



Measuring gender equality in trade using official statistics of EECCA countries

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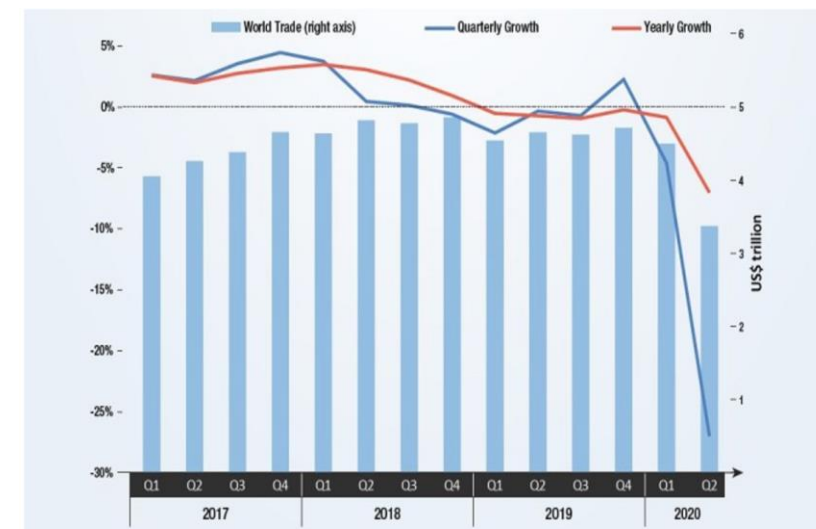
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Outline

- What can we learn about gender equality in trade by using existing official statistics in Eastern Europe, Caucasus and Central Asia?
- Studying common patterns of trade and employment with official statistics provides directions but requires assumptions and the use of statistical modeling
- Statistical offices can compile more detailed and accurate evidence also without additional data collection
 - The microdata linking approach!



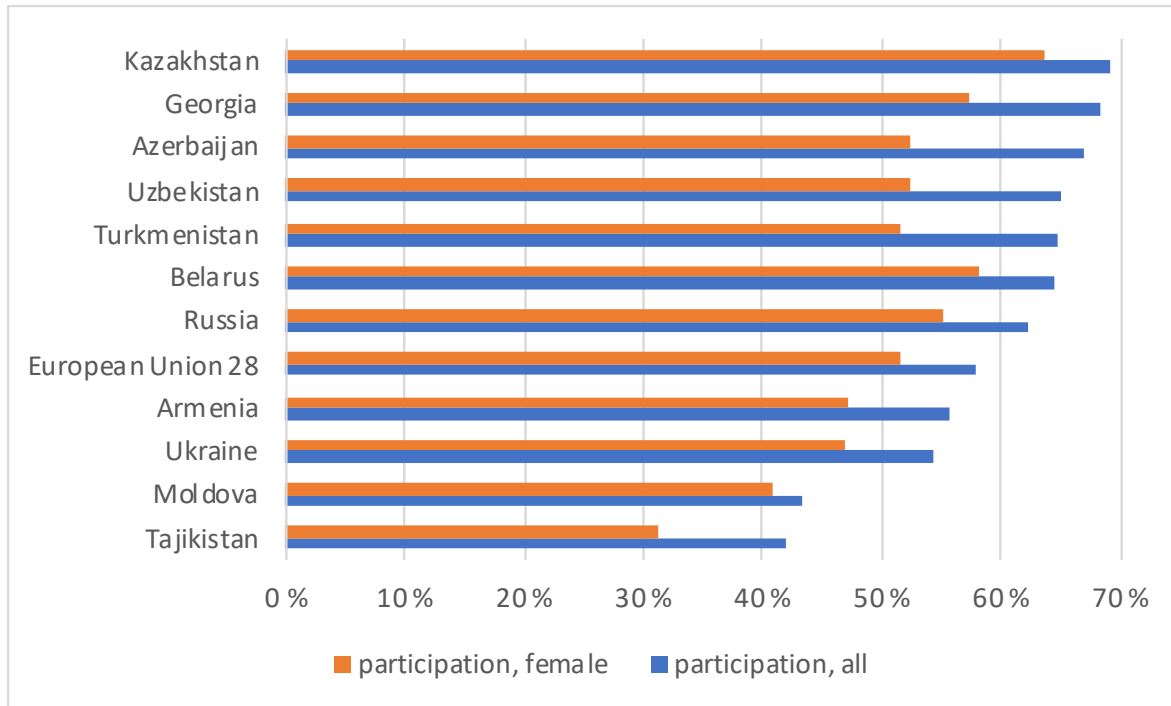
Source: UNCTAD calculations based on national statistics.

Notes: Quarterly growth is the quarter over quarter growth rate of seasonally adjusted values. Yearly growth is the four-quarter moving average of the quarterly growth rate. Figures for Q2 2020 are estimates.



Gender segregation of labour markets, 2018

Labour force participation rate, by sex

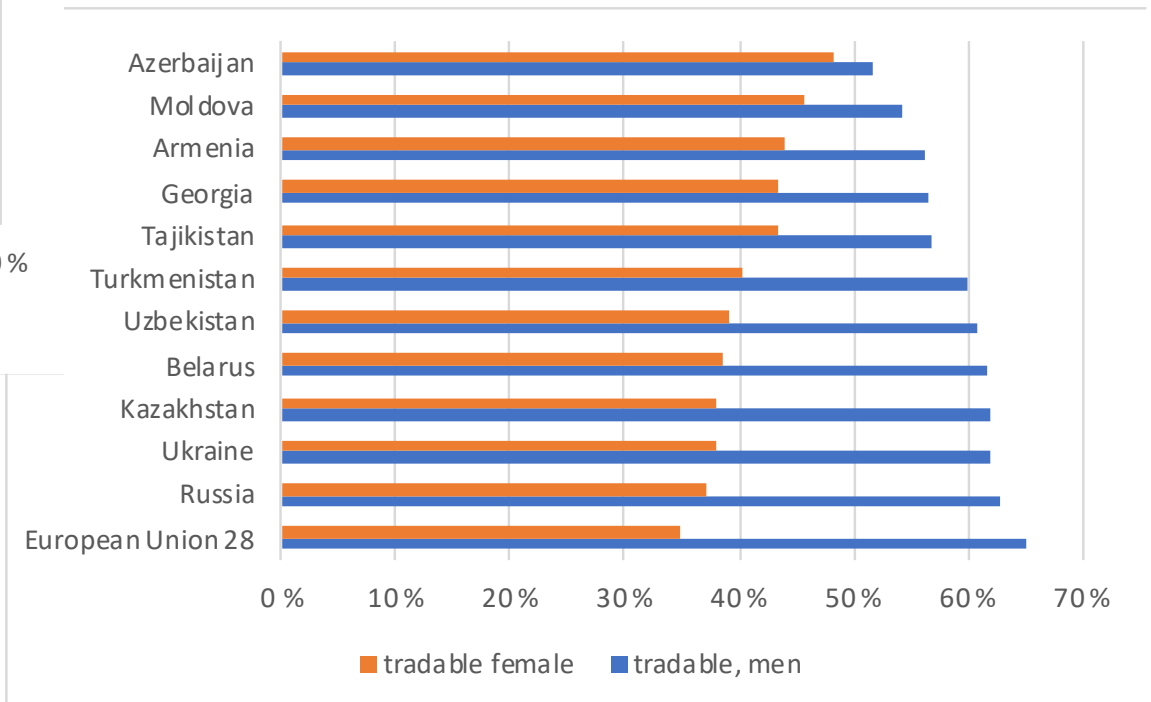


Source: ILO modelled estimates – annual labour force participation by sex and age

- Women have lower participation rates than men across countries.
- Labour force participation is highest in Kazakhstan and lowest in Tajikistan.

- “Potentially tradable” sectors expose workers to competition and often higher salaries.
- Women are less involved in tradable sectors in the EU than in EECCA.
- Women form almost 50% of work force in tradable sectors in Azerbaijan.

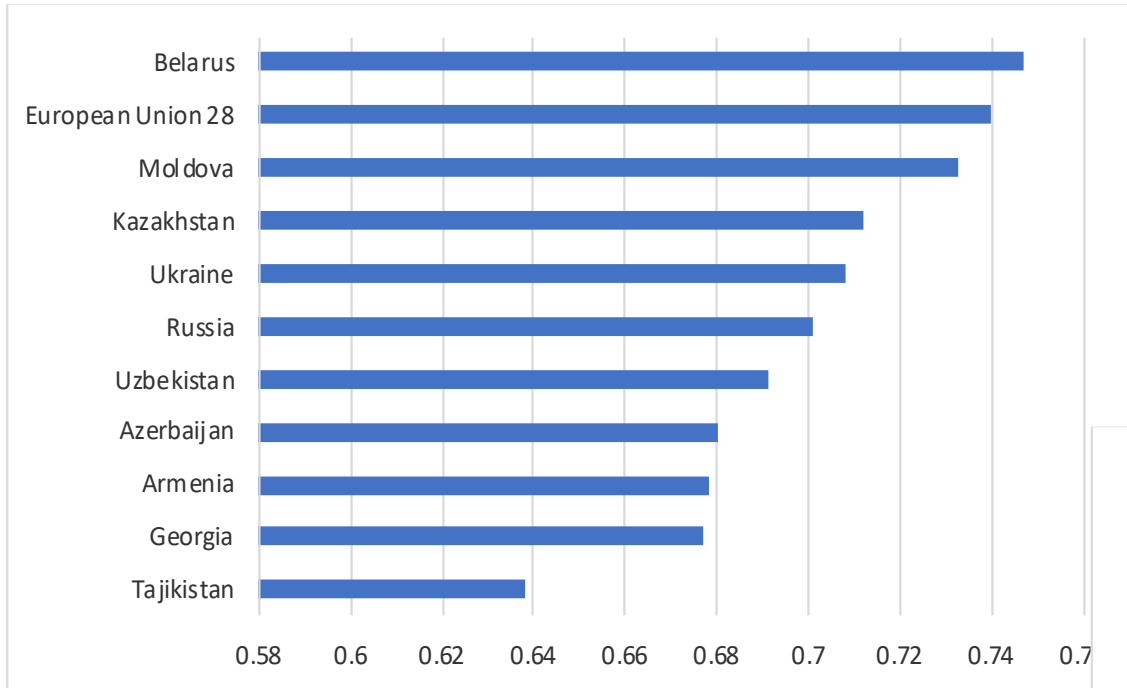
Workers of tradable sectors, by sex



Source: ILO employment distribution by economic activity by sex –ILO modelled estimates

Gender segregation of labour markets, 2018

The World Economic Forum's Global Gender Inequality index

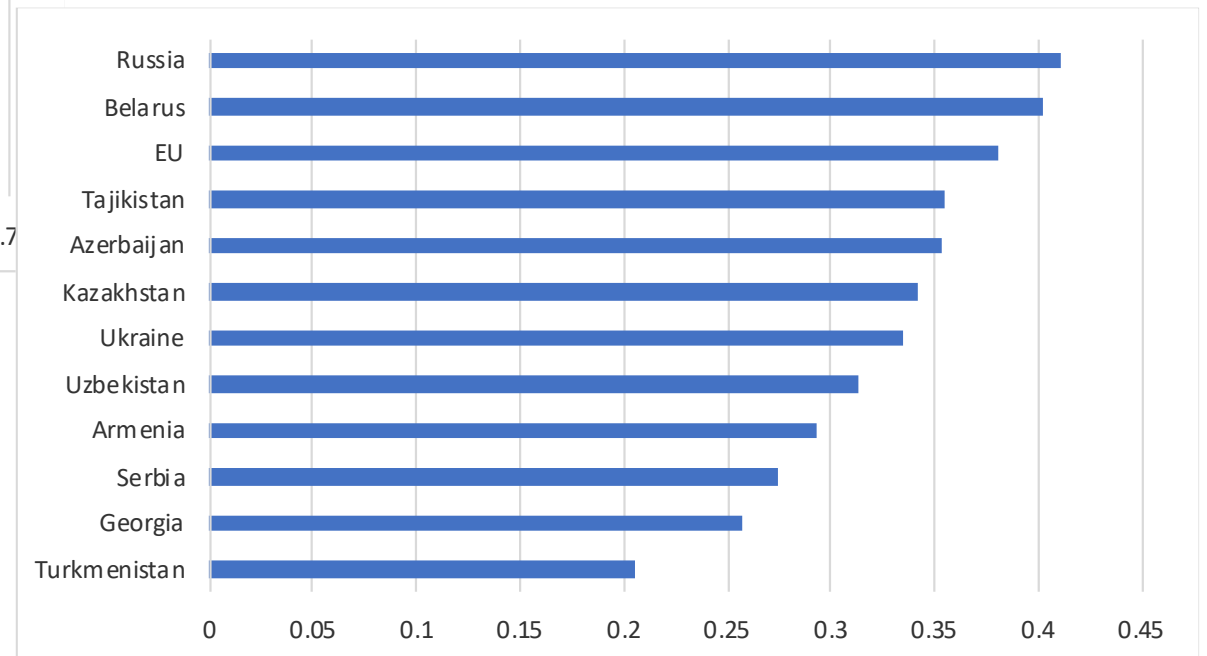


Source: World Economic Forum GGI index

- The index ranks Belarus the highest, above EU
- Most EECCA countries at or above the global gender parity score of 68.6%
- Measures political empowerment, economic participation, education and health
- **Largest gaps in empowerment & economy!**

- Segregation index = % of women that should change industries to equate gender distribution
- **High gender equality scores do not guarantee low gender segregation**
- For example Belarus (like Finland) has high gender equality and strong gender segregation

Segregation index (Duncan index)

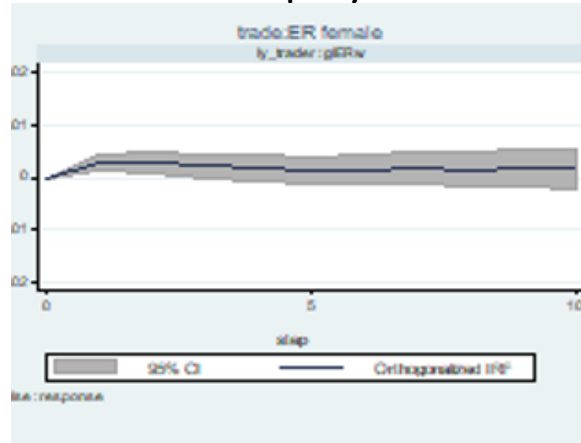


Source: UNCTAD calculations based on ILO employment distribution by economic activity by sex –ILO modelled estimates

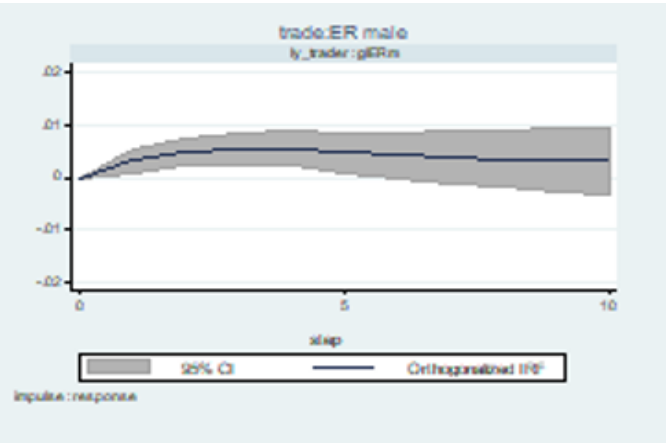
Gender equality of employment response to changes in trade

1% increase in trade in Eastern Europe, Caucasus and Central Asia (if quarterly employment statistics available)

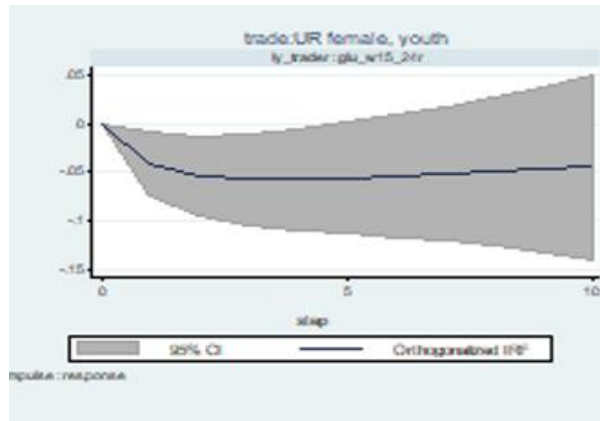
Women's employment



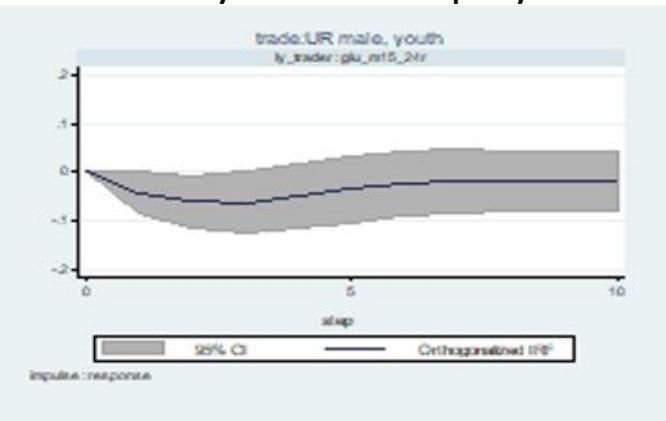
Men's employment



Women's youth unemployment



Men's youth unemployment



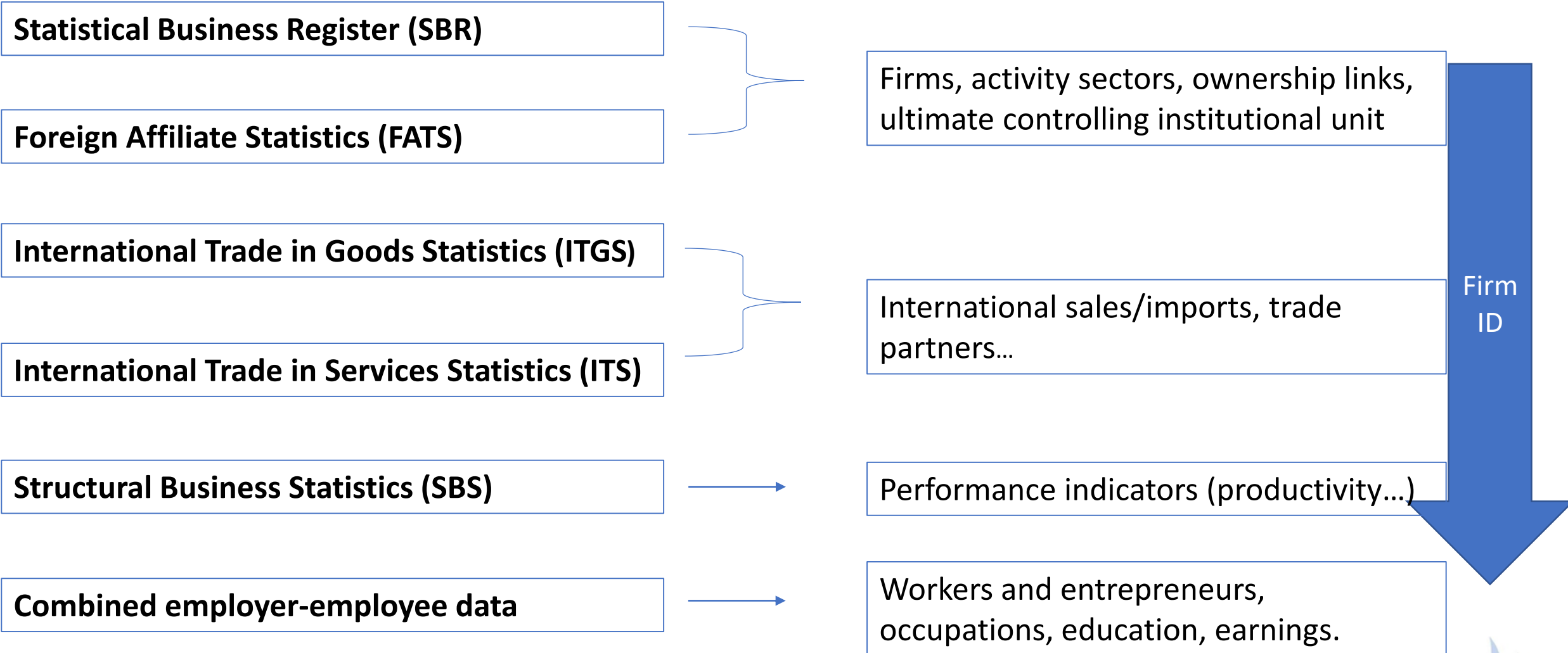
95% CI — Orthogonalized IRF

- 1% increase in trade, increases employment rate by:
 - 0.09% for women
 - 0.21% for men
- And decreases unemployment rate by:
 - 3.91% for young women
 - 2.37% for young men
- Young women are the most vulnerable to negative trade shocks.

Microdata linking approach

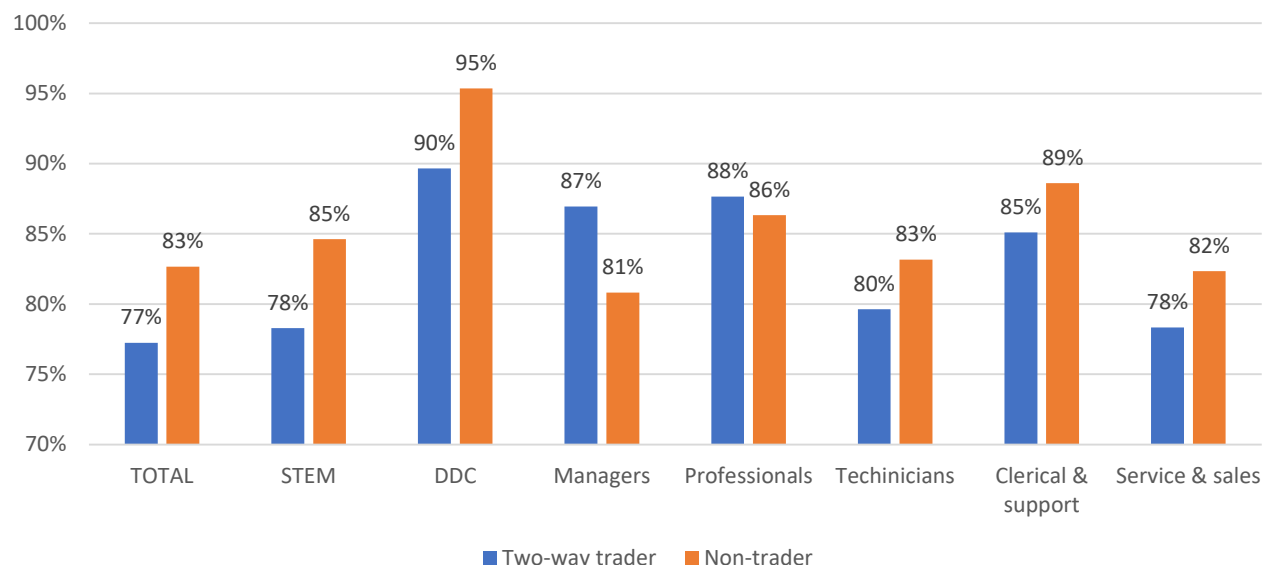
- Statistical offices can construct gender-in-trade statistics by linking:
 - Employers/businesses with their employees and owners
 - Employers with trading status (non-trader, exporter, importer, two-way trader)
 - Characteristics of businesses (size, industry, output, turnover, profitability, products) and individuals (gender, age, education, occupation)
- The resulting statistics are of higher quality and sustainable to produce usually without additional data collection
 - If links are missing, may need to collect or access data that provide the link and strengthen the capacity to link microdata across domains and datasets
- Microdata linked statistics require less assumptions and provide more details than modelling approaches using published statistics

Statistical sources for gender and trade analyses in official statistics

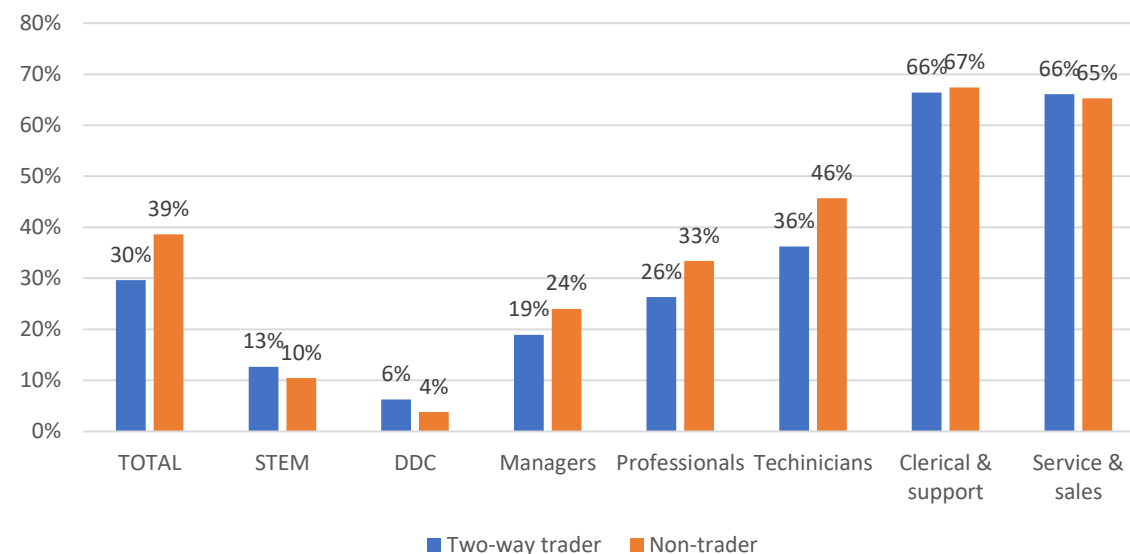


Two-way traders vs. non-traders – microdata evidence from Finland

Women’s pay as a percentage of men’s pay



Women’s participation rates



Source: Statistics Finland database

- Gender pay gap is larger in two-way traders varying across jobs
- Women’s participation much lower in two-way traders than in non-traders
- Women’s participation lower in high-paying occupations in two-way traders
- Women a majority in support jobs where gender pay gap is higher in two-way traders



What kind of statistics can be produced?

- Gender equal conditions to participate in trade
 - Gender segregation of labour markets etc.
- Women's and men's roles in international trade
 - As entrepreneurs, owners, workers and consumers
 - By education, occupation, industry etc.
- Gender equality in different types of businesses
 - In trading and non-trading businesses
 - SMEs and large businesses
 - In domestic and foreign owned businesses
- The impacts of trade e.g. on income
 - How the benefits from trade are distributed?
 - Success of female/male entrepreneurs and influence on employees



thank you!

Extra: Analytical groupings to operationalize gender and trade analysis – a proposal

Domestic enterprises

Independent

Does not control any other enterprise or is not controlled by another enterprise

Domestic group

Controlled by a domestic group, or a domestic parent without affiliates abroad.

Multinational enterprises

Domestic MNE

Controlled by a domestic group, or is a domestic parent with foreign affiliates in OFATS

Foreign MNE

Controlled by a foreign group, and therefore found in IFATS.

Trading status

Exports only

Exports exceeding €5,000 and export intensity above 5%

Imports only

Imports exceeding €5,000 and import intensity above 5%

Two-way traders

Enterprise satisfies thresholds for both exporter and importer

Non traders

Enterprise does not belong to trader categories

Skills and occupations

STEM

Science, technology, engineering, and mathematics (ISCED-F)

DDC

Subset of STEM, fields requiring deep digital competencies

ISCO-major groups

The International Standard Classification of Occupations (ISCO) major groups (1-digit level)

Activity distribution

KIS

Eurostat definition, knowledge intensive services

Manufacturing

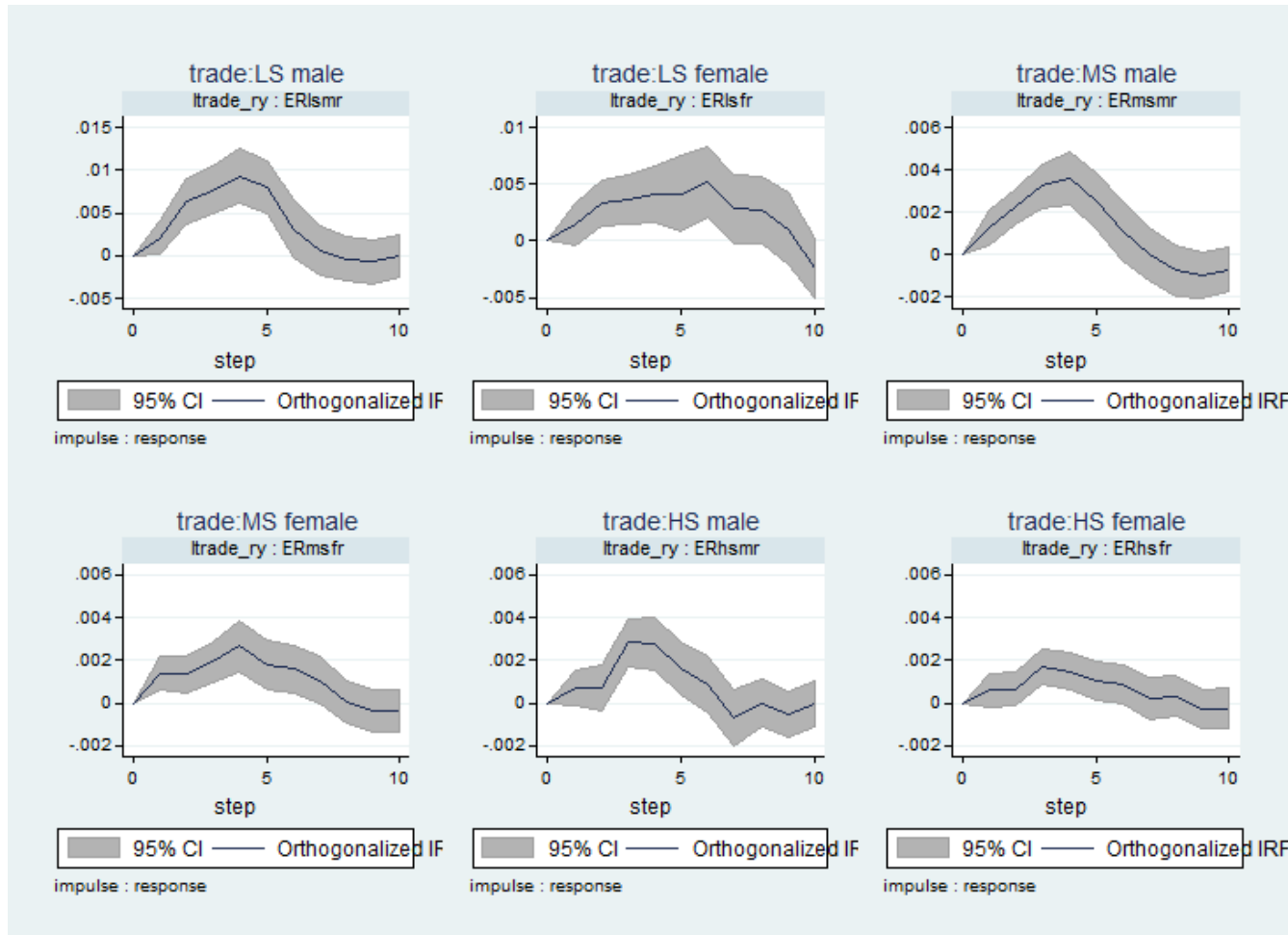
NACE 2-digit categories 10-33

Other

Note: countries can adapt these categories to suit specific focus areas. Importantly, if entrepreneurs can be identified, their trade participation can be added.



Extra: Trade expansion can promote inclusiveness in the EU, panel-var estimates



- Low skill employment rate, m
 - Low skill employment rate, w
 - Medium skill employment rate, m
 - Medium skill employment rate, f
 - High skill employment rate, m
 - High skill employment rate, f
-
- Low skill women and men strongly affected by trade shocks. Higher education levels render employment more resistant to shocks.
 - Trade policy may promote inclusiveness

Extra: key labour force statistics

- Employment rate (ER): Employees/Labour force
- Participation rate (PR): Labour force/working age population (UR+ER)
 - Trade should expand formal labour market opportunities, inverse of PR is related to the size of the informal sector.
- Unemployment rate (UR): Actively seeking employment / Labour force
- More details can be obtained if data is available (i.e. entrepreneurs, own-account workers)

Extra: estimating labour force responses to trade

- Panel-VAR
- Popular in macroeconomics
- System of equations, Y is set of variables (Labour;trade)
- $Y_{t,i} = c_i + A_{1,i}Y_{t-1,i} + \dots + A_p Y_{t-p,i} + u_{t,i}$
 - Highly parametrized and need many observations (time points) for reliable results, but can provide first *easy* gender-in-trade estimates in many countries
- If sufficient time series are available, can distinguish long and short term movements in the data.