Value creation and risk in spin-offs

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Abstract

In this thesis I analyze the value creation and risk in spin-offs, and examine whether changes in systematic risk may additionally explain abnormal shareholder gains. Unlike the increase in corporate focus, the mitigation of information asymmetry problems is found to be a key value driver in spin-offs. Moreover, I find a significant decrease in both equity and asset risk of the parent company for non-focus-increasing spin-offs, but none for focus-increasing spin-offs. Thus, non-focus-increasing spin-offs are an appropriate instrument to free the company from segments with higher risk profiles. However, the reduction in equity risk is not beneficial to shareholders around spin-off announcements.

Executive summary

Theory and hypothesis

Prior literature documents positive abnormal stock returns around spin-off announcements. Schipper and Smith (1983), for example, find significant two-day abnormal returns of 2.84%. Krishnaswami and Subramaniam (1999) report positive excess returns of 3.15% in the (-1,0) window. In addition, academic researchers find significant differences in abnormal returns, depending on whether the parent spins off an unrelated segment (focus-increasing spin-off), or a related segment (non-focus-increasing spin-off) (e.g., Daley, Mehrotra, and Sivakumar (1997) and Desai and Jain (1999) and Veld and Merkoulova (2004)). For instance, Daley, Mehrotra, and Sivakumar (1997) document significant announcement-period excess returns of 4.3% for focus-increasing spin-offs, whereas non-focus-increasing spin-offs are not found to generate significant abnormal returns. The systematically higher abnormal returns in focus-increasing spin-offs are stated to arise from the reduction in complexity, the concentration on core competencies or the elimination of negative synergies.

Besides the increase in corporate focus, the reduction of information asymmetries, of tax burden and of regulatory obstacles, the wealth transfer from bondholders to shareholders, the relative spin-off size and the elimination of the diversification discount are commonly cited in the literature as spin-off value drivers.

D'Mello, Krishnaswami, and Larkin (2004) provide an additional, risk-related argument. They argue that most of the above mentioned drivers primarily yield an improvement in future cash flows. However, as the value of the equity may be seen as the present value of future cash flows divided by the required return on equity, changes in the equity value might also result from changes in the required return on equity (D'Mello, Krishnaswami, and Larkin (2004)). Following the spin-off completion, the subsidiary to be spun off becomes a separate publicly traded company. Hence, whilst the pre-spin-off firm comprises both the parent and the subsidiary, the respective post-spin-off company consists of the parent only. Therefore, the systematic risk of the combined/parent firm is expected to change through the spin-off. Accordingly, the required return on equity is likely to alter too. Thus, changes in the systematic risk of the firms engaging in spin-offs might be a further factor influencing shareholder value in spin-offs.

Methodology

To analyze the value creation and risk in spin-offs, a sample of 116 completed US spin-offs announced between 1990 and 2009 is used. The value creation around spin-off announcements is estimated using the event study methodology as described by MacKinlay (1997). Applying both univariate and multivariate analysis, three main sources of shareholder gains commonly cited in the literature are tested subsequently: (i) increase in corporate focus, (ii) reduction of information asymmetry, and (iii) relative spin-off size.

In addition, the systematic risk of companies engaging in spin-offs is analyzed. There, I particularly focus on the change in systematic risk of the combined/parent firm through the spin-off, as well as on systematic risk differences between the parent and the former subsidiary, following the spin-off completion. The equity risks of the combined firm, of the parent company (post-spin-off) and of the subsidiary are estimated using the capital asset pricing model (CAPM) of Sharpe (1964) and Lintner (1965). Asset betas are derived following Mohr (1985).

Finally, the risk-related variables are included in the multiple regression models in order to see whether they might further explain abnormal shareholder gains around spin-off announcements.

Results

Similar to earlier studies, I find significantly positive abnormal returns around spin-off announcements. In the (-1,0) window, spin-off announcements are associated with a mean (median) cummulative abnormal return of 2.49% (1.60%). In contrast to prior literature, no significant differences are found between focus-increasing and non-focus-increasing spin-offs. Hence, the overall positive excess returns do not exclusively stem from focus-increasing spin-offs in my sample. In contrast to the increase in corporate focus, the reduction of information asymmetry is found to be significantly and positively related to abnormal shareholder gains. Furthermore, information asymmetries are found to decrease significantly in spin-offs of firms with high information asymmetry levels. Relative spin-off size has no significant impact on shareholder gains.

Overall, neither the equity risk nor the asset risk of the combined/parent firm changes significantly in spin-offs. However, there are systematic differences between the focus-increasing and non-focus-increasing sub-sample. In focus-increasing spin-offs, the systematic risk does not change significantly. On the other hand, firms spinning off related segments are able to decrease their systematic risk significantly. Furthermore, such firms spin off considerably riskier business segments.

Changes in the risk profile of the combined/parent company through a spin-off are found to be significantly related to announcement-period excess returns. However, in contrast to my expectations, I find the change in equity risk to be positively related to abnormal returns, suggesting that the higher the reduction in equity risk, the lower the abnormal shareholder gains.

Conclusion

Whether a company spins off a related or an unrelated business segment has no significant impact on shareholder gains around spin-off announcements. On the contrary, my results suggest that the mitigation of information asymmetry problems is a key value driver in spin-offs.

Whilst focus-increasing spin-offs may allow firms to concentrate on their core competencies, non-focus-increasing spin-offs appear to be an appropriate instrument to free the firm from segments with higher risk profiles, and thereby reduce the systematic risk of the parent.

However, the reduction in equity risk, and the associated reduction in the required return on equity, is not beneficial to shareholders around the spin-off announcement.