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Gender Representation in Corporate Annual Reports:  
The case of Dutch Euronext Listed Companies[[1]](#footnote-1)

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Abstract

As recently as September 2021, the United Nations Conference on Trade and Development Secretary-General quoted World Economic Forum data to suggest that almost four generations have been lost in march towards gender equality because of the COVID pandemic. Further, Rebecca Grynspan argued that “*unless we solve inequalities between men and women, the pursuit of the SDGs is not possible*” (Grynspan, 2021).

Across the European Union, the slow rate of progress on gender is reflected in the similar view that “*it will take nearly three generations to achieve gender equality at the current pace*”, in the 2021 global gender gap index averaging 0.745 across members states (<https://eige.europa.eu/gender-equality-index/2021>), and in a European Commission funding and tender opportunities portal search that identifies 711 gender-related projects (<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>).

With many arguing that progress toward gender equality was only progressing at a snail’s pace prior to the pandemic, the substantial pandemic-related setback requires that companies expand their efforts to overcome gender bias that continues to have an impact on the recruitment and promotion of women, particularly at the higher managerial and director levels. In spite of their steadily increasing numbers within the workforce, women continue to be significantly underrepresented in upper management positions (Baumgartner & Schneider, 2010). Continued dominance of males at the highest levels of plays a significant role in reinforcing perceptions of the relationship between gender and power. As such, major corporations both reflect and reproduce gender inequalities through their structures and operating dynamics (Acker, 2006; Britton & Logan, 2008). Similar to societal structures concerning power and influence, language and art influence perceptions of the role of women in society. Language and images reflect and influence norms, prejudices, and biases about social groups (Hitti, Jang, Moreno, & Pelletier, 2019; Charlesworth, Yang, Mann, Kurdi, & Banaji, 2021).

We bring together organisational power, language, and imagery through a cross-sectional analysis of 87% of the 102 Netherlands-based Euronext listed companies’ annual reports published in 2020[[3]](#footnote-3). As an initial step we assess the images, nouns, and pronouns embedded in the reports to determine the extent of any gender—male oriented—bias in their structure. Although the methodology adopted is a relatively simple test of proportions, complexity is reflected through the use of 25 image variables, eight nouns, and eight pronouns. The image analysis adopts an extended version of Benschop and Meihuizen (2002). The text analysis follows the approach of Hitti, Jang, Moreno, and Pelletier (2019) in counting the frequency of male and female nouns and pronouns.

Unsurprisingly, we find that Euronext listed companies headquartered in the Netherlands produce financial statements that are predominantly male-gendered. Aggregated image analysis finds that images favour men over women with a multiple of 2.58. In other words, over five male images appear for every two female images in listed company annual reports. Linguistic analysis finds the aggregated proportion of male oriented nouns and pronouns to be 44.1% and 76.3% respectively across the same company financial reports. Although the predominance of female nouns—female, females, woman, women—appears contradictory to the statistics for images and pronouns, this is explained by the asymmetric use of gender when qualifying an individual. As example, referring to a ‘female manager’ as opposed to a ‘manager’ when the incumbent is male. Pronoun use within the text of the financial reports reflect a very similar dominance to that found with the images. The 76.3% male pronoun usage means that male pronouns—he, him, his, himself—are used 3.23 times more frequently than female pronouns.

One could argue that the dominance of male imagery and linguistic style is a reflection of underlying gender composition of the companies themselves. This line of thought might suggest that companies want to avoid ‘window dressing’ through presenting a balanced gender perspective that is contrary to the realities of the enterprise.

We investigate this contention by contrasting the statistics discovered with the gender composition of the management (executive) and supervisory boards. We acknowledge that the declining proportions of females at higher organisational levels means that board proportions do not equate to aggregate employee proportions. However, ‘tone at the top’ studies provide significant evidence to suggest that culture is determined at the highest levels of an organisation (Schwartz, 2013; Gunz & Thorne, 2015; Patelli & Pedrini, 2015; Medcraf, 2016). The average female representation on the management and supervisory boards of the sample companies are 9.9% and 24.3% respectively. Additionally, 68 out of every 100 Netherlands Euronext listed companies having only male executives and 22 out of every 100 have exclusively male supervisory boards. Relative to these data, images and linguistic elements of company annual financial statements overstate the influence of women.

Although our more detailed analysis of annual report images is consistent with the overall proportional dominance of males, the examination of roles—employee versus client and manager/supervisor versus worker—and location within the overall image finds a number of nuanced differences that may be considered indicative of pervasive bias by the primary authors of the annual reports. A larger proportion of women are depicted as clients and photographed in casual attire. Conversely, a larger proportion of men are photographed in what best constitutes a professional context. When these differences are considered against the overall backdrop of a reduced linguistic and image appearance of females, societal stereotypes of the role of males and females is clearly evident.

Overall, we find consistent underrepresentation of women across the Netherlands’ most significant listed companies. Our analysis provides evidence that traditional portrayals of females and males in society prevail with females occupying proportionally more customer and lower level employee positions in the image analysis of corporate financial reports. Additionally, we find a discrepancy between female underrepresentation on all measured levels and female overrepresentation in relation to their participation at the highest organisational level.

Our research provides evidence consistent with the idea that annual report statements by senior corporate officers take cognisance of societal pressures to transform an inequitable gender landscape through linguistic tools and imagery. However, statements and images are, at best, imperfect signals of potential strategies and commitment to transform. The outstanding question is whether the higher representation of women in annual reports relative to management and supervisory board composition will induce the needed change across both bodies in the Netherlands two-tiered governance system.

We contribute to academic research on gender diversity and equality by investigating how listed companies present themselves as gender-aware organisations in one of their most important forms for public pronouncements. Annual financial statements are used extensively as a key source of information by equity competitors, customers, external activists, investment professionals, investors, and regulatory authorities. Increasingly, regulatory authorities require that financial statements present information that extends considerably beyond the presentation of audited financial results. These requirements are unlikely to abate, particularly if regulators perceive that images and linguistic tools are being employed by companies to ‘window dress’ rather than present an honest picture of progress to address EDI issues. We acknowledge that our contentions concerning ‘window dressing’ are tentative. However, our findings suggest that further study of the relationship between company external gender representation and internal employee gender diversity is warranted. Research conducted using multi-period analysis across a broader range of companies will provide insight about the extent to which companies use their influence to narrow the gender gap or simply window dress reality.

**Key words**

Annual reports, board structure, gender bias, gender equality, image analysis, gender representation, window dressing

**References**

Abulzahab, Z.M.F. 2021. Gender Equality in Annual Reports: From Window Dressing to Opening Doors. Unpublished Master’s Thesis, Rotterdam School of Management, Erasmus University Rotterdam.

Acker, J. 2006. Inequality Regimes. *Gender and Society*, 20(4), 441-464.

Baumgartner, M. & Schneider, D. 2010. “Perceptions of women in management: A thematic analysis of razing the glass ceiling.” *Journal of Career Development*, 559-576.

Benschop, Y., & Meihuizen, H. 2002. “Keeping up gendered appearances: Representations of gender in financial annual reports.” *Accounting, Organizations and Society*, 27(7), 611-636.

Britton, D. M. & Logan, L. 2008. Gendered Organizations: Progress and Prospects. *Sociology Compass*, 2(1), 107-121.

Charlesworth, T. E., Yang, V., Mann, T. C., Kurdi, B. & Banaji, M. R. 2021. “Gender stereotypes in natural language: Word embedding shows robust consistency across child and adult language corpora of more than 65 million words.” *Psychological Science*, 32(2), 218-240.

Grynspan, R. 2021. UNSTAD Gender and Development Forum, 26-28 September 2021. Bridgetown, Barbados, Opening Keynote Address.

Gunz, S. & Thorne, L. 2015. “Introduction to the Special Issue on Tone at the Top.” *Journal of Business Ethics*, 126, 1-2.

Hitti, Y., Jang, E., Moreno, I., & Pelletier, C. 2019. “Proposed taxonomy for gender bias in text: A filtering methodology for the gender generalization subtype.” P*roceedings of the First Workshop on Gender Bias in Natural Language Processing*, 8-17.

Mandt, L.T. 2021. Imag(e)ining Gender Equality in Dutch Small and Medium-Sized Enterprises. Unpublished Master’s Thesis, Rotterdam School of Management, Erasmus University Rotterdam.

Medcraf, G. 2016. “Tone from the top: influencing conduct and culture.” *Law and Financial Markets Review*, 10(3), 156-158.

Patelli, L. & Pedrini, M. 2015. “Is Tone at the Top Associated with Financial Reporting Aggressiveness?” *Journal of Business Ethics*, 126, 3-19.

Schwartz, S. 2013. “Developing and sustaining an ethical corporate culture: The core elements.” *Business Horizons*, 56(1), 39-50.

1. This paper draws heavily on the research undertaken by Zoë Abulzahab and Louisa Mandt when completing their MSc degrees at the Rotterdam School of Management, Erasmus University Rotterdam in 2021. [↑](#footnote-ref-1)
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3. The corporate annual reports used for the research are for the 2019 financial year. [↑](#footnote-ref-3)