

# Gender Diversity In Belgian Boardrooms And Corporate Performance: A Study Of The Gender Quota Law

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## INTRODUCTION

Gender diversity on corporate boards has become a key issue in corporate governance, with research suggesting diverse boards can influence decision-making and company performance. Despite the extensive existing literature, the impact of gender diversity on firm performance remains unclear, with a notable lack of studies focusing on the Belgian context. Therefore, my master thesis aims to address this gap and explores whether the share of women in boardrooms influences firm performance in Belgium taking as a turning point the 2011 Belgian gender quota law mandating one-third female representation in Belgian boardrooms.

## RESEARCH QUESTION

Does the share of women in the boardroom influence firms' performance in Belgium?

## DATA

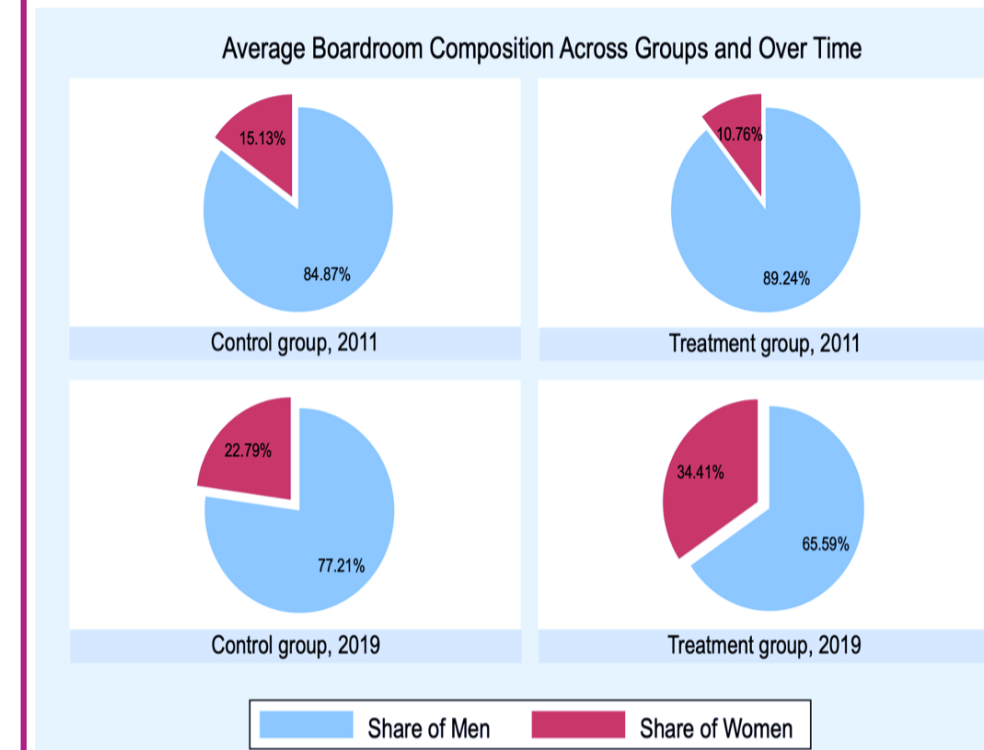
Data for my study was primarily hand-collected from ORBIS database, supplemented with financial information from companies' annual reports on the NBB Consult website when required. Board composition details were gathered from the social balance sheets of companies. The final panel dataset consists of two groups:

- **93 companies** subject to the gender quota law, and
- **94 companies** not subject to the quota.

However, the dataset has some limitations, including incomplete information and the inability to determine the exact size of certain companies.

## ANALYSIS OF THE BELGIAN GENDER QUOTA LAW

Figure 1: Evolution of the Share of Women and Share of Men in Boardrooms



Notes: This figure represents the mean of the share of women and men across groups and overtime. The control group is composed of 94 Belgian private unlisted companies unaffected by the gender quota law enacted in 2011. The treatment group is constituted of all Belgian companies impacted by the gender quota law for which information was publicly available, precisely 93 firms are encompassed within the treatment group (88 Belgian listed firms and 5 autonomous public companies).

- ❑ 20 percentage points increase in average Share of Women in Boardrooms of affected firms from 2011 to 2019.
- ❑ An average increase of 2 Female Board Members with constant average board size.

Table 4: Changes in Board Composition Over Time - Shifts in Female and Male Membership

	2011			2019		
	(1) Control group	(2) Treatment group	(3) Diff	(4) Control group	(5) Treatment group	(6) Diff
Total Board members	5.191 (4.723)	<b>9.280</b> (4.036)	4.088*** (0.643)	5.287 (5.441)	<b>9.462</b> (4.180)	4.175*** (0.710)
Number of Men	4.298 (3.709)	<b>8.183</b> (3.551)	3.885*** (0.531)	3.809 (3.437)	<b>6.161</b> (2.775)	2.353*** (0.457)
Number of Women	0.894 (1.470)	<b>1.097</b> (1.391)	0.203*** (0.209)	1.479 (2.431)	<b>3.301</b> (1.712)	1.822*** (0.308)
Observations	94	93	187	94	93	187

Notes: Comparing 2011 to 2019, this table illustrates the evolution over time of the mean number of female and male members on the Board of Directors, alongside the overall average, for both entities subject to the gender quota legislation (i.e. treatment group) and those exempt from it (i.e. control group). The treatment group is composed of 88 Belgian listed companies and 5 autonomous public enterprises. The control group is constituted of 94 Belgian unlisted private firms. Standard errors of the mean in parenthesis. \*p<0.1, \*\*p<0.05, \*\*\*p<0.01.

## METHODOLOGIES and RESULTS

First methodology:

### Two-Way Fixed Effects regression model

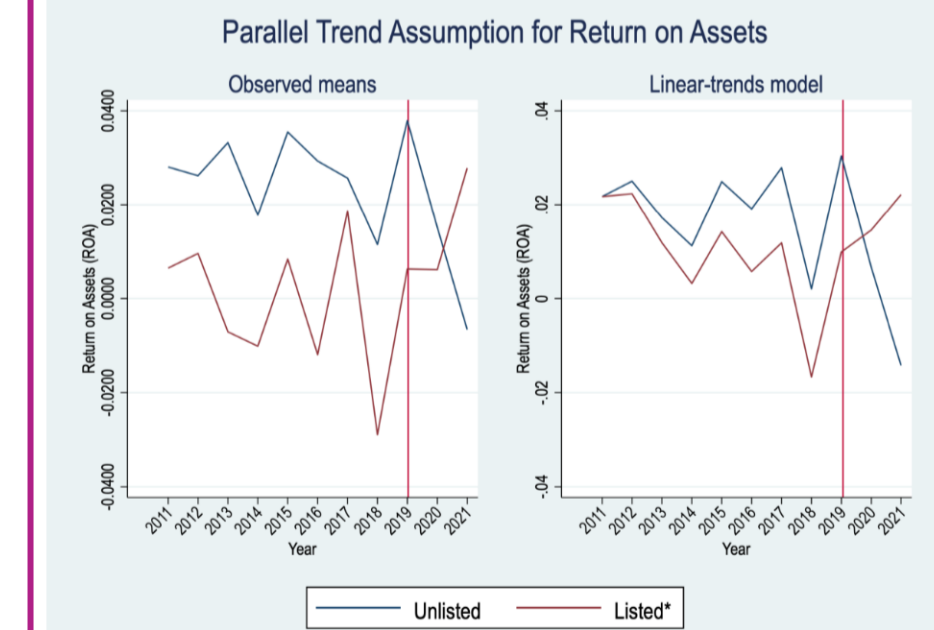
- **Objective:** Estimate the direct influence of greater gender diversity in boards on firm performance.
- **Results:** Inconsistent results with the impact of the share of women on firm performance varying between positive and negative across specification.

Second methodology:

### Two steps procedure combining Difference-in-Differences and Instrumental Variable regressions

- **Objective:** Empirically assess the impact of the Belgian gender quota law on female representation in boards and use these estimates to evaluate the influence on firm performance.
- **Results:** Statistically significant results suggesting that an increase of one percentage point in the share of women on the board is associated with a decrease of 0.162 percentage point in ROA, a firm performance measure.

Figure 2: Parallel Trend Assumption of ROA: Observed Means and Linear-Trend Model (Controlled for net income, total assets, total liabilities (excl. equity), labor costs, and EBIT)



Notes: This figure represents a difference-in-differences regression of the dependent variable Return on Assets, with net income, total assets, total liabilities (excl. equity), labour costs, and EBIT used as control variables. The Return on Assets (ROA) is calculated by dividing net income by total assets. The control group is constituted of 94 unlisted private firms and corresponds to the blue line. \*The treatment group is composed of 88 listed companies and 5 autonomous public enterprises and corresponds to the red line. Source: ORBIS, 2023

## ROBUSTNESS

- ❑ Inconsistent Results when using alternative firm performance measures
- ❑ Use of a more extensive and complete database
- ❑ Having more Comparable Groups
- ❑ More Sophisticated Methodologies (e.g. Staggered DiD, Propensity Score Matching, etc.)

## CONCLUSIONS

**Key finding:** Increased gender diversity is linked to a decrease in return on assets.

### Caution with these (short-term) results:

- Omitted Variable Bias (OVb)
- Missing data and small sample size
- Methodological concerns

**Potential explanation?** Lack of experience.

**Future research?** Long-term effects of gender diversity on firm performance should be explored for more robust findings.

## REFERENCES

Please refer to my master thesis' references.

## CONTACT

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