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The Central European Review of Economics and Management (CEREM)

# **Provided in Cooperation with:**

WSB Merito University in Wrocław

Suggested Citation: Drooduin, Timothy (2023): IPO underpricing and overpricing and long-term firm performance in the Netherlands, United Kingdom, France, Sweden, and Italy: Learning from three Dutch IPOs, The Central European Review of Economics and Management (CEREM), ISSN 2544-0365, WSB Merito University in Wrocław, Wrocław, Vol. 7, Iss. 4, pp. 109-158, https://doi.org/10.29015/cerem.978

This Version is available at: https://hdl.handle.net/10419/312529

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# CENTRAL EUROPEAN REVIEW OF ECONOMICS AND MANAGEMENT

ISSN 2543-9472; eISSN 2544-0365

Vol. 7. No.4. December 2023, 109-158



IPO Underpricing and overpricing and long-term firm performance in the Netherlands, United Kingdom, France, Sweden, and Italy: learning from three Dutch IPOs

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Received: 27.06.2023, Revised: 14.07.2023, Revised: 06.09.2023, Accepted: 06.09.2023 doi: http://10.29015/cerem.978

Aim: This research contributes to the study of the relationship between initial public offering (IPO) under- and overpricing and long-term firm performance as measured by net income.

**Research methods:** Using ordinary least-squares regressions, an international sample of 444 IPOs from the United Kingdom, Sweden, France, Italy, and the Netherlands for the period 2013–2017 is analysed. The data was extracted from the Eikon Refinitiv database. Further, an in-depth analysis of three Dutch IPOs by six interviews with five (former) management members and one investment banker is conducted.

Conclusions: The results show that the more profitable a firm is in the long run, the likelier positive initial stock returns move towards zero after the first trading day. The case studies support these findings and the concept of asymmetric information between market participants can offer a partial explanation. Additionally, as firms operating in the industrial and healthcare sector grow larger, the offer price tends to be closer to the overall market demand. Nonetheless, no significant relationship is found between initial stock return and net profitability for other industries. While the country analysis also displays no significant relationship, underpricing is more prevalent in the United Kingdom than in the other sample countries.

**Originality:** This article combines a full-fledged quantitative study with a full-fledged qualitative study on one of the most perilous corporate finance milestones, that is, the complex transformation from a private to a public company through a stock market listing.

**Limitations:** The sample composition skews towards underpriced IPOs. Also, although the notion of reverse causality is discussed based on the views of interviewees, no quantitative evidence is provided.

Keywords: Initial public offering; equity pricing; firm performance; capital markets; case studies JEL: G32

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#### 1. Introduction

Few corporate events receive more attention from the media, researchers, the public, and industry workers than initial public offerings (IPOs). It is the first time a private firm offers shares to the public in a stock issuance, a corporate milestone that most entrepreneurs can only dream of. Whilst many people may think of an IPO as an influx of big money to corporations captured by flashy news headlines, it remains a perilous endeavour changing the firm on multiple fronts.

A crucial task managers face before issuing stock to the public is correctly estimating the IPO's economic value. This assignment is commonly outsourced to investment banks and underwriting firms. As these parties cannot be sure what the market demand will be, there is a risk that the demand will either fall short or exceed expectations. The actual market value is often assumed to be revealed exactly one day after the issuance. Suppose the closing price at that moment is higher than the offer price. In that case, the IPO was underpriced, meaning that the corporation left money on the table because the market deemed the firm's stocks more valuable and corrected itself. Consequently, underpricing transfers wealth from pre-issue shareholders to its new owners. Conversely, the IPO is considered overpriced if the closing price is lower than the offer price. In this case, if all the firm's equity is floated and purchased, the firm raises extra capital but disgruntles new shareholders. In general, a meticulous process with lasting implications and of the utmost importance to corporate managers considering this strategic direction.

Information-based theories contend that IPO market participants have different sets of information relevant to the issuance's value. Many underpricing theories reason that it is a form of compensation for the risk of information asymmetry between participants. As larger firms often have longer operating histories, with more comprehensive financial disclosures, one might argue that information related to financial statements, business strategies, and industry analyses is more widespread with these firms, thereby reducing the problem of adverse selection. Therefore, it can be posited that as firms grow, information asymmetry decreases, leading to more accurate valuations. A research question is if there is an association between larger firms in terms of profits and the accuracy of IPO pricing to that of market demand,

and whether this differs per industry or country. Moreover, what lessons can we learn from this relationship looking at the cases of three prominent Dutch IPOs.

Specifically, this research paper aims to explore the relationship between the first-day returns of IPOs, and how this relates to the accounting performance variable, net income, of companies from the United Kingdom, Sweden, France, Italy, and the Netherlands, five years after it went public. Apart from the Netherlands, this set of countries had the most IPOs during my sample period of 2013–2017. I included the Netherlands since I will provide a detailed analysis of three Dutch IPOs based on personal interviews with (former) management, board members, and an investment banker. The firms are Flow Traders, ASR, and GrandVision. With an underpriced IPO of 13%, Flow Traders differs significantly from ASR and GrandVision, which each have approximately 2% of underpricing. The findings of this research contribute to the existing body of knowledge by revealing that larger firms, in terms of net profitability, tend to set the IPO offer price closer to the overall market demand.

The remainder of this paper is organised as follows. In Section 2, I review relevant prior research and detail my testable hypotheses. I describe my sample and discuss sample characteristics in Section 3. Next, in Section 4, I discuss my empirical findings of the tests I conducted on the relation between first-day stock return and firm performance. I also provide an extensive analysis of my case studies. Then, Section 5 interprets and describes the significance of my findings. Lastly, Section 6 presents concluding remarks.

### 2. Literature and hypotheses

### 2.1. IPO underpricing and overpricing

Most firms opt to go public to raise equity capital, allow founders and pre-issue shareholders to convert wealth into cash, or enhance the firm's overall standing in the market (Ritter, Welch 2002). A systematic occurrence of underpricing, that is, a positive initial return after the first trading day, was first observed by Stoll and Curley (1970), Reilly (1973), Logue (1973), and Ibbotson (1975). On average, the largest portion of IPOs has a positive initial return. Ritter (2023) finds that the average initial return in the US is 31.9% and 47.7% for 2021 and 2022, respectively.

Researchers and practitioners widely studied the phenomenon of underpricing. Conversely, overpricing receives far less attention in the literature (Rathnayaka et al. 2019). Part of the explanation rests in underpricing being a prevalent strategy of issuers and underwriters. Indeed, empirical evidence shows that underpriced offerings relative to the aftermarket are persistent over time and across countries (Ritter 2017). Still, IPO pricing is not an exact science; discounted offerings can lead to firms leaving large amounts of money on the table (Loughran, Ritter 2002). In fact, Ritter (2022) finds that in the US IPO market, an aggregate amount of \$28.65 billion was left on the table in 2022 – twice the amount firms need to be listed on the S&P 500. Nevertheless, underpriced securities can create hype among investors and boost the financial coverage of the stock. In turn, this can generate substantial gains in the paper wealth of pre-issuing owners – according to Loughran and Ritter (2002), strategy issuers apply by integrating the unrealised gains in private equity ownership with the cost of offering discounted shares.

Chourou et al. (2018) examine the role of national culture on underpricing. The authors posit that cultural aspects significantly impact the decision-making process of IPO pricing, as it shapes behaviour related to risk tolerance, ambition, and trust. First, high uncertainty avoidance, characterised by rule-following behaviour and enhanced disclosure between market participants, tends to result in less underpricing. Second, higher levels of collectivism have the opposite effect. As group interests take precedence, managers are keener on having a successful IPO, thereby favouring underpricing. Third, higher masculinity, related to a culture that values achievement and ambition, encourages the practice of underpricing as a means to earn post-market value. Last, high levels of power distance are reflected by unequal authority and social status within a society, resulting in less social trust between issuers, underwriters, and investors. This lack of trust leads to increased asymmetric information and, subsequently, more underpricing. Furthermore, the recent research by Zhou et al. (2022) confirms the non-institutional force of uncertainty avoidance and culture of trust on the level of underpricing.

Contrarily, issuers generally refrain from deliberate overpricing due to several reasons. Firstly, overpricing can result in lower subscription rates or failure to raise the desired amount of capital. Moreover, it can undermine investor confidence, tarnish

the issuer's reputation, or cause stock price volatility in the aftermarket. Regulatory entities monitor overpricing to prevent market manipulation and the practice of misleading investors. Additionally, overpricing may serve as a magnet for short-term speculative trading or so-called "flipping", thus jeopardising the long-term stability of the shareholder base (Ellul, Pagano 2006: 382). However, it is worth noting that overpricing can also yield certain benefits, such as enhanced proceeds and favourable market perception. Indeed, a higher offer price can signal a firm's growth potential, quality, and market dominance. Lastly, depending on the extent of overpricing, it may actually mitigate short-term price volatility by reducing dramatic price swings and market reactions (Ellul, Pagano 2006).

# 2.2. Asymmetric information and adverse selection

Numerous anomalies related to equity market mispricing exist. A prominent and widely recognised theory of underpricing relates to asymmetric information between market participants. Information-based theories focus on access to superior information related to firm value by issuing firms, underwriters, or investors.

Welch (1989) argues that the management of issuers has better insights into future cash flows than investors. In this case, investors may presume that only worse-than-average quality firms offer securities to the market. Thus, a high-quality firm signals its value by offering discounted shares and retaining part of the shares in its portfolio (Dietrich 2012). Thereby, future seasoned issuances can be offered at a higher premium. Further, Allen and Faulhaber (1989) add that high-quality firms deliberately underprice to encourage favourable investor expectations of future dividends and share value. Conversely, firms classified as low-quality would have no incentive to offer shares at a discount purposefully. Assuming that, in the post-IPO period, the firm's actual value is revealed, and it becomes evident that it is incapable of attaining superior cash flows, owners may be inclined to maximise capital raising during the IPO phase (Dietrich 2021). Stated differently, signalling superior firm quality is only viable if management is confident that the firm can recuperate from the initial losses incurred by underpricing.

Early IPO research of Baron (1982) highlights the monopoly position of investment banks that trade undervalued securities to reduce marketing efforts or gain

favours with institutional investor clientele. Binay et al. (2007) find evidence that underwriters allocate shares based on commission revenues rather than book-building considerations in the IPO allocation process. Moreover, Arthurs et al. (2008) confirm the agency problem of underwriters' tendency to underprice new equity issues.

Lastly, Benveniste and Spindt (1989) and Rock (1986) posit that certain institutional investors have superior knowledge of the issuing firm's marketability and competitors.

Interestingly, Chourou et al. (2018) argue that countries with higher levels of power distance further exacerbate this behaviour. Specifically, this cultural dimension is reflected by lower levels of social trust between people, which reduces the exchange of information and leads to knowledge imbalances between market participants.

#### 2.3. Market-wide factors

Ellul and Pagano (2006) present a theory that posits that investors judge the securities' value regarding post-IPO market liquidity and liquidity risk. The authors highlight a significant relationship between IPO underpricing and investor expectations of liquidity in the secondary market and the associated uncertainty. Higher levels of underpricing are observed in IPOs with lower liquidity and higher liquidity risks, suggesting that investors require additional compensation for investing in IPOs with uncertain liquidity conditions (Ellul, Pagano 2006). Indeed, Bouzouita et al. (2015) state that underpriced offerings exhibit higher trading activity than overpriced securities. This increased trading activity may contribute to further appreciation in the firm's share price beyond the initial underpricing. Pham et al. (2003) attribute the positive relationship to a broad ownership structure. Lowry et al. (2010) emphasise the role of market-wide conditions on the variability of initial IPO returns. This market-wide uncertainty fluctuates dramatically over time, with a cyclical pattern of so-called "hot" and "cold" IPO markets (Derrien, Womack 2003: 33).

# 2.4. Hypotheses

The literature provides empirical evidence that a combination of firm-specific and market-wide factors is the source of the complexity of the initial return of IPOs. Still,

a prominent and widely accepted explanation lies in the conjecture that asymmetric information and adverse selection are vital factors in initial return variability.

In this paper, I posit that information bundles among IPO participants are less scarce as firms grow more profitable in terms of the accounting variable, net income. Firms with a stronger financial position are likely to have survived longer and have more financially related information available. Boujelbene and Besbes (2012) find that firm size can also measure asymmetric information. Indeed, Chae (2005) notes that small firms have higher information asymmetry than large firms. Demsetz (1986) adds that small firms have higher levels of internal information and wide bid-ask spreads caused by few insiders. Wide spreads are typically characterised by low liquidity as buy and sell orders do not easily match up, which directly relates to the findings of Ellul and Pagano (2006). Thus, more information asymmetry and lower liquidity in the secondary market following the IPO are more pronounced with small firms. As a result, smaller firms need to offset these inherent risks with a higher discount than more profitable organisations. Therefore, I formulate the following hypotheses:

Hypothesis 1a: In the long run, firms with higher net profitability have lower positive stock returns after the first trading day.

Hypothesis 1b: In the long run, firms with higher net profitability have lower negative stock returns after the first trading day.

# 3. Data and methodology

#### 3.1. Quantitative data

To examine the quantitative relationship between initial stock return and firm performance, I extracted a sample of IPOs from Eikon Refinitiv. The data consist of listed companies in Europe. Specifically, I examine firms from the United Kingdom, Sweden, France, Italy, and the Netherlands. First, firms with incomplete data are excluded from my sample. Then, I omit firms from the sample with significant outliers whose criteria are explained below. Therefore, my original sample is reduced from 713 to 444, with a total of 2,220 observations that cover five years. My sample period is restricted to IPOs from January 2013 to December 2017. To be included in my study, the IPO must satisfy the following requirements:

- 1) The IPO stock must be listed on the Eikon Refinitiv database.
- 2) The IPO security type includes common and ordinary shares.
- 3) The company going public must be from the United Kingdom, Sweden, France, Italy, or the Netherlands.
- 4) The IPO must have occurred between the years 2013–2017.
- 5) The IPO company must operate in one of the following industries: industrials, healthcare, financials, consumer cyclical, consumer non-cyclical, technology, energy, real estate, basic materials, and utilities.
- 6) The IPO company must have financial data from the Eikon Refinitiv database for five years after the firm went public.

#### 3.2. Definition of variables

My primary variable of interest is the percentage difference between the offer price of the IPO and the closing price exactly one day later, which serves as the level of under- or overpricing during the public offering. To exclude outliers, I solely include IPO underpricing and overpricing between the values -35% and 35%. Values above this threshold may dilute the general relevance of this study. My primary independent variable is net income, commonly used to indicate firm performance. It is calculated by subtracting expenses, interest, and taxes from the firm's revenue. The variable net income showed a kurtosis value of 106 in the original sample – indicating

substantial outliers. Thus, I set a minimum of -€500 million and a maximum of €500 million for net income, which reduced the kurtosis value to 21 – still showing outliers, but significantly less.

I employ three variables to control for firm-specific characteristics. To control for the size of a firm, I include a natural logarithm of total assets, which is the sum of current- and noncurrent assets. Large firms tend to be of higher quality than smaller firms. Moreover, I control firm leverage by dividing the market value of debt by equity. The debt-to-capital ratio is capped at 100%. Finally, I add a natural logarithm of firm age by subtracting the firm's IPO year from the founded year. Further, to reduce the impact of extreme values, which could potentially have a significant effect on the results, my sample excludes firms founded before 1900. These controls enhance the internal validity by limiting the effect of theoretically important but not focal variables in this study.

Table 1. Definition of firm-level variables

Variable:	Definition:
StockReturn	The percentage difference between the IPO offer and closing price.
NetIncome	Revenue minus expenses, interest, and taxes (scaled in millions).
TotalAssets	The natural logarithm of the sum of current and noncurrent assets (scaled in millions).
Leverage	The ratio of the market value of debt divided by the market value of equity.
FirmAge	The natural logarithm of the firm founding year minus its IPO year.

**Note(s):** The data source is Eikon Refinitiv. The currency for NetIncome and TotalAssets is Euro ( $\epsilon$ )

# 3.3. Quantitative methodology

First, a univariate regression analysis will test a plausible relationship between initial stock return and firm performance. Then, to isolate the distinct impact of underand overpricing, one will be excluded to analyse the other. Furthermore, the analysis will be extended to encompass industry- and country-level comparisons. Specifically, differences will be explored between firms operating in industrials, healthcare, technology, consumer-cyclical, financials, and other industries combined. Finally, an analysis is performed on all individual sample countries.

The dataset for this study comprises 444 IPOs extracted from the Eikon Refinitiv database. Accounting variables, including net income, total assets, debt-to-capital ratio, and firm age, were also sourced from the same database. My initial sample consists of IPOs from 2013 to 2017. Post-2017 IPOs were excluded because I needed five subsequent years of accounting data for the panel model analysis. Ultimately, 444 IPOs in my final sample satisfy these requirements, which will be analysed using the statistical software STATA/SE 17.0. Table 2 reports the overall model characteristics.

#### 3.4. Qualitative data

Along with the quantitative analysis, this study will perform an in-depth investigation of the research question in its natural contexts. It aims to link the theoretical background to practical implications; this paper will undertake three case studies focusing on Dutch IPOs.

The first case study examines ASR, a prominent Dutch insurance company that went public in June 2016. ASR holds a significant market presence, ranking second in non-life insurance with a market share of 15.7% and third in life insurance with an approximate market share of 13.05% (KPMG 2021). For this, I conducted two personal interviews—one with Chris Figee, previous partner at McKinsey and current CFO of KPN. Between 2014 and 2020, Chris Figee functioned as CFO of ASR. The second interview was conducted with Michel Hülters, the Chief Investment Officer of ASR since 2016, prior to the public offering.

The second case study focuses on GrandVision, a global optical retailer with more than 7,200 stores worldwide, which went public in February 2015—the firm results from the merger between GrandVision S.A. and Pearle Europe B.V. in 2011. For this case study, I interviewed Willem Eelman, previously the CIO of Unilever and CFO of C&A Retail Europe, who then progressed from a non-executive director and advisor to GrandVision to the CFO of the firm. Additionally, I interviewed Kees van

der Graaf, a former member of Unilever's board of directors and executive committee, who joined GrandVision in 2011 and is the current Chairman of the supervisory board.

The final case study is the stock exchange listing of Flow Traders, a proprietary trading firm founded in 2004 with operations in Europe, the United States, and Southeast Asia. Flow Traders is a liquidity provider in global financial markets, focusing on exchange-traded products (ETPs). Consistent with the other cases, I conducted two interviews. The first interviewee was Dennis Dijkstra, Flow Traders' CFO from 2009–2014, then appointed Co-Chief Executive Officer from 2019 until 2022. Second, I spoke with William Marshall, who, at the time of Flow Traders' IPO, served as Managing Director in the Equity Advisory team at Rothschild & Co, the sole financial advisor to Flow Traders on the offering in July 2015.

# 3.5. Qualitative methodology

The second methodological framework applied in this paper is confirmatory case studies. Merriam (1998: xiii) defines case studies as "an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit". As IPOs are considered one of the most complex and precarious corporate events, influenced by a wide array of factors, this paper, in conjunction with the regression results, will feature an extensive analysis of three Dutch IPOs in my data. Multiple case studies are pursued to compare the association between net income and first-day IPO stock return. Furthermore, for practical reasons, selecting specific firms was guided by the availability of participating interviewees, given that the case study pool was limited to Dutch IPOs meeting the established quantitative criteria. Upon consent, the interview audio was recorded and subsequently transcribed. To ensure consistency, each firm included two structured interviews. Open-ended questions allowed the participants to elaborate on relevant aspects of the topic. Key interview findings are summarised in the data matrix (see Appendix).

Moreover, to enhance the validity and reliability of my research, the cases draw upon multiple data sources to converge to the same set of findings. These sources include six personal interviews, annual/interim reports, press releases, IPO prospectus, information released by Euronext Amsterdam (AEX), and in the case of

Flow Traders, internal documentation provided by its financial advisor, Rothschild, and joint book-runner, Credit Suisse. Notably, all three IPOs experienced underpricing, but the degree to which the stock return increased afterwards, differs significantly between the first and the two other cases.

#### 4. Results

As shown in Table 2, for the 2013–2017 period, the mean stock return is positive at 4.8% for the overall sample reflecting 444 IPOs and therewith firms. As evident from the summary statistics, the average firm in the sample size has a net income of 21 million per year and a debt-to-capital ratio of approximately 50%. In the original sample, the net income variable showed a kurtosis value of 106 - a substantially positively skewed distribution. After I set the minimum to +0.000 million and the maximum to +0.000 million, the kurtosis value dropped to +0.001 million some outliers, but significantly less.

Before I present the results from my univariate regression analysis, Table A1 reports the correlation matrix for all the variables. Multicollinearity, or high intercorrelations among independent variables, is not a concern in my regression model since none of the estimated correlation coefficients exceeds the threshold of 0.7. The Breusch-Pagan test for heteroskedasticity also shows a p-value higher than 10% (see Table A2). Thus, homoscedasticity and a constant error variance can be assumed in the model.

**Table 2. Summary statistics** 

	N	Mean	Median	STD	Min	Max	Skewness	Kurtosis
StockReturn	2,220	.048	.034	.107	346	.344	.072	4.064
NetIncome	2,142	21.063	1.578	85.550	-500	500	2.491	21.097
TotalAssets	2,128	4.918	4.762	2.271	-4.327	12.888	.268	3.479
Leverage	1,984	50.443	46.012	39.027	0	100	.101	1.401
FirmAge	2,050	2.378	2.565	1.092	0	4.736	521	2.825

**Note(s):** This table presents the overall model characteristics.

# 4.1. Predictors of first-day stock return

Table 3 reports the results of three univariate ordinary-least squares (OLS) regressions of net income on first-day stock return with an added control variable for each. As reported in the first model (1), representing 2099 total observations and 444 IPOs, NetIncome has a negative relation with StockReturn at a significance level of 1%. However, TotalAssets has a positive relation with StockReturn, which is also significant at a level of 1%. In model (2), I add the control Leverage, whose estimated coefficient is negative but insignificant at all levels. The rightmost model (3) adds the third control, FirmAge, which has a positive estimated coefficient but is also statistically insignificant. Thus, only NetIncome and TotalAssets are significant predictors for StockReturn.

**Table 3. Regression results OLS panel data**Dependent variable: First-day stock return (in %) (StockReturn)

	(Model 1)	(Model 2)	(Model 3)
NetIncome (M)	0000461***	0000493***	0000377**
	(.0000151)	(.0000151)	(.000016)
TotalAssets (M)	.0068446***	.0087881***	.0072449***
	(.0011173)	(.001282)	(.0013973)
Leverage		0000603	0000489
		(.0000665)	(.0000694)
FirmAge			.0036504
			(.0023851)
Constant	.015053***	.0038568	.0004081
	(.0058077)	(.0064714)	(.0081921)
Observations	2099	1,899	1,757
R-squared	0.0178	0.0255	0.0192
Adj.R-squared	0.0168	0.0240	0.0170

	(Model 1)	(Model 2)	(Model 3)
NetIncome (M)	0000461***	0000493***	0000377**
	(.0000151)	(.0000151)	(.000016)
TotalAssets (M)	.0068446***	.0087881***	.0072449***
	(.0011173)	(.001282)	(.0013973)
Leverage		0000603	0000489
_		(.0000665)	(.0000694)
FirmAge			.0036504
C			(.0023851)
Constant	.015053***	.0038568	.0004081
	(.0058077)	(.0064714)	(.0081921)
F-statistic	18.96	16.53	8.59

**Note(s):** This table presents the ordinary least-squares estimation results for regressing net income on stock return. The data set contains 444 firms representing 213 from the UK, 85 from Sweden, 67 from France, 59 from Italy, and 20 from the Netherlands. The natural logarithm of total assets is a proxy for the firm size, leverage is the ratio between the market value of debt divided by equity, and firm age is the natural logarithm of subtracting the company-founded year by the IPO year. Standard errors are reported in parentheses under the estimated regression coefficients. \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1

# 4.2. Underpricing vs overpricing

The presence of a negative and significant estimated coefficient of NetIncome, with a positive and significant constant term, raises the question of a potential tipping point beyond which the conclusion may become invalid. Thus, I perform a univariate regression including only underpriced- or overpriced IPOs. The results are shown in Table 4. Interestingly, all independent and control variables demonstrate significance at a 1% level for the 340 underpriced IPOs. Notably, NetIncome and Leverage exhibit negative estimated coefficients, indicating that higher-income firms and higher levels of debt to capital display lesser underpricing. Additionally, TotalAssets and FirmAge are positively related to StockReturn, suggesting that firms with more assets and older firms tend to have higher levels of underpricing (see Graph A1). Based on IPO

literature, my first hypothesis conjectures a negative relationship between net income and initial stock return. I find supporting evidence.

**Table 4. Regression results for underpricing and overpricing** Dependent variable: First-day stock return (in %) (StockReturn)

	Underpricing	Overpricing
NetIncome (M)	0000352***	0000118
	(.0000133)	(.0000266)
TotalAssets (M)	.0036705***	.0090076***
	(.0012346)	(.0018491)
Leverage	0001755***	.0001044
	(.0000621)	(.0000891)
FirmAge	.0086966***	0010387
	(.0021206)	(.0031581)
Constant	.0592187***	1151423***
	(.0074113)	(.0102946)
Observations	1,237	520
R-squared	0.0273	0.0786
Adj.R-squared	0.0241	0.0714
F-statistic	8.64	10.98

**Note(s):** This table reports the ordinary least-squares estimation results for regressing net income on stock return. The data set includes 340 firms with a positive stock return after the first trading day and 104 firms with negative stock returns. Standard errors are reported in parentheses under the estimated regression coefficients. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Conversely, among the 104 firms with overpriced IPOs, the only significant variable is TotalAssets, which, in line with the underpriced issues, exhibits a positive relationship with StockReturn. My second hypothesis, which posits that firms with higher net income are associated with lower levels of overpricing, yields results

reported in the first row of Table 4. The estimated coefficient of NetIncome is negative but statistically insignificant, suggesting no significant relationship between this variable and StockReturn within the overpriced sample IPOs. Thus, I do not find empirical evidence supporting my second hypothesis.

### 4.3. Industry-level analysis

To advance my analysis, Table 5 reports industry-level comparisons. Firms in the industrials sector display a significant negative relation with StockReturn at a 1% level, whereas the healthcare sector shows a significant positive relation at a 5% level. Thus, firms operating in industrials with higher net income proceeds show less underpricing, while the opposite is observed in the healthcare sector. However, the constant in the healthcare sector is notably significant and negative, indicating that the industry tends to experience overpriced IPOs. Further, TotalAssets exhibits positive and significant estimated coefficients for the industrials, healthcare, and consumer cyclical sectors, consistent with the findings in Table 3 and Table 4. The control Leverage shows a negative estimated coefficient significant at a 1% level for the consumer cyclical sector and a 10% level for all other industries. The consumer cyclical sector demonstrates a significant estimated coefficient for FirmAge at a 5% significance level. Also, as reported in the 7th row, the Adjusted R-squared is substantially higher for the healthcare sector, with 18% of StockReturn's variability explained by the model.

#### 4.4. Country-level analysis

First, country-level summary statistics are shown in Table A3. Interestingly, the average initial stock return in the UK, around 7.7%, differs significantly from Sweden, France, Italy, and The Netherlands, that range between 1.6% to 3% underpricing.

Country-level regression results are presented in Table 6 and display no significant relationship between NetIncome and StockReturn for all sample countries. Nevertheless, for both Sweden and the Netherlands, TotalAssets exhibits a positive estimated coefficient significant at a 1% level. This result is consistent with Table 3 and Table 4. Contrarily, Italy shows a negative estimated coefficient significant at a 5% level. Translated, firms with fewer assets tend to demonstrate less underpricing in

# IPO UNDERPRICING AND OVERPRICING AND LONG-TERM FIRM ...

Italy. Moreover, the UK, Sweden and the Netherlands show a positive and significant relation between FirmAge and StockReturn, again consistent with previous results – older firms tend to experience higher levels of underpricing. Lastly, the control Leverage is insignificant for all countries.

**Table 5. Regression results per industry**Dependent variable: First-day stock return (in %) (StockReturn)

	Industrials	Healthcare	Consumer Cyclical	Technology	Financials	All Others
NetIncome (M)	0001307***	.000618**	.0000278	.0000343	-1.69e-06	9.48e-06
	(.0000455)	(.00026)	(.0000607)	(.000208)	(.000017)	(.0001043)
TotalAssets (M)	.0059381*	.025056***	.0061895*	000375	0019829	.0070871
	(.003448)	(.004313)	(.0032288)	(.0050683)	(.002632)	(.0043396)
Leverage	0001364	.0001018	000494***	.0001654	.000051	0003637*
8	(.0062145)	(.0001823)	(.0001429)	(.0001815)	(.000145)	(.0001952)
FirmAge	.0048098	.0006862	.0105266**	.0016775	0027313	.0035488
rimage	(.0001719)	(.0084551)	(.0052011)	(.0112049)	(.004483)	(.0047674)
	(10001715)	(1000 1001)	(10002011)	(10112015)	(1001105)	(1001/0/1)
Constant	.0156167	09828***	.0072228	.0294638	.0697951	.0409585
	(.0213033)	(.0235987)	(.0188121)	(.0287506)	(.016047)	(.0231951)
Observations	344	276	368	273	257	239
R-squared	0.0271	0.1911	0.0556	0.0038	0.0065	0.0206
Adj.R-squared	0.0156	0.1792	0.0452	-0.0111	-0.0093	0.0038
F-statistic	2.36	16.01	5.34	0.25	0.41	1.23

**Note(s):** This table presents industry-level ordinary least-squares estimation results for regressing net income on stock return. From left to right, the table includes 79 industrial firms, 67 healthcare firms, 84 consumer cyclical firms, 68 tech firms, 81 financial firms, and 65 firms from real estate, consumer non-cyclicals, energy, basic materials, or utilities. Standard errors are reported in parentheses under the estimated regression coefficients. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 6. Regression results per country**Dependent variable: First-day stock return (in %) (StockReturn)

	United Kingdom	Sweden	France	Italy	The Netherlands
NetIncome (M)	0000125	.0000103	0000194	-7.18e-07	0000262
	(.000056)	(.0001339)	(.0000324)	(.0000559)	(.0000195)
TotalAssets (M)	.001988	.0217692***	.003692	0091402**	.0153293***
	(.0019808)	(.0045869)	(.0021396)	(.0041969)	(.005157)
Leverage	.0001034	.000059	0000797	0000627	0002495
	(.0000961)	(.0002209)	(.0000994)	(.0002158)	(.000222)
FirmAge	.0062123**	0028767	0006914	.023345***	.0159124**
	(.0030192)	(.0082026)	(.0042766)	(.0070914)	(.0070523)
Constant	.0458638***	0851365***	.0040567	.018608	1002827***
	(.0108814)	(.0241949)	(.0137892)	(.027431)	(.0321494)
Observations	729	396	324	218	90
R-squared	0.0117	0.1065	0.0103	0.0681	0.1886
Adj.R-squared	0.0062	0.0974	-0.0021	0.0506	0.1504
F-statistic	2.14	11.65	0.83	3.89	4.94

**Note(s):** This table presents country-level ordinary least-squares estimation results for regressing net income on stock return. The UK is represented by 213 firms, Sweden with 85, France with 67, Italy with 59, and the Netherlands with 20. Standard errors are reported in parentheses under the estimated regression coefficients. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### **Case study: Flow Traders**

Within ten years, founders Jan van Kuijk and Roger Hodenius turned Flow Traders, a proprietary trading firm headquartered in Amsterdam, into a billion-dollar company that thrives on market volatility. With a specialisation in Exchange Traded Products (ETPs), investment funds designed to replicate the return of an underlying benchmark asset, the firm rapidly grew in a niche market. Currently, the firm has offices in Europe, the US, and South-East Asia. The year prior to the IPO in July 2015, Flow Traders' estimated European market share was 13%, counting both buyers' and

sellers' volume (Flow Traders Prospectus 2015). The market faces intense competition, and reputation within the industry is detrimental to business results.

Moreover, the industry was, and still is, rapidly growing. BlackRock (2015), the world's largest asset manager, measured ETPs under management at \$598 billion in 2006 and \$2,959 billion at the end of 2015. As of December 2022, this number inflated to a whopping \$8,143 billion (Flow Traders 2023a). Indeed, Dennis Dijkstra, former CEO of Flow Traders, states that the equity story was linked to the expansion of the firm's market share and the underlying market of ETPs.

To support the firm's growth ambitions and objective to access more trading platforms, increase the number of institutional counterparties, and provide liquidity to existing shareholders, a secondary placement was made by Flow Traders and the private equity firm Summit Partners. Consequently, all net proceeds were received by the sellers.

# IPO pricing

Flow Traders' free float of 40%, including greenshoe, resulted in €599 million of equity capital raised for the sellers. Analysis of the pre-deal investor education stage reveals apparent investor demand at the lower end of the indicative valuation range of €1,350 million (Internal documents, Rothschild 2015). The pricing range was formulated based on investor feedback and engagement, incorporating approximately 80% of the received feedback, as pointed out by William Marshall, former Managing Director of Rothschild & Co. Considering the deteriorating market conditions characterised by the Greek government-debt crisis, a slightly wider price range of €29 to €37 was set to allow further pricing flexibility. In Graph 1, the trading performance of the AEX index during the book-building period indicates a consecutive decline over four days, further exacerbated by the withdrawal of six IPOs due to market volatility (Internal documents, Credit Suisse 2015). Thus, according to William Marshall, the quantity and quality of the orders given the Euro-crisis made it prudent to opt for a conservative pricing approach rather than aggressive positioning. Ultimately, the IPO shares were priced at €32, representing the mid-point of the revised range ( $\in$ 31–33) and denoting a market capitalisation of around  $\in$ 1.5 billion.

One of Flow Traders' main competitors which operates in the US market, Virtu Financial, went public in 2015. Dennis Dijkstra states that a key market peer such as Virtu increased Flow Traders' probability of becoming a listed company. Namely, Virtu, the one listed comparable, served as a reference to the pricing process, which is partially contingent on investors' familiarity with the innovative, tech-dominant business model, and with it, demand for all price levels. Specifically, the top of Flow Traders' price range was justifiable by adding a small premium to Virtu's 15 price-to-earnings ratio, used as a reference measure to estimate Flow Traders' value for the IPO (Internal documents, Rothschild 2015).

(AEX 495 33 32 31 Rising market volatility 485 30 480 29 27 470 26 465 25 460 24 23 455 01-Jun 08-Jun 15-Jun 06-Jul AFX Stoxx 50 volatility

Graph 1. A successful IPO despite market conditions

Source: Internal document, Credit Suisse (2015).

Flow Traders' secondary placement led to a high-quality book of allocable demand which was multiple times oversubscribed (3.5x) with more than 120 institutional orders. Approximately 69% of the shares were allocated to long-only investors, while hedge funds and retail investors received 30% and 1%, respectively (Internal documents, Rothschild 2015).

#### Stock return

Twenty-four hours after sounding the gong at Euronext Amsterdam, Flow Traders' stock price exhibited a significant surge of 13%, reaching €36.20. Translated,

if Flow Traders had perfectly set its offer price to the overall market demand, the firm could have raised €678 million, representing an upward deviation of €79 million. Nevertheless, Dennis Dijkstra acknowledges that post-IPO, the sellers continued to have an accumulated majority stake in the firm, thus highlighting that the former private shareholder base experienced substantial unrealised capital gains due to an underpriced offering. Furthermore, William Marshall discloses that the sellers contemplated floating an additional portion of shares. However, this idea was discouraged by Rothschild for two reasons: firstly, the long-term prospects of the firm were expected to outweigh the short-term capital gain, and secondly, the sellers did not require additional capital at that point. Thus, the IPO bill size remained unaltered.

While Dennis Dijkstra believes that 10% underpricing is ideal, William Marshall asserts that the level of stock return one-week post-deal is a better measurement point to determine the IPO's success. According to William Marshall, as price ranges in Europe have an approximate variance of 20%, valuations can differ immensely in the final two weeks based on decision-makers' actions.

In terms of overpriced securities, William Marshall asserts that it is necessary to differentiate between management and owners to assess the impact of a premium offering. He contends that it is difficult to justify the upside of aggressive overpricing from a management perspective. For a firm seeking to raise capital through equity markets, it is crucial to cultivate a content shareholder base inclined to support management in its next growth initiatives. By means of illustration, William Marshall refers to IPO deals from founder-led companies. Specifically, he cites Russian deals over the past decade, in which certain founders aggressively valued the firm without bearing the aftermarket into account. William Marshall hypothesises that these founders are arguably right. Namely, "two or three years further on, the share value has nothing to do with the IPO". Thus, minor overpricing may seem negligible if the issuers' strategy relies on something other than future primary and secondary issuances or accessing debt capital markets in the near term. Dennis Dijkstra asserts that overpricing, contrary to classical industries, is more prevalent in the tech industry since, contingent on the equity story, "tech firm IPOs can have a certain magic to it as these firms are hard to value and can become extremely hot".

# Market and financial position

According to Dennis Dijkstra, Flow Traders maintained a conservative capital position before the IPO, characterised by complete reliance on equity financing without recourse to debt. The firm's position of trading financial instruments was funded through loans obtained from a syndicate of banks. Preceding the IPO, the firm was in a rapid growth phase. In fact, by the end of the fiscal year in 2014, the firm had a net trading income of €172,697 million. This figure witnessed a substantial 76.4% increase to €304,719 million in the subsequent year. Additionally, Flow Traders' global ETP value traded rose 44% from €9,956 billion in 2014 to €14,300 billion in 2015 (Flow Traders 2015).

Flow Traders operates in a highly competitive market and competes with financial institutions and other specialised trading firms, whereby trading strategies, pricing efficiencies, technological advancements, market knowledge, and access to liquidity drive competition. The firm's ability to adapt to changing market conditions and regulatory requirements is crucial in maintaining a competitive advantage.

# Post-IPO effects

First, Dennis Dijkstra emphasises the business model's dependence on various external parties. Specifically, exchanges, central banks, pension funds, insurance firms, asset managers, other ETP issuers, and regulatory entities worldwide. For instance, Flow Traders' regulatory approval to access Chinese ETF markets, as announced in November 2022, exemplifies the firm's strategic objective to expand its footprint in Asia and its reliance on regulatory bodies (Flow Traders 2022). Dennis Dijkstra highlights that the listing bolstered Flow Traders' influence in the regulatory domain, with institutional counterparts, and the broader market.

As a listed company, Flow Traders launched an employee equity participation program in 2017, enabling employees to acquire shares in the open market. Over 90% of the employees participated in this program, resulting in a collective investment of €9.2 million in the firm (Flow Traders 2018). Therewith, Flow Traders' business success translates into financial rewards and aligns employees' interests with stakeholders. Moreover, coupled with a minimum dividend payout ratio of 50%, this incentive plan fosters a culture where employees have "skin in the game" and a vested

interest in the firm's performance. Further, William Marshall highlights the significance of IPO underpricing in providing Flow Traders with flexibility and a safety margin, particularly because of its employee ownership structure. At the time, if Flow Traders' share price fell below its offer price due to aggressive pricing, it would become exceedingly challenging to regain momentum and reset market expectations.

Additionally, to support Flow Traders' structural growth ambitions, the firm opened offices across the globe. Dennis Dijkstra asserts that the IPO boosted Flow Traders' global exposure and presence, resulting in increased visibility among institutional counterparts and extensive coverage by financial media. Moreover, the IPO facilitated attracting and retaining a highly skilled workforce responsible for managing Flow Traders' state-of-the-art technological platform. Indeed, the company experienced substantial growth in its workforce over the years. In 2015, Flow Traders employed 268 employees; by 2020, this figure had risen to 564, denoting a remarkable 110% increase in employee count in five years (Flow Traders 2020).

Furthermore, Flow Traders' IPO has prepared the ground for future primary issuances, capitalising on the market's resonance with Flow Traders' story. Dennis Dijkstra highlights that the firm generates sufficient operational cash flows, removing the immediate need to raise funds through equity capital markets. Still, Dennis Dijkstra acknowledges that in the event that Flow Traders opts to perform a significant merger or acquisition, whereby equity capital is the more cost-effective financing alternative, the listing provides Flow Traders with added financial flexibility.

In the opinion of Dennis Dijkstra, one drawback of the listing pertains to the potential slowdown in decision-making processes. Given Flow Traders' operation in a rapidly evolving environment, a hands-on approach is deemed most appropriate for the firm's business model, as highlighted by the statement: "A million things can happen to our firm in a single financial quarter". Further, Dennis Dijkstra emphasises that in a private setting, communication tends to be more open, intensive, and frequent due to the alignment of long-term interests between private equity owners and management. This level of interaction allows for more agile decision-making, which is detrimental to navigating the multitude of potential events that can impact Flow Traders. Additionally, Dennis Dijkstra asserts there is little leniency from the market

in sudden postponements as there is "no way out" if the firm announces news related to dividends or results.

From management's perspective, Dennis Dijkstra believes that Flow Traders experienced a highly successful IPO, partly driven by the deliberate strategic choice of opting for an underpriced offering geared explicitly towards gaining momentum and meeting market expectations.

### Case study: GrandVision

In 2010, HAL Holding, a Dutch subsidiary of HAL Investments, an international investment company, had majority ownership in Pearle BV and GrandVision SA; it decided to merge the optical chains and continue under GrandVision BV (later changed to NV). The combined scale, resources, and skills to develop global capabilities and expand its established market positions prompted the merger (GrandVision Prospectus 2015). Kees van der Graaf, chairman of GrandVision's supervisory board, highlights that HAL perceived that its role in maximising GrandVision's growth potential and market presence was accomplished. Consequently, HAL decided to divest its stake in the firm by offering it to the public in an IPO.

GrandVision operates as a comprehensive provider of optical services, offering a diverse range of products and services by its optical experts. These products include, among others, prescription glasses, sunglasses, and contact lenses. The firm conducts its retail operations under renowned local banners such as Pearle, Generale d'Optique, and Apollo Optik. It is important to note that the firm owns part of the stores, while others operate as franchise stores. Before the IPO, GrandVision boasted a global presence, with 5,600 stores dispersed across 43 countries spanning Europe, Asia, the Middle East, and Latin America.

# IPO pricing

At the start of 2015, HAL announced its intention to launch an IPO consisting of a secondary offering of up to 20-25% of the outstanding shares. The price range was set between  $\[mathbb{\in} 17.50-\[mathbb{\in} 21.50\]$  and later revised to  $\[mathbb{\in} 19.00-\[mathbb{\in} 21.00\]$ . HAL offered 51 million shares for  $\[mathbb{\in} 20\]$  per share with an over-allotment option of 7.65 million shares,

representing 23% out of HAL's 98.57% stake in GrandVision. Correspondingly, the firm was valued at approximately €5 billion. The over-allotment option was fully exercised, whereby all proceeds went to HAL.

Willem Eelman, former CFO of GrandVision, asserts that HAL's decision to list GrandVision on Euronext Amsterdam was primarily driven by transparently disclosing the firm's net asset value to the market. In the books of HAL, GrandVision was perceived to be undervalued. Indeed, prior to the IPO, GrandVision had a book value of €703 million, whereas as of December 2014, the book value was based on the IPO, equalling €799 million (HAL 2014). The quarter float of HAL's interest successfully unveiled the firm's value in and to the market.

Willem Eelman and Kees van der Graaf believe the IPO was exceptionally well priced, with nearly €1.17 billion capital raised for the seller. Willem Eelman argues that part of the pricing accuracy rests in the fact that numerous peers in the market served as references. Think of the French Essilor and Italian Luxottica eyewear companies that merged into EssilorLuxottica in 2018. Interestingly, EssilorLuxottica acquired GrandVision in 2021, adding further significance to the industry dynamics and context of the IPO.

#### Stock return

The offer price was set at €20 per share. Exactly one day later, the share price increased by 1.86% to €20.37. Despite the complex and demanding nature of the pricing process, Kees van der Graaf explains that a slightly underpriced offering provides a certain level of assurance that the placement will succeed. Still, Kees van der Graaf acknowledges that despite meticulous and comprehensive pricing analyses, the first-day stock return can result from the prevailing market sentiment or the impact of the CEO's last presentation preceding the listing. Nevertheless, if the initial increase exceeds 6%-7%, the offer price is too low. Willem Eelman highlights the influence of employee ownership and notes a 10% initial stock return as ideal.

Kees van der Graaf emphasises the varying levels of risk related to the proportion of the total equity offered. The size of the IPO, calculated by multiplying the number of shares times the offer price, can exhibit significant differences. Thus, the money left on the table through underpricing gradually increases as firms sell more shares in an IPO. Hence, as the percentage of equity offered increases, the appeal of a discount reduces. Stated differently, if substantial ownership proportions are offered in the IPO instead of multiple sell downs, a slightly overpriced offering may be more advantageous, particularly when demand exceeds supply.

As a supervisory board member of GrandVision and Basic Fit, Kees van der Graaf uses Basic Fit's IPO as a successful example. The firm floated 56.1% ownership with a share price of €15, which experienced a 3.3% decline to €14.50 on the first trading day. He argues that Basic Fit's business model is relatively straightforward: "The more clubs you have, the more members, the more sales. If people believe that the firm can open that many new clubs in a short period, then it is possible to overprice the IPO". Conversely, "surprising the market in a negative sense leads to a considerable loss in credibility. In the positive sense, it is crucial that the firm can explain the variance and prove that the firm did not withhold information that may have been relevant for analysts determining the share value. Else the market reevaluates the firm and adjusts the share price accordingly."

# Market and financial position

While the history of one of the separate entities dates to the late 19th century, the merger only occurred in 2011. Therefore, GrandVision was a relatively young company with relatively young management. At the time of the IPO in 2015, the firm had a solid financial position with a net result of  $\in$ 231 million, up from  $\in$ 175 million the year before. As of September 2014, the firm's borrowings under the Revolving Credit Facility amounted to  $\in$ 795 million. Additionally, GrandVision's operation generated solid cash flows of  $\in$ 222 million, a slight increment compared to 2013, despite a significant capital expenditure increase from  $\in$ 133 to  $\in$ 158 million (HAL 2014).

The market is highly resilient to changing macroeconomic conditions and shows regular annual consumer repurchase cycles. Various regional and national optical retail chains exist, but to a much lesser extent, multi-country, or even completely international chains. Moreover, roughly 40% of the global population requires some vision correction (GrandVision 2020). Both an increasing and ageing population are favourable market developments for the firm.

# Post-IPO effects

First, since HAL remained the majority owner of the firm, with the remaining interest divided among shareholders, each no more than a 3% stake in the firm, the threat of an abrupt shift in corporate control was null. In other words, shareholders who obtained shares from the secondary offering invested in GrandVision in return for negligible corporate control. The firm remained a closely held corporation, with HAL holding the cash flows and voting rights.

According to Willem Eelman, the IPO provided GrandVision with increased strategic and financial autonomy from HAL, as highlighted by the statement: "In terms of outside capital, but also if we ever wanted to do one more big acquisition through a primary issuance, it gave us a lot more options on the corporate side to be able to fund the company independently from HAL." In preparation for the IPO, GrandVision aimed to simplify its capital structure by replacing all debts owed to HAL with debt capital obtained through a syndicate of bank loans.

Further, Willem Eelman asserts that considering GrandVision's total market capitalisation, the firm could have been listed on the Amsterdam Exchange Index (AEX) rather than the Amsterdam Midkap Index (AMX). However, the limited availability of free float in the market restricted this possibility. Willem Eelman further mentions discussions between GrandVision and HAL to float an additional quarter of HAL's stake in the firm to 51% ownership, which would have likely facilitated an AEX listing and further market visibility. However, the announced acquisition of EssilorLuxottica in 2019 rendered these talks idle.

Moreover, the IPO of GrandVision, although not involving the raising of new equity capital, presented strategic options to accelerate the firm's acquisition portfolio, as mentioned by Willem Eelman. The optical retail market is highly fragmented, with most countries comprising small store chains or independent opticians. Throughout its history, GrandVision has pursued a growth strategy through acquisitions, expanding its business into new markets. However, the execution of such growth plans demands sufficient cash, and the IPO enhances financial flexibility and diversity via greater access to external sources of capital.

Before the onset of the COVID-19 pandemic, the firm was in a growth phase, rapidly opening stores in numerous high-potential markets, primarily through

acquisitions of smaller competitors or opening new franchise stores (GrandVision 2020). The continuous investment in expansion and a maximum leverage ratio of 2.0 (net debt/EBITDA) allowed for increased global capabilities, fostering economies of scale, consolidating the firm's position, and facilitating considerable expansion.

GrandVision's global reach and scale allowed for distinct procurement advantages as to product quality, range, and purchase prices (GrandVision 2016). In turn, consolidating leadership positions in GrandVision's operating markets, made possible or enhanced through the IPO, strengthened the firm's bargaining power. Specifically, in 2019, as part of the firm's centralization transformation, GrandVision reduced the number of local suppliers by 2% (GrandVision 2019). Fewer and more centralised suppliers to negotiate with allow for more affordable eye care products – one of GrandVision's competitive advantages (GrandVision 2019).

Additionally, GrandVision's business model relies heavily on the experience and skills of country-level operational leaders, whereby local market dynamics and optical knowledge provided by opticians, optometrists, and optical sales experts are detrimental to business results (GrandVision 2020). The listing contributes to attracting new talent and retaining executives and experienced managerial staff in operating markets. Specifically, GrandVision could offer stock options or annual share awards. While private firms can offer similar employee incentives, the extra liquidity provided by the secondary market increases its value and attractiveness.

According to Kees van der Graaf, the initial post-IPO quarter carries substantial implications for the business's long-term success. Kees van der Graaf asserts that a widely recognised principle exists, positing that a single underperforming quarter necessitates a subsequent period spanning 4-8 quarters, during which the firm must meet its financial targets to restore confidence and trust among market participants. This principle applies to all reporting periods as a public firm. Thus, the market exerts constant and unrelenting pressure on various key areas, including financial objectives, the maximisation of growth potential, the calibre of management, the resilience of the firm's strategic direction, and the efficacy of corporate governance practices related to remuneration and incentivizing leadership. These critical aspects are subject to continual scrutiny and questioning by the market, as expressed by Kees van der Graaf

and Willem Eelman. He views this as one of the numerous byproducts of GrandVision's overall successful listing.

### Case study: ASR

In October 2008, due to escalating liquidity issues caused by the global credit crisis, the Dutch government intervened by nationalising Fortis Group's banking and insurance activities. The state acquired the Dutch operations of Fortis Group, or ASR, worth €16.8 billion. However, it was evident that the government's intention was not to maintain a perpetual stake in ASR, and the urge within ASR to regain its status as a publicly listed firm was renewed. About eight years later, the financial sector was sufficiently stable, with great interest in the market, and ASR was ready for privatisation. A study was conducted to determine the state's optimal and most lucrative exit strategy. According to Chris Figee, former CFO of ASR, management preferred an IPO against being acquired. The study concluded that the added value derived from an auction, including possible synergies, was limited. Moreover, rival firms such as Aegon and Achmea lacked the necessary financial resources, whereas NN group was acquiring Delta Lloyd in a €2.5 billion deal.

# IPO pricing

In May 2016, ASR embarked on its IPO as market conditions were deemed favourable. To determine a fair initial offer price, investment bankers performed valuations of the firm. Concurrently, ASR executives travelled globally to gauge institutional investors' demand for the prospective IPO. On behalf of the Dutch state and ASR, NL Financial Investments ("NLFI") indicated a price range of €18 to €22 per share. The offer comprised 52.2 million offer shares, with an over-allotment option of 7.8 million, representing 40% of the outstanding shares. The state's objective was profit maximisation, while management sought to secure a favourable position in the market post-IPO. In terms of pricing, Chris Figee asserts that IPOs should always incorporate a discount. "There are over 20 insurers in Europe; if an investor misses the IPO, no big deal; you compete for time". According to Chris Figee, the only exception to this rule entails tech firms during times of economic prosperity

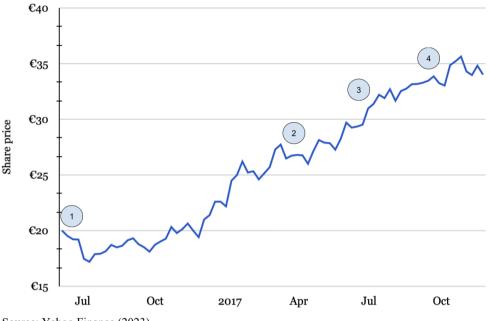
with widespread demand for these securities. However, for classical industries, the market has already set a certain pricing benchmark.

Another factor influencing the offer price was its impact on shareholders' composition regarding their investment horizons. Chris Figee indicates that the order book revealed a decline in the proportion of long-only investors and excessive hedge fund stakes when the offer price exceeded €19.50–19.75. Ultimately, the offer price was set at €19.50 per share.

According to Michel Hülters, Chief Investor Relations, approximately 70% of the shareholders were long-only investors, while the remaining 30% consisted of liquidity providers. Notably, although liquidity providers can rapidly divest their stake in the firm, their investment horizon closely aligns with that of long-only investors, as pointed out by Michel Hülters. In addition, Chris Figee and Michel Hülters emphasise that finding a balance between shareholders that understand the business model, and commit to the firm for a prolonged period, along with short-term oriented investors providing liquidity in the secondary market, played a pivotal role in ASR's IPO.

#### Stock return

By the end of the first trading day, the stock price rose 2.60% to €20. Michel Hülters holds that firms should strive towards fair IPO valuation, ideally followed by a few percentage points appreciation of the stock price after the first trading day – a positive market response that serves as a highly favourable signal. The share price development, as highlighted by Chris Figee, was strongly influenced by the level of free float in the market. ASR had its IPO with a 20–25% free float, which thwarted stock price appreciation due to low liquidity. Thus, the stock price witnessed significant growth once the firm consistently delivered on its performance and fulfilled its commitments while simultaneously increasing the free float level.



Graph 2. ASR's share price development and sell-downs (Jul 2016 – Nov 2017)

Source: Yahoo Finance (2023).

Chris Figee argues that part of ASR's successful IPO can be attributed to the positive momentum created through strategic (under)pricing. Indeed, the enthusiasm and hype among investors enabled ASR to establish a higher offer price for each sell-down based on higher share values, as depicted in Graph 2 below. In fact, the second sell-down was priced at  $\[ \\epsilon \\ep$ 

# Market and financial position

Before the IPO, ASR had a robust balance sheet, with a solvency II ratio of 185%. This number signifies the firm's exceptional financial strength and minimal reliance on external lenders. Indeed, its core business activities predominantly funded the firm's investments. Over the years, the Solvency II ratio witnessed a gradual upward

trend, with minor adjustments, rising from 185% at the time of the IPO to 221% at the end of 2022, as disclosed by ASR (2022).

In 2015, the Netherlands was the fifth-largest insurance market in Europe (ASR 2016). The Dutch insurance market is mature and saturated, with fierce competition and price pressure. By the end of 2015, ASR achieved the second-highest market share of 12% in the non-life sector. Additionally, ASR held the sixth position in the life insurance sector, also with a market share of 12% (ASR 2016).

# Post-IPO effects

An initial offering marks a corporate milestone that heralds the next phase of a company's journey and is followed by one of the most decisive quarters for establishing market confidence. In the third quarter of 2016, ASR saw an operating result of €150 million, exceeding the average of €146 million recorded in the first half of 2016 (ASR 9 Month Trading Update, 2016). In addition, ASR achieved an operating return of equity of 14.6%, comfortably exceeding the target of 12% (ASR 9 Month Trading Update, 2016). Thus, the firm experienced a healthy 2.6% rise in share price and solid financial performances that met or exceeded ASR's financial targets.

However, apart from the financial results of the quarters preceding the IPO, ASR does not disclose quarterly financial results. Given the long-term nature of insurance contracts, which can last up to 50 years, the firm de facto possesses long-term obligations towards its customers. Still, Chris Figee contends that being listed on the stock exchange has introduced a slightly more short-term orientation within ASR. An example of this shift includes earnings management practices – accounting techniques used to improve the appearance of the firm's financial position – which could bias specific decision-making processes. For instance, external pressures might lead to postponing certain investments to subsequent reporting periods solely due to the challenge of convincing shareholders of their viability.

Furthermore, the expansion of ASR's shareholder base, marked by its inclusion on the AEX index, significantly enhanced its profile and visibility. For one, it provided greater access to capital markets at more favourable terms and conditions – strengthened by ASR's discounted offering, according to Michel Hülters. However,

maintaining this access necessitates active engagement and open dialogue with institutional investors and the broader market. ASR's investor relations department plays a central role in spearheading these efforts, contributing to the firm's performance in the years following the IPO. Moreover, the enhanced attractiveness of ASR to talented individuals, media coverage on prominent news outlets, a boost in reputation, and more autonomy in decision-making generated both direct and indirect advantages for ASR's market position and leverage in negotiations with counterparts.

To illustrate this, in a bid of ASR for market dominance in the life, non-life, and pension insurance sector, the merger between ASR and the Dutch operations of Aegon, another major insurance firm, was only feasible by being publicly listed, as specified by Chris Figee. The corporate governance and decision-making complexities arising in a private setting, where the state was the sole shareholder, would have impeded any merger proposal of such magnitude. This proposition was recently passed with a 99.9% vote at the extraordinary general meeting.

Whilst the IPO did not change ASR's strategy, it garnered increased support for its existing strategy from the new international shareholder base, as mentioned by CEO Jos Baeten (2016: 2). Simultaneously, Chris Figee explains that "the firm is a bit more locked in its strategy, and it is hard to make radical changes", explained by the risk-averse nature of investors. Nevertheless, the slightly underpriced and successful IPO not only financially rewarded the initial institutional investors who placed their trust in the business model but could prove advantageous once ASR requires access to capital markets as part of its strategy thenceforth. Namely, "Markets have a memory like an elephant", as said by Michel Hülters. Overall, Michel Hülters highlights that ASR maintained and improved its solid financial framework, robust solvency II position, engaged in acquisitions, distributed dividend payments, assumed slightly more risk in its investment portfolio and experienced an overall upward trend in stock performance since the IPO.

#### 5. Discussion

### 5.1. Underpricing

Among the underpriced IPOs, there is an observable trend where firms with higher net profitability exhibit lower levels of positive initial return. This finding supports my first hypothesis. To further investigate, I explore whether lower negative initial returns are also linked to higher net income levels. However, no such relation can be detected, thereby failing to provide evidence for my second hypothesis. Several reasons might explain my results.

First, as Dang et al. (2017) research about the most popular firm size proxies in corporate finance includes revenues, by extension, I use net income interchangeably with firm size. Therefore, since net income is a significant predictor of underpriced IPOs, larger firms tend to have an offer price closer to the closing price than smaller firms

As outlined in the literature review, initial returns tend to be higher for firms that are more difficult to value due to high information asymmetry. Ritter (1984) discovered a significant relationship between sales, as a measure of risk, and initial returns. Smaller firms with lower sales, representing higher risk, have higher initial returns than larger firms (Ritter 1984).

Lowry et al. (2010) identify various firms that go public regarding age, industry, size, and reputation. For instance, certain firms have existed for over 100 years, operate within well-established industries, and receive extensive media coverage before their IPOs. Conversely, other firms are less than a year old, belong to lesser-known industries, and receive limited or no media attention. Consequently, larger firms entail less uncertainty, making it less challenging for parties to assess their prospects. As valuation and pricing are driven by accumulated market demand, underwriters face fewer difficulties valuing larger firms when market demand is more predictable (Rock 1986). Ritter (1984) asserts that smaller firms with greater information asymmetry should offset ex-ante uncertainty risks of investors by higher underpricing.

Further, Chae (2005) and Boujelbene & Besbes (2012) verify that large firms experience fewer information asymmetries in corporate transactions. Chae (2005)

attributes this to an increasing function of firm size and pre-disclosure information dissemination. Thus, various participants possess a more comprehensive understanding of the firm's present and future value. Traditionally, underpricing serves as a mechanism for compensating investors for the inherent risk of an IPO. However, one could argue that this advanced knowledge diminishes issuers' need to offer a discount.

Additionally, Demsetz (1986) notes that smaller firms have fewer insiders, with wider ask-bid spreads. The bid represents the demand for a security, the ask represents its supply, and the spread is a measure of liquidity. Smaller firms, with wider spreads and lower liquidity levels, pose a disadvantage to risk-averse investors favouring the option to sell newly acquired shares. Thus, issuers must entice investors through a higher discount to attract sufficient market demand.

Another plausible explanation is the limited financial coverage from speculators and news outlets of smaller firms. Aggarwal et al. (2002) find that issuers deliberately underprice offerings to attract analyst attention and generate price momentum. Indeed, Merton's (1987) model demonstrates that analyst coverage can catalyse IPO publicity, leading to increased firm value through greater investor recognition. These findings hold particular relevance for smaller firms.

The case studies I conducted further support my first hypothesis. Namely, ASR (2.60%) and GrandVision (1.86%) have significantly lower levels of underpricing compared to Flow Traders (13.16%). The average net income between 2013–2017 of ASR, GrandVision and Flow Traders are €836 million, €178 million, and €162 million, respectively. Nevertheless, Flow Traders' average is highly biased due to an extraordinary record year in 2020, with net profits amounting to €465 million – a 774% increase from the year before. Still, the case examples confirm my finding that lower levels of underpricing are associated with larger firms.

Next to possible causes outlined in the literature section, my model could suffer from reverse causality, whereby underpricing favours long-run firm performance. All interviewees agree that firms should strive for an underpriced issuance. To illustrate this, William Marshall shares that privately-owned firms advised by the investment bank are informed that an IPO should be considered a discounted offering.

However, opinions regarding the optimal level of underpricing vary among interviewees. Dennis Dijkstra names a 10% initial stock return as ideal. William Marshall suggests that the investment bank considers a 5% to 15% increase one-week post-deal a success in pricing. He posits that deal dynamics and valuation expectations primarily drive near-term under- and overpricing. Kees van der Graaf concurs that the initial return can simply reflect the market sentiment on the day of the IPO or be a reaction to the last presentation by the issuer's CEO before going public. However, if the initial increase exceeds 6%-7%, the offer price is set too low. Willem Eelman confines the desirable level to below 10%.

Still, a unanimous agreement exists among the interviewees whereby slight underpricing is considered more successful by management, investors, investment banks, the press, and the broader public. Thus, for underpriced offerings, the numerous benefits of an IPO on firm performance can be underpinned. One notable advantage entails the increased visibility in financial markets, achieved through the transparency of the firm's market value. Consequently, this enhanced visibility provides greater access to capital markets. For instance, in the case of GrandVision, the IPO facilitated financial autonomy and expanded strategic options within the firm's acquisition portfolio. Flow Traders' IPO provided the option to reward employees through incentive plans. The business model's dependence on external parties also made the heightened status highly valuable. Another illustrative example is the case of ASR, where the ownership shift made the acquisition of Aegon Nederland possible, a €4.9 billion acquisition deal, prominently re-shaping ASR's standing in the competitive environment. Furthermore, Willem Eelman, Chris Figee, Michel Hülters, and Dennis Dijkstra emphasise the public markets' heightened pressure on firm performance. While this presents substantial challenges, it also yields benefits by driving firms to improve and optimise various operational aspects. The interviewees highlight the following areas: current performance benchmarks, key performance indicators targets, reporting systems, performance forecasting, organisational structure, corporate governance, investor relations, and overall business professionalisation. Chris Figee describes this dynamic as a continuous flow of feedback provided by the market. Altogether, a two-sided coin: one that forces maximum efficiency and the other that penalises any lack of it.

## 5.2. Overpricing

My analysis of overpriced IPOs, however, shows no significant relationship. Thus, I do not conclude that net income affects the negative initial returns of overpriced IPOs. Still, based on my interviewees, specific arguments can be put forth.

William Marshall distinguishes between management and owners to examine the effect of overpriced equity issuances. For management, it is vital to have an investor base inclined to support its strategies that frequently require external capital. Indeed, Chris Figee and Michel Hülters affirm that in IPOs, it is essential for newly entered shareholders to understand the business model, commit to it, and for management to feel at ease with its investor base. Nevertheless, William Marshall argues that since two or three years following the IPO, the share price is unrelated to the IPO, minor overpricing may be a rewarding strategy for owners. Especially if the firm's strategy does not require access to capital markets in the foreseeable future. Still, in the mind of Michel Hülters, especially the role of and relationship with capital markets is vital. He argues that the rollout of a business strategy that necessitates raising funds in capital markets becomes exceedingly challenging if the firm has previously disappointed investors with immediate capital losses due to overpricing, regardless of the time in between. Kees van der Graaf believes that offerings with a premium can succeed, but the firm must have an extremely compelling long-term story, as was the case with Basic Fit's IPO. Taken together, understanding the essential components of the firm's long-term strategy, and distinguishing between management and owners, is crucial for gaining insights into overpriced securities.

## 5.3. Industry-level

In terms of industry differences, my model indicates that larger firms operating in the industrial sector have lower levels of initial stock return. In contrast, larger healthcare firms show higher initial returns. However, it must be noted that the constant term of healthcare is negative at -9.8% and significant at a 5% significance level. This aligns with the findings of Ritter (2023), who observed an average initial stock return of -14% for IPOs of pharmaceutical firms between 2013 and 2017. Thus, healthcare IPOs are, on average, substantially overpriced. Specifically, as healthcare firms grow larger in net profits, the initial stock return moves towards zero. This

indicates that the influence of asymmetric information, the driving factor behind the initial stock return, remains applicable, despite the opposite direction for healthcare firms.

Moreover, industry-level factors affecting first-day stock return were identified by several interviewees. Chris Figee and Dennis Dijkstra highlight that the value of firms operating in older and classical industries is more predictable since these have more established historical cash flow data and more market peers. Consequently, a benchmark for pricing has already been set, and firms are expected to have a discounted IPO, in their opinion. This observation aligns with the concept of asymmetric information between market participants.

Furthermore, while Dennis Dijkstra and Chris Figee believe that IPOs should be priced at a discount, both name tech-firm IPOs as one of the exceptions that can command a premium because of their greater pricing power; Chris Figee connects it to technology booms with a market-wide abundance of investor demand in these securities. Dennis Dijkstra emphasises valuation difficulties and unreasonable investor expectations of certain tech firms. Indeed, Lowry et al. (2010) find significantly higher initial return variability among tech firms due to valuation challenges. Willem Eelman offers a different perspective by emphasising the prominence of employee stock compensation, which is custom in the tech industry. This industry-specific element potentially influences the pricing process, favouring underpricing.

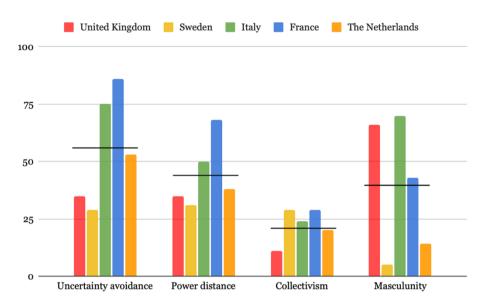
Hsu et al. (2010) present compelling evidence that a successful IPO, typically accompanied by a modest positive initial stock return, leads to a substantial decline in the performance of industry rivals. This finding underscores the notion that an IPO not only impacts the firm going public across multiple dimensions but also exerts an insidious influence on the competitive standing of other companies operating within the same domain. Therefore, it further supports the argument made by all interviewees that a slight underpricing, and hence, a successful IPO, yields greater returns for the newly listed firm.

### 5.4. Country-level

Based on my country-level analysis, no concrete and robust conclusion can be drawn for the relation between net income and first-day stock return for the individual sample countries. Nevertheless, firms within the sample countries display distinct variations in average initial stock return values, as shown in Table A3. Specifically, the UK stands out considerably, with an average underpricing level of 7.7%. In contrast, Sweden, Italy, France, and the Netherlands exhibit positive initial stock returns ranging from 1.6% to 3%.

As described in the literature section, Chourou et al. (2018) discover strong evidence that issuers operating in countries with high uncertainty display less underpricing. Conversely, countries with high power distance, masculinity, and collectivism show greater underpricing. Graph 3 depicts the sample countries' scores on the applicable dimensions of Hofstede (2010). Notably, the UK has the second lowest score in uncertainty avoidance and scores considerably higher than the average sample score regarding masculinity. This aligns with Chourou et al.'s (2018) findings, suggesting higher initial stock returns. However, the UK's scores fall below the sample average of power distance and collectivism, contradicting the authors' findings.

Moreover, the UK is home to one of the world's largest and most prestigious stock exchanges: the London Stock Exchange (LSE). London hosts a well-established financial infrastructure, a deep pool of institutional investors, a convenient language, and it has been a major historical financial hub. Hence, it attracts a substantial number of IPOs from both domestic and international firms. Indeed, between 2013–2017, 213 firms went public – more than Sweden, France and Italy combined. Consequently, a higher level of underpricing may be necessary for firms to differentiate themselves in the UK's highly competitive IPO market.



Graph 3. Sample countries' scores on four Hofstede dimensions

Source: Hofstede (2010).

#### 6. Conclusion

This study investigates the relationship between the initial stock return of an IPO and firm performance, as proxied by net income, for a sample of 444 IPOs located in the United Kingdom, Sweden, France, Italy, and the Netherlands over 2013–2017. A univariate analysis shows a significant negative relationship between the initial stock returns of underpriced IPOs and the net profitability of firms. This finding is further supported by the case studies of Flow Traders, ASR, and GrandVision, wherein the latter exhibit higher net income and lower initial stock returns than Flow Traders. For overpriced IPOs, no such relation can be detected. However, the industry analysis reveals that the initial stock return of firms operating in the healthcare and industrial sectors moves towards zero as firms grow larger in net income. While the country analysis does not reveal a significant relationship, the average initial stock return is considerably higher in the UK than in the other countries. The influence of the LSE

and the national culture in terms of uncertainty avoidance and masculinity could partially explain this deviation.

To further investigate, the possibility of reverse causality is discussed. All interviewees agree that a slightly positive initial return represents a successful IPO with numerous and substantial benefits to the firm. Interestingly, the Dutch IPO case studies stand out since, in all three cases, private equity owners and not management decided to go public. As the three secondary placements did not raise new equity capital – a general IPO rationale used for expanding business operations – one could argue to what extent the IPOs reflect the interests of management at that time. Still, the case studies underscore numerous advantages of an IPO, such as increased leverage with business partners, access to capital markets for refinancing high-interest debts or funding strategic M&A deals, and regular performance evaluations that optimise operational processes and guide strategic decision-making.

In conclusion, the larger and more profitable a firm is, the likelier the initial stock return moves toward zero. Based on existing IPO literature, the concept of asymmetric information between market participants can explain the negative relationship. A key takeaway for managers based on the case studies is that the available information among market participants, be it historical data, business model familiarity, industry benchmarks, market peers, and the overall uncertainty of a firm's value, governs the need and chance of a positive initial return following the IPO. Moreover, while firms ought to discount their IPOs for numerous reasons, in specific situations, overpricing has merit. However, the probability of scaring investors away and risking access to capital markets favours decision-makers to strive towards accurate valuation with modest underpricing. Finally, while first-day stock returns stir strong sentiments — which is natural human behaviour — IPO pricing is no exact science. Still, management should prepare for the fact that, from the day of the listing onwards, the firm will be confronted with constant and relentless scrutiny from the market.

I acknowledge several limitations to this analysis that warrant consideration. First, the sample composition skews towards underpriced IPOs, as positive initial stock returns are more prevalent in my sample countries. Including countries more renowned for premium offerings might be interesting, whereby a country-level analysis could yield valuable insights. Second, I posit reverse causality based on my

qualitative data; however, I fail to provide quantitative evidence – a gap future research could address. Third, it is imperative to acknowledge that the time frame of this research (2013–2017) includes firms that went public in 2016–2017, coinciding with the profound impact of the COVID-19 pandemic as I test data of the subsequent five years. Hence, extending the sample period or limiting the analysis to specific industries might be helpful, as the pandemic affected sectors in varied ways. Further, as for the case studies, only the Flow Traders case included an interview with an investment banker that guided management in the IPO. In hindsight, incorporating the perspectives of IPO advisors could offer a more diverse range of insights, complementing the opinions of current or former management. Specifically concerning the allocation and pricing process, whereas management possesses greater expertise in areas related to initial stock return sentiment, the firm's financial and market position, and post-IPO performance. Overall, additional in-depth research on this topic and beyond holds promising potential as the post-pandemic era lifts the brakes put on listings and potentially reignites the momentum of the recordingbreaking IPO year 2019.

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# **Appendices**

**Table A1. Matrix of correlations** 

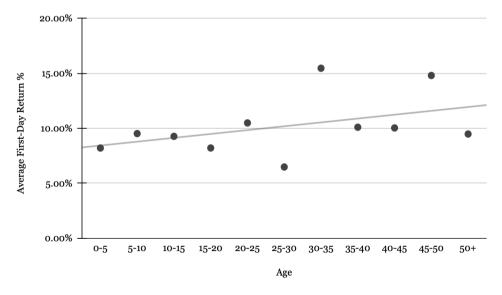
Variables	StockReturn	NetIncome	TotalAssets	Leverage	FirmAge
StockReturn	1.0000				
NetIncome	0.0039	1.0000			
TotalAssets	0.1202	0.4548	1.0000		
Leverage	0.0307	0.1242	0.3531	1.0000	
FirmAge	0.0599	0.0398	0.1845	0.1079	1.0000

**Note:** This table reports the estimated correlation coefficients between the used variables.

Table A2. Breusch-Pagan/Cook-Weisberg test for heteroskedasticity

Chi2	6.13
CIIIZ	0.13
Prob > chi2	0.0133

Graph A1. Average first-day returns by age of firm at time of IPO



Source: Eikon Refinitiv (2023).

Table A3. Country-level summary statistics

	United I	Kingdom	Swe	eden	Fra	nce	Ita	ıly	The Net	herlands
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
StockReturn	1065	.077	425	.0183	335	.0167	295	.0296	100	.0209
NetIncome	1030	13.757	425	16.731	335	23.86	252	28.87	100	84.99
TotalAssets	1007	4.739	425	4.751	330	4.585	266	5.358	100	7.367
Leverage	870	39.725	401	53.274	334	56.727	279	68.417	100	61.20
FirmAge	935	2.186	420	2.770	330	2.280	275	2.734	90	1.812
Firms	213		85		67		59		20	

**Note:** This table presents country-level summary statistics.

**Table A4. Interview data matrix Flow Traders** 

	Flow Traders	
	Dennis Dijkstra	William Marshall
Firm introduction	Dutch origin; brand awareness; liquidity; business model; one competitor; private equity.	
IPO pricing	Stability; fair pricing; book-building; unrealised capital gains; existing shareholder base; absolute and relative float.	Eurozone crisis; volatility; high quality book; aggressive pricing; balance; broader price range; Europe 20% variance; discount; employee ownership; flexibility; safety margin.
Stock return	10% underpricing ideal; long-only investors;	One-week post deal 5– 15% uptick ideal; deal

	hedge funds; 600 million equity capital raised; classical industries; benchmark; positive momentum.	size; momentum; owners; management; supportive shareholder base; founder-led companies; Russian deals; controlling stake; deal dynamics; valuation expectations.
Market and financial position	ETFs; passive investing; growing market; organic growth; conservative financing.	
Post-IPO effects	Attract talent; diversity; international exposure; market share doubled; access capital markets; M&A status; shareholder communication; dividends.	

**Note:** Interview available with the author upon request (mail: t.d.drooduin@student.rug.nl)

Table A5. Interview data matrix GrandVision

	GrandVision		
	Willem Eelman	Kees van der Graaf	
Firm introduction	Merger GrandVision SA and Pearle BV; HAL majority owner; firm value transparency; secondary placement; capital structure.	Small and large acquisitions; rapid expansion; growth potential; HAL; revaluation; market climate; bank consortium.	
IPO pricing	Market unrest; delayed IPO; excellent pricing; market peers; pricing references.	AEX low prices; decision-maker; management interests; roadshows; analysts.	

Stock return	Quarter float; book value; slight underpricing ideal.	Underpricing is a small percentage, but large amount of capital; all in the game; order books; negligible corporate control; worst scenario IPO failure; surprising the market.
Market and financial position	Acquisition portfolio; strategic options; autonomy; attract human capital; AEX; AMX; cash generative; Revolving Credit Facility; commercial paper.	Small shareholders (<3%); net debt position 800-900 million.
Post-IPO effects	Professionalisation; capital markets; reporting; brand awareness; Essilorluxottica; public market pressure.	COVID-19 pandemic; lockdowns; store traffic; first reporting quarter.

**Note:** Interview available with the author upon request. (mail: *t.d.drooduin@student.rug.nl*).

Table A6. Interview data matrix ASR

	ASR		
	Chris Figee	Michel Hülters	
Firm introduction	Financial crisis; nationalisation; auction; IPO; synergies; risk; restructuring.	State ownership; temporary situation; internal motivation to become publicly listed again.	

IPO pricing	Twenty insurers in Europe compete for time; discount; positive buzz; long-term oriented investors; liquidity providers; book-building process.	Investor education program; institutional investors; roadshows; book-building; short-term investment orientation; fundamental analysis.
Stock return	Drastic price swings; free float; share price appreciation; liquidity; credibility; classical industries.	Accurate pricing; intrinsic value; 2% appreciation.
Market and financial position	Conservative financing; solid balance sheet; new capital regime; capital structure unchanged; leverage.	Solvency II ratio; long- term customer obligations; USP; performance reporting.
Post-IPO effects	Sell downs; independence; short-term orientation; earnings management; sharpened focus; more profile with customers, business partners, employees; stability; governance and decision-making; confidential; Aegon deal.	Acquisitions; dividend; external capital; riskier investments; long-term share price appreciation; corporate strategy; investor relations; open communication style; responsibility; talent.

**Note:** Interview available with the author upon request (mail: *t.d.drooduin@student.rug.nl*)