Make Room! Make Room!
A Note on Sequential Spinoffs and Acquisitions

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Abstract

In this study, we identify a novel pattern of deal-making activity—spinoffs followed by acquisitions—that has yet to be analyzed in the corporate strategy literature. We present a set of descriptive results showing that firms undertake spinoffs followed by acquisitions at a rate that is too high to be attributable to random chance. We also find that the acquired businesses are typically more closely related to these companies' remaining operations than are the spun-off subsidiaries, a pattern that is common across companies with different characteristics. Together, these results suggest that firms may use sequential spinoffs and acquisitions to achieve ongoing synergies and improve the allocation of managerial attention within their organizations. We conclude by discussing how our work contributes to ongoing conversations in corporate strategy about patterns of acquisitions and divestitures, resource redeployment, reconfiguration, and firm scope.

Keywords: spinoffs, divestitures, acquisitions, corporate strategy, corporate scope

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INTRODUCTION

There is a large and important literature in the field of strategy about how firms shift their boundaries (Chang, 1996; Karim and Mitchell, 2000; Matsusaka, 2001; Helfat and Eisenhardt, 2004). One of the main mechanisms through which firms implement such changes is by undertaking acquisitions, which are thought to expand firm scope, and divestitures, which are believed to reduce it. Extant research in strategy and finance has even highlighted the pattern of corporate deal-making in which divestitures follow acquisitions, usually reflecting scope reduction after some period of scope expansion (Porter, 1987; Kaplan and Weisbach, 1992; Meyer, Milgrom, and Roberts, 1992; Teece *et al.*, 1994; Capron, Mitchell, and Swaminathan, 2001; Hayward and Shimizu, 2006; Kaul, 2012).

As early as Penrose (1959), scholars have recognized that the resources that a firm has at its disposal may constrain the set of initiatives it might take to shift its corporate scope. For example, an absence of managerial slack or a lack of appropriate organizational capabilities can be significant limiting factors on both acquisition and divestiture activity (Cyert and March, 1963; Levinthal and March, 1981; Nelson and Winter, 1982; Greve, 2003). Within this broad context, therefore, spinoffs[1] are an especially interesting mode of corporate strategy to consider because they do not generate any cash, meaning that they do not directly impact the parent firm's financial resources. By the same token, however, spinoffs may have an impact on a key non-financial resource, the time and attention of top management (Schoar, 2002; Levinthal and Wu, 2010), by releasing that resource to be allocated to other uses within the parent firm (Feldman, 2016a). One potential use for the newly-liberated managerial resources created by spinoffs is further acquisition activity, raising interesting questions about how this pattern of corporate deal-making (as distinct

[1] Spinoffs are a mode of divestiture in which a "parent firm" distributes shares in one of its businesses *pro-rata* to its existing shareholders, resulting in the creation of a new, publicly-traded "spinoff firm."

from its inverse of acquisitions followed by divestitures) might alter a firm's corporate scope. Thus, in this study, we present analyses that point to a fuller appreciation of the interrelationships between initiatives that can shift a firm's overall scope of activities.

Anecdotal evidence confirms that the practice of undertaking acquisitions after spinoffs manifests itself reasonably frequently in practice. For example, in November 2015, ConAgra announced that it would break itself into two parts by spinning off its commercial frozen potato division into a new company called Lamb Weston, leaving behind its portfolio of consumer brands in a new company called ConAgra Brands. In describing the benefits of this strategic shift, ConAgra CEO Sean Connolly explained, "You will have a management team here that is squarely focused on one thing, which is enhancing the operational focus of the ConAgra Brands business, which has not [previously] been the case." Connolly further elaborated that he is "willing to buy new brands to spruce up the ConAgra portfolio" (Soderlin, 2015). Even more recently, in September 2016, A. P. Moeller-Maersk announced that it would separate its transport and energy divisions via spinoff, with one of the key rationales for the split being to allow each of the units to be able to pursue acquisitions independently of the other: "'It's very clear that Maersk wants to grow,' said Lars Jensen, chief executive of Copenhagen-based SeaIntelligence Consulting. 'Instead of the units fighting each other for capital, the split up will allow the separate businesses to focus on acquisitions. I expect Maersk Line [Maersk's transport business] to be much more predatory over the next couple of years…On the strategic front, Maersk Oil will adjust to focus on fewer geographies, particularly in the North Sea, where it will strengthen its portfolio through acquisitions or mergers'" (Paris and Chopping, 2016).

We begin our study by analyzing empirical data to investigate whether acquisitions are undertaken after spinoffs at a rate that is unlikely to be attributable to random chance. Consistent

with the above anecdotes and discussion, we find that this is indeed the case. We then dig into the characteristics of the spun-off and acquired businesses, finding that acquired business units are likely to be more related to the parent firms' remaining operations than are the spun-off businesses. While the trivial justification for these patterns of behavior would be that spinoffs are being used to free up capital resources for future acquisitions, there are two features of the setting that rule out this explanation. First, the Fortune 500 firms we are studying are generally not cash constrained and have easy access to liquid capital markets, suggesting that these companies should be able to undertake acquisitions without having to divest existing businesses.[2] Second, even if these companies did need capital, we are restricting our attention to spinoffs as a mode of divestiture, which do not generate cash for parent firms. Thus, we interpret our findings as suggesting that the firms in our sample may be undertaking sequential spinoffs and acquisitions to achieve ongoing synergies and improve the allocation of managerial attention within their organizations.

We conclude by discussing how the strategic behavior we observe in our study connects to key concepts and theoretical frameworks in corporate strategy, especially the reverse pattern of acquisitions followed by divestitures, as well as resource redeployment and reconfiguration.

WHY DO FIRMS UNDERTAKE SPINOFFS?

An ample literature has emerged analyzing why companies might choose to undertake spinoffs. This research can be divided roughly into four main categories.

The first reason why firms might choose to undertake spinoffs is to reduce over-diversification. Firms often diversify into industries that are unrelated to their core businesses, but

[2] To further confirm this intuition, moreover, we also conduct a robustness check testing whether our results differ among firms that are more cash constrained relative to those that are less cash constrained. As we will describe later in this paper, the patterns of spinoffs followed by acquisitions that we observe in this study do not vary in the extent to which the parent firms are cash constrained.

these industries can be too distant from managers' knowledge and experience. As a result, firms undertake spinoffs (and other divestitures) to reverse such endeavors, thereby returning managers' attention to their firms' core competences (Porter, 1987; Markides, 1992, 1995; Johnson, 1996; Bergh, 1997, Daley, Mehrotra, and Sivakumar, 1997; Desai and Jain, 1999).

Second, companies may undertake spinoffs to reduce their complexity in the capital markets. When a firm operates in multiple businesses, especially unrelated ones, it can be difficult for external stakeholders to evaluate the coherence of that company's operations (Zuckerman, 1999; Nanda and Narayanan, 1999; Litov, Moreton, and Zenger, 2012). Spinoffs resolve such problems by removing businesses that may be clouding analysts' and investors' perceptions (Zuckerman, 2000; Bergh *et al.*, 2008; Feldman, 2016b).

Third, firms may undertake spinoffs to remove unwanted businesses. Spinoffs (and other divestitures) can remove obsolete or declining businesses (Porter, 1987; Anand and Singh, 1997; Hayward and Shimizu, 2006; Shimizu, 2007), as well as acquisitions that failed or did not meet expectations (Kaplan and Weisbach, 1992; Shimizu and Hitt, 2005).

Fourth, and finally, firms may undertake spinoffs to improve the alignment of spinoff firm managers' incentive compensation with stock market performance. A problem that is thought to affect multi-business firms is that divisional manager compensation may not be well aligned with firm-level performance, resulting in inefficient behavior on the part of those managers. Spinoffs can help resolve this issue by separating individual businesses from one another and allowing each of them to trade publicly, thereby facilitating a more direct alignment between compensation and performance (Seward and Walsh, 1996; Feldman, 2016c).

To evaluate the relative prevalence of the four above-described rationales for spinoffs, we analyzed the explanations that companies provided for undertaking these deals. One of the key

features that makes spinoffs a particularly attractive empirical context is the fact that when a company undertakes one of these deals, it must file a "registration statement" with the SEC, disclosing five years of backwards-looking financial data on the operations of the spun-off subsidiary and providing a discussion of the benefits the spinoff is expected to achieve. For the companies that undertook the sample of spinoffs analyzed in this study, we hand-collected the text descriptions of these expected gains from these companies' registration statements. We then read these descriptions and grouped them into common categories, enabling us to determine what proportion of companies cited each expected benefit as a motivation for undertaking a spinoff.

Table 1 presents a list of these motivations. Consistent with the above-described literature, 92% of the companies that undertook these deals state that they did so to improve managerial focus; nearly 82% of them mention the need to clarify capital market perceptions as the rationale for these spinoffs; and close to 75% of these companies also point to the need to improve the alignment of divisional managers' incentives as a key factor driving them to undertake these deals. Interestingly, however, more than 50% of the firms in our sample also reference a desire to undertake spinoffs to facilitate future merger and acquisition (M&A) activity.[3] It is striking that existing research in corporate strategy has yet to study this motivation, given the high percentage of companies that point to it, as well as the otherwise strong alignment between companies' stated reasons for spinning off businesses and the literature's investigation of these rationales.

-----Table 1 here-----

Accordingly, we undertake this endeavor in our study. We begin with an empirical investigation of the incidence of M&A activity following spinoffs, as well as the characteristics of

[3] Of course, none of the rationales presented in Table 1 are mutually exclusive of one another, and indeed, the attainment of one of these rationales (*e.g.*, improving managerial focus) can contribute to the achievement of another (*e.g.*, reducing capital market complexity).

the acquired and spun-off business units. We then reflect on the implications of our analysis for corporate strategy research.

SAMPLE AND DATA

We used SDC Platinum's Mergers and Acquisitions database to compile a list of all of the non-taxable spinoffs that were announced and completed by Fortune 500 firms between January 1, 1995 and December 31, 2009. There were 196 such spinoffs undertaken by 146 Fortune 500 firms during this period of time. For each of these parent firms, we constructed nine-year panels consisting of the five years pre-spinoff (consonant with the disclosure requirements described above), the spinoff's effective year, and the three years post-spinoff. We used SDC to gather data on the acquisitions (the identity and SIC code of the acquired businesses) undertaken by the parent firms in each of their nine years in the sample.

Table 2 presents the average value of divestitures and acquisitions, as well as counts of the number of deals undertaken in each of the years surrounding the spinoffs in our sample. Divestiture counts are highest in the spinoffs' effective years because spinoffs are a subset of divestitures. The number and value of divestitures undertaken is not significantly different before and after the spinoffs in our sample. Acquisitions appear to be more common in the years before (rather than after) spinoffs, justifying the existing research on the phenomenon of acquisitions followed by divestitures (Kaplan and Weisbach, 1992; Hoskisson, Johnson, and Moesel, 1994; Anand and Singh, 1997; Capron *et al.*, 2001; Hayward and Shimizu, 2006; Maksimovic, Phillips, and Prabhala, 2011). However, the number of acquisitions undertaken post-spinoff is quite significant, and the acquisitions undertaken after spinoffs are larger in dollar terms, justifying our attention to the phenomenon of spinoffs before acquisitions in this study.

-----Table 2 here-----

ANALYSIS AND RESULTS

Spinoffs Followed by Acquisitions

To study whether companies do, in fact, undertake spinoffs to facilitate future acquisitions, we begin by analyzing the incidence of M&A activity in the wake of corporate spinoffs. Acquisitions could, of course, be undertaken after spinoffs in reaction to external shocks or common industry trends (Mulherin and Boone, 2000), or out of sheer random chance, even if the events were completely independent of one another. We therefore define the benchmark case as one in which the timing of spinoffs and acquisitions is truly independent. We then predict that acquisitions will be undertaken after spinoffs at a rate that would be extremely unlikely if the events were independent of each other.

As described previously, we collected data from SDC Platinum on all of the acquisitions made by the parent firms in our sample during a nine-year window surrounding the completion of the spinoffs they undertook. In 74 percent of the spinoff events in our sample, the parent firm also made an acquisition within one year of that deal. That number seems high enough to offer support for the suggestion that firms undertake acquisitions after spinoffs, but the difference merits testing.

To test our prediction that acquisitions occur after spinoffs at a rate that would be extremely unlikely if the events were independent, we simulate the likelihood that spinoffs—in the observed sample size of 146 parent firms with the observed base rate of spinoffs in 5.2 percent of firm-years—would have an associated acquisition within one year if the events were truly independent with different base rates of acquisitions. The algorithm for the simulation is as follows. For each candidate base rate of acquisition—for example, a firm making an acquisition randomly in 10 percent of firm years—we generate 100 iterations of 146 times 25 firm-years. In each of those years, the focal firm has the candidate probability of making an acquisition, and the observed 5.2

percent probability of undertaking a spinoff. For each candidate base rate, we then determine the 98% confidence interval for how likely a firm is to make an acquisition within one year of undertaking a spinoff.[4]

Figure 1 depicts the results of the simulation, along with the observed base rate of 74 percent of spinoffs being followed by an acquisition one year later. Return to the example candidate base rate of 10 percent of firm years. If these firms undertook acquisitions distributed *i.i.d.* binomial with p=0.10—undertaking acquisitions randomly in 10 percent of years—we could be 98 percent confident that we would only observe spinoffs being followed by acquisitions in 15 to 25 percent of years.[5]

The next step is to compute a true base rate probability of acquisitions that are undertaken by companies that are comparable to the firms in our sample. To do so, we begin by identifying a reference group of firms. For each parent firm in our sample, we define the reference group as the five companies with the closest market share operating in the same primary four-digit SIC code as the parent firm. We then collected from SDC Platinum all of the acquisitions that were undertaken by these reference firms between 1990 and 2014. The average firm in the reference group completes an acquisition in roughly 25 percent of years. Figure 1 suggests that if acquisitions are

[4] Because we use 100 iterations, we obtain the 98% confidence interval by excluding the highest and lowest iterations and then taking the maximum and minimum of the remaining 98 iterations.

[5] As mentioned previously, we also conduct a robustness test to determine whether these results differ for firms that are relatively more versus relatively less cash constrained. To do this, we divided our sample of divesting firms into quartiles according to their current ratio (a common metric for cash constraint that is defined as the ratio of current assets to current liabilities) and re-ran the above analysis on the firms in the lowest and highest quartiles. For firms in the lowest quartile of current ratio (the most cash constrained), the observed base rate of spinoffs was 5.5 percent of firm-years, while for firms in the highest quartile of current ratio (the least cash constrained), the observed base-rate of spinoffs was 5.8 percent of firm years. Assuming that either of these two groups of firms undertake acquisitions distributed *i.i.d.* binomial with p=0.6667—undertaking acquisitions randomly in 66.67 percent of years (which is coincidentally the observed rate of acquisition activity in both groups of firms)—the simulation results reveal that we could be 98 percent confident that we would only observe spinoffs being followed by acquisitions in 30 to 45 percent of years. Given that our observed proportion of spinoffs followed by acquisitions, 74 percent, is well outside of the 30 to 45 percent range, we can reject the null of independent spinoffs and acquisitions for firms that are relatively more cash constrained as well as firms that are relatively less cash constrained.

truly undertaken independently of spinoffs, and the base rate of acquisitions were 25 percent, we would observe a spinoff being followed by an acquisition 38 to 45 percent of the time.

Our observed proportion of 74 percent is well outside that range, so at the comparison base rate we can reject the null of independent acquisitions and spinoffs. In fact, the base rate would have to be greater than 40 percent for us to observe as high a proportion of spinoffs being followed by acquisitions within one year (74 percent) as we do. This finding reinforces the point that it is extremely unlikely that the firms in our sample are initiating spinoffs and acquisitions independently of one another.

-----Figure 1 here-----

Relatedness of Spun-Off and Acquired Businesses

Given that companies' behavior seems to reflect the predicted pattern of spinoffs followed by acquisitions, we next seek to understand the characteristics of the acquisitions these firms are undertaking. One characteristic that is especially interesting to us is the relatedness of the acquired business to the remaining, post-spinoff operations of the parent firm, particularly when juxtaposed against the relatedness of the spun-off subsidiary to its former parent's remaining operations. Investigating the relatedness of spun-off subsidiaries and acquired business units has the potential to shed light on how the composition of the parent firms' portfolio changes as a result of its spinoff and acquisition activity.

Figure 2 displays the percentages of related and unrelated acquisitions that are undertaken within one year of spinoffs. An acquisition is defined as "related" when the acquired business unit operates in the same SIC code, with a specified number of digits, as the firm that acquired it within one year after the accompanying spinoff that it also undertook. For two of the three definitions of relatedness—the parent firm and the acquired business unit sharing a three- or a four-digit SIC

code—Figure 2 reveals that more than half of the business units that are acquired after a firm undertakes a spinoff are related to the parent firm's main operations.

-----Figure 2 here-----

We refine this analysis by considering the relatedness of a firm's acquisitions as compared to the relatedness of its earlier spinoff. For example, a focal firm specializing in the "Rolling, Drawing, and Extruding of Nonferrous Metals" industry (SIC 3350) that spun off a business operating in the "Steel Pipe and Tubes" industry (SIC 3317) and bought a business operating in the "Drawing and Insulating of Nonferrous Wire" industry (SIC 3357) would have replaced a business sharing two digits of its primary SIC code with one sharing three digits of its main SIC code. This would mean that the focal firm replaced a less related business (SIC 3317) with a more related one (SIC 3357). Alternately, a focal firm specializing in the "Rolling, Drawing, and Extruding of Nonferrous Metals" industry (SIC 3350) that spun off a business operating in the "Drawing and Insulating of Nonferrous Wire" industry (SIC 3357) and bought a business operating in the "Steel Pipe and Tubes" industry (SIC 3317) would have replaced a business sharing three digits of its primary SIC code with one sharing two digits of its main SIC code. This would mean that the focal firm replaced a more related business (SIC 3357) with a less related one (SIC 3317).[6]

Figure 3 shows that the more related a spun-off subsidiary is to the parent firm's main operations, the more related the parent firms' subsequent acquisitions will be, on average. For example, when the spun-off unit is unrelated to the parent firm's primary business, 60 percent (0.47/0.78) of subsequent acquisitions are related at least at the two-digit level. When the spun-

[6] Bryce and Winter (2009) and Lien and Klein (2008) have developed alternate measures of industry relatedness. Bryce and Winter (2009)'s measure is based on establishment-level manufacturing data and Lien and Klein's (2008) on industries in which firms from their sample operate. Unfortunately, more than half (54%) of the parent firms in our sample are outside of the manufacturing sector, and only 644 acquired units (out of 5,345) operate in industries analyzed by Lien and Klein (2008), making these measures less well suited to our data than standard SIC codes.

off unit is related to the parent firm's primary business at the three-digit level, 71 percent of subsequent acquisitions (0.55/0.77) are related at the four-digit level. This pattern suggests that on balance, the businesses that remain within parent firms' portfolios are more related to one another following the sequential spinoffs and acquisitions undertaken by these companies than they had been previously.

-----Figure 3 here-----

To shed additional light on this phenomenon, we next provide some summary statistics on how frequently different types of companies undertake *related acquisitions following unrelated spinoffs* ("RAFUS"). Each spinoff is a candidate to be a RAFUS and is defined as such if, at any of its two-, three-, or four-digit SIC codes, the spun-off unit was unrelated to its parent firm and that spinoff was followed within two years by an acquisition that was related to the parent firm. Table 3 presents counts of the numbers of spinoffs that are RAFUS, broken down according to four separate characteristics of the divesting parent firms.

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The first of these four characteristics is the size of the parent firm, as measured by its mean assets over the data window. Larger firms seem to take on slightly more RAFUS transactions (61/104=0.59) than smaller firms (47/92=0.51), though the numbers reveal that this phenomenon is not limited to the largest firms. We then investigate whether RAFUS transactions are more common among more diversified firms. We begin by measuring diversification using Palepu's (1985) total diversification (DT) measure. Again, the numbers suggest that while RAFUS transactions are more common among more diversified firms, even less diversified firms are likely to undertake these transactions. We then measure diversification by the average number of segments in which the parent firm operated during the data window. The results are similar, again

showing RAFUS transactions to be more common among more diversified firms, but prevalent across the board. Finally, we investigate whether RAFUS transactions are linked to cash constraints. We divide the sample at the median of the current ratio, with firms above the median being less cash constrained. The numbers in Table 3 seem to suggest that RAFUS transactions are even more common among less cash constrained firms, suggesting that they are not necessarily driven by the need to reallocate capital resources.

Together, the results presented in Table 3 reveal that the pattern of deal-making that we have documented in this subsection (RAFUS) is common across various types of parent companies, further reflecting the prevalence of this phenomenon.

DISCUSSION

We have empirically investigated whether companies that undertake spinoffs follow through on one of their most-frequently stated motivations for undertaking these deals—facilitating future M&A activity. We present preliminary evidence consistent with them doing so, in that acquisitions are undertaken after spinoffs at a rate that is far too high to be attributable to random chance. We also find that the businesses that are acquired within these sequences of transactions tend to be more related to the parent firms' remaining operations than are the businesses these companies spin off, implying a net increase in the relatedness of the parent firms' portfolios.

Patterns of Acquisitions and Divestitures

At its most fundamental level, our study identifies a novel pattern of corporate strategic activity that has not been analyzed by extant research: divestitures followed by acquisitions. While the idea that acquisitions and divestitures are undertaken in tandem with one another is well-recognized, divestitures are typically thought to be undertaken *after* acquisitions, often as a means of increasing the focus of the organization (Meyer *et al.*, 1992). As Teece *et al.* (1994: 3, *emphasis* added) put it, "the sequence is generally for firms to begin as single product and subsequently

become multi-product, rather than the other way around… Indeed, there often appears to be a degree of circularity to the fashion in which new businesses are *added and subsequently divested*." Although we do not develop a formal theoretical framework surrounding these issues, we will now reflect on the circumstances in which firms might undertake divestitures *before* acquisitions, and distinguish these explanations from traditional arguments about why firms might undertake divestitures *after* acquisitions.

In Table 4, we present a set of arguments as to why companies might undertake the traditional pattern of divestitures after acquisitions (in Panel A), alongside a distinct set of explanations for why companies might undertake the novel pattern of deal-making analyzed in this study, divestitures before acquisitions (in Panel B). While the typologies that are laid out in Panel A have ostensibly been recognized and analyzed empirically in existing research, the literature on the typologies described in Panel B appears to be much sparser. Accordingly, our efforts to describe the data and suggest a sequencing pattern that is distinct from than the one that is currently discussed in the literature is an important step forward in better understanding the complexity of how firms sequence activities in order to manage their corporate portfolios. In particular, while most large companies actively manage their portfolios of businesses over time, isolating the sequencing of different modes of corporate strategy—what is really preceding what—is difficult to do. Thus, it is in this domain that we believe that both the contribution of our work and the opportunities for future research most clearly reside.

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Delving into Panel B of Table 4 in more detail, the "cash generation" typology suggests that one explanation for why companies might undertake divestitures before acquisitions is to generate cash that could then be used to fund these subsequent deals (Lang, Poulsen, and Stulz,

1995; Nanda and Narayanan, 1999).[7] Importantly for our purposes, though, this pattern of behavior is limited to sell-offs (which generate cash), whereas our study focuses on spinoffs (which generate no cash). Thus, while cash generation may be a perfectly rational reason for firms to undertake divestitures before acquisitions, the context in which our study is situated allows us to rule it out as an explanation for our findings.

Turning next to the "managerial preferences" typology, this rests on the familiar agency-theoretic argument that empire-building managers seek to grow the scope of their firms beyond optimal levels (Stulz, 1990), in particular because firm size is positively associated with managerial compensation (Jensen and Murphy, 1990) as well as non-pecuniary benefits such as power, reputation, and job security (Jensen, 1986; Shleifer and Vishny, 1990). Thus, the "managerial preferences" typology suggests that managers, having just undertaken a divestiture, may subsequently seek to undertake acquisitions in order to re-grow the size of the firms that they oversee. Although we cannot explicitly rule this argument out as an explanation for the results we have documented in this study, it is telling that the acquisitions that occur in the years after the spinoffs we analyze are neither larger nor more unrelated than the acquisitions that occurred in the years before those spinoffs. Both characteristics would be expected to manifest themselves if the "managerial preferences" typology were really at play in our results.

In terms of the "investor penalty" typology, this argument builds on our earlier point that one of the key reasons that companies undertake spinoffs is to reduce their complexity in the capital markets (Zuckerman, 2000; Bergh *et al.*, 2008; Feldman, 2016b). If this were indeed the case, one

[7] For example, General Dynamics undertook a series of large divestitures during the early 1990s, the proceeds of which were used to fund their subsequent acquisitions later in the decade (Dranikoff, Koller, and Schneider, 2002). More recently, Cargill has engaged in a similar process: "Since mid-2015, Cargill has also sold its U.S. crop-insurance agency, a sauces business, its interest in a steel-processing venture and its U.S. pork business…Cargill has reinvested some of the proceeds into acquisitions, including deals for a salmon-feed company, the industrial chocolate operations of Archer Daniels Midland Co., several U.S. meat-processing plants and a software company focused on animal-feed formulation" (McFarlane and Bunge, 2016).

would imagine that investors would penalize companies that undertook spinoffs (especially focus-increasing spinoffs) less for subsequently undertaking acquisitions, particularly of businesses that were related to their remaining operations. Testing this argument opens an interesting avenue for future research, namely, analyzing how investors respond to acquisitions that are undertaken before and after refocusing events such as spinoffs and divestitures. Interestingly, if we believe that rational investors would reward firms for making acquisitions after spinoffs, theoretically it must be the case, in equilibrium, that more focused firms perform better than more diversified firms. This raises the possibility that investors may believe in some value from ongoing synergy or the preservation of a scarce asset like managerial attention, both of which are considered next.

The foregoing discussion leaves open the "ongoing synergy" and "managerial attention" typologies, which are the primary areas where we believe the contribution of our study really lies. With respect to "ongoing synergy," our results seem to be most dispositive of this explanation for the pattern of corporate deal-making we observe, since companies divest unrelated businesses and subsequently acquire related businesses in order to achieve greater synergies within their portfolios of businesses. This point is an interesting one when juxtaposed against the conventional wisdom that related acquisitions, in and of themselves, have the potential to generate synergies for acquiring firms. By contrast, our results reveal that it is actually *the pairing* of unrelated spinoffs with related acquisitions that can generate synergies, since it may be necessary to remove the unrelated portion of the business before companies can fully exploit the true benefits of relatedness among their remaining business units.

Further to these points, adjacent to the "ongoing synergy" typology is the "managerial attention" typology, in which firms first undertake divestitures to free up the attention of their

CEOs and top management teams.[8] In turn, those companies then undertake acquisitions, also typically of businesses that are more related to their remaining operations than were the businesses they divested, since they now have "bandwidth" available to devote to those new operations. Two interesting points emerge from this "managerial attention" typology, additive to the lessons from the "ongoing synergy" typology. The first is that a few studies have already shown that spinoffs, in and of themselves, may liberate the attention of corporate managers, especially in the years immediately following the completion of those deals and particularly when the divesting firms are moderately (rather than highly or not very) diversified (Feldman, 2016a).[9] The present study adds to this work by showing that, again, acquisitions constitute an important "next step" to spinoffs when it comes to managerial attention, since these acquisitions are where the newly-liberated managerial attention ultimately gets focused. The second point is that it is difficult, if not impossible, to distinguish empirically between the "managerial attention" and "ongoing synergy" typologies, since both imply a similar pattern of activity within the focal firm: unrelated spinoffs followed by related acquisitions. Indeed, managerial attention can even be thought of as a corporate resource that might generate synergies by being reallocated from (unrelated) spun-off subsidiaries to newly-acquired (related) businesses. Accordingly, this implication of the "managerial attention" typology raises a key connection between our study and the burgeoning literature on resource redeployment, the point to which we next turn.

Resource Redeployment, Reconfiguration, and Firm Scope

[8] Theoretically, companies could simply hire new senior managers into their organizations as a means of increasing their capacity of managerial attention, and this might or might not be "cheaper" than the cost of undertaking a spinoff as a means of liberating managerial attention. However, the offsetting disadvantage of hiring new managers as a means of increasing managerial attention capacity is that the new managers would not necessarily have the same accumulated body of experience running a focal firm, which could ultimately make this approach less valuable than the alternative of undertaking a spinoff.

[9] Feldman (2016b) also shows that spinoffs can focus the attention of the divisional managers that run spun-off subsidiaries by tying their compensation directly to the operations that they specifically oversee.

Resource redeployment, the internal redistribution of non-financial resources within a firm, is a topic in corporate strategy that has recently garnered intense interest (Folta, Helfat, and Karim, 2016). Scholars have sought to understand what factors motivate firms to redeploy resources within their organizations, what types of resources are most easily redeployed across businesses, and what gains firms might enjoy from the redeployment of resources (Helfat and Eisenhardt, 2004; Levinthal and Wu, 2010; Sakhartov and Folta, 2014; Miller and Yang, 2016). However, one of the key limitations of this growing body of research is the availability of micro-level data on the particular resources that are being redeployed within companies. While some studies have gathered such data (Miller and Yang, 2016; Blit, Liu, and Mitchell, 2016) and others rely on detailed case studies (Hannah, Bremner, and Eisenhardt, 2016; Rindova, Martins, and Yeow, 2016) to elucidate the process of resource redeployment, Folta *et al.*'s (2016: 11) call for the development of "stylized facts around resource redeployment" as "a critical starting point" for future research remains outstanding.

This study takes a step towards answering this call by using information on the relatedness of spun-off and acquired business units to speak to the possibility of resource redeployment, particularly with regard to managerial attention as the key resource in question. Our finding that firms seem to replace the less-related business units they are spinning off with the more-related business units they are acquiring implies that companies may proactively use these patterns of transactions to enable managers to devote their attention to growing and overseeing more coherent portfolios of businesses, as in the ConAgra and Maersk examples referenced in the Introduction (Soderlin, 2016). In so doing, we provide a useful counterpoint to Capron *et al.* (2001), who explore resource redeployment by showing that firms bring in new resources through acquisitions and then remove unwanted resources through divestitures. By contrast, we explore resource

redeployment by showing that firms remove extraneous resources through spinoffs and then reallocate their remaining resources to acquisitions that supplement their existing businesses. While these processes are clearly not mutually exclusive, our study clarifies the distinction between them, opening the door to research investigating in greater detail how firms can redeploy resources by undertaking spinoffs (and other divestitures) followed by acquisitions.

In addition to these issues, our work also speaks to the literature on resource reconfiguration. Karim and Capron (2015) conceptualize reconfiguration as encompassing resource redeployment, since "internal modes of reconfiguration include internal resource sourcing, redeployment and recombination." However, these authors classify strategic actions like acquisitions and divestitures as external modes of reconfiguration, thereby treating them as distinct from resource redeployment (see also Karim and Mitchell, 2000). In contrast to the distinctions that these studies draw between internal (resource redeployment) and external (acquisitions and divestitures) modes of reconfiguration, however, we believe that our study suggests that spinoffs (and perhaps divestitures more generally) can contribute to internal reconfiguration by freeing certain resources (such as managerial attention) from their current uses, and then allowing those resources to be reallocated to the firms' remaining operations and to accessing new resources via acquisitions. Our ideas in this study therefore add nuance to the concept of resource reconfiguration, paving the way for more in-depth conversations about these fine distinctions.

Finally, our work also connects to a longstanding ambiguity in the field of corporate strategy: while firms are said to be diversifying (refocusing) when they undertake acquisitions (divestitures), it is difficult to determine whether their diversification *levels* have increased (decreased) as a result of these deals. For example, Hoskisson and Johnson (1992) point out that the fact that firms undertake divestitures does not necessarily imply a reduction in their diversified

scopes. Indeed, these authors find that although many firms reduce their diversification levels by undertaking divestitures, some instead increase their diversification levels. Similarly, Teece *et al.* (1994) show that even as firms diversify, they maintain a constant level of coherence, suggesting that diversification does not necessarily imply an increase in firm scope. Accordingly, our study takes a step towards resolving this ambiguity, since our finding that companies sequentially undertake strategies with opposite implications for firm scope (spinoffs and acquisitions) could explain why other scholars have not observed net increases or decreases in diversification levels when studying these strategies independently of each other.

CONCLUSION

In this study, we have presented a set of descriptive results showing that firms frequently undertake spinoffs followed by acquisitions, and that the acquired business are typically more closely related to those companies' remaining operations than are the spun-off subsidiaries. These findings contribute to the ongoing conversations in the corporate strategy literature about sequenced patterns of acquisitions and divestitures, resource redeployment, reconfiguration, and firm scope. We hope that our work inspires future research seeking to explore, in greater detail, the mechanisms underpinning the pattern of behavior that is at issue in this study, as well as the outcomes of this strategy.

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Table 1. Companies' stated motivations for undertaking spinoffs

Stated Motivation	% Reports
Focus	91.78%
"Focus on businesses with own strategies"	
"Focus managerial and financial resources"	
"Increase response speed of individual businesses"	
Capital Markets	81.51%
"Provide direct access to the capital markets"	
"Facilitate capital market evaluations"	
"Allow investors to direct their investments appropriately"	
Managerial Incentives	72.60%
"Align the interests of managers more closely with those of shareholders"	
Mergers and Acquisitions	54.79%
"Facilitate future M&A activity"	
Regulation	4.11%
"Divest to meet regulatory constraints"	

Table 2. Summary statistics on divestitures and acquisitions undertaken around spinoffs

Year	-5	-4	-3	-2	-1	Spinoff year	1	2	3
Average Divestiture Value	$239.39	$289.59	$774.52	$786.24	$283.24	$1,795.43	$1,462.83	$728.83	$526.21
Count of Divestitures	128	95	123	175	182	258	177	129	104
Average Acquisition value	$539.44	$629.03	$986.87	$1,264.72	$530.04	$765.17	$995.09	$1,052.45	$1,445.71
Count of Acquisitions	489	536	523	656	712	438	311	300	306

Table 3. Number of spinoffs undertaken by firms that are Related Acquisitions Following Unrelated Spinoffs (RAFUS)

	Above Median		Below Median		
Statistic	Related	Unrelated	Related	Unrelated	Total
Assets	61	43	47	45	196
Diversification (DT)	60	50	48	38	196
Number of segments	55	48	53	40	196
Current ratio	70	48	38	40	196

Table 4. Typologies of divestitures after acquisitions versus divestitures before acquisitions

Panel A. Divestitures After Acquisitions				Panel B. Divestitures Before Acquisitions			
Typology	**Definition**	**Examples**	**References**	**Typology**	**Definition**	**Examples**	**References**
Unbundling	Acquiring firm buys target consisting of more than one business. Acquiring firm only wants some of those businesses, but target is unwilling to sell them separately. Thus, acquiring firm buys entire target and then divests unwanted businesses.	Monsanto's acquisition of Searle and subsequent divestiture of NutraSweet	Maksimovic, Phillips, & Prabhala (2011)	**Ongoing Synergy**	Firm undertakes divestitures to focus on a narrower set of businesses, which it expands in by undertaking acquisitions of more closely related businesses than the one it divested.	ConAgra acquisitions after Lamb Weston spinoff; Maersk Oil and Line acquisitions after Maersk spinoff	
Failure	Acquiring firm buys target, but the acquisition turns out to be unsuccessful. Thus, acquiring firm later divests target that it had previously acquired.	Morgan Stanley-Dean Witter Discover, DaimlerBenz-Chrysler	Kaplan & Weisbach (1992), Hayward & Shimizu (2006)	**Managerial Attention**	Firm undertakes divestitures to free up CEO and TMT attention, which can then be redeployed to remaining businesses.	HP Inc and HP Enterprise acquisitions after HP spinoff	
Changed Market Conditions	Acquiring firm buys target, and the acquisition is successful for some period of time. However, market conditions change and the logic behind the acquisition begins to break down. Thus, acquiring firm divests target that it had previously acquired.	eBay acquisition and spinoff of PayPal, Xerox acquisition of ACS and spinoff of (renamed) Conduent	Burgelman (2015)	**Cash Generation**	Firm that is liquidity constrained or that has difficulty raising cash in the capital markets undertakes divestitures to generate cash. The firm then uses the cash it has raised to pay for a subsequent acquisition or program of acquisitions.	General Dynamics, Cargill	Lang, Poulsen, & Stulz (1995), Nanda & Narayanan (1999), Dranikoff, Koller, & Schneider (2002)
Scale Efficiencies	Acquiring firm buys target, some of whose assets are redundant. As a result, acquiring firm divests redundant assets, and is able to gain economies of scale by consolidating production.	American Airlines-USAirways, BNSF, Exxon-Mobil, etc…	Hoskisson, Johnson, & Moesel (1994), Anand & Singh (1997)	**Managerial Preferences**	Managers have a preference for running larger firms, so they undertake acquisitions after divestitures in order to increase the size of their companies.		
Resource Redeployment	Acquiring firm buys target, whose resources it combines with its own. Acquiring firm subsequently divests some of its own assets, since the acquisition eliminated the need for those assets.	CPC International (corn refining), Alcoa (commodity aluminum)	Capron, Mitchell, and Swaminathan (2001), Helfat & Eisenhardt (2004)	**Investor Penalty**	Investors penalize acquisitions undertaken by focused firms less than acquisitions undertaken by diversified firms, so managers undertake acquisitions after divesting.		

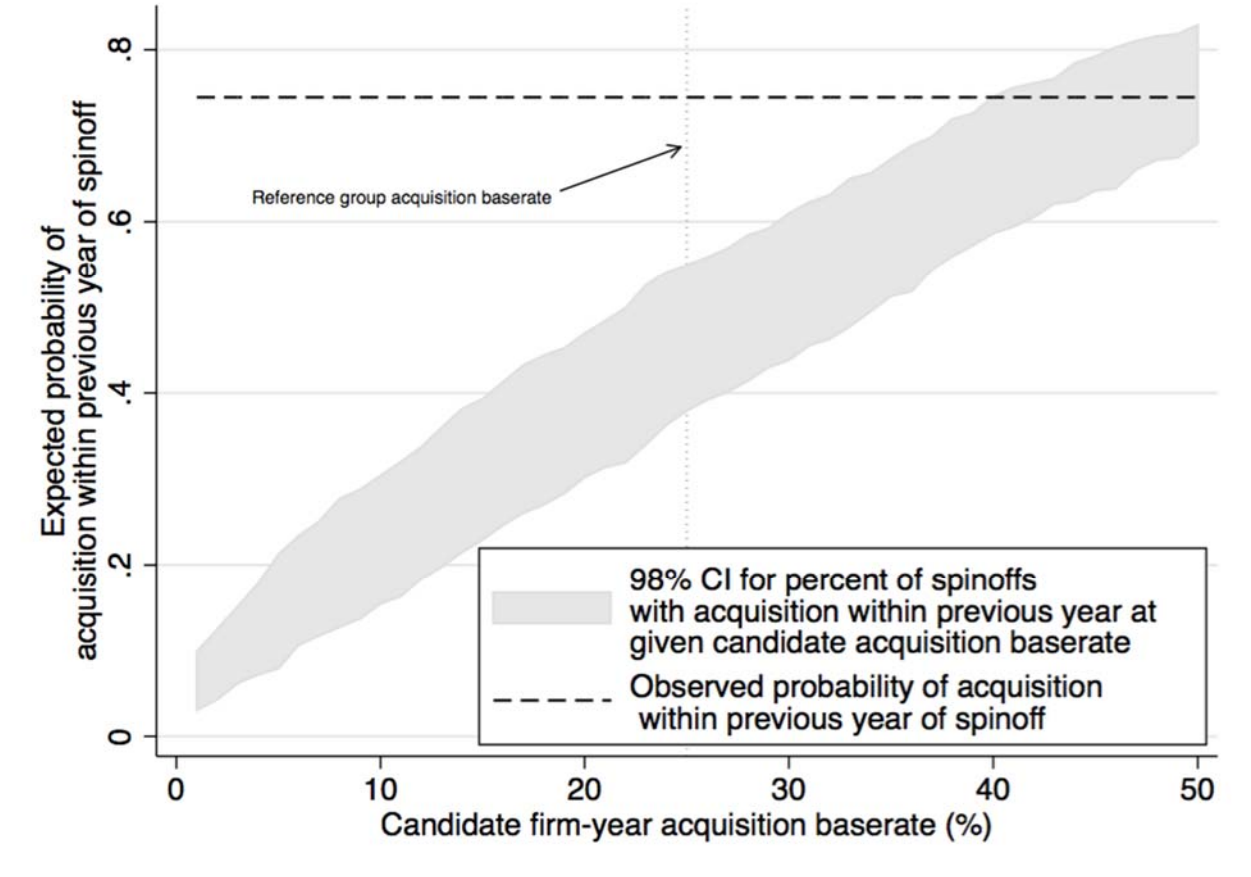

Figure 1. If firms made acquisitions randomly at the candidate baserate, expected probability of spinoffs having an acquisition within the previous year

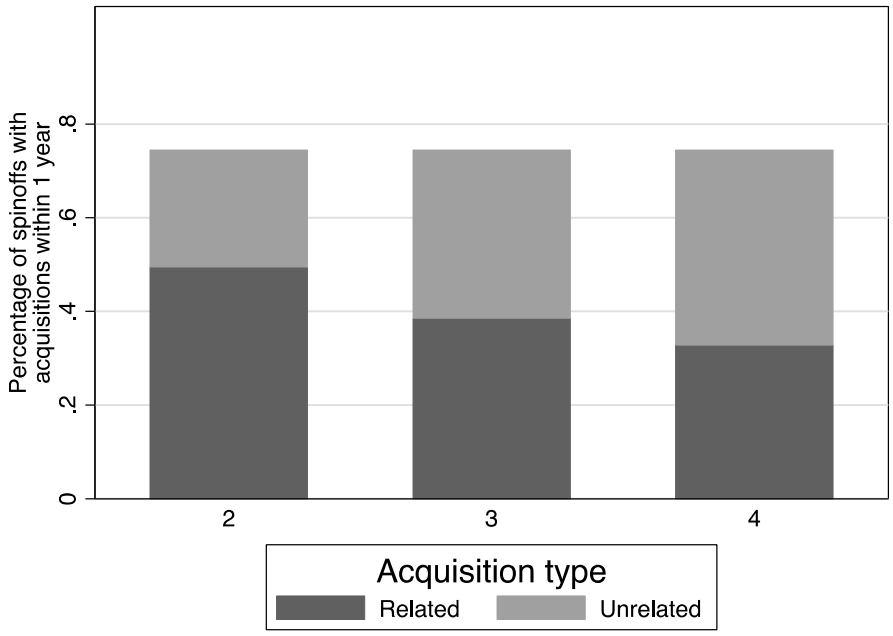

Figure 2. Of the acquisitions that are undertaken one year after spinoffs, the percentage of acquisitions that are related versus unrelated to the parent company's main business (using the number of primary SIC code digits to define relatedness)

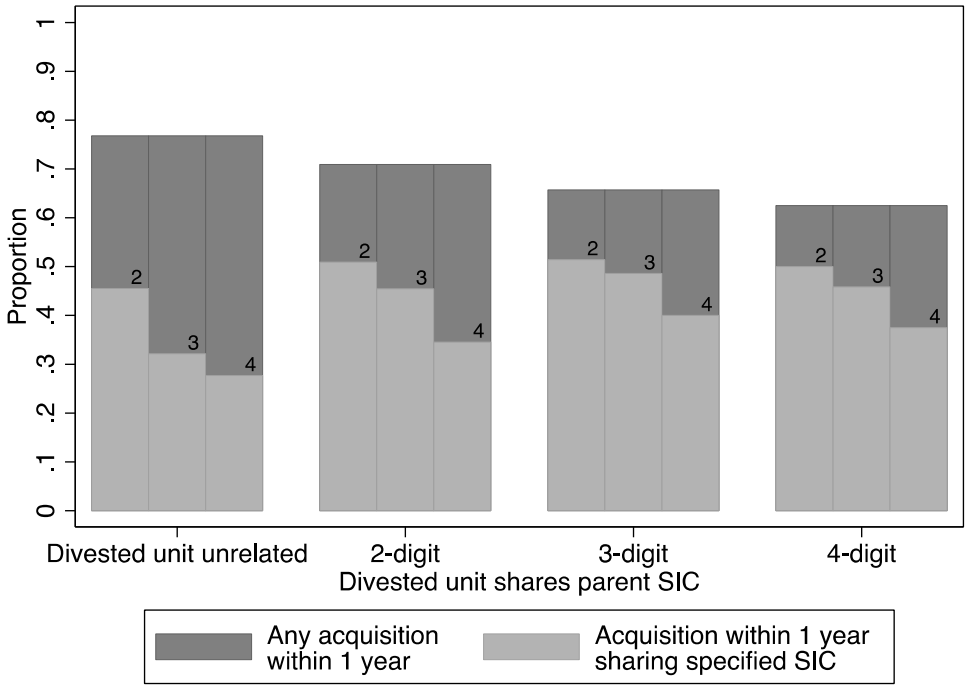

Figure 3. For different degrees of relatedness between the industry of a divesting firm and its spun-off subsidiary, the degree of relatedness between the main industry of the divesting firm and its acquired business unit within a given year