanisms by which divestitures affect subsequent performance. We find that divestitures benefit strong firms to avoid becoming a target for acquisition and to further growth, while they benefit weak firms with regards to their accounting performance. Findings also suggest that divestitures allow firms to free both financial and managerial resources that are later reinvested in the operational activities of the firm.

**OUT WITH THE OLD, IN WITH THE NEW:  
THE IMPACT OF DIVESTITURES ON FIRM PERFORMANCE**

**INTRODUCTION**

Multiple studies have investigated the relationship between divestiture activity and subsequent performance. The results are mixed: several studies find that firms that have active divestiture strategies gain subsequent performance benefits (R. O. Hoskisson & Johnson, 1992; e.g., Markides, 1995; Owen, Shi, & Yawson, 2010), while other studies have found the opposite (e.g., Bergh, 1995; Montgomery & Thomas, 1988; Wright & Ferris, 1997) or no (e.g., Woo, Willard, & Daellenbach, 1992) effect. Research has only begun to investigate alternative mechanisms that might produce the conflicting results. This study investigates the extent to which divestiture affects multiple forms of performance is shaped by firm strength or weakness.

We frame this study using the resource based view of the firm, particularly drawing from Penrose's (1959) idea that firms can generate growth by drawing on their resource base. We extend the traditional argument to suggest that there is also a complementary Penrose effect that emphasizes growth opportunities firms can create by eliminating existing resources. This perspective provides relevant concepts to frame the analysis, without offering sufficiently fine-grained logic to motivate specific hypotheses. Hence, we develop a set of research questions concerning divestitures and subsequent performance that we explore empirically; the results, in turn, provide a base for further theoretical development. We investigate the impact that divestitures have on multiple forms of performance, including survival, growth and profitability. In doing so, we

examine two forms of mechanisms that will affect the relationship between divestitures and subsequent performance: those that free resources and those that invest the freed resources. We apply the study in the context of several hundred firms operating in the global pharmaceutical industry between 1977 and 2012.

This paper contributes to the literature in two ways. First, it contributes to the resource-based view literature by shedding light on how firm strength shapes the way that eliminating resources via divestitures affects subsequent performance. We extend the traditional Penrose (1959) argument concerning resources and growth to argue that divestitures can free resources that can be reinvested in the firm, thus either helping weak firms retrench or strong firms continue improving. Second, we extend our understanding of how divestitures affect subsequent performance by exploring the mechanisms through which this effect may occur, particularly looking at what resources are being freed and how they are being reinvested within the organization. Overall, this work highlights the particularly strong role divestitures play in business reconfiguration for strong and weak firms.

This paper, given its exploratory nature, has three parts. The first section provides a background of the literature and phenomenon, while developing our baseline theoretical arguments. The second section develops the logic for our first research question on how firm strength moderates the impact of divestiture activity on subsequent performance, followed by our results concerning this relationship. The third section then dives more deeply into explaining the mechanisms, particularly focusing on what resources divestitures free and how are those freed resources are reinvested in the organization,

followed by our results concerning these questions. The final section discusses the implications of the results of both parts of the analysis.

### **BACKGROUND: RBV, DIVESTITURES AND PERFORMANCE**

Resource based theory suggests that the possession of superior resources helps firms achieve competitive advantages (Barney, 1991; Wernerfelt, 1984) that can lead to above-average performance (Amit & Schoemaker, 1993; Helfat et al., 2007). The related dynamic capabilities lens suggests that firms can reconfigure their resource base in efforts to retain or renew their competitive advantage (Helfat et al., 2007; Teece, Pisano, & Shuen, 1997). The literature has examined how different modes of reconfiguration affect firm performance including acquisitions (Capron & Mitchell, 2007; Capron, 1999), internal development (Karim & Mitchell, 2004), alliances (Das & Teng, 2000; Kale, Dyer, & Singh, 2002; Kale & Singh, 2007), and – to a relatively lesser extent – divestitures (Brauer & Wiersema, 2012; R. E. Hoskisson, Johnson, & Moesel, 1994; Moliterno & Wiersema, 2007).

Divestitures – which include the sale, spinoff or liquidation of resources by an ongoing corporation – are a critical mode of reconfiguration by which firms can modify their resource base. Much of the literature on divestitures has examined antecedents that drive firms' divestiture activity (Berry, 2010; Duhaime & Baird, 1987; e.g., Duhaime & Grant, 1984; Hopkins, 1991; R. O. Hoskisson & Johnson, 1992). The most common view of the divestitures among these studies is the idea that it allows firms to regain or retain competitiveness by raising resources and/or reducing excess capacity stemming from prior strategic decisions (Villalonga, 2004) in efforts to repay debt or to reinvest in new avenues that may drive future growth (Brown, James, & Mooradian, 1994). A subset of

studies has examined the relationship between divestitures and subsequent firm performance. Divestitures, by freeing resources that can be used to repay debt and improve a firm's financial position or that can be reinvested in new opportunities for growth, have potential consequences on the subsequent performance of firms. This set of studies, however, provides mixed results regarding the impact of divestiture activity on subsequent performance.

A few studies have found that divestiture activity leads to decreased subsequent performance. Wright and Ferris (1997) found that there is slight negative market reaction after the divestiture announcement. Bergh (1995) found a similar relationship between divestiture activity and subsequent accounting performance, particularly for firms divesting business units that were related to the core business. Montgomery and Thomas (1988) also explored this relationship and found that the effect of divestitures on performance is negative, and that, even though divesting firms are able to improve their subsequent performance relative to their previous level, their performance is lower compared to firms that did not engage in divestitures. A more recent study by Feldman (2014) focused on the comparison of subsequent performance of firms that divested legacy to those that didn't, and her findings indicate that the subsequent performance of firms that divest legacy businesses is lower than for firms that retain the, particularly when the divested unit is related to the core business.

A smaller subset of studies has found no effect between divestitures and subsequent performance. For example, Woo, Willard & Daellenbach (1992) showed that divestitures, spinoffs in particular, do not have an impact on subsequent performance.

A relatively larger number of studies have found that divestiture activity leads to improved subsequent performance. Hoskisson and Johnson (1992) find that firms that engage in divestiture activity have significant improvement in their accounting performance relative to competitors. A subset of studies found a similar effect to divestiture announcements on market performance (Alexander, Benson, & Kampmeyer, 1984; Hite & Owers, 1983; Jain, 1985; Mulherin & Boone, 2000), and even on increasing the odds of survival by making firms less vulnerable to takeovers and bankruptcies (Powell & Yawson, 2012).

Divestitures have also been positively linked to subsequent performance under a number of different conditions. Markides (1995) finds that the performance of firms improves after divestiture, but only for firms that have a proactive divestiture strategy and engage in sales of resources before others in the industry. Other studies have found that subsequent performance improves when the divested resource has a dissimilar human resource profile (Chang, 1996); when the divestiture allows the firm to refocus on the core by divesting unrelated businesses (Bergh, 1998) or non-core brands (Depeçik, van Everdingen, & van Bruggen, 2014), resolves corporate conflict (Ioannou, 2013), or helps refocus after being overdiversified (Dittmar & Shivdasani, 2003; Markides, 1995). Moreover, some studies have found that not just the firm level performance, but even the subsequent performance of acquired units improves when the acquisition is done in combination with divestitures (Capron, 1999; Abor, Graham, and Yawson, 2011).

These mixed results suggest that we need to further understand the role of divestitures as a mode of resource reconfiguration for firms. Traditionally, the resource based view has suggested that firms can achieve competitive advantage by reconfiguring

their resources (Penrose, 1959; Barney, 1991). Most of the literature in this area of expansion and growth has been focused on acquisitions (e.g., Capron & Mitchell, 2008), alliances (Das & Teng, 2000; Kale & Singh, 2007, 2007), and internal development (Karim & Mitchell, 2004). Divestitures, however, have been consistently overlooked as a potential tool for growth. We argue that firms can use divestitures to draw from their base by freeing resources that can be reinvested within the organization, allowing weak firms to retrench, or strong firms to further continue their expansion. By divesting, firms can free financial and managerial resources that can be crucial for weak firms to retrench and for strong firms to continue pursuing their growth.

In the next section we explore the role of firm strength as a moderator of the relationship between divestiture activity and subsequent performance. Most of the literature on divestitures have focused on them as a tool used by weak firms in efforts to retrench (e.g., Chakrabarti, Vidal, & Mitchell, 2011), even though the literature has found mixed results with regards of the role of prior firm strength on divestiture activity. In the next section, we explore the role that firm strength has on the relationship between divestiture activity and firm performance, in efforts to shed light to the intriguing set of mixed results found in the literature.

### **DIVESTITURES, FIRM STRENGTH AND PERFORMANCE**

Firms can benefit from divesting as it frees up resources that might be crucial for retrenchment and growth for firms coming from positions of weakness and strength, respectively. The traditional view on the antecedents to divestitures suggests that firms coming from positions of weakness use divestitures in their efforts to retrench

(Chakrabarti, Vidal & Mitchell, 2011), as they free financial resources that can be used to repay debt (Brown et al., 1994), or free managerial resources by refocusing on the core business of the company (Haynes, Thompson, & Wright, 2002, 2003; Markides, 1992, 1995). Thus, firms coming from positions of weakness would experience an improvement in their subsequent performance.

The divestiture of firms coming from positions of strength has been consistently overlooked in the literature. However, strong firms also benefit from engaging in divestitures, and potentially even more so than firms coming from positions of weakness. Firms coming from positions of strength may be in the best position to decide what resources to release; unlike firms coming from positions of weakness, strong firms can take the time to think strategically and may be less likely to dispose of resources at a discount in the sole efforts to raise financial resources to ensure survival.

This conundrum brings us to our first exploratory research question of how does firm strength moderate the impact that divestiture activity on subsequent performance. Firm strength has been identified as a main influencing factor that leads to firm divestitures, with the literature finding that divestitures are tool more commonly used by firms coming from positions of weakness (Chang, 1996; e.g., Duhaime & Grant, 1984; Markides, 1992), though some studies have found no relationship (Bergh, 1997; e.g., Hayward & Shimizu, 2006; Xia & Li, 2013). Even though firm strength has been linked to divestitures, it has been overlooked as a mediating factor of the potential benefits that firms can attain by divesting.

## **Data and Methods**



We explore this research question on a sample of 503 firms operating in the global pharmaceutical industry between 1978 and 2012. Two main archival sources were used to collect the data. Firm level data on company financials comes from COMPUSTAT, as was data on the segments for each of these companies. SDC Platinum was used to obtain the divestiture events, as well as some controls (e.g., acquisitions). This setting is particularly relevant to explore this question, as the pharmaceutical industry has firms operating in the spectrum of firm strength, as well as a wide range of activity with regards with acquisitions and divestitures.

We use multiple measures of performance; given the inconsistency in results from previous studies, we seek to explore whether divestitures affect different measures of performance differently. We explore firm survival in the following year, relative to exit via dissolution or via acquisition. We also consider the sales growth as a measure of subsequent performance, measured as the difference in sales from year  $t$  to year  $t+1$ . Return on Assets (ROA) and Net Income at year  $t$  are both used as alternative measures of accounting performance.

We measure *firm strength* as the firm's 2-year prior Return on Assets (ROA); we used two-years to provide more distance between firm strength and subsequent performance and thus reduce potential endogeneity biases. *Divestitures* are measured as a count of the number of divestitures at year  $t-1$ .

Several controls are included in the model to account for alternative explanations. Prior sale growth (between  $t-1$  and  $t-2$ ) is included to account for trends in growth that may be driving subsequent performance. We include a *diversification dummy*, as it may impact the subsequent performance of firms. We also include a *count of segments* to

account for differences in the ex-ante portfolio across firms. *Firm size* – measured as prior sales –, lagged *R&D expenses*, lagged *financial slack* – measured as cash over liabilities – and *age* are included to account for firm-specific characteristics that may impact subsequent performance. We also include a *headquarters dummy* that takes the value of 1 if the firm is headquartered in the United States and 0 otherwise, as firms operating in this economy may have more opportunities given the extent of development of the market to engage in more divestitures. As divestitures have been linked to acquisition activity, we include a *count of prior acquisitions* and a count of *failed acquisitions* to account for the role that these may have on the divestiture and subsequent performance. Table 1 below includes descriptive statistics for all these variables.

-----  
Insert Table 1 About Here  
-----

## **Results**

Table 2 presents the results. Models 1 through 4 correspond to a multinomial logistic regression testing the mediating role of firm strength on firm survival vs. exit via acquisitions vs. exit via dissolution. Models 1 and 3 suggest that firms coming from positions strength are more likely to become targets for acquisition than to survive as independent companies, and that firms that do more divestitures also have higher chances of becoming a target for acquisition. Model 2 indicate that coming from positions of weakness are more likely to dissolve than to remain operational, and divesting does not seem to have any impact on avoiding or leading to dissolution; Model 4 further shows that divesting – either from positions of weakness or strength – does not have an impact on subsequent survival. In contrast, Model 3 shows that firms coming from positions of strength that engage in divestitures are *less* likely of becoming a target for acquisition,

and thus have higher odds of survival. Thus, the combination of these results suggest that firms coming from positions of strength that engage in more divestiture activity have higher odds of surviving and avoid becoming a target for acquisition.

-----  
Insert Table 2 About Here  
-----

Models 5 through 10 provide a paneled ordinary least square regression with random effects, as the dependent variables are continuous.<sup>1</sup> Models 5 and 6 provide results for the impact of divestitures, and the mediating role of firm strength, on subsequent sales growth. These models indicate that firms coming from positions of strength tend to have higher subsequent sales growth. Model 6 further indicates that the more divestitures firms pursue, the slightly higher the subsequent growth in sales. More importantly, Model 6 indicates that firms coming from positions of strength that engage in more divestitures have an even higher increase in their subsequent sale growth.

Models 7 and 8 show the results using ROA as a dependent variable, and 9 and 10 for Net Income. These models indicate that firms coming from positions of strength have a higher subsequent ROA (Models 7 and 8) and Net Income (Models 9 and 10), as do those that engage in more divestitures, thus providing similar results as with sales growth as a dependent variable. However, firms that divest more that are coming from positions of strength have a subsequently lower ROA (Model 8) and lower Net Income (Model 10); alternatively put: firms coming from positions of weakness that engage in divestitures show improvements in their subsequent ROA (Model 8) and subsequent Net Income (Model 10).

---

<sup>1</sup> A Hausman test was conducted to compare random and fixed effects; the test was insignificant, suggesting that the estimators are consistent.

Overall, these results indicate that divestitures tend to be positively associated with subsequent improvements in performance. Specifically, we find that the more divestitures firms conduct are associated with an improvement in the odds of becoming a target for acquisition, though they don't really have an effect in protecting firms from dissolution; divestitures also tend to be positively associated with both subjective and objective measures of subsequent performance: the more divestitures firms conduct is positively associated with subsequent improvement in sales growth, return on assets, and net income.

Our findings regarding the role of firm strength on the relationship between divestitures and subsequent performance are intriguing. Firms coming from positions of strength that engage in more divestitures see a positive impact on their odds of survival relative to becoming a target for acquisition and they also see a higher subsequent growth in their sales. Firms coming from positions of weakness, on the other hand, see a benefit to divesting, but more so in objective accounting measures of performance, particularly ROA and net income.

These results suggest that divestitures have positive benefits for firms coming from both positions of weakness and from positions of strength, but the benefits are seen in different subsequent outcomes of performance. Freeing resources, then, does have a positive impact on subsequent performance; however, it is unclear what are the mechanisms at play. In the next section we will investigate these mechanisms, particularly looking at what resources are being freed, and how they are being reinvested in the firm.

## **DIVESTITURES, FIRM STRENGTH AND PERFORMANCE: MECHANISMS**

Engaging in divestitures has a positive subsequent impact of performance, either in terms of subsequent growth or survival for firms coming from positions of strength, or in relation to accounting performance such as ROA and net income for firms coming from positions of weakness. This is then consistent with the complementary ideas to the Penrose effect (1959) that firms draw from their resource base to grow, and by divesting firms can free resources that can be reinvested. However, it is still unclear what resources firms free, and second, how do they use those freed resources. Exploring this can help us further understand how firms use divestitures, particularly when coming from positions of weakness or positions of strength.

Divestitures allow firms to free resources that are somewhat locked. First, firms can trade-in the value of their past investments, thus freeing *financial resources*, that can be more easily reinvested in the organization. Second, by divesting resources firms can also free one of the more critical resources that constrains growth – *managerial capacity*; by divesting, managers can free their attention to focus it on other areas. Understanding if there are any differences in the resources firms free when they are coming from positions of weakness and positions of strength can help us better understand where these mixed results in the subsequent performance comes from.

Divestitures can be used to free different types of resources that can have direct consequences in how firms reinvest those resources. That brings us to a second mechanism. Once firms free resources by divesting, the question of how they reinvest those resources can help us shed light on how it later translates into subsequent improvements in performance. Firms can choose to reinvest the resources either by

internally developing new or strengthening remaining areas within the organization, or by acquiring resources from the external environment. Both internal and external reinvestments require both financial and managerial resources, and these reinvestments can differ for firms coming from positions of weakness or strength.

The next section explores empirically these mechanisms: (i) what resources firms free by divesting – financial or managerial – and (ii) how they are subsequently reinvested in the firm – internally or externally.

### **Data and Methods**

We explore the mechanisms on the same set of 503 firms operating in the global pharmaceutical industry between 1978 and 2012. In order to fully understand the role of divestitures and the mediating role of firm strength on subsequent performance, we show here multiple mechanisms tests to assess what resources are being freed and how they are being reinvested in the organizations. We thus have multiple dependent variables to test these mechanisms.

To test the first part of the question – what resources do divestitures free – we use two different measures. First, to measure the extent to which divestitures free financial resources we use *Cash* – measured as the cash and cash equivalents in year  $t$  – as a dependent variable; given the continuous nature of the variable, a random-effects paneled OLS regression was used as a specification. To explore the extent to which divestitures free managerial resources we used the count of the number executives in the Top Management Team (*TMT*); random-effects paneled OLS is also used as a specification here (sensitivity analyses using Poisson and Negative Binomial offered the same results).

To explore how the resources were reinvested, we look at 5 different mechanisms. First, the freed resources can be reinvested in subsequent acquisitions; thus, we use a count of *Acquisitions* at time  $t$ ; given that the nature of this variable is a count, a negative binomial specification was used to test the relationships. We also explore whether the increase in sales is coming from *internal* or *external* sources; we measure *internal* as the sales growth incurred by firms that do not engage in acquisitions, and *external* as the sales growth of firms that engaged in at least one acquisition. A paneled OLS specification was used for both of these variables. We also explored the extent to which firms reinvest in *R&D*; if divesting allows firms to free resources that can be reinvested in new areas, one way of doing so would be through exploration of new avenues. We measure *R&D* as expenditures in research and development at year  $t$ . Finally, firms can reinvest their freed resources within the organization; particularly for firms in the pharmaceutical industry, sales force has been considered as the driving force for revenues. Thus, we use *Selling, General & Administrative Expenses (SGA)* to see the extent to which the resources divested are reinvested in further the operations of the remaining resources in the organization. A paneled OLS regression was also used for this variable.

We include a similar set of controls as in the previous set of regressions. We control for *firm size* by including the lag of sales; we also control for trends in growth by including *sales growth* between  $t-2$  and  $t-1$ . We include a diversification dummy that takes the value of 1 if the firm is diversified beyond pharmaceuticals, and 0 if the firm specializes in this sector. We control for *R&D expenses*, as in this industry firms that invest largely in R&D may have a different background; we do this by included the

lagged expenditures the firm incurred in R&D. We also include a *count of segments* to account for potential differences in the portfolio of businesses a firm may have that could drive the divestiture activity, firm strength or their relationship with the underlying mechanisms being tested. We include *financial slack*, measured as the one-year lag of the quick ratio (cash and cash equivalents over current liabilities) to account for potential differences in how pressed for financial resources. We also control for the previous *count of acquisitions* as well as the previous year's *failed acquisitions*, as they may drive the need for specific types of resources and how they are reinvested. We include firm *age* and *headquarters* (takes the value of 1 if the firm is based in the United States) to account for potential differences in the profile of firms. Finally, we control for the *industry median ROA* in the previous year to account for industry-level profitability that may drive the opportunities firms may face with regards to sellers to whom they can divest resources.

## **Results**

Table 3 shows the results for the tests of what resources are being freed by divesting and where they are reinvested. Models 1 and 2 provide results of how firm strength and divestitures shape the freeing of financial resources. Firm strength does not seem to drive the subsequent access to cash; however, firms that engage in more divestitures subsequently have larger access to financial resources (Model 1). More interestingly, though, this latter effect is even stronger when the divesting firms are coming from positions of strength (Model 2). This suggests that stronger firms that engage in more divestitures have subsequently more financial resources.

-----  
Insert Table 3 About Here



-----

Models 3 and 4 show the extent to which divestitures free managerial capacity. Model 3 indicates that neither firm strength nor divestitures lead to subsequent increases in the TMT's size. Model 4 further indicates that there is no difference in the size of the TMT after divesting for firms coming from positions of either weakness or strength. Even though this effect is non-significant, it is still meaningful, as it suggests that even though firms may have a lower resource base post-divestiture, the fact that the size of the TMT does not decrease suggests that they have a higher capacity to focus on the remaining set of resources.

The abovementioned results combined suggest that divestitures allow firms to free financial resources – particularly for firms coming from positions of strength – and allows to free managerial resources. Models 5-14 delves deeper into this, and provide information as to how the freed financial and managerial resources are reinvested – either internally or externally.

Models 5 and 6 look at the extent to which firm strength and divestitures drive subsequent performance via acquisitions. The results indicate that firms coming from positions of strength engage in subsequently more acquisitions, as do divestitures (Model 5). More interestingly, though, firms coming from positions of weakness that engage in more divestitures have subsequently higher acquisitions (Model 6).

Models 7-10 test whether the resources are reinvested internally (Models 7 and 8) or externally (9 and 10). These results indicate that firms coming from positions of strength reinvest more, both internally and externally, whereas divestitures only moderately drive more external growth (Model 9). Interestingly, the effect of divestitures

on internal investments is not mediated by firm strength (Model 8), whereas its effect on external investments is positive (Model 10). These results suggest that divesting firms coming from positions of strength tend to reinvest in external areas that lead to subsequent growth.

Models 11 to 14 test the final piece of exactly what areas within the organization the freed resources are being reinvested. These models test whether the resources are being reinvested in new areas of exploration (R&D; Models 11 and 12) or by reinvesting them in operational activities (SG&A; Models 13 and 14). These results indicate that firms coming from positions of strength invest more in R&D and in operational activities compared to firms coming from positions of weakness. Divestitures, on the other hand, have a non-significant effect on both R&D and operational investments.

Interestingly, however, we find that the more firms coming from positions of strength engage in divestitures, the more likely they are to reinvest it in operational activities (Model 14), and we find no effect of this on R&D. This interesting result suggests that firms coming from positions of strength reinvest the freed resources to further improve their base of operations in efforts to remain strong in subsequent periods.

## **CONCLUSION**

This paper explores the effects that divestitures have on subsequent performance by showing the mediating role firm strength has on this relationship, and the mechanisms by which these effects on subsequent performance comes from. Building on the existing resource based view of the firm and on the literature on divestitures, this paper sheds light

as to why prior literature has found mixed results in how divestitures affect subsequent performance.

We find that the effect that divestitures have on different measures of firm performance is mediated by firm strength. Firms coming from positions of weakness that engage in larger number of divestitures tend to see subsequent improvements to their accounting performance, whereas firms that engage in more divestitures while coming from positions of strength see subsequent improvements in their survival odds and their growth in revenues. The mediating role of firm strength sheds light on the relationship between divestitures and subsequent performance, and suggests that the benefits of engaging in divestitures for firms coming from positions of weakness and from positions of strength differ.

We identify different mechanisms driving this relationship. First, we explore what types of resources are being freed – financial or managerial – and second, we study how those resources are being reinvested. Divestitures allow firms to free financial resources, particularly so for firms coming from positions of strength. This is consistent with the previous literature that suggests that firms use divestitures as a way to raise financial capital, but the argument has been that this is so for firms coming from positions of weakness as they are in need to repay debt in efforts to retrench. Interestingly, we find that the effect is more pronounced for firms coming from positions of strength, suggesting that they are in a better position to proactively engage in divestitures and can choose which resources from their portfolio no longer fit with the larger efforts of the organization. Moreover, we find no effect on the impact that divestitures and firm strength have on managerial capacity; this lack of effect is interesting, as it implies that

firms do not decrease their managerial capacity after divesting, thus suggesting that there is a higher managerial capacity post-divestiture to reinvest it in the remaining or new operations of the firm.

To further the analyses, we explored how firms reinvested the financial and managerial resources freed by divesting. Firms that engage in more divestitures subsequently seem to engage in more external growth, regardless of whether they are coming from positions of weakness or strength. A more thorough review indicates that firms coming from positions of strength do less acquisitions in regards to count, but their sales grow more via external sources; this suggests that stronger firms may engage in less number of acquisitions, but these acquisitions may be larger and more profitable. Moreover, this subsequent increases in performance for firms coming from positions of strength that engage in large number of divestitures seem to be coming from reinvestments in the remaining operational activities of the firm.

The work contributes to the resource based view of the firm and the overall literature on divestitures. For the resource based view, the work offers insights on how firms use divestitures as a mode of reconfiguration that allows firms to trade in the assets they have to free financial and managerial resources, and explores how these resources are later reinvested. Firms coming from positions of strength improve their odds of survival and rates of growth when they engage in more divestitures, whereas firms coming from positions of weakness improve their accounting measures of performance. These differences are seen based on what resources firms free and how they reinvest them – stronger firms can proactively choose the resources they want to free as well as the timing of the divestiture, and thus can raise more financial resources that can be later

reinvested both externally via acquiring highly profitable units, as well as reinvesting in the operational activities of the firm. Most centrally, this paper provides evidence of a complement to Penrose's (1959) insights about paths to growth, in which firms tend to build on and extend their existing resource bases. We show that eliminating existing resources offers a means for increasing subsequent performance by freeing financial and managerial resources that opens new avenues for growth.

It also contributes to the literature on divestitures, as it sheds light on how firm strength mediates the impact that divesting has on subsequent performance, and highlights that the divestiture benefits on subsequent performance firms coming from positions of strength may be on different types of performance measures than for those coming from positions of weakness. This paper sheds light on why the literature has found mixed results on the relationship between divestitures and subsequent performance, and has shed light on the mechanisms by which these differences arise.

This paper has limitations that provides avenues for ongoing research. First, this study explores a single industry; future work on this topic will collect data on other industries in order to assess generalizability of the results. Second, this paper explores a limited set of mechanisms that play a role in the relationship between divestitures and subsequent performance; further studies can expand our understanding by looking more in-depth the nature of the resources divested, as well as the nature of the reinvestment of resources within the firm. Third, further studies should continue teasing out the causal connections between divestitures and subsequent performance, and even divestitures and their relationship with other modes of reconfiguration.

Overall, this exploratory study highlights the importance of divestiture activity on subsequent performance, particularly for firms coming from positions of strength. Moreover, this study highlights how the mediating role of firms strength shapes the benefits from divesting on multiple measures of performance, indicating that firms coming from positions of weakness and positions of strength obtain different benefits from divesting. This paper also sheds light on the mechanisms by which divestiture affects performance by studying what resources are being freed and how they are being reinvested, stressing that divestitures are a tool that allows, particularly firms coming from positions of strength, to free financial and managerial resources and reinvest them in the remaining operational activities of the firm, as well as externally acquired, highly profitable resources. The results provide a basis to pursue further studies of the dynamic processes of firm reconfiguration and subsequent performance.

**Table 1. Descriptive Statistics**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
(1)Exit	1																						
(2)Sale growth	-0.01	1																					
(3)ROA	-0.06	0.10	1																				
(4)Net income	-0.02	0.36	0.17	1																			
(5)Count of divestitures	0.00	0.27	0.12	0.49	1																		
(6)Cash	-0.02	0.36	0.14	0.83	0.50	1																	
(7)TMT	-0.06	0.03	0.13	0.13	0.09	0.07	1																
(8)Acquisitions	-0.01	0.26	0.18	0.48	0.40	0.44	0.11	1															
(9)Internal	0.01	1.00	0.14	0.51	0.11	0.35	0.07	0.00	1														
(10)R&D expenses	-0.02	0.49	0.17	0.86	0.54	0.85	0.11	0.50	0.46	1													
(11)SG&A expenses	-0.02	0.48	0.17	0.91	0.57	0.87	0.12	0.54	0.51	0.96	1												
(12)Sales growth (t-1 - t-2)	-0.02	0.23	0.10	0.44	0.31	0.38	0.02	0.26	0.42	0.47	0.49	1											
(13)Diversification dummy	0.00	0.07	0.04	0.11	0.13	0.12	0.13	0.15	0.06	0.13	0.18	0.07	1										
(14)R&D expenses (lag)	-0.02	0.41	0.17	0.89	0.54	0.86	0.10	0.49	0.45	0.95	0.95	0.51	0.12	1									
(15)Count of segments	-0.02	0.17	0.24	0.30	0.27	0.31	0.25	0.33	0.15	0.34	0.37	0.18	0.28	0.34	1								
(16)Industry median ROA	-0.06	-0.04	0.32	-0.07	-0.12	-0.09	-0.09	-0.09	0.02	-0.10	-0.13	-0.03	-0.24	-0.10	0.00	1							
(17)Firm size	-0.03	0.37	0.18	0.92	0.54	0.86	0.13	0.53	0.45	0.93	0.97	0.51	0.14	0.94	0.40	-0.07	1						
(18)Financial slack	0.04	-0.03	-0.11	-0.04	-0.03	-0.03	-0.15	-0.05	-0.03	-0.04	-0.03	-0.05	-0.02	-0.04	-0.08	-0.05	-0.05	1					
(19)Net income (lag)	-0.03	0.34	0.16	0.89	0.49	0.83	0.11	0.49	0.37	0.88	0.90	0.36	0.10	0.84	0.29	-0.07	0.91	-0.04	1				
(20)Age	0.06	-0.12	-0.38	-0.23	-0.12	-0.18	-0.27	-0.17	-0.17	-0.23	-0.24	-0.12	0.11	-0.23	-0.22	-0.57	-0.27	0.09	-0.23	1			
(21)Acquisitions (lag)	0.00	0.23	0.18	0.50	0.50	0.45	0.17	0.58	0.23	0.51	0.55	0.26	0.15	0.52	0.35	-0.10	0.55	-0.05	0.49	-0.16	1		
(22)Failed acquisitions	0.00	0.18	0.14	0.38	0.32	0.35	0.18	0.42	0.14	0.42	0.46	0.20	0.11	0.43	0.27	-0.08	0.44	-0.03	0.40	-0.10	0.49	1	
(23)Headquarters US	0.03	-0.07	-0.12	-0.11	-0.13	-0.12	0.00	-0.12	-0.05	-0.14	-0.15	-0.08	0.01	-0.14	-0.10	0.15	-0.13	0.02	-0.11	-0.15	-0.12	-0.11	1
Mean	0.05	102.8	-0.23	167.6	0.16	316.3	5.77	0.24	32.98	188.3	716.9	104.8	0.65	183.3	1.46	-0.15	1.11	4.07	164.5	1979	0.24	0.1	0.84
S.D.	0.25	805.5	0.41	968.1	0.61	1637	1.34	0.82	218	837.6	2696	823.5	0.48	808.3	1.13	0.13	4.87	16.32	951.6	33.4	0.83	0.42	0.37

**Table 2. Results for Effects of Firm Strength and Divestitures on Performance**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Acquired v. Survival	Dissolved v. Survival	Acquired v. Survival	Dissolved v. Survival	Sales Growth	Sales Growth	ROA	ROA	Net Income	Net Income
Firm Strength (ROA, 2-year lag)	0.389** (0.183)	-0.862** (0.412)	0.486** (0.190)	-0.822** (0.415)	60.254** (26.216)	39.957** (18.574)	0.488*** (0.021)	0.495*** (0.021)	0.250** (0.110)	0.373*** (0.106)
Count of Divestitures (1-year lag)	0.274** (0.114)	-0.550 (0.680)	0.211* (0.120)	-1.493 (1.655)	94.685 (60.171)	102.389* (61.645)	0.011** (0.005)	0.008* (0.005)	-21.162 (29.872)	42.920* (24.549)
Strength x Divestitures			-0.650** (0.279)	-1.534 (1.947)		227.649** (114.366)		-0.082*** (0.028)		-0.033*** (0.011)
Sales growth	-0.000 (0.000)	-0.007*** (0.002)	-0.000 (0.000)	-0.007*** (0.002)	0.009 (0.050)	0.009 (0.052)	0.000 (0.000)	0.000 (0.000)	-0.026 (0.037)	-0.021 (0.035)
Diversification Dummy - Lagged	-0.160 (0.175)	-0.394 (0.343)	-0.174 (0.176)	-0.391 (0.343)	-2.807 (13.893)	0.915 (12.568)	0.047*** (0.015)	0.045*** (0.015)	-9.135 (7.066)	-12.298* (7.073)
R&D expenses	0.001*** (0.000)	-0.015 (0.015)	0.001*** (0.000)	-0.015 (0.015)	0.539** (0.241)	0.532** (0.241)	0.000 (0.000)	0.000 (0.000)	0.253*** (0.082)	0.296*** (0.103)
Count of Segments - Lagged	-0.056 (0.065)	0.165 (0.194)	-0.054 (0.066)	0.171 (0.196)	20.139 (25.373)	20.761 (24.912)	0.012*** (0.003)	0.012*** (0.003)	-54.361*** (17.902)	-52.473*** (17.561)
Industry median ROA - lagged	-2.128*** (0.759)	1.310 (1.853)	-2.175*** (0.765)	1.324 (1.853)	-1,238.832 (1,038.174)	-1,274.890 (1,026.506)	-2.321 (2.449)	-2.305 (2.443)	-901.262 (714.356)	-1,011.052 (732.916)
Firm size	-0.166*** (0.054)	-6.428** (2.940)	-0.150*** (0.049)	-6.331** (2.927)	-33.675 (40.387)	-34.419 (40.572)	0.000 (0.001)	0.000 (0.001)	116.333*** (28.128)	99.055*** (28.387)
Financial slack (1-year lag)	-0.001 (0.013)	-0.109** (0.054)	-0.001 (0.013)	-0.109** (0.054)	-0.523 (0.433)	-0.492 (0.426)	-0.002*** (0.001)	-0.002*** (0.001)	-0.529* (0.292)	-0.466* (0.281)
Headquarters dummy (US)	0.494** (0.226)	0.998 (0.665)	0.510** (0.227)	0.998 (0.666)	-42.408 (27.307)	-44.222* (26.506)	-0.093*** (0.016)	-0.093*** (0.016)	-4.670 (29.159)	9.612 (31.645)
Age	0.003 (0.005)	0.035* (0.019)	0.003 (0.004)	0.036* (0.019)	-2.974* (1.537)	-2.901* (1.505)	-0.002*** (0.000)	-0.002*** (0.000)	-0.144 (0.860)	0.139 (0.851)
Count of acquisitions (1-year lag)	0.111 (0.088)	0.398** (0.180)	0.132 (0.089)	0.454** (0.230)	4.251 (36.768)	-0.424 (37.844)	0.012*** (0.004)	0.014*** (0.004)	13.598 (27.173)	8.574 (24.024)



Failed Acquisitions - Lagged	0.099 (0.187)	0.442 (0.403)	0.095 (0.184)	0.471 (0.409)	-24.938 (45.026)	-24.236 (43.885)	-0.001 (0.007)	-0.002 (0.008)	-66.904 (52.612)	-75.540 (52.855)
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-9.980 (8.979)	-75.370** (37.888)	-10.244 (8.880)	-76.053** (38.027)	5,724.790* (3,018.089)	5,571.501* (2,953.727)	2.538*** (0.610)	2.605*** (0.620)	185.755 (1,753.636)	-418.086 (1,753.837)
Observations	5,066	5,066	5,066	5,066	5,079	5,079	5,080	5,080	5,067	5,067
Number of firms	503	503	503	503	505	505	505	505	505	505

Robust standard errors clustered by firm in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 3. Results for Mechanisms on Firm Strength and Divestitures on Performance**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Cash	Cash	TMT	TMT	Acq.	Acq.	Internal	Internal	External	External	R&D	R&D	SGA	SGA
Firm strength	66.819*	53.027	0.448	0.577	1.395***	1.502***	11.992*	16.299**	450.538**	363.789**	20.83***	19.43***	41.468**	28.510**
	(37.450)	(38.062)	(0.338)	(0.376)	(0.164)	(0.168)	(6.567)	(7.482)	(197.367)	(172.705)	(6.093)	(6.761)	(17.630)	(13.378)
Count of divestitures	145.993***	151.187***	-0.034	-0.002	0.071*	0.101**	-36.972	-48.279	149.690*	112.420	24.182*	24.705	44.018	41.038
	(21.901)	(22.051)	(0.049)	(0.057)	(0.040)	(0.042)	(23.842)	(34.755)	(84.626)	(76.482)	(14.404)	(15.073)	(28.474)	(26.357)
Strength x Divestitures		144.561**		-0.444		-0.495**		-55.788		509.055*		15.464		132.908**
		(72.049)		(0.309)		(0.204)		(55.090)		(294.968)		(25.226)		(60.841)
Sales growth	-0.197***	-0.197***	-0.000	-0.000	-0.000	-0.000	0.199	0.198	-0.005	-0.004	-0.03***	-0.33***	-0.013	-0.013
	(0.015)	(0.015)	(0.000)	(0.000)	(0.000)	(0.000)	(0.155)	(0.154)	(0.059)	(0.060)	(0.012)	(0.012)	(0.013)	(0.013)
Diversification	5.696	7.936	0.104	0.109	0.246*	0.225*	0.756	0.173	15.689	34.740	10.81***	11.06***	5.278	8.861
	(34.395)	(34.392)	(0.280)	(0.275)	(0.133)	(0.132)	(5.001)	(5.075)	(100.221)	(95.124)	(3.827)	(3.645)	(11.557)	(10.355)
R&D expenses	0.930***	0.927***	-0.000	-0.000	-0.000	-0.000	0.229	0.230	0.723**	0.711**	0.735***	0.734***	0.051	0.049
	(0.047)	(0.047)	(0.000)	(0.000)	(0.000)	(0.000)	(0.202)	(0.201)	(0.335)	(0.340)	(0.081)	(0.081)	(0.062)	(0.063)
Count of segments	-4.381	-3.732	0.055	0.051	0.093***	0.092***	-2.982	-3.116	51.676	54.048	-10.477	-10.435	1.402	1.874
	(13.318)	(13.314)	(0.051)	(0.051)	(0.035)	(0.035)	(10.071)	(10.006)	(65.061)	(64.185)	(6.671)	(6.671)	(10.345)	(10.068)
Firm size	177.173***	176.653***	-0.024*	-0.025*	0.026**	0.025**	-5.457	-4.397	-65.942	-65.188	49.68***	49.63***	-0.435	-0.632
	(7.822)	(7.822)	(0.014)	(0.013)	(0.011)	(0.011)	(29.690)	(29.249)	(55.515)	(56.219)	(14.133)	(14.200)	(17.101)	(17.170)
Financial slack	1.958	1.982	0.001	0.001	-0.03***	-0.03***	-0.217	-0.217	-7.229	-7.690	0.071	0.073	-0.096	-0.119
	(1.637)	(1.636)	(0.012)	(0.012)	(0.011)	(0.011)	(0.159)	(0.155)	(5.302)	(5.412)	(0.124)	(0.124)	(0.235)	(0.234)
Headquarters US	71.828*	70.130*			-0.44***	-0.42***	-1.426	-0.847	-119.131	-125.574	-10.140	-10.265	-28.359	-30.037
	(42.485)	(42.429)			(0.132)	(0.127)	(9.152)	(9.133)	(94.255)	(92.904)	(7.575)	(7.609)	(20.183)	(19.551)
Age	3.012***	3.061***	-0.01***	-0.01***	-0.01***	-0.01***	-1.764***	-1.766***	-4.592*	-4.306	0.018	0.023	-1.309**	-1.268**
	(0.808)	(0.807)	(0.002)	(0.002)	(0.001)	(0.001)	(0.535)	(0.538)	(2.715)	(2.634)	(0.429)	(0.425)	(0.663)	(0.642)
Count of acquisitions	-59.891***	-63.121***	0.067	0.071	0.319***	0.321***	30.876	32.758	-60.403	-62.802	-18.16**	-18.48**	-15.560	-16.915
	(17.504)	(17.575)	(0.043)	(0.044)	(0.048)	(0.049)	(26.674)	(25.483)	(63.586)	(63.676)	(7.399)	(7.429)	(19.028)	(19.228)

Failed Acquisitions	-138.694***	-137.931***	0.236***	0.234**	0.230***	0.227***	24.083	25.345	-98.002	-92.996	14.206	14.255	26.313	26.818
	(29.857)	(29.860)	(0.090)	(0.092)	(0.083)	(0.083)	(19.851)	(19.965)	(70.790)	(70.272)	(20.728)	(20.713)	(29.206)	(29.652)
Industry median ROA	-701.678	-726.495	-9.550	-9.672	-3.314	-3.141	-256.986	-275.203	-4,609.588	-7,215.924	-221.515	-223.737	-1,311.783	-1,264.087
	(3,955.4)	(3,955.4)	(11.548)	(11.380)	(9.642)	(9.386)	(346.805)	(351.340)	(5,133.925)	(5,649.109)	(267.765)	(266.329)	(1,003.566)	(978.224)
Constant	-6,139***	-6,243***	22.9***	23.***	14.6***	14.9***	3,480***	3,482***	8,423	7,418	-63.495	-73.848	2,359.0*	2,285.0*
	(1,749.493)	(1,747.344)	(5.458)	(5.501)	(3.475)	(3.414)	(1,064)	(1,068)	(5,262)	(5,133)	(864.607)	(857.642)	(1,237.3)	(1,201.2)
Observations	5,070	5,070	761	761	5,080	5,080	4,222	4,222	857	857	5,035	5,035	3,262	3,262
Number of firms	505	505	68	68	505	505	498	498	218	218	502	502	398	398
R-Square	0.776	0.776	0.161	0.160			0.268	0.269	0.174	0.175	0.936	0.936	0.983	0.984

Robust standard errors in parentheses, clustered by firm

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## REFERENCES

- Abor, J., Graham, M., & Yawson, A. (2011). Corporate Governance and Restructuring Activities Following Completed Bids. *Corporate Governance: An International Review*, 19(1), 61–76. doi:10.1111/j.1467-8683.2010.00833.x
- Alexander, G. J., Benson, P. G., & Kampmeyer, J. M. (1984). Investigating the Valuation Effects of Announcements of Voluntary Corporate Selloffs. *Journal of Finance*, 39(2), 503–517.
- Amit, R., & Schoemaker, P. J. H. (1993). Strategic Assets and Organizational Rent. *Strategic Management Journal*, 14(1), 33–46.
- Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99.
- Bergh, D. D. (1995). Size and Relatedness of Units Sold: An Agency Theory and Resource-Based Perspective. *Strategic Management Journal*, 16(3), 221–239.
- Bergh, D. D. (1997). Predicting Divestiture of Unrelated Acquisitions: An Integrative Model of Ex Ante Conditions. *Strategic Management Journal*, 18(9), 715–731.
- Bergh, D. D. (1998). Product-Market Uncertainty, Portfolio Restructuring, and Performance: An Information-Processing and Resource-Based View. *Journal of Management*, 24(2), 135–155.
- Berry, H. (2010). Why Do Firms Divest? *Organization Science*, 21(2), 380–396. doi:10.1287/orsc.1090.0444
- Brauer, M. F., & Wiersema, M. F. (2012). Industry divestiture waves: How a firm's position influences investor returns. *Academy of Management Journal*, 55(6), 1472–1492.
- Brown, D. T., James, C. M., & Mooradian, R. M. (1994). Asset Sales by Financially Distressed Firms. *Journal of Corporate Finance*, 1(2), 233–257.
- Capron, L. (1999). The Long-Term Performance of Horizontal Acquisitions. *Strategic Management Journal*, 20(11), 987–1018.
- Capron, L., & Mitchell, W. (2007). Selection Capability: How Capability Gaps and Internal Social Frictions Affect Internal and External Strategic Renewal. *INSEAD Working Papers Collection*, (61), 1–40.
- Capron, L., & Mitchell, W. (2008). Acquisition Experience and Acquisition Success: Examining the Mediating Role of Acquisition Implementation and Mode Selection Capabilities.
- Chakrabarti, A., Vidal, E., & Mitchell, W. (2011). Business Transformation in Heterogeneous Environments: The Impact of Market Development and Firm Strength on Retrenchment and Growth Reconfiguration. *Global Strategy Journal*, 1(1-2), 6–26. doi:10.1002/gsj.3
- Chang, S. J. (1996). An Evolutionary Perspective on Diversification and Corporate Restructuring: Entry, Exit, and Economic Performance During 1981-89. *Strategic Management Journal*, 17(8), 587–611.
- Das, T. K., & Teng, B.-S. (2000). A Resource-Based Theory of Strategic Alliances. *Journal of Management*, 26(1), 31–61. doi:10.1177/014920630002600105
- Depecik, B., van Everdingen, Y. M., & van Bruggen, G. H. (2014). Firm Value Effects of Global, Regional, and Local Brand Divestments in Core and Non-Core Businesses. *Global Strategy Journal*, 4(2), 143–160. doi:10.1111/j.2042-5805.2014.1074.x
- Dittmar, A., & Shivdasani, A. (2003). Divestitures and Divisional Investment Policies. *The Journal of Finance*, 58(6), 2711–2744. doi:10.1046/j.1540-6261.2003.00620.x
- Duhaime, I. M., & Baird, I. S. (1987). Divestment Decision-Making: The Role of Business Unit Size. *Journal of Management*, 13(3), 483–498.
- Duhaime, I. M., & Grant, J. H. (1984). Factors Influencing Divestment Decision-Making: Evidence from a Field Study. *Strategic Management Journal*, 5(4), 301–318.
- Feldman, E. R. (2014). Legacy Divestitures: Motives and Implications. *Organization Science*, 25(3), 815–832. doi:10.1287/orsc.2013.0873
- Haynes, M., Thompson, S., & Wright, M. (2002). The Impact of Divestment on Firm Performance: Empirical Evidence from a Panel of UK Companies. *The Journal of Industrial Economics*, 50(2), 173–196. doi:10.1111/1467-6451.00173
- Haynes, M., Thompson, S., & Wright, M. (2003). The determinants of corporate divestment: evidence from a panel of UK firms. *Journal of Economic Behavior & Organization*, 52(1), 147–166.

- Hayward, M. L. A., & Shimizu, K. (2006). De-Commitment to Losing Strategic Action: Evidence from the Divestiture of Poorly Performing Acquisitions. *Strategic Management Journal*, 27(6), 541–557. doi:10.1002/smj.526
- Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). *Dynamic Capabilities: Understanding Strategic Change In Organizations*. Blackwell Publishing.
- Hite, G. L., & Owers, J. E. (1983). Security Price Reactions Around Corporate Spin-Off Announcements. *Journal of Financial Economics*, 12(4), 409–436.
- Hopkins, H. D. (1991). Acquisition and Divestiture as a Response to Competitive Position and Market Structure. *Journal of Management Studies*, 28(6), 665–677.
- Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. (1994). Corporate Divestiture Intensity in Restructuring Firms: Effects of Governance, Strategy, and Performance. *The Academy of Management Journal*, 37(5), 1207–1251.
- Hoskisson, R. O., & Johnson, R. A. (1992). Research Notes and Communications: Corporate Restructuring and Strategic Change: The Effect on Diversification Strategy and R&D Intensity. *Strategic Management Journal*, 13(8), 625–634.
- Ioannou, I. (2013). When Do Spinouts Enhance Parent Firm Performance? Evidence from the US Automobile Industry, 1890–1986. *Organization Science*, 25(2), 529–551.
- Jain, P. C. (1985). The Effect of Voluntary Sell-off Announcements on Shareholder Wealth. *The Journal of Finance*, 40(1), 209–224.
- Kale, P., Dyer, J. H., & Singh, H. (2002). Alliance Capability, Stock Market Response, and Long Term Alliance Success: The Role of the Alliance Function. *Strategic Management Journal*, 23(8), 747.
- Kale, P., & Singh, H. (2007). Building Firm Capabilities Through Learning: The Role of the Alliance Learning Process in Alliance Capability and Firm-Level Alliance Success. *Strategic Management Journal*, 28(10), 981–1000.
- Karim, S., & Mitchell, W. (2004). Innovating Through Acquisition and Internal Development: A Quarter-century of Boundary Evolution and Johnson & Johnson. *Long Range Planning Journal*, (37), 525–547.
- Markides, C. C. (1992). Consequences of Corporate Refocusing: Ex Ante Evidence. *The Academy of Management Journal*, 35(2), 398–412.
- Markides, C. C. (1995). Diversification, Restructuring and Economic Performance. *Strategic Management Journal*, 16(2), 101–118.
- Moliterno, T. P., & Wiersema, M. F. (2007). Firm Performance, Rent Appropriation, and the Strategic Resource Divestment Capability. *Strategic Management Journal*, 28(11), 1065–1087.
- Montgomery, C. A., & Thomas, A. R. (1988). Divestment: Motives and Gains. *Strategic Management Journal*, 9(1), 93–97.
- Mulherin, J. H., & Boone, A. L. (2000). Comparing Acquisitions and Divestitures. *Journal of Corporate Finance*, 6(2), 117–139.
- Owen, S., Shi, L., & Yawson, A. (2010). Divestitures, wealth effects and corporate governance. *Accounting & Finance*, 50(2), 389–415. doi:10.1111/j.1467-629X.2009.00332.x
- Powell, R., & Yawson, A. (2012). Internal Restructuring and Firm Survival. *International Review of Finance*, 12(4), 435–467. doi:10.1111/j.1468-2443.2012.01151.x
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509–533.
- Villalonga, B. (2004). Diversification Discount or Premium? New Evidence from the Business Information Tracking Series. *The Journal of Finance*, 59(2), 479–506.
- Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), 171–180.
- Woo, C. Y., Willard, G. E., & Daellenbach, U. S. (1992). Spin-Off Performance: A Case of Overstated Expectations? *Strategic Management Journal*, 13(6), 433–447.
- Wright, P., & Ferris, S. P. (1997). Agency Conflict and Corporate Strategy: The Effect of Divestment on Corporate Value. *Strategic Management Journal*, 18(1), 77–83. doi:10.2307/3088196
- Xia, J., & Li, S. (2013). The Divestiture of Acquired Subunits: A Resource Dependence Approach. *Strategic Management Journal*, 34(2), 131–148. doi:10.1002/smj.2008