

MANAGEMENT BUYOUTS AND SMALL BUSINESS PERFORMANCE: AN EXPLORATORY EXAMINATION AND RESEARCH AGENDA

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ABSTRACT

Management buyout activity is increasingly shifting from large firms to small firms. However, to date, little is known about how such activities impact the performance of small firms. This research has identified a sample of small firms that have undergone a management buyout and found that, relative to other firms in their respective industries, these small buyout firms experienced performance gains similar to those experienced in buyouts of larger firms. Suggestions for extending this area of research are made.

INTRODUCTION

Management buyouts occur when incumbent managers, in combination with outside investors, take a firm private by purchasing all of the firm's outstanding stock (Fortier, 1989). Such activities have grown to be an important part of American business with an estimated \$235 billion of buyouts occurring during the 1980s (Zahra & Fescina, 1991). Additionally, similar levels of activity have also begun to occur in Europe (Osborne, 1990). Despite this high level of activity, research on such financial restructurings has remained limited, and the need to examine their impact on business remains (Bettis, 1992; Fox & Marcus, 1992).

Specifically, the effect of buyouts on smaller businesses has yet to receive significant investigation. To date, the principal investigations of small business buyouts have addressed their nature (Krause, 1986; Krause, 1987a; Malone, 1989; Mitton, 1982; Stancill, 1988;) and how to evaluate whether such an activity was appropriate for a given small business (Gaffin, 1986; Krause, 1987b; Krause, 1988; *Management Review*, 1986). Management buyout activity has increasingly shifted from larger firms to smaller ones (Dobrzynski, 1991); yet little is known

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about what happens to the small firm's performance as a result of the buyout. This paper seeks to highlight these issues by conducting an exploratory examination of the ramifications of buyouts on small firm performance during the time that the firm is privately held. Based on the tentative findings of this study, the paper concludes with a discussion of future research directions on the subject of small firm buyouts.

LITERATURE REVIEW

To date, seven principal articles have focused on post- buyout performance (see Table 1). These articles have examined buyouts in a wide range of firms and have found generally that profitability in these firms has improved. These performance gains have been attributed to improvements in the firm's efficiency (Muscarella & Vetsuypens, 1990).

Table 1

Organizational Performance Following a Buyout

Author	Sample	Time Frame	Post Buyout Performance
Opler (1992)	44 LBOs	LBOs occurred between 1985-1989, year before LBO to 2 years after	* increased operating cash flows * improved operating efficiency
Muscarella & Vetsuypens (1990)	57 reverse buyouts	LBO year to IPO year	* officers and directors ownership drops by 15.9% following IPO * sales increase following buyouts
Singh (1990)	55 reverse LBOs	3 years prior to IPO and year of IPO	* sales increase IPO and year of * inventory DOH decrease * operating income increases
Smith (1990)	58 MBOs	3 years prior to buyout to 2 years after buyout	* cash flow/assets increased * cash flow/employees increased
Bull (1989)	25 LBOs	2 years prior to buyout compared to 2 years	* sales/assets increased * cash flow maximized * ROE increased following buyout
Kaplan (1989)	276 MBOs	2 years before MBO to 3 years after	* decrease capital expenditures * operating income/net cash flow improved
Lichtenberg & Siegel (1989)	1,108 buyouts	2 years before buyout compared to 2 years after	* plant productivity increased

Agency theory recognizes that ownership and management in the modern corporation are separate. Owners of the firm do not manage it; instead they hire professional (non-owner) managers to run the firm. The theory contends that managers in such situations maximize their own benefit rather than that of the firm's owners or shareholders. Following a buyout, managers gain a significant level of ownership in the firm and are thus motivated to act more consistently in the best interest of the firm (and its owners). Thus, agency theory would argue that improvements in performance that occur following a buyout would be the result of the closer alignment of the firm's owners' and managers' interests (Jensen, 1989). If this closeness of this alignment were lessened, the manager would again have less incentive to monitor or control the firm's costs as carefully as an owner would (Jensen & Meckling, 1976).

However, in a smaller firm, any single manager has greater influence and often a larger ownership stake as well. At the lower limit, of course, there is perfect alignment since the owner is also the only manager, which is the case in many smaller businesses. Thus, a smaller firm may not suffer the same agency cost problems that a large firm does. This reduced threat of agency costs in conjunction with less organizational complexity (Hannan & Freeman, 1984) may help to explain the overall superiority in efficiency often attributed to smaller businesses. Therefore, it is not immediately clear whether agency offers a valid explanation of small buyout firm performance, as it does for larger firms following a buyout.

Nevertheless, there is case evidence that similar performance improvements do occur in small firms. ISI Systems provides a typical case example. This small firm resulted from a 1986 buyout of a division of Grumman Data Systems Corporation; the purchased division provided proprietary software applications to property and casualty insurance companies. As buyouts typically do, ISI went public again in 1987. However, during the year in which it was privately held, managers discontinued the reselling of microprocessor hardware. This action led to a four percent decrease in the cost of sales as a percentage of revenues. At the same time, ISI also reduced its research and development (R&D), sales, and marketing costs. Finally, while it was privately held, ISI also managed to increase its revenue by 18 percent by increasing sales in other areas, and it achieved all this without adding additional personnel.

Overall, ISI made sales gains while lowering its cost of sales by six percent. Thus, in the relatively brief time that ISI was privately held, this small firm gained better control of its expenses and increased its sales. Therefore, while the principles of agency theory may or may not hold for small firms' post-buyout performance, experiences such as ISI's indicate a substantial effect on performance.

The empirical evidence gathered to date on the effects of buyouts on large firms and the case observations of buyout influence on small firms are compelling. They provide sufficient reason to expect performance improvements following small firm buyouts. Thus, the following hypothesis will be investigated:

Hypothesis: Management buyouts of small businesses lead to gains in performance (sales, profit margin, SG&A) while the firm is privately held.

METHOD

Sample Selection

Most firms taken private via a buyout tend to return to public trading (Kaplan, 1991). In part, this new public stock offering represents a means for independent investors to be reimbursed for their initial investment in the buyout (Academy Industry Program, 1990). Becoming publicly owned again also provides a way for the firm's managers, who typically have risked a high percentage of their personal net worth, to reduce their own financial exposure. A buyout's return to public trading is called a "reverse management buyout".

Studying privately-held firms has always presented special problems (Dess & Robinson, 1984; Sapienza, Gannon & Smith, 1988), but reverse buyouts afford researchers unique opportunities to study the same firms as both public and private entities since their ownership structure goes through these changes in a relatively short period of time. Combining both pre- and post-buyout information permits inferences to be drawn about the firm's activities while it was privately held. Unfortunately, for a buyout firm that remains private, there is no such publicly available information for analysis. Therefore, in a manner consistent with prior buyout research (Muscarella & Vetsuypens, 1990; Singh, 1990), this study used a sample drawn from reverse management buyouts to analyze small buyout firm performance.

The exclusion from the sample of firms that failed or remained private may create bias and is open to criticism. However, the purpose of this exploratory study is to make a case for the importance of further investigation of small firm buyouts, and the results reported here are intended to serve merely as a guide for more refined studies. The enhancement of the sample is, in fact, one issue that we raise for future consideration later in this paper.

Additionally, the theoretical basis of this investigation, agency theory, posits an impact on performance due to the level of managerial ownership (agency). Agency offers no theoretical foundation upon which to base a prediction that the performance of excluded firms would be different.

The data for this study on reverse management buyouts were obtained from the Securities Data Corporation (SDC). This for-profit corporation collects 500 data items on the filings of all initial public offerings (IPOs) of United States firms. An IPO signals a firm's intention to offer its stock for public trading. Buyout firms that filed an IPO between January 1, 1980 and November 25, 1988 were included. This time span was chosen because it marked a period of significant buyout activity. In addition, choosing a time period sufficiently in the past allowed for better retrospection.

Information on the identified buyout firms was then gathered. This information was obtained from a wide variety of public sources including annual reports, prospecti, Standard and Poor's Compustat tapes, and Compact Disclosure. Financial data were located on a total of 44 reverse buyouts.

Small Firms

To date, no definition has been established and consistently used to delineate small businesses. The definition chosen for this research is that used by the U.S. Small Business Administration which identifies a small business as one employing 500 or fewer employees.

Of the 44 reverse buyouts, eight were identified that met the study's three criteria for inclusion: (1) experiencing a buyout (referred to hereinafter as MBO); (2) employing fewer than 500 employees at the time of their buyout, and (3) filing an IPO during the 1980 to 1988 time period. (See Appendix for a list of the sample firms.) However, to further confirm that the selected sample was indeed composed of small firms, a t-test was used to compare the sample's sales to the other 36 reverse buyout firms in the MBO and the IPO years. Both the MBO ($t = 2.41$, $df = 42$, $p = .02$) and the IPO ($t = 2.3$, $df = 42$, $p = .03$) years showed significant differences in size. Therefore, it is justifiable to argue that these eight firms are indeed small businesses, both by definition based on two well-accepted measures of size as well as relative to the population of reverse buyout firms.

Measures

The best data available for investigating buyout performance are accounting measures. The use of market-based measures is not an option since buyout firms, as noted previously, are privately held. Despite the usual concerns regarding accounting data, it has been shown that managers do not manipulate accounting data prior to buyouts to depress the buyout price (DeAngelo, DeAngelo, & Rice, 1984; Kaplan, 1988). Further, the accounting/tax changes associated with buyouts do not impact the results reported (Bull, 1989). Thus, accounting data should provide acceptable performance measures.

However, the concept of buyout performance is complex, and its measurement should be multi-dimensional (Bull, 1989); but there is no commonly accepted set of performance variables used by all researchers. In fact, one survey of new venture performance studies revealed more than 35 different measures of performance (Brush & Vanderwerf, 1992). For the present study, three measures of performance were selected for investigation—sales, profit margin, and selling, general and administrative expenses (SG&A).

It is possible, however, that changes detected in a buyout firm's performance are driven, not by its internal efficiency improvements, but by general economic conditions in its industry. To control for such an industry effect, changes in the performance measures were compared to the average industry performance of the relevant industry for each sample firm.

The initial step in these comparisons was to calculate industry averages for the three-digit Standard Industrial Classification (SIC) code for the principal industry of each of the eight firms. The data for these averages were obtained from Standard and Poor's Compustat data base. The primary, secondary and tertiary data tapes were used for these calculations to ensure that adequate numbers of firms were used for the comparisons. Changes in performance for each of the eight sample firms were then compared to changes in performance of the corresponding principal industry. The average number of firms in each industry comparison group in the sample firm's MBO year was 14.

Analysis

While the small size of the sample used in this study does not prohibit an exploratory examination, it does limit the statistical strength of the analysis. Use of a non-parametric statistic, specifically a Mann-Whitney U test, was deemed most appropriate given the small sample size.

RESULTS

The results of the nonparametric tests indicated support for the hypothesis. Compared to average industry performance changes, small business buyouts showed greater gains. Both sales (U statistic = -1.79; p = .10) and SG&A (U statistic = -2.10; p = .05) improved for the privately-held small businesses relative to industry averages. The small businesses experienced a mean increase in sales of 11 percent during the private period while the overall industry mean increase was only six percent. Similarly, the mean increase in the SG&A costs for the industries was 11 percent during this period while the small firms' mean increase was only six percent.

The increase in profitability for the small firms versus the industry group shows a larger mean gain for the small buyout firms (9.4 percent gain versus 7.6 percent gain). While not statistically significant (U statistic = -.74), these means do indicate performance somewhat better than the firm's relevant industry peers.

DISCUSSION

The results of this exploratory examination provide some indication that the hypothesis of performance improvements following small business buyouts cannot be rejected. Small business buyouts do appear to experience performance gains while the firm is privately held that are greater than those achieved by other firms in their industry. Making comparisons to a firm's industry helps to control for the impact of general economic conditions. Both case evidence and performance data point to increased growth, improved profitability, and better operating efficiency for small business buyouts.

In the case of large firm buyouts, research has shown consistently that these financial restructurings lead to improved operating performance. However, much of this gain may be due to the reduction of agency costs in the firm. Such agency costs may not pose problems for a small firm to the same degree as they do for a large firm; thus, there may not be as much opportunity for improvement in small firms as in large ones.

While our results do make a preliminary case for similar improvements in small buyout performance, the question still remains whether agency theory is an appropriate explanation for these performance gains. Agency-based gains would be accompanied by a substantial change in the level of managerial ownership. Adequate data on ownership levels prior to the buyout were unavailable for statistically testing this proposition. However, the substantial changes in ownership levels that followed the reverse buyouts in our sample hints that agency may have played a role. In the six firms for which a determination could be made, top management team ownership went from 91 percent during the private period to 65 percent after the IPO, a drop of 26 percentage points (28.59 decrease). A change in ownership of this magnitude suggests that agency may have an effect on small buyout performance. These results demonstrate a clear need for further testing of the efficacy of agency theory in this context. Competing explanations should be explored. Other research needs are discussed in the following section.

FUTURE RESEARCH

This research has been a brief exploratory examination of small firm buyouts. However, the small sample size has limited the strength of the conclusions that can be reached. Future research should seek to enrich the sample and increase its size before re-examining buyout performance.

To date, most of what is known about buyouts is based on studies of large firms (e.g., Seth & Easterwood, 1993). Research effort should be directed toward identifying those areas in which small and large firm buyouts differ. Malone (1989) pointed out that highlighting these differences may have important public policy implications as leveraged buyouts increasingly come under legislative scrutiny. Public policy designed solely around large firm buyout experiences could prove to be detrimental and even devastating for small firms. For example, a small business manager's role is frequently different in nature from that of a manager in a large business. Small business managers rarely enjoy the same task specialization that their counterparts in larger businesses do; rather, they are more often called upon to be generalists. This broader perspective of the overall business may account for differences in managerial behavior with regard to buyouts.

Another potential difference between large and small firms is their strategic choices for restructuring the business following the buyout. Prior studies have found that buyout firms undergo significant restructuring activities (Muscarella & Vetsuypens, 1991; Seth & Easterwood, 1993). However, these studies focused almost solely on large firms. Small firms, however, typically have less elaborate internal structures and control mechanisms (Singh, Tucker, & House, 1986). This relative informality may influence the smaller firm's restructuring decisions in several ways. First, the small firm may require less restructuring since there is typically less bureaucratic "fat" impeding its efficient performance. Whereas large firms may enjoy the luxury of slack resources, small firms rarely have such a cushion and must be efficient in order to survive in the first place. Thus, efficiency gains such those detected in this investigation, may be much more difficult to achieve in the small firm. Future research should examine the nature of the restructuring activities that follow a small business buyout and how the strategic intent of that restructuring may differ from activities and intentions in large businesses.

Finally, future research should seek to identify those factors associated with successful buyouts. A potential drawback to the methodology used in this study, which relies on performance data from reverse management buyouts, is that those buyouts that do not return to public trading are automatically excluded from consideration. There may be key differences between buyouts that remain private and those that do not. Seth and Easterwood (1993) have suggested, for example, that the longevity of a buyout is tied to the degree of restructuring needed. Future research should seek to expand buyout databases in order to compare buyouts based on the magnitude of their performance gains. Attempts should also be made to gain information on buyouts that remain private as well as those that fail. Such studies may necessitate the collection of primary data and may have to rely on performance data abstracted from managerial perceptions. This methodology could be difficult to execute. Malone (1989), for example, reported that many of the non-respondents to his survey of small company buyouts indicated that it was against their corporate policy to release such information. A number of factors such as the principal industry in which the firm competes, the size of the firm, its prior profitability, and its level of diversification may impact the success of the buyout. Factors such as these should be identified and examined as well with an eye toward developing contingency prescriptions for successful small business buyouts.

This paper has used some preliminary findings to build a case for future research that will help to answer these and other questions about the ramifications of buyouts for small businesses. No single study will provide all the answers; instead a stream of research will be required to probe all of the possible avenues of investigation. It is hoped that this initial investigation will serve as a guide as well as a challenge to encourage more in-depth analyses of small firm buyouts. The market for buyouts is increasingly moving to smaller businesses. Owners and managers of small businesses need to understand how such buyouts can affect their firms and how to maximize the positive aspects of a buyout for their businesses.

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APPENDIX

Reverse Buyout Sample Firms

Sample firm	Buyout year	Principal SIC
A&W Brands	1986	208
Calton Inc.	1985	153
Continental Homes	1985	152
DSP Tech	1984	382
HDR Power Systems	1984	362
ISI Systems	1986	737
MBS Textbook Exchange	1985	594
Southern Electronics	1986	506