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Target difficulty, target flexibility, and firm performance: Evidence from business units' targets ☆

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A B S T R A C T

Despite the importance of target setting for firms, prior research offers mixed evidence regarding performance consequences of target difficulty levels. While experimental research suggests that setting difficult targets can increase performance, empirical evidence in field studies is mixed and ambiguous. To explain this ambiguity, we introduce and analyze firms' target flexibility with regard to adjusting targets intra-year. We argue that target flexibility is associated with both target difficulty and firm performance in the field and therefore can significantly contribute to an understanding of their relationship. Our examination of survey and archival data from 97 firms supports our predictions. We find that the difficulty of business unit targets exerts a direct positive effect, but an indirect negative effect on firm performance where the latter is partly mediated by firms' target flexibility. Additionally, we find that the predominant use of targets for planning and coordination (vs. performance evaluation) mitigates both performance effects. Our findings may help explain mixed field study evidence regarding the effects of target difficulty.

Introduction

In October, the board of Comsys IT Partners, an information technology consulting company, cut the earnings target that the company had to meet in the last six months of 2008 for its executives to get a bonus. The compensation committee at Comsys justified the reduction by bluntly stating that the original 2008 goal "was unattainable" for earnings before interest, taxes, depreciation and amortization.

[The New York Times, 2009]

Targets constitute an important element of management control in almost all organizations (Chenhall, 2003; Luft & Shields, 2003). They play a particularly important role in performance evaluation, because meeting or exceeding targets is often associated with bonus payments (Covaleski, Evans, Luft, & Shields, 2006; Widener, 2006a). Targets also serve as decision-making tools in planning, coordination, and resource allocation (Hansen & Van der Stede, 2004; Widener, 2007). Despite the importance of target setting for firms, research offers little empirical evidence regarding their use and performance effects (Anderson, Dekker, & Sedatole, 2010; Ittner & Larcker, 2001; Libby & Lindsay, 2010).

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A major element of target setting is the level of target difficulty (Shields, Deng, & Kato, 2000). Goal-setting theory and corresponding experimental evidence suggest that difficult but attainable goals have positive effects on performance (Locke & Latham, 1990, 2002). However, the association between target difficulty and performance in the field is mixed and ambiguous. Some empirical studies show a positive relationship (Hofstede, 1968; Simons, 1988; Webb, Jeffrey, & Schulz, 2010), whereas others find no significant association (Hansen & Van der Stede, 2004; Hirst & Lowy, 1990) or even a negative impact (Kenis, 1979; Webb, Williamson, & Zhang, 2013).

We suggest that these ambiguous results can be explained by taking into account how firms handle target levels intra-year. While this aspect does not have to be controlled for in laboratory settings without changing environmental conditions, prior field work in target setting has paid scant attention to it. Studies on target adjustments have explored the degree to which firms revise targets at year-end (Indjejikian & Matějka, 2006; Leone & Rock, 2002) or have investigated how the anticipation of this adjustment hurts year-end performance (Anderson et al., 2010; Bouwens & Kroos, 2011; Murphy, 2001). But they have not investigated the performance effect of intra-year target adjustments or its relation to the target difficulty determined at the beginning of the period. In this paper, we introduce and define the extent to which firms potentially adjust targets in the course of a period as target flexibility. As explained below, we propose that it represents a mediating variable in the relationship between target difficulty and firm performance. Specifically, more difficult targets may be revised more often than easy targets, thereby inducing higher target flexibility. Furthermore, target flexibility is likely to interfere with targets' incentive effects and therefore likely influences firm performance. If targets are adjusted in the course of the year as economic conditions change, as illustrated in the introductory statement, financial incentives can be recalibrated, and target flexibility therefore may have some benefits (Milgrom & Roberts, 1992). However, target flexibility may also induce high costs since the anticipation of high target flexibility may lead people to withhold effort to avoid upward adjustment or foster downward adjustment (Weitzman, 1980) or may reduce the motivational power of targets since people lack a clear benchmark for judging their performance (Marginson & Ogden, 2005). As we will argue below, these effects are likely to lead to an overall negative mediating effect of target flexibility on firm performance. The omission of this variable in prior field studies offers a potential explanation for the ambiguous and mixed findings regarding the performance effects of targets.

However, the usefulness of high target flexibility may also depend on how strongly targets are used for purposes besides control. Researchers and practitioners emphasizing the decision-making role of targets question their usefulness if they are rigid and not adapted as business conditions change (Hansen, Otley, & Van der Stede, 2003; Hope & Fraser, 2003). These scholars argue for flexible target setting, such as rolling budgets, to prevent new business conditions from rendering targets obsolete and uninformative. Thus, even though increased target flexibility may impair control-oriented purposes of targets, the predominant use of targets for decision-making is likely to mitigate this negative effect on firm performance (Hansen & Van der Stede, 2004).

Our study makes two contributions to the accounting literature. First, using a cross-sectional data set, comprising both archival and survey data, we predict and show that the more difficult a target at the beginning of a period, the higher the target flexibility and the likelihood of potential adjustments during this period. This relationship creates an additional, indirect association between target difficulty and firm performance with target flexibility as a mediating variable, which negatively affects firm performance. That is, although we only find a marginally significant effect of target difficulty on firm performance—in line with the contradictory results of prior empirical studies—we can attribute this weak finding to a combined positive direct association and negative indirect association between target difficulty and performance, partly mediated by a firm's target flexibility (Shields & Shields, 1998). Methodologically, these results are such that the positive effects of target difficulty (up to a level) are offset by the negative effects of target flexibility (Tzelgov & Henik, 1991; Zhao, Lynch, & Chen, 2010). In this way, we respond to recent claims in the accounting literature to develop more complete models of corporate control by adding mediators that will reveal a more comprehensive picture of management control systems (Burney & Widener, 2013; Shields et al., 2000). As Shields et al. (2000, p. 186) point out, suppressing relationships among components of control systems "can lead to a distorted understanding of the effects." Stated differently, empirical models that include target difficulty but ignore target flexibility might be incomplete (Ittner & Larcker, 2001).

Second, we hypothesize and find that a firm's stronger use of targets for decision-making, instead of control, attenuates both effects—the direct and the indirect of target difficulty—on firm performance. These findings contribute to research into the dual roles of accounting information use (Indjejikian & Matějka, 2006) and the various functions of targets for firms (Hansen & Van der Stede, 2004). Our results provide a more differentiated picture for both advocates of flexible budgeting systems, who stress the decision-making purpose of targets (Hope & Fraser, 2003; Schmidt, 1992), and proponents of the use of targets for performance evaluation (Bonner, Hastie, Sprinkle, & Young, 2000; Murphy, 2001). In this way, we respond to a call by Sprinkle (2003) to explore the interdependence of managerial accounting information used for decision-making and control purposes.

Beyond these two contributions, we test our propositions with matched survey and archival data. Despite widespread calls for such approaches, survey studies often fail to include "hard" or externally validated data that can enhance the credibility of performance tests (Bertrand & Mullainathan, 2001; Ittner & Larcker, 2001; Young, 1996) and circumvent potential common method variance issues (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).