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Institutional trading, information production, and the choice between spin-offs, carve-outs, and tracking stock issues

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ABSTRACT

We analyze a firm's choice between spin-offs, equity carve-outs, and tracking stock issues and the role of institutional investors in corporate restructuring. We model a firm with two divisions. Insiders have private information about firm value and face an equity market with retail and institutional investors. We show that restructuring increases information production by institutional investors (relative to that about the consolidated firm): the highest increase in information production arises from spin-offs, the next highest from carve-outs, and the lowest from tracking stock issues. Insiders with the most favorable private information implement spin-offs; those with less favorable private information implement carve-outs; those with even less favorable private information implement tracking stock issues; and those with unfavorable private information remain consolidated. We explain the positive announcement effect and increase in analyst coverage associated with all three forms of restructuring. Our model also generates a number of novel testable predictions for firms' choice between spin-offs, carve-outs, and tracking stock issues, and for institutional trading around these three forms of restructuring.

1. Introduction

The pace of corporate restructuring, especially spin-offs and carve-outs, has accelerated recently. At least part of this acceleration seems to be driven by the views of firms' managers and institutional investors that spin-offs and carve-outs (as well as other forms of restructuring) help to "unlock hidden value" by correcting the undervaluation of various parts of a conglomerate firm.[1] Institutional investors seem to have a particular preference for "pure-play" firms (where all projects of the firm are in related industries) rather than conglomerate firms (where different divisions operate in unrelated industries), which seem to be reflected

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[1] Firms often explicitly state that their motive for restructurings is to help analysts and investors better understand their businesses. To quote a *Wall Street Journal* (September 21, 1995) report on AT&T's decision to spin off Lucent Technologies Inc. and NCR Corp.: "The market value of AT&T was being buried," Mr. Allen said. "Investors couldn't understand the strategy of the combined company." Under the new setup, AT&T will be the biggest pure play in telecommunications. "Investors will clearly understand it now," the chairman said..." Another article from the *Wall Street Journal* (December 7, 1992) expresses similar views on Adolph Coors Co.'s spin-off decision: "Adolph Coors Co., in a filing with the SEC, said it was spinning off its ceramics, aluminum, and packaging businesses to make it easier for analysts and investors to evaluate the separate businesses of Coors Brewing Co. and the 'technology,' or nonbeer companies..."

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in their lower valuation of conglomerate firms (the "diversification discount").[2] While the stated argument that spin-offs, carve-outs, and other forms of restructuring help unlock hidden value is well known among practitioners and empirical researchers, the precise mechanism through which this occurs has been controversial in the literature. The objective of this paper is to develop a theoretical analysis explicitly studying the role of institutional investors in corporate spin-offs, carve-outs, and tracking stock issues and analyze a firm's choice between these three forms of restructuring.[3]

A number of other rationales have been advanced for corporate spin-offs (e.g., Parrino, 1997; Aron, 1991; Nanda and Narayanan, 1999; Chemmanur and Yan, 2004) in the literature. However, theoretical analyses of other forms of restructuring such as carve-outs or tracking stock issues are extremely rare, and the analyses that do exist focus on the fact that carve-outs raise external financing, treating carve-outs as essentially spin-offs where one of the spun-off firms sells equity to outsiders. In practice, however, many firms explicitly consider the alternative forms of restructuring such as spin-offs, carve-outs, or tracking stock issues, and choose among these alternatives based on the costs and benefits of these restructuring mechanisms for shareholder value. Despite this, there has been no theoretical analysis so far in the literature regarding a firm's choice between the aforementioned three mechanisms from the point of view of maximizing shareholder value, and our objective in this paper is to develop such an analysis.

Our theory is based on the insight that all three forms of restructuring, namely, spin-offs, carve-outs, and tracking stock issues, result in an increase in the extent of information production by institutional investors (and affiliated analysts) about the firm. This increase in information production arises due to two reasons. First, by dividing consolidated firms into less complex units with their own financial reports certified by outside auditors, they reduce outside investors' information production cost for various divisions of a firm; this "direct reduction in institutional investors' information production cost" effect may be different across different forms of restructuring, as we argue later.[4] Second, since different investors may have expertise in producing information about some parts of the firm but not about others, the aforementioned forms of restructuring allow them to concentrate their investment in those parts of the conglomerate firm about which they have an advantage in producing information, thereby increasing their expected profits from information production (and therefore their incentive to produce information). This second "specialization in information production" effect is likely to be similar across the three forms of restructuring, since all of the restructuring forms allow investors to focus their equity investments on those parts of the firm regarding which they have an informational advantage. The two effects of the three forms of restructuring on outsiders' incentives to produce information about the firm, and the differences in the synergy loss incurred by the firm across spin-offs, carve-outs, and tracking stock issues are the important driving factors behind a firm's choice of restructuring mechanism in our model.

We develop a model where the firm makes a choice between three restructuring mechanisms (spin-offs, carve-outs, and tracking stock issues), or remaining consolidated. The firm has two divisions: division 1 and division 2. We consider a setting with a continuum of firm types in which a consolidated firm may realize a high or a low long-run cash flow with the probability of the high cash flow realization ("firm type") private information to firm insiders, with outside investors knowing only the probability distribution across types. The equity market consists of institutional investors, who may produce information about the cash flow of the two divisions of the firm by incurring a certain cost, and retail investors, who have no such ability to produce information. Institutional investors are of two types: those with a comparative advantage (low cost) for producing information about division 1, and those with a comparative advantage (low cost) for producing information about division 2.

We focus on the following important difference between spin-offs, carve-outs, and tracking stock issues. A spin-off represents a clean break-up between parent and subsidiary, resulting in two independent firms after the spin-off. In contrast, only a minority interest in a carved-out firm is held by outsiders, with the parent company maintaining the majority interest in the firm subsequent to the carve-out. Further, in many cases, the parent and subsidiary firm share many top corporate officers. Tracking stocks are shares of the parent company, but their cash flows are tied to the performance of a particular subsidiary which they "track." In particular, in the case of tracking stock issues, parent and subsidiary have the same management team and board of directors. This ongoing connection between parent and subsidiary after carve-outs and tracking stock issues has both positive and negative consequences. On the one hand, the ongoing connection makes it easier to maintain synergies existing before the restructuring. On the other hand, the fact that there is no clean break-up between parent and subsidiary makes it harder for outsiders to evaluate the two firms resulting from a restructuring (relative to the case where the two firms are cleanly separated, as in a spin-off). We capture these two differences by assuming that the reduction in institutional investors' information

[2] The important role played by institutional investors in corporate spin-offs is reflected in the following quote from an article in the *Financial Times* (October 28, 2005): "The new backlash against conglomerates suggests that a more lasting shift in investor preferences may be taking place, driven in part by the growing influence of hedge funds and private equity houses. In public equity markets, big rarely has appeared less beautiful. In the U.S., the most visible sign of this is the break-up of companies such as Cendant, the sprawling leisure group behind Avis rental cars; and Orbitz travel website, which this week announced a four-way demerger to try to lift its flagging share price. It follows a similar decision by Barry Diller's InterActive Corporation to spin-off its Expedia travel site, and the breaking apart of Viacom, the media empire that owns CBS television network."

[3] Tracking stock, also called targeted stock, letter stock, or alphabet stock, is equity ownership in one division of a diversified firm. An equity carve-out is the sale of a portion of a wholly-owned subsidiary's common stock to the public. A corporate spin-off is a pro-rata distribution of a subsidiary's shares to the firm's shareholders. For the differences between the three types of restructuring, see, e.g., Chemmanur and Paeglis (2001).

[4] Empirical researchers have observed and documented the improved dissemination of information about the different divisions of a firm following various forms of restructuring. For example, Schipper and Smith (1986) point out that, in the case of carve-outs, "the dissemination of information about the subsidiary's financial position and performance may be increased through subsidiary financial reports and additional private search for information" (p155). They also document that 14 of 59 firms conducting carve-outs in their sample state that their motive is to "improve investor understanding of subsidiary" (Table 8). D'Souza and Jacob (2000) notice that "Targeted stock issuances might nevertheless represent good news from an information perspective because of the comprehensive financial statements that firms must provide for each targeted stock segment" (p461).