

## WOMEN IN PRINT: A SPECIAL CASE STUDY

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### **Abstract**

The author - who is a woman, a printer and senior manager holding several positions - was recently influenced that motivated her to examine the situation of women in the printing industry more deeply and scientifically. Initially, she focused on Patria Printing House, the company she managed as CEO. The research puts emphasis on examining the proportion of women working at the company in total, and also in management positions. There was a question as to whether this diversity influences the company's effectiveness, so the subject of investigation is whether the development of balance sheet profit is related to the activities of female managers. Over the past 10 years, the ratio of the printing company's balance sheet profit to sales revenue has consistently increased. From this, it is not possible to draw the conclusion that this was due to the positive effect of the proportion of women in management, but it can be concluded that efficiency has not deteriorated. The question of equal pay for the same position, without gender discrimination, is important. It was also established that gender discrimination does not apply in manager positions at the company. While for the company as whole, the average salary of women is below that of men. This may also be explained by the fact that men occupy different positions from women.

**Key word:** *gender equality, statistical analyses, women in leadership, women in print, impact of women on business performance*

### **Introduction**

The printing industry has traditionally been a masculine industry, with certain jobs and sub-skills still being mainly held by men. Even at professional events in the printing industry in Hungary, there is a significant majority of men in the audience (around 80-90%). Recently, a speaker from outside the industry remarked that the printing industry is lucky to have such a high proportion of men, because sectors that have become more feminised are performing worse (such as education or health sector). The statement is obviously based on prejudice, but it did raise the question in the author's

mind whether there is a correlation between the performance of firms and sectors and the proportion of women employed. Or whether the proportion of female managers has an impact on firm performance. In recent years, there have been publications on the situation of women in the printing industry, but these studies (Alexiou, Roberto 2022) have approached the issue mainly from a sociological perspective, rather than an economic one. Another actual issue is whether women and men receive equal pay for equal work. Decades ago, the popular belief and social expectation was that men were the “breadwinners” and therefore deserved higher wages. These misconceptions persist to this day, deeply embedded in social thinking. While there is a growing demand for a change in this perception. Many movements have been launched to improve the sociological, social, cultural and, of course, economic perception of women. The author, as a woman, as a manager of one of the largest printing companies in Hungary and a future PhD student, decided to examine the situation of women in the company she manages.

## **Methodology**

The company under investigation is a security printing company with a 130-year history and 400 employees. The study used statistical analysis to examine the evolution of the proportion of women both in the company as a whole and in management, broken down by management level, over the period of years 2013-2023. Regression analysis was used to assess whether a correlation could be detected in the proportion of women in the operating result over the same period. The focus of the study’s investigation was to statistically demonstrate the extent to which the “same pay for the same work” approach applies. The study compared the average wages of women and men in management and at the firm level, and in production where both women and men work in the same job. Statistical analysis was used to identify male-dominated jobs.

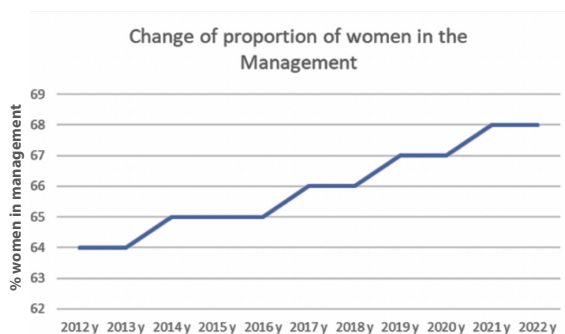
The main aim of the study is to analyse data from a specific company to highlight the gaps and help the company’s HR department to improve internally. Also, a mini-pilot analysis for the author to explore further research and analysis ideas for the author’s doctoral thesis.

## **Results**

In the last 10 years, the proportion of women in the whole company has gone from 60% to 70%. If we look specifically at the proportion of women in the production areas, it is also 61% at present. It can be stated that the company employs a higher proportion of women than men and that this proportion has increased over the last 10 years. It may be an interesting question

whether this trend is representative for the whole industry at national and European level. And if so, what might be the reasons behind it. As a sample, I asked three printing companies with 100–200 employees about the proportion of women: these are 47%, 66%, 41%.

For the company in the study, a separate analysis was made of how the proportion of women in management has changed. The proportion of women in management has increased from 64% to 68%, meaning that women were already significantly represented in management 10 years ago.



*Fig. 1. Development of proportion of women holding management position between year 2012-2022*

A closer look at each management level shows that the proportion of women has increased more significantly at the top management level, while it has decreased at the middle management level and increased at the team leader level. 1st level of management are the CEO and other directors. 2nd level: top managers but not holding director position. 3rd level: middle management. 4th level: team leaders.

*Table 1. Proportion of women at management levels in 2023 Table*

	Number of people	nr of women	women %
<b>2023. February</b>			
<b>Management:</b>	<b>63</b>	<b>43</b>	<b>68%</b>
1st level	6	3	50%
2nd level	5	1	20%
3rd level	15	9	60%
4th level	37	30	81%
<b>Total company:</b>	<b>389</b>	<b>272</b>	<b>70%</b>

Table 2. Proportion of women at management levels in 2013

	Number of people	nr of women	women %
<b>2013. February</b>			
<b>Management:</b>	<b>73</b>	<b>47</b>	<b>64%</b>
1st level	8	2	25%
2nd level	4	2	50%
3rd level	14	7	50%
4th level	47	36	77%
<b>Total company:</b>	<b>363</b>	<b>219</b>	<b>60%</b>

The study looked at the evolution of company performance, i.e. how the company’s operating profit and turnover have changed based on public reporting. The results show that, with corrections, turnover has increased steadily, while operating profit has been increased too.

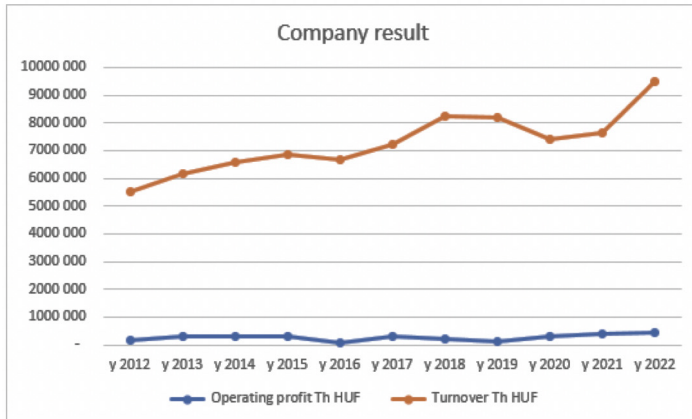


Fig. 2. Operating profit and turnover at the company between 2012-2022

Operating profit shows the real performance of a company, so, the trend line plotted by regression analysis of the change in the proportion of women and the operating profit shows visually that the company’s performance increased as the proportion of women increased. Of course, with this much information it would be unfounded to say that this improvement in performance is due to women, but it can also be said that the increase in the proportion of women has not led to a deterioration in the company’s performance (Hougard, Carter 2022) The positive trend line can be seen both in the proportion of women in the company as a whole, in the proportion of women in management and in the proportion of women in senior management.

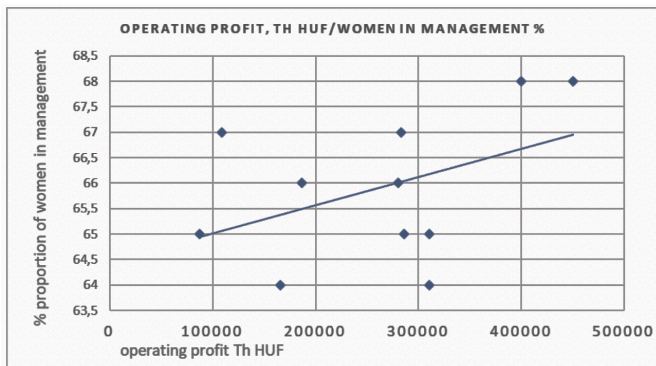
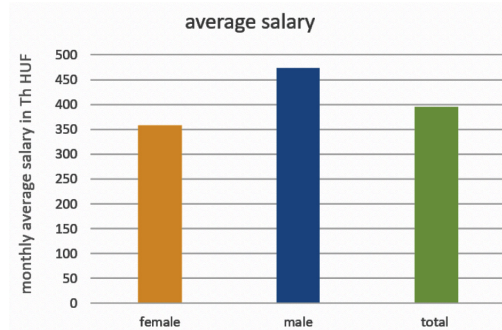


Fig. 3. Correlation between proportion of women and company's operating profit in the period between 2013-2023

Equal pay remains an interesting and sensitive issue (Ammerman, Groysberg 2021) In this study, only job and responsibility categories with the same content can be compared, so as not to be misleading. There were few cases of men and women holding the same job titles in the companies surveyed. One would think that men and women would have the same job in production, but a closer look at the total number of employees reveals that there are less than 10% of men and women with the same job, but that it is also spread over several areas. Therefore, in terms of pay, management and its different levels were examined first. The results showed that at director level (19%), senior management (8%) and middle management (14%), the average salary of women is higher than that of men, while at team leader level, men are paid more (10%).

Among production workers, the gender ratio was mixed among the 10 colleagues employed in mould making in similar jobs (10 women, 6 men). Looking at their average salaries, women are 1% more remunerated, which is not a significant difference, so in this area the “same work, same pay” approach is applied.

The study also analysed the average pay of women/men for the whole company. Surprisingly, the average salary of men is 32% higher than that of women. We have seen earlier that this difference is not due to the pay gap in management, but occurs at the employee level. As has been said, the jobs are different, it can be assumed that the difference is due to the content of the jobs, the jobs held by men may require more qualifications.



*Fig. 4. Monthly average salary at female, male employees in HUF*

In the context of the analytical problem raised, the study went on to identify those jobs that are typically male-dominated, defined as more than 90% of the employees in a given position being male. According to the analyses, male-dominated jobs are machine operators (either digital, sheet-fed offset, reel-fed or flexo) and cutters in the binding department.

## **Conclusion**

In the company surveyed, the proportion of women in both management and the company as a whole has increased. It is worth investigating whether this is a typical trend at industry level with a European perspective. The reasons behind this change could also be the subject of research.

The study has shown that the increase in the proportion of women in the company studied has not worsened the company's performance.

On the issue of equal pay, women are not discriminated against in top and middle management, with group managers seeing higher pay than men.

The analysis of average company salaries shows that men earn significantly more in lower level jobs, but the analysis here needs to be complemented by a job analysis where salaries should be weighted by levels of expertise and responsibility.

It can be said that at the company the equal pay as a principle does not necessarily meet in lower-level jobs.

The study also identified male-dominated jobs such as machine operators and cutters in the bindery department.

A similar analysis of impact of women on performance and the topic of equal pay could be the subject of further research work with other domestic printers and with a European focus.

## References

1. Alexiou, A.; Roberto. R. (eds) *Women in Print* 1st ed. Peter Lang Group 2022. ISBN 978-1-78997-978-7
2. Archer, C.; Moog, C.; Hinks J. (eds) *Women in Print 2*. 1st ed. Peter Lang Group 2022. ISBN 9781789979770
3. Beilock, S. (2019) *Research-Based Advice for Women Working in Male-Dominated Fields* Harvard Business Review (digital article) <https://hbr.org/2019/02/research-based-advice-for-women-working-in-male-dominated-fields>
4. Hougard, R.; Carter, J.; Afton, M. (2022) *When Women Leaders Leave, the Losses Multiply* Harvard Business Review (digital article) <https://hbr.org/2022/03/when-women-leaders-leave-the-losses-multiply>
5. Ammerman, C.; Groysberg, B. (2021) *How to Close the Gender Gap* Harvard Business Review (digital article) <https://hbr.org/2021/05/how-to-close-the-gender-gap>