

CEO Characteristics, CEO-Firm Match and Corporate Refocus Value

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(Comments welcome)

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Abstract

This paper investigates how CEO characteristics affect firm value through divestiture. Using a novel dataset on CEOs' industry exposure along their career path, I find CEOs in diversified conglomerates are more likely to divest divisions that they are less qualified to manage and focus on what they specialize in. The evidence is consistent with my hypothesis that, CEOs divest divisions to achieve a better match of their talents and expertise with their firms' retained assets. Firms that divest for better CEO-firm match experience significant abnormal stock returns and improvements in firm performance for the three years following refocusing divestitures. The overall gain increases in the realized CEO-firm match improvement. Nonetheless, divestitures that increase corporate focus but do not improve the talent-asset match deliver little gain for firms in long run. The results are robust to controlling for CEO's firm-specific expertise, the magnitude of change in corporate focus as well as the corporate control events that divesting firms experience subsequent to divestitures, and are shown to be free from other confounding factors. Overall, the results indicate that the failure to gain from diversification for some firms might be due to the poor match of their managers' skills with the assets they diversify into. And corporate refocus gain is at least in part attributable to post-divestiture better match between managerial expertise and firm assets. This study suggests that managerial characteristics have a first-order effect on corporate investment decisions and performance.

1 Introduction

Managers have contrasting styles. For example, on its choice of John N. Lemasters as the firm's new CEO, the board of Contel Corporation commented: "His technical savvy sets him apart from other Contel executives, most of whom are accountants by training. He is a hep guy technologically.....a man who can manage the final stage of transition." By contrast, Napier, the departing CEO and President of Contel, had "exclusively financial" strengths. Financial economists have started recognizing and evaluating the potential influence of idiosyncratic managerial difference on firm behavior (e.g. Malmendier and Tate (2005), and Goel and Thakor (2008)). In their seminal contribution to the "manager matters" literature, Bertrand and Schoar (2003) document manager fixed effects are important determinants of a wide range of corporate decision making. Despite the fact that managers do matter in corporate decisions, only a few studies investigate how manager's characteristics shape firm's investment decisions¹, and in particular, the extent to which they affect the consequent firm value. Furthermore, different managers may fit with a firm with varying degrees of efficiency. Job match theory pioneered by Jovanovic (1979a, 1979b) suggests that seemingly equivalent managers vary in their productivities because of heterogeneity in the quality of job matches. However, how idiosyncratic managerial characteristics may fit with the firm's characteristics, whereby the manager-firm match creates value, remains unexplored empirically. This paper intends to fill this gap. Allgood and Farrell (2003) argue that a good CEO-firm match is associated with good firm performance. Yet the matching process remains a black box. Just as they point out, using performance as a proxy for CEO-firm match quality has to abstract from the fact that the match quality may change as the firm grows and industry/market conditions change. This paper relaxes this constraint and specifically investigates how the CEO's divestiture decision may be a mechanism to effect a favorable change in CEO-firm match and thus create value.

In this paper, I posit that CEOs in conglomerates divest to achieve a better match of their skills with their firms' retained assets, and document empirical evidence in support of this hypothesis. The central idea is that refocusing divestitures may allow firms to refocus on assets that are better matched with their managers' skills, and the better skill-asset match

¹Among these are Chemmanur and Paeglis (2005), Xuan (2006) and Lerner et al. (2007).

leads to gains from divestitures. Due to the diverse nature of conglomerate operations in different industries, some CEOs may find that they are not equally talented in managing all divisions of the firms. Some divisions may lie outside their expertise domain. To maximize their productivities, CEOs are likely to be motivated to divest divisions that they are less qualified to manage and focus on divisions that provide a better match with their skills. An important objective in this paper is to ask whether the biggest gains from refocusing divestitures accrue to firms whose managers divest divisions they were least qualified to manage, i.e. where the skills of the divesting managers are the farthest from the divested divisions. Thus this paper examines whether changes in skill-asset match (also referred as CEO-firm match) as consequences of divestitures are associated with subsequent changes in firm performance. Looking at changes instead of making cross-sectional comparisons of the performances across firms ensures that the inferences are free from some unobservable confounding factors at the firm level.

My exploration of the match of the CEO's skills with the firm's assets is motivated partly by anecdotal evidence². For example, Robert D. Kennedy, then CEO of Union Carbide Corp, divested almost all business in the company's Consumer and Industrial Products group (even though it was regarded by analysts as the company's birthright and a high-growth business). Kennedy had been the President of and long responsible for the other group - Chemicals and Plastics - before he took over the company as its CEO in 1986. In his comment on the divestiture decision, he cited his 31-year career with the company in each of those retained business, which he felt had given him "a real understanding of and belief in those businesses"³. Investors too have their concerns about the CEOs' skills. This is reflected in Wall Street's

²As Bertrand and Schoar (2003) argue, there is generally no role for idiosyncratic differences across managers in many empirical studies of corporate decisions and standard agency models, manager's expertise has been taken with such a neoclassical view as well (one exception is Lerner et al. (2007)). Yet there is an abundance of anecdotal evidence contradicting this view.

³Dun & Bradstreet provides another interesting case. The company's CEO Charles Moritz explained the sale of Corinthian Broadcasting in 1984 as follows, "There are some things we do pretty well, like these information businesses, and there are other things we don't know how to do quite so well. We realized that to manage a television group broadcaster to be number one in its markets would require some skills that, to be brutally honest, we're not so good at." For the same reason, the company sold Technical Publishing in 1986. Both divisions were still profitable when D&B sold them. Moritz spent most of the 25 years in the

contrasting responses to CEO appointment announcements depending on whether the new CEOs have industry experience or not. For instances, Wall Street analyst expressed little optimism that the new chief could turn around the struggling M/A-Com upon the company's announcement of electing Thomas A. Vanderslice Chairman and CEO⁴: "I think the jury is still out on whether it will be good news.....I would have preferred to see the job go to someone with greater experience in defense electronics, given the trials and tribulations facing the defense industry." In contrast, industry analysts generally applauded the moves when American Cyanamid Company named Albert J. Costello Chairman and Chief Executive and Frank V. AtLee President. The two top executives were seen as having complementary strengths – Costello in agricultural products and AtLee in the medical area, two core areas of the company's operations. These anecdotes suggest that the CEO's industry expertise may be a potentially important factor in determining both her ability to manage the firm's assets as well as her divestiture decisions.

When CEOs have differing management strengths in firms' divisions and divest those they were less qualified to manage, divestitures can affect firm value in the following ways. First, if managerial information quality and marginal productivity of effort differ across divisions, then a divestiture creates value by allowing the CEO to focus her effort on the retained division where her information quality and marginal productivity of effort are higher. In contrast, when the CEO is equally capable in managing divisions (so that skills-asset match is not a concern), divestitures result in corporate focus but without creating value due to an improved match between the CEO's skills and the firm's assets. Second, focus on divisions with better match with the CEO's skills enables the CEO to convey the strategies of the firm more credibly to the market. Her track record of management success in the retained divisions (or industries of the divisions) has a branding effect in communicate with investors. Thus, firms may incur lower costs in producing and transmitting information. This *certification value*⁵ is incremental to the value from a reduction in information asymmetry

company's Donnelley marketing division before he became CEO of D&B in 1984.

⁴According to New York Times on Nov. 29, 1989, Mr. Vanderslice spent 23 years with the General Electric Company, rising to be vice president and sector executive of power systems. At the end of the 1970's, he left G.E. for the GTE Corporation and in 1984 he joined Apollo until it was acquired in early 1989.

⁵This term is coined in Chemmanur and Paeglis (2005) when they argue the quality and reputation of a

from corporate refocus. Firms where the matching problem is not the motivation for the divestitures may become less obscure for investors due to refocusing divestitures, but there will be no incremental value creation due to a better match between the CEOs' skills and the needs of the retained divisions⁶. Third, divestiture of divisions that are misaligned with the CEO's skills can also lead to higher value creation due to a reduction in wasteful lobbying and an improvement in intrafirm capital allocation. Stein (2003) argues, in a framework of centralized capital budgeting decision by diversified firms, that the CEO's skills in business lines can improve her monitoring of divisional managers. When the CEO is better able to assess the value implications of information presented by her subordinates, parochialism in the form of wasteful lobbying is more likely to be replaced with useful information communication from subordinates to the CEO. Indeed, Stein suggests that the capital allocation by an ill-informed CEO can create an outcome strictly worse than the one in which capital is allocated by an equally ill-informed capital market, given the intrafirm rent-seeking problems within the hierarchy identified in the literature (Rajan et al. (2000) and Scharfstein and Stein (2000)).

Thus, corporate divestiture provides a good setting in which to examine how managerial characteristics like industry expertise affect firms' investment decisions and values. Furthermore, while the literature agrees that on average greater corporate focus through divestiture is consistent with shareholder value maximization⁷, less attention has been paid to understand that to what extent and how corporate refocus creates value. Even a positive average firm's management can affect its IPO pricing.

⁶The following statement filed by Pirate Capital (one institutional investor of James River Coal) in a 13D file is cited in Brav et al. (2008) and I think it is a good example of the certification value of CEO's expertise: "We have become increasingly concerned that James River's valuation is being discounted relative to its peers - a discrepancy we attribute to management's failure to articulate to the investment community a cohesive operational and financial strategy, together its demonstrated inability to meet its earnings consensus..... We attribute these missteps to CEO Peter Socha's lack of operating experience within the coal industry..... We are now convinced that the company's senior management team is simply not up to the task of achieving such goals....."

⁷See, for examples, John and Ofek (1995), Comment and Jarrell (1995), Berger and Ofek (1999), Daley et al. (1997), Desai and Jain (1999), and Dittmar and Shivdasani (2003) among others.

effect of refocus need not imply the absence of situations where refocusing divestitures fail to create value. My focus is on the cross-sectional variation in corporate refocus value that remains largely unexplained.

My sample consists of all focus-increasing firms that divest at least one entire business segment mostly through asset sales between 1980 and 2003. I hand-collected data that track all divesting CEOs' managerial experience throughout their career paths, from which CEOs' talents and skills in all divisions of the divesting firms can be reasonably inferred. Among the total 486 firm-years, there is great heterogeneity in CEOs' skills within firms and across firms. CEOs in 164 firm-years have differing abilities in managing divisions of the firms. They are referred to as *specialist* CEOs. Divisions that specialist CEOs have skills in managing are classified as *specialized divisions*, while those that specialist CEOs do not specialize in are labeled *non-specialized divisions*. Divestitures by specialist CEOs who divest non-specialized divisions and retain specialized divisions are thus classified as "Divestitures for better match". I use divestitures for all other reasons by specialist CEOs and other CEOs as the benchmark in my analysis. Therefore, the empirical analysis in the paper focuses on specialist CEOs' divestiture decisions to determine whether non-specialized divisions are more likely to be divested than specialized divisions *ceteris paribus*, and whether refocus gains are primarily associated with divestitures of non-specialized divisions.

The empirical results are generally consistent with the divest-for-better-match hypothesis. I find that the majority of specialist CEOs divest non-specialized divisions and retain specialized divisions. A non-specialized division is more likely to be divested than a specialized one even after controlling various widely-documented factors that may lead to a division's divestiture. Moreover, consistent with the literature that focus-increasing divestitures create value, on average sample firms experience significantly positive three-year buy-and-hold abnormal returns (BHARs). But strikingly, the new finding is that the abnormal performance is limited to only firms divesting for better CEO-firm match, while the BHARs for other firms are not significantly different from zero. My results show that ignoring the CEO-firm match problem may overestimate the value effect of corporate refocus. I test the robustness of the divest-for-better-match hypothesis by checking several alternative explanations for the results. It turns out that the primary results are not driven by whether the divest-

ing CEOs were selected from inside or outside their firms, or the different degrees of focus increase achieved by divesting firms, or whether firms are reversing their investment errors by divesting prior poor acquisitions (e.g. Boot (1992)).

I show further evidence that strengthens the support for the main hypothesis. First, among firms divesting for better CEO-firm match, I find smaller firms gain more from divestitures than larger ones. The intuition is twofold. First, divestitures result in greater improvement in CEO-firm match in smaller firms than in larger ones. Second, CEOs have greater impact on firm performance in smaller firms. Greater divestiture gains are consistent with both aspects. I check and rule out the possibility that the relation between firm size and divestiture gain is a result of a greater change of firm risk in smaller firms following divestitures. Indeed, there is no such a monotonic relationship between firm size and divestiture gain for those firms that divest for other reasons. Furthermore, BHARs for small firms are not significantly different from zero if the divestitures do not achieve better CEO-firm match, even when the comparison is limited to other small firms. This finding negates the possibility that a firm size difference between those divesting for better CEO-firm match and others may drive the primary result.

Second, as a robustness check, I focus exclusively on the subset of firms divesting for better CEO-firm match, and investigate two different divestiture scenarios: divestitures that realized better CEO-firm match ex post and divestitures that failed to fulfill the intended better CEO-firm match ex post due to the divesting CEO's unforced early departures (the divesting CEO departed in no more than one year following the divestiture due to non-performance-related reasons like mandatory retirement or health problem). Looking at CEOs experiencing early departures for exogenous reasons makes the analysis less subject to the endogeneity concern that CEO turnover (typically forced turnover) is related to poor post-divestiture performance. The main hypothesis is that divestitures that realized better CEO-firm match ex post will create value, but those failing to fulfill the better match due to a departure of the divesting CEO will not. The evidence shows that divestiture gains go primarily to better-matched firms where the CEOs who undertook the divestitures stay sufficiently long after the divestitures for firms to capitalize on the better talent-asset match. Firms that targeted for better CEO-firm match but experienced voluntary CEO departures following divestitures do not gain at

all.

As additional robustness checks, I complement the use of BHARs as a performance measure with examinations of changes in the diversification discounts of firms and their post-divestiture performance. I find that diversified firms that divest for better CEO-firm match as well as firms that divest for other reasons significantly underperform their industry peers and experience diversification discounts for the three years prior to divestitures. For the post-divestiture three-year period, firms divesting for better CEO-firm match do not underperform their industry peers or experience diversification discounts any more, while the underperformance and discounts persist for the other firms. Specifically, firms that divest for better CEO-firm match experience substantially greater improvements in profitability and market valuation following divestitures.

An alternative potential interpretation of the specialist CEO's divestiture preference is the entrenchment motive described by Shleifer and Vishny (1989). Specialist CEO may focus corporate resources on specialized divisions for her higher job security and lower human capital risk. This agency view, however, would lead to a prediction that is exact opposite to my empirical findings on post-divestiture firm values. Another potential concern is endogeneity. CEO succession is not a random event⁸. The board of directors may determine a corporate-focus strategy and then specifically select a specialist CEO in anticipation that her skills will facilitate implementation of this strategy. Although we can not rule out this situation completely, I conduct an additional test to show that many, if not most, specialist CEOs do divest for better match of their talents with their firms' retained assets⁹. Specifically, if a CEO is strategically picked to implement this board's predetermined strategy, we should observe the new specialist CEO divesting the non-specialized divisions immediately after taking office. Thus I repeat my analysis using a subsample of divesting firms, in which all CEOs

⁸Li (2005) specifically examines the endogenous matching problem between firms and CEOs in a context of CEO turnover, and find firm post-turnover performance could be underestimated without taking into consideration the matching problem.

⁹Indeed, no matter who motivates the divestiture decision (CEO or board), better match of CEO's talent with firm's retained assets result anyway when an unspecialized division is divested and specialized division(s) is(are) retained.

make their divestiture decisions only two years or more after being appointed CEO¹⁰. The results continue to hold even for this limited sample. Together with the fact that more than half of the CEOs categorized as divesting-for-better-match undertake divestitures more than two years after being appointed, it suggests that these CEOs do divest for better match with the firms' assets rather than merely implementing strategies predetermined by their boards.

The paper proceeds as follows. Section 2 briefly reviews the related literature and delineates the marginal contribution of this paper relative to that literature. Section 3 describes the data and presents sample and variable construction. Section 4 examines specialist CEO's divestiture preference. Section 5 presents the main results on value gains from refocusing divestitures. Section 6 conducts additional tests on firm performance and robustness checks. The paper concludes with Section 7.

2 Related Literature

This paper contributes to the growing "manager matters" literature by showing that managerial characteristics have a first-order effect on corporate investment decision and consequential firm value. Bertrand and Schoar (2003) show that the idiosyncratic characteristics of managers have a significant influence on the firm's investment policy, financial policy and organizational strategy. In a similar vein, Xuan (2006) investigates how new CEOs' prior affiliations with firms' divisions affect their capital budgeting decisions. He finds a reverse-favoritism pattern that divisions not previously affiliated with the new CEO receive significantly more capital expenditures than that received by affiliated divisions in the year following the appointment of the new CEO. But that paper does not examine the value implication of this apparent "bridge-building" behavior. Chemmanur and Paeglis (2005) find management quality and reputation of the entire management team, measured by proxies of general management skills, affect firms' IPO and post-IPO performance. Sample firms in their study are those relatively younger, smaller and stand-alone firms, which are systematically different from the older, larger and multi-divisional conglomerates examined here.

¹⁰The median time wedge between CEO turnover and divestiture decision is two years for all firms divesting for better CEO-firm match.

And they focus on the whole management team's general management skills proxied by, for examples, business education and financial, legal and accounting knowledge. By contrast, I focus on the importance of the CEO's industry expertise given the diverse nature of conglomerations. Malmendier and Tate (2005) argue that managerial overconfidence can account for corporate investment distortions. Goel and Thakor (2008a) rationalize the fact that an overconfident manager is often deliberately promoted to CEO under value-maximizing corporate governance, and further show the implication of a CEO's overconfidence attribute on firm value. Goel and Thakor (2008b) show envy between CEOs can cause merger waves. Bennedson, Perez-Gonzalez and Wolfenzon (2007) find the CEO's own death as well as deaths in the CEO's family are strongly associated with declines in the firm's operating profitability, investment and sales growth. Perez-Gonzalez (2006) finds that CEOs who are family descendants of a departing CEOs, a founder or a large shareholder of the firm and did not attend selective colleges, significantly underperform relative to unrelated CEOs. Kaplan, Klebanov and Sorensen (2007) assess entrepreneurial CEOs of buyout and VC-funded companies in seven general areas - leadership, personal, intellectual, motivational, interpersonal, technical and functional, and study how these CEO characteristics and abilities relate to hiring decisions, private equity investment decisions and subsequent performance. Closest to the spirit of this study, Gompers et al. (2007) relate venture capitalists' industry experience with their investment decisions, and find VCs with the most industry experience respond to favorable product market signals most by increasing their investments more than other VCs with relatively little industry experience and those with considerable experience but in other industries.

This paper also sheds some light on the debate on corporate diversification. The recent literature (e.g. Campa and Kedia (2002), Villalonga (2004a)) argues that firms choose to diversify and diversification is a value-increasing action given the constraints that firms face. For example, firms may experience poor performance in their core business, and diversify into new businesses for growth opportunities. However, my paper suggests that such diversification initiatives may be value destroying if the managers in the acquiring firms have skills that are poorly matched with the assets in the newly-added businesses.

My study is generally related to prior work that documents the cross-sectional variation

of value gains from divestitures. An extensive stream of research focuses on the difference in value gains from focus-increasing divestitures relative to those from non-focus-increasing divestitures. My paper is consistent with the influential view that focus increase creates value, but it extends this view by examining the conditions under which an increase in focus increase creates value. Besides those studies, Cusatis, Miles and Woolridge (1993) investigate the value created through spinoffs and show that both the spunoff subsidiaries and parents experience an unusually high incidence of takeovers and the abnormal long-run return is limited to firms involved in takeover activity. In this paper, I control for post-divestiture takeover activity and my main results are unaffected. Lang, Poulsen and Stulz (1995) propose and test an agency view of asset sales, and find stock market discounts asset sale proceeds retained by the divesting firm. But they do not look at the long-run effect of the divestiture on firm's performance and the value gains for shareholders. Bates (2005) examines divesting firms' use of proceeds and the trade-off between investment efficiencies and agency costs of managerial discretion associated with retained proceeds. He finds that firms with favorable contemporaneous growth opportunities and higher expected investment needs tend to retain proceeds, and shareholder returns to retention decisions are positively correlated with growth opportunities and net-of-industry investment.

3 Data and Variables

3.1 Sample Construction and Data Sources

The sample consists of all diversified firms which divest at least an entire business division. I start by identifying all firms in Compustat segment tapes that report at least one less segment between 1980 and 2003¹¹. To make sure the decrease in the number of reported segments is not simply due to report changes, I investigate the asset sale and spin-off activities by these firms in SDC. In order to be qualified as a sample firm, the firm must be a diversified firm prior to divestiture, operating in at least two different industries (3-digit SIC code), and then it must have a simultaneous divestiture record in SDC corresponding to the drop of the

¹¹My data ends in 2003 because I need to investigate three-year post-divestiture stock returns.

segment that ceases reporting. The *Wall Street Journal* and wire reports in Lexis-Nexis are used to confirm that the divestitures reported in SDC cause the segment in question to be dropped. In addition, firms incorporated outside the United States are not considered. And those firms that do not have Compustat and CRSP data available are also excluded. In the resulting sample, I find 797 firm-years of divestitures that result in a reduction in the number of reported segments. I remove 122 firm-years in that the divesting firms are not classified as diversified as they virtually operate in a single industry¹². 29 firm-years are dropped when a segment in the financial sector (with SIC between 6000 and 6999) or in the utility sector (with SIC between 4900 and 4999) is divested. 8 firm-years are further dropped when the divestiture is made after the firm files bankruptcy or is in the process of liquidation.

For each of the 638 refocusing firm-years in the sample, I hand-collected information on the divesting CEO's career path and some other characteristics that are relevant to my analysis from various media sources including company proxy statements, SEC filings, Lexis-Nexis people search, Factiva news search, company websites and other internet resources. The information collected includes CEO age, tenure, managerial responsibilities throughout the corporate ranks and the durations, industry specializations, whether the divesting CEO was appointed from inside or outside the firm, the nature of turnover for both the divesting CEO and her predecessor, whether the divesting CEO is the founder of the firm and whether the firm is a family firm.

I further drop 72 firm-years where information on the divesting CEO's career path is not available. Since my analysis is primarily based on a three-year period following divestiture, I remove 70 firm-years where the divestiture decision is made by a CEO who steps down one year or months following the divestiture¹³. Finally, 7 firm-years are dropped because the divestiture decision is made by an interim CEO and 3 firm-years are removed where the divesting CEO moves to a spun-off entity as CEO following a spin-off. The final sample consists of 486 organizational changes (447 asset sales and 39 spin-offs) by 412 firms.

¹²The reported segments in those firms share the identical three-digit SIC code.

¹³Including them doesn't change the primary results qualitatively. Further analysis on this subsample of divesting CEOs will be conducted in Section 5.

3.2 Variable Definition and Construction

3.2.1 Managerial Expertise and Specialist CEO

I measure the CEO's skills in a division using the CEO's managerial responsibility experience in the division or the industry of that division prior to the appointment¹⁴. I classify CEOs as *specialist* CEOs when they specialize in managing certain, but not all, divisions of the firm. They either advanced through the ranks from certain, but not all, divisions in their firm prior to adding the title of CEO (mostly as divisional managers), or they have managerial experience in certain, but not all, industries that the firm operates in if they are hired from outside (used to be managers in other firms in the same industry)¹⁵. All other CEOs are those who either have no experience at the time of turnover or are widely experienced in all divisions of the firm. For those inexperienced, they either have always worked in a general role (like General Counsel, Chief Financial Officer, VP of administration) within the firms, or they have been executives in other firms that operate in different and unrelated industries¹⁶. For those widely experienced, they have been incumbent CEOs serving a long tenure (more than ten years¹⁷) at the time of divestitures. Many of them are founders of the firms.

¹⁴This includes any relevant managerial skills that the CEO accumulated in capacities with responsibility for corporate operation in a specific industry. Parrino (1997) finds that industry-specific human capital is highly valued in most industries.

¹⁵A similar characterization of specialist CEOs is also used in Xuan (2006). The difference is that I focus on a CEO's industry expertise in addition to the segment affiliation. For example, suppose an insider CEO advanced from and is only affiliated with segment A (using Xuan (2006)'s terminology), one of the three segments A, B and C in the firm. Before the CEO joined the firm and took the managerial responsibility in segment A, she also had extensive managerial experience in the industry of segment B. Thus, in my sample, this insider CEO is affiliated with and specialize in not only segment A, but also B.

¹⁶CEOs who were cited at the announcement of their appointments having specific skills like regulatory, political, financial, turnaround, etc. but out of industries that firms' divisions operate in are also classified as inexperienced in the industries.

¹⁷I set the ten-years criteria based upon literature on CEO turnover and longevity. For example, Song (2006) documents that the mean and median of tenure for 679 CEOs recorded in ExecuComp between 1992 and 2004 are 10.4 and 7.8 years, respectively. Vancil (1997) reports that among Fortune 500 CEOs, only 25% served for ten years or more.

3.2.2 Divest-for-better-match

I define divisions in the firm with a specialist CEO as *specialized divisions* if the specialist CEO has skills in managing them. The remaining divisions in this firm are labeled *non-specialized divisions*. I classify all divestitures made by specialist CEOs who divest non-specialized divisions and retain specialized ones as *divest-for-better-match*¹⁸, as those divestitures result in a better match between the CEOs' skills and retained assets.

3.2.3 Firm Performance

Buy-and-hold Abnormal Return To investigate the value implication of a firm's divestiture decision, I focus on the three-year buy-and-hold abnormal returns following the effective dates of divestitures. I measure the three-year buy-and-hold abnormal return using a matching firm methodology. Barber and Lyon (1997) and Kothari and Warner (1997) both show that the conventional tests for long-horizon abnormal stock returns using a reference portfolio, such as a market index or industry and size based portfolio, suffered misspecification problems. Instead, along with Lyon et al. (1999), they demonstrate that the control firm approach yields well-specified statistics. Accordingly, in my study of three-year abnormal stock returns following the firm's refocusing divestiture, I follow Datta et al. (2001) whereby each sample firm is matched with a control firm by market capitalization (size), book-to-market ratio and one-year prior stock returns. In addition, I also require that no equity has been publicly issued for candidate control firms during the prior three-year period and that they are not more than 10% smaller than their matched sample firms. For both sample and control firms, the book-to-market ratio is calculated at the end of the month immediately preceding the effective date of the divestiture, and the market capitalization is as of the day prior to the effective date. The one-year prior stock return is the one-year buy-and-hold return beginning 252 trading days and ending on the last trading day prior to the effective date.

¹⁸Cases when specialist CEOs divest both unspecialized and specialized divisions but retain specialized divisions are also classified as *divest-for-better-match* when specialist CEOs specialize in more than one division.

Specifically, I match each sample firm with its control firm such that the sum of the absolute percentage differences between the size, book-to-market ratio and pre-divestiture one-year return of the sample firm and the control firm is minimized. Sample firms listed on NYSE/AMEX are matched with their first control firms from the pool of qualified NYSE/AMEX-listed firms. If the first control firm gets delisted during the holding period, the next closest matched firm is substituted at the close of trading on the date of the delisting, and so on. I use the same procedure to pick up control firms for Nasdaq-listed sample firms from the pool of qualified Nasdaq-listed firms.

Excess Value As a second measure of firm performance, I examine the firm's change in diversification premium/discount (as measured by excess value developed in Berger and Ofek (1995)) following divestiture. The excess value is the natural log of the ratio of a firm's actual value to its imputed value. The imputed value of a firm is calculated as the sales-weighted sum of imputed values of its divisions as stand-alone entities. A positive excess value implies a diversification premium, while a negative one represents a diversification discount.

Return on Assets I also include the firm's return on assets as a third measure of firm performance, which is the ratio of the firm's cash flow to the book value of total assets. Specifically, I look at the change in the industry-adjusted ROA following divestiture. The industry-adjusted ROA is the firm's ROA net of the median ROA of all firms in the industry as classified using three-digit SIC codes.

Announcement Cumulative Abnormal Return Finally, the cumulative abnormal returns are studied for windows $(-1, 0)$, $(-1, 1)$, $(-2, 0)$, $(-2, 2)$ and $(-5, 5)$ surrounding the initial announcement of divestitures. They are computed using the market model and Scholes-Williams betas. The estimation period is from 220 days to 60 days prior to the announcement date.

3.3 Summary Statistics

I identify 164 specialist CEO-years, and among those, there are 159 *divest-for-better-match* refocusing divestiture cases. Among the other 327 cases, 322 cases are divestitures by other CEOs and 5 cases by specialist CEOs retaining only non-specialized divisions.

Table 1 presents the distribution by year of the full sample of 486 focus-increasing divestitures as well as the *divest-for-better-match* and *others* subsamples. Divestitures, regardless of whether for a better CEO-firm match or for some other reasons, do not appear to be clustered in the sample period, even though they are less frequent before 1982 and after 2001. Year fixed effects are included in the regressions to control for possible time effects.

Table 2 provides firm-level characteristics of sample firms. Panel A reports a firm's financial condition as of the year prior to divestiture. Firms divesting for better CEO-firm match are generally larger, more diversified (both before and after divestiture), and more financially sound, while other firms are growing faster. It is less a surprise that firms with specialist CEOs are usually larger and more diversified firms. Operating in a highly diversified portfolio of industries, large conglomerates may find it generally hard to have a CEO who has acquired skills in every single industry. Panel B reports the level of diversification prior to and subsequent to divestiture for sample firms, and the change in focus around divestiture. Firms divesting for better match are more diversified pre-divestiture and remain so post-divestiture. Both types of firms on average experience significant increase in focus following divestitures. The median number of segments dropped due to divestitures is one for both types of firms. According to the diversification measure using sales-based Herfindahl index, firms other than divesting for better match even have experienced greater increase in focus by 0.077 significantly.

Table 3 presents summary statistics for both divested and retained segments. Firms tend to divest smaller and lower-profitability segments. Consistent with the divesting-for-better-match hypothesis, non-specialized segments are dominantly divested, increasing the proportion of specialized segments from less than 40% to nearly 50% for all firms divesting for better match.

To examine the impact of divestiture proceeds on firm's post-divestiture investment policy,

I follow Dittmar and Shivdasani (2003) and look at firm’s change in leverage and in external financing after the divestiture (unreported). Generally I find comparable results in Dittmar and Shivdasani (2003), suggesting that divestitures do not have a long-term impact on firm’s leverage and external financing activities. More specifically, divestitures do provide a large cash flow for sample firms, on average about 33.9% (23.5% and 39% for firms divesting for better match and other firms, respectively) of firm’s market value at year t-1. Both types of firms experience reductions in leverage at year t and year t+1, and then increase their leverage back to the level of year t-3 or even more. Both types of firms are net issuers of capital (equity and debt issues net of equity repurchases and debt repayments) for the predivestiture three years, become net distributors of capital at year t and year t+1, and then are again net issuers at year t+2 and t+3¹⁹.

4 Specialist CEO’s Preference of Segment Divestiture

From Table 3, we have observed that non-specialized segments are predominantly divested. In this section, I further test whether CEO’s specialization has any incremental power in explaining a segment’s divestiture, in addition to those well-documented factors in the literature. My main hypothesis predicts that specialist CEO will more likely divest non-specialized segments than specialized ones, *ceteris paribus*, for better match of her specialized skills with retained segments. I run the following logit regression on all segments in the sample:

$$Divestiture_{ijt} = \alpha + \beta_1 * Specialist_{jt} + \beta_2 * Specialist_{jt} * non-specialized_{ijt} + \gamma * X_{ijt} + YearFE + \varepsilon_{ijt} \quad (1)$$

In specification (1), $Divestiture_{ijt}$, $Specialist_{jt}$ and $non-specialized_{ijt}$ are all dummy variables. $Divestiture_{ijt}$ equals one if a segment i is divested in firm j at time t . $Specialist_{jt}$ takes value one if the divesting CEO is a specialist in firm j at time t . $non-specialized_{ijt}$ equals one if the segment is not a specialized segment, i.e. the specialist CEO has no prior managerial experience in that segment/industry. If *ceteris paribus* a specialist CEO divest

¹⁹Firms divesting for better match are net distributors of capital only at year t, and net issuers for all postdivestiture three years.

for a better match between her talent and expertise and firm’s retained segments, one would predict that $\beta_2 > 0$. X_{ijt} contains a set of control variables that may affect a segment being divested. They include the segment’s size (segment assets), profitability, growth opportunity (imputed Tobin’s Q), industry profitability (industry ROA), segment’s asset tangibility and whether a segment is a low-sale or lowest-sale segment. Segment imputed Q is the median Q of all single-segment firms sharing the identical three-digit SIC code with the segment. Segment profitability is the ratio of segment operating profits to segment assets. Segment Industry ROA is the median ROA of all single-segment firms sharing the identical three-digit SIC code with the segment. Segment asset tangibility is the median of the ratios of net property, plant and equipment to assets for all single-segment firms sharing the identical three-digit SIC code with the segment. A low-sale segment is a dummy that equals one if the segment’s sales is below the median of all segments’ sales in the firm. A lowest-sales segment is a dummy that equals one if the segment’s sales is smallest in the firm. Literature has documented that firms more likely divest a small and less profitable segment and segment with more liquid assets (Schlingemann et al. (2002)). Similarly, when the segment asset is less firm-specific and thus is more likely available for alternative use due to its higher tangibility, the segment has higher chance of being divested (Boot (1992)). In all regressions, I include a calendar year dummy for year fixed effects and use robust standard errors clustered by firm.

Results are reported in Table 4. An non-specialized segment is more likely divested by specialist CEO even after controlling various factors that may affect a segment’s divestiture. Despite the strong positive correlation between segment divestiture and unspecialization in firms with specialist CEOs, it remains unclear whether specialist CEOs’ divestiture decisions are driven by the preference for better match of their skills with firms’ remaining segments, or alternatively, simply motivated by their desire for greater entrenchment (Shleifer and Vishny (1989)). Given the contrasting value implications of these two divestiture motives for shareholders, we will confront them against the firm performances and stock returns in the next section.

Growth opportunity seem not a determining factor in firm’s divestiture choice of segment. The impact of segment’s growth opportunity even has a positive sign, albeit not significantly, on firm’s divestiture decision. Divesting a high-growth segment is more likely when the

segment requires substantial investment relative to a low-growth segment with stable cash flow. Earnings from the low-growth segment but with stable cash flow can be used to support firm's other growing businesses. Thus, despite the potential loss of long-term return on equity coming across from divesting a high-growth segment, firm often needs to balance its short-term cash needs with long-run equity return.

5 Post-divestiture Abnormal Stock Returns

In this section, I provide the primary result and show its robustness that specialist CEOs divest for better match between their talents and firm assets. To do this, I mainly examine the long-run buy-and-hold abnormal stock returns of refocusing divestitures, and confront the primary result against other various hypotheses. To give a complete analysis, I also look at the cumulative abnormal return around divestiture announcement.

5.1 Univariate Analysis

5.1.1 Overall

In Table 5, I report a univariate analysis of three-year buy-and-hold abnormal stock returns (BHARs). Consistent with the literature, post-divestiture BHARs overall are significantly positive for the full sample of focus-increasing divestitures. The mean and median of post-divestiture BHARs are 13.27% and 4.29%, respectively. However, all positive BHARs indeed accrue to firms divesting for better match between CEO's talents and firm's remaining assets. Constrasting the finding by prior research, focus-increasing divestitures by other firms on average do not gain at all for the three years following divestitures. This confirms the conjecture that specialist CEO's divestiture is more likely for better match of CEO's skills with firm's assets rather than for greater entrenchment. Overall, the primary result suggests that the better CEO-firm match following divestiture is more informative of the post-divestiture long-run value creation than increase in focus itself.

5.1.2 Inside and Outside CEOs

Panel B of Table 5 examines whether the results are robust to CEO's firm-specific expertise. I follow the standard practice in CEO turnover literature (e.g. Denis and Denis (1995) and Parrino (1997)) and classify divesting CEOs as outsiders if their tenure with the firms at the time of successions is no more than one year. In recent years, more firms start to go outside for their new CEOs²⁰. The recent literature (e.g. Murphy and Zábojník (2004) and Frydman (2005)) proposes that there has been a shift in the importance of skills from firm-specific to more general management skills. In this setting of refocusing divestiture, I take CEO's firm-specific experience into consideration as a test of whether observable and unobservable firm-specific factors can account partly for the efficiency variations of firms' divestitures. In particular, given the fact that many external CEOs are also industry outsiders for the firms, little evidence has been presented on whether cross-industry outside hire works well in the context of corporate refocus, i.e., whether the leadership in one industry or firm travels well to another.

There are several points highlighted in Panel B. First, our main result holds that all refocus value accrue to firms divesting for better CEO-firm match. Second, on average, firm-specific experience is still valuable as inside CEOs outperform outside CEOs. Third, the role of firm-specific experience becomes less significant if external CEOs are industry insiders. Instead the three-year BHAR is higher for firms with external specialist CEOs than those with internal specialist CEOs. Nevertheless, external CEOs without industry experience appears to underperform significantly, which implies the leadership does not travels well across industries and firms.

5.1.3 Diversified Parents and Stand-alone Parents

Based on the number of segments following divestiture at year $t+1$, I categorize divesting firms into two groups: diversified parents which remain diversified²¹ and stand-alone parents which

²⁰Li (2005) documents that 23.1% of 532 new CEOs from 1998 to 2001 are outsiders, while Denis and Denis (1995) find the proportion of outside hires is 15.3% in sample of 908 turnovers from 1985 to 1988.

²¹Firms continue to operate at least two segments which share different three-digit SIC codes.

operates a single segment This categorization is of particular interest, because according to corporate focus hypothesis, divesting and becoming pure-play removes cross-subsidization in firm's investment, diverges from potential agency problem (Scharfstein and Stein (2000) and Rajan et al. (2000)), and better aligns managerial incentives (Rotemberg and Saloner (1994)), and hence will create more value than remaining diversified. Therefore, if the effect of corporate refocus is dominant, we should observe significantly positive BHARs for those stand-alone parents other than divesting for better match and they should at least outperform those diversified parents divesting for better match.

The results presented in Panel C of Table 5 suggest that stand-alone parents other than divesting for better match do not gain at all in the long run. On average, BHARs for those firms are not significantly different from zero. Rather, diversified parents divesting for better match gain by an average 24.7% (median). The median of BHARs for stand-alone parents divesting for better match is much higher at 53.6%. This contrasting result that only firms realizing better CEO-firm match gain from becoming pure-play *ex post* indicates that focus is not the only dimension in evaluating corporate refocus policy. In general, there is consistent first-order evidence that all refocus gains accrue to firms divesting for better CEO-firm match, and the effect of becoming pure-play is at best second-order.

5.1.4 Reversal of Prior Errors

Divestitures, in some cases, are reversal of prior poor acquisition. Boot (1992) argues that managers delay divestitures of acquisitions out of career concern that divestiture implies admission of investment errors, thus announcement of divestitures should be good news for shareholders. Literature has documented positive announcement stock return when firms divest initially acquired segments (Weisbach (1995) and Allen et al. (1995)). Thus, the positive relation between *divest-for-better-match* and three-year buy-and-hold abnormal return may be driven by the possibility that firms divesting for better match are mostly divesting prior bad acquisitions.

To explore this issue, I track the acquisition records for every divested segment using SDC and Lexis-Nexis wire reports, and find divestitures of initially acquired segments in

106 firm-years. I find the proportion of firms divesting for better match (23%) is not quite different from the porportion of other firms (21%) within the subsample of those 106 cases. Also, as panel D of Table 5 documents, the subsample of those 106 cases correcting prior errors on average do not gain from divestitures in long run. Instead, the other subsample of firm-years conducting regular divestitures experience significantly positive BHARs (mean 14.39%, median 5.44%). In particular, the primary result that divestitures for better match gain more holds regardless of whether divestitures are corrections of mistakes or not. The mean (median) BHARs for firms divesting for better match are 43.63% (28.07%) and 46.97% (28.68%), respectively, and are not significantly different. Similarly, BHARs for other firms are not significantly different from zero, regardless of whether divestiture is a reversal of prior poor acquisition or not.

5.2 Multivariate Analysis

To have a more complete view of the relationship between divestiture for better match and sharehold returns, I conduct a multivariate analysis and several configurations of the following general model are estimated:

$$BHARs = f \left(\begin{array}{l} Size, BM \text{ ratio}, Prior \text{ runup}, Divest\text{-}for\text{-}better\text{-}match, Insider \\ Stand\text{-}alone, Reversal, Takeover, Change \text{ in focus} \end{array} \right) \quad (2)$$

where the dependent variable $BHARs$ is the natural logarithm of one plus the sample firm's three-year BHARs minus the natural logarithm of one plus the control firm's three-year BHARs. And $Size$ is the natural logarithm of market capitalization as of the day prior to the effective date of divestiture. $BM \text{ ratio}$ is computed at the end of the month immediately preceding the effective date of divestiture, taken natural logarithm as well. $Prior \text{ runup}$ is defined as the difference of one-year buy-and-hold return beginning 252 days prior to the effective date of divestiture between the sample firm and control firm. $Divest\text{-}for\text{-}better\text{-}match$, $Insider$, $Stand\text{-}alone$, $Reversal$ and $Takeover$ are all dummy variables. $Divest\text{-}for\text{-}better\text{-}match$ equals one if specialist CEO divests non-specialized segments and retains specialized segments. $Insider$ takes value one if the divesting CEO is promoted from inside the firm. $Stand\text{-}alone$ equals one if the divesting firm becomes single-segment firm at year

$t+1$. *Reversal* equals one if firm divests an initially acquired segment. *Takeover* equals one if the divesting firm is taken over and get delisted within the three years following divestiture. *Change in focus* is the change in sales-based Herfindal index from year $t-1$ to $t+1$. In all regressions, year dummies are included.

Results presented in Table 6 document that coefficients for *Divest-for-better-match* are positive and statistically significant in the four models including it. These suggest that divestitures resulting in better match between CEO's talents and retained assets gain significantly more than otherwise. The results are robust controlling for origins of CEOs to the divesting firms, reserrals of decisional mistakes by divesting prior acquisitions and post-divestiture takeovers. Consistent with the univariate analysis, I find the influences of divesting prior acquisitions and post-divestiture takeover activity in divesting firms are not significant.

A pairwise correlation test reveals that correlation of *Divest-for-better-match* with *Change in focus* and *Stand-alone* is significantly negative, replicating the result shown in Panel B of Table 2 that firms other than those divesting for better match experience greater increase in focus and also become more focused through divestitures. Regressions with *Divest-for-better-match* (Model (5)) or without *Divest-for-better-match* (Model (2), (3) and (6)) all find that *Change in focus* and *Stand-alone* are not significant determinants of gains from refocusing divestitures. Coefficients for change in focus are even, albeit insignificantly, negative. Firms vary in gains from refocusing divestitures. Shrinking business lines and getting more focused do not necessarily lead to more value. This reinforces the main argument of this study that it is not only focus but what one firm focuses on that matters.

5.3 Further Discussions

It is documented in the above analysis that firm's divestiture gain is positively related with the improvement in CEO-firm match quality. In this part, I provide evidences that lend further support to the argument that divestiture that improves CEO-firm match creates value. Specifically, I investigate the cross-sectional variations of BHARs among firms that

divest for better CEO-firm match, and test whether greater improvement in CEO-firm match through divestiture gives rise to bigger BHARs.

5.3.1 Firm Size and CEO-Firm Match Quality

A careful analysis of the sample firms finds that large conglomerate firms on average operate in more industries than relatively smaller diversified firms. And thus for all firms divesting for better match, divestiture of one segment in small firms should result in greater improvement in CEO-firm match than in large firms. That is to say, the improvement in CEO-firm match quality through divestiture is generally declining with firm's size. Therefore we should expect, among firms divesting for better match, bigger gains accrue to small firms than large ones.

The intuition for the relation between firm size and divestiture gain is two fold: First, even though CEO-firm match improves, large firms usually continue operating in multiple business lines, and in most cases there are still some of them that specialist CEOs do not specialize in. In contrast, the majority or all assets retained are specialized ones in smaller firms. Therefore there should be greater improvement in CEO-firm match quality in smaller firms. Second, in a large conglomerate with great management depth, the influence of CEO's specialization is less pronounced as in a small firm. The governance hierarchy and management regularity may weaken the individual role played by CEO. While CEO is critical in strategic decision in a large conglomerate as well as in a small one, the "hands-on" experience in specialized divisions may less likely be turned to greater productivity in those divisions than in a small firm.

To conduct the test, I partition the full sample into quartiles based on the divesting firm assets at year $t-1$. The results are presented in Table 7. Panel A shows that significant divestiture gains all accrue to firms divesting for better match for all the four asset quartiles, while BHARs of all other firms are not significantly different from zero regardless of asset quartiles. This verifies the value of better CEO-firm match even among firms with similar sizes, negating the possibility that firm size may have driven the primary result²². More

²²There might be concern that other firm characteristics like firm size may drive the primary result, and thus the relationship between divestiture gains and divestiture for better match is simply reflecting the fact

interestingly, for firms divesting for better match, divestiture gains decline monotonically from asset quartile 1 to quartile 4. This virtually reflect the decrease in change of match quality as firms become larger and more diversified. The monotonicity of shareholder return with respect to firm size reinforces the primary argument that the increase in CEO-firm matching quality is positively related with shareholder return from refocus.

There is concern that the firm size and divestiture gain relation documented above might be driven by the potentially greater change in firm risk in smaller firms following divestitures. If this was the case, we would expect a similar pattern of divestiture gains for firms other than divesting for better match. But results shown in Table 7 suggest the lack of such evidence. Other firms in smallest and largest asset quartiles seem to gain more than those of middle sizes, although BHARs in none of them are significantly different from zero. This helps to alleviate the concern that the effect of firm risk change may lead to the above finding.

I repeat the regression analysis in Table 6 on each subsample by firm asset quartile. Results obtained in Model (1) to (4) in Panel B of Table 7 reveal that the coefficients for *Divest-for-better-match* are significantly positive for the lowest three asset quartiles, but insignificant for the highest asset quartiles. Confirming the finding in the univariate analysis, the magnitudes of coefficients for *Divest-for-better-match* decline monotonically from lowest to highest asset quartile. In addition, I also conduct an alternative test by including an interaction term $Assets * match$ in the full sample regression, where *Assets* is the natural logarithm of firm assets at year t-1 and *match* is the shortcut for the dummy variable *Divest-for-better-match*. Coefficient for this variable in Model (5) is significantly negative as the larger the firm is, the less is the improvement in match quality and thus the lower return is from the divestiture. Consistent with the finding in the univariate analysis, divestiture gains increase in the change in CEO-firm match quality.

5.3.2 Early Departure of Divesting CEOs

As discussed in Section 2, there are 70 firm-years where divestiture decision was made by a CEO who steps down one year or months following the divestiture. Here I take a close

that firms categorized as *divest-for-better-match* are larger on average, as documented in Section 2.

look at those cases. Among them, I'm able to identify the reasons of the divesting CEOs' departures for 66 cases. In 18 firm-years, the divesting CEOs are ousted or resigned for poor firm performances. In the other 48 firm-years, the divesting CEOs depart due to mandatory retirement requirement, health problem or acceptance of a same position in another firm, among which I classify 19 firm-years as *Divest-for-better-match* cases.

These 19 cases with early departure of CEOs for exogenous reasons can potentially serve as counterfactuals to test the main hypothesis²³. According to the main hypothesis that firms gain from divestiture for better CEO-firm match, we would expect that divestiture gains only accrue to those firms with divesting CEOs staying sufficiently long after the divestitures for the firms to capitalize on the better talent-asset match, as documented in the above analysis. For those cases with CEOs departing shortly following divestitures, smaller or no gains are expected for divesting firms as better CEO-firm match is not fulfilled, despite being attempted. A simple test finds that the mean (median) three-year BHARs for the 19 cases is -22% (-16.6%), albeit statistically insignificant²⁴.

5.4 Initial Announcement Cumulative Abnormal Return

To present a complete picture, in this section, I examine the initial announcement cumulative abnormal return (CAR) for five windows (-1, 0), (-1, 1), (-2, 0), (-2, 2) and (-5, 5). Typically, there is a gap between initial announcement and the effective date of divestiture, varying from months to one or two years. It's worthwhile to note that the initial announcement CAR measures slightly different value implications of divestiture from the three-year post-divestiture BHAR. Although the announcement return is an immediate and market-based measure of wealth effect on divestiture and its expected future gain, it also reflects the noise of stock price reaction²⁵, affected by the degree of anticipation of the divestiture, the uncertainty

²³I exclude from analysis those cases with divesting CEOs departing for more endogeneous reasons like poor performance.

²⁴The mean (median) BHAR is not significantly different from zero either, when it is calculated only for the period between the divestiture effective date and CEO's departure date.

²⁵See Bhagat et al. (2005) for a complete argument in their estimates of takeover value.

over the deal resolution²⁶, the potential of overpayment by asset buyers and typically the deal size. Rather, the post-effective-date BHAR measures the pure gain from better management of retained assets after the deal is resolved. Thus these two measurements of divestiture gain do not perfectly overlap, and we need to interpret the results more carefully²⁷.

The results on CAR of the sample firms, as shown in Table 8, are consistent with the literature on divestiture announcement return. Investigation of all five windows shows comparable results with those in prior studies. Both types of firms have significantly positive CARs around initial divestiture announcement. Nevertheless, the magnitudes of CARs for firms divesting for better match are smaller, even though the differences are basically not statistically significant. I interpret this pattern of announcement abnormal return as follows: divestitures are good news for both types of firms, but investors have different anticipation on the divestitures and also respond reasonably to the different deal sizes of divestitures by those two types of firms. For firms divesting for better match, investors have observed the specialist CEOs' relative strengths in managing different divisions and thus more likely well anticipate specialist CEOs' divestiture decisions. Much less surprise may partially account for the lower abnormal return. As for the deal size, investors' responses are rather straightforward in that investors tend to respond more substantially to relatively bigger deals than to smaller ones. A close look at the deal sizes find that the mean (median) size (transaction value of divestiture normalized by firm's market value at year t-1) of deals by firms divesting for better match is 0.24 (0.05). It is significantly smaller than that by other firms, 0.39 (0.11). Collectively, the differing degrees of anticipation and deal sizes may have driven the announcement abnormal return pattern to some extent. Nevertheless, my focus in this study is on how divestiture gain from better management of retained assets relates to CEO's skills.

²⁶Typically, firms announce the intent of divestiture or choose to announce when an initial agreement has been reached with potential buyers. Even in case of initial agreement announcement, the deal is still subject to the negotiation of a definitive agreement and definitive financing arrangements by the bidder. Termination of a deal is not rare.

²⁷In a similar line, Bates (2005) finds investment benefits associated with asset sale proceeds are only partially incorporated into share prices around the asset sale announcement.

6 Additional Tests and Robustness Check

In this section, I test the main hypothesis using two other proxies for firm performance: diversification discount and return on assets. In addition, I also address the endogeneity concern that CEOs are strategically selected to implement firms' refocus plans made by boards. Finally, additional robustness checks are also conducted in this section.

6.1 Diversification Discount

6.1.1 Univariate

As additional evidence, I examine the change in diversification discount for both types of firms and expect that firms divesting for better match should experience more reduction in diversification discount in the post-divestiture three-year period. I calculate the average annual excess value (using sales multiplier) for three years prior to (year $t-3$ to year $t-1$) and subsequent to divestitures (year $t+1$ to year $t+3$), and then look at the difference between predivestiture and post-divestiture average annual excess value. Following Berger and Ofek (1995), I exclude the extreme excess values from the analysis, resulting in the loss of 43 observations (8.8%). Those dropped are with excess value either above 1.386 or below -1.386 (actual values either more than four times imputed values, or less than one-fourth imputed values).

Table 9 shows that firms, regardless of whether divest for better match, are significantly discounted relative to a comparable portfolio of stand-alone firms for the three-year period prior to divestiture, and firms divesting for better match are even more discounted than others. However, for the three-year period following divestitures, firms divesting for better match are no longer discounted while other firms continue so. Both types of firms reduce their diversification discounts from refocusing divestitures, but the analysis using difference-in-difference approach reveals firms divesting for better match gain significantly more than other firms.

6.1.2 Multivariate

To show that my results are free from some confounding factors, I run firm-case fixed effect regressions of excess value on firm characteristics for the three years prior to and subsequent to divestitures. The regressions are based on the following model:

$$EV_{it} = \alpha + \beta_1 * After + \beta_2 * Divest-for-better-match * After + \gamma * X_{it} + \lambda_i + \mu_t + \varepsilon_{it} \quad (3)$$

where EV_{it} is the excess value for firm i at year t . *After* is a dummy that equals one for post-divestiture period. The coefficient β_2 for the interaction term *Divest-for-better-match * After* is of primary interest and is expected to be significantly positive. I also control for firm's degree of focus using H-index and firm size using the natural logarithm of firm assets.

The significantly positive coefficients for *After* as reported in Table 10 indicate that both types of firms reduce their diversification discounts through refocus. But firms divesting for better match gain significantly more than other firms as we can tell from the significantly positive coefficients for the interaction term *Divest-for-better-match * After* in all three models. In sum, firms divesting for better CEO-firm match experience greater improvement in market valuation than other firms, relative to a comparable portfolio of stand-alone firms.

6.2 Operating Performance

In this section, I also investigate the change in operating performance for both types of firm from predivestiture to post-divestiture three-year period. I measure firm's operating performance using industry-adjusted ROA. Since I need to run a firm-case fixed effect regression on operating performance as in the examination of diversification discount in the last section, it's required data on ROA be available at least one year prior to and subsequent to divestiture. Among the 31 observations dropped, 29 drops are due to unavailability of data for post-divestiture period because firms get delisted within a year following the divestiture. To address the concern that operating performance prior to divestiture may continue in the

period after divestiture, I estimate an AR(1) model regressing the post-divestiture industry-adjusted three-year average ROA on the predivestiture industry-adjusted three-year average ROA. The residual is the measure of the change in annual industry-adjusted ROA from pre-divestiture period to post-divestiture period. I obtain comparable results if I simply use the difference in the industry-adjusted three-year average ROA.

Results in Table 11 show that both types of firms significantly underperform their industry peers for the three years prior to divestitures. For the three years subsequent to divestiture, firms divesting for better match do not underperform their industry peers while other firms continue to do so. Also, firms divesting for better match achieve significant improvement in operating performance, but virtually no improvement is found in other firms. Taken together, there is greater improvement in profitability in firms divesting for better match than other firms following the divestitures. This reinforces the primary argument that only focus on assets that managers specialize in creates value. As a robustness check, I also estimate a firm-case fixed effect regression similar to the one used for excess value and find the main results hold anyway (not reported).

6.3 Robustness

One potential concern is endogeneity. CEO succession is not a random event. The board of directors may determine a corporate-focus strategy and then specifically select a specialist CEO in anticipation that her expertise will facilitate implementation of this strategy. To address this issue, I perform an additional check. Specifically, if a CEO is strategically picked to implement the board's predetermined strategy, we should observe the new specialist CEO divesting the non-specialized divisions immediately after taking office. An investigation finds that the median time wedge between CEO turnover and divestiture decision is two years for all firms undertaking divestitures to achieve better CEO-firm match. Thus, I repeat my analysis using the subsample of divesting firms in which all CEOs undertake divestitures only two years or more after being appointed CEO. This subsample consists of 352 firm-years accounting for 72% of the full sample, within which divestitures in 93 firm-years are classified as divesting-for-better-match. The results continue to hold even for this limited subsample.

Together with the fact that more than half of the CEOs categorized as divesting-for-better-match undertake divestitures at least two years after being appointed, it suggests that these CEOs do divest for better match with the firms' assets rather than merely implementing strategies predetermined by their boards.

Another concern is that the change in segment reporting rule undertaken in 1997 by FASB may influence my results. The change in the definition of segments may make it difficult to compare segments before 1998 from after 1998. Thus I repeat all my analysis based on the subsample of divestitures made before 1998, and obtain qualitatively similar results.

7 Conclusion

This paper relates the firm's divestiture decision and its value implications to the CEO's skills. Using a sample of 486 refocusing divestitures during the period 1980 to 2003, I find that CEOs are more likely to divest assets that they are less qualified to manage and focus on assets that provide a better match with their experience and skills. And only when a divestiture achieves a better match between the CEO's talents and the firm's remaining assets, does it create long-run value. This study thus adds a new perspective to the "manager matters" literature by showing how managerial skills shape corporate investment (divestiture) decisions and their impact on firm value. It also extends the literature on corporate focus by suggesting that it may be misleading to generalize about the value of corporate focus without examining the CEO-firm match achieved by the divestiture that creates the increased focus.

The results in this paper also shed some light on the firm's CEO choice. In recent years, the number of firms seeking CEOs from other firms has increased (e.g. Murphy and Zábajník (2004) and Frydman (2005)), which raises the question of whether leadership skills in one industry travels well to another²⁸. This paper suggests that hiring an outsider as CEO will not improve firm performance unless the CEO's skills match up well with the firm's assets. In studies that do not control for this match, we should expect mixed results.

²⁸Typical cross-industry hires include Geroge Fisher from Motoral to Kodak, John R. Walter from R.R. Donnelley & Sons Co. to AT&T, Louis V. Gerstner, Jr. from RJR Nabisco Inc to IBM, among many others.

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Table 1: Year-wise Distribution of Divestitures

This table reports the distribution by year of the full sample of 486 focus-increasing divestitures as well as the divest-for-better-match (159 divestitures) and all others (327 divestitures) subsamples. The divest-for-better-match subsample consists of those firm-years that specialist CEOs divest non-specialized divisions and retain specialized divisions.

Year	Full sample	Divest-for-better-match	All others	Year	Full sample	Divest-for-better-match	All others
1980	2		2	1992	29	10	19
1981	2		2	1993	17	5	12
1982	14	5	9	1994	28	4	24
1983	18	4	14	1995	30	13	17
1984	33	12	21	1996	34	11	23
1985	27	11	16	1997	33	17	16
1986	34	14	20	1998	14	3	11
1987	33	8	25	1999	14	3	11
1988	22	7	15	2000	9	2	7
1989	21	9	12	2001	19	8	11
1990	30	5	25	2002	3	1	2
1991	19	7	12	2003	1		1
				Total	486	159	327

Table 2: Firm-level Summary Statistics

Panel A provides firm-level characteristics for the year prior to divestiture (year t-1). Tobin's Q is as of the beginning of the year t-1. Asset growth is computed from year t-2 to year t-1. Means (medians) are reported below.

Panel A: Descriptive Statistics			
	Full sample	Divest for better match	All others
Number of firms	412	140	272
Assets (\$MM)	3520.6 (703.9)	3870.5 (1932.5)	3350.5 (423.6)
Cash flow/Assets	0.118 (0.120)	0.123 (0.126)	0.115 (0.119)
Tobin's Q	1.39 (1.15)	1.36 (1.19)	1.41 (1.15)
CAPX/Assets	0.064 (0.054)	0.067 (0.061)	0.063 (0.052)
Interest coverage	10.65 (4.89)	7.71 (6.35)	12.09 (4.22)
Free cash flow/Assets	0.053 (0.060)	0.062 (0.067)	0.048 (0.055)
Asset growth	0.148 (0.049)	0.084 (0.033)	0.179 (0.056)
Obs.	486	159	327

Table 2: Firm-level Summary Statistics (continued)

Panel B reports the level of diversification prior and subsequent to divestiture, and change in focus following divestiture. Two measures for focus are used: one is the number of reported segments and the other is the sales-based Herfindahl index. Means (medians) are reported below. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Panel B: Change in Focus around Divestiture							
	Full sample		Divest for better match		All others		Difference
		Obs.		Obs.		Obs.	
Number of segments							
year t-1	3.62 (3.00)	486	3.89 (4.00)	159	3.49 (3.00)	327	0.40*** (1.00***)
year t+1	2.48 (2.00)	466	2.84 (3.00)	154	2.29 (2.00)	312	0.55*** (1.00***)
Change	1.16*** (1.00***)	466	1.08*** (1.00***)	154	1.20*** (1.00***)	312	-0.12 (-0.00)
Sales-based Herfindahl index							
year t-1	0.503 (0.488)	486	0.491 (0.470)	159	0.509 (0.498)	327	-0.018 (-0.028)
year t+1	0.701 (0.673)	466	0.648 (0.594)	154	0.732 (0.760)	312	-0.084*** (-0.166***)
Change	0.198*** (0.156***)	466	0.147*** (0.112***)	154	0.224*** (0.177***)	312	-0.077*** (-0.065***)

Table 3: Segment-level Summary Statistics

This table reports segment-level summary statistics for the year prior to divestiture (year t-1). Imputed Q, Industry ROA, Asset Tangibility are the medians of Tobin's Q, ROA and the ratios of net property, plant and equipment to total assets for all single-segment firms sharing the identical three-digit SIC code with the segment, respectively. Means (Medians) are reported below.

	Full sample	Divest-for-better-match			All others		
		All	Divested	Retained	All	Divested	Retained
Assets (\$ MM)	901.3 (137.3)	884.9 (259.4)	408.9 (131.3)	1078.1 (336.9)	910.3 (99.8)	547.6 (53.4)	1076.6 (123.0)
Imputed Q	1.40 (1.29)	1.42 (1.30)	1.43 (1.26)	1.41 (1.31)	1.40 (1.28)	1.42 (1.29)	1.38 (1.27)
CAPX/Assets	0.074 (0.054)	0.074 (0.058)	0.072 (0.059)	0.075 (0.058)	0.073 (0.052)	0.076 (0.048)	0.072 (0.053)
Operating Profits/Assets	0.088 (0.098)	0.088 (0.100)	0.050 (0.072)	0.103 (0.106)	0.088 (0.096)	0.055 (0.061)	0.103 (0.107)
Industry ROA	0.137 (0.137)	0.134 (0.134)	0.129 (0.130)	0.137 (0.138)	0.138 (0.138)	0.137 (0.139)	0.138 (0.137)
Asset Tangibility	0.325 (0.282)	0.344 (0.291)	0.334 (0.278)	0.349 (0.291)	0.314 (0.291)	0.322 (0.280)	0.309 (0.271)
Number of segments	1760	620	179	441	1140	364	776
Number of specialized segments (%)		239 (38.5%)	20 (11.2%)	219 (49.7%)			

Table 4: Specialist CEO's Preference of Segment Divestiture

This table shows the results from logit regressions of segment divestiture on CEO's specialization and other segment characteristics for the year prior to the divestiture. Specialist is a dummy that equals one if the divesting CEO has expertise and prior managerial experience in certain, but not all, divisions of the firm. non-specialized is a dummy for a division that equals one if a specialist CEO has no expertise or prior managerial experience in that division. Segment imputed Q is the median Q of all single-segment firms sharing the identical three-digit SIC code with the segment. Segment profitability is the ratio of segment operating profits to segment assets. Segment Industry ROA is the median ROA of all single-segment firms sharing the identical three-digit SIC code with the segment. Segment asset tangibility is the median of the ratios of net property, plant and equipment to assets for all single-segment firms sharing the identical three-digit SIC code with the segment. A low-sale segment is defined as 1 if the segment's sales is below the median of all segments' sales in the firm. A lowest-sales segment is defined as 1 if the segment's sales is smallest in the firm. Robust standard errors (clustered by firm) are in parentheses. All regressions control for year fixed effects. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Dependent Variable: Segment Divestiture Dummy						
	(1)	(2)	(3)	(4)	(5)	(6)
Specialist	-1.427 (0.207)***	-1.238 (0.232)***	-1.174 (0.217)***	-1.111 (0.208)***	-1.153 (0.203)***	-1.118 (0.206)***
Specialist * Non-specialized	1.846 (0.249)***	1.691 (0.273)***	1.658 (0.260)***	1.438 (0.254)***	1.557 (0.244)***	1.457 (0.256)***
Segment assets (log)		-0.169 (0.023)***	-0.182 (0.022)***	-0.112 (0.022)***	-0.103 (0.020)***	-0.097 (0.022)***
Segment imputed Q		0.071 (0.144)				0.184 (0.171)
Segment profitability		-0.294 (0.266)				-0.136 (0.214)
Segment Industry ROA			-1.777 (1.428)			-2.051 (1.495)
Segment asset tangibility			0.612 (0.282)**	0.447 (0.297)		0.488 (0.316)
Low-sale segment				1.095 (0.144)***		0.620 (0.181)***
Lowest-sales segment					0.921 (0.141)***	0.768 (0.204)***
Constant	-1.792 (0.118)***	-0.037 (0.359)	0.742 (0.194)***	-0.808 (0.215)***	-1.411 (0.109)***	0.202 (0.272)
Obs.	1760	1352	1445	1445	1716	1430
Pseudo R ²	0.047	0.065	0.063	0.105	0.087	0.120

Table 5: Three-year Buy-and-hold Abnormal Stock Return

This table reports a univariate test of three-year buy-and-hold abnormal stock return (BHAR, unit: %). Each sample firm-year is matched with a control firm, which is selected at the divestiture effective date by market capitalization, book-to-market ratio and prior one-year buy-and-hold stock return. Panel A shows the full sample result of post-divestiture three-year BHARs. Panel B presents the results based on the division of the sample into two subsamples: divestiture undertaken by CEOs advanced internally and by CEOs selected from outside the firms. Panel C presents the results based on whether divesting firms remain diversified or become stand-alone (single-segment firm) following divestiture. In Panel D, the sample is segmented based on whether divestitures are reversals of prior acquisition mistakes or not. The last column of the table reports the t-statistic and z-statistic for the difference of BHARs between firms divesting for better match and other firms. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

	Full sample	Divest-for- Better-Match	All Others	Difference t/z-statistic
Panel A: Full Sample				
Mean	13.27**	46.19***	-2.74	4.36***
Median	4.29**	28.07***	-5.18	5.06***
Obs	486	159	327	

Table 5 (Continued)

	Full sample	Divest-for- Better-Match	All Others	Difference t/z-statistic
Panel B: post-divestiture BHARs by Origin of Divesting CEOs				
B1: Inside CEOs				
Mean	16.59***	40.35***	4.61	2.95***
Median	5.94**	24.99***	-1.86	3.76***
Obs	364	122	242	
B2: Outside CEOs				
Mean	3.41	65.45***	-24.25	3.38***
Median	-3.84	48.58***	-16.66*	3.44***
Obs	122	37	85	
Panel C: post-divestiture BHARs by Parent firms at Year t+1				
C1: Diversified Parents				
Mean	9.84*	36.84***	-6.17	3.65***
Median	3.44	24.70***	-4.75	3.81***
Obs	325	121	204	
C2: Stand-alone Parents				
Mean	20.18*	75.97***	2.95	2.84***
Median	4.52	53.64***	-5.18	3.59***
Obs	161	38	123	
Panel D: BHARs by Correction of Prior Mistakes				
D1: Divestiture of Prior Acquisitions				
Mean	9.26	43.63***	-9.17	3.22***
Median	-0.91	28.07***	-6.84	3.07***
Obs	106	37	69	
D2: Other Divestitures				
Mean	14.39**	46.97***	-1.02	3.51***
Median	5.44*	28.68***	-3.39	4.11***
Obs	380	122	258	

Table 6: Multivariate Analysis of Three-year Buy-and-hold Abnormal Stock Return

This table shows the results from regressions of three-year buy-and-hold abnormal return on divest-for-better-match and other firm characteristics. The dependent variable is the natural logarithm of one plus the sample firm's three-year buy-and-hold returns (BHRs) minus the natural logarithm of one plus the control firm's three-year buy-and-hold (BHRs). And *Size* is the natural logarithm of market capitalization as of the day prior to the effective date of divestiture. *BM ratio* is computed at the end of the month immediately preceding the effective date of divestiture, taken natural logarithm as well. *Prior runup* is defined as the difference of one-year buy-and-hold return beginning 252 days prior to the effective date of divestiture between the sample firm and control firm. *Divest-for-better-match*, *Insider*, *Stand-alone*, *Reversal* and *Takeover* are all dummy variables. *Divest-for-better-match* equals one if specialist CEO divests non-specialized segments and retains specialized segments. *Insider* takes value one if the divesting CEO is promoted from inside the firm. *Stand-alone* equals one if the divesting firm becomes single-segment firm at year t+1. *Reversal* equals one if firm divests an initially acquired segment. *Takeover* equals one if the divesting firm is taken over and get delisted within the three years following divestiture. *Change in focus* is the change in sales-based Herfindal index from year t-1 to t+1. Robust standard errors (clustered by firm) are in parentheses. All regressions include year dummy variables. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Regression Analysis on Three-year BHAR Using Full Sample						
Dependent Variable: $\ln(1+BHR_{\text{sample}})-\ln(1+BHR_{\text{control}})$						
	(1)	(2)	(3)	(4)	(5)	(6)
Size (log)	-0.049 (0.023)**	-0.038 (0.024)	-0.030 (0.023)	-0.055 (0.024)**	-0.056 (0.026)**	-0.041 (0.025)
BM ratio (log)	0.048 (0.074)	0.051 (0.077)	0.056 (0.075)	0.048 (0.074)	0.046 (0.076)	0.052 (0.077)
Prior runup	0.000 (0.003)	0.001 (0.004)	0.001 (0.004)	0.001 (0.003)	0.000 (0.003)	0.001 (0.004)
Divest-for-better-match	0.402 (0.093)**			0.403 (0.094)**	0.409 (0.094)**	
Change in focus		-0.134 (0.306)			-0.106 (0.367)	-0.237 (0.365)
Stand-alone (year t+1)			0.010 (0.114)		0.081 (0.142)	0.074 (0.141)
Insider				0.141 (0.124)	0.141 (0.126)	0.141 (0.127)
Reversal				0.070 (0.109)	0.053 (0.115)	0.047 (0.119)
Takeover				0.046 (0.134)	0.027 (0.163)	0.043 (0.163)
Constant	1.227 (0.431)**	1.111 (0.465)**	1.043 (0.451)**	1.159 (0.449)**	1.158 (0.478)**	1.016 (0.485)**
Obs.	486	466	486	486	466	466
R ²	0.110	0.079	0.076	0.114	0.116	0.083

Table 7: Three-year Buy-and-hold Abnormal Stock Return by Asset Quartiles

This table reports three-year buy-and-hold abnormal stock return (BHAR, unit: %) by asset quartiles. The sample is partitioned into quartiles based on the sample firms' assets. Each sample firm-year is matched with a control firm, which is selected at the divestiture effective date by market capitalization, book-to-market ratio and prior one-year buy-and-hold stock return. Panel A reports the result of univariate analysis based on asset quartiles with Quartile 1 being the lowest asset quartile and Quartile 4 the highest. The last column of Panel A reports the t-statistic and z-statistic for the difference of BHARs between firms divesting for better match and other firms. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Panel A: Univariate Analysis of BHAR by Asset Quartiles				
	Full sample	Divest-for- Better-Match	All Others	Difference t/z-statistic
Asset Quartile 1 (Lowest)				
Mean	33.41**	103.20***	15.42	2.45**
Median	22.71**	74.30***	8.78	2.88***
Obs	122	25	97	
Asset Quartile 2				
Mean	3.28	57.60**	-14.63	2.81***
Median	-4.30	52.39***	-16.76	3.09***
Obs	121	30	91	
Asset Quartile 3				
Mean	4.25	32.32**	-12.96	2.89***
Median	-0.73	34.45***	-8.42	3.08***
Obs	121	46	75	
Asset Quartile 4 (Highest)				
Mean	11.98*	26.73**	-1.39	2.07**
Median	1.09	10.51**	-1.25	1.94*
Obs	122	58	64	

Table 7: Three-year Buy-and-hold Abnormal Stock Return by Asset Quartiles

(Continued)

Panel B reports the result based on a multivariate model, estimated for each of the sample firm asset quartiles (Model 1 to 4) and the full sample (Model 5). The dependent variable is the natural logarithm of one plus the sample firm's three-year buy-and-hold returns (BHRs) minus the natural logarithm of one plus the control firm's three-year buy-and-hold (BHRs). And *Size* is the natural logarithm of market capitalization as of the day prior to the effective date of divestiture. *BM ratio* is computed at the end of the month immediately preceding the effective date of divestiture, taken natural logarithm as well. *Prior runup* is defined as the difference of one-year buy-and-hold return beginning 252 days prior to the effective date of divestiture between the sample firm and control firm. *Divest-for-better-match*, *Insider*, *Stand-alone*, *Reversal* and *Takeover* are all dummy variables. *Divest-for-better-match* equals one if specialist CEO divests non-specialized segments and retains specialized segments. *Insider* takes value one if the divesting CEO is promoted from inside the firm. *Reversal* equals one if firm divests an initially acquired segment. *Takeover* equals one if the divesting firm is taken over and get delisted within the three years following divestiture. *Change in focus* is the change in sales-based Herfindal index from year t-1 to t+1. *Assets * match* is an interaction variable, where *Assets* is the natural logarithm of firm assets at year t-1 and *match* is the shortcut for the dummy variable *Divest-for-better-match*. Robust standard errors (clustered by firm) are in parentheses. All regressions include year dummy variables. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

Panel B: Regression Analysis of BHAR Using Subsamples Based on Assets and Full Sample					
	Dependent Variable: $\ln(1+BHR_{\text{sample}})-\ln(1+BHR_{\text{control}})$				
	(1)	(2)	(3)	(4)	(5)
	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Full Sample
Size (log)	-0.019 (0.111)	-0.086 (0.116)	-0.216 (0.166)	-0.025 (0.099)	-0.019 (0.031)
BM ratio (log)	0.220 (0.171)	-0.125 (0.176)	-0.370 (0.322)	0.091 (0.119)	0.090 (0.077)
Prior runup	0.010 (0.007)	-0.005 (0.008)	-0.003 (0.007)	-0.002 (0.006)	0.001 (0.004)
Divest-for-better-match	0.932 (0.360)***	0.517 (0.277)*	0.419 (0.161)***	0.225 (0.138)	1.237 (0.416)***
Asset * match					-0.122 (0.055)**
Change in Focus	0.328 (0.639)	-0.864 (0.504)*	1.963 (0.868)**	0.002 (0.342)	0.068 (0.299)
Insider	0.742 (0.346)**	0.235 (0.241)	0.099 (0.209)	-0.055 (0.163)	0.178 (0.126)
Reversal	0.294 (0.440)	-0.160 (0.217)	-0.021 (0.247)	0.120 (0.152)	0.059 (0.115)
Takeover	-0.245 (0.263)	0.097 (0.300)	0.026 (0.364)	0.193 (0.183)	0.033 (0.161)
Constant	1.426 (1.507)	0.269 (1.165)	0.323 (1.166)	0.780 (1.379)	0.954 (0.510)*
Obs.	116	118	115	117	466
R ²	0.278	0.332	0.276	0.274	0.127

Table 8: Initial Announcement Cumulative Abnormal Return

This table documents the initial announcement cumulative abnormal return (CAR) using five windows. They are computed using the market model and Scholes-Williams betas. And the estimation period is from 220 days to 60 days prior to the announcement date. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

	Full sample	Divest for Better Match	All Others	Difference between groups
Window (-1, 0)				
Mean	1.77***	0.98**	2.15***	-1.17**
Median	0.86***	0.64***	1.01***	-0.37
Window (-1, 1)				
Mean	2.17***	1.94***	2.28***	-0.34
Median	0.96***	0.98***	0.92***	0.06
Window (-2, 0)				
Mean	1.82***	0.74	2.35***	-1.61**
Median	0.62***	0.24*	0.77***	-0.53
Window (-2, 2)				
Mean	2.21***	1.62**	2.49***	-0.87
Median	1.38***	1.24***	1.43***	-0.19
Window (-5, 5)				
Mean	2.22***	1.59**	2.52***	-0.93
Median	1.56***	1.33***	1.70***	-0.37
Obs	486	159	327	

Table 9: Diversification Discount

This table shows the result of univariate test on diversification discount. Annual excess value from year -3 to -1 and from yr 1 to 3 are average annual excess values (using sales multiplier) for the predivestiture and post-divestiture three-year period, respectively. The change in annual excess value is the difference between predivestiture and post-divestiture values. Following Berger and Ofek (1995), the extreme excess values are removed from the analysis, resulting in the loss of 43 observations (8.8%). Those dropped are with excess value either above 1.386 or below -1.386 (actual values either more than four times imputed, or less than one-fourth imputed). ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

	Full sample	Divest for Better Match	All Others	Difference between groups
Annual excess value from yr -3 to -1				
Mean	-0.104***	-0.167***	-0.072***	-0.095**
Median	-0.133***	-0.186***	-0.081***	-0.105**
Obs	390	134	256	
Annual excess value from yr 1 to 3				
Mean	-0.028	0.013	-0.049*	0.074
Median	-0.047	-0.011	-0.048*	0.049
Obs	375	130	245	
Change in annual excess value from yr (-3, -1) to yr (1, 3)				
Mean	0.092***	0.154***	0.058**	0.107**
Median	0.107***	0.124***	0.086***	0.048*
Obs	333	118	215	

Table 10: Multivariate Analysis of Diversification Discount

This table shows the results from firm-case fixed effect regressions of excess value on firm characteristics for the three years prior to and subsequent to divestitures. "After" is a dummy variable that equals one if the observations occur after the divestiture and is zero otherwise. Divest-for-better-match is a dummy that equals one if specialist CEOs divest non-specialized divisions and retain specialized divisions. H-index is the sales-based Herfindahl index measuring the degree of focus. Robust standard errors (clustered by firm-case) are in parentheses. All regressions also include year dummy variables. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

	Dependent Variable: Excess Value		
	(1)	(2)	(3)
After	0.150 (0.040)***	0.100 (0.041)**	0.109 (0.040)***
After * Divest-for-better-match	0.106 (0.040)***	0.114 (0.040)***	0.111 (0.040)***
H-index		0.218 (0.081)***	0.258 (0.082)***
Assets (log)			0.082 (0.049)*
Constant	-0.468 (0.126)***	-0.564 (0.142)***	-1.203 (0.393)***
Obs.	2014	2014	2014
Number of firm-cases	431	431	431
Firm-case fixed effect	Yes	Yes	Yes
R ² (within)	0.056	0.065	0.073

Table 11: Operating Performance (Industry-adjusted ROA)

Annual ROA from year -3 to -1 and from year 1 to 3 are the three-year average industry-adjusted ROA for predivestiture and post-divestiture, respectively. I estimate an AR(1) model, regressing the post-divestiture three-year average industry-adjusted ROA on the predivestiture three-year average industry-adjusted ROA. The residual is the measure of the change in annual industry-adjusted ROA from predivestiture three-year period to post-divestiture three-year period. I obtain comparable results if I simply use the difference in the industry-adjusted ROA. ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively.

	Full sample	Divest for Better Match	All Others	Difference between groups
Annual ROA from year -3 to -1				
Mean	-0.018***	-0.012**	-0.021***	0.009
Median	-0.010***	-0.009*	-0.010***	0.001
Obs	455	152	303	
Annual ROA from year 1 to 3				
Mean	-0.016***	-0.002	-0.023***	0.021**
Median	-0.011**	0.002	-0.017***	0.015**
Obs	455	152	303	
Change in annual ROA from year (-3, -1) to year (1, 3)				
Mean	0.000	0.010*	-0.005	0.015*
Median	0.003	0.009**	-0.000	0.009**
Obs	455	152	303	