RESOURCE REDEPLOYMENT IN CORPORATE ACQUISITIONS: GOING BEYOND HORIZONTAL ACQUISITIONS

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Resource redeployment, defined by Lee (2016) as reallocation of a firm's resources (a) to another product market or (b) to another firm, has been at the focus of corporate strategy research since Chandler (1962) and Penrose (1960). These two dimensions, in which resources can be redeployed, have motivated two respective streams of research. On the one hand, the withdrawal of a firm's resources from one product market and their redeployment to another market within the scope of the same firm has been considered 'inter-temporal economies of scope' (Helfat and Eisenhardt, 2004). Determinants and implications of such economies were elaborated theoretically (Lieberman, Lee, and Folta, 2017; Sakhartov and Folta, 2015) and were tested empirically (Miller and Yang, 2016; Wu, 2013). On the other hand, the withdrawal of resources from one party in a corporate acquisition and their reallocation to another party that operates in the same product market has been investigated in research on horizontal acquisitions (Capron, Dussauge, and Mitchell, 1998; Capron, Mitchell, and Swaminathan, 2001). Except for a few earlier studies that appealed to redeployment in diversifying acquisitions (*i.e.*, the acquirer and the target operated in different product markets) but did not directly register redeployment (Anand, 2004; Anand and Singh, 1997) and except for a few nascent studies that focused on redeployment of labor in acquisitions (Ouimet and Zarutskie, 2016; Poliquin and Chauvin, 2019; Tate and Yang, 2015), the two dimensions of redeployment have been considered separately.

That detachment of redeployment of resources between product markets from redeployment of resources between merging firms contrasted with the early descriptions of redeployments that were observed at subsidiaries of E.I. du Pont de Nemours & Co. and that

combined both dimensions (Chandler, 1962; Penrose, 1960). The separate consideration of the two dimensions of resource redeployment was also at odds with popular stories where acquiring firms redeployed resources of the acquired targets to new product markets (Baghai *et al.*, 1997).

This study aims to develop a theory of resource redeployment that would comply with its broader definition and, thus, would more-fully capture its properties. Although the restrictive focus on resource redeployment *either* between product markets within the same firm *or* between merging firms within the same product market gave a deeper understanding of each of these dimensions, access to both dimensions that is available to managers can shed new light on the use of redeployment and on its performance outcomes. Therefore, this study combines features of the two dimensions and considers redeployment of resources between two merging firms that may not necessarily be from the same product market.

Key features of resource redeployment between product markets are captured with determinants of inter-temporal economies of scope that were raised in previous research. In particular, the degree to which product markets of the merging firms are similar to each other can vary from perfectly related (*i.e.*, the markets are the same) to totally unrelated (*i.e.*, the markets are very different). Following Montgomery and Wenerfelt (1988), relatedness is represented inversely with the cost of redeploying resources between the two product markets. In turn, inducements for redeploying resources between these markets are captured directly with the current return advantage in the recipient market and volatility of returns in both markets, and inversely with correlation of these returns (Sakhartov and Folta, 2015).

Essential features of resource redeployment between the merging firms are represented with two notorious challenges faced by corporate acquirers. The first challenge is the risk of adverse selection: the acquirer is incompletely informed about the target and, without its careful

valuation, can buy a 'lemon' (Akerlof, 1970). The second challenge is linked to the integration of the target: if not accompanied with an integrative effort by the acquirer, a corporate acquisition can generate inferior performance (Zollo and Singh, 2004).

To develop a more-comprehensive theory of resource redeployment, this study uses a formal model. This approach is advantageous because it replicates previous detailed accounts of redeployment of resources between product markets and systematically examines this complex phenomenon in the context of corporate acquisitions, instead of prematurely relegating the resolution of that complexity to empirical estimations. In that sense, the used formalism prepares more-elaborate empirical studies by outlining the economic structure for future estimations. This approach is useful also because it extends the understanding of the implications of resource redeployment in corporate acquisitions beyond the case of horizontal deals. The conceptual imagination that is enabled by formalism and is not limited by the availability of data allows this study to ask the "what if" question in the context where that question was largely avoided. Still another advantage of using the formal model in this study is that the model represents a simulated laboratory where the causal mechanisms behind the reported results can be uncovered.

The model derives multiple intriguing results which engage the valuation challenges (*i.e.*, Figure 1) and the integration challenges (*i.e.*, Figure 2) faced by the corporate acquirer. First, confirming the result on the valuation challenges (Reuer and Sakhartov, 2020) and extending it to the integration challenges, the marginal case of horizontal acquisitions is shown to miss the context where redeployment of resources between the acquirer and the target creates the highest value. Notably, redeployment of resources when the merging firms are strongly related to each other creates more value than redeployment of resources when the merging firms operate in the exact same product market, thus demonstrating the inverse U-shaped relationship between the

acquirer return and relatedness. Second, responding to the observation that relatedness is not a unique determinant of value that the same firm derives in redeploying resources between various product markets (Sakhartov and Folta, 2015), value that the acquirer attains in redeploying resources between the merged firms is not determined solely by relatedness. To demonstrate the important impact of other determinants each Figure 1 and Figure 2 ramifies into three panels involving the three dimensions of inducements for resource redeployment. The effects of two of these additional dimensions (*i.e.*, volatility of returns in the merged businesses in Panels B and correlation of these returns in Panels C) on the return to the acquirer do not depend on whether the key challenge to the acquirer is linked to the valuation of the target or to the integration of the target. Thus, return volatility enhances the acquirer return in both cases, while return correlation reduces that return in both cases. In contrast, the effect of the current return advantage in the firm to which resources move over the firm from which they are taken depends on which challenge dominates the acquisition context. Specifically, with valuation challenges, the acquirer return is the highest when the acquirer's and the target's businesses perform symmetrically at the time of the deal, thus revealing an inverse U-shaped relationship between the acquirer return and the current return advantage. In contrast, with integration challenges, the return to the acquirer increases monotonically in the current return advantage. A detailed explanation of these differential effects of the four determinants will be developed in the full version of the paper and will attend to how much of valuation effort and to how much of integration effort the acquirer should optimally commit depending on the configurations of the four determinants.

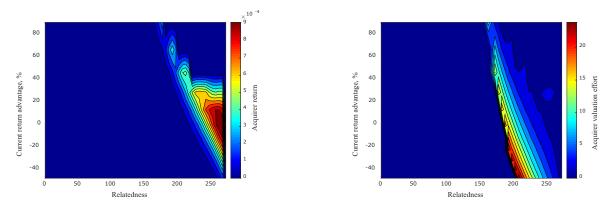
Insert Figures 1 and 2 here

The core contribution of these findings is that they make both researchers and managers think comprehensively about how the benefit of resource redeployment following corporate

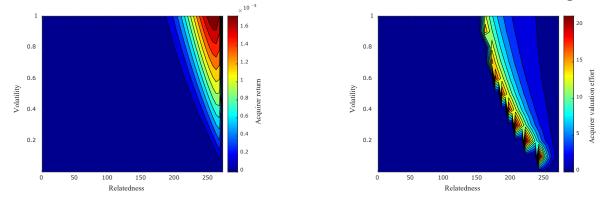
acquisitions rewards acquirers. These results reunite two streams of research which were unnecessarily held apart for some time—the literature on how the same firm redeploys resources between its constituent product markets and the literature on how the corporate acquirer redeploys resources between its business and the target's business that operates in the same industry as the acquirer. This advance is important for future empirical operationalizations of value that is realized in corporate acquisitions, and it is instructive to corporate managers.

REFERENCES

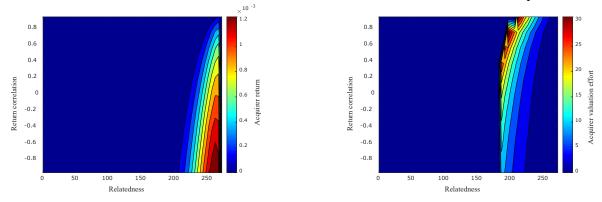
- Akerlof G. 1970. The market for 'lemons': Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics* **84**(3):488–500.
- Anand J. 2004. Redeployment of corporate resources: A study of acquisition strategies in the US defense industries, 1978–1996. *Managerial and Decision Economics* **25**(6/7): 383–400.
- Anand J, Singh H. 1997. Asset redeployment, acquisitions and corporate strategy in declining industries. *Strategic Management Journal* **18**(S1): 99–118.
- Baghai MA, Coley SC, Farmer RH, Sarrazin H. 1997. The growth philosophy of Bombardier: An interview with Laurent Beaudoin, chairman and CEO of Bombardier, Inc. *The McKinsey Quarterly*, **2**: 1–22.
- Capron L, Dussauge P, Mitchell W. 1998. Resource redeployment following horizontal acquisitions in Europe and North America, 1988–1992. *Strategic Management Journal* **19**(7): 631–661.
- Capron L, Mitchell W, Swaminathan A. 2001. Asset divestiture following horizontal acquisitions: A dynamic view. Strategic Management Journal **22**(9): 817–844.
- Chandler AD. 1962. *Chapters in the History of the American Industrial Enterprise*. MIT Press: Cambridge, MA.
- Lee G. 2016. Resource Redeployment. In *M Augier, DJ Teece (eds.), The Palgrave Encyclopedia of Strategic Management.*
- Lieberman MB, Lee GK, Folta TB. 2017. Entry, exit, and the potential for resource redeployment. *Strategic Management Journal* **38**(3): 526–544.
- Miller DJ, Yang HS. 2016. Product turnover: Simultaneous product market entry and exit. In *TB* Folta, CE Helfat, S Karim (eds.) Resource Redeployment and Corporate Strategy (Advances in Strategic Management, Volume 35), Emerald Group Publishing Limited.
- Montgomery CA, Wernerfelt B. 1988. Diversification, Ricardian rents, and Tobin's q. *RAND* Journal of Economics 19(4): 623–632.
- Ouimet P, Zarutskie R. 2016. *Acquiring Labor*. US Census Bureau Center for Economic Studies Paper No. CES-WP-11-32.
- Penrose ET. 1960. The growth of the firm—A case study: The Hercules Powder Company. Business History Review **34**(1): 1–23.
- Poliquin, C, Chauvin J. 2019. Knowledge Sharing and Intra-Organizational Worker Mobility. Academy of Management Proceedings **2019**(1): 18529.
- Reuer JJ, Sakhartov AV, 2020. *Economies of Scope and Optimal Due Diligence in Corporate Acquisitions*, working paper.
- Sakhartov AV, Folta TB. 2015. Getting beyond relatedness as a driver of corporate value. *Strategic Management Journal* **36**(13): 1939–1959.
- Tate GA, Yang L. 2015. The Human Factor in Acquisitions: Cross-Industry Labor Mobility and Corporate Diversification. US Census Bureau Center for Economic Studies Paper No. CES-WP-15-31.
- Wu B. 2013. Opportunity costs, industry dynamics, and corporate diversification: Evidence from the cardiovascular medical device industry, 1976–2004. *Strategic Management Journal* 34(11): 1265–1287.
- Zollo M, Singh H. 2004. Deliberate learning in corporate acquisitions: post-acquisition strategies and integration capability in US bank mergers. *Strategic Management Journal* **25**(13): 1233–1256.



Panel A. Various combinations of relatedness and the current return advantage

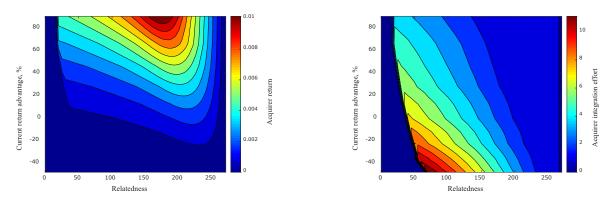


Panel B. Various combinations of relatedness and return volatility

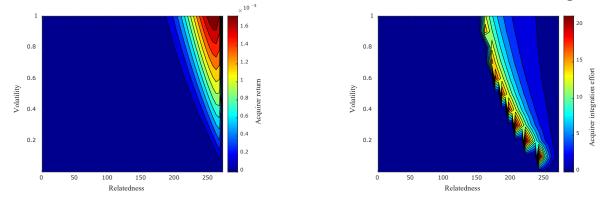


Panel C. Various combinations of relatedness and return correlation

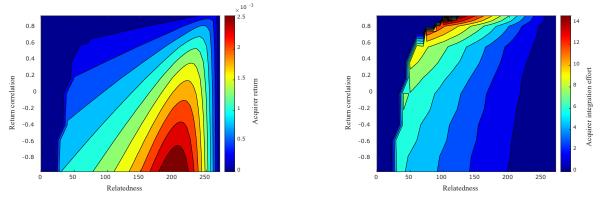
Figure 1. Resource redeployment in corporate acquisitions with valuation challenges



Panel A. Various combinations of relatedness and the current return advantage



Panel B. Various combinations of relatedness and return volatility



Panel C. Various combinations of relatedness and return correlation

Figure 2. Resource redeployment in corporate acquisitions with integration challenges