

# **CORPORATE RENEWAL ACROSS BUSINESSES AND COUNTRIES**

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**Abstract**

This study brings together research in corporate strategy and international business to develop an integrated theoretical framework of corporate renewal in diversified firms. We distinguish between two approaches to corporate renewal: resource exploitation in response to changes in output markets, and resource augmentation in response to changes in input markets. Although both types of renewal take advantage of a diversified firms' access to a wider range of markets, they represent fundamentally different mechanisms, making it important to distinguish between them. Overall, our study offers a conceptual bridge between parallel work in the corporate strategy and international business research streams, while highlighting important opportunities for future research for both literatures.

**Keywords:** Corporate Renewal; Resources and Capabilities; Product Markets; Geographic Markets; Factor Markets; Diversified Firms; Multinational Corporations

## **Introduction**

The question of what value the headquarters unit in a diversified firm adds—and the consequent limits to firm scope—has long been recognized as a fundamental issue in strategy (Rumelt, Schendel, and Teece, 1994; Leiblein and Reuer, 2020). While the large and growing body of research in corporate strategy that has evolved to answer that question (Feldman, 2020) is nominally concerned with “the management of the multi-business firm and its associated boundary-of-the-firm choices in product factor, and geographic markets” (Leiblein and Reuer, 2020), in practice the focus of this work has primarily been on diversification across businesses rather than geographies. The management of multinational firms has thus largely been the purview of a distinct but parallel literature on international business and global strategy. In part, this may be traced back to Rumelt et al.’s original 1994 work, which separated the question of what determines success or failure in international competition from the question of what role the headquarters plays in a diversified firm. As a result, the corporate strategy literature and the international business literature—while immensely fruitful on their own—have seen limited communication between them, leaving several areas of potential cross-fertilization underexplored.

A case in point is the topic of strategic renewal, defined as the “refreshment or replacement of attributes of an organization that have the potential to substantially affect its long-term prospects”, where attributes include “goals, products and services, resources and capabilities, and the like” (Agarwal and Helfat, 2009; p. 282). Recent years have seen an acceleration of work on redeployment and renewal in corporate strategy research, with scholars emphasizing the dynamics of scope over time (Helfat and Eisenhardt, 2004; Folta, Helfat, and Karim, 2016), and studying how firms exit some businesses while entering others (Kaul, 2012; Wu, 2013; Feldman, 2014; Vidal and Mitchell, 2015; Bennett and Feldman, 2017), and how they constantly redeploy resources and adjust structures within their existing businesses to maintain their competitive advantage (Karim, 2006;

Levinthal and Wu, 2010; Sakhartov and Folta, 2014; 2015; Karim and Kaul, 2015; Feldman, 2020). These studies echo early work in the international business literature that recognized the ability of firms to shift activities between countries in order to arbitrage across changing conditions (Kogut, 1989, Kogut and Kulatilaka, 1994; Ghemawat, 2007), yet with the exception of a few studies (Belderbos and Zou, 2009; Berry, 2010; 2013) systematic scholarly attention to firms' redeployment of activities across countries has remained scarce. At the same time, while the international business literature has long emphasized access to factor markets—both for low-cost inputs (Belderbos and Zou, 2009; Benito, 1997; Caves, 1996; Feenstra, 1998) and for knowledge (Chung and Alcacer, 2002; Alcacer, 2006; Berry, 2006a; 2014; Berry and Kaul, 2015)—as a motive for internationalization (Dunning, 1980), work in corporate strategy has largely remained focused on changing demand conditions as a driver of redeployment (Wu, 2013; Sakhartov and Folta, 2014; 2015). Thus, both streams of research have a lot to learn from each other.

In this essay, we seek to bridge this important gap by developing an integrated theoretical framework of corporate renewal that draws on insights from both the corporate strategy and international business literatures, as well as work on capability lifecycles (Helfat and Peteraf, 2003). Specifically, we distinguish between two fundamental forms of corporate renewal: *resource exploiting* changes in which firms adapt to changing output markets by redeploying, replicating, or recombining their existing resources and capabilities; and *resource augmenting* changes in which firms respond to evolving input markets by retiring, retrenching, or renewing their resources and capabilities to serve their existing output markets. We thus offer a more general theoretical framework of corporate renewal, one that applies across both business and geographic contexts, maps to terminology from both the corporate strategy and international business literatures, and points to new opportunities for both research streams.

Building on this framework, we then highlight several opportunities for cross-pollination between the corporate strategy and international business literatures. On one hand, we contend that the international business literature's traditional focus on the motives that drive firms to internationalize in the first place (Dunning, 1980) have kept it from fully engaging with questions related to resource redeployment, and that this literature would benefit from engaging with recent work in corporate strategy. In particular, we argue that more attention is required to fully understand multinational arbitrage (Kogut, 1989; Kogut and Kulatilaka, 1994; Ghemawat, 2007) both theoretically and empirically. On the theoretical side, we highlight the need to distinguish between intra-temporal arbitrage opportunities whereby firms take advantage of country-specific capabilities to serve global markets (Ghemawat, 2007) and inter-temporal arbitrage, which involves shifting firm activities from one country to another in response to changing conditions (Kogut, 1989; Kogut and Kulatilaka, 1994; Rangan, 1998), consistent with work in corporate strategy that makes a similar distinction between intra- and inter-temporal economies of scope (Helfat and Eisenhardt, 2004; Sakhartov and Folta, 2014; 2014). Drawing on our framework, we also stress the distinction between resource exploiting arbitrage and resource augmenting arbitrage—a distinction that matters not only for multinational firms' strategies, but for the impact of these strategies on the macro-economic environment of the firms' home and host countries. On the empirical side, we call for more attention to the interdependence between multinational entry or expansion in one country, and exit or contraction in another, and emphasize the need for more research empirically documenting trends in MNC arbitrage.

On the other hand, we discuss several areas where corporate strategy research could benefit from deeper engagement with the international business literature. Specifically, we contend that in focusing on the redeployment of existing capabilities across changing product markets, corporate strategy has largely ignored the parallel possibility of diversified firms retiring, retrenching, or

renewing their capabilities to take advantage of changing factor market conditions in serving their existing product markets (Helfat and Peteraf, 2003), a point long emphasized by international business research on low-cost or knowledge seeking motives for going abroad. We also argue that corporate strategy research has paid limited attention to the costs of maintaining redeployability, in terms of diversified firms' ability to respond and adapt to the needs of each individual business (Chen, Kaul, and Wu, 2019), a tension long recognized in international business research on the trade-off between integration and responsiveness (Bartlett and Ghoshal, 1989; Prahalad and Doz, 1987). Finally, we highlight the need for research on corporate redeployment to pay attention to differences in institutional contexts across businesses (Nelson, 1993; Furman, Porter, Stern, 2001; Berry, Guillen and Zhou, 2010), especially when redeploying into new or nascent markets (Ahuja and Yayavaram, 2011; Dorobantu, Kaul, and Zelner, 2017; Oberholzer-Gee and Yao, 2018).

Our study thus contributes to research in both corporate strategy and international business. By developing an integrated theoretical framework to serve as a conceptual bridge between two fundamental streams of strategy research (Rumelt et al., 1994), we not only advance the study of intra-firm resource coordination decisions in diversified firms (Feldman, 2020), we also help to partly address the growing fragmentation of the strategy field (Leiblein and Reuer, 2020). In addition to encouraging researchers from both sides of the proverbial aisle to engage more deeply with each other's work, our essay also highlights a rich array of theoretical and empirical questions that remain underexplored as a result of this division. It thus points the way to a rich agenda for future scholarship in both areas. Finally, we also stress the need for more work at the intersection of both research streams, such as work that looks at the relationship between changes in a firm's geographic scope and changes in its business portfolio (Berry, 2010; 2013), or research that examines how firms' make or buy decisions are co-determined with their choices on where to source from (Berry and Kaul, 2015; Leiblein, Larsen, and Pedersen, 2014).

## Resource Exploitation and Resource Augmentation in Diversified Firms

Corporate renewal—i.e., the actions firms take to adapt to changing external environments—is a topic of fundamental interest within the corporate strategy literature (Teece, Pisano, and Shuen, 1997; Eisenhardt and Martin, 2000; Helfat and Peteraf, 2003; Helfat et al., 2007; Teece, 2007; Agarwal and Helfat, 2009). A growing stream of work focuses on the advantage that diversified firms enjoy in responding to changing market conditions (Folta et al., 2016; Maritan and Lee, 2017). This work argues that diversified firms enjoy inter-temporal economies of scope (Helfat and Eisenhardt, 2004): their presence in multiple markets enables them to redeploy capacity constrained but fungible resources from one market to another within the firm as external conditions change (Levinthal and Wu, 2010; Wu, 2013; Sakhartov and Folta, 2014; 2015), and this option to redeploy represents an important, though often overlooked, source of a diversified firm's advantage (Anand, Kim and Lu, 2016; Lieberman, Lee, and Folta, 2017; Sakhartov, 2018)<sup>1</sup>.

While the corporate strategy literature has thus increasingly come to focus on the dynamics of scope choices, such as redeployment and renewal, these activities have received relatively little attention in the recent international business literature. Though early work in the field often focused on international expansion as a way for firms to maintain and enhance their competitive advantage (Hymer, 1960; Buckley and Casson, 1976) and highlighted the potential for firms to flexibly shift their operations from one country to another in response to changing conditions (Kogut, 1989; Kogut and Kulatilaka, 1994; Rangan, 1998), subsequent work in the area has focused mostly on firms' decision to enter a country, examining the motives behind foreign market entry (Dunning, 1980; Nachum and Zaheer, 2005) as well as the entry modes used (Brouthers, 2002; Martin, 2013; Shaver, 2013). With the exception of a handful of studies examining divestments from foreign

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<sup>1</sup> Some recent scholarship has also argued that diversification may also constrain firm adaptation (Rawley, 2010; Figueiredo, Rawley, and Rider, 2015; Natividad and Rawley, 2016; Chen, Kaul, and Wu, 2019).

countries (Belderbos and Zou, 2009; Berry, 2010; 2013) and MNC linkages through global value chains (Alcacer, 2006; Mudambi, 2008; Alcacer and Delgado, 2016), we have much less focus in the international business literature on how firms adapt and renew their multinational portfolio over time. At the same time, the international business literature has increasingly emphasized the importance of accessing factor inputs as a motive for multinational location choice (Dunning, 1988; Nachum and Zaheer, 2005), even as the work in corporate strategy has mostly focused on changing demand conditions as a driver of corporate redeployment (Levinthal and Wu, 2010; Wu, 2013; Sakhartov and Folta, 2014; 2015).

It would thus seem that although the two research streams—corporate strategy and international business—both examine diversified firms, they have increasingly progressed in directions that are largely distinct from, though parallel to, each other. This in turn suggests the potential for substantial cross-pollination between the two areas, with each stream of research standing to benefit from greater engagement with the other. Such a mutually beneficial sharing of insights requires a common foundation, one that integrates and reconciles the concepts and terminology from both literatures into a single conceptual framework.

Our attempt in this essay is to offer just such a foundation. To develop our integrative framework, we draw on the work of Helfat and Peteraf (2003) and their work on capability lifecycles. We do so because we see a firm's resources and capabilities as the fundamental building blocks that underlie both its business and geographic scope choices. Further, we expect that a firm's attempt to renew its competitive advantage by adapting to changing external conditions will be reflected in the actions it takes to use or modify its resources and capabilities. In particular, we build on prior work to distinguish between two approaches to corporate renewal—resource exploitation and resource augmentation—the differences between which are summarized in Table 1.

\*\*\* Insert Table 1 about here \*\*\*

### *Resource Exploitation*

The first path to corporate renewal involves a firm *exploiting* its current resources and capabilities in new ways. This may involve using existing capabilities to serve new output markets, either by replicating them, i.e. duplicating them in new markets, or redeploying them, i.e., shifting them from existing markets to new markets (Helfat and Peteraf, 2003). Or it may involve recombining existing capabilities in order to develop new applications for them (Helfat and Peteraf, 2003). Specifically, it may involve internal recombination of capabilities, i.e., recombinations that involve bringing together existing capabilities within the firm (Kogut and Zander, 1992; Karim and Kaul, 2015)<sup>2</sup>. Such resource exploiting actions are likely to be triggered by changing conditions in product or geographic markets—those markets in which firms sell their products—with firms re-prioritizing the deployment of their existing capabilities as the attractiveness of different markets waxes or wanes. Indeed, as already mentioned, such resource exploiting changes have been the focus of much of the prior research in corporate strategy (Folta et al., 2016; Maritan and Lee, 2017), a key focus of which has been the redeployment of resources between businesses within the diversified firm in response to changing market conditions (Benito, 1997; Helfat and Eisenhardt, 2004; Berry, 2015; Sakhartov and Folta, 2014; 2015). Faced with declining opportunity in one of its businesses, a diversified firm may choose to shift its capacity-constrained resources to alternate uses (Anand and Singh, 1997; Levinthal and Wu, 2010; Wu, 2013), often while partially or wholly divesting out of its more marginal markets in order to free up resources for these new areas (Berry, 2010; Kaul, 2012; Vidal and Mitchell, 2015; 2018; Bennet and Feldman, 2017).

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<sup>2</sup> We consider recombinations that involve new capabilities from outside the firm in the next sub-section.

Resource exploiting change thus involves a strategic choice by the firm to focus its efforts on some markets more than others, growing its market share in markets that are increasingly attractive, at least on a relative basis. Such change may be triggered by a decline in the attractiveness of one or more of the firm's existing output markets (Levinthal and Wu, 2010; Wu, 2013) or by an increase in the attractiveness of new markets and the emergence of new opportunities (Kaul, 2012; Berry, 2013). Further, such change may take the form of full or partial redeployment of resources from the less attractive market to the more attractive one (Kaul, 2012; Berry, 2013; Wu, 2013), or it may involve the replication of the firm's existing resources and capabilities to serve new markets (Penrose, 1959; Helfat and Peteraf, 2003). In the case of redeployment, the firm partially or fully exits the existing market, shifting its capability to the new market. For instance, a firm may retask its existing sales force to sell an entirely different line of products, or refocus its research scientists on a new therapeutic area. Redeployment is thus associated with inter-temporal economies of scope (Helfat and Eisenhardt, 2004; Sakhartov and Folta, 2014). In contrast, replication involves the firm simply transferring its capabilities and best practices from one market to the other, creating a duplicate set of resources and routines in the new market (Nelson and Winter, 1982; Winter and Szulanski, 2001); it is thus associated with intra-temporal economies of scope. For instance, a firm may use the expertise of its sales force in its existing market to train a new sales force in a different market, or it may draw on best practices in its existing research labs when designing new labs to serve other therapeutic areas.

Whether a firm chooses to redeploy or replicate will depend partly on whether there is a change in absolute attractiveness of the firm's existing markets or not, with redeployment being more likely if the firm's existing markets are seeing an absolute decline. It may also depend upon the speed of the change required: a firm facing a rapidly growing new market may choose to redeploy resources to take advantage of it, while one facing a more slowly growing market may rely more on

replication, given the natural limits to the latter (Penrose, 1959). Thus, a firm in two markets, one growing faster than the other, may rely more on replication, achieving a resource exploiting change in its portfolio by growing its operations in the faster growing market more aggressively than in the slower growth market. Conversely, a firm in two markets, one of which is declining while the other grows, may prefer to redeploy resources from the former to the latter.

Resource exploitation is consistent with the market-seeking motives (Dunning, 1980; Cantwell, 1989) traditionally emphasized in the international business literature, where firms enter and expand in foreign markets in order to take advantage of—and create additional value from—their valuable home country resources and capabilities, internalizing their foreign activities in order to protect these resources and ensure value appropriation (Hymer, 1960; Buckley and Casson, 1976; Teece, 1977; Dunning, 1980). As country growth rates change, MNCs may still continue to rely on their existing resources and operations—especially those in their home country—to serve foreign markets, they may simply reprioritize which country’s markets they serve with those resources, based on the changing attractiveness of the market for their output in those countries.

#### *Resource augmentation*

While resource redeployment in response to changing market conditions is certainly important, it is not the only means of corporate renewal. A second approach to strategic renewal involves *augmenting* the firms existing resources and capabilities to enable them to better serve the firm’s existing markets. This may entail the retirement or retrenchment of the firm’s existing capabilities, to be replaced by new ones, or it may involve the renewal of these capabilities through increased investments of time, capital, and effort in improving them (Helfat and Peteraf, 2003). It may also include external recombination, i.e., the recombination of a firm’s existing capabilities with new capabilities from outside (Rosenkopf and Nerkar, 2001; Rosenkopf and Almeida, 2003; Lavie,

2006). Such resource augmenting activities are likely to be triggered by changes in the firm's input markets, with firms seeking to replace or renew their capabilities when faced with the emergence of new technologies or new sources of inputs. These input market changes may include those that affect the availability and/or price of the external inputs that the firm uses (Helfat and Peteraf, 2003), which may drive a firm to alter its sourcing strategies, potentially augmenting its internal capabilities to deal with new sources of inputs. They may also include those that impact the viability and comparative advantage of the firm's internal capabilities itself—such as radical technological changes that render the firm's existing technologies obsolete (Tushman and Anderson, 1986; Henderson, 1993; Gatignon et al., 2002) or advances in distant knowledge clusters (Furman, Porter, and Stern, 2002; Berry, 2006a; Berry and Kaul, 2015) —motivating the firm to augment the affected capabilities.

Such resource augmentation in response to changing input markets is consistent with the efficiency seeking and asset seeking rationales emphasized in the international business literature. Research has explored how firms can relocate parts of their business processes from one country to another to access cheaper factors of production and reduce total costs across all firm operations (Head and Ries, 2001; Blonigen, 2001). As wages and other input costs change across countries, multinational firms shift their production activities to take advantage of local factor market conditions, such as more abundant labor pools (Driffield and Love, 2007; Dunning, 1988; Nachum, Zaheer, and Gross, 2008) or lower cost suppliers (Benito, 2005; Kleinert, 2003; Wan and Wu, 2016). In addition to these efficiency seeking motives, firms may also go abroad for asset or knowledge seeking purposes, i.e., to access new knowledge and expertise that can help renew their internal capabilities (Almeida, 1996; Alcacer, 2006; Berry, 2006a; Alcacer and Chung, 2007; Kuemmerle, 1999; Cantwell and Mudambi, 2005). Foreign markets can provide access to new and diverse knowledge that may be used as an input when expanding firm resources and capabilities (Penner-

Hahn and Shaver, 2005; Zhao, 2006; Berry, 2006a; 2014). As knowledge diffuses across countries and new clusters of innovation and expertise develop, multinational firms may not only seek to establish R&D labs in these countries to take advantage of local knowledge (Andersson, Forsgren and Holm, 2002; Chung and Alcacer, 2002; Alcacer, 2006; Berry, 2006a; 2014), they may also shift production activities to these countries to continue benefiting from the collocation of R&D and production (Berry and Kaul, 2015). As long highlighted in the international business literature, differences across country institutional contexts provide access to not just lower costs, but also different knowledge bases, inputs, and education systems (Nelson, 1993; Furman, Porter, Stern, 2001; Berry et al., 2010; Berry and Kaul, 2015) that can be used to extend, augment, and develop new capabilities that can be transferred across firm operations. Firm abilities to shift activities and operations across countries may thus be a key source of advantage for MNCs, with firms that have a broad multinational presence being at an advantage compared to their focused counterparts in learning when a new input source becomes available or when a new technology is developed, and finding it easier to take advantage of this knowledge across a range of markets (Cantwell and Mudambi, 2005; Song, Asakawa and Chu, 2011).

Of course, these two types of corporate renewal—resource exploitation and resource augmentation—are not mutually exclusive. It may be that as firms shift their focus to faster growing markets, they also invest in augmenting their capabilities, in order to serve that market more efficiently. Or, conversely, it may be that as firms augment their existing capabilities, they become aware of new opportunities in hitherto untapped product markets, motivating them to redeploy their resources (Kaul, 2012). The potential for resource exploitation and resource augmentation to be correlated notwithstanding, the two remain conceptually distinct.

## Opportunities for international business research

The framework in Table 1 suggests several avenues of future research for both international business and corporate strategy scholars. We begin by considering the opportunities for international business scholarship. As mentioned above, the international business literature has long recognized multinational arbitrage as an important source of advantage for MNCs relative to their single country rivals (Kogut, 1989; Kogut and Kulatilaka, 1994; Ghemawat, 2007). The discussion in the previous section suggests that international business scholars can build on and extend this insight by exploring multinational arbitrage as a form of corporate renewal (Agarwal and Helfat, 2009).

Applying a corporate renewal lens to multinational arbitrage suggests several potential opportunities for future research. First, it highlights the need to distinguish more clearly between the intra-temporal and inter-temporal benefits of operating across different countries. The received literature uses the term arbitrage in two distinct senses. Traditional international business scholarship spoke of arbitrage as the ability of multinational firms to shift activities from one country to another in response to changing market or country conditions (Kogut, 1989; Kogut and Kulatilaka, 1994). It thus focused on *inter-temporal arbitrage*, i.e., changes in the location of MNC activities over time. Such arbitrage involves the redeployment of a firm's resources—both its capacity-constrained resources (such as financial resources and managerial attention) and its scale-free capabilities (such as technologies and brands)—from one geography to another as the attractiveness of the market in one country declines or that of the market in another country increases. For instance, a firm may relocate its manufacturing operations from China to Vietnam if it finds the institutional environment in the latter more conducive, or it may shift its call center operations from India to Bangladesh as labor costs in India rise.

More recently, however, scholars have highlighted the potential for firms to turn local resources (both low-cost inputs and / or knowledge) into a source of global advantage (Frost, Birkinshaw, and Ensign, 2002; Cantwell and Mudambi, 2005; Ghemawat, 2007; Berry and Kaul, 2015). This work highlights the potential for *intra-temporal arbitrage*, i.e., the ability of multinational firms to leverage location-specific resources on a global scale. This form of arbitrage involves firms developing scale-free capabilities that are location specific, i.e., that take advantage of the unique characteristics and advantages of a given location, and then leveraging these capabilities on a global scale. These scale-free capabilities may include technologies developed in one country (taking advantage of local knowledge spillovers) that find application globally, or brands originating in a country (and often associated with it) that appeal to customers globally. They may also include the knowledge of local factor-market conditions that allow a firm to tap into local resources for global use. For instance, a firm's understanding of local labor markets in low-wage countries may allow them to use low-cost labor to manufacture for global consumption, or a firm's political capital or managerial experiences in a market with weak institutions (Henisz, 2000; Berry, 2006b; Perkins, 2014) may allow it to access natural resources and market opportunities not available to other multinational firms.

The distinction between these two conceptions of arbitrage closely parallels a similar distinction in the corporate strategy literature, where scholars have distinguished between intra-temporal economies of scope from the sharing of resources across businesses at a given point of time, and inter-temporal economies of scope from the redeployment of resources across businesses over time (Helfat and Eisenhardt, 2005; Sakhartov and Folta, 2014; 2015). In particular, both the traditional multinational arbitrage literature and the literature on redeployability draw on a real options perspective, seeing the firm's presence in multiple markets as an option that gives it the

flexibility to expand or contract its operations as uncertainty about market conditions is resolved (Kogut and Kulatilaka, 1994; Sakhartov and Folta, 2014; Sakhartov, 2018).

The distinction between intra-temporal and inter-temporal arbitrage is important because the two may require very different approaches to multinational strategy. Firms pursuing intra-temporal arbitrage benefits may want to make long-term, country-specific investments in their chosen locations, so as to maximize the potential gains from tapping into local knowledge and inputs. In contrast, firms prioritizing inter-temporal arbitrage may want to stay relatively flexible, and so may choose to invest in resources and technologies that are easily redeployable to other locations, while also relying more on third party sourcing.

Similarly, the relative emphasis on intra-temporal or inter-temporal arbitrage may determine the countries in which a firm chooses to locate. As work in corporate strategy has shown, a focus on inter-temporal vs. intra-temporal synergies leads to very different choices of portfolio businesses, with relatedness between businesses being more important for intra-temporal synergies than for inter-temporal benefits. In parallel, international business scholarship has long emphasized various types of cross-national distance (Berry, Guillen, and Zhou, 2010) and their effect on multinational firm portfolio choice and performance. Distance between countries may impact intra-temporal vs. inter-temporal arbitrage differently. For instance, firms focusing on intra-temporal arbitrage may prefer to locate in countries with substantial knowledge, demographic, or cultural distance between them, so as to tap into unique markets and resources, while those focusing on inter-temporal arbitrage may want less distance between their portfolio countries, to make shifting from one country to another in response to changing conditions easier. Conversely, firms focusing on inter-temporal arbitrage may want to choose a portfolio of countries with greater economic and geographic distance between them, so that changes in market conditions are more likely to be

uncorrelated. At the same time, firms pursuing intra-temporal arbitrage may want to avoid countries with unstable institutions or high uncertainty, while those are precisely the countries that may be most attractive to firms focusing on inter-temporal arbitrage. Exploring the role of different types of arbitrage as a motivator for MNC location choice is thus an important area of future opportunity for international business research.

Second, within inter-temporal arbitrage, our framework suggests the need to distinguish between resource exploiting and resource augmenting arbitrage. As forms of corporate renewal, these two types of arbitrage represent not only conceptually distinct actions, but also different sources of value for MNCs. Consider, for instance, the finding that MNCs did better in the aftermath of the financial crisis than their domestic counterparts (Alfaro and Chen, 2012). The distinction we propose between the two types of corporate renewal suggests that this superior resilience of MNCs to a market shock may be the result of two very different mechanisms. On one hand, MNCs may have strategically shifted their sales to faster growing output markets to offset the negative revenue impact of the recession in their home market. On the other, MNCs may have shifted their production and other value chain activities to more advantageous input markets to increase margins and compete more effectively with domestic players, thus indirectly softening the hit to their revenues. Of course, as mentioned earlier, the two approaches are not mutually exclusive: firms can and do shift both their sales and their production. But it is certainly possible for a multinational firm to shift its sales efforts towards more attractive output markets without altering its production and R&D footprint, just as it is possible for the firm to shift its value chain activities across countries without altering the country markets it serves.

These two types of arbitrage also have contrasting implications for the firms' home country. If MNCs primarily respond to a recession by shifting their sales to faster growing countries, and

serve these foreign markets using resources and inputs in their home country, then MNC arbitrage may help to dampen the negative effects of the recession at home, effectively allowing home country workers to tap into foreign demand. Conversely, if MNCs primarily respond to a recession by shifting production and other value chain activities to more advantageous countries, this may amplify the negative effects of the recession in the home country, effectively causing home country factor markets to be even harder hit than output markets, and increasing unemployment beyond what would be caused by falling domestic demand alone. It is thus critical to understand which of these strategies are used by MNCs to respond to a recession, both to identify the sources of MNC resilience to crises, and to determine the macroeconomic consequences of such resilience.

Third, in highlighting the potential for inter-temporal arbitrage as a form of corporate renewal, our framework also sets the stage for more empirical work examining multinational arbitrage. While the concept of arbitrage has long been discussed in the international business literature (Kogut, 1989; Kogut and Kulatilaka, 1994), systematic empirical evidence on how firms shift activities from one country to another remains relatively scarce (Rangan, 1998; Belderbos and Zou, 2007). To begin with, more work is required to document patterns of shifting activities between countries within a firm, with studies moving beyond an analysis of entry into or exit from countries to examine the relationships between exit from one country and entry into another, and how these may be influenced by institutional differences across locations (Berry et al., 2010; Berry 2013) or firm experiences and learning across different locations. Similarly, more work is required examining the expansion or contraction of economic activities within countries, and the resulting rebalancing of the firm's multinational portfolio, over time (Belderbos and Zou, 2009), with these portfolio changes being further divided into resource exploiting or resource augmenting changes. As already discussed, future scholarship could also take a leaf out of corporate strategy research to examine how the potential for inter-temporal arbitrage conditions MNCs location choices. More

attention is also required to firm heterogeneity, to understand which firms are most likely to pursue inter-temporal arbitrage, and what (dynamic) capabilities may enable firms to benefit from cross-country flexibility more effectively (Petricevic and Teece, 2019).

Finally, more attention is required to the performance implications of multinational arbitrage. On one hand, the question of how a firm's multinational scope relates to its performance remains a hotly contested area in international business research (Kirca et al., 2011; Verbeke and Forootan, 2012; Berry and Kaul, 2016; Pisani, Garcia-Bernardo, and Heemskerk, 2019). On the other, recent scholarship suggests that capital markets may systematically underestimate the benefits of redeployability (Sakhartov, 2018). There is thus a need for international business research to move beyond a one-dimensional view of multinationality to examine different dimensions of a firm's multinational presence and their independent effect on firm competitive advantage (Wiersama and Bowen, 2011; Berry and Kaul, 2016). In particular, future scholarship might seek to distinguish the benefit to a multinational firm from maintaining the flexibility to shift from one market to another from the advantages of multinationality more generally. It may also, following on our discussion above, distinguish between the benefits to MNCs from selling their output in multiple countries (and having the flexibility to shift their sales) and the gains to them from undertaking production and R&D activities (Alcacer, 2006) in multiple countries (and being able to reconfigure their value chains).

### **Opportunities for corporate strategy research**

While our discussion thus far highlights potential areas of future research for international business scholars, our framework also suggests several opportunities for research in corporate strategy. To begin with, it suggests the need for greater attention by corporate strategy researchers to resource augmentation. Even as the corporate strategy literature has increasingly recognized the

importance of inter-temporal economies of scope (Helfat and Eisenhardt, 2005)—arguing that diversified firms may have an advantage in adapting to changing conditions—the focus of this work has remained largely on the redeployment of the firm’s existing resources to serve demand in new markets (Levinthal and Wu, 2010; Wu, 2013; Sakhartov and Folta, 2014; 2015), i.e., on resource exploitation. There is thus an underexplored opportunity to study the advantage of diversified firms in the pursuit of resource augmentation.

There are several reasons to think that diversified firms may have an advantage in retiring, retrenching, or renewing their resources and capabilities, and in recombining them with capabilities from outside the firm. First, access to a wider range of factor markets would give diversified firms flexibility in their operations. Just as firms may respond to changing product market conditions by shifting their existing resources to serve more attractive product markets, they may also respond to changing factor market conditions by shifting their existing demand to be served from more attractive factor markets. While different product markets will require different inputs and resources, there is likely to be some overlap between the needs of different markets (especially if the markets are related) and moreover, the resources and inputs themselves may be somewhat fungible (Montgomery and Wernerfelt, 1988; Levinthal and Wu, 2010; Anand et al., 2016), allowing inputs for one market to serve as (imperfect) substitutes for inputs for another<sup>3</sup>. As prices in one factor market rise—or market conditions turn otherwise challenging—firms will look for access to alternative factor markets (Helfat and Peteraf, 2003), and diversified firms may have an advantage in gaining access to such markets given their broader footprint.

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<sup>3</sup> Inputs into one business may only serve as substitutes for inputs into another if they are fungible across businesses; similarly, inputs from one geographic location may only serve as substitutes for inputs from another if they (or their resulting output) is fungible (or mobile) across geographies. Of course, an input that is non-fungible across businesses may still be used to substitute across locations; and an input that is non-fungible across locations may still be used to substitute across businesses.

Second, access to a wider array of potential inputs may give diversified firms an advantage in renewing their capabilities by identifying and incorporating new capabilities from outside, potentially recombining them with their existing knowledge. Diversified firms may be able to benefit from new inventions and discoveries across a wider range of factor markets, taking what they learn in one factor market and adapting and applying it across other (relevant) markets (Williams, 2007; Kim and Anand, 2018). Thus, diversified firms may be at an advantage compared to their focused counterparts in learning when a new input source becomes available or when a new technology is developed, and may find it easier to take advantage of this knowledge across a range of markets (Cantwell and Mudambi, 2005; Song, Asakawa and Chu, 2011), with the firm itself serving as a conduit through which new technologies spread from one market to the other. Moreover, the broader knowledge access of such firms may allow for superior recombination (Katila and Ahuja, 2002; Kogut and Zander, 1992; Martin and Salomon, 2003), not only within the firm (Miller, Fern, and Cardinal, 2007; Karim and Kaul, 2015) but also by drawing on knowledge from outside (Kaul and Wu, 2016). In particular, diversified firms may have greater absorptive capacity (Cohen and Levinthal, 1990) given their presence in multiple markets and may enjoy an advantage in combining their externally acquired capabilities with their existing complementary resources (Tripsas, 1997; Wu, Wan, and Levinthal, 2014) or application knowledge (Sosa, 2009). Diversified firms may also be more motivated to seek potentially breakthrough technologies than their single business counterparts, especially when their performance in a given technology is declining (Eggers and Kaul, 2018) and may be less constrained in the search strategies they use to pursue such inventions (Eggers and Kaul, 2019).

Third, access to a range of factor markets—coupled with the ability to at least partially substitute across them—may give diversified firms superior bargaining power relative to input providers. As competitive strategy research has long recognized, access to alternative sources is a key

driver of a buyer's bargaining power (Porter, 1980). It follows that firms that have access to a wider range of factor markets, and can credibly threaten to shift from one to the other, will enjoy greater bargaining power in each market than their focused counterparts. As prices in one factor market rise, not only will a diversified firm have the flexibility to move to an alternate source (as discussed earlier), but it may be able to use the threat of doing so to realize better terms from input and resource providers. Thus, not only will access to a wider range of factor markets increase the diversified firm's ability to create value, it will also enhance its ability to capture that value (Chatain and Zemsky, 2007; Chatain, 2011). For all these reasons, diversified firms may enjoy an advantage in augmenting their resources and capabilities over time, and more work exploring that possibility is warranted.

A second opportunity suggested by our framework is the need for more attention to the costs of maintaining redeployability. In order for a diversified firm to retain the option of moving its resources to a different use, it will need to develop and maintain resources that are relatively fungible, useful across a range of different product markets rather than being specialized for use in a single market (Montgomery and Wernerfelt, 1988; Anand et al., 2016; Folta et al., 2016). The need to maintain compatibility across markets may thus limit the extent to which the firm is able to adapt its resources to any specific market, potentially lowering its performance in that market (Natividad and Rawley, 2015; Chen et al., 2019). The cost of the option to redeploy is the limited ability of the firm to make market-specific investments. This is a familiar problem for international business research, that has long recognized the tension between integration and responsiveness (Roth and Morrison, 1990; Tallman, 1991; Ghemawat, 2007), but has received less attention in work on corporate strategy.

Recognizing that redeployability may come at the cost of market-specific performance is important because it highlights the potential limits to the advantage that inter-temporal economies of scope confer. It also offers a different perspective on the benefits and costs of diversification. Take, for instance, a recent study by Lieberman, Lee and Folta (2017), which shows that entrants in a new market from related markets were more likely and faster to exit than entrants from unrelated markets. The authors ascribe this difference to the redeployability of the resources of the related entrants, arguing that such entrants will be less willing to bear poor performance in the new market given the option to redeploy. While this is certainly plausible, an alternate explanation for their finding is that in retaining the option to redeploy, related entrants fail to invest as much in capabilities specific to the new market and therefore realize inferior performance compared to unrelated entrants that are fully committed to the new market. In other words, while retaining ties to their old businesses gives related entrants a superior exit option, having one foot out the door also makes them more likely to need to use it. By stressing the link between corporate strategy research and research in international business, our framework draws more attention to this possibility and stresses the need for more theoretical and empirical work examining the trade-off between redeployability and commitment.

Thinking about the costs of redeployability also suggests that corporate strategy may need to think more carefully about partial redeployment and the potential for firms to shift resources and activities back and forth between markets in response to changing conditions. Much of the existing work on corporate redeployment has focused on cases where firms exit from one market in favor of another (Wu, 2013; Sakhartov and Folta, 2014; 2015; Folta et al., 2016). And even when this redeployment is only partial, meaning that the firm chooses to remain in both businesses, at least in the short run, the underlying driver in this work is a long-run trend of decline in one business and / or growth in the other. In contrast, the international business literature on arbitrage emphasizes the

benefits of flexibility (Kogut and Kulatilaka, 1994; Rangan, 1998), with multinational firms maintaining a consistent presence in multiple countries and shifting activities back and forth between them in response to (often temporary) changes in country conditions. Research in corporate strategy could benefit from more closely examining the benefits and costs of such portfolio rebalancing activities, by which firms shift resources back and forth between businesses in response to market fluctuations, wherein firms maintain a permanent presence in multiple businesses as a means of maintaining flexibility to deal with temporary fluctuations. Such activity would not involve either exit from existing business or entry into new ones, but it would still reflect inter-temporal rather than intra-temporal synergies, since the benefits would come not from the sharing of resources between businesses but the movement of resources back and forth across them (Helfat and Eisenhardt, 2005).

A final area where corporate strategy research on redeployment and corporate renewal could benefit from stronger engagement with international business research is in recognizing the role of institutional context. While the international business literature has long recognized the challenges of entering markets with weak or unstable institutional environments (Kobrin, 1979; Tallman, 1988; Uhlenbruck and Castro, 2000; Henisz, 2000; Henisz and Zelner, 2001; Meyer, Estrin, Bhaumik, and Peng, 2009), work on corporate redeployment and renewal has paid relatively little attention to the problem of dealing with weak institutions. This is an important oversight because new and emergent markets are often characterized by missing or weak institutions (Zhao, 2006; Dorobantu, Kaul, and Zelner, 2017). Both formal (government) regulations and informal norms around new technologies and market opportunities are often in a state of flux, as market actors develop and define their preferences, and regulators examine the broader consequences of alternate institutional arrangements (North, 1990). Not only do such markets represent contexts with high institutional uncertainty, they also present opportunities for firms to earn institutional rents (Ahuja and

Yayavaram, 2011) by shaping both social norms and the interpretation of formal rules (Funk and Hirschman, 2017) and by investing in strategies that help to partially overcome the weakness of prevailing institutions (Berry, 2017; Zhao, 2006; Oberholzer-Gee and Yao, 2018).

Recognizing the challenges and the opportunities presented by weak institutional contexts may be especially important for firms redeploying resources from well-established but declining product markets to new emerging product markets. While the resources and capabilities from the former may be easy to redeploy to the latter, firms seeking to renew their competitive advantage in this way may face significant challenges in adjusting to the very different institutional environment. For instance, an automobile company redeploying from traditional gas-powered automobiles to electric vehicles may find itself faced with a very different set of regulations in its new business, one that it will need to learn to navigate. Corporate strategy researchers would do well to think more carefully about such challenges, and could benefit from looking to the international business literature when doing so, given that international business scholars have long grappled with the complexity of dealing with different institutional contexts (Johnson and Vahlne, 1977; Whitley, 1992; Barkema, Bell and Pennings, 1996; Zaheer and Zaheer, 1997; Zhao, 2006; Berry et al., 2010). . These studies highlight the importance of distance and differences across markets and conceptualize many dimensions along which markets can differ. While the corporate strategy literature has generally thought of relatedness between markets in terms of the similarity of products sold (Rumelt, 1982; Palepu, 1985) or knowledge and capabilities used (Markides and Williamson, 1994; Tanriverdi and Venkatraman, 2005; Neffke and Henning, 2013), the international business literature offers much richer conceptualizations of distance and differences between countries (Berry et al., 2010). The corporate strategy literature may thus benefit from embracing some of these other dimensions of difference—e.g., difference in institutional context, economic characteristics, or prevailing culture—when studying the benefits and challenges of diversifying across businesses.

## Discussion

In this essay, we bring together research in the distinct but parallel domains of corporate strategy and international business to develop an integrated framework describing strategic renewal in diversified firms. We discuss two distinct approaches to corporate renewal: resource exploitation, in which a firm redeploys, replicates, or internally recombines its existing resources in response to changing product market conditions; and resource augmentation, wherein a firm responds to changing factor market conditions by retiring or retrenching its existing capabilities, or renews them by recombining them with new capabilities from outside. We map these distinct approaches to renewal—which are based on insights on capability lifecycles (Helfat and Peteraf, 2003)—to the underlying motives for expansion into new markets from the international business literature, thus creating a common terminological blueprint that allows our framework to be used across both corporate strategy and international business research. We then argue that diversified firms may have an advantage in pursuing both types of strategic renewal relative to their single business counterparts, drawing on theory from both literatures.

As such, our essay offers a novel theoretical perspective on the intra-organizational reconfiguration of activities within diversified firms (Feldman, 2020), provides an integrated framework that may be used across both business and geographic markets, and bridges research on corporate strategy and international business. In doing so, it speaks to not one but two fundamental questions in strategy (Rumelt et al., 1994; Leiblein and Reuer, 2020): the question of what role the headquarters of a diversified firm plays, and the question of how multinational firms compete. It also emphasizes the potential for cross-fertilization between these two domains, thus helping to address the issue of fragmentation between sub-fields within the larger domain of strategy (Leiblein and Reuer, 2020).

The integrated framework we develop also contributes back to each literature, highlighting key areas of opportunity for future research. For international business research, we emphasize the potential to further develop and explore the concept of multinational arbitrage (Kogut, 1989; Kogut and Kulatilaka, 1994; Ghemawat, 2007). We draw inspiration from corporate strategy research—including from work on capability transformation (Helfat and Peteraf, 2003; Agarwal and Helfat, 2009), resource redeployment (Helfat and Eisenhardt, 2004; Levinthal and Wu, 2010; Sakhartov and Folta, 2014; 2015) and dynamic capabilities more generally (Teece, Pisano, and Shuen, 1997; Teece, 2007; Helfat et al., 2007)—to highlight the distinction between intra-temporal arbitrage, whereby firms use local resources to gain global competitive advantage at a point in time; and inter-temporal arbitrage, whereby firms shift their activities from one country to another over time in response to changing product and factor market conditions. Using our integrated framework, we further divide inter-temporal arbitrage into resource exploiting and resource augmenting arbitrage, depending on whether an MNC is shifting its sales in response to changing demand conditions or shifting its production and / or R&D in response to changing factor market conditions, respectively. These conceptual distinctions also point to a rich set of opportunities to study multinational arbitrage empirically, in order to better understand how MNCs shift their portfolio of activities across countries over time (Belderbos and Zou, 2009; Berry, 2010; 2013).

For corporate strategy research, we complement extant research that focuses on resource redeployment and intertemporal economies of scope (Helfat and Eisenhardt, 2004; Levinthal and Wu, 2010; Wu, 2013; Sakhartov and Folta, 2014; 2015; Folta et al., 2016) extending this important and fast growing domain of research in corporate strategy (Feldman, 2020) by highlighting the potential benefits of diversification for research augmentation. Our paper suggests that an especially fruitful agenda for further research in corporate strategy may be to consider the effect of changes in factor market conditions—such as the emergence of new technologies or the availability of new or

lower cost inputs—and the ways in which firms reconfigure their internal activities and change their overall scope to take advantage of these opportunities on the input side (Berry, 2010; Kaul, 2012; Berry and Kaul, 2015). In addition, we argue that corporate strategy researchers may take inspiration from international business research and pay more attention to the costs of maintaining redeployability in terms of lost responsiveness to individual businesses, as well as to the challenges of entering new markets with different, weak, or missing institutions.

While our main essay lists potential opportunities for future research in corporate strategy and international business separately, there is also room for more work at the intersection of the two streams. Many MNCs are also diversified across different business areas and are thus required to make trade-offs across their business and multinational scope (Bowen and Wiersema, 2007; Geringer, Tallman and Olsen, 2000). For instance, expanding opportunities in a firm's core business in foreign markets may prompt it to reconsider its business scope, as it sees greater opportunity in exploiting its existing resources in new geographic markets than in new businesses (Berry, 2010). Similarly, the vertical scope choices—i.e., the decision of whether to integrate or outsource specific activities—that firms make in foreign markets may also be inherently linked to the choice of which markets to operate in, and the benefits they seek to realize from those markets (Berry and Kaul, 2015; Leiblein et al., 2014). It may be, for instance, that firms seeking to take advantage of intra-temporal arbitrage may be more likely to choose offshore integration (to enable country-specific investments), while those focusing more on inter-temporal arbitrage may prefer offshore outsourcing (to maintain flexibility). In this way, the theoretical linkages we have made between the corporate strategy and international business literature suggest the potential for further exploration of the interface between the two.

Finally, our study also has important implications for practitioners (Leiblein and Reuer, 2020). By distinguishing between resource exploiting and resource augmenting change, we emphasize that managers must not only pay attention to changes in their output markets, they must also consider the opportunities and challenges presented by shifts in their input markets, both across countries and across business lines. We thus emphasize the ways in which managers of multi-business firms may use their scope to more efficiently and effectively retrench and renew their resources and capabilities, in addition to redeploying them. We also draw attention to the potential costs of trying to stay flexible across multiple businesses (Chen et al., 2019). Similarly, we also highlight the need for managers of multinational firms to think more carefully about how they create and maintain flexibility in their operations to react to changing input and output market conditions across countries, and the need for managers of domestic firms to recognize the substantial advantage such flexibility may give their multinational competitors (Alcacer, 2006), especially in the face of an economic downturn (Alfaro and Chen, 2012).

To conclude: in this study, we extend the literature on corporate renewal in diversified firms, arguing that in addition to the redeployment of their existing resources and capabilities in response to changing output market conditions, firms may also pursue corporate renewal by augmenting their resources and capabilities to take advantage of evolving input markets. Our theoretical framework thus bridges the corporate strategy and international business literature, drawing on both these literatures, as well as work on the capability lifecycle (Helfat and Peteraf, 2003), and highlighting key opportunities for future research in both streams. Our study thus has important implications for research on corporate strategy and multinational business, and points the way to a rich area of future scholarship.

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**Table 1: Resource Exploitation and Resource Augmentation**

	<b>Resource Exploitation</b>	<b>Resource Augmentation</b>
<b>Description</b>	Shifting existing resources to serve demand in new / more attractive markets	Replacing or refreshing resources to serve demand in existing markets
<b>Attribute being renewed</b>	Sales portfolio (across businesses / countries)	Input portfolio; internal resources and capabilities
<b>Key driver</b>	Changes in output (business or geographic) market conditions	Changes in input market conditions
<b>Source of value for diversified firm</b>	Access to faster growing / more attractive markets	Access to cheaper / higher quality inputs
<b>Types of capability transformation</b>	Redeployment, replication, (internal) recombination	Retirement, retrenchment, renewal, (external) recombination
<b>Motives</b>	Market seeking	Efficiency seeking, knowledge / asset seeking