Chapter 1

The impact of investment and R&D intention disclosure on IPO returns ᵃ

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Abstract

This study investigates the signaling properties of the use-of-proceeds disclosure in the prospectuses of going public companies. This disclosure plays an important role in mitigating information asymmetries through revealing the motivation of owners to take the business public. A three-layered classification scheme for the use-of-proceeds is used, consisting of investment intention, debt payment intention, and general corporate purpose intention. The study argues that companies declaring investment intention and in particular, those disclosing research and development (R&D) intention signal their long-term value creation potential and consequently provide greater returns, while debt payment and general corporate purpose intentions do not signal value creation . A sample of 117 firms that went public on Borsa Istanbul are used to test the predictions. Results show that investment is the primary motivation for going public and over 50% of all proceeds are allocated for further investment plans. Debt payment intention and general corporate purposes come second and third in terms of the amount of proceeds. Capital expenditures (CAPEX) account for most of the investment plans, as 76 of the 79 firms declaring investment intention allocated part of the proceeds to it. In contrast, only 15 small firms declare R&D investment intention, accounting for a negligible 0.3% of the gross proceeds. Regressions show that investment declaring companies provide larger initial returns relative to non-declaring firms. R&D emerges as the source of good performance despite its small size while CAPEX plans appear to be priced in the offer price and have no significant impact on long-term returns. The results support the notion that the use-of-proceeds disclosure provides investors information to assess investment worthiness of the going public companies and highlight the importance of investing in the future.

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1. Introduction

This study investigates the relationship between use-of-proceeds disclosure and returns. The discussion on this subject is not new. Seminal research papers exist on the intention of secondary equity offerings (SEO) (Autore et al., 2009; Jeanneret, 2005; Silva & Bilinski, 2015; Walker & Yost, 2008) and initial public offerings (IPOs) (Amor & Kooli, 2017; Andriansyah & Messinis, 2016; Kim & Weisbach, 2008; Leone et al., 2007; McGuinness, 2019; Wyatt, 2014). Of particular interest is the signaling theory that predicts a quality signaling mission for investment declarations leading to better aftermarket prices (Trueman, 1986) and leaving substantial amounts of proceeds on the table to signal quality (Allen & Faulhaber, 1989; Welch, 1989). Prior research associates investment intention with future cash flow stability, less severe asymmetric information, quality signals and more favourable market reaction (Autore et al., 2009; Hill, 2008; McGuinness, 2019; Silva & Bilinski, 2015; Trueman, 1986; Walker & Yost, 2008). Conversely, recapitalization and general purpose declaration are associated with negative signals as they are likely to be market timers, overvalued (Kim & Weisbach, 2008; Silva & Bilinski, 2015) and spend the proceeds on value destroying projects (Walker & Yost, 2008). Thus, investment disclosure is expected to be associated with less opportunistic behaviour and consequently better initial and long-run returns. The investment intention; however, aggregates proceeds allocated to capital expenditures (CAPEX) and research and development (R&D). This could lead to oversimplification of the impact of investment elements since CAPEX and R&D are subject to different accounting treatment, the former is tangible and capitalized while the latter is intangible and expensed. Prior research argues R&D is an important source of uncertainty (Guo et al., 2006). While market reacts positively to CAPEX and R&D announcements in the short-term (Chung et al., 1998; Eberhart et al., 2004; Lev & Sougiannis, 1996), only R&D is associated with long-run performance improvements because benefits of R&D are likely to be revealed in the long-term (Eberhart et al., 2004; Guo et al., 2006; van Bommel & Vermaelen, 2003). There is even evidence of performance deterioration following CAPEX increases (Jain & Kini, 1994). Therefore, this study argues that decomposition of investment intention is crucial to shed light on the individual impact of CAPEX and R&D on returns, and to decouple the long-termism and ambiguity associated with R&D investments from CAPEX. This practice is also more in the spirit of Trueman (1986) who theorizes a signaling role for CAPEX alone.

This study utilizes disclosure of use-of-proceeds specificity (Leone et al., 2007), and its investment, debt payment and general corporate

purpose intention metrics to seek answers to two research questions: First, are the disclosure specificity and investment declaration associated with better aftermarket returns? Contrary to the negative relationship between specificity and returns presented in Leone et al. (2007). the paper argues that specificity is market-dependent and its effect on returns could vary based on its components. As specificity would collectively reflect the signals of its components, its effect on returns is likely to be ambiguous. Second, do CAPEX and R&D have divergent outcomes with regards to initial and long-run returns? Prior IPO research merges these two declarations to obtain the investment variable. While this study also follows this mainstream practice, it gives CAPEX and R&D an additional separate treatment to observe their unique effects on returns.

The sample consists of 117 capital-raising firms that went public between 2010 and 2020 at Borsa Istanbul. The Capital Markets Board (SPK) Issue Directive I.40 (2010) requires capital-raising issuers to attach a use-of-proceeds intention report to the prospectus. The following SPK Issue Directive 128.VII.1 (2013) Rule 33/1 imposes mandatory disclosure for use-of-proceeds intention and two quarterly post-issue assessments. These regulations enable collection of data and make this study possible. The sample represents 87% of all Turkish IPOs in terms of numbers and 70% of all gross proceeds during the same period. The remaining 18 issuers are excluded because they issue secondary shares only and do not raise capital, in which case proceeds become the personal wealth of the selling shareholder. The three-layered classification scheme in Walker and Yost (2008) and Autore et al. (2009) is followed, where use-of-proceeds is grouped by investment (INVEST), debt repayment (DEBT) and general corporate purpose (GCP) intentions. The study employs ordinary least squares (OLS) regressions to test the hypotheses, as well as a Heckman regression to control for potential investment selection. Main findings are consistent with the prior theory and evidence on the role of investment intention on aftermarket returns, while showing that only R&D part of the investment disclosure is positively associated with underpricing and long-run performance. Specificity and its DEBT and GCP components have no significant impact on returns. Results show that investment intention is the dominant use-of-proceeds disclosure, declared by 72 (67.5%) of the issuers and more than half (50.4%) of the proceeds allocated for it. Overall, IPOs specify 78.8% of the use-of-proceeds. The DEBT and GCP intentions account for the remaining 28.4% of specificity. The findings demonstrate that issuers planning to allocate proceeds for new investments tend to provide larger returns than non-investment IPOs. The firms allocating all proceeds to future investments

provide more than triple average initial returns of firms allocating zero proceeds to investment (12.5% vs. 3.8%). Despite their small number, 15 IPOs declaring R&D intention provide the highest return of all groups, and triple average initial return of firms without R&D declaration (17.5% vs. 5.9%). Moreover, R&D declaring companies are the only disclosure class that does not underperform in the long-run, while IPOs declaring zero investment are the least underpriced and the worst performers in the long-run. Multivariate tests support the positive effect of investment and R&D disclosure on returns; however, investment has no significant impact on returns when stripped of the R&D component. Specificity, DEBT and GCP disclosures are not significantly associated with initial and long-run returns. These findings support the quality signaling properties of investment disclosure (Amor & Kooli, 2017; Autore et al., 2009; Walker & Yost, 2008) and informative content of the use-of-proceeds section. They are also consistent with Guo et al. (2006) that research and development (R&D) is a major source of information asymmetry, and its benefits slowly unravel (Eberhart et al., 2004). Nonetheless, the Trueman (1986) theory that predicts a quality signaling role for CAPEX is consistently rejected.

The contribution of this study is twofold. First, it extends the relevant disclosure literature on equity issues (Amor & Kooli, 2017; Autore et al., 2009; Beatty & Ritter, 1986; Kim & Weisbach, 2008; Leone et al., 2007; Silva & Bilinski, 2015; Walker & Yost, 2008) through investigating the impact of CAPEX and R&D disclosure on returns. Prior research does not decompose investment intention into its components. Second, for the first time the study documents the motivations and intentions of Turkish issuers for going public and extends prior research on Turkish IPOs that utilize prospectus disclosure to document the relationship between IPO price support, lockups, valuation, and underpricing (Tutuncu, 2020c, 2020b, 2020a). The investors should be aware that they could benefit from the information content of the use-of-proceeds section since it will help them decide the investment worthiness of the going public company. Issuers should realize that more focus on long-term sustainability by investing in R&D would benefit both investors and companies because it mitigates disappointments, e.g., helps prevent winner's curse (Rock, 1986) in the short- and long-run as market reacts positively to quality signals.

The rest of the study is as follows. Section 2 reviews the literature and constructs the testable hypotheses. Section 3 describes data and provides descriptive statistics. Section 4 presents test results and Section 5 concludes.

2. Literature review and hypothesis development

The literature often associates greater uncertainty and less specific disclosure with larger underpricing to enforce an equilibrium between issuer and investor wealth (Beatty & Ritter, 1986; Myers & Majluf, 1984). This line of reasoning assumes that underwriters need to offer greater discounts to compensate investors for the larger risk they are prepared to take, and the issue is priced by market more accurately in the light of more specific disclosure (Leone et al., 2007; Amor and Kooli, 2017) and with the assistance of book-building mechanism   which allows price adjustments (Benveniste & Spindt, 1989). Central to underpricing are the issuer motivations for going public and investor perceptions about value, thus issuers need to justify their going public decision and the offer price that comes with it. Pagano et al. (1998) find that firms issue equity primarily to exploit mispricing in capital markets. Röell (1996) surveys the motives for going public and finds that financing investment is the most important and exploiting mispricing is the least important intention. Kim and Weisbach (2008) note that some equity issues are motivated by wealth expropriation if market prices are higher than justified by the issuing firm's fundamentals. The equilibrium model introduced by Myers and Majluf (1984) argues that investors discount the price announced by the issuer because they are aware of their relative ignorance and may be suspicious of issuers' intentions. In this asymmetric environment, issuers may signal quality of the issue by underpricing (Allen & Faulhaber, 1989; Welch, 1989) and ensure participation of less informed investors in the market (Rock, 1986). One way of signaling firm quality is disclosing the level of planned capital expenditures (Trueman, 1986), as it will demonstrate that insiders have favourable private information about the firm. Chung et al. (1998) show that investors distinguish valuable investment opportunities from less valuable ones and firms with larger growth opportunities have a more positive market reaction.

On the other hand, the rational investor would discount the value of an asset when the information about its quality is withheld and react positively to good information disclosure. Trueman (1986) defines the good information as the planned CAPEX, through which issuers can signal the quality of the asset to investors. The issuing firm could abstain from disclosing specific information if rent-seeking motives are present; however, would provide it if specific information allows market to estimate its value in an unbiased manner (Walker and Yost, 2008) and proves that the issuer is not an opportunistic market-timer (Autore et al., 2009). Kim and Weisbach (2008) study post-issue financial statements to show that when the issuer is valued at lower multiples, the proceeds are likely to be used to finance

new investments. Conversely, issuers stating debt as their primary intention are likely to be market timers (Hertzel & Li, 2010) and overvalued (Amor & Kooli, 2017). Likewise, ambiguous intentions such as general purpose could be used to mask overvaluation (Silva and Bilinski, 2015) and imply that proceeds would be used for value destroying projects (Walker and Yost, 2008). If the use-of-proceeds specificity and investment intention convey credible information about the quality and value (Trueman, 1986; Kim and Weisbach, 2008), the issue would suffer from less severe ex-ante information asymmetry. The issuers in this case would not need to offer large discounts to attract investors and the issue should still be accompanied by larger initial returns. The prior evidence on market reaction to investment declarations supports this argument. Walker and Yost (2008) document that markets react favourably to the declared investment intention in secondary offerings. Autore et al. (2009) and Adriansyah and Messinis (2016) show that investment is the only use-of-proceeds intention associated with better operating performance. Silva and Bilinski (2015) find that issuers citing investment intentions perform better than non-investment issuers in the long-run. McGuinness (2019) presents more evidence that investment intention is associated with larger subscription rates, higher price updates and larger initial returns in Hong Kong IPOs. This discussion provides two hypotheses concerning specificity, investment and underpricing:

H1: Disclosure of overall use-of-proceeds specificity is associated with larger initial returns.

H2: Disclosure of investment intention is associated with larger initial returns.

Although a significant relationship is proposed between specificity and returns following the mainstream disclosure research, the specificity incorporates a mix of different intentions which may not convey the favourable information better disclosure is purported to have. While Leone et al. (2007) find a negative relationship between specificity and initial returns, the use-of-proceeds specificity in their sample is dominated by the debt payment intention, which may send a negative signal to the market. Amor and Kooli (2017) find that firms stating debt as their primary intention time the market and provide the worst returns. McGuinness (2019) shows that investment intention is associated with better returns relative to other intentions in the short- and long-run. Similarly, Autore et al. (2009) document that issuers declaring debt payment and general corporate purpose intentions underperform in the long-run, while investment declaring firms do not. Therefore, it is necessary to interpret specificity results with

caution as its components are likely to send mixed signals. This study defines use-of-proceeds specificity as percentage disclosed use-of-proceeds intention relative to net proceeds as in Leone et al. (2007). The specificity is often a combination of several intentions, and its components may vary from one market to another. For example, Jeanneret (2005) reports new investment and capital structure intentions. Leone et al. (2007) factor specificity into debt and non-debt components. Hill (2008) and Adriansyah and Messinis (2016) divide use-of-proceeds into 5 different categories. Wyatt (2014) uses 3 categories consisting of growth, production, and financing. This study uses the 3-layered classification scheme following the dominant strand of the literature as used by Walker and Yost (2008), Autore et al. (2009), Silva and Bilinski (2015), and McGuinness (2019).

This study decomposes investment disclosure to obtain a better understanding of the use-of-proceeds. Although the existing use-of-proceeds literature aggregates CAPEX and R&D to obtain investment disclosure, in practice, the CAPEX and R&D parts of the investment may be processed differently by market because the former is tangible and capitalized while the latter is intangible and expensed. Their separate treatment is consistent with the accounting standards, as well as a large body of research that individually studies their effect on performance (Chung et al., 1998; Fedyk & Khimich, 2018; Lev & Sougiannis, 1996; van Bommel & Vermaelen, 2003). While Trueman's (1986) argument presents CAPEX as a safer investment with more predictable cash flow outcomes, the R&D stands out because it presents investors with more ex-ante uncertainty (Guo et al., 2006), and the full extent of its potential benefits will only be revealed in the long-run (Eberhart et al., 2004; Guo et al., 2006). Prior research argues that R&D increases or announcements are associated with more uncertainty (Lev and Sougiannis, 1996; Eberhart et al., 2004), and R&D intensity is a major source of information asymmetry for IPOs, thus require larger initial returns to compensate for short-term uncertainty and provides better long-run returns as the uncertainty dissipates and R&D investments are realised in the long-term (Guo et al., 2006). Investors may demand higher returns from R&D declaring IPOs and receive it as overall market reaction to R&D announcements and increases is positive (Lev and Sougiannis, 1996; Guo et al., 2006). On the other hand, CAPEX declarations provide a more tangible basis for estimating value and future cash flows, thus investors may be satisfied with smaller returns in exchange for less severe uncertainty. Consistent with this discussion, the following hypotheses are proposed:

H3: R&D investment disclosure is associated with larger initial and long-run returns.

H4: Non-R&D investment (CAPEX) disclosure is not associated with larger initial and long-run returns.

Existing research investigates determinants of going public, market timing and investor composition in the Turkish IPO market (Avci, 2020, 2024, 2025). This study differs by analysing the effect of ex-ante use-of-proceeds disclosure on underpricing and long-run returns, and also extends Tutuncu (2020a, 2020b) who show the effect of insider valuation on price support, lockup decisions, and underpricing in Turkish IPOs.

3. Data and sample descriptive statistics

The sample covers the population of capital-raising firms going public at Borsa Istanbul between 2010 and 2020. The list of the IPOs and basic sample data are drawn from the SPK website and enhanced with manually collected data from prospectuses from Public Disclosure Platform (KAP) and supplemented with the share price data from Borsa Istanbul Data store and www.investing.com. All data sources are public and accessible by researchers. 135 firms went public in the 11-year period of the study, of which 18 issued secondary equity only and then were dropped from the sample. 63 IPOs raised new capital only and 54 both raised new capital and sold existing shares. The final sample incorporates 117 IPOs that fully or partially raise new capital as part of the issue. This is a necessary requirement to construct the sample because cash from the sale of existing shares often do not benefit the company, but the incumbent shareholders who are not bound by regulations to declare their spending plans. There are a few instances where shareholders remain in the issuing firm and use their income from secondary sale to pay down company debt. These exceptional examples are not included in the analysis of the proceeds and all use-of-proceeds intention statistics are based on net proceeds to the issuing firm. The use-of-proceeds disclosure is located in the section 9.25 of the prospectus, or the information is provided in the intermediary report published by underwriter. Examples of the disclosure are given below.

Pegasus A.S.: "… The expected investment covering the final and optional orders to be delivered between 2013 and 2022 amounts to $12.5 billion at list prices. Part of the proceeds from the IPO are planned to be used to finance acquisitions of new planes. In addition, part of the proceeds is planned to be used to finance important investments and expenditures on marketing, sales, additional qualified personnel, equipment, facilities and general corporate activities in the process of expanding the flight network and launching new services. Pegasus A.S. intends to use IPO proceeds to

improve its liquidity and demonstrate better and competitive ratios relative to its peers ..."

Specificity: 0%.

Bakanlar Medya A.S.: "The company intends to use IPO proceeds to finance working capital requirement, to benefit from the cash payment discount and reduce the cost of purchasing raw material (paper), new investments, to reduce financial debt and debt servicing costs, and to purchase machinery and equipment in line with the growth aims. In this regard, the anticipated investment budget for 2013 and 2014 is €400,000... and net proceeds is expected to be ₺4,571,240."

Specificity: €400,000 * S (€/₺) on June 03, 2013 / 4,571,240 = €400,000 * 2.4603 / ₺4,571,240 = 21%

Investment specificity: 21%; Debt specificity: 0%; General corporate purpose specificity: 0%.

Cemas Dokum A.S.: "IPO proceeds will be used to finance capacity-increasing investments and working capital requirements. The estimated cost of capacity investment will be $6,300,000. The anticipated purchase of machinery and accessories are listed below at the list prices... Although the proceeds are expected to meet the financing requirements for these purchases, leasing will be used as additional financing tool if the IPO funds do not suffice."

The author-calculated net proceeds after the cost of issue are approximately $11,500,000.

Specificity: 55%

Investment specificity: 55%; Debt specificity: 0%; General corporate purpose specificity: 0%.

Berkosan A.S.: "Company needs to issue new capital to strengthen its equity capital and expects close to ₺7.9 million proceeds from the issue. The new source will be primarily used to finance working capital. The expected use-of-proceeds is given in the following percentage distribution:

25% will be used to reduce existing debt; 35% will be used to purchase latest technology equipment and in the automation of existing machinery; 30% will be used to finance research activities aimed to increase profitability and momentum through opening new production lines and upgrading the existing facilities in markets such as Azerbaijan and Libya; and 10% to accelerate R&D and laboratory works."

Specificity: 100%

Investment specificity: 45%; Debt specificity: 25%; General corporate purpose specificity: 30%.

Table 1 and 2 present distributions of number of firms declaring use-of-proceeds intentions and detailing specificity of intentions across years of the issue. The sample represents 87% of all Turkish IPOs between 2010 and 2020 in terms of numbers and 70% in terms of proceeds. The aggregate proceeds in the last decade are $6,228 million, of which $4,366 million is covered by this study. 99 (84.6% of) firms fully or partially disclose specifics of their intentions. Investment (INVEST) motive is the primary intention, 79 (67.5% of) firms declaring their plans to do so. INVEST covers proceeds allocated to capital expenditures (CAPEX) (76 firms), research and development (R&D) (15 firms), and a few planned acquisitions (5 firms). Second on the list is the general corporate purpose (GCP) intention which mainly covers working capital and marketing investments. 52 (47%) of the issuers make this declaration. The debt repayment (DEBT) motive is the least frequent intention. 39 (35%) of the issuers declare that they intend to use proceeds for debt payments. In terms of dollar specificity, issuing firms' use-of-proceeds declarations account for 78.8% of the proceeds. Investment remains the primary motivation with 50.4% of proceeds. Debt repayment intention comes second with 19.6% and GCP is the least important with 8.8% of total sample proceeds in terms of dollars. It appears that Turkish firms utilize new issues primarily to finance new investment projects. However, they invest considerably more in CAPEX (40%) and R&D investment is minuscule, having received only 0.3% of the net proceeds. The overall specificity and investment specificity compare favourably with prior studies. For example, in Walker and Yost (2008) sample, 53% of the issuing firms state investment purpose. On the other hand, debt repayment is the primary intention in Leone et al. (2007), and Hill (2008), while Silva and Bilinski (2015) report GCP as the dominant motive and investment intention remains circumstantial. Therefore, Turkish market provides a strong case to test the predictions related to investment intention.

Table 1. Distribution of use-of-proceeds intentions (N; %)

Year	All IPOs	SPEC.	INVEST	CAPEX	R&D	GCP	DEBT
2010	17	12	10	10	0	1	2
2011	24	19	13	13	2	9	8
2012	24	19	14	13	1	12	8
2013	17	14	13	13	0	7	7
2014	10	10	10	10	2	8	5
2015	5	5	4	4	2	4	-
2016	1	1	1	1	0	1	-
2017	1	1	1	0	1	1	1
2018	5	5	2	2	2	4	4
2019	6	6	5	4	2	5	4
2020	7	7	6	6	3	5	2
Total	117	99 (84.6%)	79 (67.5%)	76 (65%)	15 (12.8%)	57 (48.7%)	41 (35%)

Table shows number of firms declaring use-of-proceeds intentions across years. Percentages are relative to the number of all observations.

Sample descriptive statistics and variable definitions are reported in Table 3. The average (median) issuer discloses 80.8% (100%) of the use-of-proceeds specificity. INVEST is the leading motive for going public, as 43.58 (45%) of the net proceeds are allocated for planned or ongoing investments, followed by GCP 20.66% (0%) and DEBT 17.07% (0%) intentions. Note that the mean statistics are reported for equally weighted observations and in terms of aggregate dollar proceeds DEBT intention nearly triples GCP, which puts it in the second place. INVEST is largely accounted for by the CAPEX 37.94% (30%), and the average issuer plans to allocate almost 2.43% of proceeds to R&D activities. The use-of-proceeds disclosure specificity in Turkish IPOs compares favourably to other studies. For example, Leone et al. (2007) report 67.8% average specificity and 38.1% debt specificity. The statistic is quite high in the Turkish market because of the mandatory disclosure regulation for IPOs going public after 2013. The priority of Turkish issuers appears to be financing investment projects, upgrading the equipment, and expanding the asset base, rather than debt reduction. While the statistics appear nominally impressive on paper, the dollar amount of proceeds obtained, and as a result, funds allocated to investment and R&D are in fact small. The median PROCEEDS is a mere $8.92 million. The largest proceeds $713 million belongs to the IPO of Emlak Konut GYO, which allocates proceeds fully to CAPEX as typical of a

real estate investment trust. The total gross proceeds obtained by 15 R&D disclosing IPOs is a small $79.4 million, which is equivalent to 1.8% of gross proceeds in this sample. The largest R&D firm is RTA Labs. valued at $12.4 million at the offer price. The second largest is Kontrolmatik, valued at $6.5 million at the offer price. Both firms are in the Technology index. Larger firms abstain from investing in R&D and instead focus on more predictable short-term opportunities such as construction. For example, 12 construction IPOs obtain a total of $1.58 billion gross proceeds, of which $1.33 billion is allocated to CAPEX, which has little long-term benefit associated with resolution of uncertainty in this particular case. The Turkish market has an interesting IPO portfolio, and the following section attempts to decipher the impact of going public motivations and highlight the importance of R&D to obtain long-term benefit.

Table 2. Specifics of the use-of-proceeds intentions (million $; %)

Year	Gross Proceeds	Net Proceeds	SPEC.	INVEST	CAPEX	R&D	GCP	DEBT
2010	1605.14	1462.13	1295.45	1241.68	1185.22	0	10.76	43.01
2011	596.58	473.53	267.84	169.56	167.74	1.41	47.06	51.62
2012	289.65	201.21	116.48	44.1	43.84	0.26	45.22	28.65
2013	664.53	564.72	257.49	222.19	213.92	0	22.9	12.4
2014	93.69	75.86	75.86	33.23	32.46	0.76	15.82	26.81
2015	35.23	25.64	25.64	18.28	17.91	0.37	7.35	0
2016	12.5	6.25	6.25	3.31	3.31	0	2.94	0
2017	7.43	4.96	4.96	1.48	0	1.48	1.24	2.23
2018	901.72	660.7	660.7	6.64	5.12	1.52	135.64	518.42
2019	46.29	35.76	35.18	16.85	14.99	1.86	7.5	11.39
2020	113.36	88.61	88.61	56.26	53.35	2.91	19.98	12.36
Total	4366	3599	2834 (78.8%)	1813 (50.4%)	1737 (40%)	10.57 (0.3%)	316.4 (8.8%)	707 (19.6%)

Table shows distribution of use-of-proceeds intentions in terms of US Dollar. Proceeds are converted to US Dollars using the Central Bank bid spot exchange rate on the first trading day. The net proceeds amount is calculated as gross proceeds minus proceeds from secondary shares, and dollar use-of-proceeds is obtained by multiplying net proceeds by the percentage use-of-proceeds intention. The total gross proceeds for the 135 IPOs from 2010 to the end of 2020 is $6.228 billion. This sample covers $4.366 billion (70%) of all proceeds from IPOs in the last decade. Overall, $2834 billion (45%) of all proceeds are allocated for a specific purpose. Percentages are relative to net proceeds.

4. Results

The hypotheses (H1, H2, and H3) predict significant differences in returns between specific and non-specific use-of-proceeds disclosure as well as investment disclosure. The sample is partitioned by the type of disclosure and intention to test these predictions. The aim in this step is to examine whether specificity and investment disclosing issuers yield larger returns, holding other factors constant. Table 4 shows initial and long-run returns grouped by use-of-proceeds intentions. The average (median) initial return for the sample is 7.4% (3.2%). Compared against these statistics, investment disclosing IPOs have significantly larger initial returns. The average IPO committing proceeds fully to investments provide 12.5% return compared to the meagre 3.8% in non-investment IPOs. The source of this superior return appears to be R&D disclosures. While CAPEX declaring IPOs have larger returns than non-CAPEX IPOs, the differences between them are not significant. On the other hand, R&D committing IPOs provide the largest returns, their average (median) 17.5% (20.3%) return significantly surpassing the non-R&D IPO returns. Moreover, R&D committers are the only IPO class that does not underperform in the long run. DEBT and GCP declaring IPOs exhibit average performance, the differences in initial and long-run returns being insignificant. While IPOs in the investment and R&D classes are the top performers, those in the non-INVEST and non-CAPEX are the worst. These IPOs have the smallest average and 0 median initial return, as well as the largest negative long-run returns. While investment intention tends to provide additional information and manifests it in the form of better returns, more specific disclosure does not lead to significantly better returns. The findings of the univariate analysis reject prediction of H1 for specific disclosure, and support H2 and H3 for investment disclosure. In other words, preliminary results validate the reservations expressed about the quality signaling properties of the specificity as advocated by Leone et al. (2007) and suggests that information contained in CAPEX disclosure is not good enough to validate significantly better returns, contrasting Trueman (1986).

Table 3. Descriptive statistics

	Mean	Median	25th	75th	Min	Max
SPECIFIC. (%)	80.81	100	96.4	100	0	100
INVEST (%)	43.58	45	0	80	0	100
GCP (%)	20.66	0	0	39.5	0	100
DEBT (%)	17.07	0	0	31.5	0	100
CAPEX (%)	37.94	30	0	69.5	0	100
R&D (%)	2.43	0	0	0	0	50
AGE	17.12	15	7.5	24.5	0	57
SIZE ($ mil)	150.75	32.61	14.98	99.11	4.75	2852.3
PROCEEDS ($ mil)	37.32	8.92	5.26	24.98	1.52	713.08
PRIMARY (%)	84.48	100	69.37	100	11.05	100
RETAINED (%)	69.26	69.7	62.5	75	29.7	94.66
DILUTION (%)	38.26	35.3	22.45	50	40	200
BB	0.21	0	0	0	0	1
VC	0.094	0	0	0	0	1
IR (%)	7.41	3.28	-0.84	16.58	-17.29	108
BHAR	-0.379	-0.577	-0.889	-0.093	-1.255	1.765

SPECIFICITY is the percentage use-of-net proceeds disclosed in the prospectus (Leone et al., 2007). INVEST, GCP, and DEBT are the disclosed investment specificity, general corporate purpose specificity, and debt repayment specificity as percentage of net proceeds. Capital expenditure (CAPEX) and research and development (R&D) are part of the investment intention and calculated relative to net proceeds. AGE is the IPO year minus the incorporation year. SIZE is the dollar market capitalization at the offer price. PROCEEDS is the dollar gross proceeds calculated as total shares offered including overallotment, multiplied by the offer price. PRIMARY is the percentage of new shares issued divided by total shares issued. RETAINED is defined as number of shares held by insiders divided by outstanding shares after IPO. DILUTION is defined as the number of newly issued shares divided by pre-IPO shares (Roosenboom, 2012). BB is the dummy variable representing book-building offerings. VC is a binary variable for venture capital sponsor, denoted 1 if IPO has VC shareholder prior to offering and zero otherwise. Overall, 11 IPOs are backed by VC funds. IR is the first day raw return calculated as first day close price minus offer price, divided by offer price. Buy-and-hold abnormal returns (BHAR) are computed as daily compounded stock returns for three years minus BIST All Share Index daily compounded returns for the same period, excluding first trading day. First trading day Central Bank bid spot exchange rate for US Dollars is used for dollar conversion.

Next, multivariate regressions are conducted to investigate the impact of use-of-proceeds disclosure on returns. The model in Eq. 1 tests the general prediction of the hypotheses that use-of-proceeds disclosure is positively associated with aftermarket returns due to positive market reaction to quality signals and long-term nature of investments. The model below is estimated via ordinary least squares (OLS). RETURN is the initial return (IR) or the three-year buy-and-hold abnormal return (BHAR). DISCLOSURE is

the main variable of interest, and it represents percentage SPECIFICITY, INVEST, DEBT and GCP intentions as well as non-disclosure intentions relative to net proceeds to the company. A separate model is also presented with CAPEX and R&D as independent variables. DILUTION, RETAINED and PARTICIPATION control insiders' commitment to the firm and wealth motives for going public (Leland & Pyle, 1977; Roosenboom, 2012). RETAINED equity signals reduced incentives to pursue self-interest (Jensen and Meckling, 1976). BB is a dummy variable that controls for the book-building style price negotiation and adjustment (Benveniste and Spindt, 1989). Since this feature enables a price update over the initial range, the offer price is expected to be more accurate, potentially resulting in less underpricing for the issuer. VC is a binary variable for venture capital sponsors, included as presence of VCs may certify the offering and mitigate uncertainty (Barry et al., 1990; Megginson & Weiss, 1991). PANDEMIC is a dummy variable that equals 1 for the 7 IPOs in 2020, 0 otherwise. The variable aims to control for the abnormal investor and marker behaviour observed in the post-pandemic world. Arguably, retail investors flocking to the markets in pursuit of higher returns (Tutuncu, 2023) may result in larger oversubscriptions and larger underpricing. Oversubscription is not included because it results in the loss of 50 observations; however, robustness tests confirm that results hold after it is controlled. AGE is the natural logarithm of the IPO used to control for the information asymmetry and life cycle of the company. Including controls such as size, profitability, leverage, industry- and year-fixed effects does not change the essence of the results, and a parsimonious model is estimated with only significant variables to allow a larger degree of freedom.

$$RETURN = \alpha + \beta_1 DISCLOSURE + \beta_2 DILUTION + \beta_3 RETAINED + \beta_4 PARTICIPATION + \beta_5 BB + \beta_6 VC + \beta_7 PANDEMIC + \beta_8 AGE + \varepsilon \qquad \text{(Eq. 1)}$$

Table 4. Initial and long-run returns by the type of use-of-proceeds disclosure

	Initial return		BHAR	
	Mean	Median	Mean	Median
All firms (N: 117)	0.074*** (5.63)	0.032*** [5.32]	-0.379*** (-4.44)	-0.577*** [-4.20]
Specificity				
All SPEC. firms (N: 99)	0.080*** (5.27)	0.036*** [4.98]	-0.354*** (-3.92)	-0.577*** [-3.76]
Full SPEC. firms (N: 88)	0.083*** (5.13)	0.037*** [5.09]	-0.292*** (-2.90)	-0.382*** [-3.02]
Zero SPEC. firms (N: 18)	0.041** (2.42)	0.010* [1.81]	-0.529* (-2.04)	-0.697* [-1.78]
SPEC. vs. non-SPEC.	n.s. (1.08)	n.s. [0.72]	n.s. (0.72)	n.s. [1.14]
Full vs. zero SPEC.	n.s. (1.15)	n.s. [0.96]	n.s. (0.93)	n.s. [1.36]
Investment				
All INVEST firms (N: 79)	0.091*** (5.15)	0.040*** [5.29]	-0.256** (-2.52)	-0.354** [-2.82]
Full INVEST firms (N: 21)	0.125** (2.43)	0.093*** [3.11]	-0.380* (-2.03)	-0.655* [-1.65]
Zero INVEST firms (N: 38)	0.038** (2.46)	0 [1.29]	-0.679*** (-4.89)	-0.848*** [-3.17]
INVEST vs. non-INVEST	* (1.91)	** [2.14]	** (2.32)	*** [2.81]
Full vs. zero INVEST	** (2.02)	** [1.99]	n.s. (1.31)	*** [4.93]
CAPEX				
All CAPEX firms (N: 76)	0.088*** (4.74)	0.037*** [4.93]	-0.303*** (-3.09)	-0.382*** [-3.25]
Full CAPEX firms (N: 18)	0.117** (2.06)	0.035*** [2.59]	-0.426** (-2.38)	-0.655* [-1.92]
Zero CAPEX firms (N:41)	0.049*** (3.22)	0** [2.09]	-0.522*** (-3.22)	-0.807** [-2.54]
CAPEX vs. non-CAPEX	n.s. (1.38)	n.s. [1.51]	n.s. (1.23)	** [2.19]
Full vs. zero CAPEX	n.s. (1.48)	n.s. [1.06]	n.s. (0.37)	n.s. [0.89]
R&D				
All R&D firms (N: 15)	0.175*** (4.78)	0.203*** [3.29]	0.121 (0.31)	-0.011 [0.33]
Zero R&D firms (N:102)	0.059*** (4.37)	0.013*** [4.11]	-0.435*** (-5.25)	-0.589*** [-4.62]
R&D vs. non-R&D	*** (3.04)	*** [3.49]	** (2.02)	n.s. [1.51]
Debt payment				
All DEBT firms (N: 41)	0.063*** (3.98)	0.032*** [2.93]	-0.257* (-1.69)	-0.301** [-2.27]
Zero DEBT firms (N: 76)	0.080*** (4.35)	0.034*** [4.38]	-0.448*** (-4.38)	-0.653*** [-3.61]
DEBT vs. non-DEBT	n.s. (-0.61)	n.s. [-0.19]	n.s. (1.08)	n.s. [1.26]
General corporate purpose				
All GCP firms (N: 57)	0.072*** (4.29)	0.038*** [3.41]	-0.270** (-2.17)	-0.293*** [-2.47]
Zero GCP firms (N: 60)	0.076*** (3.75)	0.031*** [4.11]	-0.463*** (-3.97)	-0.655*** [-3.39]
GCP vs. non-GCP	n.s. (-0.13)	n.s. [-0.02]	n.s. (1.12)	* [1.71]

Only 4 firms fully allocate proceeds to debt payments, and 6 firms fully allocate proceeds to GCP, and due to their small numbers, tests are not conducted for full DEBT and full GCP firms. Likewise, no company plans to spend proceeds fully on R&D. Observation numbers in long-run returns vary. Winsorization at the 1st and 99th percentiles do not change results. Significance of means and medians is tested by t-test and sign rank test, respectively. t-values are in parentheses, z-values are in brackets. ***, **, and * show significance at 1, 5, and 10% level. n.s.: not significant.

Table 5 and 6 report the tests of underpricing and long-run return hypotheses modelled in Eq. 1. Each column reports the model with another use-of-proceeds disclosure variable. Panel A reports basic regressions with DISCLOSURE as the only regressor, Panel B reports models including controls. Results strongly indicate a positive role for the investment intention on initial returns as INVEST variable is significant at conventional levels. One standard deviation increase in the percentage investment allocation is associated with a 22.8% increase in underpricing. Partition of the INVEST into CAPEX and R&D reveals that R&D disclosures are the source of this positive association as CAPEX coefficient is insignificant and R&D is highly significant. Technically speaking, one standard deviation increase in the percentage R&D allocation is associated with a 29.5% increase in underpricing. This pattern extends to long-run returns as R&D remains highly significant, consistent with the H3 predictions and confirming the long-term nature of the R&D expenses. SPECIFICITY, CAPEX and the combined INVEST disclosure have no significant impact on long-run returns. On the contrary, investors tend to penalize DEBT and more generally, lack of investment motivation as they are associated with smaller initial returns. The findings are in line with the theories and evidence arguing for more severe uncertainty for R&D investments demanding larger initial returns (Eberhart et al., 2004), which translates into better returns when the uncertainty dissipates in the long run (Lev and Sougiannis, 1996; Guo et al., 2006). CAPEX does not translate into long-term value for investors as it does not involve this slow resolution of uncertainty, supporting H2, H3 and H4 as well as prior findings in Table 4 while contrasting Trueman (1986). Overall, results suggest a positive role for investment commitments; however, cautions against uniform treatment of CAPEX and R&D as the former contains virtually no information about the future performance. This divergence highlights the tangibility of CAPEX and ambiguity associated with R&D as the former could easily be incorporated by valuation models into the offer price while the latter requires a premium.

Several alternative model specifications are considered to test the robustness of the results. First, dummy investment variables (DINVEST, DCAPEX, DR&D) are utilized instead of the percentage disclosure. This construct gives information on the binary choice of whether or not disclosing investment plans have an effect on returns. The tests are repeated with dummies that equal to 1 if the investment is the primary use-of-proceeds intention, and 0 otherwise, following the prior literature (Walker and Yost, 2008; Amor and Kooli, 2017). Only the first specification is reported as both constructs yield similar results. Third, a two-step Heckman selection model

is used to account for the probability of investment selection in the case that the decision to invest is not exogenous and depends on other factors. OLS estimates could be inconsistent if selection bias is present. The procedure involves estimating a probit in the first stage using DINVEST variable to account for determinants of investment choice and augmenting the second stage OLS variable by the Inverse Mills ratio obtained from the probit. The choice of investment is modelled as a function of LAGGEDINVEST (Amor and Kooli, 2017), LEVERAGE (Leone et al., 2007), RISKFACTORS (Leone et al., 2007; Arnold et al., 2010; McGuinness, 2019), PRIMARY (Kim and Weisbach, 2008), BIG5 and TECH variables. Prior literature models the disclosure specificity (Leone et al., 2007) and investment intention as endogenous (Amor and Kooli, 2017; McGuinness, 2019). SPECIFICITY is assumed exogenous because of the (SPK (Capital Markets Board), 2013) regulation mandating the disclosure of use-of-proceeds. Unsurprisingly, all post-2013 IPOs fully disclose their intentions.

Table 5. Ordinary least squares (OLS) underpricing regressions

	SPEC	INVEST1	INVEST2	DEBT	GCP
Panel A: Basic model					
DISCLOSURE	0.036(1.55)	0.083**(2.09)		-0.032(-0.78)	-0.052(-1.31)
CAPEX			0.053		
R&D			0.641***(5.12)		
Constant	0.044**(2.53)	0.037**(2.51)	0.037***(2.66)	0.08***(4.73)	0.08***(4.93)
R^2 (%)	0.94	5.14	14.15	0.37	1.12
F	2.40	4.38	15.39	0.61	1.71
Panel B: Full model					
DISCLOSURE	0.034(1.18)	0.092***(3.02)		-0.062*(-1.78)	-0.052(-1.22)
CAPEX			0.038(1.56)		
R&D			0.537***(3.48)		
DILUTION	0.768**(2.42)	0.768***(2.76)	0.737**(2.39)	0.746**(2.41)	0.72**(2.30)
RETAINED	1.523**(2.41)	1.535***(2.78)	1.412**(2.33)	1.448**(2.40)	1.368**(2.25)
PARTICIPATION	1.21**(2.54)	1.221***(2.95)	1.056**(2.41)	1.128**(2.49)	1.074**(2.34)
BB	-0.037(-1.65)	-0.041*(-1.85)	-0.033(-1.64)	-0.045**(-2.22)	-0.051**(-2.05)
VC	0.073**(2.19)	0.071**(2.49)	0.051*(1.92)	0.089***(3.23)	0.072**(2.18)
PANDEMIC	0.17***(4.41)	0.17***(5.11)	0.14***(4.88)	0.178***(4.76)	0.185***(4.72)
AGE	0.018(1.21)	0.024*(1.74)	0.022(1.57)	0.021(1.38)	0.018(1.22)
Constant	-1.435**(-2.40)	-1.47***(-2.83)	-1.35**(-2.35)	-1.34**(-2.38)	-1.261**(-2.21)
Adj. R^2 (%)	39.15	44.39	47.13	39.85	39.50
F	4.76	6.86	8.10	6.24	4.64
N	117	117	117	117	117

Table reports OLS regressions with robust errors. DISCLOSURE variable stands for SPECIFICITY, INVEST, DEBT, GCP portion of the use-of-proceeds in their respective models. INVEST2 model partitions investment disclosure into CAPEX and R&D components. 15 IPOs declare R&D intention. t-statistics are in parentheses. ***, **, and * show significance at 1, 5, and 10% level.

Table 6: Ordinary least squares (OLS) long-run return regressions

	SPEC	INVEST1	INVEST2	DEBT	GCP
Panel A: Basic model					
DISCLOSURE	0.298(1.20)	0.351*(1.69)		0.102(0.30)	-0.222(-1.08)
CAPEX			0.229(1.11)		
R&D			5.435***(3.40)		
Constant	-0.62***(-2.83)	-0.54***(-4.59)	-0.54***(-4.70)	-0.39***(-4.00)	-0.33***(-3.18)
R² (%)	2.39	3.82	12.88	0.11	0.86
F	1.45	2.84	5.95	0.09	1.17
Panel B: Full model					
DISCLOSURE	0.099(0.38)	0.314(1.55)		0.093(0.27)	-0.484**(-2.21)
CAPEX			0.288(1.42)		
R&D			5.261***(3.09)		
DILUTION	-1.48***(-2.80)	-1.49***(-3.46)	-1.62***(-2.75)	-1.55***(-2.84)	-1.79***(-3.60)
RETAINED	-3.41**(-2.20)	-3.39**(-2.50)	-3.61**(-2.21)	-3.62**(2.30)	-4.35***(-3.01)
PARTICIPATION	-2.98*(-1.93)	-2.88**(-2.01)	-3.39(-2.22)	-3.226**(-2.12)	-3.89**(-2.71)
BB	-0.42***(-3.07)	-0.42***(-3.09)	-0.36**(-2.58)	-0.44***(-3.25)	-0.48***(-3.38)
VC	-0.084(-0.28)	-0.189(-0.63)	-0.227(-0.59)	-0.053(-0.18)	-0.11(-0.39)
AGE	-0.043(-0.36)	-0.016(-0.13)	-0.068(-0.55)	-0.051(-0.41)	-0.032(-0.26)
Constant	2.875*(1.97)	2.72**(2.12)	3.04**(2.04)	3.15**(2.20)	3.85***(2.88)
Adj. R² (%)	13.58	16.42	26.06	13.78	17.38
F	4.15	4.92	4.46	4.07	4.72
N	69	69	69	69	69

Table reports OLS regressions with robust errors. DISCLOSURE variable stands for SPECIFICITY, INVEST, DEBT, GCP portion of the use-of-proceeds in their respective models. t-statistics are in parentheses. ***, **, and * show significance at 1, 5, and 10% level.

However, the choice of what information to disclose (Verrecchia, 1983; 2001) and whether or not to invest is a discretionary choice insiders need to make. LAGGEDINVEST is defined as the preceding year CAPEX plus R&D expenses, divided by lagged total assets. RISKFACTORS is defined following McGuinness (2019) as the natural logarithm of total number of risk factor enumerations or captions. The risk factors explain and closely relate to existing and future operations. This variable is expected to be positively correlated with investment intention as new risks associated with planned investments are likely to be disclosed. LEVERAGE is expected to be negatively associated with investment motivation as higher leveraged firms would be more motivated to reduce debt. It is calculated as long-term debt divided by total assets in the year before the IPO. PRIMARY controls the insider motives for going public and investor perceptions. Sale

of existing shares is associated with the timing motive and sends a negative signal (Leland and Pyle, 1977; Autore et al., 2009), hence a larger primary fraction of issued equity should be associated with more specific disclosure and investment intention. It is defined as the number of primary shares issued divided by total shares issued. BIG5 is a dummy variable for the top investment bankers accounting for the largest proceeds in the last 11 years. These bankers may prevent misrepresentation of use-of-proceeds intentions due to reputational concerns. TECH is a technology sector dummy to control for the R&D-intensity. The estimates reported in Table 7 are consistent with the previous findings in Table 5 and Table 6. The Inverse Mills coefficient in the Heckman selection regression is positive and significant, suggesting that investment disclosure is associated with larger underpricing after the choice of disclosing it is controlled.

Table 7. Robustness tests for underpricing regressions

	OLS1	OLS2	Probit1	Heckman1
INVEST/DINVEST	0.054** (2.23)			
CAPEX/DCAPEX		0.0123 (0.55)		
R&D/DR&D		0.075* (1.86)		
DILUTION	0.774** (2.54)	0.747** (2.30)		0.938*** [8.42]
RETAINED	1.537** (2.55)	1.458** (2.29)		1.823*** [6.06]
PARTICIPATION	1.243*** (2.75)	1.14** (2.38)		1.71*** [5.80]
BB	-0.032 (-1.46)	-0.032 (-1.55)		-0.09*** [-2.80]
VC	0.075** (2.59)	0.06** (2.02)		0.099** [2.09]
AGE	0.019 (1.33)	0.015 (0.97)		0.016 [0.99]
PANDEMIC	0.168*** (4.64)	0.155*** (4.45)		0.187*** [3.84]
LAGGEDINVEST			2.954** [2.23]	
LEVERAGE			-1.357** [-2.31]	
RISKFACTORS			0.533** [2.14]	
PRIMARY			1.82*** [2.69]	
BIG5/TECH			Yes	
Inverse Mills				0.127** [2.09]
Constant	-1.463** (2.58)	-1.35** (-2.27)	-2.255** [-2.35]	-2.25** [-2.35]
R² (%)	41.39	41.56	11.31	n/a
F/χ²	6.03	6.23	16.68	102.84
N	117	117	117	117

OLS1 and OLS2 use DINVEST, DCAPEX, and DR&D dummies as independent variables, which are equal to 1 if investment, CAPEX, and R&D intentions are declared, 0 otherwise. Dependent variable in the probit regression is DINVEST. INVEST and R&D remain significant when oversubscription rate is controlled in underpricing regressions (unreported). t-values are in parentheses, z-values are in brackets. ***, **, and * show significance at 1, 5, and 10% level.

Turkish companies declare investment plans as their primary intention and reason for going public. The investment intention accounts for 50.4% of net proceeds in terms of US Dollars, more than doubling the second-place debt reduction intention. The hypothesis tests through OLS and Heckman selection method validate a positive role for the investment motivation on financial performance. The strong support for the investment intention predictions should be viewed in line with its dominant position, which leads to less ex-ante uncertainty through signaling quality (Trueman, 1986; Allen and Faulhaber, 1989), while offering larger returns for investors to mitigate the potential winner's curse (Rock, 1986). Although the positive market reaction to investment intention is consistent with the prior evidence (Autore et al., 2009; Amor and Kooli, 2017; McGuinness, 2019), R&D is the source of this positivity, as well as better long-term performance. The lack of association between SPECIFICITY and returns highlights conflicting motivations of use-of-proceeds elements and ambiguity of their combined signal. This contrasts with Leone et al. (2007) who find and interpret the negative sign of the specificity as evidence of more accurate pricing. Overall, the results suggest that use-of-proceeds section contains useful information to assess investment worthiness of the going public companies and mitigates ex-ante uncertainty about their short- and long-term value. Noted; however, is the fact that R&D investing IPOs are few and small despite their superior performance. The combined R&D investment amounts to 0.3% of the aggregate net proceeds compared against 40% CAPEX. It is vital to overcome the apparent short-termism embedded in CAPEX and invest more in R&D to secure better and sustainable performance.

5. Conclusion

This study investigates the relationship between use-of-proceeds disclosure and returns using the population of 117 capital-raising IPOs at Borsa Istanbul between 2010 and 2020. The study period is important since it straddles two global financial crises, which jointly mark the beginning and the end of the last IPO waves starting in 2010. It is important to draw lessons from the past decade to provide implications for the future. Building on the theory of disclosure (Verrecchia, 1983; Trueman, 1986; Allen and Faulhaber, 1989; Kim and Weisbach, 2008), and empirical studies on IPOs (Leone et al., 2007; Walker and Yost, 2008; Autore et al., 2009; McGuinness, 2019), this study predicts that higher quality use-of-proceeds disclosure would be associated with larger underpricing and better long-run performance. The quality of disclosure could be signalled by investment intention and the R&D component of it. The findings are in line with

these predictions; investment disclosure and R&D intention are strongly associated with better initial returns while only R&D investment leads to better long-run performance. While investment is the primary motivation for going public, not all investment plans are equal. This study distinguishes between CAPEX and R&D investments and shows that CAPEX is not related to larger underpricing and long-run returns due to its tangible nature and predictability of cash flows associated with it. The research highlights the importance of investing in R&D for long-term sustainability and encourages investors to assess the use-of-proceeds intentions of insiders to mitigate a potential winner's curse.

This study can be extended to incorporate operating performance. Analysis of operating performance would allow observing the spending and investment behaviour of IPOs and their linkages with use-of-proceeds intentions for the first time as previous research investigates this matter in the context of SEOs alone (Walker and Yost, 2008; Autore et al., 2009; Silva and Bilinski, 2015). This extension, however, comes with own limitations as far as Turkish market is concerned since the matching techniques are difficult to apply due to lack of standard industry classification codes. On the other hand, the present study can be extended to cover secondary equity offerings. There is a lack of research on Turkish SEOs and their motives for raising additional capital. Another extension would be to study how these proceeds are actually used vis-à-vis their declared intention. Finally, markets in the (post)-pandemic world witnessed a large volume of IPOs. An analysis of the use-of-proceeds intentions in these IPOs would contribute greatly to the present literature. The usual limitations such as time-consuming prospectus analysis and manual data collection would apply to these extensions.

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