Executive Summary

In this thesis, I examine the dynamics and levels of technology company valuations.

Reviewing existing literature, I explore the possible reasons for increased M&A deal activity and deal sizes (KPMG Enterprise, 2017; White, 2017) within the technology sector (Keienburg, Kengelbach, Mehring, Schmid, & Sievers, 2016). Ultimately, this thesis posits that this could be the influence of landmark deals in this area (Rauch & Zörgiebel, 2016) - and thus attempts to explain the marked differences in valuation of the technology sector, versus broader sectors. Broadly summarised, authors are looking at value indicators in three different categories: accounting data, web measures and qualitative data. Accounting data includes conventional models like earnings and sales, but also considers R&D investments, marketing expenses, and dividends as well as book values. For web measures, authors study the value implications of unique visitors for a web page. Qualitative parameters include managerial actions taken and communications between companies and shareholders.

To evaluate the findings of the previous literature on accounting data, I look at quarterly data for the S&P 100 index from the years 2012 – 2016 which I extracted from Thomson Reuters. I develop a model to determine valuation influence of eleven financial variables. As the first step in this model, I regress share prices on KPIs for sales, earnings, EBIT, EBITDA, R&D, book value and dividends while controlling for sector effects. In a second step, I leave out the control variables and calculate the regression for each of the defined eleven sectors (see Table 3). Also, I take average values for the KPIs into the examinations to discover possible differences across sectors which could indicate variations in valuation dynamics (e.g. generally higher P/E ratios or lower dividend payments for the IT sector).

The results of my empirical tests combined with sector averages show that company valuations in the IT sector are not generally higher than in other industries. While a remarkably high average EV/EBIT multiple in the Information Technology sector could create the impression, other multiples contradict this. Also from the first part of my model, I cannot observe a stronger positive effect of the IT sector control variable on share prices than for those of other sectors.

Further, my findings show only little differences in the value implications of the studied KPIs. While sales, earnings, operative profits and book value all appear to positively influence share prices as indicated by prior research, none has sufficiently higher coefficient levels for a distinction between sectors. What is surprising, though, is the statistical insignificance of R&D expenses per sales and the negative influence of dividends on share prices. R&D expenses have previously found to be positively correlated with valuations (Lev & Sougiannis, 1996). I argue that the insignificant R&D coefficient is due to high deviations in the observed R&D

investments of technology companies. For the negative dividends influence, I introduce the idea that higher dividends could be associated with a lack of investments for future growth.

As for landmark deals, there appear to be some signs in the increasing deal sizes in private and public equity transactions that high valuations escalate one another to greater heights (White, 2017). However, I do not find generally higher valuation levels for TCs. Therefore, I cannot confirm an influence of landmark deals.

I close by suggesting further research into the relations of R&D expenses and dividends to technology companies' share prices as well as the practical use of the real options model as a proven valuation method.