

Impact of Women in Industrial Competitiveness

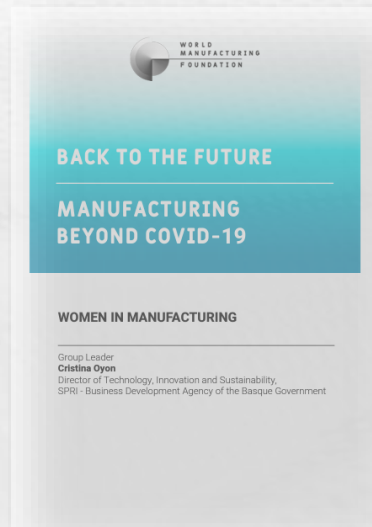
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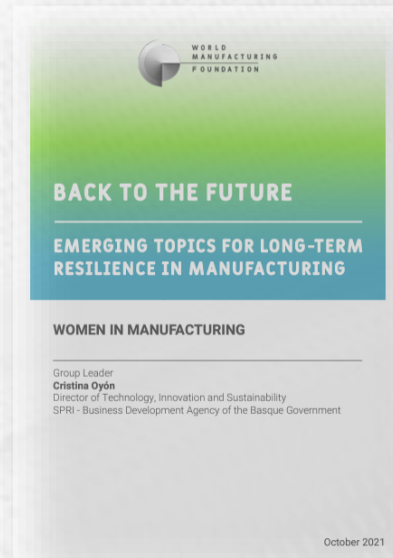
**New Business Models for the
Manufacturing of the Future**

27TH - 28TH NOVEMBER 2023
SDF | Treviglio (Bergamo)

Scope



White Paper 2020
**Manufacturing beyond
Covid**



White Paper 2021
**Emerging topics for long term
resilience in manufacturing**



White Paper 2023
**Impact of Women in
Industrial Competitiveness**

Context

Women are underrepresented in Manufacturing

47% of the labor force is made up by women, but only **20%** of the manufacturing workforce

International Labour Organization. ILO. January 2021.

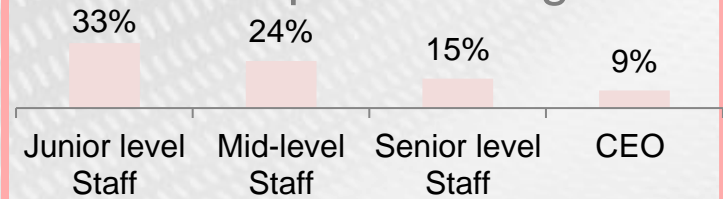
3/4 of the female population don't even consider manufacturing as a potential career

UNIDO. Nelson, Judy. (2020, November 10). Why We Have Gender Inequality in Manufacturing.

Only **1/3** manufacturing professionals and **1/4** manufacturing leaders are women

Deloitte. Women in manufacturing study. Exploring the gender gap.

Across all industries, women make up on average:



World Economic Forum (2016)

2020. Manufacturing beyond Covid

Focus on **analysing the situation of women in the industry and establishing recommendations** to rebalance the gender gap with the ultimate purpose of driving the industry's recovery towards a more sustainable and digital future after the Covid-19 sanitary crisis.

Fostering women to...	...overcoming current barriers...	...and seixing new oportunities...	...with recommendations for action...
ACCES	Digital gap. Not enough interest in STEM	Sustainability servitization - new business models	Create awareness - communicate attractiveness of manufacturing and new opportunities
THRIVE	Working conditions	More flexibility, more diverse and equitable workplace	Change mindset towards outcome oriented working models and boost innovation through diversity
LEAD	Glass ceiling	Not only economic values, but also social and environmental sustainability	Mainstream gender issues in industrial policies and company strategies with data, objectives and resources

...in a new industrial model for high added-value manufacturing, that becomes part of the solution to climate and social crisis.

2021. Emerging topics for long term resilience in manufacturing

Focus on the identification of specific actions to boost the access, promotion and leadership of women in the manufacturing industry and “change the rules” on which to work from industry, education institutions and public administration

CULTURAL TRANSFORMATION

STRATEGIC IMPERATIVE

ACCES			THRIVE			LEAD	
01_ Engage girls in stem	02_ Increase women's employability	03_ Promote female entrepreneurship	04_ Equitable work environment	05_ Equal pay for equal value	06_ Gender equality plans	07_ Women's participation in decision making	08_ Women on boards
8 GAME CHANGING ACTIONS							
01_ Data & research			02_ Making manufacturing appealing			03_ Female role models	
3 BUILDING BLOCKS							

Context

Gender equality no longer remains just a matter of human rights, but a **fundamental** question to ensure **competitiveness** and economic recovery. UNIDO, 2019.

Companies in the **top quartile of gender diversity** on executive teams were **25 percent more likely to experience above-average profitability** than peer companies in the fourth quartile. *McKinsey&Company. (2020, May). Diversity wins How inclusion matters.*

A profitable firm at which **30 percent of leaders are women** could expect to add **more than 1 percentage point to its net margin** compared with an otherwise similar firm with no female leaders . *Marcus Noland, Tylor Moran, Barbara Kotschwar. (2016). Is Gender Diversity Profitable? Evidence from a Global Survey.*

Investing in women to increase their participation in the labor force leads to economic gains, **29% outperformance** by the most diverse companies. *Blackrock. (November 2023). Lifting financial performance by investing in women*

SPRI 2023 Study on the Impact of Women in Industrial Competitiveness

- The research has a **twofold objective**:
 - To provide a **methodology** to analyze the correlation between gender equality and industrial competitiveness.
 - To develop a **case study** that provides data as an objective basis to help prove that a higher rate of gender diversity benefits business competitiveness.

Methodology

Multidimensional and comprehensive assessment of the concepts of competitiveness and gender equality in industrial companies.

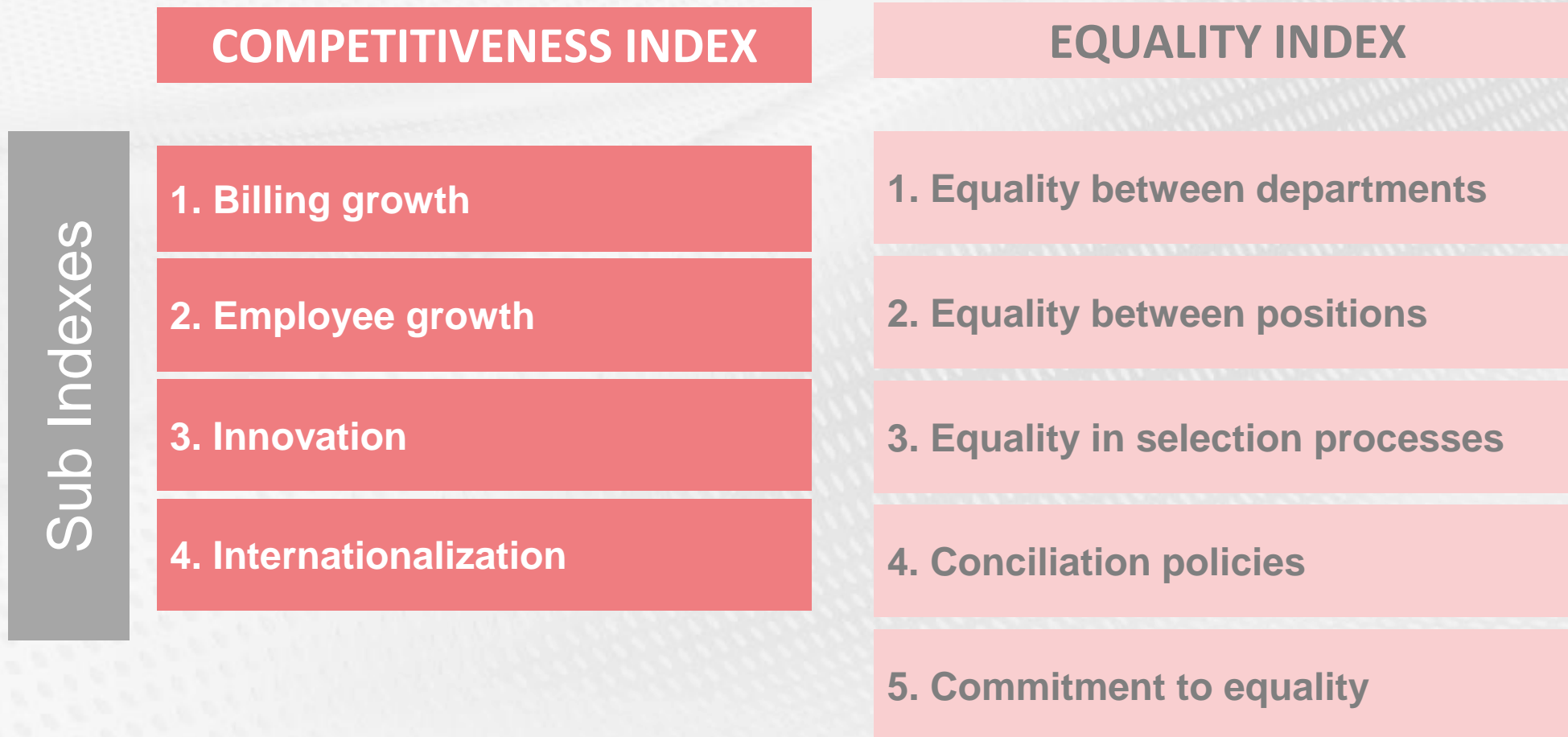


Case study

Survey launched to 2,500 Basque industrial and/or industrial-related services companies. A sample of 474 companies was achieved.

Methodology

Two different composite indexes were created, one related to competitiveness and the other to equality. Each index is composed of a set of sub-indexes and variables that are weighted to reflect the importance of each of them.



Methodology – Competitive index

Sub Index	Variables
1. Billing growth	2021 turnover growth percentage relative to 2019
2. Employee growth	2021 employee growth percentage relative to 2019
3. Innovation	<ul style="list-style-type: none">• R&D activity• R&D department• R&D employees• Active participation in R&D funding programmes• Percentage of R&D revenues/total
4. Internationalization	<ul style="list-style-type: none">• Turnover percentage of exports• Number of production plants abroad

Methodology – Equality index

Sub Index	Variables
1. Equality between departments	<ul style="list-style-type: none"> Percentage of women by department
2. Equality between positions	<ul style="list-style-type: none"> Percentage of women by position
3. Equality in selection processes	<ul style="list-style-type: none"> Equal candidacy in the selection processes • Equality training for HR staff
4. Conciliation policies	<ul style="list-style-type: none"> Flexibility in working hours • family member Existence of paid parental leave for childcare • Continuous working day to care for children Leave for serious illness of a family member • Existence of Teleworking option
5. Commitment to equality	<ul style="list-style-type: none"> Strategic commitment to equality • Existence of promotion policies for women Equality Plan • Positive discrimination Equality Group • Equality training for employees Sexual harassment Protocol

Case study

A **survey to collect the information** to build the indexes was launched in August 2022 to **2,500 Basque companies** that operate in the industrial and/or industrial-related services sector. A **sample of 474** companies was achieved. SPRI worked with **The European House – Ambrosetti** to carry out the analysis.

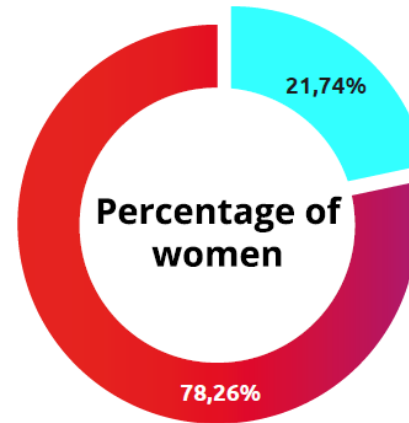


Characteristics that make the Basque Country a suitable region:

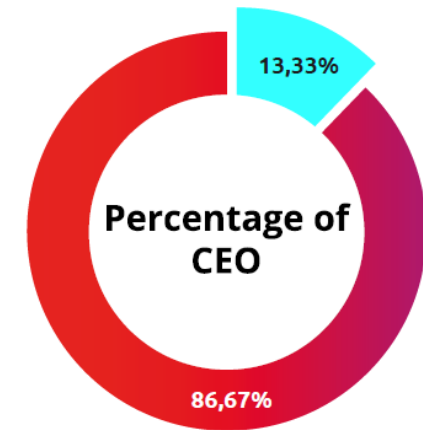
- Weight of industrial activities on GDP: 23,9% (almost 40% of GDP of industrial-related services are considered).
- Weight of women in the labor market: 44%
- Weight of employed women in industry: 21%

Sample characterization - Main figures

- Women represent **21.74%** of the workforce in the sample.
- Only **13%** of the companies have a woman at the lead.



● Men ● Women

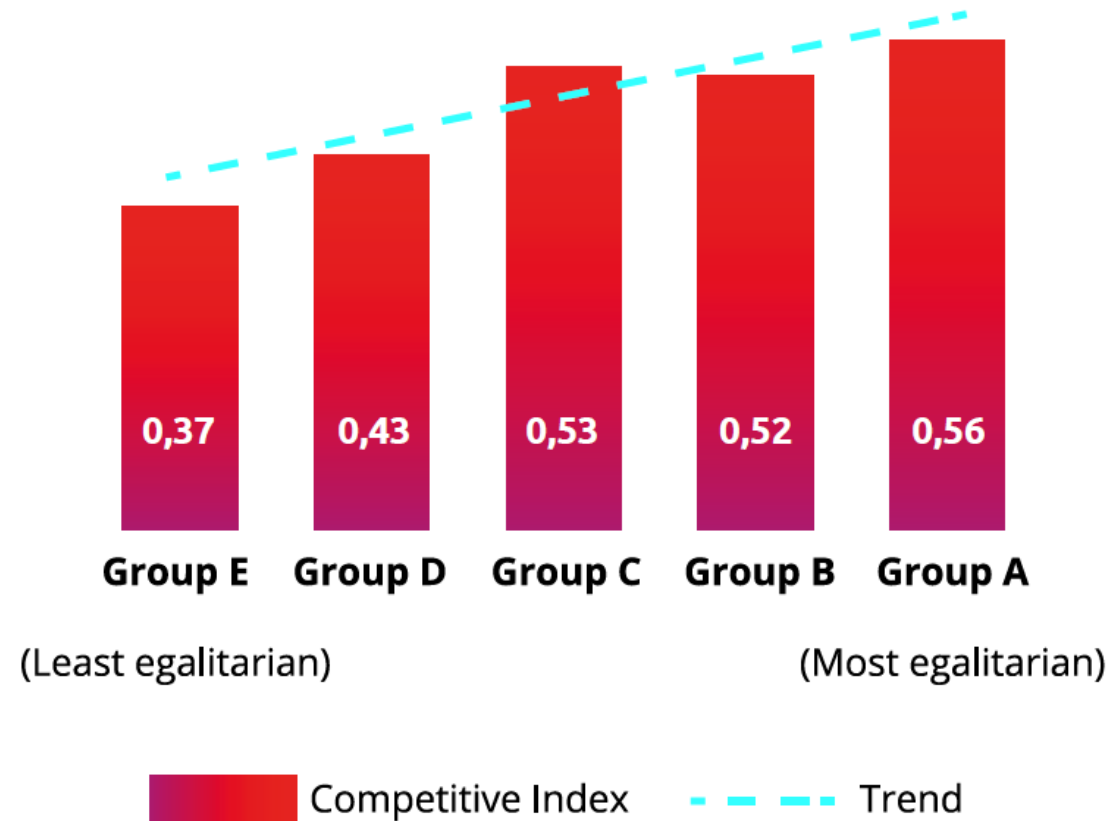


● Men ● Women

- Women are **underrepresented** regardless their qualification, position or role

- **Companies with higher gender inclusion are more competitive**

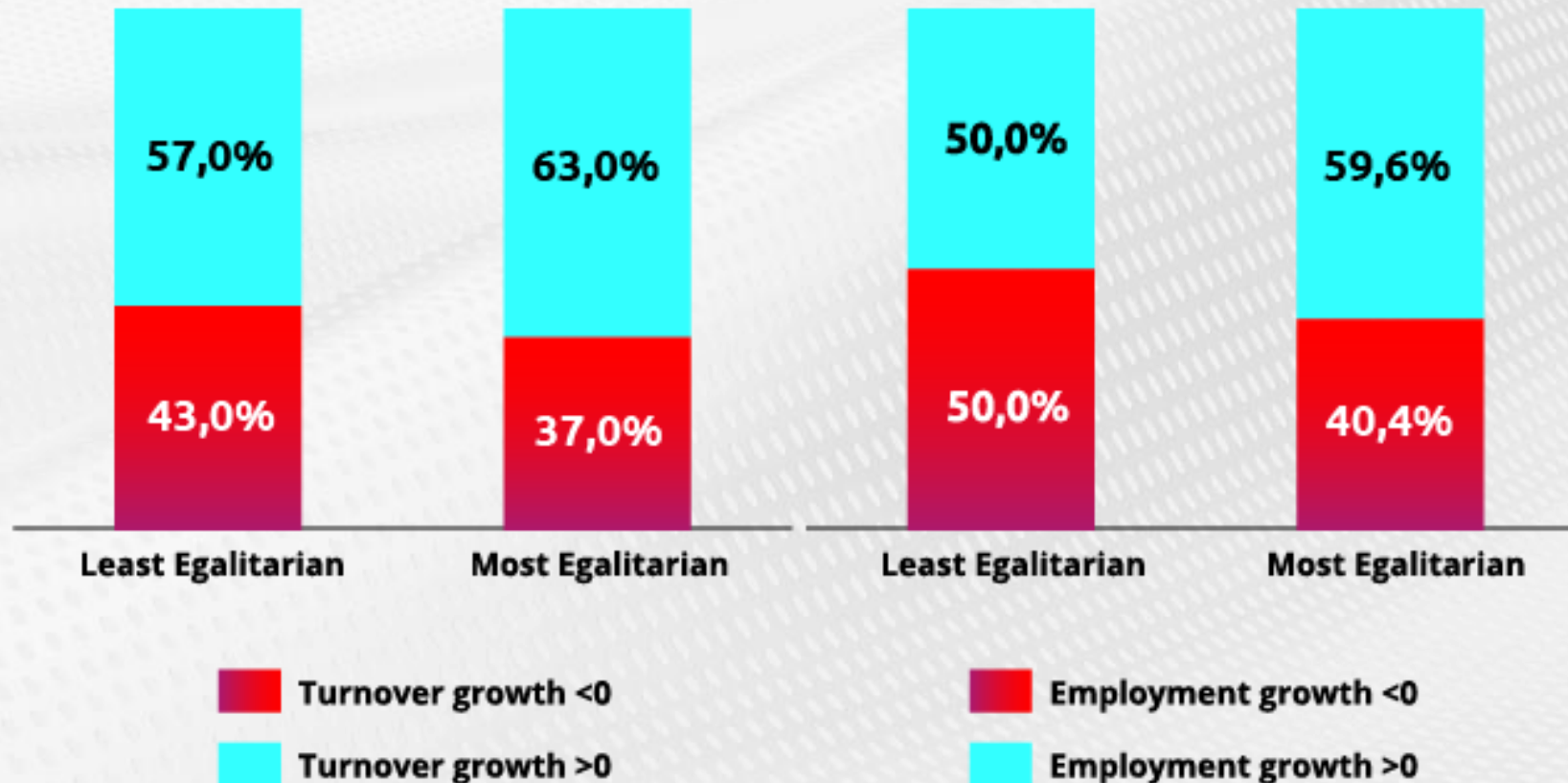
Key Findings - Competitiveness perspective



NB: The indexes in the chart shows the average results for each group. The dataset has been distributed by quintiles. The index range is between 0 (Min) and 1 (Max).

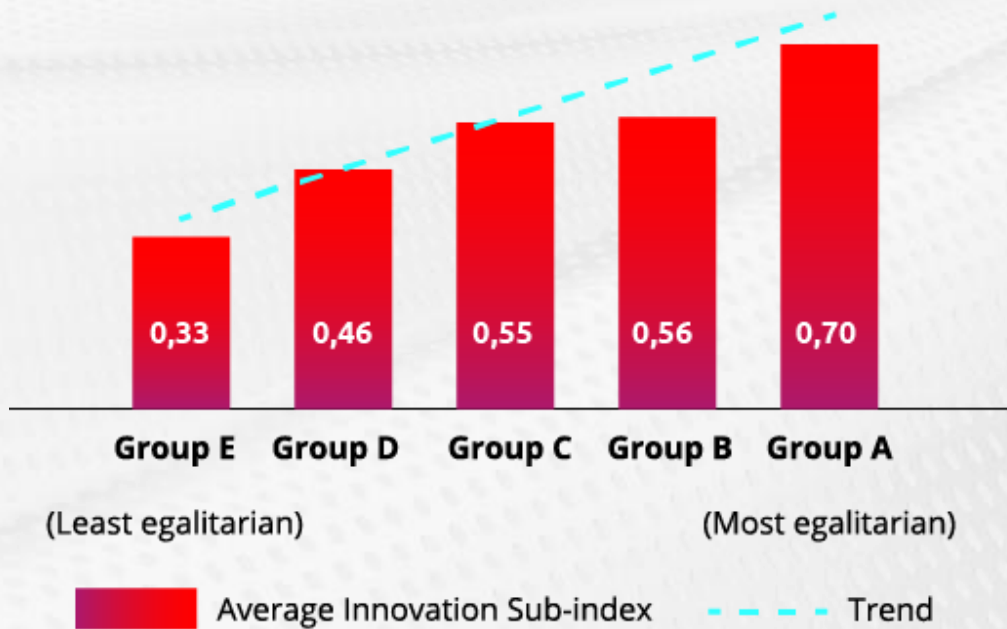
The most egalitarian companies have grown more in **TURNOVER AND EMPLOYMENT**

'19-'21 Billing and Employment Growth Sub-Index according to the equality ranking

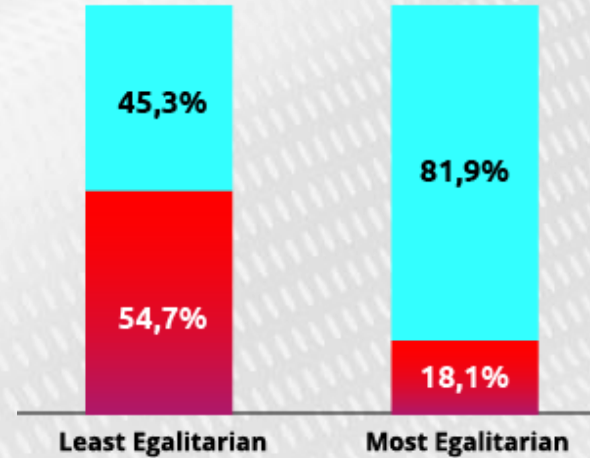


The most egalitarian companies show a higher level of INNOVATION

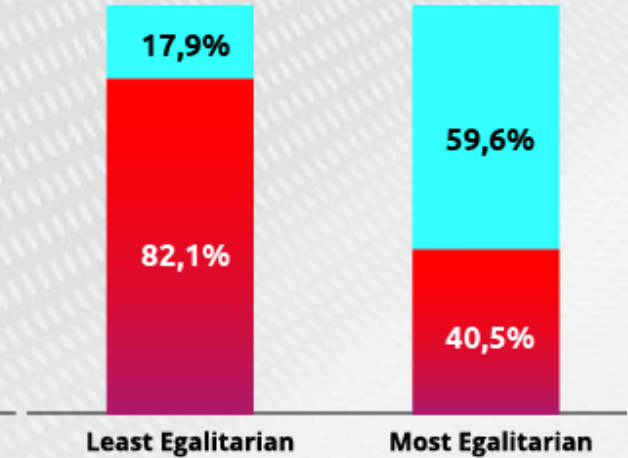
Innovation Sub-index Average of Companies according to the Equality Ranking



R&D call participation in the last three years



R&D internal departament

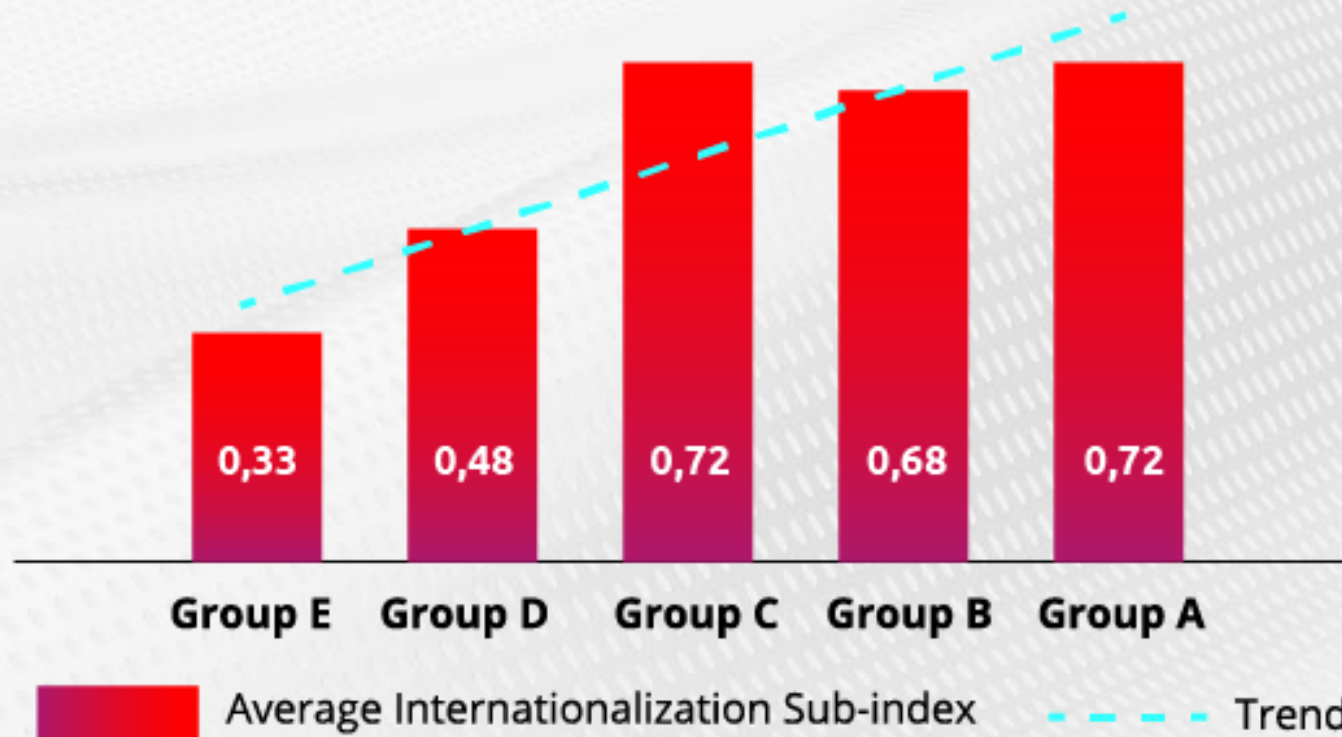


█ Yes █ No

NB: The indexes in the chart shows the average results for each group. The dataset has been distributed by quintiles. The index range is between 0 (Min) and 1 (Max).

The most egalitarian companies are more projected on the **INTERNATIONAL BUSINESS** scenario

Average Internationalization Sub-index of Companies according to the Equality Ranking



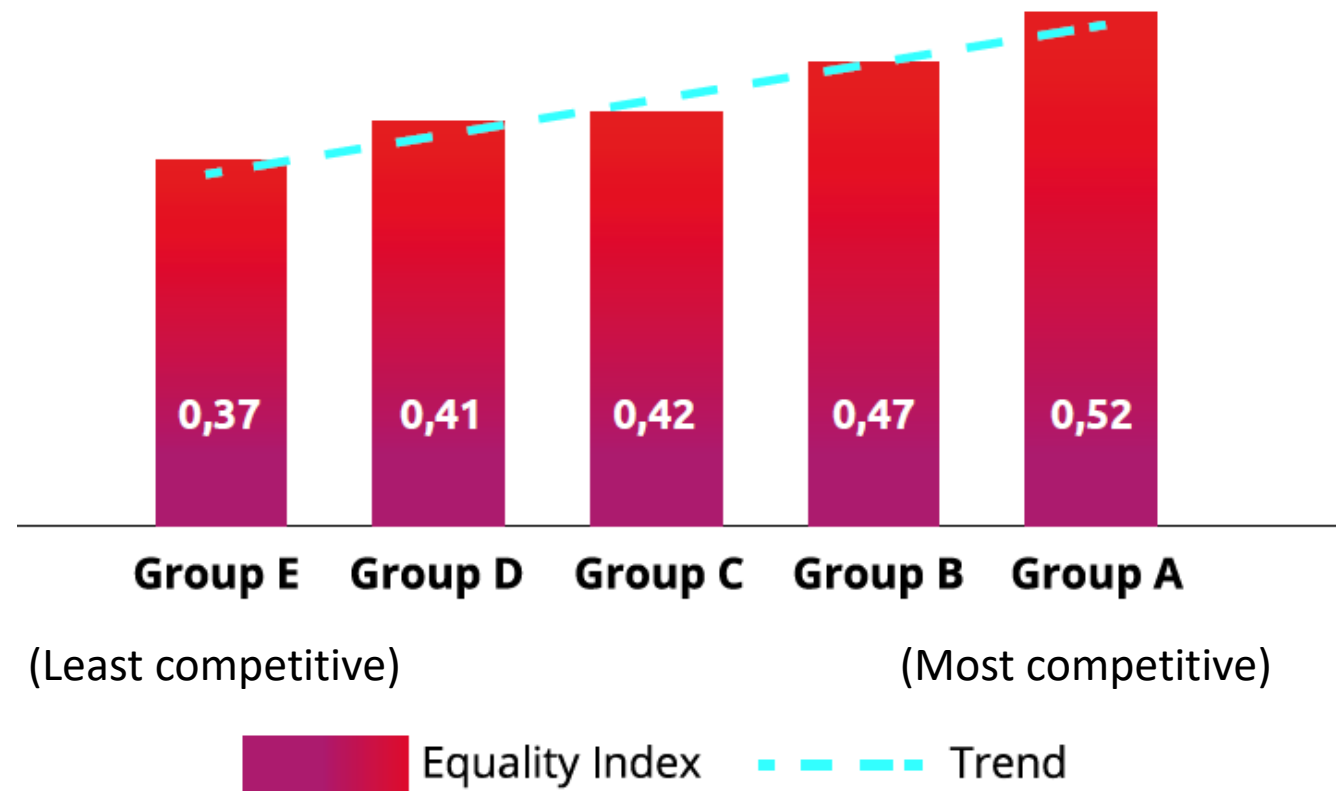
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Key Findings

-

Equality perspective

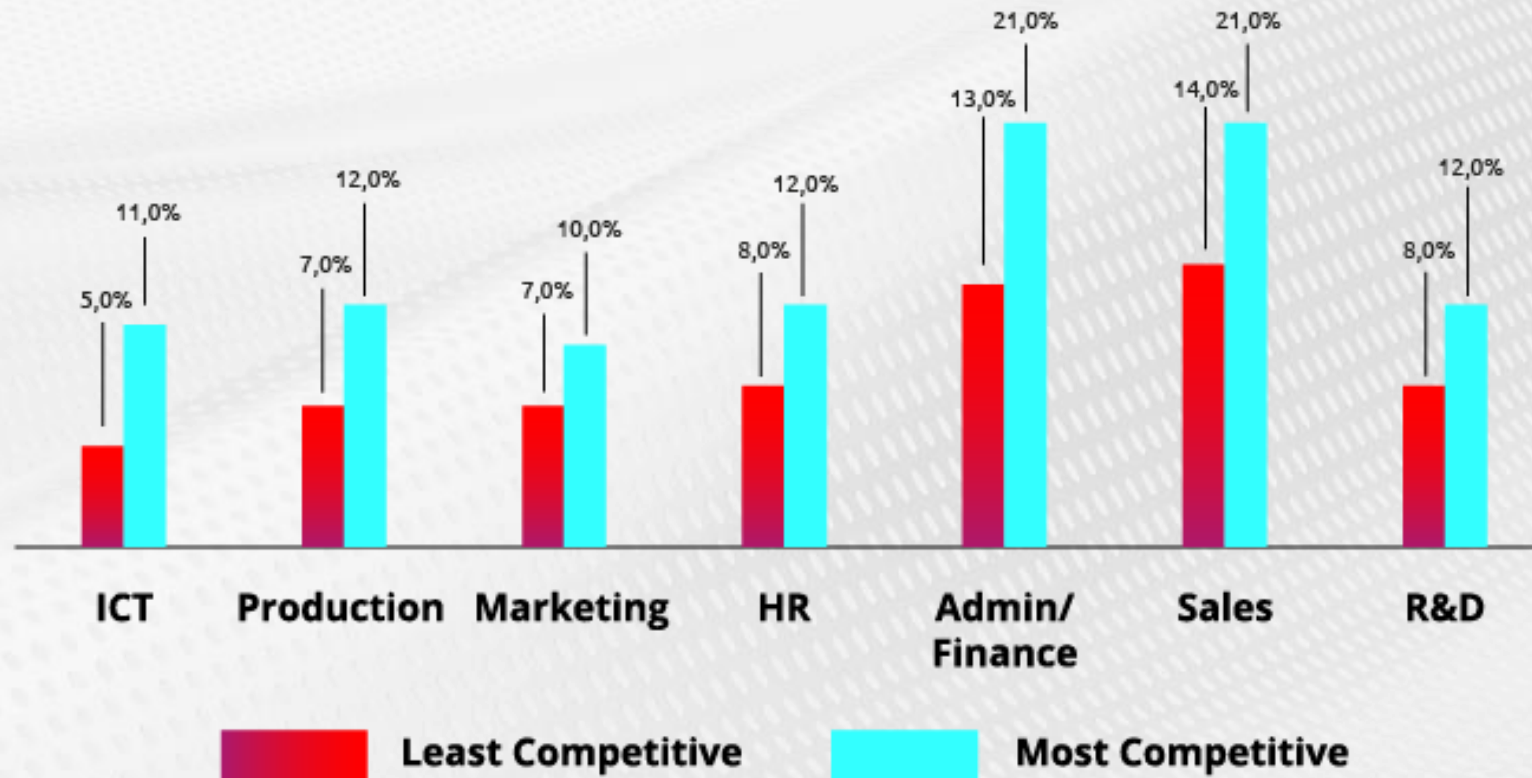
- The most competitive companies are more egalitarian than the least competitive ones



NB: The indexes in the chart shows the average results for each group. The dataset has been distributed by quintiles. The index range is between 0 (Min) and 1 (Max).

Most competitive companies have more gender-balanced DEPARTMENTS (HORIZONTAL EQUALITY)

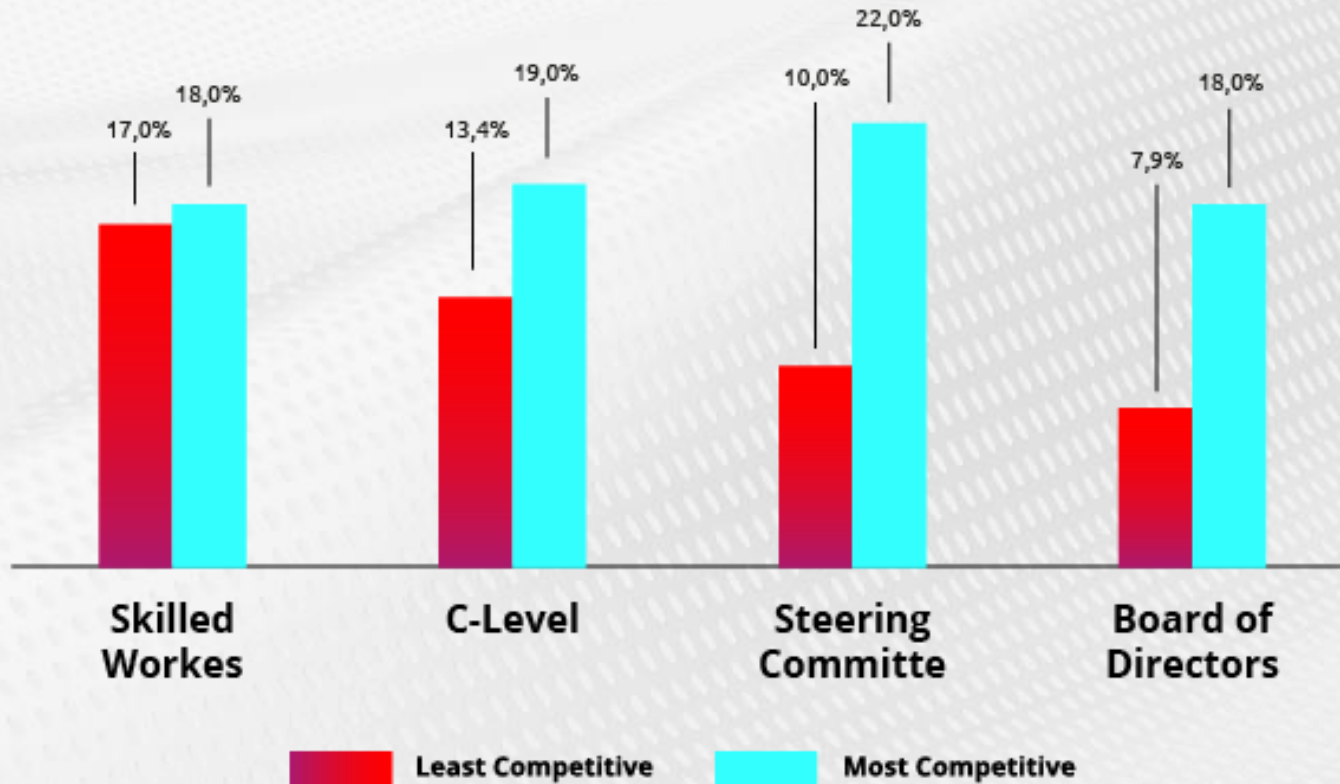
Least competitive vs. most competitive: 40%-60% *men to women ratio of employees by department



**The focus on this range is explained by its greater representativeness of gender equality compared to all other ranges of the same index*

Most competitive companies have more gender-balanced structure by ROLE/POSITION (VERTICAL EQUALITY)

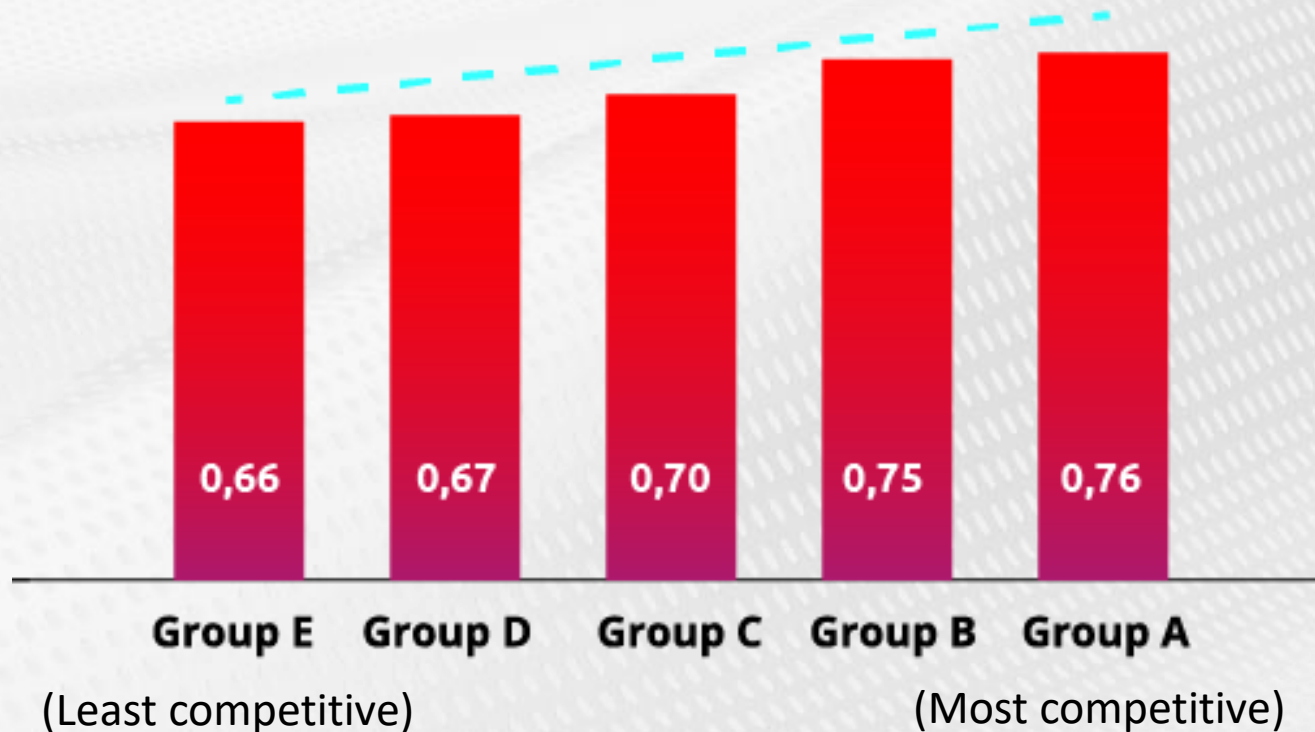
Least competitive vs. most competitive: 40%-60% *men to women ratio of employees by role



**The focus on this range is explained by its greater representativeness of gender equality compared to all other ranges of the same index*

Most competitive companies apply more WORK-LIFE BALANCE POLICIES (flexible hours, teleworking, care leave...)

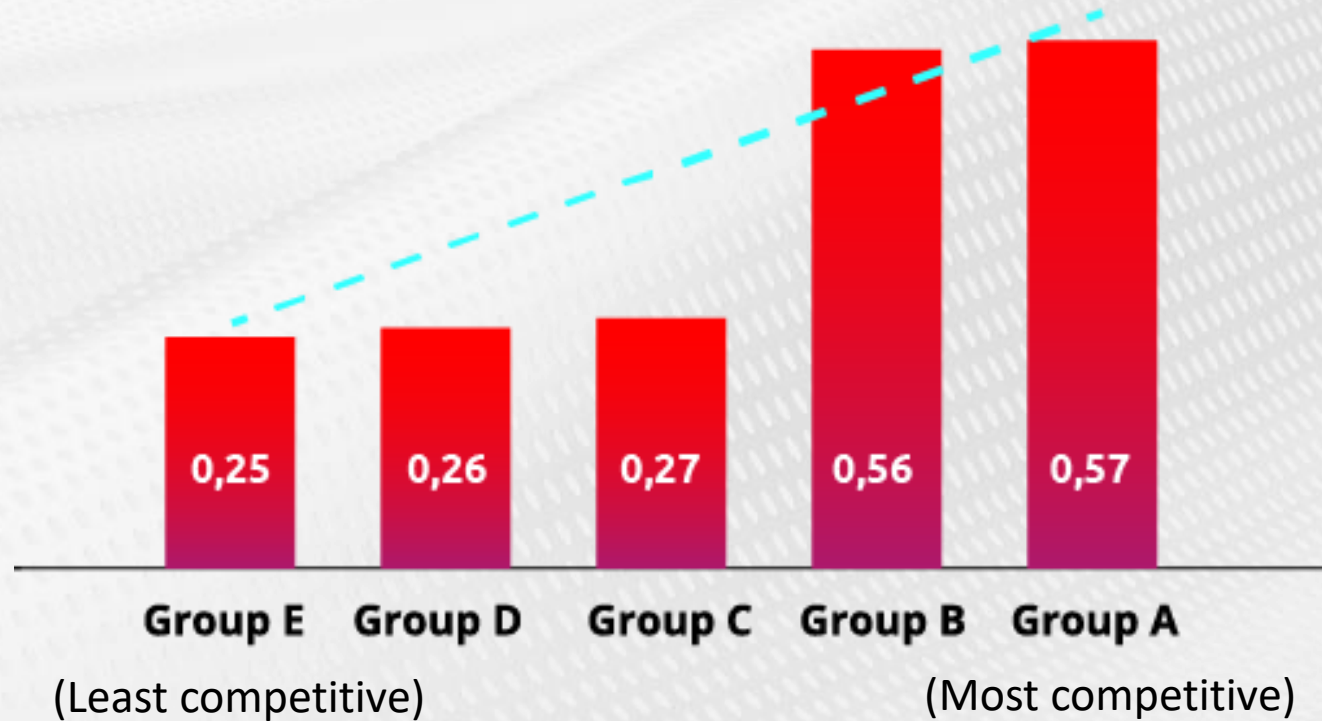
Work-life Balance Sub-Index according to the competitiveness ranking



NB: The indexes in the chart shows the average results for each group. The dataset has been distributed by quintiles. The index range is between 0 (Min) and 1 (Max).

Most competitive companies show greater commitment to promote women and in the implementation of internal GENDER-BASED POLICIES (plans, commissions, training and equality protocols)

Inclusivity by governance Sub-Index according to the competitive ranking



NB: The indexes in the chart shows the average results for each group. The dataset has been distributed by quintiles. The index range is between 0 (Min) and 1 (Max).

Conclusions

- This study provides a **methodology** to measure the **impact of women in industrial competitiveness** (turnover, employment, R&D, internationalization).
- The study identifies the **keys to promoting competitiveness from equality**:
 - Horizontal equality (by departments)
 - Vertical equality (by level of responsibility)
 - Work-life balance measures (flexible hours, teleworking, care leave...)
 - Internal equality policies (plans, commissions, training and equality protocols)
- The conclusions drawn from this research hold massive potential as a **motivational tool** for the implementation of gender inclusive policies in companies and governments.

Replication of the analysis

The work carried out sets the foundation for further advancement by extending the application of this methodology to other contexts or regions beyond the Basque region.



- Replication in the EIT Manufacturing contact database
- ~80 responses
- Preliminary results reinforce the conclusions: companies with higher gender inclusion are more competitive.



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Women in Industry - SPRI Group



WORLD MANUFACTURING FORUM

WMF