Abstract

This thesis empirically analyses how merging companies change their capital structure and thus financial leverage in the time around a transaction. Quarterly findings indicate that companies incrementally increase their leverage rather than go through a sudden change. Further results show that this observation holds true for various approaches of leverage with book and market values of equity. In addition, the influence of macroeconomic shocks on the market value of equity as used in most definitions of financial leverage is discussed. There is evidence that such shocks can significantly impact financial leverage ratios in the short run.

Executive summary

Hypothesis

Activities in the mergers and acquisitions sector are closely linked to the credit market. Most market participants, financial and strategic investors (buyers), at least partially finance transactions with debt. Thus, common sense demands the assumption that a merger is accompanied with an increase in financial leverage of the merging firm. This phenomenon was empirically proved by Ghosh and Jain (2010) by analysing carried out mergers in the years 1978 to 1987.

The last twelve years however can be characterised by severe macroeconomic shocks like the subprime crisis or the dot-com bubble. On the one hand, it is unclear which effect those shocks have had on financial leverage of firms particularly in the time of a merger. On the other hand, it is just as uncertain whether results by Ghosh and Jain can be applied to current data without any problems.

Methodology

This thesis replicates and develops parts of the research conducted by Ghosh and Jain (2010) with the most current data. With a bottom-up approach, deals from every quarter from Q1 in 2004 to Q4 in 2009 are analysed. By using data from the Center for Research in Security Prices and from Compustat five different ratios of financial leverage are computed for deals in each quarter using both, market values and book values of equity. Afterwards all four quarters of each year are aggregated to an annual mean and median financial leverage. Finally, those annual data will be combined to result in an overall observation of financial leverage around mergers in the years 2004 to 2009.

In order to make the results presented in this thesis comparable to the findings of Ghosh and Jain, the numbers have to be adjusted to effects of several macroeconomic shocks. For this, a qualitative approach is chosen which explains irregularities in the annual results.

Results and conclusion

The results of this research partly support the observations of Ghosh and Jain. While a significant increase in financial leverage directly around the merger can be noticed, Ghosh and Jain found a rather constant financial leverage after the initial increase. My research showed that even though the initial raise took place, the leverage ratios still continued to increase in the following quarters following an incremental course.

Generally speaking this result holds true for alle examined definitions of financial leverage regardless of the composition. Market leverage proved to be quite volatile while book leverage was higher in absolute numbers and less volatile. Short-term leverage did not change much over time, neather before nor after the merger while long-term leverage did change significantly. A clear sign that companies take up more long-term debt after a merger than they did before.

Analysing annual data, certain irregularities can be observed which are triggered by macroeconomic shocks. For the year 2004, the aftermath of the dot-com bubble impacted the results noticably. The years 2007 to 2009 were obviously affected by the subprime crisis and the subsequent credit crunch. Overall on an aggregated level however, those shocks canceled each other out so that the overall results are not likely to diverge from this research.