Executive Summary

This thesis addresses the effect of a potential financial distress situation on company valuation based on a sample company. While opinions on this matter are diverse, it seems to be common practice to disregard the effect of financial distress completely when performing company valuations. The author of this thesis examines the effect of financial distress on valuation and thereby evaluates whether this practice is justifiable in the current corporate finance setting. In a first step the theoretical background of the financial distress theory is outlined and possible methods as well as challenges for the valuation of the costs of financial distress are discussed. Specifically two financial models, one from Andrade and Kaplan (1998) and another one from Almeida and Philippon (2007) are explained in more detail and evaluated. In an empirical section the two models are applied on a sample company using current data.

In order to quantify the effect of a potential financial distress situation on valuation, the company value without specifically including financial distress is compared with the value of the company using a valuation technique that is adjusted for financial distress. For a more accurate company value adjusted for distress, the costs of financial distress need to be derived in the first place. These are found using the two models of Andrade and Kaplan (1998) and Almeida and Philippon (2007) that are discussed in the theoretical section of this paper. Andrade and Kaplan's (1998) model is used in order to obtain the potential costs of financial distress based on previous bankruptcies. A net present value of these costs is then derived with Almeida and Philippon's (2007) model. Using the adjusted present value formula the net present value of the costs of financial distress is then incorporated into the company valuation. The effects of financial distress can now be evaluated by observing the company value without distress adjustment and the company value adjusted for financial distress.

This approach is applied to a sample company in the empirical section. Mettler Toledo, a multinational industrial manufacturer, has been identified as an ideal sample company due to its unique situation. First the adjusted present value method was used to value Mettler Toledo without financial distress costs. Then the costs of financial distress were estimated using Andrade and Kaplan's (1998) approach based on data of previous bankruptcies from 2000 to 2009. In order to derive the net present value of costs of financial distress of Mettler Toledo, Almeida and Philippon's (2007) model was applied using bond yield spreads from 2002 to 2012 as input data. All relevant data is obtained from Bloomberg. The net present value of the costs of financial distress is then subtracted from the adjusted present value and a final company value of Mettler Toledo incorporating costs of financial distress is found. This value is then compared to the adjusted present value without costs of financial distress.

The results reveal that the company value adjusted for financial distress is considerably smaller than the value found with traditional valuation techniques. Furthermore the costs of financial distress are estimated to significantly outweigh the tax benefits of the interest tax shield. It also becomes apparent that including costs of financial distress adds substantial information for a more accurate valuation. Expanding on the research topic the author of this thesis also proposes an opinion of when to include costs of financial distress into company valuation as well as the merits and disadvantages of doing so. Due to the fact that the financial distress adjustment is time consuming and potentially costly, the author, therefore, suggests using this type of valuation prominently for complex tasks and for companies that have a significant probability of financial distress.