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Product market competition, type of mergers, and post-merger performance in Taiwan☆

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ABSTRACT

This paper investigates the effect of product market competition, along with the interaction effect of market competition and the type of mergers and acquisitions (focused or diversified M & As) on an acquirer's post-merger long-term performance. Literature suggests that market competition has the function of disciplining managers and forcing them to operate efficiently. Our main hypotheses are that market competition has a positive effect on post-merger performance only for focused mergers due to the diversification-discount phenomenon, and that diversified mergers may erode the benefits of competition in post-merger performance. Using merger events for Taiwan's listed firms as a sample, the evidence supports our hypotheses, even when considering the endogeneity of market competition and considering only non-electronics events. The discipline derived from market competition tends to be weak across the whole sample. The robustness check confirms the limited positive effect of competition caused by finding a negative relation between acquisition premium and competition only for the focused M & As.

1. Introduction

This paper aims to examine the effects of pre-merger product market competition, as well as the interaction effects of market competition and the type of mergers and acquisitions (M & As); that is, whether the acquiring and acquired firms belong to the same or different industries (i.e., focused or diversified), on acquiring firm's performance after an M & A. Product market competition is an important factor that may affect a firm's operating efficiency (Allen and Gale, 2000), corporate governance (Giroud and Mueller, 2010, 2011; Ko et al., 2016), innovation strategies (Vives, 2008; Gu, 2016), financial decisions and situations (MacKay and Phillips, 2005; Aivazian and Lai, 2011; Byun et al., 2014; Jiang et al., 2015; Gu, 2016), risks (Gaspar and Massa, 2006; Irvine and Pontiff, 2009; Jo et al., 2011; Ambrose et al., 2015), and other aspects. M & As are a relatively large and important investment in a firm's operating life and they are associated with the firm's prospects (Masulis et al., 2007). The impact of pre-merger market competition on an M & A's long-term performance and the role of the various types of M & A in this context deserve an empirical investigation.

There is a proverb in China: "Thrive in calamity and perish in soft living," and this rationale can also apply to business operations. In a less competitive industry, managers are more likely to run their firms without much pressure over the life of their firms and they do not adopt challenging strategies to enhance their competitive advantages (Bertrand and Mullainathan, 2003). Such enterprises may operate inefficiently and have no strong competitiveness. On the contrary, in a highly competitive industry, managers will

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operate diligently with effective activities to improve their firms' competitiveness in order to survive. The possible result is that these firms have a greater chance for survival in a competitive industry. Hart (1983) and Schmidt (1997) point out that the disciplinary pressure of competition incentivizes managers to operate efficiently without slack in order to survive. Shleifer and Vishny (1997) argue that product market competition forces companies to improve their efficiency and thus plays a role resembling corporate governance. Further, Masulis et al. (2007) view market competition as an effective external governance mechanism for alleviating managerial agency problems. The model in Allen and Gale (2000) shows that competition among firms is more effective than other corporate governance systems in fostering efficient resource use.

Numerous empirical results support the disciplinary function that market competition can improve the efficiency of corporate governance, firm performance, and stock returns, and that it can even reduce risks (see Giroud and Mueller, 2010, 2011; Jo et al., 2011; Jiang et al., 2015; and Gu, 2016). However, recently, Stoughton et al. (2015) theoretically and empirically show that firm investment is more efficient in less-competitive industries by recognizing the advantages of concentrated markets. Side effects are likely to emerge in more competitive markets, where the pressures of competition are much fiercer. One reason is that the weaker market power for individual firms possibly leads to operating difficulties, lower profits, and higher risks (Gaspar and Massa, 2006; Irvine and Pontiff, 2009). Additionally, because competitive industries generally experience lower profits, managers likely have fewer incentives to work hard (Scharfstein, 1988). Thus, the net effect of market competition is worthy of empirically examining, particularly, on investment activity, which is a primary channel of firm growth.

M & As, particularly the diversified (i.e., unrelated) type, have been widely shown to decrease in value as a result of existing managerial agency problems or overconfidence[1]; this may be less serious for focused M & As. More studies agree with the positive disciplinary effect of market competition, and with that corporate governance can mitigate the harm inflicted by the CEOs' overconfidence (such as overinvestment and excessive risk-taking) (Banerjee et al., 2016). Thus, this paper hypothesizes that the performance of M & As may be positively associated with the intensity of pre-merger market competition, in particular, focused (i.e., related) M & As. However, diversified M & As will weaken this positive effect, as whether the market competition can discipline selfish or overconfident managers is ambiguous.

Using publicly traded acquiring firms' M & A activities in Taiwan from 2005 to 2013 as a sample, this paper focuses on long-term performance (benchmark-adjusted and industry-adjusted Tobin's q and cash flow returns) for a three-year post-merger period. Our finding is that only for within-industry M & As, a positive effect of product market competition exists, as measured by one minus the Herfindahl-Hirschman Index ($1-\text{HHI}$) and industry concentration rate ($1-\text{ICR}$), respectively, on the post-merger long-run performance; however, this positive influence is eliminated in terms of the different-industry M & As. For the overall sample, the effect of market competition tends to be limited. In other words, the interaction between product market competition and focused M & As is what matters most. The test results are robust when the endogeneity of market competition are considered. Moreover, although most of the observations (i.e., M & A events) come from the electronics industry, the interaction effect of market competition and focused M & As is significant for non-electronics companies also. Meanwhile, this result has an implication for the diversification discount (consistent with most of the literature), under which the disciplinary force from market competition is inadequate.

To the best of our knowledge, very little empirical work has been done on this issue. A related, but distinct, research is by Masulis et al. (2007), who focus on the relation between corporate governance and the acquirers' stock announcement returns for a U.S. sample of firms, in which product market competition is deemed to be an external governance mechanism. Our paper examines long-term performance and is related to the literature on M & As, market competition, corporate governance, and diversified investment. We bridge a gap in the literature by examining the effects of product market competition and type of M & As on the long-term performance. Also, the sample of our empirical study is for an emerging market country apart from the developed countries and, thus, it is of substantial value to academicians and practitioners.

The paper is organized as follows. Section 2 reviews the literature related to the effect of product market competition and diversified M & As, and develops our hypotheses. In Section 3, we present the data employed, the definition of key variables, and our econometric procedures. Section 4 presents and discusses our primary empirical results. In Section 5, we consider robustness checks, including investigating the impacts of the endogeneity of market competition using two-stage estimation models, as well as the non-electronics industry effect, as a high proportion of acquirers come from the electronics industry. Section 6 presents the main conclusions of the study.

2. Literature review and hypothesis development

A strand of literature has studied the effect of product market competition on increases in managerial incentives to exert more effort and on reducing agency problems between managers and shareholders. In a highly competitive industry, companies may easily fail when their operating efficiency and performance are relatively poor. Managers must always be vigilant and work hard to enhance efficiency in order to remain profitable when they face competition and challenges. Namely, product market competition forces companies to improve their efficiency and thus plays a function analogous to corporate governance (Shleifer and Vishny, 1997; Allen and Gale, 2000). For example, Hart (1983) and Schmidt (1997) provide a model showing that market competition can be an incentive scheme for improving managerial effort in order to keep their jobs and avoid liquidation of firms, where Schmidt's model describes

[1] Literature provides two important explanations for the diversification discount phenomenon: agency problems arising from managerial self-interest investments (Jensen, 1986; Shleifer and Vishny, 1989; Stulz, 1990; Denis et al., 1997; and among others), and managerial overconfidence (overoptimism) (Malmendier and Tate, 2008; Andreou et al., 2017). The common adverse behavior that lowers firm values is overinvesting and expanding firm size over its optimal level (Aggarwal and Samwick, 2003).