

FACTORS INFLUENCING THE GOING PRIVATE DECISION - A HAZARD MODEL APPROACH

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Abstract

The aim of this paper is to characterize companies which voluntarily changed their ownership from public to private. The research question addressed in this paper is, if it is possible to characterize going private companies in earlier stages than just shortly before the announcement of their step into privacy. I therefore examine going private companies in a lifecycle context with Cox hazard model and conduct additional logistic regressions at the time of the IPO and shortly before delisting. Further, I not only focus on companies' fundamentals, but also on perceptibility and corporate governance variables. With data of 1'184 US IPOs from 1990 to 2013, my results show that both, perceptibility and corporate governance variables accelerate the going private decision.

Keywords: Going Private, Voluntary Delisting, Corporate Lifecycle

1. INTRODUCTION

While observing the life of a company, after a couple of successful years, it becomes obvious that often financial capital is needed in order to grow further. Having reached an adequate size, companies may put trust in a going public step¹⁵ to achieve such a growth goal. After the generated capital is invested, companies most often stay public. Just few of them decide to leave the public capital market and become private again¹⁶. In other cases, companies are forced to delist, because they don't meet the minimum requirements of a stock exchange any more or go bankrupt¹⁷. Turbulent developments on financial markets and more rigid accounting standards by Sarbanes-Oxley Act of 2002 on the US public capital market make the step into privacy a lucrative choice for public companies¹⁸. As there is not a lot of empirical evidence about this issue and the topic enjoys even additional attention not only from companies' but also from investors' side, it is the motivation of the author to provide further research findings which may supplement the knowledge of researchers and practitioners and ease their decisions. This paper is focusing on factors influencing the voluntary going private decision in a lifecycle context.

Previous research provides different insights about the going private phenomenon. Researchers found evidence for abnormal returns, which can be earned by investors at the time of the announcement

of the going private transaction.¹⁹ Empirical evidence also exists about the bid premiums paid to shareholders with the aim of accomplishing the transaction.²⁰ In order to simplify the recognition of going private candidates among other public listed companies, researchers further conducted studies characterizing such companies²¹. These studies identify various company fundamental characteristics (e.g. small size, low growth expectations or high free cash flow) as significant factors influencing the going private decision shortly before the announcement of their step into privacy.

The research question, as seen by the author, is in the precise characterization of going private candidates as their recognition on the market is valuable for investors. The first question which arises is, if solely company fundamentals explain the going private decision. Recent studies show that good corporate governance has a positive influence on the post-IPO performance²². Firms lacking good corporate governance might therefore suffer in the public capital market and decide to leave it. The influence of corporate governance factors, mainly CEO characteristics, on a going private decision has been proven by Weir and Laing (2002) for the UK public capital market, but not in a lifecycle context.

The second question which arises is, if the time shortly before the announcement of a going private transaction is the only point in time which delivers useable data for the recognition of going private companies. This paper extends the view on the going private phenomenon by analyzing firm characteristics not only in one point in time, but

¹⁵ The going public decision is discussed e.g. by Zingales (1995).

¹⁶ According to Block (2004) about 20-30% of companies decide for a going private following his definition.

¹⁷ Being forced to delist is examined in the literature under the keyword IPO failure.

¹⁸ The influence of Sarbanes-Oxley Act (SOX) on the going private decision was examined by Chaplinsky and Ramchand (2012).

¹⁹ E.g. DeAngelo et al. (1984), Lehn and Poulsen (1989), Denis (1992), Easterwood et al. (1994), Renneboog et al. (2007) or Billett et al. (2010) among others.

²⁰ E.g. DeAngelo et al. (1984), Amihud (1989), Carow and Roden (1997), Weir et al. (2005) or Geranio and Zanotti (2011) among others.

²¹ E.g. Maupin (1987), Lehn and Poulsen (1989), Beck and Stinn (2002), Evans et al. (2005) or Gleason et al. (2007) among others.

²² See Bell et al. (2012); Krishnan et al. (2011).

during the whole public lifecycle of a firm. Based on an analysis of companies' characteristics, next to the point shortly before the announcement of a step into privacy, this paper adds an additional view already at the time of the IPO. Further, this paper uses a hazard model approach in order to provide insights about the length of the public life. Going privates in a lifecycle context have been examined by Mehran and Peristiani (2010), Bharath and Dittmar (2010) and Pour and Lasfer (2013). Supplementary to them, this paper focuses not only mainly on company fundamentals, but also on its perceptibility and corporate governance factors.

2. LITERATURE REVIEW

2.1 Going Private Characteristics

The first study with the aim to characterize going private companies was conducted by Maupin et al. (1984) for the US market. The authors examined cash flow ratios, price-to-book ratio, the dividend yield as well as the concentration of ownership. All tested factors in their study had a significant influence on the going private decision. This study was repeated by Maupin (1987) and extended by two factors, price-to-earnings ratio and the book to initial cost of assets ratio. The results showed that the retested factors of the previous study as well as the two new factors had all a significant influence on the going private decision and therefore may be seen as characteristics of firms deciding to go private. The study of Lehn and Poulsen (1989) was based on the FCF hypothesis of Jensen (1986), which expects companies with large FCF to go private. Also tested were the factors equity, tax payments and sales growth. The FCF hypothesis of Jensen (1986), which is based on the agency theory, could be proven. Another study about going privates was conducted by Kieschnick (1989). His study focused on the US market and the factors examined were e.g. interest expense, growth, FCF or management ownership. His findings were contrary to those of Lehn and Poulsen (1989), as Kieschnick (1989) could not find any evidence for the FCF hypothesis of Jensen (1986). A study focusing on the ownership structure was conducted by Lowenstein (1986). He found evidence for his hypothesis and also showed that companies leaving the public capital market and significantly smaller than those which do not voluntarily decide for a step into privacy.

Loh (1992) focused his study on financial characteristics as possible factors to distinguish from staying public companies. Among others, he tested the profitability of the company, its capital structure, the turnover and FCF. He could confirm the findings of Lehn and Poulsen (1989) and found evidence for the FCF hypothesis. Other factors were not significant for the going private decision. Another study which was examining the FCF hypothesis was conducted by Opler and Titman (1993). The authors could prove that the hypothesis holds by testing Tobin's Q and the FCF level. Companies with a low Tobin's Q and relatively high cash flow, characterized by authors as those with unfavorable investment opportunities, are more likely to leave the public capital market. Other significant factors found by Opler and Titman (1993) were the higher diversification and higher

expectation of financial distress costs²³. The FCF hypothesis formulated by Jensen (1986) remained the base for almost all studies also in the nineties. Carow and Roden (1997) found support for this hypothesis in their paper, testing for the high level of FCF and the low Tobin's Q. Kieschnick (1998) supports the findings of his first study and rejects the findings of Lehn and Poulsen (1989). He neither found evidence for the growth rate nor the level of FCF as significant factors influencing the going private decision. He also found no evidence for the size of the company and the tax payments. Halpern et al. (1999), also examined possible characteristics of going private companies. Consistent with previous findings of Kieschnick (1989 and 1998), no evidence was found for the level of FCF. Significant evidence however was shown for investment expenditures, stock performance and managerial stock ownership. The statistical evidence for managerial stock ownership is consistent with findings of Lowenstein (1986). Gleason et al. (2007) examined a large number of factors as possible characteristics of going private companies like e.g. the small size of the firm, the lower growth prospects, lower profitability, less debt and higher liquidity. All of their findings were similar to the previous research apart of two of their findings. Better growth prospects and greater levels of financial leverage were identified as typical characteristics of going private companies, which represents the opposite of what was expected. In a second step Gleason et al. (2007) focused on the influence of SOX. Their findings showed that companies before the passage of SOX were smaller in size with less earnings predictability. They also had higher growth prospects, liquidity, financial leverage, return to equity ratios as well as a higher potential for financial distress. The study by Boot et al. (2008) analyzed going privates with the focus on investor participation. They found empirical evidence for decreasing share price and increasing volatility as significant characteristics increasing the probability of a going private decision.

Weir et al. (2005) conducted a study for the UK public capital market. Their findings do not support the FCF hypothesis of Jensen (1986). Evidence is found for poor stock market performance, higher board and institutional ownership and poor market valuation. Findings of higher institutional ownership are contrary to the financial visibility hypothesis by Mehran and Peristiani (2010), who focus on the visibility aspect of companies which decide to go private despite being solid competitors to their peers. They adapt the entire public life view and examine with an extended, dynamic hazard model three visibility aspects, analyst coverage, institutional ownership and stock turnover as possible factors explaining the going private decision over the company's public life. Their results show, that firms with declining analyst coverage, falling institutional ownership as well as low stock turnover go more likely private and decide for such a step sooner. The study of Mehran and Peristiani (2010) is the first focusing on the entire public life of companies when explaining the going private step. A study focusing on costs and benefits of being public was conducted by Bharath and Dittmar

²³ Opler and Titman (1993) were testing the expenditures for research and development as an example for financial distress costs.

(2010). Similarly to Mehran and Peristiani (2010), they observe a company during its whole public life. Further, they examine their sample already at the time of the IPO. Pour and Lasfer (2013) analyze voluntary delistings from the London Stock Exchange in a lifecycle context. Their results suggest that firms with high leverage, low growth opportunities, low profitability and low trading volume are more likely to go private. These studies demonstrate that various firm fundamental characteristics describe the difference between going private companies and those which remain public. Few newer studies not only examine those characteristics shortly before the announcement of the transaction, but also during the whole public lifecycle.

2.2 Corporate Governance

Corporate governance with its rules for directing and controlling firms offers a framework for the management to achieve firm's objectives and at the same time not to disregard interests of various stakeholders. The role of corporate governance and its influence on post-IPO performance has already been examined in prior research. Krishnan et al. (2011) found evidence for positively influenced post-IPO firm performance by higher levels of corporate governance. In their research they focused on firm's reputation as a relevant part of corporate governance and showed that reputation offers various stakeholders valuable information for their decisions. Supporting evidence for this finding comes from Bell et al. (2012) who examine effects on IPO performance. Their results also suggest that higher level of corporate governance has a positive influence on IPO performance. Weir and Laing (2002) connected the research on corporate governance with the going private topic. They argue that corporate governance mechanisms may reduce the extent of the agency costs. Therefore, they imply that companies which went private have ineffective corporate governance mechanisms. Their research which focused mostly on CEO characteristics as proxies for corporate governance confirmed that low level of corporate governance is typical for going private companies shortly before their announcement for such a step.

The aim of this study is to combine literature on the voluntary going private decision in a lifecycle context with the literature on corporate governance. Prior literature shows that corporate governance has an influence on the going private decision when examining the time before the announcement of the transaction. So far, the influence of corporate governance from the time of the IPO as well as during the quotation time has an influence on the going private decision has not been examined. My study has the purpose to close this research gap.

3. HYPOTHESES

The passage of Sarbanes-Oxley Act in 2002 (SOX) increased the requirements concerning the internal control and other aspects of corporate governance on public listed companies in the US. Even before, public listed companies had to comply with various accounting and controlling standards. Chief financial officers of US listed firms have to review

their reports and certify that those are fully in compliance with the requirements. Firms having issues with fulfilling corporate governance requirements while publicly listed might increase their wish for privacy. Chaplinsky and Ramchand (2012) examined the influence of stricter governance practices on the voluntary going private decision of firms and found out that they increase compliance costs and subsequently motivate firms to go private. Therefore, I expect companies with CFO certification to stay public, which leads to the first hypothesis.

H1: Firms with no Chief Financial Officer SOX Certification decide earlier to go private.

It is not only the firm's internal CFO certification, which plays a role when estimating the quality of corporate governance. When firm's financial statements are in accordance with the financial reporting standards and reflect a true and a fair view of the state of the firm, an auditor gives the company an unqualified opinion. If the contrary is the case and the auditor has concerns about the quality of the financial reporting, he will give a qualified opinion to the company. If the financial statements are only materially misstated, the auditor will give the company an adverse opinion report. Public companies which don't fulfill financial statement standards are negatively affected by investors' interest and therefore I expect of them to decide for a step into privacy.

H2: Firms with no unqualified auditor opinion decide earlier to go private.

The size of accruals is a measure for earnings management. The higher the accruals, the stronger are the indications of managed earnings of a firm, which is not in accordance with the true and fair view. If firms manipulate their earnings, the size of accruals may be used as a proxy of earnings quality. Earnings management has been examined by e.g. Peasnell et al. (2005), Xie et al. (2003) or Bekiris and Doukakis (2011). They found evidence for the relationship between earnings management and low level of corporate governance. The study of Chou et al. (2005) has proven that in the long-run, the performance and the returns of reverse LBOs are suffering when firms manage their earnings. Therefore, I expect firms with managed earnings, violating corporate governance rules to decide for a step into privacy.

H3: Firms with higher accruals decide earlier to go private.

Investors prefer to put trust in companies, which have high perceptibility already at the time of their IPO. Ernst and Haecker (2007) advance a view that small companies are not getting enough attention from the investors on the public market and therefore being public has no sense for them. They also add that bigger companies with a low free float are affected by a scant attention as well. According to Modigliani and Miller (1963), low cost of capital increases the wish to become public. As the reverse must be also truth, low liquidity, which occurred due to low visibility makes a staying public

too expensive. Therefore, I expect small companies to decide for a step into privacy.

H4: *Firms with lower market capitalization decide earlier to go private.*

According to Bharath and Dittmar (2010), investors are less informed than the issuers about the true value of the firm going public, which is a problem of adverse selection. Firms with low perceptibility on the public capital market are affected by higher adverse selection costs and might wish to avoid them. As suggested by Ackert and Athanassakos (2001), the number of analysts who follow a firm can be used as a proxy for firm's perceptibility. The visibility hypothesis of Mehran and Peristiani (2010) also corresponds with the opinion of Bharath and Dittmar (2010) and states that low analyst coverage make a company invisible. Therefore, I expect companies with low analyst coverage to decide for a step into privacy as they wish to decrease their adverse selection costs.

H5: *Firms with low analyst coverage decide earlier to go private.*

Another possible indicator for a firm's low perceptibility is its auditor at the IPO. Firms with an auditor from the Big 4²⁴ are expected to receive higher attention from investors' side due to their higher visibility on the market. Auditors' reputation and its positive influence on the IPO pricing have already been proven by Beatty (1989). His findings were confirmed by Hogan (1997) who analyzed costs and benefits of auditing quality in the IPO market. The relevance of auditor quality for investors was proven by Mansi et al. (2004) who found evidence that quality and tenure of auditors both matter to investors. As the quality of the auditor influence the perceptibility of companies already at their IPO, I expect companies who were accompanied by minor players to decide for a step into privacy.

H6: *Firms with no Big 4 auditor at their IPO decide earlier to go private.*

In order to test these hypotheses, I use control variables covering company fundamentals already tested in previous studies and mentioned in the literature review. Table 1 presents the whole set of tested variables, consisting of corporate governance variables, perceptibility variables as well as company fundamentals variables.

4. DATA

This paper is analyzing a dataset of 1'184 IPOs of firms which went public on the three major stock exchanges NYSE, Amex and NASDAQ between 1990 and 2013 in the US. All IPOs were obtained from the Thomson SDC New Issues database and their data had also to be available in Compustat and CRSP database, which provided the company data and the delisting information. Penny stock IPOs, ADRs, REITs as well as all financial institution are excluded from the sample accordingly to previous literature. Only IPOs with voluntary delisting due to company

request are part of the sample. Companies which had to delist due to negative reasons are excluded from the sample. These modifications lead to the final sample of 1'068 IPOs of which 188 went voluntary private during the examined period until Dec. 31 2013. The sample therefore includes only companies which went voluntary private between 1990 and 2013. Companies which were still trading during this period are part of the control group.

Table 1 explains all variables which are examined in this study. Perceptibility variables are obtained either from Compustat or CRSP database. I calculate the natural logarithm of market capitalization (*marketcap*) of each company in order to proxy the size. As no precise data about analyst coverage (*analyst*) is available, I construct a binary variable to set one if the absolute market capitalization of a firm is above median. Bigger companies are expected to be more covered than smaller ones.

Further variable contributing to the perceptibility hypothesis is the auditor at the IPO (*auditor*). I construct a binary variable set to one if one of the Big 4 was auditor at the IPO. CRSP database provides the auditor information. Big 4 auditors are indicated with signs from 01 to 09. All other auditors have a sign above 09. Therefore, I set all companies with a sign from 01 to 09 one and all others with zero.

In order to examine the influence of corporate governance on the voluntary going private decision, I acquire data about the quality of companies' reports. For calculating the CFO filings (*cfosox*) I hand collect data from SEC's EDGAR database. The Chief Financial Officer SOX Certification Variable identifies whether a company has filed Certification Documents as required by Sarbanes-Oxley Act of 2002 (SOX). These Certification Documents certify that the CFO of the company has reviewed the 10Q and 10K reports and that these reports report fairly and are fully in compliance with the requirements of the SEC. I construct a binary variable set to one if the CFO has signed the Certification Documents otherwise the variable is set to zero. Auditor's opinion (*opinion*) is a binary variable based on hand collected data also from SEC's EDGAR database. An opinion of an external auditor can be unqualified, qualified or adverse and is considered essential when reporting financial information to various stakeholders. An unqualified opinion indicates the auditor's endorsement of the accuracy and correctness of the disclosed information. A qualified opinion is not considered as negative, but it might indicate that the auditor was unable to verify certain information and misstatements might occur in the audited statements. An adverse opinion indicates serious reporting problems as the auditor states that the financial statements do not fairly present the financial situation of the company. Only an unqualified opinion is a sign of fairly presented financial statements and hence of a high level of corporate governance. I therefore set the binary variable to one only when the auditor's opinion is unqualified, otherwise I set it to zero. Management of earnings is a sign for low level of corporate governance (Xie et al., 2003). The measurement of aggregate accruals compared to previous periods is used to measure company's earnings quality. If overall earnings don't increase by actual cash

²⁴ PWC, KPMG, EY and Deloitte.

earnings, but by accrual accounting manipulation, then the company has less persistent earnings with lower quality. Thus, the higher the accruals (*accruals*) of a company, the more managed its earnings might be. I calculate the accruals ratio, as it is used to compare companies of different sizes, based on net operating assets and acquire the necessary data from Compustat:

$$\text{Accruals Ratio} = (NOA_t - NOA_{t-1}) / ((NOA_t + NOA_{t-1}) / 2) \quad (1)$$

where,

$$\text{Net Operating Assets} = (\text{Total Assets} - \text{Cash}) - (\text{Total Liabilities} - \text{Total Debt}) \quad (2)$$

All accounting variables are used from the year before the company's IPO and are obtained from Compustat.

Table 2 presents the survivor function of examined going private companies and well as the number of going private companies per quotation year. 22 companies were only one year public before they decided to return into privacy. 14 companies remained two years public. The longer the companies are public, the lower the probability of going private. So went only two companies private which have been on the public capital market for 19 years. During the observation period, almost 16% of companies decided for a voluntary step into privacy on the three major US stock exchanges.

Table 1. Variables description

<i>Variables</i>	<i>Description</i>
survival	Quotation time since the IPO until voluntary delisting or until the end of the observation period in years
censor	Binary variable set to one if the company is still trading at the end of the observation period and therefore the observation is right censored
Perceptibility variables	
marketcap	log of market capitalization: number of shares outstanding x share price
analyst	Binary variable set to one if the market capitalization (size as a proxy for coverage) of the company is above the median of the whole sample.
auditor	Binary variable set to one if the IPO is audited by a Big 4 auditor (Deloitte, EY, KPMG, PWC)
Company fundamentals	
roa	Return on Assets measured as Net Income over Total Assets
fctf	Free Cash Flow to the Firm measured as Free Cash Flow to the Firm over Total Assets
pe	Price-to-Earnings Ratio
pb	Price-to-Book Ratio
tlta	Total Leverage over Total Assets
capex	Capital Expenditures over Total Assets
Corporate Governance variables	
cfosox	Binary variable set to one if the filed certification document that company report fully complies with requirements of the SEC contains the CFO signature.
opinion	Binary variable set to one if the auditor opinion is non-qualified.
accruals	Accruals Ratio measured as aggregate accruals which are based on Net Operating Assets

Table 2. Going private companies over time

Time	Total number of companies	Going private companies	Survivor function
1	1'184	22	.9814
2	1'162	14	.9696
3	1'147	18	.9544
4	1'122	6	.9493
5	1'111	14	.9373
6	1'049	9	.9293
7	1'017	8	.9220
8	980	11	.9116
9	902	10	.9015
10	836	11	.8896
11	775	8	.8805
12	702	11	.8667
13	666	5	.8602
14	641	6	.8521
15	600	8	.8407
16	504	7	.8291
17	463	7	.8165
18	397	2	.8124
19	291	2	.8068
20	235	3	.7965
21	181	4	.7789
22	121	2	.7661
23	71	0	.7661
24	38	0	.7661
188 (16%)			

Table 3. Descriptive statistics

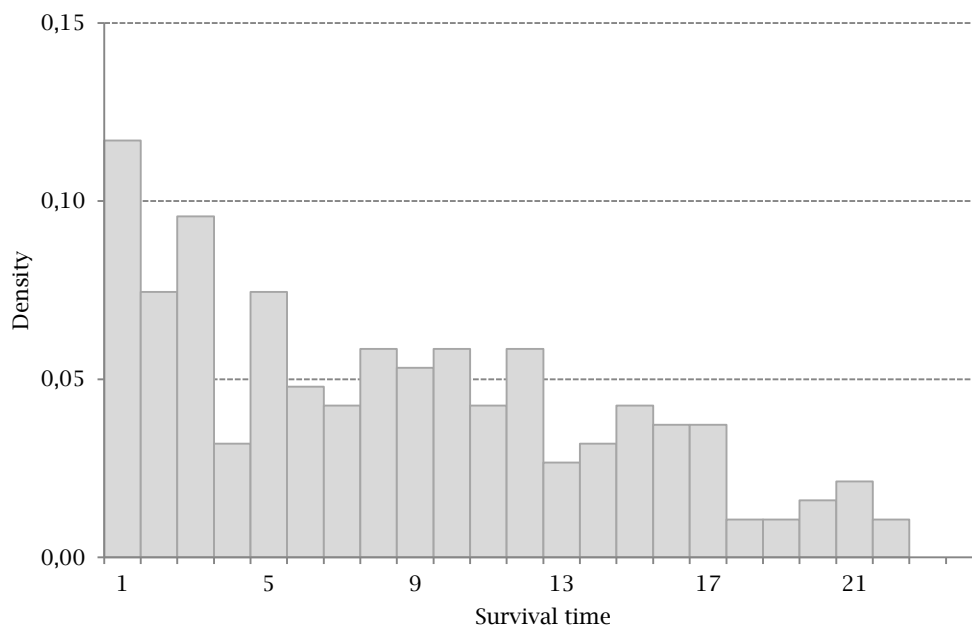
Variable	Total Sample			Surviving IPOs	Going Privates	t-Test
	Mean	Min	Max	Mean	Mean	
marketcap	5.424	-2.422	11.371	5.885	3.498	-58.636***
analyst	0.462	0	1	0.517	0.184	-36.155***
auditor	0.829	0	1	0.846	0.662	-17.170***
roa	-0.126	-32.932	1.220	-0.047	-0.201	-6.756***
fcff	-0.039	-4.626	0.750	-0.024	-0.122	-8.409***
pe	3.049	-1870	2890	1.145	20.113	2.035**
pb	4.946	-397.9	1422	2.999	3.776	0.750
tlta	0.542	0	19.513	0.518	0.556	1.793*
capex	-0.576	-162.2	142.2	-1.202	2.119	2.833***
cfsox	0.477	0	1	0.499	0.249	-24.633***
opinion	0.214	0	1	0.574	0.270	-29.419***
accruals	0.198	-33.1	154.3	0.035	0.119	0.552
survival	13.541	0	24			

The majority of examined variables are highly significant on 1% level. This means that there are significant differences in these factors representing companies' characteristics between the going private companies and the control group which is still trading until the end of the observation period. */**/** shows statistical significance at the 10%/5%/1% level.

Table 3 provides the descriptive statistics and the results of the t-tests. The average survival time (*survival*) of examined companies on the public capital market is 13.5 years. Figure 1 makes obvious that the majority of going privates occur within the first years of privacy. More than a half of the

examined going private companies went private within their first eight quotation years. Based on this fact, I conclude that company characteristics already at the time of its IPO influence the survival time on the public capital market until a voluntary going private decision.

Figure 1. Survival time of going private companies



Additionally, I calculate the time between the issue date and the delisting date for going private companies²⁵. For the control sample a similar computation was done. As there is no delisting date for companies from the control sample, the duration of being public was calculated as the difference between the issue date and the last day in December 2013, when the data collection ends. Next to it, companies from the control sample were identified with 0 in order to be recognized as still trading in contrary to the going private group which was noted with 1.

5. METHODOLOGY

To examine factors influencing the going private decision of firms in the lifecycle context, I follow previous literature (e.g. Mehran and Peristiani, 2010 and Bharath and Dittmar, 2010) and use a survival analysis model. I analyze the expected survival time of going private companies and the factors which accelerate their voluntary decision to go private. If T is a random variable representing the time until the occurrence of a voluntary going private decision, then the cumulative distribution function of T is

$$F(t) = P(T < t), t > 0 \quad (3)$$

²⁵ Data from Compustat.

It is expressing the probability that the event has occurred by duration t. The survival function gives the probability that the event has not occurred by duration t and is given by

$$S(t) = P(T>t) = 1 - F(t) \tag{4}$$

A conditional probability express that the event will occur in the interval t until t+h given that it has not occurred up to time t. Divided by the width of the interval, a rate of event occurrence per unit of time results. Limiting the interval to zero, a hazard function with an instantaneous rate of occurrence is then given by

$$\lambda(t) = \lim_{h \rightarrow 0} \frac{P(t < T < t+h | T > t)}{h} = \frac{f(t)}{S(t)} \tag{5}$$

For the first analysis of the survival data, I use a non-parametric model of Kaplan-Meier. For right censored data²⁶, the Kaplan-Meier survivor function is

$$\hat{S}(t) = \prod_{t_i=1}^t \left[\frac{n_{t_i} - d_{t_i}}{n_{t_i}} \right] \tag{6}$$

where, d_i is the number of going privates until t_(i) and n_i the number of public companies just before t_(i).

To estimate the cumulative hazard, I apply the Nelson-Aalen estimator, which is defined as

$$\hat{\Lambda}(t_{(i)}) = \sum_{j=1}^i \frac{d_j}{n_j} \tag{7}$$

where, the cumulative hazard until t is the sum of the hazards up to t and can be interpreted as the number of voluntary going privates during the interval 0 to t.

To examine the impact of firm characteristics on the voluntary going private decision during the public lifecycle I use a Cox proportional hazard model (Cox, 1972) of the instantaneous probability of voluntary delisting. The model of Cox is a methodological approach which allows identifying explanatory variables on longevity or entity. Although the model has been mostly used in the previous research to explain e.g. bankruptcy²⁷, it will be transferred in this study and used for a "positive"²⁸ outcome calculation. Li et al. (2005) describe the advantage of the model as follows:

"The strength of the model lies in its ability to model and make inferences on the timing of delisting without making any specific assumptions about the distribution form of life expectancy (Li et al., 2005)."

The Cox proportional hazard model can be expressed as:

$$h(t) = h_0(t) * \exp(\beta_1 X_1 + \dots + \beta_n X_n) \tag{8}$$

This model is providing estimates of β with a partial likelihood method, but provides no estimate of the baseline hazard h₀(t). Some of the observations are right censored due to the fact that

for some companies the going private event has not occurred at the time the data is analyzed. Cox hazard model is flexible enough to control for this fact.

In order to address heterogeneity concerns, I not only use the semi-parametric Cox hazard model, but also use more robust parametric models to verify the results. Even if the baseline hazard is not necessary for estimation of hazard ratio in the Cox model, the distribution of survival time is unknown. Thus, I assume a parametric form for the distribution of survival time and use four parametric models. When (1) T - Weibull (λ, p) with survivor function

$$S(t) = \exp\{-(\lambda t)^p\} \tag{9}$$

Where, p>0 and λ>0, then the hazard function is given by

$$\lambda(t) = \lambda^p p t^{p-1} \tag{10}$$

where, p is a shape parameter. When p>1 the hazard increases and vice versa. If p = 1, then the hazard is constant and leads to an exponential model (2) which is a special case of the Weibull distribution. In an exponential distribution the survivor function is

$$S(t) = \exp\{-\lambda t\} \tag{11}$$

and the density function of an exponential distribution is

$$f(t) = \lambda \exp\{-\lambda t\} \tag{12}$$

Another robust parametric hazard model is the Gompertz model (3), which is characterized by the fact that the log of the hazard is linear in t. Thus, Gompertz is a log-Weibull distribution with the hazard

$$\lambda(t) = \exp\{\alpha + \beta t\} \tag{13}$$

Further, I presume the baseline hazard function follows a log-logistic distribution. Then the log-logistic hazard function (4) is defined as

$$\lambda(t, x) = \frac{\exp(\beta x) \alpha t^{\alpha-1}}{[1 + \exp(\beta x) t^\alpha]} \tag{14}$$

Where, α>1 indicates an increasing hazard and vice versa.

Finally, I also conduct a logistic regression in order to find out how much of the voluntary going private decision can be explained already first at the time of the IPO as well as second at the time of the announcement of the going private decision. This probability can be expressed as (Pampel, 2000):

$$p(\text{going private}) = \frac{1}{1 - e^{-\alpha + \sum_{i=1}^n \beta_i \text{factor}_i}} \tag{15}$$

6. EMPIRICAL RESULTS

This chapter contains the results of the empirical analysis on voluntary going privates. In the first

²⁶ Due to the fact that for some companies the going private event has not occurred at the time the data is analyzed, some of the observations are right censored.

²⁷ Shumway (2001) used e.g. this hazard model to forecast bankruptcy.

²⁸ In this thesis, the going private step is seen as positive, because the companies do not go bankrupt, but just leave the public capital market.

subchapter, the estimation of the survival function using the Kaplan-Meier method and the cumulative survival function using the Nelson-Aalen method are presented. The second subchapter presents the results of the duration analysis using the Cox proportional hazard model as well as the parametric hazard models of Weibull, Gompertz, the log-logistic model and the exponential one. The third subchapter presents the results from the logistic regressions.

Kaplan-Meier and Nelson-Aalen Survival Functions

In the first step, I estimate the non-parametric survival functions using the Kaplan-Meier and the Nelson-Aalen method. Figure 2 shows the Kaplan-Meier survivor function. The probability of surviving during the observation period shows that in $t = 25$ almost 25% of all companies from the whole sample

undergo a voluntary going private and 75% stay public. Figure 3 shows the first derivative of the survival function, which is the hazard rate. Hazard rate describes the behavior of the probability during the observation period. Between the fifth and the 16th listing year the probability of a voluntary going private is given. After the fifth public year this probability increases abruptly, decreases on the contrary steadily after the 16th year of being public. The Nelson-Aalen method in figure 4 shows the cumulative hazard estimate. In $t = 0$ the whole sample is public and in $t = 25$ more than 25% companies went voluntary private. Around 6% of all companies decide for a voluntary delisting already during their first five years on the public capital market, which strengthens the fact that firm characteristics at the time of the IPO already have a significant influence if a company decides to go private or stay public.

Figure 2. Kaplan-Meier survival estimate

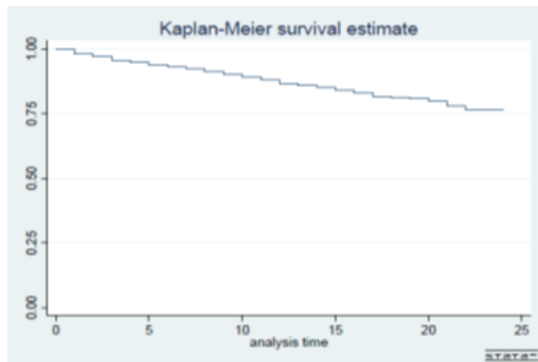


Figure 3. Smoothed hazard estimate

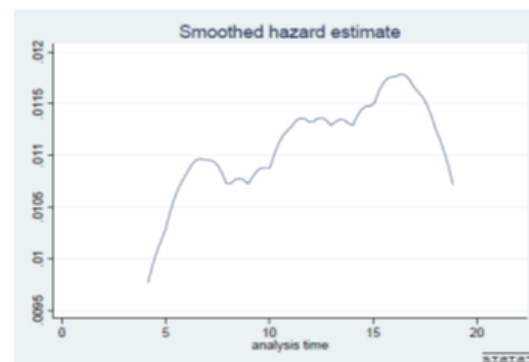
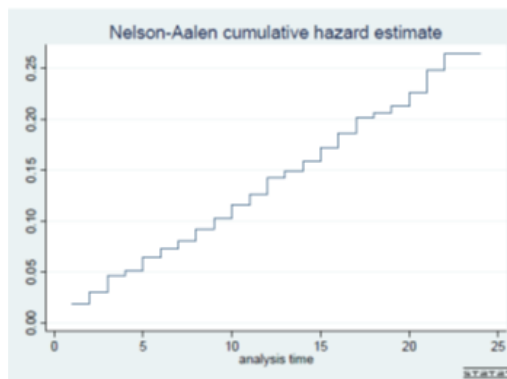


Figure 4. Nelson-Aalen cumulative hazard estimate



Duration Analysis Results

Table 4 shows the results of the duration analysis using the semi-parametric Cox proportional hazard model. The coefficients represent the effect on the hazard rate when an independent variable increases by one unit.

The hypotheses 4-6 suggest that perceptibility measured as market capitalization, analyst coverage and the auditor at IPO accelerates the voluntary going private decision of public companies. The

results shown in table 4 confirm this influence of perceptibility factors on the survival time.

The results of the Cox model suggest that market capitalization (marketcap) has a very strong significant influence on the hazard rate. Due to the negative sign of the coefficient, the higher the market capitalization, the longer a company stays public or vice versa, the smaller the company measured by market capitalization, the earlier it might decide to voluntarily leave the public capital market. This result shows that market capitalization has an influence on the voluntary going private

decision and therefore confirms H4. An explanation might be that smaller companies are less visible for investors and therefore receive less attention from them. Lacking investors' attention might lead to lower liquidity and undervaluation which encourages companies for a voluntary step into privacy. For analyst coverage (analyst) the results also suggest a very strong significant influence on the hazard rate. The lower the analyst coverage, the earlier a company decides for a voluntary going private. This confirms H5 and shows that companies with lower

analyst coverage get less attention from investors and therefore decide earlier to leave the public capital market. A further factor significantly accelerating the voluntary going private decision is the Big 4 auditor at the IPO (auditor). According to the results, if the auditor at the IPO was one of the Big 4, than the survival time at the public capital market is longer. On contrary, if the auditor is less known, it accelerates the voluntary going private decision. This finding confirms H6.

Table 4. Regression results of Cox proportional hazard model

Variables	Coeff	t-stat
marketcap	-0.424***	-11.25
analyst	-1.147***	-4.84
auditor	-0.704***	-4.15
roa	-0.216*	-1.78
fcff	-0.311*	-1.62
pe	0.001	1.02
pb	0.003***	3.24
tlta	-0.001	-0.03
capex	0.020*	1.60
cfosox	0.182	1.01
opinion	0.319*	1.76
accruals	-0.062*	-1.60
Observations	1068	
Likelihood ratio (chi)	287.38***	

The sample includes 1'184 IPOs going public between 1990 and 2013 on NASDAQ, NYSE or AMEX. The independent variable is survival time, measured as the difference between the IPO date and the date of going private or end of observation period which is Dec 31 2013. If the IPO continues to be listed through the end of the observation period, the observation is right-censored. marketcap is the logarithm of market capitalization calculated as number of shares outstanding multiplied by the share price, analyst is a binary variable set to one if the market capitalization of the company is above the median of the whole sample, auditor is a binary variable set to one when the IPO is audited by a Big 4 auditor, roa is the return on assets measured as net income over total assets, fcff is the free cash flow to the firm measured as free cash flow to the firm over total assets, pe is the price-to-earnings ratio, pb is the price-to-book ratio, tlta is the amount of leverage calculated as total leverage over total assets, capex are the capital expenditures calculated over total assets, cfosox is a binary variable set to one if the certification document fully complies with SEC requirements and is signed by the CFO, opinion is a binary variable set to one if the auditor opinion is non-qualified, accruals is the accruals ratio measured as aggregate accruals based on net operating assets. For ties, the Breslow method is applied. ***/**/* indicates statistical significance at the 1%/5%/10% level.

Findings on hypotheses 1-3 about corporate governance measured as CFO SOX certification, auditor opinion and the amount of accruals are similar to those of perceptibility, even if the statistical significance is lower. H1 suggest that firms with no CFO SOX certification (cfosox) which would certify that their accounting is fully in compliance with the requirements decide earlier to go private. The results suggest that CFO SOX certification has no statistical influence on the hazard rate and therefore companies with reports lacking certification do not earlier decide for a step into privacy. Further firms not only need to confirm their report quality internally, but also receive an auditor opinion. H2 suggest that firms with no unqualified auditor opinion decide earlier to go private. The results confirm this hypothesis on a low significance level. The effect of accruals (accruals) on the hazard rate is also given on a low significance level. The lower the accruals, the earlier this company decides for a voluntary step into privacy. This stands in contrary to the expectations in H3. A possible explanation might be, that interpretation of accruals is highly dependent on investors' financial sophistication and therefore not an ideal measure for the level of corporate governance.

Further results on control variables mostly confirm findings from previous researches about going privates. Price-to-book ratio (pb) influences

significantly the hazard rate but only with a low impact. The higher the price-to-book ratio, the earlier a company goes private. No evidence is found for price-to-earnings ratio (pe) and leverage (tlta). According to the results, they have no influence on the hazard rate. A low statistical significance is found for return on assets (roa). The lower ROA, the earlier a company might voluntary decide for privacy. Weak evidence is also found for free cash flow (fcff). Other than in previous findings where high free cash flow has a strong influence on a going private step and supports the agency theory, my results suggest that a lower free cash flow accelerates the voluntary going private decision. My findings are consistent with those of e.g. Kieschnick (1998) or Halpern et al. (1999).²⁹ Also capital expenditures (capex) provide weak evidence about the influence on hazard rate. The results suggest that companies with lower capital expenditures stay longer public and vice versa.

In order to test the robustness of these results, I perform further analyses using the Weibull, Gompertz, the log-logistic and the exponential model, which are in contrary to the semi-parametric Cox model fully parametric and therefore more robust. Tables 5 and 6 present the results from

²⁹ Both studies analyzed going privates shortly before the announcement of their step into privacy and not in a lifecycle context.

these four additional robustness models. They mainly confirm the findings of the Cox hazard model. The perceptibility hypothesis is also confirmed in the Weibull model, as all three perceptibility factors market capitalization (*marketcap*), analyst coverage (*analyst*) and auditor at IPO (*auditor*) are highly significant. The log-logistic model shows identical results for the perceptibility hypothesis. The lower the market capitalization of a public company, the higher is the probability of an earlier voluntary step into privacy. The lower the size of analysts covering a public company, the higher is the probability of its earlier

voluntary going private. If the auditor at the IPO was not one of the Big 4, the higher is the probability that such a company will decide earlier to leave the public capital market. These findings confirm the hypotheses 4-6. Similar to the Cox hazard model, the Weibull and the log-logistic model also couldn't find any evidence for the CFO SOX certification influencing the voluntary going private decision. The log-logistic model shows high significance for auditor's opinion (*opinion*) and confirms *H2*. Based on this finding, firms with no unqualified opinion from their auditor decide earlier for a voluntary step into privacy.

Table 5. Robustness test of the Weibull and the log-logistic survival model

Variables	(I)	t-stat	(II)	t-stat
<i>marketcap</i>	-0.427***	-11.37	0.398***	9.22
<i>analyst</i>	-1.155***	-4.87	0.822***	4.45
<i>auditor</i>	-0.707***	-4.17	0.641***	4.19
<i>roa</i>	-0.218*	-1.81	0.162	1.16
<i>fcff</i>	-0.322*	-1.70	0.218	1.13
<i>pe</i>	0.001	1.05	-0.001	-1.02
<i>pb</i>	0.003***	3.85	-0.002***	-3.15
<i>tlta</i>	0.005	0.09	-0.001	-0.01
<i>capex</i>	0.022*	1.76	-0.017*	-1.64
<i>cfosox</i>	0.186	1.03	-0.152	-1.00
<i>opinion</i>	0.333 *	1.84	-0.374**	-2.41
<i>accruals</i>	-0.062*	-1.63	0.052*	1.54
<i>constant</i>	-2.615***	-8.35	1.469***	6.90
Observations	1068		1068	
Likelihood ratio (chi)	294.90***		293.43***	

The sample includes 1'184 IPOs going public between 1990 and 2013 on NASDAQ, NYSE or AMEX. The independent variable is *survival_time*, measured as the difference between the IPO date and the date of going private or end of observation period which is Dec 31 2013. If the IPO continues to be listed through the end of the observation period, the observation is right-censored. *marketcap* is the logarithm of market capitalization calculated as number of shares outstanding multiplied by the share price, *analyst* is a binary variable set to one if the market capitalization of the company is above the median of the whole sample, *auditor* is a binary variable set to one when the IPO is audited by a Big 4 auditor, *roa* is the return on assets measured as net income over total assets, *fcff* is the free cash flow to the firm measured as free cash flow to the firm over total assets, *pe* is the price-to-earnings ratio, *pb* is the price-to-book ratio, *tlta* is the amount of leverage calculated as total leverage over total assets, *capex* are the capital expenditures calculated over total assets, *cfosox* is a binary variable set to one if the certification document fully complies with SEC requirements and is signed by the CFO, *opinion* is a binary variable set to one if the auditor opinion is non-qualified, *accruals* is the accruals ratio measured as aggregate accruals based on net operating assets. For ties, the Breslow method is applied. ***/**/* indicates statistical significance at the 1%/5%/10% level.

Table 6. Robustness test of the Gompertz and the exponential survival model

Variables	(I)	t-stat	(II)	t-stat
<i>marketcap</i>	0.651***	-11.39	0.656***	-11.14
<i>analyst</i>	0.312***	-4.91	0.326***	-4.73
<i>auditor</i>	0.494***	-4.15	0.493***	-4.18
<i>roa</i>	0.799*	-1.87	0.812*	-1.70
<i>fcff</i>	0.727*	-1.68	0.754*	-1.48
<i>pe</i>	1.000	1.05	1.000	0.96
<i>pb</i>	1.003***	3.57	1.003***	3.30
<i>tlta</i>	1.002	0.03	1.000	0.01
<i>capex</i>	1.021*	1.66	1.020*	1.59
<i>cfosox</i>	1.207	1.04	1.202	1.02
<i>opinion</i>	1.389*	1.81	1.387*	1.81
<i>accruals</i>	0.940*	-1.63	0.941*	-1.54
<i>constant</i>	0.108***	-9.20	0.152***	-8.89
Observations	1068		1068	
Likelihood ratio (chi)	294.28***		285.50***	

The sample includes 1'184 IPOs going public between 1990 and 2013 on NASDAQ, NYSE or AMEX. The independent variable is *survival_time*, measured as the difference between the IPO date and the date of going private or end of observation period which is Dec 31 2013. If the IPO continues to be listed through the end of the observation period, the observation is right-censored. *marketcap* is the logarithm of market capitalization calculated as number of shares outstanding multiplied by the share price, *analyst* is a binary variable set to one if the market capitalization of the company is above the median of the whole sample, *auditor* is a binary variable set to one when the IPO is audited by a Big 4 auditor, *roa* is the return on assets measured as net income over total assets, *fcff* is the free cash flow to the firm measured as free cash flow to the firm over total assets, *pe* is the price-to-earnings ratio, *pb* is the price-to-book ratio, *tlta* is the amount of leverage calculated as total leverage over total assets, *capex* are the capital expenditures calculated over total assets, *cfosox* is a binary variable set to one if the certification document fully complies with SEC requirements and is signed by the CFO, *opinion* is a binary variable set to one if the auditor opinion is non-qualified, *accruals* is the accruals ratio measured as aggregate accruals based on net operating assets. For ties, the Breslow method is applied. ***/**/* indicates statistical significance at the 1%/5%/10% level.

The Weibull model confirms this finding on a lower significance level. Higher accruals are a sign of earnings management and therefore an indication of a lower level of corporate governance. The Weibull model finds weak evidence for higher accruals accelerating the voluntary going private decision. The log-logistic model shows no empirical evidence. For the controlling variables the Weibull model shows strong significance of the price-to-book ratio (*pb*), which confirms that undervaluation accelerates the decision for a step into privacy. On a low significance level the Weibull model finds evidence for return on assets (*roa*), free cash flow (*fcff*) as well as for capital expenditures (*capex*). This confirms the robustness of the results from the Cox hazard model. Companies with lower return on assets, lower free cash flow and with higher capital expenditures are those which might earlier decide to leave the public capital market. Low return as well as not efficiently spent capital might lead to lower interest from investors' side and accelerate the company's decision for a voluntary going private step. The log-logistic model confirms the capital expenditures hypothesis on a weak significance level only.

The Gompertz model also confirms the results of the Cox hazard model. Hazard ratios of the Gompertz model shows the influence on the time until a voluntary going private occurs. Low market capitalization (*marketcap*) significantly accelerates the going private decision. An increase in the market capitalization by one standard deviation decreases the likelihood of a going private by almost 35%, in line with *H4*. Statistical significance is also found for *H5* and *H6*. An increase in the analyst coverage (*analyst*) by one standard deviation reduces the public life by about 68% and an increase in Big 4 auditor at IPO (*auditor*) reduces it by almost 51%. The results on influence of corporate governance on the voluntary going private decision are less consistent than those on perceptibility. The effect on hazard rate of CFO SOX certification (*cfosox*) is positive but without statistical significance. Therefore *H1* cannot be confirmed. In contrary, auditor's opinion (*opinion*) shows significance. An increase in auditor's opinion by one standard deviation increases the probability of a going private which is in accordance with *H2*. Firms with no unqualified auditor opinion suffer under their low level of corporate governance and may therefore decide earlier to go private. Only weak evidence was found for the influence of accruals. An increase in the accruals by one standard deviation reduces the probability of a going private by almost 6%. This finding is contrary to the expectation in *H3*. This finding might be explained by the unclear interpretation of accruals as shown by Louis and Robinson (2005). Their findings show that accruals might not be always interpreted as managers' opportunism, but in some cases also as their optimism. The Gompertz model confirms the findings of the Cox hazard model for the control variables. Highest empirical evidence is again found for price-to-book ratio (*pb*). An increase in the price-to-book ratio by one standard deviation increases the likelihood of an earlier going private. The results of the exponential model show similar results to those of the Gompertz model. The highest evidence is again found for the perceptibility hypothesis. For

the corporate governance hypothesis weak evidence is found for auditor's opinion (*opinion*), confirming *H2*. An increase in the auditor's opinion by one standard deviation increases the probability of an earlier step into privacy.

Logit Regression Results

As the results of the Kaplan-Maier and Nelson-Aalen survival function show, around 6% of all companies decide for a voluntary delisting already during their first five years on the public capital market, which strengthens the fact that firm characteristics at the time of the IPO already have a significant influence if a company decides to go private or stay public. Therefore, I conduct a logistic regression with the aim to show if future going private companies can be already recognized by investors at the beginning of their public life. Table 7 presents the results of the logistic regression. Strong empirical evidence is found for the perceptibility hypothesis. Companies, which later decide for a voluntary step into privacy are at the time of their IPO significantly of smaller size measured by market capitalization (*marketcap*), have lower analyst coverage (*analyst*) and their auditor at IPO was not one of the Big 4 (*auditor*) compared to the control group. Strong evidence is also found for two of the three corporate governance factors.

Companies which later decide for a going private have no CFO SOX certification (*cfosox*) and no unqualified auditor opinion (*opinion*) compared to the control group. No evidence is found for the amount of accruals.

Regarding the control variables, high empirical evidence is found for price-to-earnings ratio (*pe*), price-to-book ratio (*pb*) as well as for leverage (*lta*). Firms with higher price-to-earnings ratio, with higher price-to-book ratio as well as with higher leverage at the time of their IPO decide later more likely for a step into privacy. Valuation multiples like the price-to-book and the price-to-earnings ratio are industry-dependent and therefore an industry-specific analysis would be needed in order to describe their impact on going privates more precisely. Previous studies found diverging evidence for valuation multiples. My results are consistent with those of Maupin (1987). No significant results are found for return on assets (*roa*), free cash flow (*fcff*) and for capital expenditures (*capex*) at the time of the IPO. The tested factors in logistic regression at the time of the IPO explain 72.3% of the going private decision measured by R^2 .

The majority of previous studies, as shown in the literature review, focused their analyses on explaining the going private step by firms' characteristics shortly before the announcement of this step. I conduct a logistic regression with data shortly before the announcement. The results are presented in table 7. The R^2 of the regression is 35.6%. Characteristics tested in this study seem to explain less of the going private decision shortly before the delisting than at the time of the IPO. Still, strong evidence is again found for the perceptibility hypothesis. Firms characterized by lower market capitalization (*marketcap*), low analyst coverage (*analyst*) and with no Big 4 auditor (*auditor*) are more likely to decide to go voluntary private. Empirical evidence is also found for auditor's

opinion (*opinion*). Firms with no unqualified auditor's opinion are more likely to go private. For control variables, empirical evidence is found for return on assets (*roa*) and free cash flow (*fcff*). Firms with lower return on assets and with less free cash

flow than the control group decide more likely for a going private. These results are consistent with the findings of e.g. Kieschnick (1998), Kosedag and Lane (2002) and Weir et al. (2005).

Table 7. Logit regression at the time of the IPO and before the announcement of a going private

<i>Variables</i>	<i>(I)</i>	<i>t-stat</i>	<i>(II)</i>	<i>t-stat</i>
marketcap	-0.690***	-7.31	-0.712***	-10.67
analyst	-3.125***	-3.62	-1.167***	-4.40
auditor	-1.258***	-3.44	-1.289***	-5.40
roa	-0.278	-0.92	-0.807***	-3.03
fcff	-0.373	-1.29	-0.819**	-2.29
pe	0.037***	3.31	0.001	0.69
pb	0.033**	2.69	0.001	0.71
tlta	1.049***	3.65	0.389*	1.63
capex	-0.004	-0.35	0.016	1.23
cfosox	-3.002***	-3.22	0.277	1.16
opinion	-5.138***	-10.64	0.497*	2.00
accruals	0.043	0.66	-0.087*	-1.64
constant	6.426***	8.53	2.454***	6.29
Observations	1077		1077	
Likelihood ratio (chi)	741.45***		342.48***	
R ²	72.29%		35.59%	

The sample includes 1'184 IPOs going public between 1990 and 2013 on NASDAQ, NYSE or AMEX. The independent variable is set to one if the company went private and zero if it is part of the control group. Data for the first analysis were collected one fiscal year before the IPO and data for the second analysis were collected from the fiscal year before the announcement of the voluntary step into privacy. *marketcap* is the logarithm of market capitalization calculated as number of shares outstanding multiplied by the share price, *analyst* is a binary variable set to one if the market capitalization of the company is above the median of the whole sample, *auditor* is a binary variable set to one when the IPO is audited by a Big 4 auditor, *roa* is the return on assets measured as net income over total assets, *fcff* is the free cash flow to the firm measured as free cash flow to the firm over total assets, *pe* is the price-to-earnings ratio, *pb* is the price-to-book ratio, *tlta* is the amount of leverage calculated as total leverage over total assets, *capex* are the capital expenditures calculated over total assets, *cfosox* is a binary variable set to one if the certification document fully complies with SEC requirements and is signed by the CFO, *opinion* is a binary variable set to one if the auditor opinion is non-qualified, *accruals* is the accruals ratio measured as aggregate accruals based on net operating assets. For ties, the Breslow method is applied. ***/**/* indicates statistical significance at the 1%/5%/10% level.

7. CONCLUDING REMARKS

The aim of this study is to explore the relationship of perceptibility and corporate governance factors on the voluntary going private decision. Previous studies mostly focused on various company characteristics which distinguish them from companies which stay public. This characterization was conducted shortly before the announcement of a going private step. Only few studies analyzed the whole public lifecycle and characterized the companies not only shortly before their going private, but also earlier. This study complement these findings by adding perceptibility and corporate governance factors, which were analyzed not only shortly before the announcement of a step into privacy, but also already at the time of the IPO with a logistic regression and during the whole public lifecycle with a Cox proportional hazard model. Using a sample of 1'184 IPOs in the US between 1990 and 2013, I find that the voluntary step into privacy is influenced by perceptibility as well as corporate governance variables. Small size of a company together with low analyst coverage and with no Big 4 auditor at the IPO decreases the perceptibility of a company at the public market and increases the likelihood of a voluntary step into privacy. The results further show that firms with no unqualified opinion from their auditor decide more likely for a voluntary step into privacy. I cannot find

evidence for the missing CFO SOX certification as well as for the high amount of accruals accelerating the voluntary going private step. These results of the Cox hazard model are confirmed by the Weibull, exponential, log-logistic and Gompertz model. The results from the logistic regression at the time shortly before the announcement of a going private step confirm the perceptibility hypothesis as well as the influence of auditor's opinion. The results further show that future going private companies strongly differ from companies which stay public already at the time of their IPO in perceptibility as well as corporate governance variables.

Overall, the results show that investors shouldn't take only fundamental variables into account when identifying future going private companies at the public capital market. Important roles play also the perceptibility and corporate governance variables. According to the results companies differ in these variables already at the time of their IPO and during their whole public lifecycle from companies which stay public. Investors who are able to recognize future going private companies may earn higher returns when these companies are buying their shares back, making them a lucrative investment. Further research might focus on further variables explaining the going private phenomenon as well as on the question if these companies should have ever gone public.

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