



# *Measuring the impact of COVID-19 on women and men via trade: Microdata linking approach*

**Henri Luomaranta**

Statistician  
Division on Globalization and  
Development Strategies, UNCTAD  
[henri.luomaranta@un.org](mailto:henri.luomaranta@un.org)



# Outline

- The economic consequences of the pandemic and the lockdown measures are not gender neutral
- Lack of gender differentiated data hampers understanding of human consequences and appropriate policy responses
- Investments in statistical infrastructures that allow linking microdata can address (some) of the measurement challenges

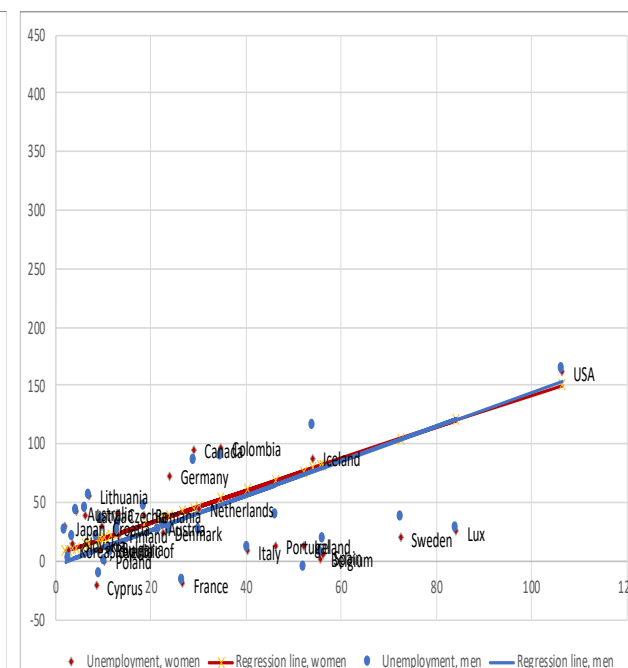
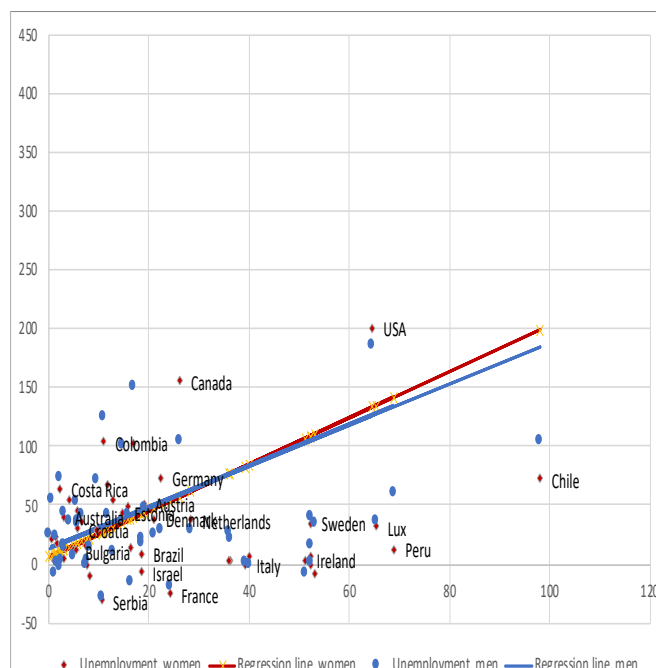
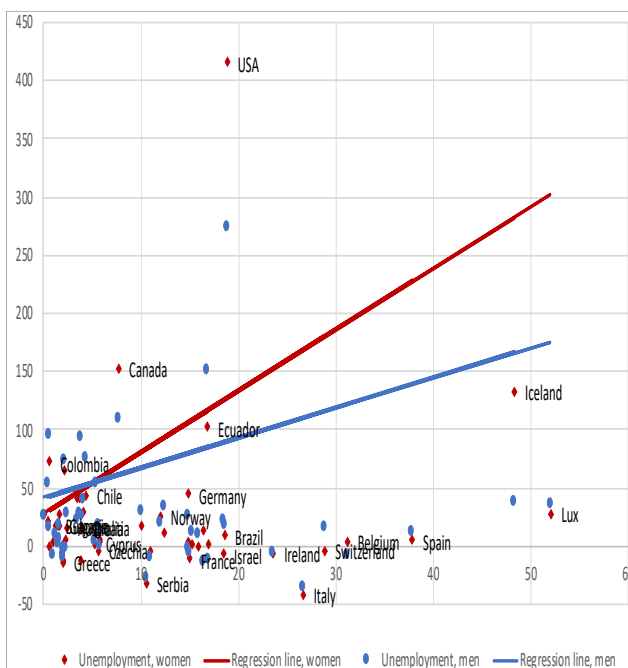


Source: UNCTAD calculations based on national statistics.

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.



# The effects of the pandemic are not gender neutral – regressing unemployment versus Covid-19 prevalence



X-axis: y-y unemployment growth  
Y-axis: Covid-19 prevalence per 100M

Source: UNCTAD calculations based on Oxford, Blavatnik School of Government. Coronavirus government response tracker. and ILO Unemployment rates.

April (50 countries)

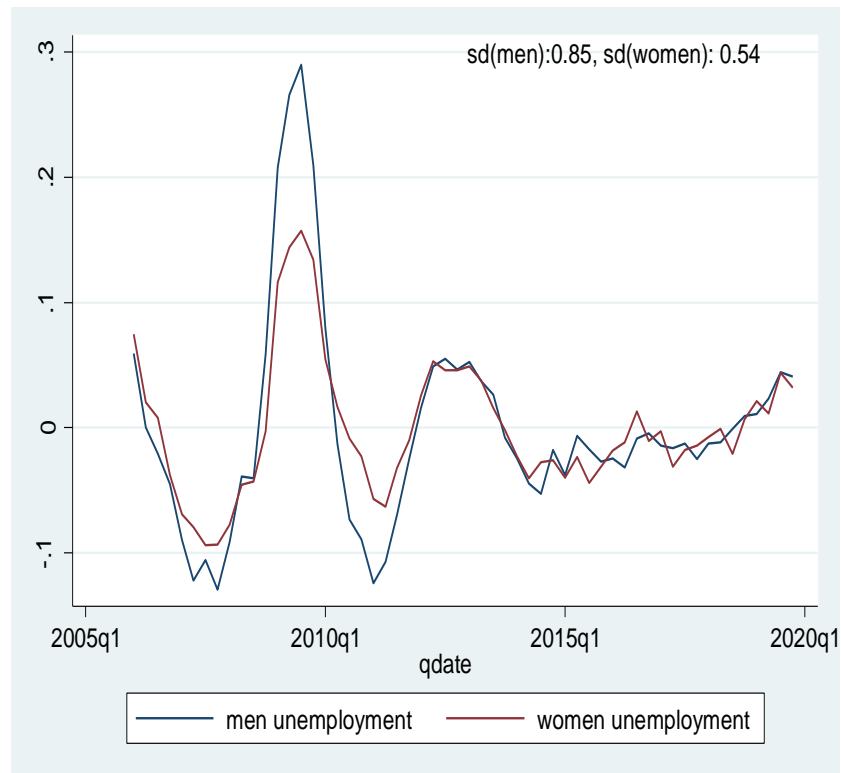
June (50 countries)

July (30 countries)

Note: red rectangles indicate unemployment y-y growth of women, red line is a population weighted relationship between unemployment and Covid-19 prevalence. Blue circles and blue lines represent male data.

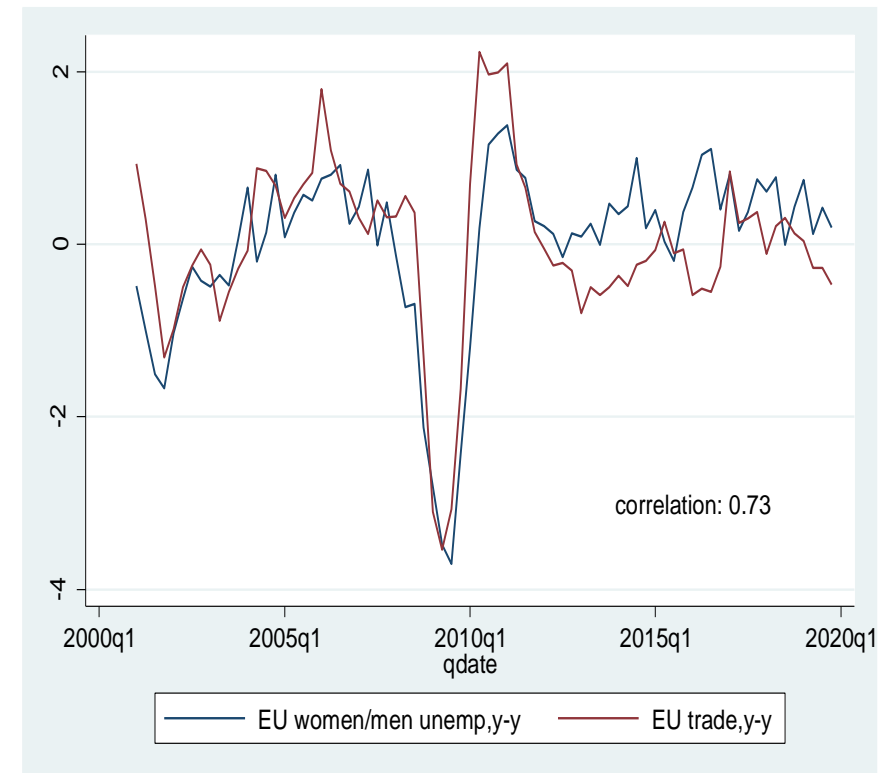
# Is male employment likely to suffer more as the crisis spreads to industries and international trade plummets?

Cyclical component of women's and men's unemployment



Source: UNCTAD calculations based on Eurostat employment data and international trade in goods data

International trade y-y growth vs. women's/men's unemployment



Evidence from the EU: male employment is related to trade fluctuations and reacts more strongly to business cycles

Societal consequences and impact on jobs are still unfolding



---

# Microdata linking as a tool for a better policy

- The above evidence is silent about reasons, relies strongly on assumptions, is not particularly detailed, and it is limited to countries with sex disaggregated employment data.
- More granular data and statistics are needed to explore causality and inform policy
- An example: how to assess the relationship between trade and women's and men's employment.



# Statistical sources for gender and trade analyses at national statistical offices

**Statistical Business Register (SBR)**

**Foreign Affiliate Statistics (FATS)**

**International Trade in Goods Statistics (ITGS)**

**International Trade in Services Statistics (ITS)**

**Structural Business Statistics (SBS)**

**Combined employer-employee data**

Firms, activity sectors, ownership links,  
ultimate controlling institutional unit

International sales/imports, trade  
partners...

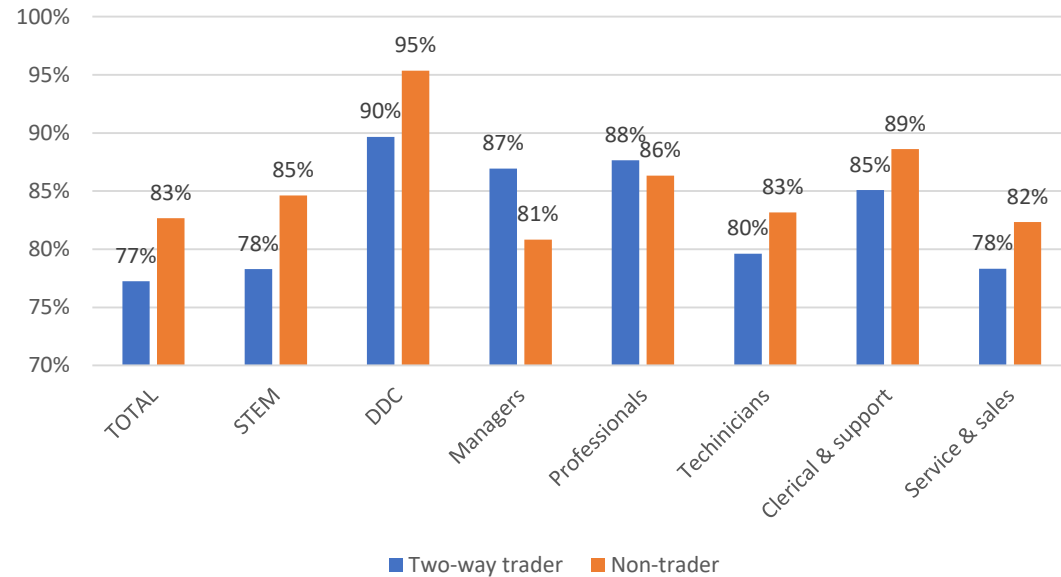
Performance indicators (productivity...)

Workers, occupations, education,  
earnings.

Firm  
ID

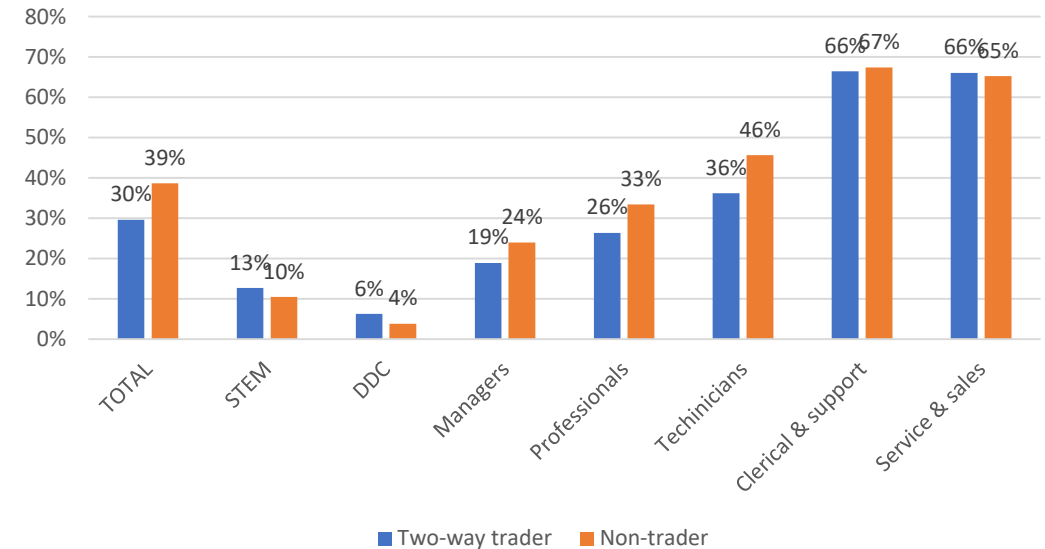
# Gender pay gap and participation to trade: evidence from Finland

Gender pay gap: two-way traders vs. non-traders



Source: Statistics Finland database

Participation rates: two-way traders vs. non-traders



- Women are less often found in firms that trade internationally and are concentrated in support functions.
- Gender pay gap is larger within international traders overall, but smaller among managers and professionals in two-way trader than in non-traders.
- International trade more likely to impact male employment in the business sector
- The lower skill level professions may be at risk, however.



---

## Conclusions

- Employment consequences of Covid-19 are not gender neutral due to occupation and industry segregation
- Detailed data of women and men in trade would allow better assessments of human consequences
- Countries can invest in statistical infrastructures that allow linking and reusing existing data.
- For many countries these data are already at hand.





---

thank you!