Gender-in-trade statistics – use of business-level data

- The main focus: ***merging trade data with enterprise-level data*** *mostly from* **business statistics surveys.**

- ***Benefits:*** Individual enterprise-level data on trading companies provide flexibility of deriving gender-in-trade statistical indicators at different disaggregations.

- ***Primary limitations*** for NSOs:
  - Availability of trade microdata: institutional ownership and data exchange between NSO and data owners
  - Identifiers for enterprises in the statistical business register and customs database (?)

Gender-in trade work in Georgia

- First attempt to analyze trade data from gender perspective in Georgia.

- Initially, the sectoral analysis of a number of exporting industries performed.

- Next, microlinking of all available sources to trade data followed.

- Data used: trade data (annual, 2016-2020); structural business statistics (annual, 2016-2020); statistical business register; structure of earnings survey (2017).

- *Critical factors*: trade microdata is received by Geostat (monthly) from the customs agency. All government agencies use the same business ID of registered legal entities.

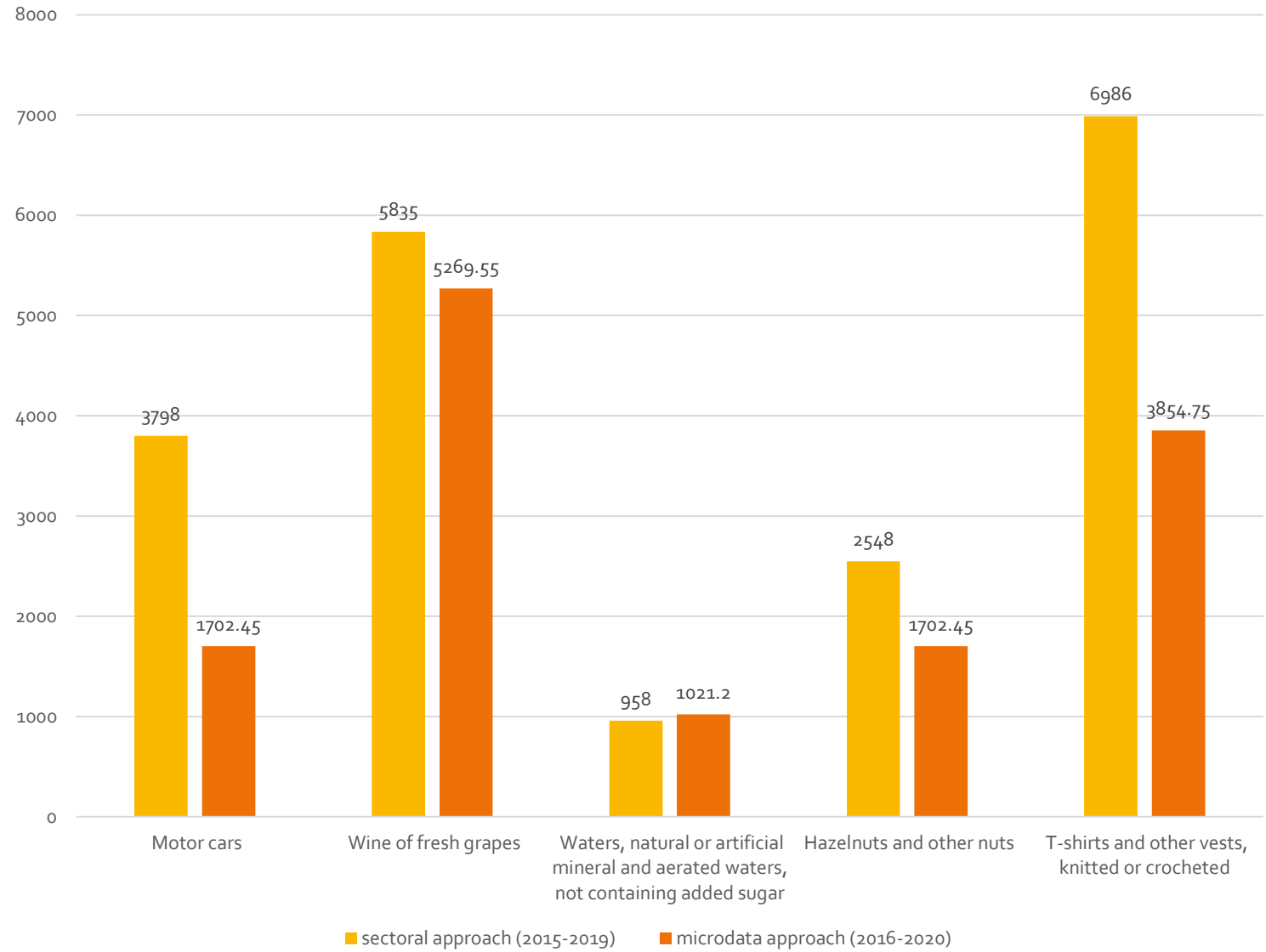## Key gender-in-trade indicators from the sectoral analysis

- Five export goods (HS, 4-digit) were selected and mapped to the corresponding NACE sectors

- Sectoral gender-disaggregated data used from SBS and SoE surveys

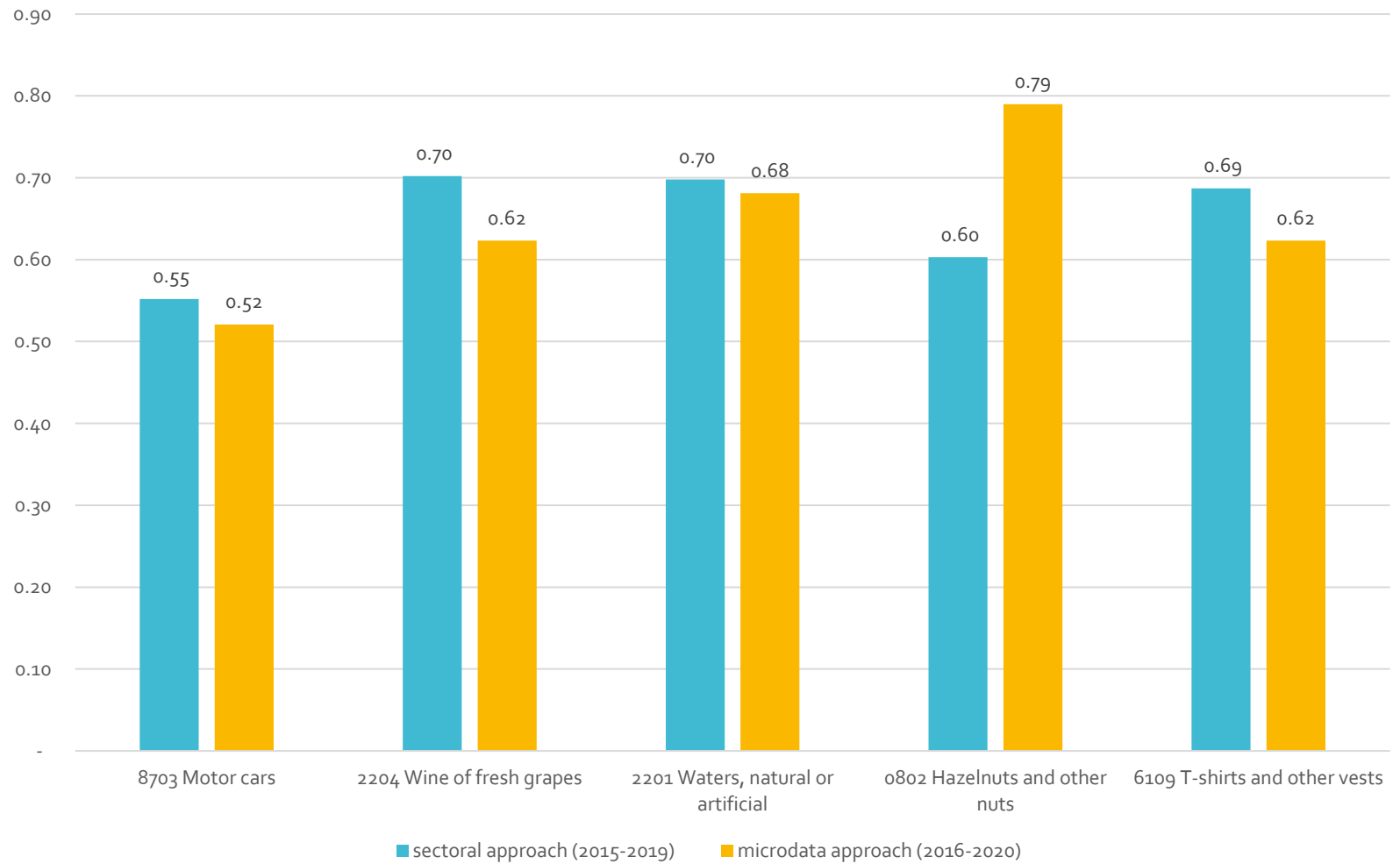| Exporting Sector	Share of female employment, %	women's to men's wages, 2015-2019
Motor vehicles (Sale of motor vehicles)	20.4%	0.55
Grape wines (Manufacture of grape wines)	40.1%	0.70
Mineral waters (Production of mineral waters and other bottled waters	26.0%	0.70
Hazelnuts and nuts (Processing and preserving of fruit and vegetables)	63.5%	0.60
T-shirts and other vests (Manufacture of wearing apparel)	87.0%	0.65

Key gender-in-trade indicators from the sectoral analysis(2)

	Sale of motor vehicles		Manufacture of wine from grape		Production of mineral waters and other bottled waters		Processing and preserving of fruit and vegetables		Manufacture of wearing apparel	
	Gender pay gap	Weighted Impact*, %	Gender pay gap	Weighted Impact*, %	Gender pay gap	Weighted Impact*, %	Gender pay gap	Weighted Impact*, %	Gender pay gap	Weighted Impact*, %
Managers	49.7%	35.0%	25.8%	14.6%	82.8%	11.8%	5.4%	1.7%	49.2%	6.9%
Professionals	26.2%	28.0%	41.2%	23.1%	36.2%	15.1%	-21.7%	-3.5%	30.2%	2.5%
Technicians and associate professionals	20.3%	13.9%	1.1%	0.3%	-3.5%	-0.1%	54.6%	23.4%	35.8%	7.0%
Clerks	33.1%	5.1%	15.6%	6.1%	65.6%	43.5%	28.2%	15.2%	-4.3%	-0.3%
Service and sales workers	23.3%	14.0%	-11.0%	-5.0%	n/a	n/a	-20.0%	-1.3%	-78.6%	-5.3%
Skilled agricultural workers	n/a	n/a	30.6%	11.6%	n/a	n/a	28.9%	0.5%	n/a	n/a
Craft and related trades workers	44.5%	8.0%	-11.5%	-14.8%	n/a	n/a	-2.3%	-2.7%	34.4%	77.1%
Plant and machine operators and assemblers	-16.3%	-4.0%	6.0%	3.3%	n/a	n/a	-14.0%	-2.4%	69.3%	31.9%
Elementary occupations	n/a	n/a	17.8%	60.8%	52.5%	29.7%	24.7%	69.2%	-13.1%	-19.7%
Total, sector	**44.8%**	**100%**	**23.1%**	**100%**	**22.6%**	**100%**	**36.4%**	**100%**	**44.6%**	**100%**

Comparison of sectoral and microlinking analysis results – employment in 5 exporting sectors (annual average)

Chart: Comparison of sectoral and microlinking analysis results.

Sector	sectoral approach (2015-2019)	microdata approach (2016-2020)
Motor cars	3798	1702.45
Wine of fresh grapes	5835	5269.55
Waters, natural or artificial mineral and aerated waters, not containing added sugar	958	1021.2
Hazelnuts and other nuts	2548	1702.45
T-shirts and other vests, knitted or crocheted	6986	3854.75

Comparison of sectoral and microlinking analysis results – women-to-men wage ratios (annual average)

Gender-in-trade indicators from data microlinking

- Given the limitations of the sectoral analysis, the data microlinking represents a far more efficient approach.

- Approximately 49,000 business companies involved in exports and/or imports of goods during 2016-2020 linked to the available data from
  - structural business statistics surveys (2016-2020)
  - labour statistics survey (structure of earnings survey 2017)
  - business register (incl. ownership data)

- Almost all trading companies classified either as two-way traders or importers, as exporting companies were to some extent dependent on imports.

- The share of companies which only exported goods during 2016-2020 did not exceed 4% of total exports (and 1% of total trade).

- Data linked for two-way traders accounting for **more than 90%** of imports and exports.

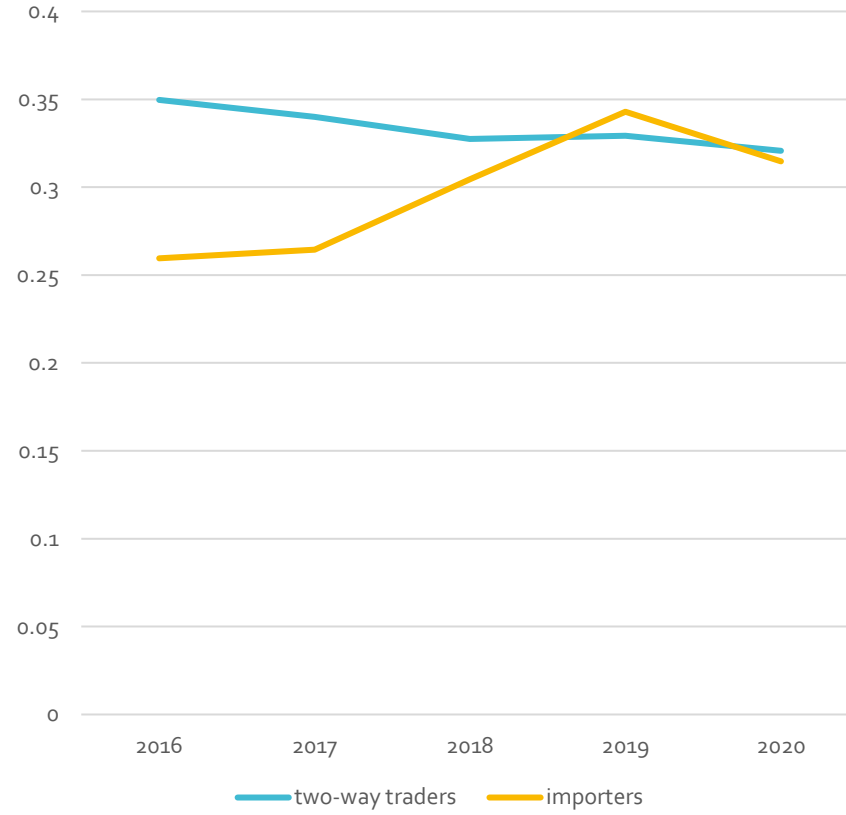# Key results from data microlinking: employment and wages

- Women's employment in external trade remained inferior to men's, although it kept increasing over 2016-2020.

- Gender pay gap was ca. 1/3 for both two-way traders and importers in 2020.

Employment ratio (women/men)

two-way traders — importers

## Gender pay gap

two-way traders — importers
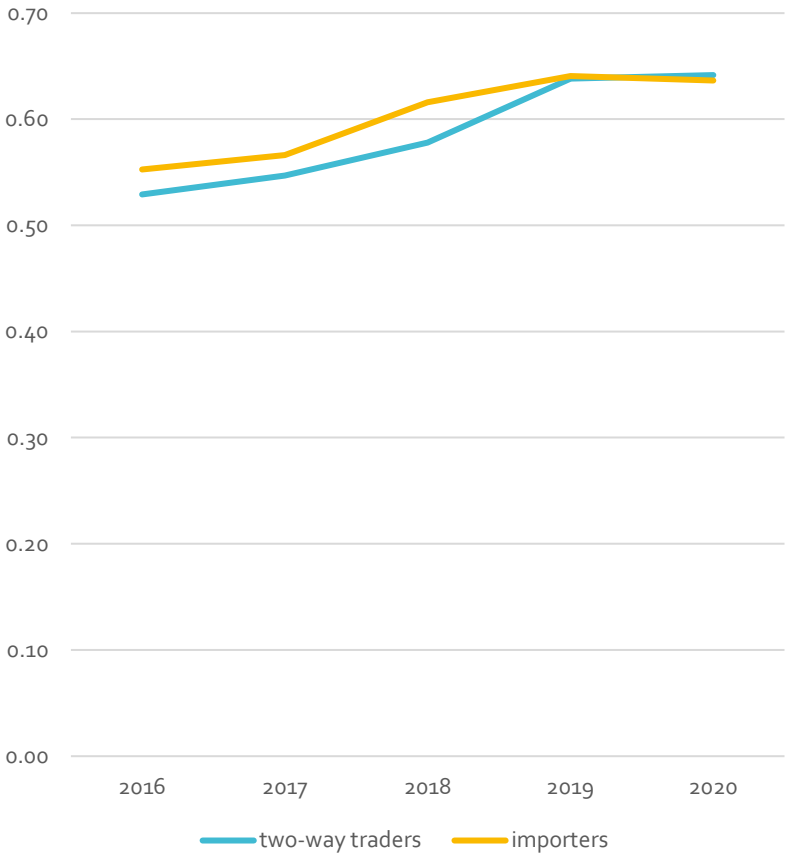
Key results from data microlinking: employment and wages by skill levels

- The women-to-men employment ratio and the gender pay gap by occupation levels were the most favorable for high skill workers.

| 2017 structure of earnings survey		employment ratio (women/men)	gender pay gap
two-way traders	managers	0.40	0.41
	high-skill workers	0.64	0.31
	medium-skill workers	0.51	0.26
	low-skill workers	0.62	0.45
importers	managers	0.45	0.38
	high-skill workers	0.92	0.18
	medium-skill workers	0.43	0.27
	low-skill workers	0.55	0.43

Key results from data microlinking: ownership of trade companies

- Number of male owners was higher than that of female owners for all types of trading companies
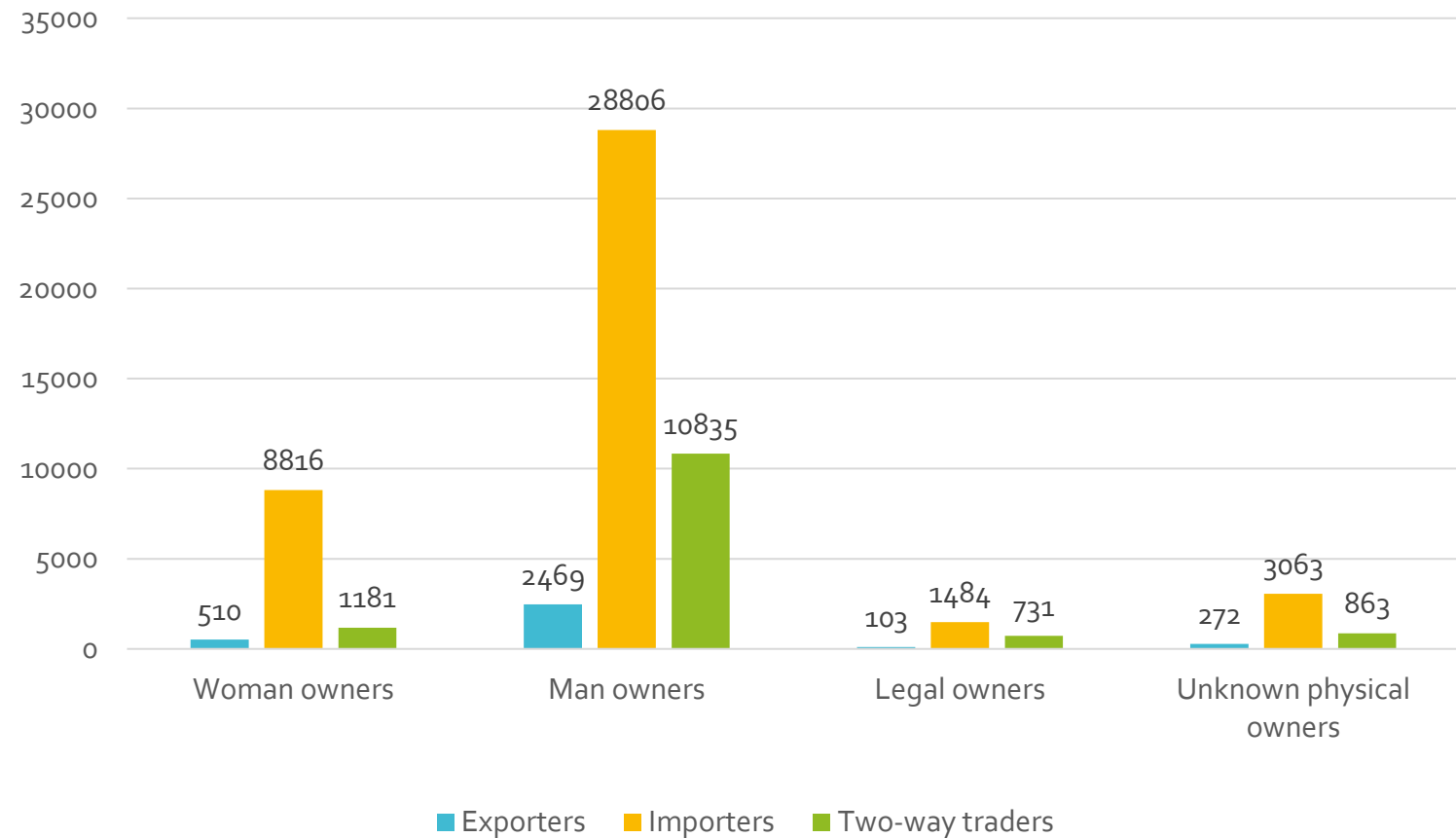
Key results from data microlinking: trade-weighted ownership

- Using 2020 trade volume as weights, it turns out that:
  a) two-way traders are largely owned by legal entities.
  b) men's ownership of importers is ca. 51%

- The trade-weighted ownership share of men (*data shown in percentages)* exceeded that of women approx. 9 times in two-way traders, 5 times in importers.
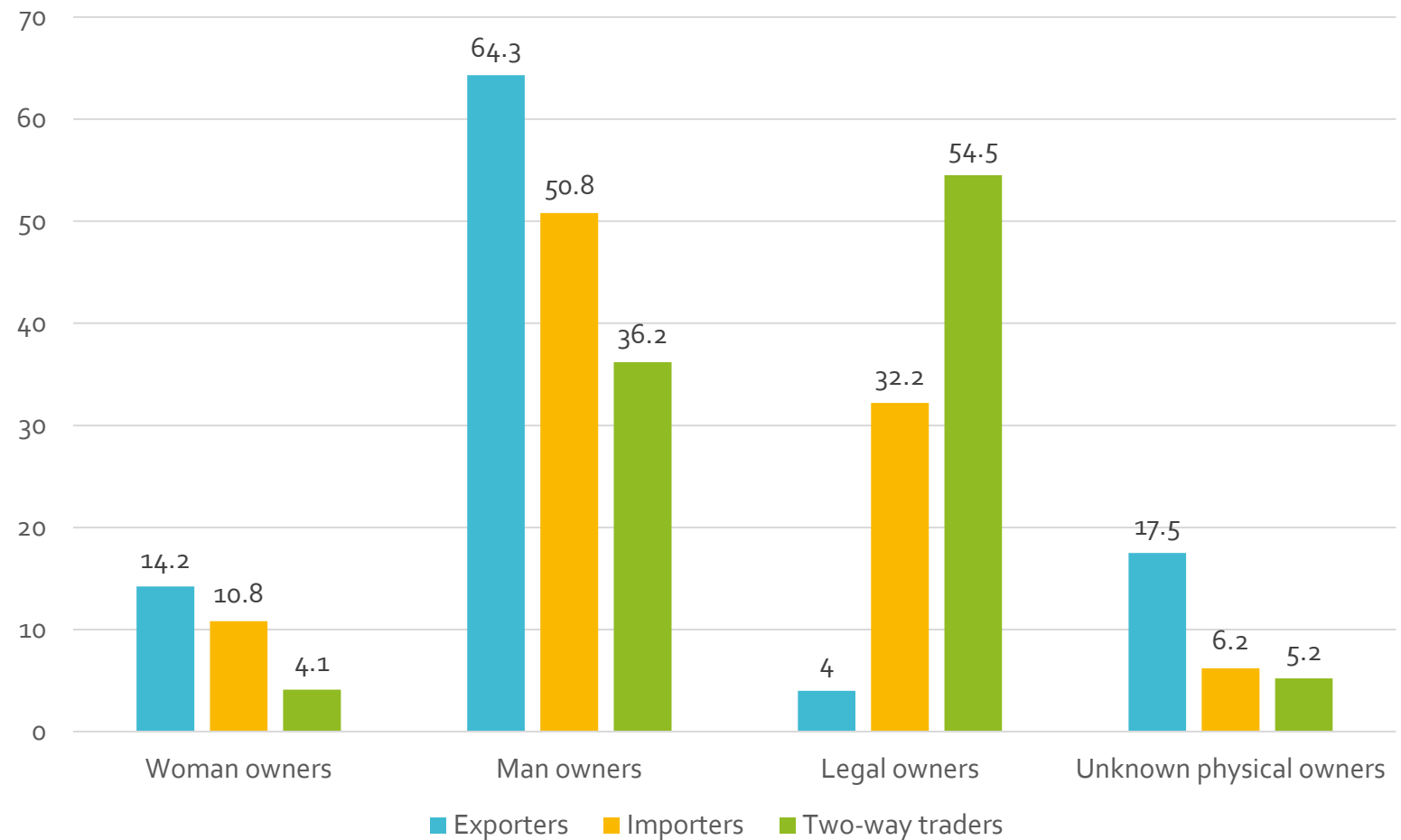
Other results from data microlinking

- Trading companies where *women's share was higher than men's share* showed higher employment ratios (both two-way traders and importers) compared to "men-owned" enterprises. However, the differences in gender pay were not as straightforward.

- Two-way traders with *100% Georgian ownership* showed employment and wage ratios more favorable to women, compared to two-way traders with *foreign or joint ownership*.

- The situation was contrary among importers, where companies with foreign or joint ownership registered better women-to-men employment and wage ratios.

- Comparison of gender-in-trade indicators obtained from the sectoral and microlinking approaches showed moderate differences in wage-related numbers and bigger differences in employment numbers.

Conclusions

- Gender analysis of trade has a significant potential for studying and promoting gender equality.

- Microlinking approach of producing gender-in-trade indicators represents a preferred method of analysis.

- Despite obvious limitations, the sectoral approach may provide insights into the gender differences for trading sectors. The accuracy of sectoral estimates will depend on the precision of mapping export products to the corresponding areas of activity.

- As a new and evolving area, the gender-in-trade statistics will continue to expand.
  In the case of Georgia, potential future work may be related to the use of new surveys (such as trade-in-services survey or survey of innovations in enterprises) as well as new rounds of the existing surveys (first of all, the structure of earnings survey planned for 2022).

Thank you!

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