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The evolution of ownership structure of corporate spin-offs ☆

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ABSTRACT

Spin-offs inherit the ownership structure of their parents. The change from the monitoring requirements of the parent to those of an often smaller and higher risk firm constitutes a shock to this inherited ownership structure. This paper examines how block ownership changes in response to this shock and the performance and survival consequences of these changes. Block ownership increases from an average inherited level of 20.34% to 27.35% in three years. Comparison with size and industry-matched firms shows that this is not due to secular trends. Block ownership increases more when the inherited block ownership is smaller, when the spin-offs are smaller, have poorer performance and fewer growth opportunities relative to the parent, and when they operate in industries that are less related to the parents' industries. The results suggest that block ownership changes in response to the monitoring needs of spin-offs. This interpretation is supported by the positive association between changes in block ownership and subsequent firm performance and survival.

1. Introduction

This paper examines the evolution of the ownership structure of corporate spin-offs i.e. firms that existed as divisions of a parent company before becoming independent legal entities. At inception spin-offs inherit the ownership structure of the parent because the issuance of spin-off shares takes place in the form of a pro-rata stock distribution to the stockholders of the parent company. However, the assets and operations of spin-offs are usually quite different from those of their parents. This creates an opportune experimental setting for testing hypotheses on how changes in firm characteristics and thus monitoring requirements influence ownership structure, and the consequences of changes in ownership structure for firm performance and survival.

Most previous analysis of ownership structure is of mature or large firms. The ownership structure of such firms changes slowly (see for example, Barclay and Holderness, 1989; Denis and Sarin, 1999; Zhou, 2001) thereby impeding direct analyses of its causes and consequences (Zhou, 2001; Core and Larcker, 2002). Unlike mature firms, spin-offs are likely to experience significant changes in ownership structure. Specifically, if monitoring requirements influence ownership structure, the ownership structure inherited by spin-offs will change in response to changes in monitoring needs arising from differences between parent companies and spin-offs in attributes such as firm size, risk, growth options and industry mix. For example, consider the ownership structure of Corn

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Products, the corn-refining division contributing 20% of firm sales, spun off by parent Bestfoods, a diversified packaged-foods company. Bestfoods had no block holder listed in the proxy statements prior to the spin-off or in the subsequent years. In contrast, in its first proxy statement, Corn Products had one block holder holding 8% of the shares. Total block holdings then increased to 25% in year 2, decreased to 17% in year 3, 12% in year 4 and finally increased to 22% in year 5.

Using a sample of 117 spin-offs from 1981 through 2000, I document changes in block ownership (the total holdings of owners who each hold at least five percent of the voting shares) and test predictions regarding their determinants, and performance and survival consequences. The salient findings are below.

Regarding the changes in block ownership:

- In the three years after inception the block ownership of spin-offs increases from a mean inherited level of 20.34% to a mean of 27.35%. The increase in block ownership is mainly from outside block holdings i.e. where the beneficial owner is unaffiliated to the management of the firm.
- By contrast, a sample of mature matching firms chosen on the basis of size and industry shows insignificant changes in block ownership suggesting that ownership changes in spin-offs are not due to industry or secular trends.

Regarding the determinants of changes in block ownership:

- The changes in block ownership are systematically related to changes in monitoring needs captured by the industry relatedness of spin-offs and parents, and by their differences in size, performance and growth opportunities. A significant negative association between the inherited block ownership and subsequent changes in block ownership also supports the monitoring-needs argument. Reflecting a greater need for incremental monitoring, spin-offs with lower inherited block ownership experience larger increases in block ownership.

Regarding the survival and performance of spin-offs:

- The survival of spin-offs is positively related to the changes in block ownership that occur in the first three years of their independent existence.
- Changes in the stock valuation of spin-offs are similarly positively related to past changes in block ownership.
- Pair wise differences in the stock valuation of spin-offs and matching firms are positively associated with the corresponding differences in block ownership.
- In a simultaneous estimation of Q and block ownership, the relation between the market-to-book ratio and block ownership of spin-offs becomes less significant over time and more similar to the corresponding relation in the sample of matching firms.

Overall, the results show that changes in block ownership occur in response to changes in monitoring needs and are positively associated with enhancements in the stock valuations of spin-offs and the probability of their survival. Thus the results help to explicitly demonstrate the adaptive nature and value relevance of the block ownership of firms — a widely prevalent feature in US corporations that is also often used to examine corporate finance and governance issues in the academic literature (Dlugosz et al., 2006).

The experimental setting employed in this paper helps to alleviate problems arising from the endogenous formation of ownership structure (Demsetz and Villalonga, 2001). However, such problems can persist if the parent's decision to spin-off a unit is an outcome of its existing block ownership. To address these concerns I examine press articles relating to the motivation for the spin-off deal. Detailed examinations reveal no evidence that the parent's ownership structure or the sub-optimality thereof is a motivation for the spin-off transaction. Consistent with this lack of evidence, examination of the parent firm's block ownership reveals insignificant changes subsequent to the spin-off. Further, what changes occur in block ownership show no systematic association with changes in the monitoring needs of the parent that arise due to the spin-off. These results provide empirical support for the argument that the spin-off transaction is not endogenous to the ownership structure of the parent at the time of the spin-off.

The rest of this paper is organized as follows. In the next section I discuss the choice of spin-offs for a study of ownership structure and develop hypotheses. Section 3 details sample formation and present descriptive statistics. Section 4 documents changes in the ownership structure of the spin-offs and compares them to those of the matching mature firms. Section 5 examines the determinants of changes in block ownership and relates the changes to firm performance and survival. Section 6 tests the potential endogeneity of the spin-off decision and reports robustness checks. Section 7 concludes.

2. Spin-offs and ownership structure

2.1. Using spin-offs to study changes in ownership structure

Much of the empirical literature on ownership structure examines the determinants of the level of different types of ownership (managerial, block, institutional, etc.) and their relation to firm performance in a cross-section or panel of firms (see for example — Demsetz and Lehn, 1985; Agrawal and Knoeber, 1996; Cho, 1998; Denis and Sarin, 1999; Himmelberg et al., 1999; Demsetz and Villalonga, 2001). Studies of changes in ownership structure around restructuring events are relatively rare. Gilson (1990) studies changes in the block ownership of firms that default on their debt obligations. Parrino et al. (2003) examine changes in institutional ownership around forced CEO turnover. Kole and Lehn (1999) document the evolution of inside and block ownership in the airline industry around its deregulation. Wruck (1989) and Barclay et al. (2007) examine changes in block ownership brought about by