The role of gender in trade - statistical evidence from linking Finnish microdata on employees and entrepreneurs
Pontus Lindroos, Henri Luomaranta and Satu Nurmi
Topics

1. Linking micro-data of Finnish statistical registers
2. Internationally trading enterprises vs. other enterprises
   • Traders providing competitiveness (and wealth)
3. Labor force participation by gender
   • Distribution of salaries generated by trading enterprises
4. Entrepreneurship by gender
   • Distribution of capital income generated by trading enterprises
Towards more granular statistics

• Several on-going projects (e.g. among Eurostat, OECD and statistical offices of Nordic countries)
  • Statistical offices of Nordic countries work towards adding more dimensions to (business) statistics
    • Focus on trade and global value chains
    • Important elements – age of enterprise and high-growth status
    • Better understanding of dependencies from enterprise groups (domestic or foreign ownership)

• Including social dimensions and gender can provide more details on inclusive globalisation
Microdata linking – The importance of the unique enterprise ID

- International Trade in Services
- Statistical Business Register
- IFATS: Foreign affiliates in Finland
- Structural Business Statistics: Turnover, value added, employment
- Business Demography: Age
- FLOWN: Owners-Employers
- FOLK: Employees-Employers
- OFATS: Affiliates abroad
- International Trade in Goods
- International Trade in Services
- Statistical Business Register
FOLK (employees) and FLOWN (owners) data modules

- Statistics Finland offers ready-made research data modules for scientific studies and statistical surveys, with persons linked to enterprises
- FOLK data modules include basic demographic information on persons residing in Finland
  - Annually used in the compilation of statistics on the structure of population, the employment statistics and the family statistics
- FLOWN data module includes person owners of the enterprises
  - Finnish tax administration requests limited liability enterprises to provide a list of all the owners who have at least 10% of the shares
  - People behind the businesses owning the shares have been also traced where possible (Maliranta & Nurmi, 2019)
- Information on owners’ gender has been used to divide enterprises to four ownership groups by gender (following Kritikos, Maliranta & Nurmi, 2019)
Why should we care about equal participation to trade?

Trading enterprises are more productive and provide better pay

Figure 1: Productivity of exporters and non-exporters, 2008-2016

Figure 2: Salary in exporters and non-exporters, 2008-2016
Labor force participation by gender – Does globalisation support male dominated jobs?

Figure 8: Share of female workers and salaries paid to them by exporters and non-exporters

- Share of female workers is much lower in exporters and declining (almost 10 percentage points difference in 2016)
- Gender pay gap also seems to be higher in exporters (around 3 percentage points in exporters and 1.2 percentage points in non-exporters)
Do skill levels help explain the results?

Figure 9: Share of high-skill and other workers, by trading status

Figure 10: Female share of high-skill workers, by trading status

- All trading groups have fairly similar personnel structures by skill-level
- The share of high-skilled male workers is higher in exporter group
- Importers and non-traders have gender balance among high-skilled workers
- Does this reflect heterogeneity in occupational choices (services vs. manufacturing)?
Young enterprises – Similar pattern

Figure 11: Share of female workers and salaries paid to them by young exporters (born global) and young non-exporters

Share of female employees in exporters is somewhat declining, and wage gap is larger than in other young enterprises
Average salaries by female and male workers in high-tech firms

Figure 15: Average salaries of male and female in exporting and non-exporting high-tech firms

Wage gap persists in high-tech exporting firms, but has vanished in non-exporting firms
Entrepreneurship by gender – Does globalisation support male-driven businesses?

- Only around one fifth of entrepreneurs in exporting enterprises are women
- The female participation rate as entrepreneurs is lower than as employees
- The difference between exporters and non-exporters is larger than for employees (14.3 percentage points difference in 2016).

Figure 16: Female share of entrepreneurs based on FOLK data on occupational status
Female-owned businesses account for a higher share of female occupied jobs in both exporters and non-exporters

- The difference is large between female-owned exporters and non-exporters (25 percentage points), whereas in male-owned businesses the share of women is very similar
- Balanced ownership firms have the highest share of women in exporters (34%)
Share of high-skill female workers by export status and owner gender

- Female businesses have higher share of high-skilled females than male businesses (11.8 percentage points difference in exporters)
- Even 78.3 % of high-skilled personnel are female in non-exporter female businesses

Figure 18: Share of women in high-skill workers, by export status in 2016
Productivity in male-owned enterprises is higher than in female-owned

Figure 20: Labour productivity in exporters by owner gender

Figure 21: Labour productivity in non-exporters by owner gender
Average salary in female-owned exporting enterprises is higher than in male-owned

Figure 22: Average salary in exporters by owner gender

Figure 23: Average salary in non-exporters by owner gender
Conclusions: What have we learned?

- Linking micro-data from various business and social statistics have much potential in offering new insights on gender and trade
- Exporting enterprises have lower female participation rate and higher gender wage gap than non-exporting firms
- Skills and education level help explaining the results
- Female entrepreneurs are rare in exporting enterprises
- Female business owners seem to hire relatively more women and more highly-skilled women than male owners
- Productivity is higher in male-owned exporters, but wages are higher in female-owned exporters
- Lower female participation in trade may enlarge differences in capital and salary income between women and men
- Benefits from international trade are not distributed equally between women and men
References
