Gender in Trade Assessment in Georgia

Prepared for UNECE by Tengiz Tsekvava

31 August 2021

Contents

Produced for the United Nations Development Account project on data and statistics for more gender-responsive trade policies in Africa, the Caucasus and Central Asia

Acknowledgements

First of all, I would like to thank Mr Andres Vikat, Chief of Section of Social and Demographic Statistics of the UNECE, and Ms Anu Peltola, Statistician of Development Statistics and Information Branch of the UNCTAD, for their leadership in guiding the project and providing feedback in the report preparation process.

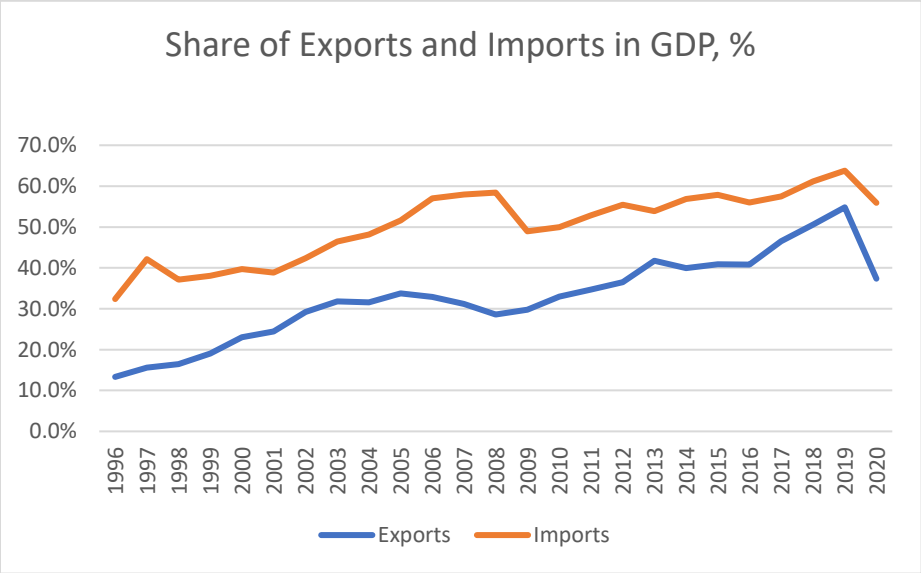
I also express my sincere appreciation of the tremendous cooperation and support extended by the Geostat staff, led by Ms Lia Dzebisauri, Deputy Executive Director. Thanks to their effort and attention to the details, the report preparation within the defined timeframe was made possible despite the difficulties imposed by the COVID pandemic.

1. Introduction

1.1 Importance of gender in trade in Georgia

After regaining independence in 1990s, the importance of external trade in Georgia as a small-open economy has been steadily increasing. Despite the significant contraction of external trade in 2020 induced by the COVID pandemic, the shares of exports and imports in the country's GDP over 2015-2020 averaged ca. 46% and 59%, respectively, i.e., the trade-to-GDP ratio exceeded 100% (*Figure 1*).

Figure 1.1. Share of exports and imports in Georgia's GDP in 1996-2020, %



Source: Geostat – external trade data

Given the importance of international trade for the Georgian economy, the availability of trade indicators disaggregated by different variables, including gender, is critical for the country's economic and social policies. In this context, gender aspects of trade statistics become very relevant with the view of addressing the issues of welfare and equality.

Similar to the situation in other countries, the production of trade statistics in Georgia largely remains a separate area. However, there exist sources of data, primarily from business statistics, that can considerably expand the analysis of exports and imports and provide insights from the gender perspective.

The increasing global attention to gender issues in trade which was explicitly stated in the 2017 Buenos Aires Declaration on Trade and Women's Economic Empowerment, represents an opportunity for the NSOs to further strengthen the production of trade statistics and add the

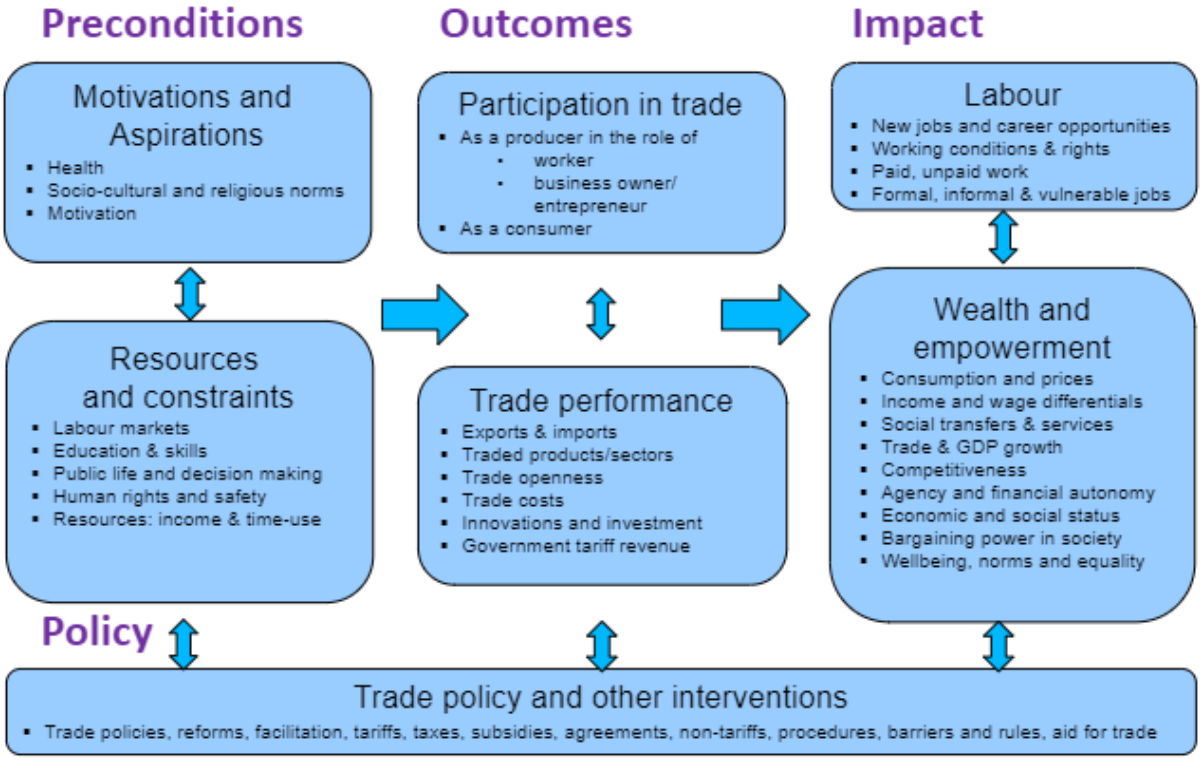
gender dimension. The present report attempts to assess the current situation with the sex-disaggregated trade data and to provide an action plan in strengthening production of gender-in-trade statistics.

1.2. Methodological approach to identifying the sources for gender in trade assessment

The assessment of the gender-in-trade sources of data in Georgia follows the conceptual framework summarized in the desk study by UNCTAD, UNECA and UNECE[1].

The framework is adapted from the UNSD approach developed for analysing female entrepreneurship. In order to measure gender-in-trade aspects of statistical data and trade policies, it looks into preconditions, outcomes, impact and policy elements. More details are presented in *Figure 1.2*.

Figure 1.2. UNCTAD Conceptual Framework for measuring gender-in-trade



Source: Desk study (2019), UNCTAD/UNECA/UNECE

[1] Desk study on the gender aspects of trade and trade policy for statistics by UNCTAD, UNECA and UNECE (2019)

As we can see from the diagram, apart from trade and business statistics data, the framework envisages the availability of a wide range of sex-disaggregated indicators from different areas of official statistics related to health, education, labor markets, etc.

However, it should be noted that, while being important elements for the gender-in-trade analysis, most statistical indicators represent contextual (background) information. It is universally agreed that enterprise-level data linking trading companies to business statistics data represents the preferred way of analysing gender aspects in trade. The obvious advantage of using enterprise-level data represents more precise individual data on the trading companies and, consequently, the flexibility of deriving statistical indicators using different disaggregations. Further discussion on this topic is given in Section 3.5.

Thus, the present assessment will review the available sources of data related to gender-in-trade analysis with the focus on the indicators obtained as a result of microdata linking.

1.3. Currently used sources of trade data

The international trade in goods statistics (ITGS) is produced by Geostat on the basis of customs data of the Revenue Service of the Ministry of Finance as well as a number of additional sources.

Geostat produces ITGS in line with the UN guidelines (International Merchandise Trade Statistics Compilers Manual), using international product classifications such as HS 2012-2017, SITC Rev. 4, BEC, Rev. 4, NACE Rev. 2. The ITGS indicators are released on a monthly basis.

The statistical data on international trade in services (ITS) are currently produced by the National Bank of Georgia (NBG) for the purposes of the balance-of-payments statistics. The ITS data largely represent macroeconomic estimates based on different data sources, such as trade flows, number of border crossings, results from specialized ad hoc surveys. Recognizing the need for enterprise-level data on trade in services, at the end of 2020 Geostat has started an ITS survey with the support of the EU Twinning Project. The quarterly data collection from ca. 2,000 enterprises engaged in both exports and imports of services will allow Geostat to finalize the methodological details and be ready for official dissemination of survey results in 2022.

The linkage of trade statistics in Georgia to other sources of available data is used both on a regular and ad hoc basis, although the number of statistical indicators is limited. The latter, through linkage to the statistical business register (SBR), include export and import numbers on enterprises by size and type of activity (NACE classification). Similar SBR linkage was used for assessing geographical distribution of exporters across Georgian regions. Data from business statistics is sometimes used for individual enterprises in order to estimate certain indicators (e.g., retained profits) for the FDI survey.

However, the enterprise level data has never been systematically used for assessing gender aspects of trade, and there are underutilized opportunities for analysis.

2. Analysis of gender aspects of trade using sectoral data

As the discussions on the conceptual and technical aspects of the microlinking were ongoing with Geostat, the initial analysis of gender aspects in trade was attempted at the sectoral level for exports. The objective of the sectoral approach was aimed at getting familiarized with the available gender-disaggregated data on trade, which would

i) provide the general description on the current situation related the gender-in-trade indicators; and
ii) help with identifying the possibilities in terms of data linking.

2.1 Overview of key selected export sectors in Georgia

The structure of the Georgian exports at the 4-digit level of HS classification shows that the top fifteen export items accounted for approximately 70% of the total exports (*Table 2.1*).

Table 2.1. Top 15 Georgian Export Items, by HS 4-digit classification, USD millions

HS Code	Name of position	2017	2018	2019	2020
	Total Exports	**2,745,743.8**	**3,379,732.4**	**3,798,449.5**	**3,342,142.2**
2603	Copper ores and concentrates	422,488.9	504,352.3	649,446.4	729,426.9
8703	Motor cars	244,634.9	428,634.7	732,810.4	404,117.2
7202	Ferro-alloys	306,369.2	352,938.9	303,384.8	247,330.0
2204	Wine of fresh grapes	171,357.3	196,851.0	222,849.4	210,281.1
2208	Undenatured ethyl alcohol, spirits, liqueurs and other spirituous beverages	126,662.0	128,651.4	127,404.4	132,209.3
2201	Waters, natural or artificial mineral and aerated waters, not containing added sugar	95,776.0	118,308.9	133,506.4	116,584.1
3004	Medicaments put up in measured doses	140,563.0	147,040.3	172,497.5	99,053.0

7108	Gold unwrought or in semi-manufactured forms, or in powder form	70,771.2	69,809.6	72,832.0	97,571.5
0802	Hazelnuts and other nuts	83,178.2	69,535.4	66,696.8	94,004.6
2616	Precious metal ores and concentrates	1,234.2	-	10,570.2	89,984.2
3102	Mineral or chemical fertilizers, nitrogenous	76,447.3	92,033.4	94,846.4	72,272.5
6109	T-shirts and other vests, knitted or crocheted	44,548.1	41,054.8	38,906.3	40,317.5
2202	Waters, mineral and aerated waters, containing added sugar	17,897.7	27,496.6	27,484.0	31,628.9
2402	Cigars, cheroots, cigarillos and cigarettes	42,328.8	148,706.1	53,603.8	28,962.5
0102	Live bovine animals	36,159.6	29,533.1	22,378.1	27,800.0

Source: Geostat – external trade

The two largest export items represented re-export of products (in particular, 100% of motor cars and more than 50% of copper ores and concentrates represented re-exports), while exports of a few products (e.g., ferroalloys, mineral fertilizers) are carried out by one or two large exporters.

In selecting export products for the mapping exercise, the aspects of export value and social impact were considered, with due attention to practical data-related constraints (including confidentiality issues). For example, the importance of the agricultural exports goes beyond the turnover value of a few dozens of enterprises due to the impact on tens of thousands of subsistence farmers whose livelihood depends on these products.

As a result, the HS-to-NACE mapping was attempted for motor cars, grape wines, mineral waters, hazelnuts, and t-shirts and other vests. Overall, these five product groups accounted for approximately 30 percent of Georgian exports.

In order to link the export product groups to the NACE sectors, Geostat staff identified main exporters of the above-mentioned products[2] and used their primary economic activity from the SBR (mainly at the 4-digit NACE level). The results of the mapping are summarized in *Table 2.2* below.

[2] The share of main exporters for each product group amounted to at least 70% of total product exports.

Table 2.2 Mapping of HS export product groups to NACE sectors

4-digit HS codes for export products	NACE (rev.2) sector	Comments on mapping and data availability
8703 Motor cars	45.1 Sale of motor vehicles	Mapping to the NACE category coincided for large enterprises. Thousands of small solo businesses classified in different NACE subdivisions
2204 Wine of fresh grapes	11.02 Manufacture of wine from grapes	Mapping to the NACE category coincided for all main exporters
2201 Waters, natural or artificial mineral and aerated waters, not containing added sugar	11.07.01 Production of mineral waters and other bottled waters	Mapping to the NACE category coincided for all main exporters
0802 Hazelnuts and other nuts	10.39 Other processing and preserving of fruit and vegetables	NACE subdivision 10.39 includes a large number of non-hazelnut producers. A number of exporters of hazelnuts and nuts are classified under NACE subdivision 01.25 (Growing of other tree and bush fruits and nuts). Business statistics data for the 01.25 category not available due to small sample size.
6109 T-shirts and other vests, knitted or crocheted	14.13 Manufacture of outerwear	Mapping to the NACE category coincided for all main exporters

Based on the above mapping, the available sectoral data was used to look into the gender aspects for the NACE sectors. Primarily, two sources of data turned out to be available: (i) Annual business statistics survey (2015-2019 data); and (ii) The 2017 structure of earnings survey. In addition to business statistics data, the analysis for two exporting items – grape wines and hazelnuts – included the data from the agricultural statistics survey.

The sectoral approach provides a general picture and shows the trends in the selected areas. However, since the mapping of the export products to the identified NACE sectors was carried out at an aggregate level, the analysis is of a limited nature. Thus, in looking at the results of the mapping exercise our objective also consists in showing limitations of this approach.

2.2 General characteristics of selected exporting sectors and basic gender-in-trade indicators

With regard to the sectoral turnover, the data showed that the value of exports amounted to at least 60% of the turnover in the corresponding exporting sectors (*Table 2.3*). This underlines the overall importance of international trade for these sectors.

Table 2.3. Percentage share of export values in turnover of exporting sectors, 2015-2019 average

Export product	Exporting Sector	Export-to-Turnover, %
Motor cars	Sale of motor cars	61.2%
Grape wines	Manufacture of grape wine	71.6%
Mineral waters	Mineral and bottled waters	63.9%
Hazelnuts and nuts	Processing and preserving of fruits and vegetables	75.6%
T-shirts and other vests	Manufacture of wearing apparel	62.5%

Source: estimations based on Geostat data

As the top exporters of grape wines, mineral waters, and t-shirts and other vests all fell under the corresponding NACE sectors, we can assert that the sectoral export intensity (ratio of exports to imports) of manufacture of grape wine, production of mineral and bottled waters, and manufacture of wearing apparel is very high. Similar conclusions can be drawn for hazelnuts and motor car exports, even though exporters of these two export products are dispersed across different sectors.

Employment and wages

The sex-disaggregated data which can be obtained from business surveys are primarily related to employment and wages. The shares of women employed in the five exporting sectors under consideration varied from 20% in motor cars sales to 87% in apparel manufacturing.

Table 2.4. Total number of employees and share of employed women, 2015-2019 average

Exporting Sector	Number of employees	Share of female employment, %
Sale of motor vehicles	3798	20.4%
Manufacture of wine from grape	2918	40.1%
Production of mineral waters and other bottled waters	1906	26.0%
Processing and preserving of fruit and vegetables	2548	63.5%
Manufacture of wearing apparel	6986	87.0%

Source: Geostat data

Contrary to the situation with the women's employment, where the number of employed women, depending on a sector, was either higher or lower than the number of employed men, the ratio of women's to men's wages was significantly below unity for all five exporting sectors, only slightly exceeding 70% for the manufacture of grape wines and being in line with the gender pay gap at the national level (*Table 2.5*).

Table 2.5. Average wages and women's to men's wage ratio

	2015 Average wages, GEL		2019 Average wages, GEL		Average ratio of women's to men's wages, 2015-2019
	Males	**Females**	**Males**	**Females**	
Sale of motor vehicles	2039.7	1437.0	2270.6	996.5	0.55
Manufacture of wine from grape	887.1	556.0	1219.0	812.3	0.70
Production of mineral waters and other bottled waters	1852.5	1100.6	2572.5	1878.8	0.70
Processing and preserving of fruit and vegetables	366.4	192.2	720.3	402.2	0.60
Manufacture of wearing apparel	421.2	446.7	1047.5	579.0	0.69
All economic sectors	**1 074.3**	**692.5**	**1 361.8**	**869.1**	**0.65%**

Source: estimations based on Geostat external trade data

In order to identify at least some of the reasons for significant gender differences in wages, we looked at the wages by ISCO occupations (at 1-digit level). The only source for enterprise-level data on wages by occupations represents the structure of earnings survey conducted for the first time in 2017. The limitation of the structure of earnings survey represents the fact that it is planned to be conducted once in 5 years.

The distribution of employed women by occupations in the five exporting sectors shows the dominance of men among managers. The male managers slightly outnumbered the female managers even in the apparel sector where the share of women in total employment equaled 87%. On the other hand, the share of female professionals exceeded that of male professionals in all five exporting sectors. For other categories, the distribution of employed persons by sex is rather sector-specific and does not reveal universal regularities.

The breakdown of wages by sex and occupations shows essential gender pay gaps across almost all sectors in the majority of categories, with a few exceptions only. In order to estimate the impact of occupations on the sectoral gender pay gaps, occupation-specific employment numbers were used as weights.

We see that gender differences in wages among managers are professionals are important for motor car sales and wine production. On the other hand, it is somewhat surprising that in three out of five sectors wage differences in elementary occupations produced the largest impact on the gender pay gap in the respective sector. This fact may indicate certain data limitations, such as the absence of more detailed data on sex-disaggregated differences in the number of working hours.

Table 6. Shares of women and men in total employment by ISCO 1-digit occupations, 2017

	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	
	Females	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**	**Males**
Managers	2.7%	15.8%	1.6%	5.6%	1.6%	3.5%	1.1%	4.3%	1.4%	1.6%
Professionals	24.8%	3.3%	4.0%	3.1%	8.0%	6.9%	1.5%	1.4%	1.3%	0.4%
Technicians and associate professionals	4.8%	13.2%	1.5%	2.3%	0.8%	0.3%	5.5%	2.1%	3.1%	1.0%
Clerks	2.0%	2.0%	2.5%	2.4%	6.4%	17.3%	4.6%	4.9%	1.3%	0.3%
Service and sales workers	2.3%	13.4%	2.3%	3.5%	0.0%	0.1%	0.2%	1.0%	0.5%	0.9%
Skilled agricultural, fishery, and forestry workers	0.0%	4.5%	1.4%	3.4%	1.2%	9.8%	0.2%	0.1%	n/a	n/a
Craft and related trades workers	0.2%	4.5%	8.8%	7.5%	0.0%	23.9%	15.4%	5.4%	43.7%	3.3%
Plant and machine operators and assemblers	1.0%	5.4%	1.8%	5.2%	8.0%	12.2%	0.1%	2.9%	7.6%	2.1%
Elementary occupations	n/a	n/a	17.2%	25.9%	1.6%	3.5%	37.1%	12.2%	29.8%	1.8%
Total, sector	**100%**		**100%**		**100%**		**100%**		**100%**	

Source: Geostat data

Table 7 Gender pay gap in the exporting sectors by ISCO 1-digit occupations, 2017

	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, fishery, and forestry 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%**

**Total employment by occupation used as weights*

Source: estimations based on Geostat data

Limitations of the Sectoral Approach

The sectoral analysis of gender in trade provides a general picture in terms of identifying and/or explaining gender inequalities. However, the macro analysis has obvious drawbacks. In particular,

- The sector producing export products also includes non-trading enterprises which may have a completely different behavior. These differences between traders and non-traders could not be captured in the analysis above.
- Export of a particular product can also be carried out by enterprises whose primary area of activity is different from the sector which primarily produces the product (e.g., trading companies). This additional information is thus omitted from the analysis.
- Importantly, the sectoral approach has a very limited scope for identifying factors which explain gender inequalities.

Thus, the availability of enterprise-level data seemed like an obvious choice for further advancing the gender analysis of trade data. For this purpose, discussions with Geostat led to identification of variables for the data linking exercise.

3. Gender-in-trade indicators from data microlinking

Thanks to a very successful cooperation with Geostat, the details for microlinking of trade data with other data sources were identified and the work was implemented with the help of Geostat's subject matter (external trade statistics, business statistics, labour statistics) and IT departments. The brief description of the process as well as the results of the data microlinking are presented in present Section.

3.1. Sources for microdata linking

As it was seen from the sectoral analysis of trade data, the main sources for microdata linking of trade data represent the statistical business register and structural business statistics (SBS) surveys. The Statistical business register (SBR) is updated monthly while business statistics surveys are conducted on a quarterly and annual basis.

The structure of earnings survey represents another valuable source of enterprise-level data which includes data on wages by sex and occupations. However, as it was mentioned, the periodicity of conducting the survey (once in 5 years) limits its applicability.

Thus, at the first stage the list of variables from the SBR and the SBS surveys included:

Statistical business register

- Enterprise registration details (geographic location, primary economic activity)
- Enterprise size (by turnover and/or number of employed)
- Enterprise ownership, by country of citizenship
- Enterprise ownership, by sex

Structural business statistics and structure of earnings surveys

- Enterprise turnover
- Enterprise investment in fixed assets
- Number of employed persons in the enterprises, disaggregated by sex and one-digit ISCO positions
- Enterprise average wages

3.2. General characteristics of trading companies

As a result of the microdata linking exercise, the data on business companies involved in exports and/or imports of goods during 2015-2020 was linked to data on structural business statistics and labour statistics surveys as well as to business register data. The business register ID represented the key linking variable. The latter is assigned to all legal entities by the National Agency of Public Register (NAPR) and is universally used by Geostat and different agencies (including the Revenue Service as the primary owner of the customs database).

Approximately 48,700 business companies conducted export and/or import activities in 2016-2020. These companies included 11.7 thousand *two-way traders* (companies with both exports and imports), 34.2 thousand *importers* and 2.7 thousand *exporters*. In value terms, the share of two-way traders in 2016-2020 total trade value equaled 70%, while importers accounted for 28.5% of total trade value and 39.2% of total imports value. The share of exporters in total trade value was only 1%, while the share of exporters in total exports value was 4% (*Table 3.1)*.

Table 3.1. Main characteristics of trading companies in 2016-2020

	Total trade value (USD thousands)	Total exports value (USD millions)	Total imports value (USD thousands)	Share in total trade value (%)
Two-way traders	36,403.5	13,247.1	23,156.4	70.5
Importers	15,541.8		15,541.8	28.5
Exporters	565.2	565.2		1.0

Source: Geostat's external trade data

The annual structural business statistics survey represented the primary source for data linking. The sample design of the SBS survey envisages full enumeration of relatively large companies. As the minimum annual turnover of such companies is ca. GEL1.5 million, currently less than USD500 thousand, virtually all significant trading companies are captured in the SBS survey.

Due to the fact that the database contained all registered export activities, including one-time transactions as low as USD100, the number of legal entities that were linked to the Geostat's survey data was significantly smaller. However, the two-way traders for which the data was linked accounted for 90.4% of total imports and 91% of total exports, while importers and exporters with SBS data accounted for 82.7% and 68.1% of total imports and exports, respectively (*Table 3.2*).

Table 3.2. Number of trading companies linked to SBS survey data and their value shares in total exports and imports in 2016-2020

	Two-way traders	Importers	Exporters
Number of trading companies in 2016-2020	11735	34195	2736
Number of trading companies linked to SBS survey data	2232	7040	377
Share of linked companies in total imports value, %	90.4%	82.7%	
Share of linked companies in total exports value, %	91.0%		68.1%

Source: Geostat external trade data

The breakdown of trading companies by NACE rev. 2 sections reveals that the NACE section is unknown for ca. 54% of the companies (*Table 3.3*). The companies for which the NACE section variable is known, mostly belong to the trade sector (ca. 55%), with other important sectors being manufacturing (11.9%), construction (8.7%) and transportation and storage (7.4%).

Table 3.3. Percentage distribution of trading companies by trading status and NACE rev. 2 sections

NACE rev.2	Exporters	Importers	Two-way traders	Total (incl. unknown)	Total (excl. unknown)
Agriculture, Forestry and Fishing	0.8	0.1	0.1	0.2	0.3
Mining and Quarrying	2.0	1.0	0.7	1.0	2.1
Manufacturing	8.4	5.1	6.2	5.5	11.9
Electricity, Gas, Steam and Air Conditioning Supply	0.0	0.1	0.1	0.1	0.2
Water Supply; Sewerage, Waste Management and Remediation Activities	0.1	0.1	0.1	0.1	0.2
Construction	1.0	5.2	1.4	4.0	8.7
Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	15.5	27.4	22.2	25.5	55.0
Transportation and Storage	2.5	3.9	2.3	3.4	7.4
Accommodation and Food Service Activities	0.7	1.6	0.5	1.3	2.7
Information and Communication	0.3	0.5	0.3	0.4	0.9
Financial and Insurance Activities	0.4	0.2	0.2	0.2	0.5
Real Estate Activities	0.5	0.8	0.3	0.7	1.5
Professional, Scientific and Technical Activities	1.0	1.1	0.5	1.0	2.1
Administrative and Support Service Activities	1.4	1.2	0.6	1.1	2.3
Public Administration and Defence; Compulsory Social Security	0.0	0.1	0.0	0.1	0.1
Education	0.2	0.3	0.1	0.3	0.5
Human Health and Social Work Activities	0.3	0.7	0.3	0.5	1.2
Arts, Entertainment and Recreation	0.3	0.5	0.2	0.4	0.9
Other Service Activities	0.4	0.7	0.3	0.6	1.3
Activities of Extraterritorial Organisations	0.0	0.0	0.0	0.0	0.0
Unknown	64.2	49.4	63.6	53.7	
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Geostat - external trade data, SBR

Despite the fact that a large number of trading companies did not have a NACE status in the SBR, the analysis is unlikely to have significant deficiencies due to a small contribution of these companies to the overall trade volume. The absolute majority of companies with unknown status (more than 80%) represent solo entrepreneurs and their share in 2016-2020 imports and exports equaled 5.9% and 6.4%, respectively.

Overall, the NACE trade section accounted for the majority (58.9%) of total imports in 2016-2020, followed by manufacturing (11.8%) and transportation and storage (11.5%). Manufacturing represented the largest exporting sector accounting for 40.6% of total exports, with trade (25.8%) and transportation (16.4%) occupying the second and third position, respectively (*Table 3.4*).

Table 3.4. Percentage shares of trading companies in 2016-2020 total imports and exports, by NACE rev. 2 sections

	NACE rev.2	Share in 2016-2020 imports (%)	Share in 2016-2020 exports (%)
A	Agriculture, Forestry and Fishing	0.59	1.1
B	Mining and Quarrying	0.38	6.8
C	Manufacturing	11.77	40.6
D	Electricity, Gas, Steam and Air Conditioning Supply	2.09	0.6
E	Water Supply; Sewerage, Waste Management and Remediation Activities	0.11	0.0
F	Construction	3.96	0.6
G	Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles	58.92	25.8
H	Transportation and Storage	11.47	16.4
I	Accommodation and Food Service Activities	0.47	0.0
J	Information and Communication	0.84	0.0
K	Financial and Insurance Activities	0.71	0.2
L	Real Estate Activities	0.46	0.0
M	Professional, Scientific and Technical Activities	0.53	1.3
N	Administrative and Support Service Activities	0.44	0.1
O	Public Administration and Defence; Compulsory Social Security	0.57	0.0
P	Education	0.04	0.0
Q	Human Health and Social Work Activities	0.47	0.0
R	Arts, Entertainment and Recreation	0.19	0.0
S	Other Service Activities	0.08	0.0
U	Activities of Extraterritorial Organisations	0.00	0.0
	Unknown	5.9	6.4

Source: Geostat - external trade data, SBR

3.3 Structural business statistics data: basic indicators of employment and wages

As it we could see from the data, the share of exporters in total trade value constituted only 1%. This is not a surprising outcome for a small open economy such as Georgia, where exporters are almost fully dependent on imports. Hence, the further analysis will be confined to two-way traders and importers, unless exporters are specifically mentioned.

The basic gender-disaggregated indicators for employment and wages among trading companies can be derived from the structural business statistics surveys which include the information on the number of employed persons[3] as well as the wage-related expenses. Data showed that importers employed a slightly higher number of men and women compared to two-way traders. Given the number of enterprises, this implied that the average number of employees in two-way traders was almost three times larger than in importer companies. The result was not unusual as two-way traders presumably performed a larger set of operations compared to importers.

Employment of both men and women was steadily increasing during 2016-2019 until the COVID pandemic broke the uptrend in 2020 (*Table 3.5*).

Table 3.5. Number of employed persons (thousands) and annual employment growth (%) in two-way traders and importers during 2016-2020, by sex

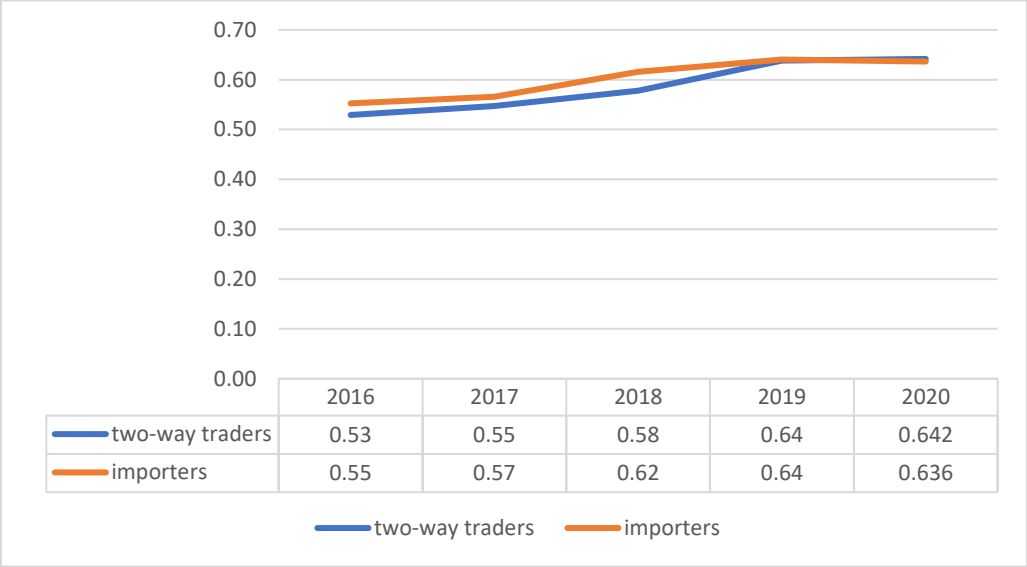
		Two-way traders		Importers	
Year	Sex	Number of employed persons, thous.	Annual employment growth, %	Number of employed persons, thous.	Annual employment growth, %
	men	93.7		96.8	
2016	women	49.5		53.5	
	men	103.4	10.4%	104.8	8.3%
2017	women	56.5	14.0%	59.3	10.9%
	men	109.2	5.6%	114.6	9.4%
2018	women	62.8	11.3%	70.6	19.0%
	men	113.6	4.1%	123.9	8.1%
2019	women	72.7	15.7%	79.3	12.4%
	men	109.4	-3.7%	118.6	-4.2%
2020	women	72.2	-3.3%	75.5	-4.9%

Source: Geostat –external trade data, SBS survey

[3] It should be noted that the employment numbers from the SBS surveys show the number of job positions rather than the number of employed persons as one person may be employed in more than one enterprise. The most frequent case represents accountants and teachers.

The number of employed women was lower in both two-way traders and importers, as the *women-to-men employment ratio* in 2016 stood at 0.53 and 0.55 for two-way traders and importers, respectively. However, the employment growth rates during the uptrend years (2016-2019) were significantly higher for women which resulted in improvement of the employment ratio to 0.64 for both two-way traders and importers (*Figure 3.1*). The 2020 pandemic led to a deterioration in employment numbers, where two-way traders faired relatively better than importers.

Figure 3.1. The women-to-men employment ratio among two-way traders and importers (%) in 2016-2020



	2016	2017	2018	2019	2020
two-way traders	0.53	0.55	0.58	0.64	0.642
importers	0.55	0.57	0.62	0.64	0.636

Source: Geostat's SBS and external trade data

While the employment figures showed clearly positive trends in reducing gender gaps, the situation was not as straightforward with regard to average wages.

First, it should be noted that the average wages among two-way traders were higher compared to importers for both women and men, with the differences oscillating between ca. 7%-15% for women and ca. 11%-22% for men during 2016-2020. Further, the annual growth rate of wages was positive over the years, with the only exception being a 0.7% annual decrease in wages for men employed in importer companies in 2020. Overall, from 2016 to 2020 the wages grew by 18.8% and 31.1% for men employed in two-way traders and importer companies respectively, while the corresponding wage increases for women equaled 23.2% and 21.4%.

Finally, the women's to men's wage ratio remained quite stable for two-way traders ranging between 0.66 and 0.68, while showing a deterioration for importers from 0.74 in 2016 to 0.69 in 2020 (*Table 3.6*).

Table 3.6. Average monthly wages, pay ratio and wage growth among two-way traders and importers in 2016-2020

Year	Sex	Two-way traders			Importers		
		Av. Monthly wages (GEL)	Wage ratio (women/men)	Annual growth rate of wages (%)	Av. Monthly wages (GEL)	Wage ratio (women/men)	Annual growth rate of wages (%)
2016	men	1461.3	0.66		1196.9	0.74	
	women	960.0			886.2		
2017	men	1542.0	0.67	5.52%	1302.3	0.74	8.80%
	women	1026.4		6.92%	958.0		8.10%
2018	men	1611.9	0.68	4.53%	1432.2	0.70	9.98%
	women	1092.5		6.43%	996.1		3.97%
2019	men	1742.7	0.67	8.12%	1539.4	0.66	7.49%
	women	1162.7		6.43%	1011.6		1.56%
2020	men	1735.8	0.68	-0.40%	1569.4	0.69	1.95%
	women	1182.7		1.72%	1075.5		6.32%

Source: Geostat - external trade data, SBS

3.3 Structure of earnings survey data: employment and wage indicators differentiated by skill levels

In order to better understand the reasons behind the gender pay gap in trade, the trade data was linked to the 2017 structure of earnings survey (SES). There were 3,261 trading companies for which the wage data was available, with the importers accounting for approximately two-thirds of the total. Despite a significantly smaller number of companies linked to the SES compared to those linked to the SBS survey, the share of two-way traders with the SES data in the total value of imports and exports exceeded 80%, while the importers with the SES data accounted for ca. 65% of the total imports' value (*Table 3.7*). Thus, the SES data proves to be a valuable source for gender-in-trade analysis allowing for additional insights into the gender differences using data differentiating by skill levels.

Table 3.7. Number of trading companies linked to SES data and their share in total trade value

	Two-way traders	Importers	Exporters
Number of trading companies in 2016-2020	11735	34195	2736
Number of trading companies linked to structure of earnings survey data	1066	2120	75
Share of linked companies in total imports value, %	83.7%	65.4%	
Share of linked companies in total exports value, %	82.8%		16.8%

Source: Geostat - external trade data, 2017 SES

The analysis of the 2017 SES data is based on the one-digit ISCO-88[4] classification, as the employees of the trading companies were divided into nine main groups[5]. These nine groups were further classified into managers, high-, medium- and low-skilled workers. The correspondence with the ISCO at one-digit level is given in *Table 3.8.*

Table 3.8. Correspondence of skills level groups with one-digit ISCO

Skill level groups	Correspondence with one-digit ISCO-88
Managers	1. Managers
High-skilled workers	2. Professionals 3. Technicians and associate professionals

[4] The latest revision of ISCO (ISCO-08) was adopted by Geostat in 2019, after the SES was conducted

[5] Group 10 of the ISCO classification comprises army personnel, not applicable to the business companies.

Medium--skilled workers	4. Clerks 5. Service and sales workers 6. Skilled agricultural, fishery, and forestry workers 7. Craft and related trades workers 8. Plant and machine operators and assemblers
Low--skilled workers	Elementary occupations

The employment distribution by skill levels shows that men are more likely to be employed as managers and medium-skill workers, while a higher percentage of women are employed as high-skill workers (*Table 3.9*). The gender differences among high-skill workers are particularly pronounced among importers, where the shares of women and men occupying high-skilled jobs constitute 38.8% and 24.0%, respectively.

Table 3.9. Employment distribution among two-way traders and importers, by sex and skill levels

	two-way traders		**importers**	
	women	**men**	**women**	**men**
managers	4.9%	6.7%	6.1%	7.7%
high-skill workers	27.3%	23.4%	38.8%	24.0%
medium-skill workers	54.9%	58.5%	39.2%	51.9%
low-skill workers	12.9%	11.4%	15.9%	16.4%

Source: Geostat – external trade data, 2017 SES

The skill-differentiated women-to-men employment ratios demonstrate that the highest women-to-men employment ratio occurred among high-skilled workers, equaling 0.64 for two-way traders and 0.92 for importers.

The largest gender differences in employment were present among managers and medium-skilled workers: in the former category the employment of women in the trading companies was approximately 2.5 times less than that of men (*Figure 3.2*).

Figure 3.2. Women-to-men employment ratio among two-way traders and importers, by skill levels

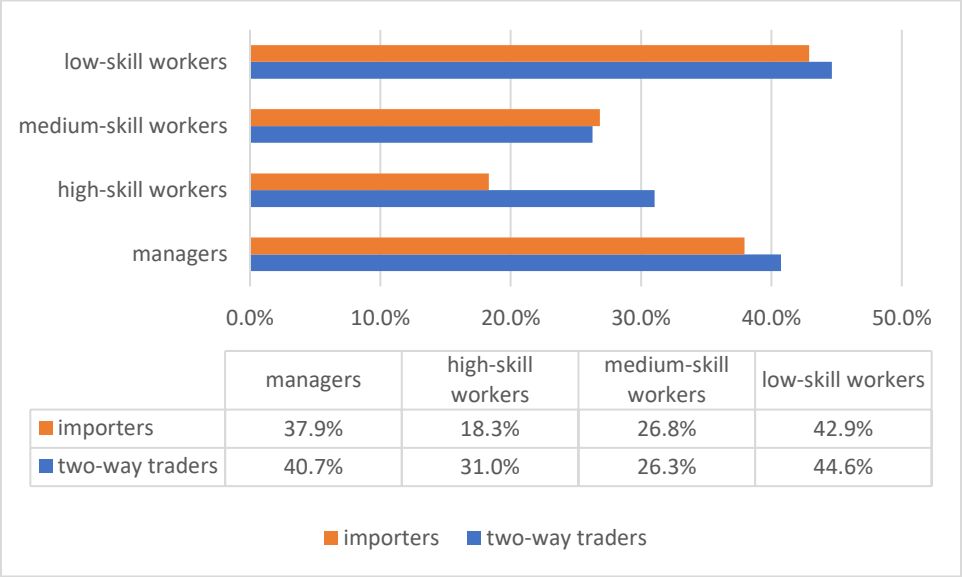
	managers	high-skill workers	medium-skill workers	low-skill workers
two-way traders	0.40	0.64	0.51	0.62
importers	0.45	0.92	0.43	0.55

Source: Geostat - external trade data, 2017 SES

The gender pay gap by skill levels to a certain extent reflects the gender composition, as the smallest gender differences occur among high-skill workers: in particular, the gender pay gap in this category among importer companies showed the lowest gender pay gap of ca. 18.%. On the other hand, the largest gender differences were observed among managers and low-skilled workers[6], reaching as high as ca. 45% among low-skilled workers in two-way traders. Overall, gender pay gaps were significantly higher among two-way traders compared to importers in all categories except for medium-skilled workers where the gender differences were approximately the same (*Figure 3.3*).

[6] An important limitation to the analysis of remuneration represent working hours. In structural business statistics and earnings surveys wages are reported on a monthly basis, and although the data on working hours are indicated by companies, the quality of data is not sufficient. The evidence from the labour force survey demonstrates that men's actual working hours are higher than women's by up to 20%. Hence, large gender pay gap may very well be overestimated, if working hours

Figure 3.3. Gender pay gap among two-way traders and importers, by skill levels



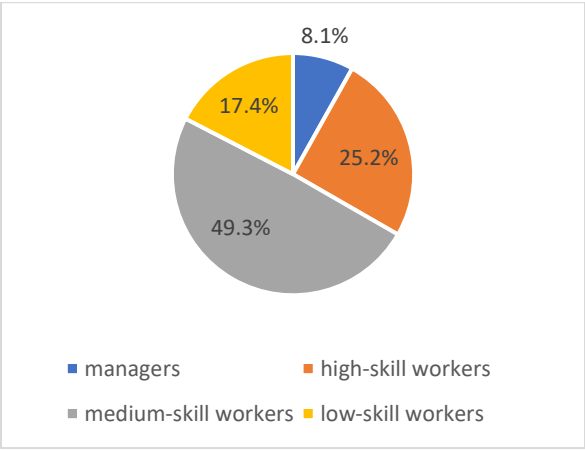
	managers	high-skill workers	medium-skill workers	low-skill workers
importers	37.9%	18.3%	26.8%	42.9%
two-way traders	40.7%	31.0%	26.3%	44.6%

Source: Geostat - external trade data, 2017 SES

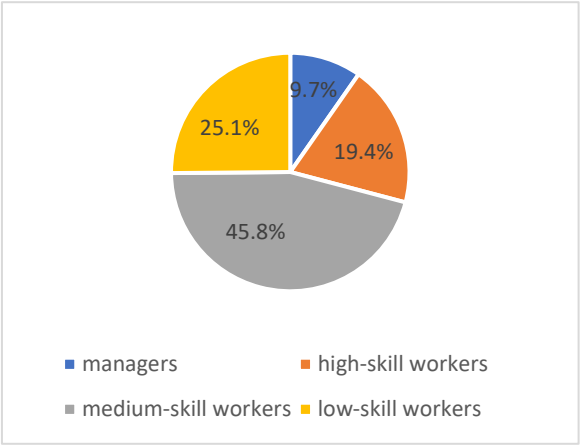
Using gender pay gap figures weighted by employment number, it is observed that medium-skill workers account for almost half of the gender pay gap among two-way traders and for ca. 45% among importers. The high-skill workers' impact on the gender pay gap is ca. 25% in two-way traders, which is equal to the impact of low-skilled workers in importers (*Figure 3.4*).

Figure 3.4. Gender pay gap impact by skill levels, employment-weighted

a) two-way traders



b) importers



Source: Geostat - external trade data, 2017 SES

3.4 Statistical business register: ownership and gender differences

In the process of linking external trade data to the statistical business register variables additional work has been performed to expand the ownership indicators.

In general, the information on business owners of an individual company is public in Georgia and it is available from the National Agency of Public Register (NAPR), which represents the initial data source for the statistical business register (SBR). Business owners may be physical persons or legal companies.

As the NAPR data does not include the gender variable for physical persons, the latter is added by Geostat to its SBR through linking the NAPR data with the civil registration database. Before the present project activities started, the gender-disaggregated ownership information in the SBR showed whether companies were "owned by women only", "owned by men only", "owned by men and women" or "owned by legal companies". Clearly, this information did not allow for identification of the number of entrepreneurs (e.g., a company "owned by women only" may have one or several women owners) or the ownership shares (e.g., a company may be "owned by men and women" but one person may hold a 90% share in ownership).

Hence, after additional data processing the business entities in the SBR now contain gender-disaggregated data on the number of individual owners as well as the ownership shares calculated separately for men, women and legal entities[7].

Figure 3.5 contains the total number of male, female and legal owners of companies disaggregated by their trading status. As we can see from the data, men outnumber women more than 9 times as owners of two-way traders, almost 5 times as owners of exporters and more than 3 times as owners of importer companies. The number of legal owners of trading companies is relatively small; however, as well will see below, the role of legal owners in trade is much more significant.

[7] Disaggregation of ownership by gender for legal owners was not currently possible.

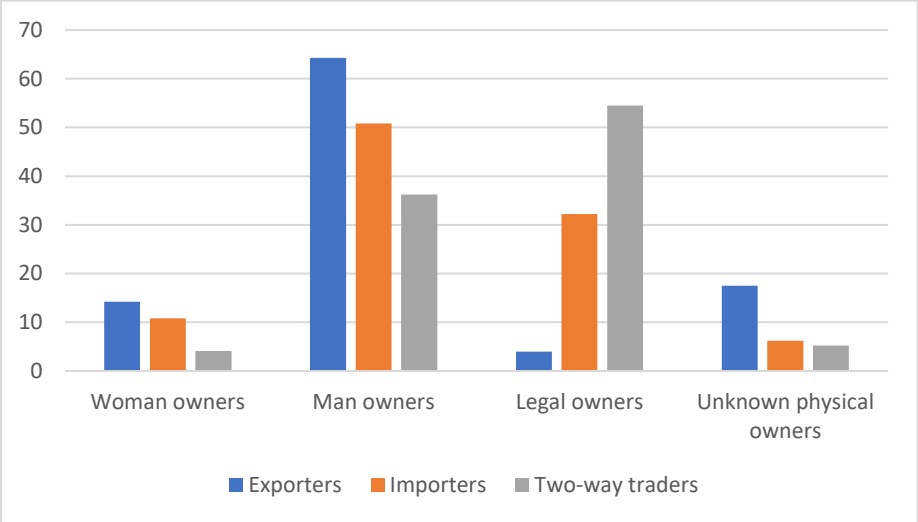
Figure 3.5 Number of women, men and legal owners of trading companies, by trading status

Source: Geostat - external trade data, SBR

While being useful, these numbers without the data on ownership shares do not tell the full story. In the absence of data on company assets, we use the trade volumes (exports plus imports) of companies as weights to estimate the ownership shares by ownership types.

As *Table 3.10* demonstrates, legal owners account for ca. 55% and 32% of two-way traders and importers value, respectively, in terms of trade turnover. Men owners control more than half of importers' trade value and ca. 64% of exporters' trade value. Unknown physical owners control a relatively high share (ca. 18%) of exporters' trade value; however, as the share of exporters in total trade does not exceed 1%, these numbers are negligible.

Figure 3.6 Ownership of trading companies by ownership type and trading status, trade-weighted



Source: Geostat - external trade data, SBR

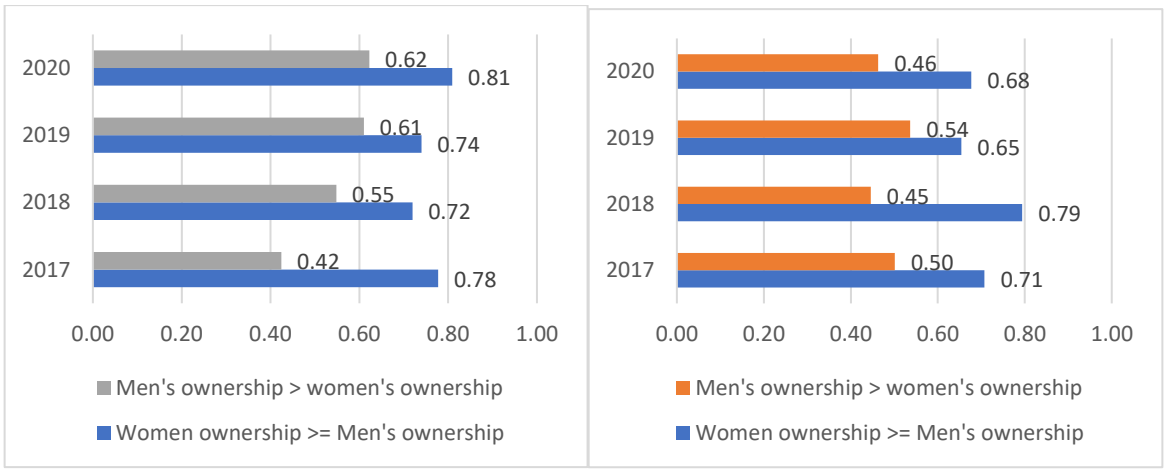
From the above numbers it is obvious that the gender gap in ownership is extremely wide. Disregarding the shares of legal and unknown owners, the share of men owners exceeds that of women owners approximately 9 times in two-way traders, 5 times in importers and 4.7 times in exporters. Given that gender disparities tend to increase with size of businesses, it is likely that the gender gap in ownership will further widen in case of gender disaggregation of large legal owners.

There were only ca. 300 companies where women's ownership share was higher than men's share. Despite important limitations in this approach related to a small sample size of such companies, the analysis aims to see whether there were associated gender differences.

In general, businesses with relatively higher women ownership tend to have higher women-to-men employment and pay ratios. For instance, in 2020 the two-way traders and importers where the ownership share of women was at least as high as men's ownership share registered employment ratios ca. 20 percentage points higher than in respective companies where men's ownership exceeded women's ownership (*Figure 3.6*).

Figure 3.7 Women-to-men employment ratios in trading companies by gender-specific ownership in 2018-2020

a) two-way traders **b) importers**

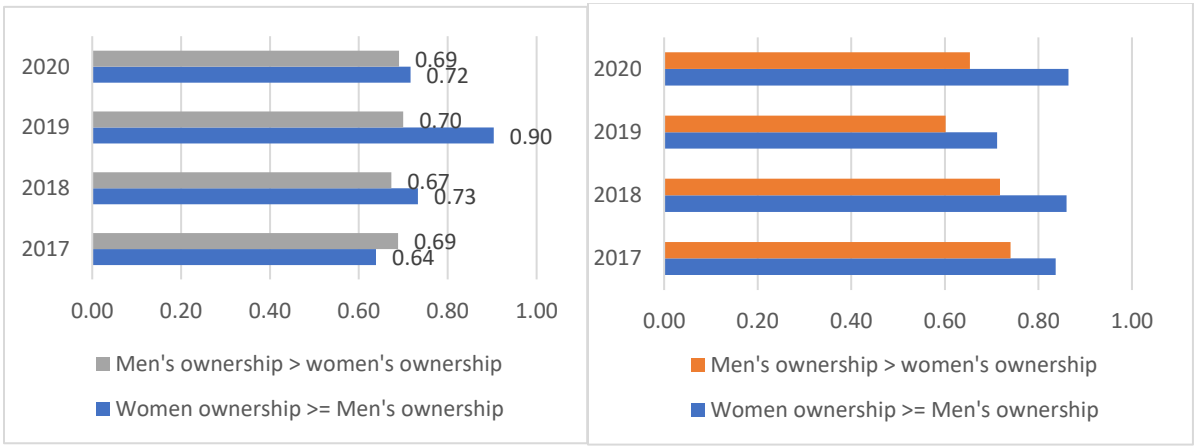


Source: Geostat - external trade data, SBS survey

Similar situation is observed with the pay ratio. Both two-way traders and importers where women's ownership was at least as high as men's share demonstrated significantly higher women-to-men wage ratios (*Figure 3.7*).

Figure 3.7 Women-to-men wage ratios in trading companies by gender-specific ownership in 2018-2020

a) two-way traders **b) importers**



Source: Geostat - external trade data, SBS survey

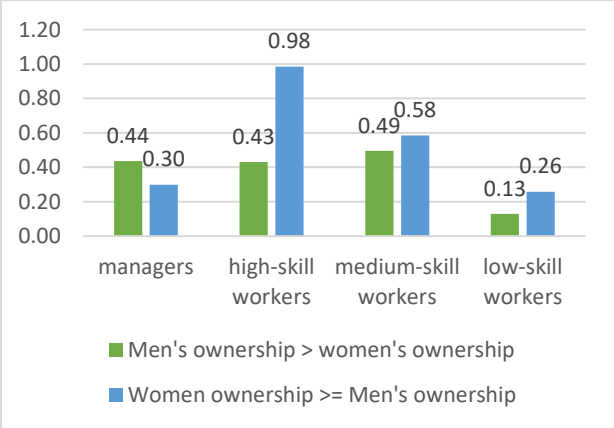
The 2017 SES data provides for further exploring the impact of ownership on the gender-in-trade indicators by skill levels. As shown in *Figure 3.8*, the women-to-men employment ratios for almost all skill levels are higher in those trading companies where women's ownership share is at least as high as men's share. The notable exception is the managers' women-to-men employment ratio among two-way traders, standing at 0.44 for "men-owned" companies vs. 0.30 for "women-owned" companies.

It is also interesting to see that both two-way traders and importers employ a significantly higher proportion of high-skilled women in "women-owned" companies, with the employment ratios standing at 0.98 and 1.2, respectively. Overall, "women-owned" importer companies had relatively gender-equal distribution by skill levels except for the medium-skill workers, where the employment of women was more than four times lower compared to men's employment.

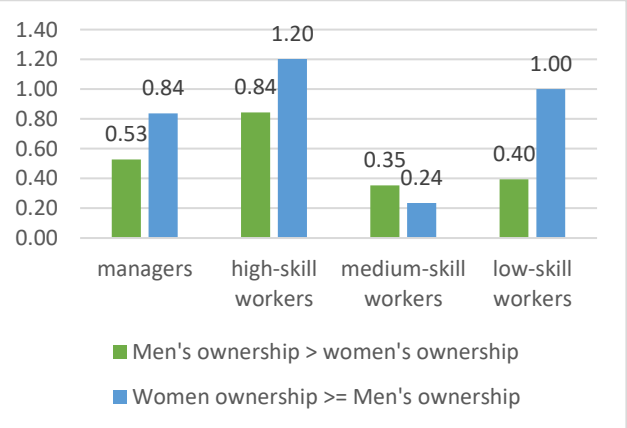
The situation was not as straightforward with regard to women-to-men wage ratios (*Figure 3.9*). In two-way traders the wage ratios for managers and high-skill workers were almost equal for "women-owned" and "men-owned" companies, while medium-skill women had relatively inferior conditions in terms of wages in "women-owned" enterprises. On the other hand, importers registered significantly better women-to-men wage ratios in "women-owned" companies, especially for managers and high-skill workers.

Figure 3.8 Women-to-men employment ratios in trading companies by gender-specific ownership and skill levels in 2017

a) **two-way traders**



b) importers



Source: Geostat - external trade data, SES

Figure 3.9 Women-to-men wage ratios in trading companies by gender-specific ownership and skill levels in 2017

a) **two-way traders** b) **importers**

Source: Geostat - external trade data, SES

Finally, the use of available information from the SBR on ownership of trading companies by partner countries[8] demonstrated that significant differences between Georgian and internationally-owned companies.

Figure 3.10 Women-to-men employment and wage ratios in trading companies by residence status, 2017-2020 average

a) **two-way traders** b) **importers**

Source: Geostat - external trade data, SES

[8] The available data showed whether a company was owned by Georgian residents, Georgian and foreign residents jointly (e.g., Georgia/Italy) or foreign residents.

3.5 Microlinking vs sectoral approach: comparing gender-in-trade indicators for key export sectors

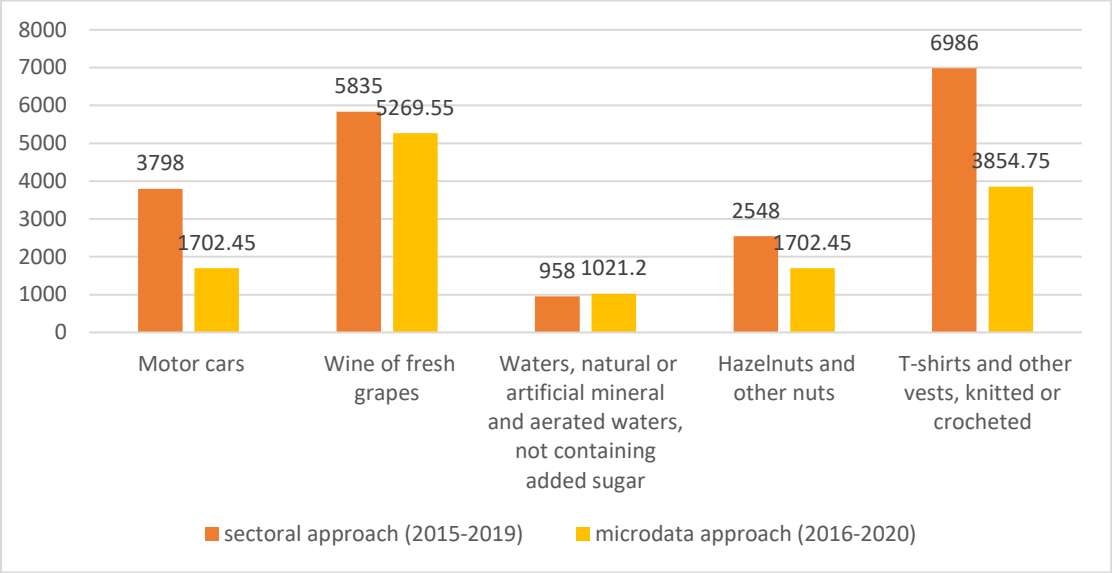
As it was mentioned in Section Two, mapping key export products (sale of motor cars, grape wines, mineral waters, hazelnuts and textile) to the appropriate sectors of economic activity at the sectoral level was not supposed to be precise for a number of reasons. For convenience *Table 2.2* is replicated below showing the correspondence between the selected HS codes for export commodities and the mapped NACE sectors.

Table 2.2 Mapping of HS export product groups to NACE sectors

4-digit HS codes for export products	**NACE (rev.2) sector**
8703 Motor cars	45.1 Sale of motor vehicles
2204 Wine of fresh grapes	11.02 Manufacture of wine from grapes
2201 Waters, natural or artificial mineral and aerated waters, not containing added sugar	11.07.01 Production of mineral waters and other bottled waters
0802 Hazelnuts and other nuts	10.39 Other processing and preserving of fruit and vegetables
6109 T-shirts and other vests, knitted or crocheted	14.13 Manufacture of outerwear

With the microlinking, it became possible to compute gender-in-trade indicators for actual companies exporting the key commodities and make respective comparisons. As *Figure 3.10* shows, the number of employed persons obtained from the sectoral approach mostly exceeded the corresponding numbers from the microdata linking approach. The difference in the employment numbers basically show the scope of the sectoral activity in the domestic market. Thus, the number of persons employed in the motor car exporting companies was almost 2.5 times less than in the NACE subdivision of motor car sales. On the other hand, a small difference in employment numbers from these two approaches points to the export orientation of the sector. A good example of an export-oriented sector represents the grape wines. In the case of mineral waters, the employment numbers from the sectoral and microdata approach practically coincided due to a limited nature of the sector.

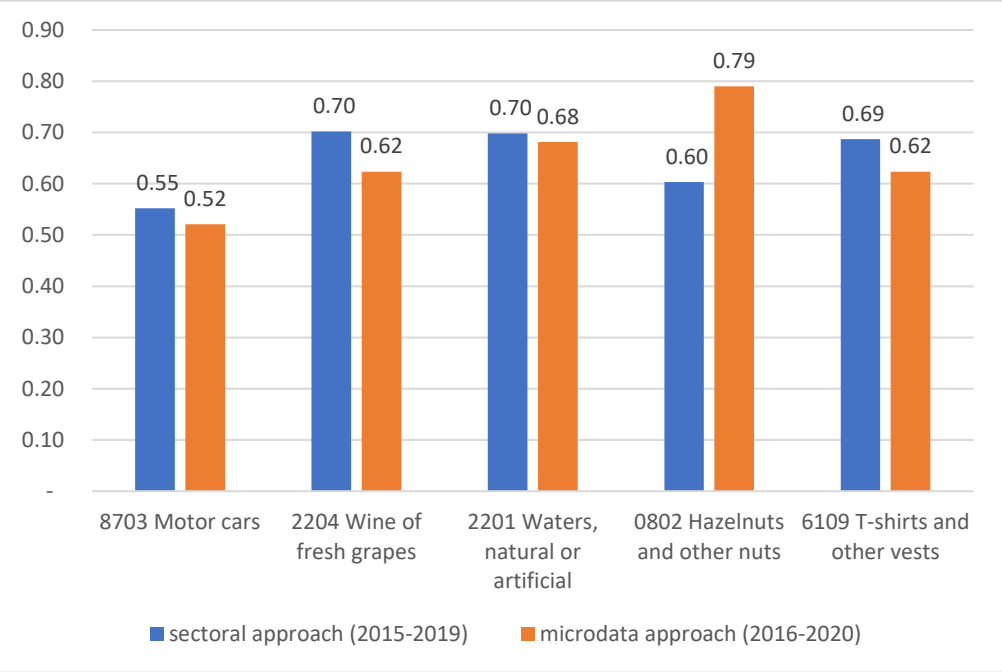
Figure 3.10 Employment in five selected export sectors using sectoral and microdata approach



Source: Geostat - external trade data, SBS

The differences in women-to-men wage ratios using two approaches were not very large (*Figure 3.11*). It should be noted that the wage ratio for companies exporting hazelnuts and other nuts (HS Code 0802) was significantly higher (0.79) in comparison with the wage ratio in the corresponding NACE 10.39 sector "other processing and preserving of fruit and vegetables" (0.60). This result shows a positive gender impact of the hazelnuts sector. However, in the remaining four selected sectors the sectoral approach yielded relatively higher women-to-men wage ratios indicating not so favorable conditions in the exporting companies with regard to women's employment (*Figure 3.11*).

Figure 3.11 Women-to-men wage ratios in five selected export sectors using sectoral and microdata approach



Source: Geostat - external trade data, SBS

Notable differences in basic characteristics between the sectoral and the microdata approach as well as impossibility to produce more disaggregated analysis in the case of the sectoral approach confirm the obvious advantage of using microdata in the analysis of the gender-in-trade indicators. Thus, continuation and further expansion of general and, in particular, enterprise-based statistical production will have a direct positive impact and represent the cornerstone for the development of the gender-in-trade statistics in Georgia.

4. Producers and potential users of gender-in-trade statistics

Geostat

As it was already mentioned, the work on gender-in-trade indicators would be impossible without strong cooperation with Geostat. It was very fortunate that Geostat as the producer of official statistics on external trade has been obtaining microdata on official merchandise trade from the customs agency of the ministry of finance over the years. This implied that with regard to the production side of gender-in-trade statistics there was no need for other stakeholders except Geostat to be engaged, making the preparatory process significantly easier.

Geostat management fully supported the project and the subject matter units (external trade statistics, business statistics, labor) were involved in the project from the very beginning – discussing the conceptual and technical aspects of the project, providing suggestions about the data microlinking and actually implementing it. Geostat's involvement remained strong throughout the project and was not hampered even in the situation of general restrictions related to the COVID pandemic.

Overall, Geostat's support was fundamental for the project, being its necessary pre-requisite. The communication with Geostat proved to be extremely efficient and smooth, which made it possible to obtain the project results within the course of a few months.

Preliminary findings were discussed with Geostat management on a regular basis, as the work progressed. The final report draft was presented to Geostat staff, including Geostat's high and mid-level management, providing the overview of the gender-in-trade indicators and showing the obtained results. The followed discussion was related on the future production and use of the gender-in-trade indicators in the country. *Geostat expressed their interest and willingness to produce gender-in-trade indicators and was ready to cooperate with international organizations on this topic in the future.*

The sustainability of production of gender-in-trade indicators by Geostat is conditioned by two factors: the interest in the topic as well as necessary resources. Based on the immediate response of Geostat to the UNECE proposal to participate in the project as well as the feedback throughout the preparation of the report, Geostat's interest has been clearly confirmed. It is also assumed that given the availability of databases and the current quality of microlinking expressed in terms of coverage, the additional effort needed for production of gender-in-trade indicators is within the available resource boundaries for Geostat.

Hence, given the usual strong ownership at Geostat there is a positive perspective with regard to the sustainability of the work on gender statistics in trade.

Ministry of Economy and Sustainable Development

The Ministry of Economy and Sustainable Development (MoESD) represents the primary policy maker in the country in the area of economic and trade policies. The ministry has recently adopted the 2021-2025 Small and Medium Enterprise (SME) Development Strategy[9]. The Strategy includes, among a general set of goals, Priority 4 – Enhancement of SME's export growth and market penetration, and Priority 6 – Promotion of women's entrepreneurship. The economic policy department stated their interest in the gender-in-trade indicators mentioning that additional data will be very beneficial for further developing evidence-based policies and using the data for evaluation of the strategy implementation results.

The discussions with the MoESD's trade policy department revealed that currently the MoESD does not have any trade policy initiatives related to gender. This can also be partly explained by the lack of gender-disaggregated data in the country. Thus, the trade policy department also confirmed that they were interested in using the gender-in-trade data in order to consider potential policy actions.

Other stakeholders

UN Women country office (UNWCO) represents one of the key international organizations involved in supporting and advocating for gender equality and women's empowerment issues. The UN Women has been closely collaborating with the government organs and, in particular, with the Ministry of Economy and Sustainable Development in developing the gender component of the 2021-2025 SME strategy.

The UNWCO continues to support the gender equality issues in relation to businesses in the country, within the current regional project of Supporting Women's Employment in the South Caucasus. They were pleased to hear about the new developments in the area of gender-in-trade statistics in Georgia and expressed their intention to cooperate in this area of work in the future.

As independently suggested by Geostat and UNWCO, another potential stakeholder in the area of gender-in-trade statistics represents the Ministry of Environment and Agriculture. Geostat has extensive cooperation with the MoEA in the areas of agricultural and environmental statistics. The UNWCO is currently cooperating with the MoEA's subordinate body, the Rural Development Agency, for which the gender focal point has been hired and further cooperation with the MoEA is planned within the above-mentioned regional project in the immediate months.

[9] http://www.economy.ge/?page=ecopolitic&s=45 (in Georgian)

Summary and Recommendations

Main conclusions

- Geostat produces international trade in goods statistics in line with the international standards on a monthly basis. The international trade in services survey was recently started, with the official data expected in 2022.
- While a number of statistical indicators on trade by enterprise characteristics have been published by Geostat, no enterprise level data has been systematically used for assessing gender aspects of trade.
- The initial analysis of gender aspects in trade was performed at the sectoral level for key export commodities by means of mapping four-digit HS export product codes to the corresponding four-digit NACE subdivisions. The selected export products included motor cars, grape wines, mineral waters, hazelnuts and apparel.
- The sectoral analysis led to the following results: i) women-to-men employment ratios were sector-specific ranging from ca. 20% for sales for motor cars to over 85% in apparel industry; ii) average women-to-men wage ratios were close to the national average of 0.65, oscillating between 0.55 for motor car sales and 0.70 for production of grape wines; iii) the breakdown of employment by occupations at one-digit ISCO level was characterized by significant gender gaps in employment and remuneration of managers; iv) the share of female professionals was higher than that of male professionals in all five selected sectors; v) the gender pay gap for managers and professionals produced the largest impact for motor car sales and production of grape wines, while gender differences in remuneration of low-skilled workers were critical for the remaining three sectors.
- The limitations of the sectoral approach associated with i) one-to-many and many-to-one correspondences between export products and related economic activities; and ii) inability to perform disaggregated analysis, demonstrate that the use of enterprise-level data is an obvious choice for further analysis of gender-in-trade issues.
- One of the key limitations of the microlinking approach is related to less than 100% overlap between trading and business statistics data, leaving a certain number of companies (primarily, small ones) beyond the scope of the analysis. However, this limitation is also inherent to sectoral approach and, as shown below, the microlinking approach provides valid results for the largest part of trading activity.
- As a result of microlinking, approximately 10,000 out of 48,700 trading companies were linked to the structural business statistics data. The linked companies accounted for the largest part of total exports and imports. Thus, the share of linked two-way traders in total exports and imports exceeded 90%, while the share of linked importers constituted ca. 82% of total imports.

- For a small open economy such as Georgia, the dependence of trading companies on imports is fundamental. Overall, the two-way traders accounted for 70% of the total trade value, while the share of exporters (companies engaged only in exports and not in imports of goods) in the total trade value equaled 1%.
- Companies belonging to the Trade section (G) of the NACE classification accounted for ca. 59% of total imports and 25% of total exports in 2016-2020. The Manufacturing section (C) companies had a 40% share in total exports.
- The women-to-men employment ratios were approximately similar for two-way traders and importers. The employment growth stood positive for both categories of companies, except for the pandemic-hit 2020. As the employment growth rates for women exceeded those for men, the women-to-men employment ratio showed an uptrend during 2016-2020, increasing from 0.53 to 0.64.
- The annual growth of wages was positive for both women and men employed in two-way traders and importers. The women-to-men wage ratio showed a very small improvement, increasing from 0.66 to 0.68 in 2016-2020. On the other hand, there was a decline in the ratio from 0.74 in 2016 to 0.69 in 2020 for importers.
- The 2017 structure of earnings survey provided additional insights on the gender differences in trade in terms of skill levels. The microlinking of ca. 3,300 companies ensured that the linked two-way traders accounted for more than 80% of total exports and imports.
- The share of male managers among all employed men was higher than the corresponding share for women. On the other hand, the share of women was higher in high-skilled jobs. As a result, the women-to-men employment ratios by skilled levels oscillated from 0.40 for managers among two-way traders to 0.92 for high-skilled workers among importers.
- The gender pay gap was at the lowest for high-skilled workers, standing at 18.3% among importers. The highest gender pay gap rates were observed among managers and low-skilled workers.
- Using employment-weighted gender pay gap numbers to calculate the impact by skill levels, it is found that the medium-skilled workers accounted for ca. 49% of the total gender wage gap among two-way traders and ca. 45% among importers.
- As a general note, the limitation in analyzing gender differences in remuneration are related to the absence of good quality enterprise data on working hours. The labor force survey shows ca. 20% difference in the number of actual working hours in favour of men. Hence, the gender pay gap estimates on an hourly basis may be overestimated.
- The number of men owners of trading companies exceeded the number of women owners approximately 9 times for two-way traders, 5 times for importers and 3 times for exporters.
- Using trade value as weights, the trade-weighted ownership of two-way traders is dominated by legal entities (ca. 55%). Men controlled ca. 51% of importers' trade value and 64% of exporters' trade value. Women's share of trade-weighted ownership equaled ca. 4.1% in two-way traders, 11% in exporters and 14% in exporters.

- The analysis of a small number of companies where the women's ownership share was at least as high as men's ownership share showed higher women-to-men employment ratios for all traders and higher women-to-men wage ratios among importers. The women-to-men wage ratios among "women-owned" two-way traders were not essentially different from all two-way traders.
- Two-way traders with 100% Georgian ownership showed higher women-to-men employment and wage ratios compared to two-way traders with foreign or joint ownership. The situation was contrary among importers, where companies with foreign or joint ownership registered higher above-mentioned ratios.
- Comparison of employment and wage data for the five selected export products shows clear differences in terms of sectoral and microlinking approach, underlining the need of enterprise-level data for more thorough analysis.
- Geostat's involvement throughout the project provides positive expectations with regard to sustainability of the statistical production of gender-in-trade indicators in the future.
- Discussions with stakeholders show the interest towards the topic and willingness to cooperate and use the gender data in trade.
- Discussions with stakeholders show the interest towards the topic and willingness to cooperate and use the gender data in trade.

Recommendations

The gender-in-trade statistics is a relatively new area which is rapidly developing while attracting high-level attention globally. In the European context, the June 2015 EU resolution on gender equality between men and women emphasizes the gender perspective in the EU international trade policy, while stressing the need to collect gender-disaggregated data on the trade impact.

The assessment of the gender-in-trade statistics in Georgia showed a vast potential in developing this area of statistics in the country. In the process of producing gender-in-trade statistics, Geostat has a strong advantage of possessing external trade microdata which can be linked to its key enterprise surveys. In this situation, it is recommended that Geostat shall perform the following activities:

- Establishing and developing cooperation with governmental organs and international partners with the view of identifying the policy needs in relation to gender equality in international trade, implementing the methodology of the gender-in-trade statistics and creating a roadmap for official production of key indicators.

- Continuing to participate in the gender-in-trade pilot project supported by the UNECE and the UNCTAD, while sharing information and encouraging participation of policy-makers and other stakeholders in the process.
- Expanding production of international trade statistics by introducing the gender-disaggregated indicators through microlinking trade data with enterprise-level data from Geostat's surveys, which primarily include data from the fields of structural business statistics, wages and structure of earnings.
- Considering opportunities of Geostat's other enterprise-level surveys, such as the survey of innovations in enterprises, with the purpose of gaining additional insights into the gender differences in international trade.

Annex 1: List of persons consulted in the process of report preparation

Geostat:

Ms Lia Dzebisauri, Deputy Executive Director

Ms Maka Kalandarishvili, Head of External Statistics Department

Ms Tina Ksovreli, Division Head of Data Processing and Analysis, Business Statistics Department

Ms Irma Gvilava, Division Head of Labor Statistics, Social Statistics Department

Ms Lia Charekishvili, Division Head of Social Infrastructure Statistics, Social Statistics Department

Mr Bachuk Bokuchava, Senior Specialist, External Statistics Department

Mr Beka Benidze, Senior Specialist, External Statistics Department

Ministry of Economy and Sustainable Development:

Ms Tsisnami Sabadze, Head of Economic Policy Department

Ms Marika Gabunia, Head of Trade Policy Department

UN Women:

Ms Nani Bendeliani, Program Analyst