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MASTERS IN FINANCE

MASTERS FINAL WORK DISSERTATION

**UNVEILING THE DRIVERS OF ANALYST COVERAGE:
THE ROLE OF THE HEAD OF INVESTOR RELATIONS**

MARGARIDA MARTINS VALENTE

OCTOBER 2023

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Abstract

This paper aims to assess whether the characteristics of the team and head of investor relations (IR) of firms influence sell-side analysts' coverage. The focus is on the largest European firms in the period from 2010 to 2022. Our findings suggest that IR turnover positively impacts analysts' coverage. Regarding the tenure of the head of IR, results point out that the years in that position is negatively associated with the number of analysts who follow the firm, while the years of experience in the firm and experience in the industry are associated positively. Next, we analyze the characteristics of the head of IR. We find that gender and professional background are likely to influence analysts' following. Overall, our findings shows that the engagement of analysts is especially driven by experienced and educated IR professionals.

JEL: G30, M14, L25

Keywords: Investor Relations, Sell-Side Analysts, IR Turnover, Gender, Education, Professional Background

Resumo

Este estudo tem como objetivo avaliar se as características da equipa e do responsável pelas relações com os investidores (RI) das empresas influenciam a cobertura dos analistas. A análise incide sobre as maiores empresas europeias no período de 2010 a 2022. Os nossos resultados sugerem que a rotação das RI tem um impacto positivo na cobertura dos analistas. Relativamente ao cargo de diretor de RI, os resultados indicam que os anos nessa posição estão negativamente associados ao número de analistas que seguem a empresa, enquanto os anos de experiência na empresa e a experiência no sector estão associados positivamente. De seguida, analisamos as características do responsável de RI. Verificamos que o género e a experiência profissional são suscetíveis de influenciar o seguimento dos analistas. De um modo geral, as nossas conclusões mostram que o envolvimento dos analistas é especialmente impulsionado por profissionais de RI experientes e com formação académica superior.

JEL: G30, M14, L25

Palavras-chave: Relações com Investidores, Analistas Sell-Side, IR Turnover, Influência de Género, Formação Educacional, Formação Profissional

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Glossary

IR	Investor relations
NIRI	National Investor Relations Institute
IRGA	Investor Relations and Governance Awards
ROE	Return on Equity
VIF	Variance Inflation Factor

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1 Introduction

This paper traces a profile for the head of the investor relations teams for all companies belonging to the Euro Stoxx 600 between the period of 2010-2022, analyzing focal points as the time of occupation in that role and gender. The paper intends therefore to assess the relationship between analysts' coverage and investor relation characteristics, searching possible trends that might be motivated by the changing environment.

Over the last few decades, the investor relation (IR) function has increased its importance and contribution in shaping the corporate information asymmetry environment. Although there is no consensus about the definition, the National Investor Relations Institute defines IR as *“a strategic management responsibility that integrates finance, communication, marketing and securities law compliance to enable the most effective two-way communication between a company, the financial community, and other constituencies, which ultimately contributes to a company's securities achieving fair valuation”* (Adopted by the NIRI Board of Directors, March 2003). There is still little research on the topic but its growing influence and importance on public corporations makes it a relevant question to search upon.

Further, confirming this matter and its growing prominence in society, we found several different initiatives highlighting IR teams and best practices in the profession. The Investor Relations and Governance Awards (IRGA), led by Deloitte Portugal, are an example, which award the best practices in IR and Governance. These awards aim to distinguish organizations and people who have contributed more and better to make the capital market more efficient, transparent, socially responsible, and valuable to the Portuguese economy and society. The Investor Relations Society also holds a Best Practice Award every year in order to showcase best practices in investor communications across the UK, Europe and internationally. The IR Magazine Awards – Europe, held by

the IR Magazine, is another example which aims to honor excellence in the investor relations profession across Europe.

From the existing literature, we can quickly identify IR's growing need and contribution to corporations (Brennan & Tamarowski, 2000). IR teams enable more transparent communication with stakeholders, and it allows the establishment of a better reputation (Mazzola et al., 2006; Kirk and Vincent, 2014; Hoffman, 2018). Hoffman and Fieseler (2012) also support the fact that if an IR team has been able to establish its reputation as a professional and reliable point of contact, it will be better situated to collect relevant input from the capital markets, dispel rumors and false information, and manage the financial community's access to top management. The IR functions have broadened from disclosing financial information to maintaining relationships with the investment community or even playing a signaling role since IR builds credibility and support for the management's vision and strategy (Gelb, 2000). Nevertheless, the constitution of IR teams remains relatively unexplored. The literature remains mixed on what backgrounds would benefit the company and how it affects analyst following.

Concerning analysts and the relationship with IR, the literature suggests the latter adds value to forecast accuracy and investor awareness. The coverage of analysts seems to be positively influenced by IR activity (Chang et al., 2006; Laskin, 2011).

Through an initial overview of the IR function over time and how it has evolved throughout the years, adapting to the changes in society, it is identifiable a rise of the importance attributed to investor relation related activities (Mazzola et al., 2006; Hoffman & Fieseler, 2012). A deeper understanding of IR teams should consider their constitution, what could be the most suitable profile and how it affects the function, how analyst coverage is related to IR, the effects thereof and how the number of analysts following a

firm and forecast accuracy could be affected according to firm-level characteristics (Embong & Hosseini, 2018).

Our results suggest that the number of analysts following the firm is positively associated with the years of experience the head of IR has in the company including all roles before IR, although negatively influenced by the years in the position as head of IR, supported by the positive link between IR turnover and analyst following. We also find that the gender and superior educational background in business plays a significant influence on the analysts' coverage, along with the experience in the industry.

The remaining of the study is organized as follows: Section 2 reviews the relevant literature and details the hypotheses. Section 3 focuses on the data and methodology, describing how the data was hand collected and the relevant variables of the study. In Section 4 is present the results and lastly, section 5 presents the conclusions and contributions.

2 Literature review and hypotheses development

2.1 The IR Function

Investor relations (IR) as a corporate function started to emerge in the years following the Second World War due to the changes corporations experienced. The exponential growth of the economy in the 50s and 60s made it necessary for companies to look for outside sources of additional financing. Corporations needed money to grow and develop and at the same time, there was a surplus in income that could be invested (Laskin, 2011).

The IR served originally as a reporting and disclosure function embedded in corporate governance requirements. It enabled shareholders to gather information to better determine its securities' market value (Marston, 1996). However, the importance and the roles of IR teams have changed as the environment changes. It has quickly evolved into an interpretation that includes marketing and communication concepts, boundary-spanning and relationship management (Rao & Sivakumar, 1999), up to and including corporate listening and executive consulting. Also, as stated by Kelly et al. (2010), IRs hold a strategic communication function that ensures two-way symmetrical communication with shareholders, which is considered beneficial and not only governed by monetary factors. Moreover, Mazzola et al. (2006) showed that financial audiences may develop a more or less favorable attitude towards a company and its strategy based on how investor relations officers illustrate their plans and internal control systems to their financial audiences, thus contributing to the firm's reputation.

As Rao and Sivakumar (1999) showed, IR departments are rapidly increasing in the USA with the rise of shareholder activism and investor emancipation (Gillan & Starks, 2007). Apart from technical reasons, such as variability in performance, the growing number of institutional investors, and increasing organizational size, the primary drivers of this increase in IR Teams diffusion were the coercive and mimetic conditions. It also signals a commitment to shareholders. This increase could be explained by the deregulation and globalization of capital markets and the ensuing rising requirements for professional financial relations.

However, there still needs to be more attention to the IR topic, possibly due to the intellectual supremacy of the efficient markets paradigm (Fama, 1970). According to the regulatory framework, all stock market participants should have equal access to information regarding the general condition of stock-listed companies. Thus, questioning

the purpose of IR departments and based on the efficient market hypothesis holding that all available information is costless and, most importantly, provided for all potential investors. Brennan and Tamarowski (2000) argued that analysts and their predictions contradict the “strong form” of the efficient markets that propose that such analysis is redundant. In fact, there are now several studies attesting to the informational content of analyst reports (Alford & Berger, 1999; Hope, 2003).

2.2 IR Teams

The IR function is still considered a developing function today, and its practice differs quite significantly among firms, industries, and countries (Karolyi, 2020), either from the level of enforcement of accounting standards (Hope, 2003) or from the cultural differences (Jayne & Dipboye, 2004). It usually mirrors the maturity of local capital markets. However, most studies providing insights into the establishment, structure and organization of IR departments focus on Western markets such as the USA and the UK.

Laskin (2009) discusses how the scandals with financial accounting practices in the USA at companies such as Tyco, Global Crossings, Williams, and others have led to a call for a more comprehensive review of the disclosure standards and the investor relations practice. This motivated the need for the investor relations profession to seek to increase stocks’ valuations on the market and regain people's trust. Kirk and Vincent (2014) contribute to this hypothesis, documenting that the investment in IR benefits firms during periods of regulatory change. On the other hand, Miller and Skinner (2015) found that recent developments in technology and media, such as way the media processes and disseminates information about firms and the social media, significantly changed investor relation professionals’ disclosure practices, challenging professionals to develop new strategies appropriate for the new landscape.

Capital market participants will judge information received from a company based on their appreciation of and respect for responsible IR professionals. IR teams enable more transparent communication with stakeholders, and it allows the establishment of a better reputation (Brennan and Tamarowski, 2000; Mazzola et al., 2006; Kirk and Vincent, 2014; Hoffman, 2018). Hoffman and Fieseler (2012) support the fact that if an IR team has been able to establish its reputation as a professional and reliable point of contact, it will be better situated to collect relevant input from the capital markets, dispel rumors and false information, and manage the financial community's access to top management. Thus, providing a detailed, reliable and positive image of a company, in turn, represents the basis of investment decisions or recommendations.

IR is an activity of key importance for publicly traded companies and might lead to a competitive advantage if well executed. Hoffman et al. (2011) defend that team construction is a critical factor in IR success. However, the literature on this matter remains mixed. While several studies report on the contribution of having a diverse team regarding performance improvement (Jayne & Dipboye, 2004), others defend that it is most frequently treated as a financial function due to its responsibility within the company as well as standard qualifications required for the job. Hoffman (2018) states that numerous studies have emerged on IR professionals and their respective skillsets. Analyses from the USA, UK, and continental Europe reveal that IR is a largely finance-dominated function with many IR officers featuring a business, accounting or finance background (Marston, 1996; Laskin, 2009). However, Kelly et al. (2010) state that there is an increasing recognition that IR practitioners need to broaden their skillset and be trained in both finance and corporate communications/public relations to meet the demands of the current business environment. Therefore, IR can be understood as a

corporate communications function which may be related to public relations but not only limited to it.

A study from Hoffman et al. (2011) regarding educational diversity among IR teams states that academic diversity (mainly marketing and communication expertise) is related to improved IR quality and decreased shareholder activism. Nevertheless, this profession's demographic and educational backgrounds are still relatively unexplored.

Regarding the IR profession, Kirk and Vincent (2014) contribute to this analysis, concluding that companies initiating an IR team experience increases in disclosure, analyst following, institutional investor ownership, liquidity, and market valuation relative to a matched sample of control firms. Furthermore, they also argue that the likelihood for managers to establish a professional IR team inside the company is more significant in larger, younger, better performing firms with more institutional investor ownership, high research and development (R&D) intensity, and greater growth opportunities.

2.3 Analysts' coverage

IR departments manage the company's crucial relationship with capital market participants. By providing information on the state and development of the business, the IR department helps enrich the financial community's understanding of a company – it provides crucial input into the financial community's sense making efforts (Hoffman & Fieseler, 2012). It intends to encourage individual and institutional investors to buy shares and, at the same time, convince analysts to issue favorable recommendations. Listed companies actively approach analysts and encourage them to cover the company regularly by providing them with information and facilitating their understanding of the company. The more analysts decide to analyze and report on a corporation, the more investor

awareness ensues. Empirical analyses have shown that the quality and intensity of investor relations communication correlate with analyst coverage (Rao & Sivakumar, 1999; Kirk & Vincent, 2014).

Consistent with these studies, Lang and Lundholm (1996) find that firms with more forthcoming disclosures in their industry have more extensive analysts following, more consensus on analysts' earnings forecasts, more accurate forecasts, and less variable forecast revisions. Furthermore, they conclude that investor relations is the department that attracts more analysts because these disclosures increase the demand for analyst reports or reduce analysts' costs of supplying them. Bushan (1989) also documents that the demand for analyst services increases with firm size because of the increased benefits of private information for larger firms. Other studies by Hope (2003), Brennan and Tamarowski (2000) and Laskin (2011) also reach similar conclusions. Moreover, Alford and Berger (1999) studied the analysts' ability to predict the company's earnings, the number of analysts following the company, and the company's trading volume. They state that analyst following is unrelated to the extent of the firm's diversification and the forecast accuracy has an insignificant effect on trading volume.

2.4 Forecast accuracy

Analysts will play a crucial role in the financial market by providing research reports which often include earnings estimates, target prices, detailed analysis of industry trends and investment recommendations, as well as their projections for the firm's financial performance. Analysts' forecast analysis can help investors and other market participants make more relevant and accurate decisions (Rahman et al., 2019). Forecast accuracy refers to the ability to make accurate estimates of the company's future financial performance.

Prior research suggests that forecast accuracy can be related to different factors: quality financial reporting, drivers of analyst forecast accuracy and accounting standards (Rahman et al., 2019), analyst characteristics such as forecasting experience, forecast frequency, forecast portfolio, reputation, earnings forecast issuance, forecast boldness, and analysts' prior performance in forecasting revenues and earnings (Lorenz & Homburg, 2018) and seniority of financial analysts, the number of different countries they cover, the number of different industries they follow and also firm-specific experience (Bolliger, 2004). According to Hope (2003), firm characteristics can also have an impact, since firm-level annual report disclosure level is positively associated with forecast accuracy, which suggests that firm-level disclosures provide helpful information to analysts. Similar results are described by Lang and Lundholm (1996), which suggest that firms with higher transparency on their disclosures experience more consensus among analysts' earnings forecasts, more accurate forecasts and less variable forecast revisions. The accuracy of analysts' earnings forecasts is expected to depend on the quality of earnings information the firm reports. Research indicates that earnings management significantly influences forecast accuracy, indicating that somehow, analysts trust the reported earnings (Embong & Hosseini, 2018).

2.5 Hypothesis Development

Based on the previous research we were able to identify that the IR team has been able to establish its reputation as a professional and reliable point of contact for outsiders. They are therefore likely to contribute to managing the information with the financial market participants (Hoffman and Fieseler, 2012), while at the same time influencing the number of analysts who choose to follow the firm (Chang et al., 2006; Laskin, 2011).

This study addresses the issue of how the personal characteristics of the head of IR can contribute to increase analyst coverage. Following the documentation of bigger forecasting accuracy relating to the number of analysts who choose to follow the firm (Lang and Lundholm, 1996), the premise of this study focuses on how and if this is affected by the IR teams, by looking at the head of IR. In particular, we investigate if the working experience of the head of IR and if any specific determinants such as the experience in the industry and previous experience as head of IR, will drive bigger engagement with the sell-side analysts and help them provide better estimations.

To examine analyst coverage we will focus the professional background as a contributing factor (Hoffman and Fieseler, 2012) to the analyst coverage, exploring if the experience in the industry, years in the firm, years in position as head of IR, and if having experience as head of IR will lead to more or less following, analyzing also whether turnover in the position as head of IR, can also influence the number of analysts who follow the firm. Lastly, we will analyze the personal characteristics such as gender, academic background and nationality in order to better understand whether there is a growing trend motivated by the changing environments, as stated in the studies of Jayne & Dipboye (2004), Marston (1996) and Laskin (2009), and check if this affects the analysts following.

H1: The level of experience of the head of IR is positively associated with the number of sell-side analysts following a firm.

H2: The turnover of the head of IR is positively associated with the number of sell-side analysts following a firm.

H3: Personal characteristics of the head of IR are associated with the number of sell-side analysts following a firm.

3 Data and Methodology

3.1 Data collection

The study sample is constituted by the Euro Stoxx 600 listed companies. The financial data was obtained from Refinitiv and supplemented with hand-collected data on the relevant characteristics of head of the Investor Relations for the period 2010-2022.

To develop the database regarding the characteristics of the IR teams and looking at the head of IR in specific, a list of individuals who have occupied the position as head of IR was composed. The hand-collection of data for the person occupying the position was extracted from multiple sources. We composed our dataset based on the current investor relations contact on the firm's IR website, the list of participants in conference calls held by the company, the contact details on the firm's earnings press releases, the predecessor and successor names in head of IR appointment press releases and other official documents, where available. The search of personal characteristics and relevant dates was established based on information available online on platforms such as LinkedIn, accompanied by information from appointment press releases, corporate websites, interviews, or summary biographies.

The data collected consisted of the following personal characteristics of the head of IR:

- Gender
- Nationality
- Years the person stayed in the position
- Previous experience as Head of IR
- Previous experience in that company's industry
- Experience in the company

- Academic background in business and the level of the degree (BSc, MSc, MBA or PhD)

From this data collection, 600 companies were analyzed and companies with missing data that could not be obtained online were excluded from the sample. A significant number of companies were discarded since between the periods of 2010-2022, any particular individual for which we could not find all the relevant characteristics online resulted on the exclusion of the company from our research. From this sample, there were also excluded companies that had started their IR activities for less than 5 years and companies belonging to the financial sector.

A final sample of 208 unique companies containing all the relevant data was constructed, providing a total of 2258 firm-year observations in the period 2010 to 2022.

3.2 Variables definition

3.2.1 Dependent Variable

Our research focuses on the impact that the IR team may have in the number of analysts who choose to follow and provide insights in terms of the future financial performance of a particular firm, over the years of 2010 to 2022. The raw variable is the number of analysts, although for robustness and to ensure the normality of the distribution of the dependent variable, we employ the natural logarithm of the number of analysts following. This feature does not jeopardize the sample, as the original dataset on the number of analysts following is truncated at zero.

3.2.2 Independent Variables

All independent variables result from the hand collected data process previously detailed.

Variable	Definition
<i>Analysts</i>	Number of sell-side analysts covering the security
<i>Log(Analysts)</i>	Natural Logarithm of the Analysts variable
<i>Exp company</i>	Years that the person has stayed in the company
<i>Exp IR</i>	Years that the person has stayed as Head of IR in the company
<i>Exp Industry</i>	(dummy) 1 if the person has experience in the industry; 0 otherwise
<i>Exp IR Firm</i>	(dummy) 1 if the person has had a previous position as Head of IR; 0 otherwise
<i>IR Turnover</i>	Rate at which the person leaves the position as Head of IR and is replaced
<i>Gender</i>	(dummy) 1 if the person is female; 0 if the person is male
<i>BSc</i>	(dummy) 1 if the person has a BSc in business; 0 otherwise
<i>MSc, MBA, PhD</i>	(dummy) 1 if the person has a MSc, MBA or PhD; 0 otherwise
<i>Internal Recom</i>	(dummy) 1 if the person was already in the company once it assumed the position as Head of IR; 0 otherwise
<i>Foreign</i>	(dummy) 1 if the company hires someone for the position of Head of IR from outside the country's headquarters; 0 otherwise
<i>ROE</i>	Return on Equity
<i>Leverage</i>	Debt-to-Equity Ratio

Table 1 - Variables definition

Regarding the characteristics chosen for this study, in order to understand if the professional experience had an impact we analyze the experience in the company, experience as head of IR in the company and also experience in the industry, which has been coded as a dummy variable - 1 if the person had already worked in the firm's operating industry and 0 otherwise. The variable concerning previous position as head of IR was also coded as a dummy variable (1 representing if the person had already worked as head of IR, 0 otherwise). The variable IR turnover refers to the replacement of the person in charge as head of IR throughout the years.

In order to analyze the personal characteristics, the variable gender was coded as a dummy variable (1 being female and 0 representing male). The variables regarding the academic background were also constructed as a dummy variable (1 meaning they had a background in business, 0 otherwise) for both levels of superior education. A variable related to the origin of these people was also created to identify whether the companies are looking for outside talent or knowledge, and if this impacts the number of analysts who choose to follow the firm. We also analyze whether the person came into the position as an internal recommendation within the firm or not (1 if yes, 0 otherwise).

3.2.3 *Control Variables*

As stated by Bushan (1989) the analyst following may be influenced by the firm size because of increased benefits of private information for larger firms. Lang and Lundholm (1996) also state that firm size and returns-earnings correlation are likely to affect forecast characteristics since they affect analysts' incentives to gather information about the firm.

In order to clearly understand the effects of the personal characteristics of the head of IR on our dependent variable we used two fundamental metrics to ensure that other potentially influencing factors are kept consistent.

We use Return on Equity (ROE) to control for the effects of financial health and profitability since this is a key measure of a company's financial performance. We also use Leverage as a control variable to account for the potential influence of the company's financial structure and risk profile.

These control variables aim to isolate any effects of external influences that may have contributed for a bigger analyst following.

3.3 Descriptive analysis

Analyzing the number of sell-side analysts who chose to follow the firm for each year, it is possible to identify a downward trend with a low peak in 2018 and again in 2022 (Figure 1).

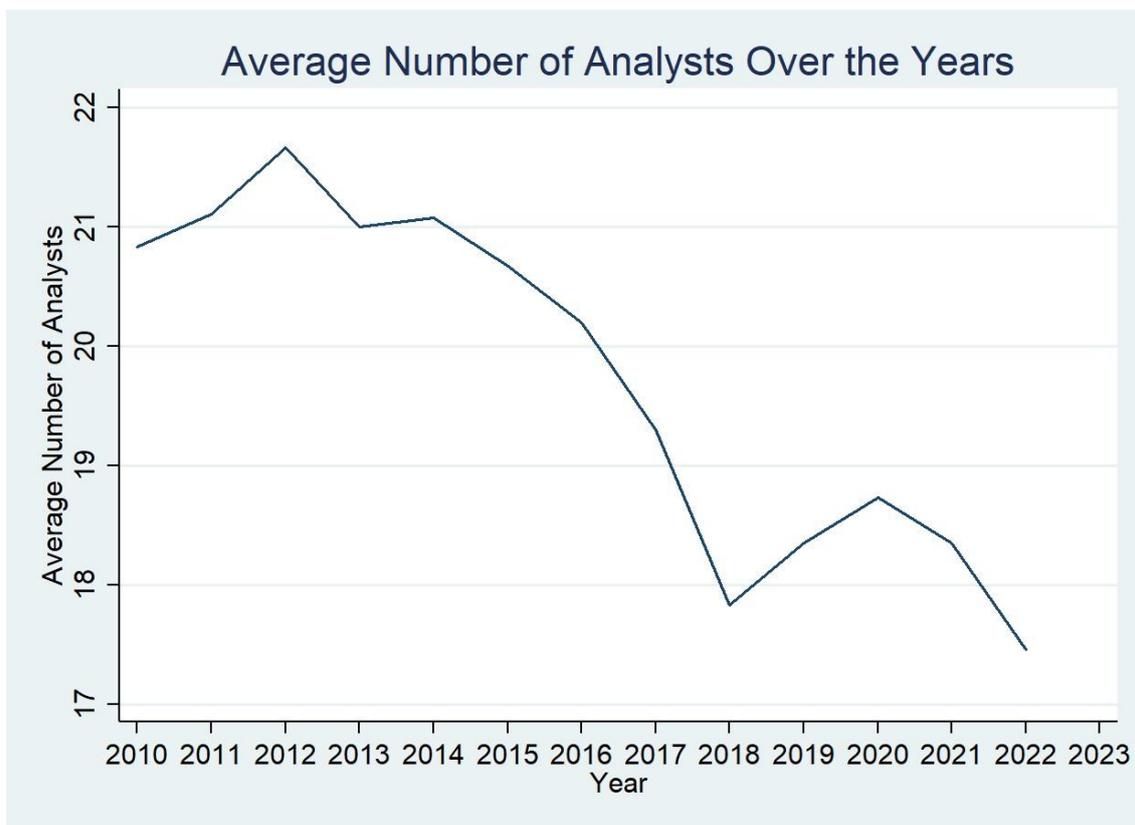


Figure 1 -Average Number of Analysts evolution between the period 2010-2022

Fang et al. (2020) explain this as a result of the new investor protection regulation in Europe, MiFID II, which was entered into force in the beginning of 2018, and requires investment firms to unbundle the costs they charge to clients. They explain that it requires asset managers and broker-dealers to unbundle the cost of investment research and advisory services from other services they provide. Their study shows a significant reduction in analyst coverage since the application of this regulation and that stock-recommendation revisions now have greater information content, buy recommendations are more profitable following MiFID II. Hettler et al. (2023) also document this decrease in the sell-side coverage in EU countries to an even greater extent than the global average,

associating it with a decrease in the quality of analyst output and a decline in forecast accuracy.

Table 2 presents the descriptive statistics of our sample which spans the period 2010-2022. On our sample, the average number of analysts is approximately 19.68.

	N	Mean	Std. Dev.	p25	Median	p75
Analysts	2,258	19.68	7.60	14.00	20.00	25.00
Analysts (log)	2,258	2.89	0.47	2.64	3.00	3.22
IR turnover	2,258	0.76	0.94	0.00	0.00	1.00
Exp	2,258	7.75	6.33	3.00	6.00	12.00
Exp IR Firm	2,258	5.03	4.78	1.00	4.00	8.00
Gender	2,258	0.35	0.48	0.00	0.00	1.00
Exp IR	2,258	0.27	0.45	0.00	0.00	1.00
Exp Industry	2,258	0.75	0.43	1.00	1.00	1.00
BSc	2,258	0.72	0.45	0.00	1.00	1.00
	2,258	0.61	0.49	0.00	1.00	1.00
MSc/MBA/PhD						
Foreign	2,258	0.24	0.43	0.00	0.00	0.00
Internal	2,258	0.40	0.49	0.00	0.00	1.00
ROE	2,258	0.14	0.39	0.08	0.13	0.20
Leverage	2,258	0.74	1.88	0.32	0.59	1.03

Table 2 - Descriptive Statistics

Regarding the professional experience, we can see that the average of years in the company is around 7.75 years while the average number of years in the position as head of IR is approximately 5.03. This suggests that these professionals have a considerable level of expertise.

We have observed that only 27% of the individuals in this sample had already have a previous role as head of IR while the majority of them (approximately 75%) has experience in the industry, consistent with the indication given by the professional experience statistics.

IR turnover has an average of 0.76 and a standard deviation of 0.94, suggesting that there is variability in IR turnover rates across our sample, with some firms experiencing

significant turnover while others present more stability in terms of the person occupying the position as head of IR.

Regarding the Gender variable, in 2010, women represented a total of 34% as the person in charge for the IR team in this sample of firms. It is possible to recognize an upward trend of women in that position as these numbers rose to 38% in 2017, followed by a slight decrease in the following years, totaling an average of 35% on our sample.

We are able to see that the majority of the people on our sample have an academic background in Business, with a significant number of them having advanced degrees. These statistics are in line with previous studies stating that most of IR professionals have a background in a business related field ((Marston, 1996; Laskin, 2009).

Moreover, due to the low value of the average of the foreign employees' variable (0.24), it is noticeable that, on our sample, the majority of IR professionals are local employees. Lastly, the average value of 0.4 of the internal recommendation variable displays that firms seem likely to consider existing employees, rewarding internal knowledge.

Regarding the control variables of the companies analyzed, we can see that ROE has an average value of 0.14, which indicates a moderate return on equity and an average value of 0.74 of Leverage suggesting that, on average, the companies on our sample have a relatively high level of leverage.

Running tests on the dependent variable, number of analysts, we can see in Figures 2 and 3, the distribution is slightly skewed however it does not constitute a major constraint to the data.

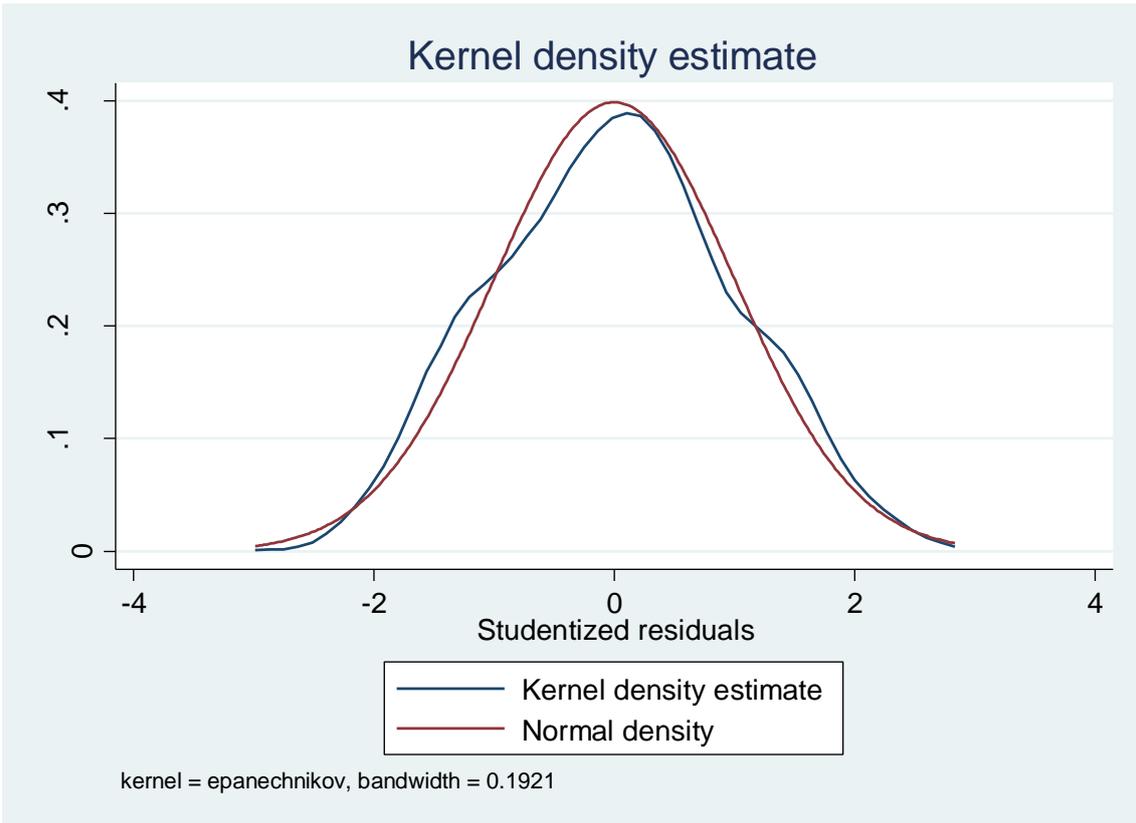


Figure 2 - Univariate kernel density estimation of the Number of Analysts variable

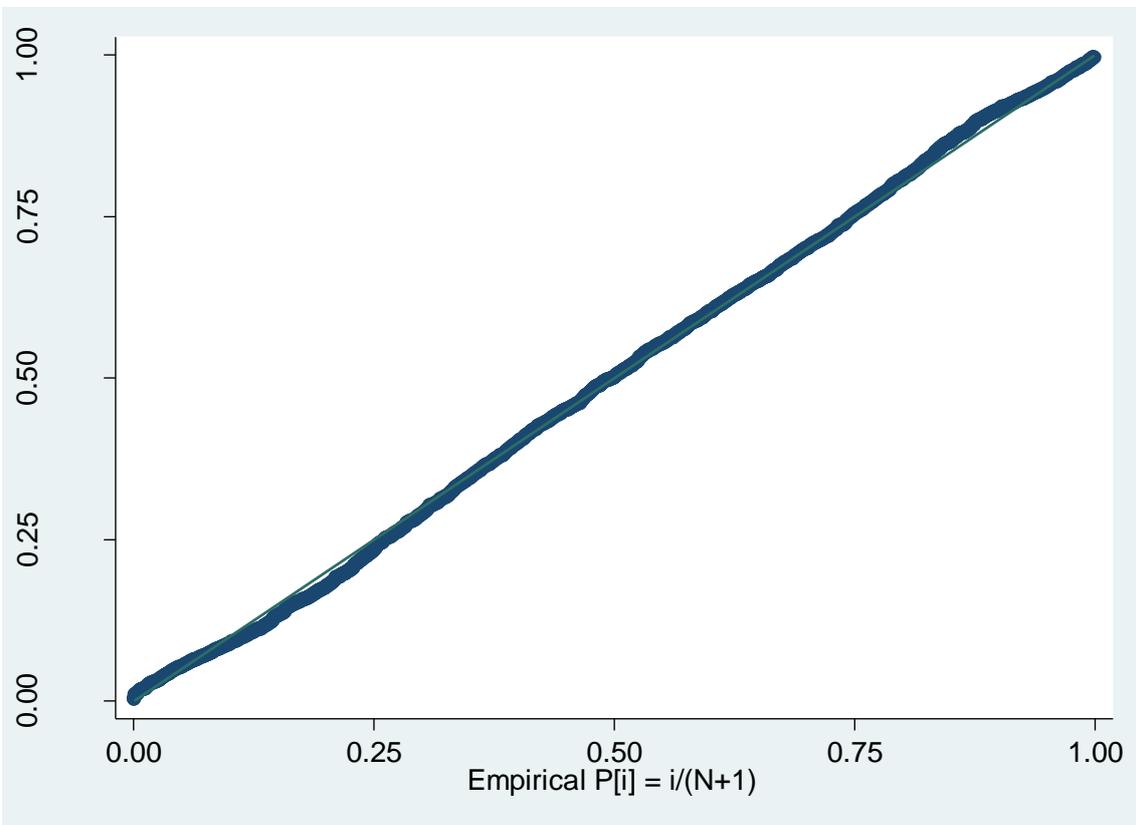


Figure 3 - Standardized normal probability plot of the Number of Analysts variable

In table 7, we can see the correlation between our variables. The negative correlation between the IR turnover and the number of analysts following the firm suggests that firms with a stable investor relations team (and a lower turnover rate) experiences higher analysts' coverage.

From the table we can also conclude that the professional experience is valued since experience in the company and in the industry has a positive correlation to the number of analyst following. However, we see that experience as head of IR is negatively linked to the number of analysts who follow the firm.

Table 3 - Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Analysts	1.00													
(2) Analysts (log)	0.949*	1.00												
(3) IR turnover	-0.088*	-0.049*	1.00											
(4) Exp	0.119*	0.096*	-0.265*	1.00										
(5) Exp IR Firm	-0.048*	-0.060*	-0.497*	0.656*	1.00									
(6) Gender	-0.130*	-0.129*	0.054*	-0.02	0.01	1.00								
(7) Exp IR	-0.046*	-0.047*	0.107*	-0.323*	-0.133*	-0.03	1.00							
(8) Exp Industry	0.061*	0.052*	-0.086*	0.249*	0.044*	-0.193*	-0.182*	1.00						
(9) BSc	0.02	0.02	0.069*	-0.02	0.01	0.050*	-0.02	-0.064*	1.00					
(10) MSc/MBA/PhD	0.068*	0.052*	0.070*	0.042*	-0.076*	-0.054*	0.065*	0.059*	-0.045*	1.00				
(11) Foreign	0.254*	0.209*	-0.03	0.097*	0.02	0.047*	0.02	0.040*	-0.075*	0.01	1.00			
(12) Internal	0.126*	0.122*	0.076*	0.430*	-0.133*	0.01	-0.348*	0.357*	0.02	0.150*	0.099*	1.00		
(13) ROE	-0.041*	-0.042*	-0.02	-0.00	-0.00	0.02	-0.02	0.03	-0.01	0.01	-0.02	0.00	1.00	
(14) Leverage	-0.02	-0.00	-0.02	-0.01	0.03	-0.03	-0.00	-0.02	0.02	-0.01	0.02	-0.057*	0.373*	1.00

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The variable gender shows a relatively weak negative correlation with the analysts' coverage and the variables for academic background, foreign employee and internal recommendation also display a weak influence on the dependent variable. In terms of the financial metrics, ROE and leverage also display a weak correlation to the number of analysts.

3.4 Research design

For the purpose of analyzing the effects that the person in charge as the head of IR teams may have on analysts coverage we established 3 main regression models. The first model is centered on the professional experience:

$$(1) \text{Analysts}_{it} = \alpha + \beta_1 \text{Exp company}_{it} + \beta_2 \text{Exp IR}_{it} + \beta_3 \text{ROE}_{it} + \beta_4 \text{Leverage}_{it} + \theta_t + \varphi_c + \delta_{it}$$

We built the models using fixed effects specifications with year (θ_t) and country (φ_c) as categorical variables to account for year and country-specific effects in the analysis. For the first regression, we focus on examining the variables related with the professional experience, therefore including the variable *Experience in the company* which accounts for the years that the person has stayed in that company. The variable *Experience as Head of IR in the company* has also been included and refers to the years that the person has stayed as head of IR in the company. With this regression we expect to understand if more analysts choose to follow or keep following a particular firm based on the fact that the head of IR is already an established and familiar person to the firm, contributing with years of experience.

The variable *Analysts* is either the number of analysts following or its natural logarithm. The inclusion of the logarithm of the dependent variable is a result of the diagnostic testing and aims to address any issues related to the scale and distribution of the data.

The second analysis focuses on the turnover of the head of IR, as follows:

$$(2) \text{Analysts}_{it} = \alpha + \beta_1 \text{IR Turnover}_{it} + \beta_2 \text{Exp company}_{it} + \beta_3 \text{Exp IR}_{it} + \beta_4 \text{Internal}_{it} + \beta_5 \text{ROE} + \beta_6 \text{Leverage}_{it} + \delta_{it}$$

This regression model also uses fixed effects specifications for year and country. The turnover is a calculation of the rate at which the person leaves the position as head of IR and is replaced, according to the formula:

$$\text{IR Turnover} = \frac{\text{Total number of employees who have left the position}}{\text{Total number of people occupying the position}}$$

In this model, we will also analyze the variables *Experience in the Company* and *Experience as Head of IR in the company*. Lastly, we also include the variable *Internal Recommendation* which analyzes the cases where the person appointed as head of IR assumed the position after having a different role in the company. Climbing the ladder in organizations is also a relevant feature because the newly appointed head of IR gathers a deeper understanding of different functions within the organization. The increased knowledge of the company may well shape the information asymmetry with outsiders whenever there are interactions with analysts.

Our last regression model, using again the fixed effects specifications for year and country.

$$(3) \text{Analysts}_{it} = \alpha + \beta_1 \text{Gender}_{it} + \beta_2 \text{Exp IR Firm}_{it} + \beta_3 \text{Exp Industry}_{it} + \beta_4 \text{Exp IR}_{it} + \beta_5 \text{BSc}_{it} + \beta_6 \text{MSc, MBA, PhD}_{it} + \beta_7 \text{ROE}_{it} + \beta_9 \text{Leverage}_{it} + \delta_{it}$$

The objective under this analysis is to understand if certain personal characteristics are associated with analysts' coverage. In this model, we include the variables *Gender*, *Background in Business*, both for bachelor level and for graduated levels of education (MSc, MBA, or PhD). We also study the influence of the variables *Previous Position as Head of IR*, for the cases where the person has already had a position as head of IR on a different company, *Experience as Head of IR in the company*, which refers to the years that the person has stayed as head of IR in the company and also *Experience in the Industry*, to understand if this will contribute to a change on our dependent variable.

4 Empirical Results

Table 4 displays the results of the regression models for the professional experience (regression 1). Across the models we have a total amount of 2,258 observations. The regressions yield an adjusted R-Squared up to 0.23 of the variance of the dependent variable explained by the independent variables in the model. The F-statistic value indicates that the overall regression model is statistically significant at conventional levels, which validates our approach.

Both variables Experience in the company and Experience as head of IR are statistically significant at the 0.05 significance level. We are able to conclude that having Experience in the Company has a positive link to the dependent variable. This result is consistent with the hypotheses that an analyst is more likely to follow a firm where the professional is already established in the industry. This may also be due to the reason that having experience in the industry also provides the advantage of building and maintaining connections with the relevant stakeholders.

Table 4 - Regression results for hypothesis testing of model 1

	(1)	(2)	(3)	(4)	(5)	(6)
	Analysts	Analysts (log)	Analysts	Analysts (log)	Analysts	Analysts (log)
Exp	0.16*** (0.02)	0.01*** (0.00)			0.30*** (0.03)	0.02*** (0.00)
Exp IR Firm			-0.03 (0.04)	-0.00 (0.00)	-0.30*** (0.04)	-0.02*** (0.00)
ROE	-0.45 (0.29)	-0.04* (0.02)	-0.41 (0.29)	-0.04* (0.02)	-0.47 (0.29)	-0.04** (0.02)
Leverage	-0.04 (0.05)	0.00 (0.00)	-0.04 (0.06)	0.00 (0.00)	-0.01 (0.06)	0.00 (0.00)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2258	2258	2258	2258	2258	2258
Adj R ²	0.21	0.17	0.19	0.16	0.23	0.18

Robust standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

On the other hand, we can see that Experience as head of IR in the company decreases the number of analysts following. A further analysis would be needed to explain as to why the number of analysts tends to decrease with the longer period the IR professional stays in the position.

This finding partially confirms our Hypothesis 1 that the number of analysts will be positively influenced by the level of experience of the person in charge, since the years of experience in the industry are positively associated with the dependent variable, while the years of experience as head of IR have a negative effect on the analyst following.

For regression model 2, we investigate on the IR turnover effects. As seen in Table 5, again we present several regressions each for the number of analysts, or the log-transformed number of analysts as the dependent variable. The total number of observations is 2258 across all models.

Model 2.5 presents the highest adjusted R-Squared where approximately 22% the variance in the number of analysts is explained by the independent variables in the model. The coefficient for IR turnover is positive, indicating a positive relationship with the

dependent variable and the variable is statistically significant (p -value = 0.147) for this model.

Table 5 - Regression results for hypothesis testing of model 2

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Analysts	Analysts (log)	Analysts	Analysts (log)	Analysts	Analysts (log)	Analysts	Analysts (log)
IR turnover	0.27 (0.17)	0.02* (0.01)	0.30* (0.17)	0.02** (0.01)	0.92*** (0.18)	0.05*** (0.01)	0.19 (0.16)	0.01 (0.01)
Exp IR			-0.59* (0.32)	-0.04** (0.02)				
Exp					0.20*** (0.03)	0.01*** (0.00)		
Internal							1.65*** (0.31)	0.10*** (0.02)
ROE	-0.40 (0.29)	-0.04* (0.02)	-0.40 (0.29)	-0.04* (0.02)	-0.42 (0.29)	-0.04* (0.02)	-0.46 (0.29)	-0.04** (0.02)
Leverage	-0.04 (0.06)	0.00 (0.00)	-0.05 (0.05)	0.00 (0.00)	-0.02 (0.06)	0.00 (0.00)	-0.02 (0.06)	0.00 (0.00)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2258	2258	2258	2258	2258	2258	2258	2258
Adj R ²	0.19	0.16	0.19	0.16	0.22	0.18	0.20	0.17

Robust standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

We can also see that the IR Turnover variable is increasingly more significant when other variables are added to the regression models.

Again, we document a negative relationship between the years as head of IR in the company with the analysts' coverage, which corroborates with the positive relationship of the IR turnover variable, suggesting that the analysts will be more drawn to analyze a company with a higher rotation rate of the head of IR position.

The variable years of experience in the company has a positive impact on the dependent variable. The variable internal recommendation also displays a positive relationship with the number of analysts who follow the firm, further confirming the assumption that the professional experience will contribute to a bigger analyst coverage.

Overall, our results reveal the relevance of the internal appointment of the head of IR, consistent with the benefits of the climbing the ladder effect within an organization.

These results are consistent with our Hypothesis 2, confirming that IR turnover leads to a higher analyst coverage.

Lastly, regression model 3 in Table 6 presents the results of the regressions done on the dependent variable. The variable gender is statistically significant in these models. The variable coefficient has a negative value which suggests that firms with more analysts following typically have men as heads of IR.

Again, experience in the industry represents a positive influence to the analysts following, while, the variables Previous Experience as head of IR and the years of experience as head of IR, have a negative link to the dependent variable. The years of experience as head of IR variable has also been found to be statistically non-significant meaning that, in this model, it is not a significant predictor of the number of analysts covering the firm. Regarding the Business Academic Background, we find that employees with advanced degrees will positively influence the number of analysts who follow the firm, more so than having just the BSc.

In column (7) all characteristics are analyzed collectively. Despite suspicions of potential multicollinearity, the variance inflation factor (VIF) test excludes such issue (mean VIF=1.96). This analysis validates all findings drawn in regressions in other columns.

Table 6 - Results of regression for hypothesis testing of model 3 using dependent variable Number of Analysts

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Analysts	Analysts	Analysts	Analysts	Analysts	Analysts	Analysts
Gender	-0.84** (0.34)						-0.59* (0.33)
Exp IR		-0.54* (0.32)					-0.50 (0.34)
Exp Industry			1.49*** (0.35)				1.31*** (0.35)
Exp IR Firm				-0.03 (0.04)			-0.04 (0.04)
BSc					0.44 (0.33)		0.56* (0.33)
MSc/MBA/PhD						0.70** (0.33)	0.62* (0.32)
ROE	-0.37 (0.29)	-0.42 (0.29)	-0.47 (0.29)	-0.41 (0.29)	-0.41 (0.29)	-0.43 (0.28)	-0.46 (0.29)
Leverage	-0.05 (0.05)	-0.05 (0.05)	-0.04 (0.06)	-0.04 (0.06)	-0.05 (0.05)	-0.04 (0.06)	-0.04 (0.06)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2258	2258	2258	2258	2258	2258	2258
Adj R ²	0.20	0.19	0.20	0.19	0.19	0.19	0.20

Robust standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 7 displays the results of the model 3 regressions for the log-transformed variable Number of Analysts, in order to provide a more robust analysis. This robustness approach strengthens the base conclusions on the personal characteristics of the head of IR.

Table 7 - Results of regression for hypothesis testing of model 3 using the log-transformed dependent variable
Number of Analysts

	(1) Analysts (log)	(2) Analysts (log)	(3) Analysts (log)	(4) Analysts (log)	(5) Analysts (log)	(6) Analysts (log)	(7) Analysts (log)
Gender	-0.06*** (0.02)						-0.05** (0.02)
Exp IR		-0.04* (0.02)					-0.04* (0.02)
Exp Industry			0.09*** (0.02)				0.07*** (0.02)
Exp IR Firm				-0.00 (0.00)			-0.00 (0.00)
BSc					0.03 (0.02)		0.04* (0.02)
MSc/MBA/PhD						0.03 (0.02)	0.03 (0.02)
ROE	-0.03* (0.02)	-0.04* (0.02)	-0.04** (0.02)	-0.04* (0.02)	-0.04* (0.02)	-0.04* (0.02)	-0.04* (0.02)
Leverage	0.00 (0.00)						
Year FE	Yes						
Country FE	Yes						
Observations	2258	2258	2258	2258	2258	2258	2258
Adj R ²	0.16	0.16	0.16	0.16	0.16	0.16	0.17

Robust standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

These analysis are partially consistent with our Hypothesis 3, where from the studied variables, Gender, Experience in the industry and Academic Background in Business display influence the number of analysts who follow the firm.

5 Conclusions

The study assesses whether the characteristics of the head of IR may influence the number of sell-side analysts who choose to follow the firm. For this research a dataset was compiled with hand-collected data regarding personal characteristics on the person in charge for the IR team over the period of 2010-2022.

We find that the number of analysts following a firm is positively influenced by the years of experience in the company of the person in charge of the IR team, while it is negatively associated with the years that the person has occupied the position as head of IR in the company. This may suggest a decrease in the analysts' interest for long tenures in IR which may be seen as a lack of innovation.

Our findings also show that the replacement of the person in charge of the company's IR team (IR Turnover) has a positive influence on the number of analysts who follow the firm, supporting the conclusion mentioned above. This suggests that the analysts are more driven to follow a firm, possibly due to the new expertise, or strategies that the change in the position might bring.

Finally, we find that there is a negative link between the female gender and the number of analysts who follow the firm, which may indicate that firms with more analysts typically have men as head of the IR team. It is important to note that this is a correlation, and the negative coefficient does not suggest that having a female person in charge for the IR Team will automatically lead to fewer analyst following, since other factors may come into play. We also found that analysts value higher education qualifications.

Our research also shows that there is a significant influence on the analysts' coverage by the experience in the industry and also for the cases where the person assumed the position as head of the IR team after moving from a different position in the company. This implies

that the analysts seem more engaged when the head of IR has a background and expertise in the company's economic sector.

This study provides a relevant contribution to the existent literature. In particular, it extends the work of Jane & Dipboye (2004), Marston (1996) and Laskin (2009), by looking to personal characteristics in order to better understand whether there is a specific list of skillsets which will incentive analysts to follow a particular firm.

The focus on the largest European listed firms also contributes to the understanding of the topic, as the size effect that may trigger more analysts' coverage is mitigated.

The study also yields contributions to practitioners in the sense that it is clear that analysts will be more driven to follow the company if the professional in charge is someone already established in the industry and, as mentioned in previous literatures, bigger analyst following will lead to higher forecasting accuracy (Lang and Lundholm, 1996).

This is not without its limitations. The process of hand-collect the data shortened the initial sample of 600 firms. This collection process presented a challenge due to the limited availability of relevant information online, which affected the viable sample. Out of the constituents of the Stoxx Europe 600, the final sample comprises data on 208 unique firms. Another limitation was due to time constraint where we were not able perform an analysis on the relation between the variables on our study and its link to the forecasting errors.

Future research may explore the specific reasons why factors like gender or previous experience as head of IR have a negative influence on the analyst following. A study regarding forecasting accuracy linked to the IR team may also provide meaningful insights regarding this functions' practice.

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