RI HUB

RESEARCH NOTE #2

RULE 1: FOCUS ON ONE BUSINESS AT A TIME

The Ruthven Institute has developed 12 rules for business success. Based on 45 years of analysis of Australia's top 1000 companies, the Ruthven Institute has distilled the essence of a winning business strategy. Research undertaken by the University of Melbourne between 1998 and 2001 supported many of these rules. In this series, the RI Hub examines the literature to assess the validity and continuing relevance of these rules. In each of the following sections, the literature is summarised, the key issues for implementation highlighted, and the questions for future research identified.

> "Australia's most profitable businesses operate in only one of Australia's 509 industry classes. As seen below in the latest analysis, the exceptions prove the rule, where only one of the most profitable 100 companies was diversified. In over 40 years of conducting such surveys, Ruthven Institute has rarely observed more than five diversified companies in the Best 100 in any given period…
>
> In short: If there is no more room to grow in one's own industry within a country, then expand internationally. For Australia, this means a 70–80 times bigger market than domestically. If a firm is not competent and equipped with unique IP to expand overseas, then one day it will be attacked from overseas entrants in its own country. So, expanding overseas is both defensive as well as a huge opportunity; and doing so is better than diversifying into another industry locally."
>
> Ruthven Institute (2019) *Business Success: In Brief the 12 Golden Rules*

Focus and diversification – the opposite sides of the strategy coin. As growth and profitability start to slow, what path should the successful firm take to continue its growth? Or to protect its current level of activity to offset downturns in the particular business cycle? The RI rule suggests that focus and geographical expansion are the key to prolonged success, yet many firms tend to favour diversification as their strategic direction.

Why Focus?

The logic for a firm being focused on a narrow band of activities and the production of a singular category of product or service rests on the key insight of Adam Smith (1776) – that specialisation maximises learning and efficiency. Peters and Waterman (1982) exhorted firms (and managers) to *stick to the knitting*, to stay with the business

AUTHORS Sabutay Fatullayev & André Sammartino

For more see https://fbe.unimelb.edu.au/cwl/research/the-ruthven-institute-hub

THE UNIVERSITY OF MELBOURNE

they know. A focused firm can hone specialised resources and routines to the needs of specific activities and customers, and build economies of scale and learning. The empirical and strategic challenge rests on understanding where the boundary between focus and diversification lies, and how *crossing this line* affects performance.

What is diversification and how is it measured?

Industrial diversification is characterised by "a change in the characteristics of the company's product line and/or market" (Ansoff, 1957). An addition of a product line to a company's business portfolio – through organic growth or mergers and acquisitions (hereafter, acquisitions) – is thus considered as *diversifying* when the new product line is sufficiently different in its characteristics from the company's existing product lines. Prior studies have also distinguished between industrial and geographic diversification. A geographically diversifying company generally expands into other regions/countries while retaining its focus on goods and services in which it is specialised. Consequently, Rule 1 favours geographic diversification over industrial diversification as a growth option. Although this review primarily focuses on industrial diversification, it also briefly discusses the performance implications of geographic diversification. In the remainder of this review, for simplicity we use the term *diversification* to denote industrial diversification. Throughout the review, we also draw attention to the differences between RI guidelines and the insights from the literature while closely following the terminology used in prior studies.

In academic research, diversification is generally categorised as either *related* or *unrelated*. Conceptually, related business lines tend to utilise similar core skills, share facilities, or exploit common factors of production (Rumelt, 1982). Therefore, the most precise way of determining the level and the extent of diversification is to analyse the commonalities between a company's product lines (Rumelt,1974). However, such a subjective assessment of commonalities is impractical for large samples of firms. Therefore, most studies on US firms classify diversification as related when the industries wherein the company's segments operate have different four-digit Standard Industry Classification (SIC) codes but the same two-digit or three-digit SIC codes.[1] They typically consider diversification unrelated when the

1 SIC was largely replaced in 1997 by NAICS (North American Industry Classification System), which operates on the same principles (but the greater coverage of service industry). For simplicity, and as studies using such data bridge these time periods, we will use SIC throughout this review.

company's segments operate in industries with different two-digit or one-digit SIC codes.[2] Applying these identification methods to Australian firms may not be as straightforward, however, because for some industries the level of refinement and the breadth of industries are not comparable across the same-digit US SIC codes and ANZSIC codes.[3] Consequently, RI uses five-digit US NAICS codes to match with the four-digit ANZSIC codes.

An important prerequisite for a multi-segment company to be classified as diversified is that more than one of its segments materially contribute to the company's revenue stream. Therefore, a multi-segment company is still considered focussed if the revenue from the dominant segment represents more than 80%-90% of the total company revenue. This threshold differs across academic studies but is 80% as per the RI guidelines. RI's definition of conglomerates also slightly varies from, and is more refined than, that of academic studies. RI divides conglomerates into two classes: *classic* conglomerates and *theme* conglomerates. Classic conglomerates are companies that have at least two segments operating in different industry divisions (i.e. one-digit ANZSIC code). Theme conglomerates include vertically integrated firms and firms whose segments operate within the same industry division. Consequently, what is considered related diversification in academic studies would be classified by the RI as theme conglomeration.

What are the benefits of diversification and why do firms diversify?

Focus allows a firm to achieve a competitive advantage over its rivals by maximising its efficiency and learning. So why are firms tempted to diversify? And what would explain higher levels of diversification? Understanding the benefits of diversification is therefore important to understand why firms tend to choose diversification as a growth option.[4]

Researchers have suggested several benefits todiversification. The first benefit is the

2 This method will inevitably classify vertical integration (i.e. acquiring a company along the supply-chain) as a *diversifying* event if the acquiring and target companies have different industry codes. Although vertical integration carries a different purpose and has potentially different implications for firm performance compared to other cases of diversification, it is very difficult to empirically distinguish the two groups in large samples. This review focuses on studies that examine diversification without delving into horizontal and vertical integration, which will be covered in greater detail when we discuss "*Rule 10: Develop Strategic Alliances*.

3 In Australia, a four-digit ANZSIC code corresponds to an industry class, a three-digit ANZSIC code to an industry group, a two-digit ANZSIC code to an industry subdivision, and a one-digit ANZSIC code to an industry division. In the US, the number of industries with two-, three-, and four-digit SIC codes are 83, 416, and 1005, respectively. In Australia, there are 214 industry groups with three-digit ANZSIC codes and 506 industry classes with four-digit ANZSIC codes.

4 Most of the costs and benefits of industrial diversification and key implementation challenges apply to geographic diversification as well.

potential for economies of scope – spreading costs over highly related tasks. Companies with related business units may exploit the interrelationships among these units and achieve cost or differentiation competitive advantages over focused firms (Rumelt, 1982). It has also been argued that diversification helps create unique strategic assets that cannot be imitated or quickly accessed by focused companies, making related diversification – rather than specialisation – a source of competitive advantage (Markides & Williamson, 1994). The second benefit is the availability of larger internal capital markets (Stulz, 1990). This gives diversified firms access to a larger pool of resources, which can be used to invest in business lines that may need it most. The third benefit is the so-called coinsurance effect, which arises from combining businesses with imperfectly correlated earnings (Lewellen, 1971). Reduced default risk is, in turn, expected to increase a conglomerate's debt capacity and/or borrowing ability.

Another prominent argument advocated in the strategy literature is that diversification is a result of surplus resources that can have multiple uses, so firms diversify into markets where they can use their core skills and resources (Chatterjee & Wernerfelt, 1991; Lecraw, 1984; Montgomery & Hariharan, 1991; Rumelt, 1974). Miller (2004) suggests some industry leaders may diversify because they already dominate the industry (due to fewer growth opportunities within the industry), while others may pursue diversification because they underperform and innovate less relative to their industry peers (also see Gomes and Livdan (2004) That firms are more likely to diversify when they become relatively unproductive in their current industry is theorised by Gomes and Livdan (2004) as well.

What are the costs and key implementation challenges of diversification?

Perhaps the greatest challenges of diversification are learning about the new industry and honing the skills and resources necessary to compete with the established incumbents. This is expected to be especially challenging if the company is competing against highly specialised firms. As will be discussed in greater detail in our next review piece on *industry life cycles* (Rule 2), factors such as the age and size of the incumbents, how long incumbents have been operating in the industry, and at what stage of the industry's life cycle the company enters are all crucial to the company's survival in the new industry.[5]

5 For example, see Lieberman and Montgomery (1988) and Ayyagari, Demirguc-Kunt, and Maksimovic (2017).

Some of the benefits discussed in the previous section can often work to also reduce the company's profitability. For example, an increase in a firm's borrowing capacity and internal capital is likely to increase internal competition over resources and the likelihood that the available funds are invested in unprofitable projects. Evidence suggests that the inefficiencies resulting from division managers' constant attempts to influence the CEO over large internal resources often leads to a decline in post-diversification firm performance (Meyer, Milgrom, & Roberts, 1992; Scharfstein, 1998; Scharfstein & Stein, 2000; Shin & Stulz, 1998). Furthermore, related diversification may bring with itself coordination problems that limit the organisation's flexibility. These coordination costs may end up cancelling out the[4] benefits of diversification in the long run (Chen, Kaul, & Wu, 2019; Hashai, 2015; Rawley, 2010). Therefore, firms need to be aware of, and be ready for, the challenges that often arise when implementing a diversification strategy and the problems that may surface shortly thereafter.

In yet other cases, a firm's diversification strategies may be motivated by managerial incentives. A sizeable body of research has argued that managers make value-destroying diversification decisions for several reasons. As per the hubris hypothesis, managers of acquiring firms may overestimate their ability to run the acquired companies (Roll, 1986). Unsurprisingly, investors react positively to acquisitions when the acquiring company retains the acquired company's management instead of completely taking over (Matsusaka, 1993). Managers' decision to diversify may also be an attempt to obtain personal benefits such as reduced risk on their human capital, improved job security, higher prestige and pay, or entering a new business line at which they are more capable.[6] Research finds that diversification decisions motivated by managerial incentives not only reduce profitability but are also penalised by investors (as reflected in stock price performance).

How does diversification affect firm performance?

The relationship between diversification and firm performance is one of the most heavily researched areas in the strategy literature. Works by University of Melbourne scholars using IBISWorld data from the 1990s found that industrial diversification had a negative impact on Australian firms' performance (measured by the ratio of profits to sales), and that specialisation (defined as the percentage of revenue from

6 For example, see Jensen (1986), Stulz (1990), May (1995), Jensen and Murphy (1990), Morck, Shleifer, and Vishny (1990), Denis, Denis, and Sarin (1997, 1999), and Aggarwal and Samwick (2003).

core activity) was positively related to average profit margin (Bosworth et al, 1999; (Feeny & Rogers, 2000)). This aligns with the broader empirical literature as discussed below. Consistent with the RI Hub approach (see *Note 1: How to Measure Performance*), we distinguish between diversification studies that look at performance through a profitability lens and those that look at investor responses to diversification.[7]

Firm performance as measured by accounting ratios and industrial diversification

A consistent early finding in this research stream was that firms diversifying into related industries or areas that draw on some common core skill/resource have higher growth in assets and profitability when compared to unrelated diversification efforts (Christensen & Montgomery, 1981; Jacquemin & Berry, 1979; Palepu, 1985; Rumelt, 1974, 1982). Berger and Ofek (1995) also found lower industry-adjusted operating margin and ROA for conglomerates than for focused firms. The evidence around the relative performance of single-industry (i.e. focused) firms versus firms with a dominant industry and those in adjacent categories (related) was less clear, especially as the focused firms are often smaller and fewer in many samples.[8] However, the tentative evidence pointed to an inverted U-relationship (see Figure 1), where there are some possible performance gains from related diversification but a clear dropoff from unrelated diversification. Results from a meta-analysis on 55 published studies that examine the diversification-performance relationship confirm this as a common finding in the strategy literature (Palich, Cardinal, & Miller, 2000).

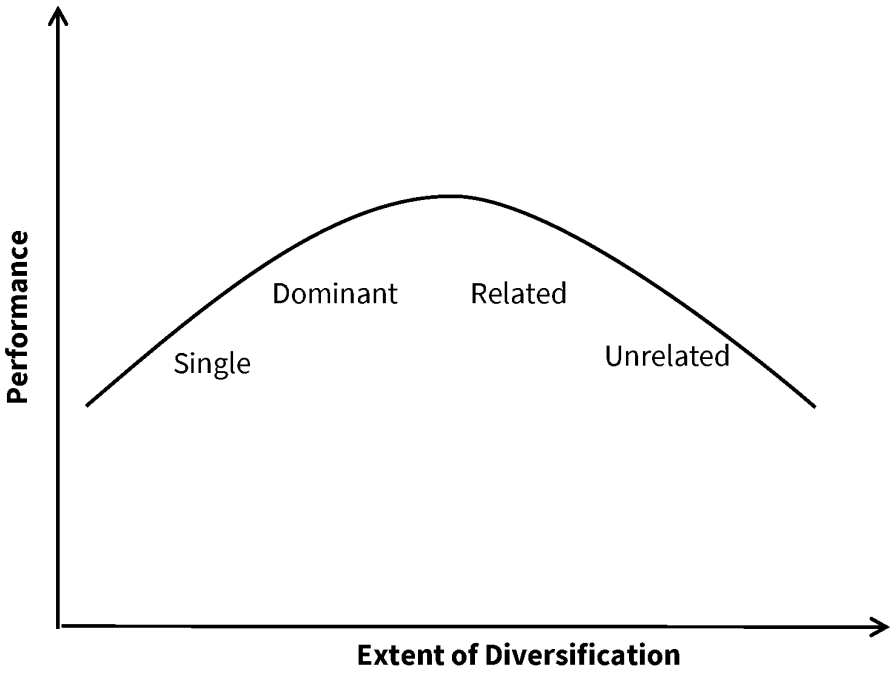
More recent research has challenged this view. For example, Hashai (2015) provides evidence that although a moderate level of related diversification is good for the firm, coordination costs at high levels of related diversification may outweigh the benefits from synergies, leading to a decline in performance. Using meta-analysis on 267 studies, Schommer, Richter, and Karna (2019) find that the relationship between unrelated diversification and performance has also improved over time. This is likely the result of investor pressure on managers to more carefully consider their diversification strategies following the wave of value-destroying conglomerations from the 1960s to early 1980s. Specifically, as managers were more heavily penalised for their value-destroying unrelated diversification efforts, firms that tended to conglomerate in later periods were generally more capable of managing

7 Diversification studies have used various performance measures to gauge a firm's protitability. Although the RI's focus is primarily on ROSF as a measure of firm performance, results from studies using other measures should be easily generalisable to ROSF given the high correlation among different profitability measures.

8 Firms with a dominant industry are firms whose revenue predominantly come from one industry category whether at 4-, 3- or 2-digit level.

diversification than an average diversifying firm in the 1970s and early 1980s.

Figure 1: The Inverted U view of the Diversification-Performance Relationship



Firm performance as measured by accounting ratios and international diversification
Evidence suggests that the relationship between firm performance and international diversification is more complex. Kim, Hwang, and Burgers (1989) find that while unrelated diversifiers benefit from international diversification, there is no significant difference between the multinational and domestic related diversifiers in terms of performance. Findings from Hitt, Hoskisson, and Kim (1997) are somewhat consistent with these results: the association between the degree of international diversification and ROA is negative for focussed firms but positive for highly diversified firms. For moderately diversified firms, performance improves initially but deteriorates when international diversification increases further.

Upon examining a sample of Japanese firms, however, Delios and Beamish (1999) show that geographic scope is positively associated with firm performance and that this relationship is not contingent on the industrial diversification. Lu and Beamish (2001) find that the performance of small and medium-sized Japanese firms declines when they initially venture into foreign markets but improves as the extent of international diversification increases. In arguably one of the most comprehensive

studies in this area, Lu and Beamish (2004) synthesize these mixed findings under one theory and provide empirical evidence in support of it.[9] Upon examining a large sample of Japanese firms over twelve years, they find that performance declines when firms initially expand into other markets but improves at moderate levels of internationalisation. The initial dip in performance likely stems from the company's limited knowledge of the new market and the lack of experience in managing more complex operations. At high levels of internationalisation, performance falls again as the costs of international diversification outweigh its benefits. A meta-analysis of 111 studies by Kirca et al. (2011) also finds a positive association between multinationality and firms performance. Results from Kirca et al. (2011) further suggest that the association between multinationality and firm performance is stronger in R&D-intensive companies, and particularly so in manufacturing industries. In service industries, advertising is found to be a more important moderating factor. Upon conducting a meta-analysis on 54 studies, Yang and Driffield (2012) find that returns to internationalisation are likely to be higher for non-US firms.

Firm valuation and industrial diversification

Results on the impact of diversification on firm valuation and stock returns are more mixed. Most of the differences in findings seem to be driven by the sample period examined and the methodology used. The earliest sample period used in these studies dates back to the 1960s and 1970s, which coincide with the great wave of mergers in the US. Evidence suggests investors viewed conglomerate mergers positively during the 1960s (Hubbard & Palia, 1999; Matsusaka, 1993; Schipper & Thompson, 1983). The market reaction was especially positive when financially unconstrained buyers acquired financially constrained companies, which is consistent with the view that investors saw large internal capital markets as a benefit of diversification (Hubbard & Palia, 1999). Also consistent with the view that co-insurance effect increases a conglomerate's borrowing capacity, Kim and McConnell (1977) show that merged firms made greater use of leverage than the combination of independent firms did before the mergers. The analysis conducted by the RI suggests that there was a similar reaction towards conglomerations by Australian investors in the 1960s and 1970s.

Findings from the 1980s and 1990s reflect the changes in the mergers and

9 Also see Cardinal, Miller, and Palich (2011) for the critique of each of these models.

acquisitions landscape during that period – specifically the wave of spinoffs by failed conglomerates. Investors reacted negatively to unrelated acquisitions during the 1980s, and firms with focus-increasing spinoffs enjoyed higher stock returns (Comment & Jarrell, 1995; Desai & Jain, 1999; Morck et al., 1990). Further evidence suggests these focus-increasing divestitures were triggered by shareholder pressure and/or changes in management structure and compensation (Berger & Ofek, 1999).

The earliest studies that document diversification discount were also based on the 1980s. Diversification discount describes a situation wherein investors value a diversified firm at less than the sum of its parts. In a seminal work, Lang and Stulz (1994) provide evidence that focused firms are valued more highly by the market (as measured by Tobin's *q*, the ratio of assets' market value to their book value) than diversified firms. They also show that a conglomerate's *q* is lower than the value-weighted average of each division's estimated *q*. Highly diversified conglomerates seem to have the highest diversification discount. In another highly influential study, Berger and Ofek (1995) find that diversified firms have, on average, negative *excess value*. A firm's *excess value* is the difference between a firm's actual market value and the sum of each division's value, which is assumed to equal the value of an average single-segment firm within its industry. Negative excess value is interpreted as evidence for diversification discount.

Lins and Servaes (1999) seek to understand whether the diversification discount applies outside the US by examining excess value for firms in the UK, Japan, and Germany. They document diversification discount for the United Kingdom and Japan, but not for Germany. Further analyses reveal that the results may be driven by the structural differences in company ownership and institutional environment. For example, unlike the UK where there is an active takeover market, internal control mechanisms play an important role in disciplining the managers of poorly performing firms in Germany and Japan. Among the three countries, the UK is the most similar to the US in terms of the institutional environment and appears to have a very similar level of diversification discount. The ownership concentration is highest in Germany, and the diversification discount exists only in firms with low insider (i.e. managers and directors) ownership. There is even a premium to diversification in other German firms. In Japan, many firms belong to industrial groups called *keiretsu*, which are somewhat similar to conglomerate organisations due to strong interlocking business relationships and shareholdings among members. Since such a

structure already gives the members of keiretsu many benefits of diversification without being diversified, costs of diversification are likely to outweigh the additional benefits in these firms. Consistent with this reasoning, Lins and Servaes (1999) find high diversification discount for firms that belong to industrial groups. These findings highlight how the ownership structure and institutional environment (along with cultural environment) may impact the costs and benefits of diversification, and as a result, investors' view of diversification.

Since the early 2000s, many studies have argued that the existence of diversification discount does not necessarily imply shareholders view diversification as value-destroying. As data on diversified firms' segments is not available, to estimate an individual division's value researchers use data on focused firms within that division's industry and assume the two groups are similar. However, if segments comprising a diversified firm tend to be less profitable and productive than their focused rivals, an investor's (who knows the true value of the divisions) valuation of these segments will be lower than a researcher's estimation, resulting in a negative excess value. Therefore, what researchers interpret as evidence of diversification discount may stem from some characteristics of firms that tend to merge together. Several studies find that such firms are indeed likely to have poorer performance and governance compared to their focused peers and hence are not as highly valued by investors as the focused firms even before the merger/acquisition.[10] Evidence from Campa and Kedia (2002) and Graham et al. (2002) indicates that the diversification discount can be explained by such differences between the focused firms and the segments of diversified firms. Results from Villalonga (2004a) suggest diversified firms may even be valued at a premium.

Firm valuation and international diversification

Evidence on the impact of international diversification on firm valuation is also mixed. The earliest theoretical arguments and empirical evidence on this issue were provided by Errunza and Senbet (1981, 1984). Both studies found a positive association between their excess value measure and the degree of international involvement. In a follow-up study, Morck and Yeung (1991) found that multinationality enhanced the positive effect of R&D expenditures and advertising on firms' *q*. Christophe and Pfeiffer (2002) and Click and Harrison (2000), on the other hand, provided evidence that international diversification is not as highly regarded

10 For example, see Campa and Kedia (2002), Graham, Lemmon, and Wolf (2002), Hoechle, Schmid, Walter, and Yermack (2012), Villalonga (2004b), and Miller (2004).

by investors as domestic operations. Results remain mixed even after controlling for industrial diversification. While Denis, Denis, and Yost (2002) document a negative association between international diversification and firm valuation, Bodnar, Tang, and Weintrop (1997) find evidence supporting the opposite. Like the studies that reached different conclusions regarding the performance implications of industrial diversification, these studies also used samples from different periods. Consequently, the differences in findings may at least partially be driven by the varying volatility of foreign exchange rates across the sample periods (Christophe & Pfeiffer, 2002).

Firm performance as measured by credit ratings and diversification

In a credit rating assessment, diversification is evaluated as part of the firm' business profile due to its direct impact on the firm's competitive position. Rating agencies generally view a high concentration of business volumes by product, customer, or geography as leading to less stable revenues and profits. Consequently, they view both the industrial diversification and geographical diversification within the same industry positively.

The concentration of business volumes on one or a small number of consumers or suppliers is likely to negatively affect a firm's credit rating even if this concentration is in an attractive product or service. Therefore, having several business lines with revenues that are not highly correlated is considered a positive rating factor because it increases the stability of revenues and profits. Such firms will likely have lower default risk as they can withstand the decline in one of their industries thanks to the revenue streams from other unrelated divisions. Consistent with this practice, Mansi and Reeb (2002) provide empirical evidence that the diversification discount stems from the risk-reducing effects of corporate diversification and thus does not exist in all-equity firms.

The positive impact of diversification on a firm's credit rating is, however, conditional on the likelihood of the diversification strategy's success. Diversification is unlikely to succeed if the company "enters new product lines and countries where it has limited expertise and lacks critical mass to be a real competitor to the incumbent market leaders" (S&P, 2013). This line of thought echoes the core strategyarguments discussed earlier. RI's position that the success rate of international diversification

11 The discussion in this subsection is mainly based on the S&P's 2013 Corporate Methodology, but other rating agencies treat the impact of diversification similarly.

critically depends on the company's market share is also consistent with this view (see Rule 5).

Conclusions and future research opportunities

In summary, although the evidence on how investors view industrial diversification is mixed, the preponderance of findings on the diversification-performance relationship suggest focus is preferable to anything above moderate levels of related diversification. Alternatively, firms can improve their performance in the long-term by expanding internationally, with the caveat that such internationalisation does not exceed moderate levels. International diversification constitutes an efficient channel through which firm-specific assets can be exploited to generate high returns (Kirca et al., 2011). This is all consistent with Rule 1.

Evidence from prior literature can be expanded in two ways using the Australian setting. First, as this literature review has shown, context is important when assessing the impact of diversification on firm performance. Results vary across sample periods, countries, industries, and even ownership structures. Therefore, the first natural step would be to check if these results continue to hold in the Australian context (especially moving into the new age economy) once the recent advancements in the diversification literature are incorporated into the empirical models.

Second, diversification strategies and their performance outcome may differ across ownership structures (Denis et al., 1999). A potentially fruitful avenue for future research would thus be to explore the differences in diversification efforts and their outcome between public and private firms. For example, privately owned firms may take a longer-term perspective on firm performance and make less frequent and fewer value-destroying diversification decisions. Although Gomez-Mejia, Makri, and Kintana (2010) present some evidence on how the diversification strategies of family-controlled firms in the US differ from other firms, all firms in their sample are public firms. In our view, documenting the differences in diversification strategies (if any) between private and public firms and understanding which one tends to be more successful would add a significant contribution to both the academic literature and practice.

References

Aggarwal, R. K., & Samwick, A. A. (2003). Why do managers diversify their firms? Agency reconsidered. *Journal of Finance, 58*(1), 71-118.

Ansoff, H. I. (1957). Strategies for diversification. *Harvard Business Review, 35*(5), 113-124.

Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. (2017). What determines entrepreneurial outcomes in emerging markets? The role of initial conditions. *Review of Financial Studies, 30*(7), 2478-2522. doi:10.1093/rfs/hhx011

Berger, P. G., & Ofek, E. (1995). Diversification's effect on firm value. *Journal of Financial Economics, 37*(1), 39-65.

Berger, P. G., & Ofek, E. (1999). Causes and effects of corporate refocusing programs. *The Review of Financial Studies, 12*(2), 311-345.

Bodnar, G. M., Tang, C., & Weintrop, J. (1997). *Both sides of corporate diversification: The value impacts of geographic and industrial diversification* (0898-2937). Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=225982

Campa, J. M., & Kedia, S. (2002). Explaining the diversification discount. *Journal of Finance, 57*(4), 1731-1762.

Cardinal, L. B., Miller, C. C., & Palich, L. E. (2011). Breaking the cycle of iteration: Forensic failures of international diversification and firm performance research. *Global Strategy Journal, 1*(1-2), 175-186.

Chatterjee, S., & Wernerfelt, B. (1991). The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal, 12*(1), 33-48.

Chen, M., Kaul, A., & Wu, B. (2019). Adaptation across multiple landscapes: Relatedness, complexity, and the long run effects of coordination in diversified firms. *Strategic Management Journal, 40*(11), 1791-1821.

Christensen, H. K., & Montgomery, C. A. (1981). Corporate economic performance: Diversification strategy versus market structure. *Strategic Management Journal, 2*(4), 327-343.

Christophe, S. E., & Pfeiffer, R. J. (2002). The valuation of MNC international operations during the 1990s. *Review of Quantitative Finance and Accounting, 18*(2), 119-138.

Click, R. W., & Harrison, P. (2000). Does multinationality matter? Evidence of value destruction in US multinational corporations. *SSRN*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=233162

Comment, R., & Jarrell, G. A. (1995). Corporate focus and stock returns. *Journal of Financial Economics, 37*(1), 67-87.

Delios, A., & Beamish, P. W. (1999). Geographic scope, product diversification, and the corporate performance of Japanese firms. *Strategic Management Journal, 20*(8), 711-727.

Denis, D. J., Denis, D. K., & Sarin, A. (1997). Agency problems, equity ownership, and corporate diversification. *Journal of Finance, 52*(1), 135-160.

Denis, D. J., Denis, D. K., & Sarin, A. (1999). Agency theory and the influence of equity ownership structure on corporate diversification strategies. *Strategic Management Journal, 20*(11), 1071-1076.

Denis, D. J., Denis, D. K., & Yost, K. (2002). Global diversification, industrial diversification, and firm value. *Journal of Finance, 57*(5), 1951-1979.

Desai, H., & Jain, P. C. (1999). Firm performance and focus: long-run stock market performance following spinoffs. *Journal of Financial Economics, 54*(1), 75-101.

Errunza, V. R., & Senbet, L. W. (1981). The effects of international operations on the market value of the firm: Theory and evidence. *Journal of Finance, 36*(2), 401-417.

Errunza, V. R., & Senbet, L. W. (1984). International corporate diversification, market valuation, and size-adjusted evidence. *Journal of Finance, 39*(3), 727-743.

Feeny, S., & Rogers, M. (2000). The role of market share and concentration in firm profitability: implications for competition policy. *Economic Analysis and Policy, 30*(2), 115-132.

Gomes, J., & Livdan, D. (2004). Optimal diversification: Reconciling theory and evidence. *Journal of Finance, 59*(2), 507-535.

Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of Management Studies, 47*(2), 223-252.
Graham, J. R., Lemmon, M. L., & Wolf, J. G. (2002). Does corporate diversification destroy value? *Journal of Finance, 57*(2), 695-720.
Hashai, N. (2015). Within-industry diversification and firm performance—an S-shaped hypothesis. *Strategic Management Journal, 36*(9), 1378-1400.
Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal, 40*(4), 767-798.
Hoechle, D., Schmid, M., Walter, I., & Yermack, D. (2012). How much of the diversification discount can be explained by poor corporate governance? *Journal of Financial Economics, 103*(1), 41-60.
Hubbard, R. G., & Palia, D. (1999). A reexamination of the conglomerate merger wave in the 1960s: An internal capital markets view. *Journal of Finance, 54*(3), 1131-1152.
Jacquemin, A. P., & Berry, C. H. (1979). Entropy measure of diversification and corporate growth. *Journal of Industrial Economics*, 359-369.
Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review, 76*(2), 323-329.
Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of Political Economy, 98*(2), 225-264.
Kim, C. W., Hwang, P., & Burgers, W. P. (1989). Global diversification strategy and corporate profit performance. *Strategic Management Journal, 10*(1), 45-57.
Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perryy, M. Z., Akdeniz, M. B., . . . Hoppner, J. J. (2011). Firm-specific assets, multinationality, and financial performance: A meta-analytic review and theoretical integration. *Academy of Management Journal, 54*(1), 47-72.
Lang, L. H., & Stulz, R. M. (1994). Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy, 102*(6), 1248-1280.
Lecraw, D. J. (1984). Diversification strategy and performance. *Journal of Industrial Economics*, 179-198.
Lewellen, W. G. (1971). A pure financial rationale for the conglomerate merger. *Journal of Finance, 26*(2), 521-537.
Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic Management Journal, 9*(S1), 41-58.
Lins, K., & Servaes, H. (1999). International evidence on the value of corporate diversification. *Journal of Finance, 54*(6), 2215-2239.
Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal, 22*(6-7), 565-586.
Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal, 47*(4), 598-609.
Mansi, S. A., & Reeb, D. M. (2002). Corporate diversification: what gets discounted? *Journal of Finance, 57*(5), 2167-2183.
Markides, C. C., & Williamson, P. J. (1994). Related diversification, core competences and corporate performance. *Strategic Management Journal, 15*(S2), 149-165.
Matsusaka, J. G. (1993). Takeover motives during the conglomerate merger wave. *The RAND Journal of Economics*, 357-379.
May, D. O. (1995). Do managerial motives influence firm risk reduction strategies? *Journal of Finance, 50*(4), 1291-1308.
Meyer, M., Milgrom, P., & Roberts, J. (1992). Organizational prospects, influence costs, and ownership changes. *Journal of Economics & Management Strategy, 1*(1), 9-35.

RI HUB

RULE 1: FOCUS ON ONE BUSINESS AT A TIME

Miller, D. J. (2004). Firms' technological resources and the performance effects of diversification: a longitudinal study. *Strategic Management Journal, 25*(11), 1097-1119.

Montgomery, C. A., & Hariharan, S. (1991). Diversified expansion by large established firms. *Journal of Economic Behavior & Organization, 15*(1), 71-89.

Morck, R., Shleifer, A., & Vishny, R. W. (1990). Do managerial objectives drive bad acquisitions? *Journal of Finance, 45*(1), 31-48.

Morck, R., & Yeung, B. (1991). Why investors value multinationality. *Journal of Business*, 165-187.

Palepu, K. (1985). Diversification strategy, profit performance and the entropy measure. *Strategic Management Journal, 6*(3), 239-255.

Palich, L. E., Cardinal, L. B., & Miller, C. C. (2000). Curvilinearity in the diversification–performance linkage: an examination of over three decades of research. *Strategic Management Journal, 21*(2), 155-174.

Rawley, E. (2010). Diversification, coordination costs, and organizational rigidity: Evidence from microdata. *Strategic Management Journal, 31*(8), 873-891.

Roll, R. (1986). The hubris hypothesis of corporate takeovers. *Journal of Business*, 197-216.

Rumelt, R. P. (1974). *Strategy, Structure, and Economic Performance*. Harvard Business School Press.

Rumelt, R. P. (1982). Diversification strategy and profitability. *Strategic Management Journal, 3*(4), 359-369.

S&P. (2013). Corporate Methodology. Retrieved from https://www.standardandpoors.com/en_US/web/guest/article/-/view/type/HTML/id/2422602

Scharfstein, D. S. (1998). *The dark side of internal capital markets II: Evidence from diversified conglomerates* (0898-2937). Harvard Business School Press.

Scharfstein, D. S., & Stein, J. C. (2000). The dark side of internal capital markets: Divisional rent-seeking and inefficient investment. *Journal of Finance, 55*(6), 2537-2564.

Schipper, K., & Thompson, R. (1983). Evidence on the capitalized value of merger activity for acquiring firms. *Journal of Financial Economics, 11*(1-4), 85-119.

Schommer, M., Richter, A., & Karna, A. (2019). Does the diversification–firm performance relationship change over time? A meta-analytical review. *Journal of Management Studies, 56*(1), 270-298.

Shin, H.-H., & Stulz, R. M. (1998). Are internal capital markets efficient? *Quarterly Journal of Economics, 113*(2), 531-552.

Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics, 26*(1), 3-27.

Villalonga, B. (2004a). Diversification discount or premium? New evidence from the business information tracking series. *Journal of Finance, 59*(2), 479-506.

Villalonga, B. (2004b). Does diversification cause the" diversification discount"? *Financial Management*, 5-27.

Yang, Y., & Driffield, N. (2012). Multinationality-performance relationship. *Management International Review, 52*(1), 23-47.