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The Extended Merger and Acquisition Process: Understanding the Rôle of IPOs in Corporate Strategy

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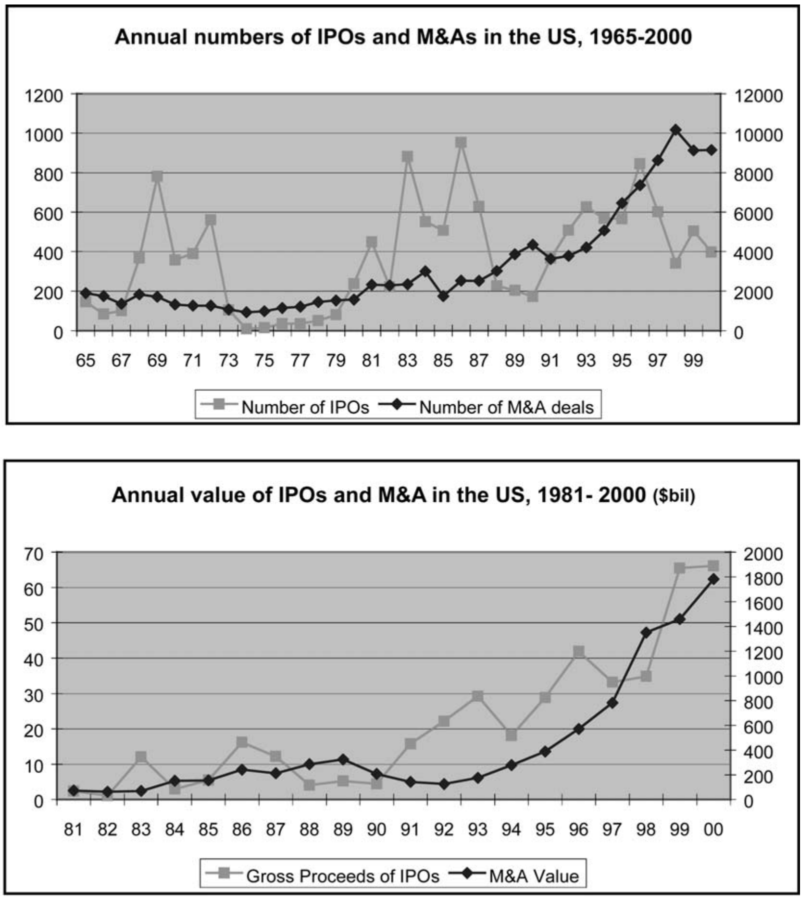
Corporate strategy research has largely ignored initial public offerings. We discuss possible reasons why this is the case and then present evidence suggesting why this may be problematic. In contrast to prior M&A research, we take the perspective of the sell-side and investigate a private firm's decision to sell itself outright versus engage in alliances or undertake an IPO beforehand. We develop the argument that sequential divestiture via IPOs can serve to mitigate *ex ante* transaction costs in the M&A market under two general conditions: (1) when search costs are non-trivial because potential acquirers' understanding of the identity and availability of exchange partners is incomplete, and (2) when information asymmetries pose valuation challenges. Consistent with these arguments, the empirical results of our research suggest that sequential divestiture via IPOs is more likely in industries with spatially-dispersed firms and for firms with significant intangible resources. Investments in strategic alliances are shown to be alternative signaling mechanisms that lessen the effects of asymmetric information accompanying intangible assets. The evidence indicates a place for IPOs on the corporate strategy research agenda as well as a need to understand sell-side processes in M&A. We suggest that IPOs can be seen as part of a more extended M&A process.

Keywords: M&As, Corporate strategy, Initial public offerings, Private firms, Divestitures

Introduction

Both initial public offering (IPO) markets and merger and acquisition (M&A) markets experienced unprecedented surges in the last decade. Figure 1 displays the annual volumes and values of IPOs and M&A activities in the US. During the 1990s, more than 5000 US companies went public, compared with fewer than 3000 firms from the EU and fewer than 1000 Japanese firms. The number is also higher than the 4866 US IPOs in the 1980s, a period which had been characterized as IPO mania. This trend is even more significant for M&A transactions. There were over fifty thousand M&A deals completed in the 1990s, roughly twice as many compared to the 1980s. And the transaction value during the 1990s was more than three times the value during the 1980s.

The going public boom has been attributed to factors as diverse as tax changes, deregulation of investments by institutional and foreign investors, the emergence of entrepreneurial firms and venture capitalists, relaxation of listing requirements, improvements in legal protection of minority shareholders, and, in Latin America, continental Europe and Asia, the advent of large-scale government privatization programs (Jenkinson and Ljungqvist, 2001). Equally significant, more than a dozen different political and economic factors have been suggested to be responsible for creating a business environment leading to the restructuring of corporate assets. These factors include the relaxation of restrictions on mergers imposed by anti-trust authorities, improvements in takeover technology and financing technology, withdrawal of resources from industries that are growing



* Gross (nominal) proceeds of IPOs data exclude IPOs with an offer price of less than $5.00 and overallotment options but include the international tranche, if any.

Source: IPO data are from Jay Ritter, available at http://bear.cba.ufl.edu/ritter/ipoall.htm M&A data are from *Merges and Acquisitions*, which includes data from *The Thomson Financial Securities Data Mergers & Corporate Transactions Database*.

Figure 1 Annual Volume and Value of IPOs and M&As in the US

more slowly or that must shrink, and, notably, deregulation in the financial services, gas, transportation, broadcasting, and telecommunications sectors (e.g., Andrade *et al.*, 2001). However, despite the increasing importance of IPO and M&A activities and the concurrence of IPOs proceeds and M&A values (the correlation is as high as 0.87 over the past two decades), little research has examined the interplay between these two markets.

Viewing IPO and M&A markets in a separable fashion may reflect a conventional view that IPO markets and the market for corporate control are largely independent. Specifically, it is often assumed that going public is mainly undertaken as a purely financial choice or the natural outcome of an entrepreneurial firm's efforts to develop a new business. Under traditional finance theory, IPOs might be assessed based on the tradeoffs between the benefits arising from relaxing an owner-manager's liquidity constraints and the costs associated with the agency hazards stemming from the separation of ownership and control in corporations (Jensen and Meckling, 1976). Although such an agency theory perspective has also inspired theories accounting for M&A activities based on conflicts of shareholders and managers over the payout of free cash flow (Jensen, 1986), the link between the decision to go public and subsequent divestiture activities has largely been ignored.

However, recent descriptive findings indicate that IPOs are often part of a larger process of transferring control rights in organizations. For instance, in newly-public Italian firms the controlling stake is sold to an outsider 13.6 per cent of the time, which is roughly twice the rate for the Italian economy in general (Pagano *et al.*, 1998). Not only are control changes more likely to happen for IPO firms than private firms, but newly-public firms also experience a greater rate of acquisition than established public firms (Field and Mulherin, 1999). Practitioner accounts of merger and acquisition patterns suggest that a firm can use an IPO as a way of 'teeing up' a company for sale, or as a first step in a sequential divestiture strategy (Rock, 1994). Taken together, these results suggest that IPO markets and M&A markets are not independent as often assumed, and that the transfer of ownership rights via IPOs also can have implications for subsequent reassignments of control rights in organizations.

In this paper we consider private firms' decisions to undertake an IPO prior to divestiture rather than undergo an outright sale. We propose that firms may use initial public offerings prior to divestiture for at least two reasons: (1) to increase the visibility of the firm for potential acquirers, and (2) to mitigate valuation challenges or the effects of these problems. As stated in a recent Wall Street Journal article's title, 'IPOs are more than fundraisers' (10 June 2002). For example, software and IT firms have recently gone public to gain attention and to enhance their credibility among customers. Plumtree Software recently went public 'to provide increased visibility and credibility in the marketplace,' and Veridian's CEO commented that a key benefit of its offering was 'the awareness that comes from being public.' We develop the argument that, to the extent that the process of going public credibly reveals information on the value of the firm, the IPO market can also enhance the efficiency of the M&A market.

For practitioners who engage in IPOs and M&A activities, our paper and results have the following four specific implications:

1. Firms need to consider IPOs as more than financing choices. IPOs can serve as instruments for strategic purposes rather than simply sources of external financing. In other words, IPOs are often means rather than ends, strategic actions that affect the long-term evolution of a firm rather than only financial decisions.
2. For a seller that has difficulty in locating potential buyers, there is value in considering IPOs as a means to increase its visibility. Conducting road shows, tapping into investment bankers' networks, and listing on an exchange can enhance a firm's publicity and attract the attention of a wider set of potential buyers.
3. A private firm that has difficulty in conveying its quality to potential buyers should consider an IPO as a means of dealing with information asymmetry between the seller and would-be buyers. By going public, a company can signal its value in a number of ways, such as by bearing a number of direct and indirect costs as well as by leveraging investment banks' reputations through underwriting relationships.
4. Strategic alliances represent an alternative means of signaling value and contending with information asymmetries in negotiations. Firms that have intangible assets, yet have engaged in collaborative relationships, may be able to sell the firm outright and may see less need to go public prior to divestiture than firms that have not forged strategic alliances.

The remainder of the paper is organized as follows. In the next section, we explore some of the factors influencing the adoption of a sequential divestiture strategy. We discuss under what conditions IPOs may partially alleviate search and valuation problems, which are ubiquitous in M&A deals for private firms. The next section provides an overview of some of our findings on the determinants of a sequential divestiture strategy. A concluding section provides some implications of our work and offers some initial thoughts on how companies can consider and use IPOs as strategic tools.

Sequential Divestiture through Initial Public Offerings

The basic question behind the sequential divestiture strategy is why private firms would incur the costs of using IPOs as part of a sequential divestiture process rather than just selling the firm outright. In fact, research on the costs of going public reports that IPO-related expenses can be substantial. Direct costs of going public include underwriting fees, legal and accounting expenses, and auditing charges. Ritter (1987) finds that registration and underwriting costs alone represent 14 per cent of proceeds on average. Furthermore, the indirect costs associated with underpricing, or the positive abnormal returns in early trading that represent wealth transfers from existing to new shareholders, are approximately 10–15 per cent on average (Ibbotson *et al*., 1988). Such costs attending the use of a sequential divestiture strategy may be justified, however, by the high transaction costs that would otherwise arise from search problems and information asymmetries in the M&A market.

For most firms that intend to undertake divestiture or acquisition activities, the first step is to set up a search-and-screen program in order to identify possible exchange partners. Although several information sources are available such as independent research companies, websites and reference books, it is not uncommon to take a minimum of six months but find only a handful of highly uncertain candidates (Reed and Lajoux, 1999). Searching for potential exchange partners is costly, and this is why there is an incentive for exchange parties to prefer localized transactions. A sequential divestiture strategy using an IPO may therefore become attractive relative to an outright sale when firms in the industry are geographically dispersed and the IPO can serve to raise the profile of the firm.

Going public can increase the visibility of the firm in a number of ways. Prior to the IPO event, for instance, the firm engages in an intensive marketing effort lasting several months. During so-called road shows and subsequent registrations and offerings, firms not only present themselves to the investment community and attract media attention, they also tap indirectly into underwriters' business relationships.

Even if the search process for acquisition candidates does not lead to inefficiencies in the acquisition market, *ex ante* transaction costs may still arise due to the challenges potential buyers face valuing the firm. In other words, potential buyers may have solved the problem of identifying possible acquisition candidates, but they still need to evaluate these firms with respect to their quality and opportunities for creating value.

Suppose a seller has private information as to its value, yet it is unable to credibly convey its true worth to potential buyers. It follows that buyers' offers will reflect the possibility that the seller will misrepresent its value and that the buyer may end up with an acquisition of lower quality. The discounting of offers in light of this quality uncertainty means that the highest quality firms may be withheld from acquirers (e.g., Akerlof, 1970). In the absence of signals to differentiate high and low quality firms or in the absence of remedies such as warranties or trust, the market may be subject to inefficiencies due to more extensive negotiations and information gathering, which contribute to a lower level of acquisitions in the aggregate.

High-tech firms and those with substantial intangible assets are most likely to be subject to information asymmetry problems. High-tech companies often involve high risks and substantial intangible resources that make traditional book value-based or asset-based valuation methods problematic in appraising these companies. Regulatory approvals and intellectual property rights such as patents and trade secrets are apt to be more important in appraising the value of such firms. By contrast, for firms with undifferentiated physical assets, sellers may be able to convey their value with relative ease, and costs involved in negotiating a deal will tend to be comparatively low.

The process of going public can be responsive to valuation problems and can deal with the underlying information asymmetries in two ways. First, going public can reduce information asymmetries directly. For instance, firms going public face new information disclosure requirements for registration and subsequent listing, and the equity market places a price on the firm. The aggregated information and collective judgment of investors may help buyers calibrate their bids. Second, IPOs can signal that the firm is more apt to be a higher-quality company since such firms will tend to be better able to bear the direct costs of underwriting fees, legal and accounting expenses, and auditing charges as well as the indirect costs of underpricing. Finally, investment banks and other institutions involved in the IPO process can certify the quality of participating firms.

Strategic alliances are an alternative form of organizational investment discussed in the literature on external corporate development that are thought to redress adverse selection in the market for firm resources. Alliances permit firms to pool together resources that are difficult to value on a piecemeal basis, avoid the transfer of ownership rights and a terminal sale, can be terminated at lower exit cost, and afford opportunities for first-hand experience with the resources in question (e.g., Reuer and Koza, 2000). Under the assumption that taking on alliance partners will be more difficult for lower quality firms, alliance investments may provide signals that help potential buyers differentiate attractive and unattractive targets.

The Evidence Examined

In order to understand to what extent search and valuation considerations influence firms' propensities to undertake an IPO prior to divestiture, we collected data from the Securities Data Corporation database to obtain a sample of private firms in the US manufacturing sector that were acquired by firms during the time period 1996–1999. Additional details on sampling, data, and measurement are available from the authors. We found that the propensity of private firms to use an IPO prior to their sale averages 4.8 per cent and ranges from 0 to 25 per cent for the industries considered. For the industries with more than one hundred transactions, the propensity to use initial public offerings prior to divestitures is above average in the following industries: chemicals and allied products; measuring, analyzing, and controlling instruments; and electronic and electrical equipment.

Spatial Dispersion

Figure 2 displays the effects of search problems on the propensity of private firms to go public prior to divestiture. We use a measure of the spatial dispersion of firms in an industry as a proxy for measuring search costs in the acquisition market, where spatial dispersion is calculated as one minus the sum of the squared proportions of the industry's firms in a State. The larger the value of spatial dispersion, the more geographically scattered are the firms in the industry. Consistent with our arguments, the figure shows that IPOs are more likely to precede acquisitions by other firms in industries that are characterized by a greater spatial dispersion of firms.

High-tech Companies and Intangible Assets

We used high-tech indicators and R&D intensity to approximate the degree of information asymmetries based on the target firm's resources. Figure 3 graphically depicts how the divestiture strategies differ across high-tech and more traditional companies. Consistent with predictions, high-tech companies are more likely to use a sequential divestiture strategy, whereas more traditional firms are apt to divest outright instead. Figure 4 suggests that the tendency of firms to use IPOs prior to divestiture is greater in industries that are R&D intensive. For firms with fewer intangibles, outright divestiture is more efficient and avoids the direct and indirect costs associated with going public. In multivariate analyses not reported here, we found that firms' investments in alliances interacted with proxies for intangibles. Specifically, firms that had intangible assets and also used alliances were less likely to divest sequentially via IPOs, whereas firms with significant intangibles were prone to use an IPO prior to divestiture when they had not previously engaged in collaborative agreements.

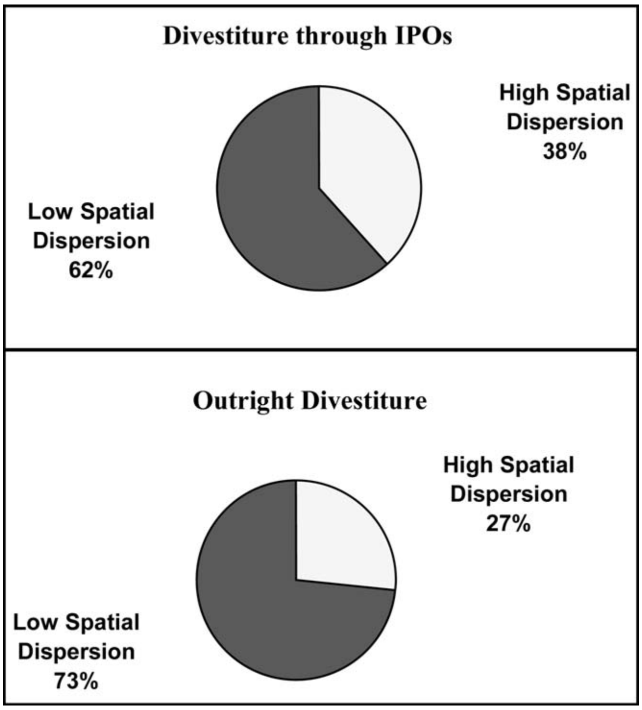


Figure 2 Spatial Dispersion and Divestiture Strategy

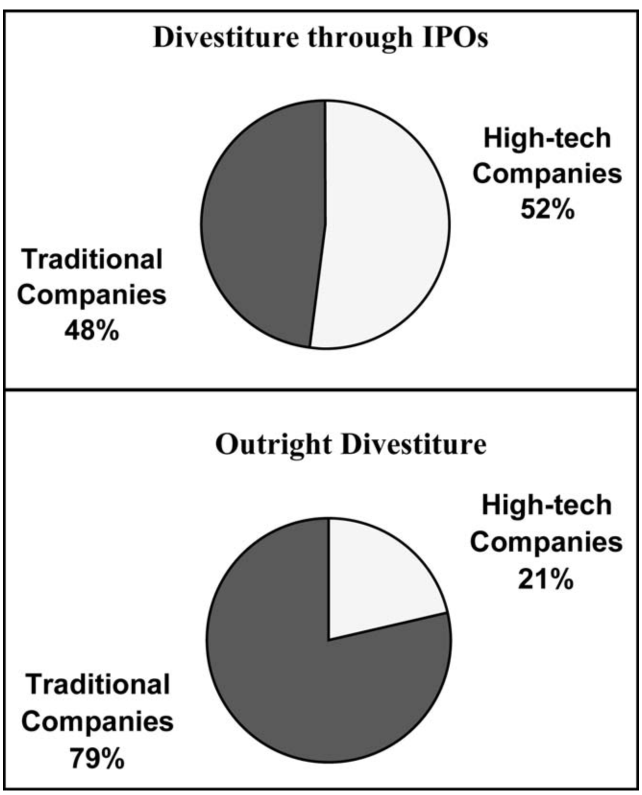


Figure 3 High-tech Companies and Divestiture Strategy

Understanding the Role of IPOs in Corporate Strategy

The study has several implications for strategy scholars and for practitioners who conduct divestiture and IPO activities. Our starting point is that prior thinking and writing on corporate strategy has largely ignored IPOs. Yet our arguments and evidence highlight the relevance of considering IPOs within a more extended process of strategic decision-making in general, and M&A activity in particular, rather than as natural end states addressing purely financial objectives. On the broadest level, our research suggests that our understanding of the operation of M&A markets will be enhanced by taking into account the decision to go public.

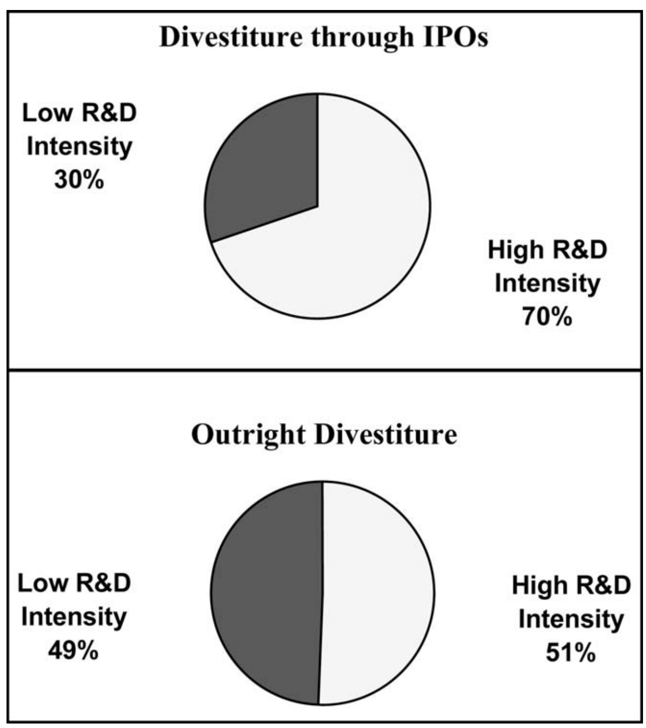


Figure 4 R&D Intensity and Divestiture Strategy

Taking Going Public Seriously

Going public is not only a financial decision but also a strategic choice. There is value in considering IPOs in a comparative institutional light given the importance of better understanding the decision by firms to go public rather than only attending to the costs and benefits of going public or the relative merits of private and public financing (Pagano *et al*., 1998). Despite the relative neglect of IPOs in corporate strategy, emerging evidence on the propensity of newly-public firms to be acquired and our findings on the tradeoffs between sequential divestiture through IPOs and outright divestiture lead us to conclude that there is more scope for research on IPOs using other, interdisciplinary perspectives. The results also indicate that more attention to the sell-side of M&A transactions as well as the role played by IPOs is warranted in governance research.

Taking Private Companies Seriously

On the other hand, private companies have also been neglected in previous M&A empirical studies. Until very recently, research into M&As has largely ignored privately-held companies, focusing instead on their public counterparts. Throughout the past two decades, the major concern has been to understand how different M&A motives influence firm performance (e.g., Andrade *et al*., 2001). As a result, the M&A literature tends to use datasets that sample public companies, and this work implicitly assumes that conclusions drawn from large, public companies apply equally well to small, private ones. However, given the substantial qualitative differences between public and private companies highlighted here, the validity of this assumption may be problematic. Future studies might consider examining whether key results and implications differ across public and private targets.

Implications for Sellers and Buyers in Acquisition Markets

The results also generate several implications for practitioners involved in corporate acquisitions. For corporate sellers and buyers, the results suggest that IPOs may mitigate inefficiencies in the acquisitions market in two ways. First, IPOs can reduce *ex ante* transaction costs attending acquisitions by raising the visibility of firms and thereby reducing search costs. We find that private firms embedded in industries that are spatially dispersed tend to use sequential divestitures through IPOs rather than outright sales. Decision-makers in privately-held firms might benefit from incorporating such a strategic view into the decision to go public.

Second, we suggested that IPOs may be responsive to adverse selection problems in the acquisitions market by reducing asymmetric information directly through the process of going public or by sending signals concerning the quality of the firm. If IPOs serve to reduce adverse selection problems, then high-tech firms or firms with more intangibles should find sequential divestiture attractive due to the valuation challenges would-be buyers face. However, we also emphasized that firms' investments in alliances may reduce information asymmetries or provide signals of firm quality, and the results show that alliances lessen the impact of intangibles on the decision to divest sequentially rather than use a direct sale. Taken together, these results suggest that firms facing difficulties in credibly signaling their quality to potential buyers can consider using IPOs as a means to reveal important information in a credible way.

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