Finance Research Letters 000 (2015) 1–6

Contents lists available at ScienceDirect

Finance Research Letters

journal homepage: www.elsevier.com/locate/frl

Diversification discount over the long run: New perspectives

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ARTICLE INFO

Article history:
Received 26 July 2015
Accepted 19 August 2015
Available online xxx

JEL classification:
G30
G31
G32
G34

Keywords:
Diversification discount
Internal capital market
Capital allocation efficiency

ABSTRACT

We study the long-term trend of excess value and internal capital allocation of diversified firms from 1976 to 2013. The late 1970s and 1980s are characterized by large average diversification discount but narrow dispersion of excess value. Excess value of diversified firms becomes less negative on average after 1990, but its dispersion grows larger. In contrast, capital allocation efficiency of diversified firms converges significantly over time. Three quarters of diversified firms do not suffer from severe capital misallocation after the early 2000s. The effect of capital allocation efficiency on excess value varies over time and becomes larger in recent years.

1. Introduction

Much of what we know about the value of diversification and the working of internal capital market is taken from research performed before the early 1990s, with only a handful of studies expanding the sample period to the early 2000s (Laeven and Levine, 2007; Datta et al., 2009; Schmid and Walter, 2009; Hoechle et al., 2012). Lang and Stulz (1994), Berger and Ofek (1995) and Servaes (1996) first document that Tobin's Q of diversified firms is persistently lower than the sum of their segment values imputed from stand-alone firms in the same industry. These earlier results are verified in Rajan et al. (2000), Lamont and Polk (2002), Laeven and Levine (2007) and Schmid and Walter (2009), which find that diversification

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http://dx.doi.org/10.1016/j.frl.2015.08.008
1544-6123/

causes value destruction and provide evidence against the argument that diversification discount is due to measurement errors (Whited, 2001) or firms' endogenous choice of diversifying (Campa and Kedia, 2002). One prominent interpretation of such diversification discount is that, although the formation of an internal capital market provides a valuable real option in allocating capital across divisions in the presence of costly external financing (Matsusaka and Nanda, 2002), such internal capital market plays limited roles and fails to direct corporate resources to the best use (Berger and Ofek, 1995; Lamont, 1997; Shin and Stulz, 1998). The inefficient functioning of the internal capital market is likely due to internal politics and top management's limited power over divisional managers (Rajan et al., 2000), or poor corporate governance and weak executive incentives (Scharfstein and Stein, 2000; Datta et al., 2009; Ozbas and Scharfstein, 2010; Saunter and Villalonga, 2010). In a recent study, Glaser and Riepe (2014) find that the risk-adjusted asset allocation in banks is also related to segments' business activities.

For the first time in the literature, this study provides an analysis on diversification discount and internal capital market efficiency over a long period from 1976 to 2013. Examining long-term trend sheds light on how the value creation (or destruction) of diversification evolves with the deepening of financial market, the decrease of market frictions, and the improvement in technology and productivity. Focusing beyond the late 1990s is particularly interesting, because financial markets have witnessed several significant events since then, including the dotcom bubble and subsequent burst, the booming of securitization and the recent financial crisis and economic recession. These events alter the availability and cost of external financing, which in turn influence the value-added from having an internal capital market. Moreover, thanks to recent regulatory changes, corporate governance has greatly improved to mitigate agency problems, and hence the efficiency of internal capital market is expected to increase. Prior studies find that diversification was perceived poorly by capital markets leading up to the previous refocusing wave in the 1980s. This study also contributes in providing evidence on how market perceives diversification during the two recent merger waves featuring mega cross-border deals.

Several new patterns emerge. First, the diversification discount exists persistently but reduces over time. It disappears and even turns into a premium during the dotcom bubble burst and the financial crisis. Second, the dispersion of excess value among diversified firms grows wider over time. Its top quartile is twice as high in the late 2000s as it was in the late 1970s, while its bottom quartile becomes more negative. Third, the internal capital allocation efficiency slightly improves on average, but its distribution converges greatly over time. Capital misallocation is less severe in about three quarters of diversified firms after early 2000. Last, the effect of allocation efficiency on improving excess value is much larger and significant during the recent two merger waves, compared to the earlier period of refocusing merger wave.

2. Data

The data are drawn from Compustat Segment and Industrial Annual data files for 1976–2013. To examine whether diversification creates or destroys corporate value, we calculate the excess value (EXV) of a firm's Tobin's Q over its imputed Q using the algorithm from Berger and Ofek (1995) based on median asset multiples.[2] We use relative value added by allocation (RVA) from Rajan et al. (2000) to capture the efficiency of capital allocation. Firms in the financial industry are not included in the sample because Glaser and Riepe (2014) point out that banks allocate "risk-bearing" capacity instead of investment budgets. Hence, general allocation measures do not work well for financial companies. We also exclude heavily regulated utility firms from the sample. Table 1 reports the summary statistics of key variables.

During the sample period, the Statement of Financial Accounting Standards 131 (SFAS 131) issued in 1997 leads to changes in the reporting of segment data starting in 1998. Hoechle et al. (2012) pointed out that such reporting changes lead to an increase in the number of reported segments. It is not clear how these changes affect the comparability of excess value and allocation efficiency measures before and after SFAS 131. Both the trend analysis and regression analysis do not reveal systematic changes in the two variables and their relationship after the implementation of the new rule. Nevertheless, we try to

[2] As a robustness check, we follow Berger and Ofek (1995) and repeat the analysis using sales and EBIT multiples. The results remain qualitatively similar in each case. We also find similar results when using the excess value measure constructed following the Rajan et al. (2000) approach.

Please cite this article as: M. Mazur, S. Zhang, Diversification discount over the long run: New perspectives, Finance Research Letters (2015), http://dx.doi.org/10.1016/j.frl.2015.08.008