

Gender in Trade Assessment in Kazakhstan

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The implementation of the project within the tight timeframes would not be possible without dedicated and efficient work of the BNS colleagues, led by Ainur Dossanova. My sincere appreciation goes to the whole BNS team.

Introduction: Objectives of the assignment

The report presents the results of the consultant's work aimed at supporting the Bureau of National Statistics of Kazakhstan (BNS) in producing data and statistics for more gender-responsive trade policies.

The project-related activities included four components:

1. Review of data availability on gender-in-trade in Kazakhstan, including the compilation of preliminary estimates of gender-in-trade by linking currently available data.
2. Preparation of materials for a 3-hour interactive session with BNS staff at the Workshop on communicating official statistics and measuring gender-in-trade, organized by UNECE and BNS from 19 to 21 October 2022.
3. Prepare an action plan to improve source data and develop new statistics for gender-responsive trade policy in Kazakhstan.
4. Facilitate a consultation among statisticians and national stakeholders on gender-in-trade statistics and policies, to collect information on data needs for policymaking, discuss data availability and possible actions to address gaps and facilitate commitment to the action plan.

The report starts with the description of the methodological approach proposed for the analysis of gender aspects in trade in Kazakhstan. Based on the proposed methodology, the availability of the data sources necessary for such analysis are presented, as a result of a desk study as well as consultations with the responsible BNS staff. Further, the process of data microlinking is considered.

The second part of the report contains the analysis of the gender-in-trade indicators calculated on the basis of data microlinking. A number of basic and differentiated statistical indicators are used to highlight the main aspects of gender differences in the external goods trade of Kazakhstan.

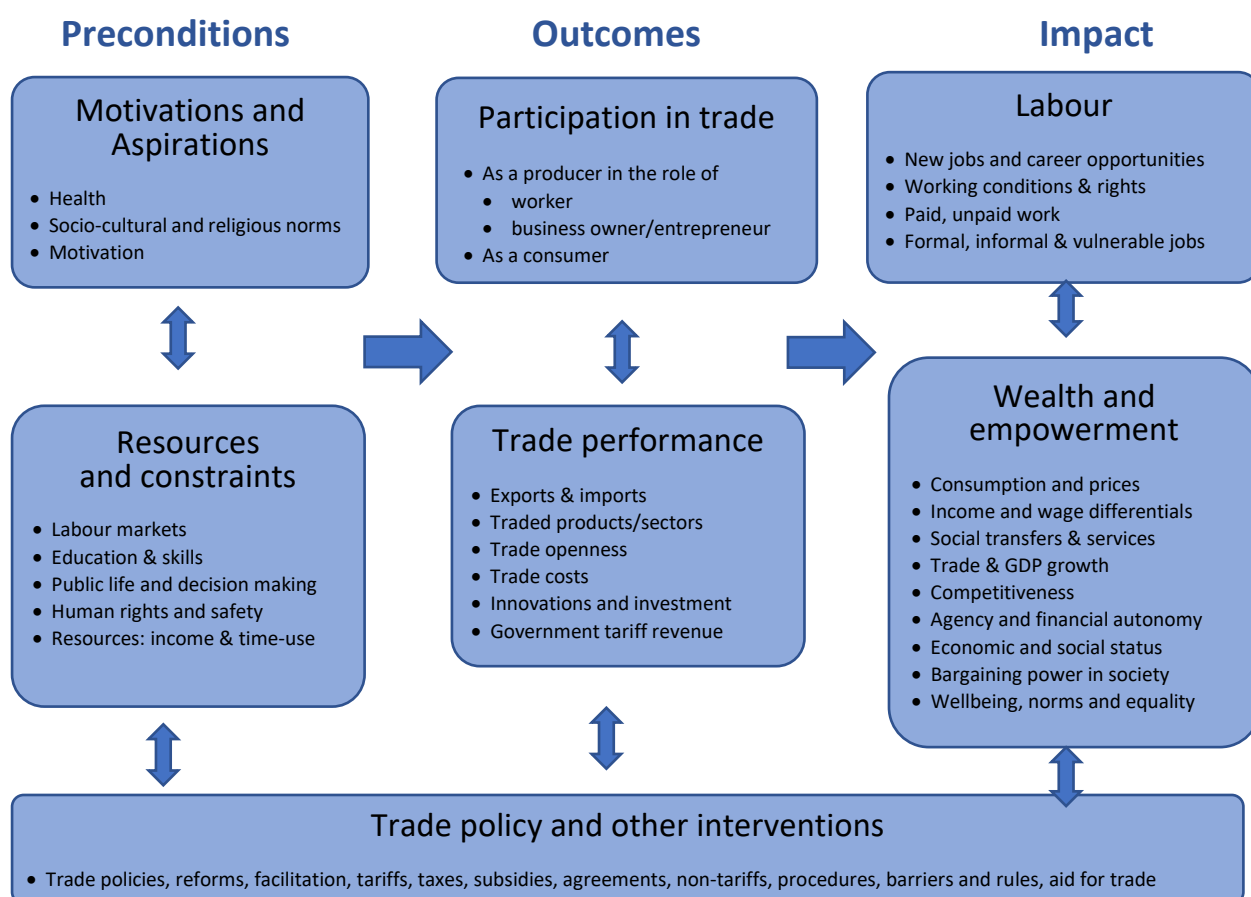
Finally, the report considers the issue of statistical production of gender-in-trade indicators from the standpoint of producers and potential users. Based on the successes and certain limitations, an outline of an action plan for gender-in-trade statistics is provided.

1. Data Availability for gender-in-trade statistics in Kazakhstan

1.1 Methodological approach

The methodological approach towards the gender-in-trade statistics is essentially based on the framework for measuring gender-in-trade as well as the instruction on compiling gender-in-trade indicators elaborated by the United Nations Conference for Trade and Development (UNCTAD)¹. The framework is adapted from the UNSD approach developed for analyzing female entrepreneurship and considers three stages (preconditions, outcomes, impact) of various components comprising a large number of social and economic areas (See Figure 1.1).

Figure 1.1. UNCTAD Conceptual Framework for measuring gender-in-trade



¹ See https://unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.30/2020/mtg3/UNDA_desk_study_on_gender_and_trade.pdf

While the framework attempts at providing the comprehensive picture of the gender-in-trade aspects, our objective consists in providing more targeted tools of gender-in-trade analysis which i) use available data to the extent possible, thus avoiding additional data collection to reduce burden on respondents, and ii) ensure sufficient flexibility for analysis of different aspects from the gender perspective.

Both of the above-mentioned requirements lead to the analysis of external trade in conjunction with the gender-disaggregated variables from non-trade data sources. As international trade in goods performed by enterprises dominates the structure of exports and imports in Kazakhstan², the assessment of the gender-in-trade statistics will be focused on *goods trade* with the *enterprises* representing the units of observation.

Consequently, the maximum flexibility in gender-in-trade analysis can be achieved by using *enterprise-level data* of international trade in goods linked to non-trade enterprise data. For this purpose, the individual data of trading enterprises with key trade characteristics (value of imports and exports by years, main commodity groups exported/imported) represent the basis for the analysis. Non-trade individual data linked to the trade data sources at various disaggregations represent the second layer necessary for the gender analysis in trade.

The processing and analysis of enterprise-level (trade and non-trade) data will be further referred to as *microlinking method*. The study of conditions and data sources used for microlinking represents the essential objective of the assignment.

² According to the latest data, in the first nine months of 2022 the value of exports and imports of goods exceeded the value of exports and imports of services almost 9 times. See <https://www.nationalbank.kz/en/news/platezhnyy-balans-vn-sektora>

1.2. Data sources for gender in trade:

a) Goods trade sources

The availability of appropriate data sources represents the necessary first step for the production of the gender-in-trade statistical indicators.

As it was already mentioned, the basis for the data microlinking represents the enterprise-level data on trade goods. An additional advantage of goods trade data consists in its comprehensiveness, as customs agencies and national statistical offices fully register external trade transactions. Thus, microlinking does not require sampling-related calculation of weights.

The official statistics on international trade in goods³ is produced by two main agencies: the BNS and the State Revenue Service. The BNS is responsible for the statistics on external trade in goods with the countries making part of the Eurasian Economic Union (EAEU), while the State Revenue Service compiles external trade in goods statistics for the remaining countries. The external trade statistics is produced on at least a monthly basis and includes breakdowns by trading partners and commodity groups.

The important practical pre-requisites for the production of gender-in-trade statistical indicators using the microlinking method represent a regular exchange of enterprise-level data by the responsible agencies as well as the use of the common enterprise IDs. Both of these aspects are in place in Kazakhstan, as the BNS has full access to external trade data produced by the State Revenue Service, and all public agencies of Kazakhstan use common Business Identification Numbers (BINs) as unique identifiers for enterprises.

b) Non-trade data sources

The usual tools of data collection for goods exports or imports represent customs declarations and/or statistical forms administered respectively by the customs and statistical agencies. These declarations (forms) usually contain general information on the trading company (enterprise ID, its legal/actual address, etc.) and more detailed information on trade transaction(s) (type of goods, goods physical volume and their value, place of origin of exported/imported goods, transit and destination countries, etc.). Thus, proper trade data on enterprise transactions do not contain information on the gender aspects of trade, implying the need of using additional non-trade data sources.

The proposed non-trade data sources for producing the gender-in-trade statistical indicators in Kazakhstan include the conventional surveys of Structural Business Statistics (SBS) and Labour

³ The external trade in services statistics is produced by the National bank of Kazakhstan.

Statistics (LS) as well as the data from the Statistical Business Register (SBR). The non-trade data sources as well as the key variables are provided in Table 1.1.

Table 1.1. Non-trade data sources and key variables

| Non-trade data sources | Variables |
|---|---|
| The Statistical Business Register (SBR) Structural Business Statistics (SBS) surveys Labour Surveys (LS: establishment surveys, structure of earnings survey) | <ul style="list-style-type: none"> - Enterprise name and ID - Address - Legal form of business organization - Registration date(s) - Area of economic activity (NACE) - Enterprise size - Turnover - Employment* - Earnings* - Skill levels of employees* - Attained education level of employees* - Investments - Active/non-active status - Ownership shares* - Company management* - Foreign/domestic ownership* |

*Note: variables with * are gender-disaggregated*

Based on the discussions with the BNS staff, a brief overview of the data sources and their availability in Kazakhstan is provided below.

Labour Statistics (LS) and Structural Business Statistics (SBS) Surveys

The Labour Statistics represents the main source for the gender-in-trade analysis. The LS surveys are conducted quarterly and annually. They fully cover large and medium enterprises⁴, while a sample of small enterprises accounts for approximately 30% of the total number of small enterprises. Additionally, labour data is supplemented from the SBS sample survey of small enterprises (using SBS data on employment and wages).

⁴ BNS uses the employment criterion for defining the size of enterprises. Large enterprises employ more than 250 persons, medium enterprises – from 101 to 250 persons, and small enterprises – no more than 100 persons.

Similar approach with regard to the scope is employed in the annual and quarterly SBS surveys (full enumeration of large and medium enterprises, sample surveys of small enterprises).

As a result, the variables from the LS and SBS surveys selected for the gender-in-trade analysis include:

- Sex-disaggregated annual data on employment in enterprises, 2017-2021
- Sex-disaggregated annual data on wages in enterprises, 2017-2021
- Sex-disaggregated data on employment and wages by occupations (at one-digit ISCO classification), 2017-2021
- Sales revenue of trading enterprises, 2017-2021
- Data on enterprise assets, 2017-2021

Statistical Business Register (SBR).

Along with the general information about the enterprise (legal form, registration date, area of economic activity, enterprise size, etc.), the variables in the SBR which were obtained specifically for the gender-in-trade analysis include:

- Sex of managers in trading companies, as of 2021
- Ownership of trading companies by men, women and legal persons, further disaggregated by their residence status (domestic/ownership), as of 2021

Remarks related to data completeness

It is natural that the availability of non-trade indicators cannot be fully achieved, due to sample surveying of small enterprises, different possible reasons of enterprises non-response, etc. especially for small enterprises. However, as mentioned in the next section, the volume of obtained data allows us to consider the gender-in-trade indicators as representative for the totality of the trading companies and draw relevant conclusions about the issues of gender equality.

2. Data microlinking and preliminary estimates of gender-in-trade indicators

2.1 Data microlinking

After the identification of potential sources for the gender-in-trade analysis, the BNS made commendable efforts to attempt data microlinking. As described above, the initial step represented preparation of the trade data. Ultimately, the trade dataset contained individual data for approximately 122,000 enterprises which had any trading activity (exports and/or imports) in 2017-2021.

The variables included the following enterprise-level data:

- Annual value of exports, 2017-2021
- Annual value of imports, 2017-2021
- Main commodity groups, separately for exports and imports (up to three products exported/imported, at HS 4-digit level)

For the purposes of analysis, companies were assumed to perform exports/imports if the value of their export/import of goods was at least \$1000 per year. Using this criterion, the breakdown of companies into two-way traders, exporters, importers and non-traders was performed. As a result, the distribution of companies by the trade status was as follows (Table 2.1):

Table 2.1. Distribution of companies by trade status, 2017-2021

| Trade Status | Share in total number of companies, % | Share in total exports' value, % | Share in total imports' value, % |
|-----------------|---------------------------------------|----------------------------------|----------------------------------|
| Importers | 66.3 | | 43.62% |
| Two-way traders | 5.1 | 83.96 | 56.35% |
| Exporters | 4.5 | 16.03 | |
| Non-traders | 24.1 | <0.1 | <0.03 |

As it was expected, despite a relatively small number of two-way traders (enterprises performing both exports and imports), these companies accounted for the majority of exports and imports value (84% and 56%, respectively).

At the second stage, non-trade data from the SBS and LS surveys as well as from the SBR were linked to the prepared trade dataset, using the common enterprise identifier (BIN). Ultimately, the following variables have been linked:

- Annual number of employees, sex-differentiated, 2017-2021
- Annual wage fund, sex-differentiated, 2017-2021
- Annual employment and wage data by occupations, 2017-2021
- Annual sale revenues, 2017-2021
- Value of enterprise assets, 2017-2021
- Ownership shares in enterprises, sex-differentiated, as of 2021
- Enterprise management, sex-differentiated, as of 2021

In general, it can be mentioned that the scope of the data microlinking expressed in terms of the trading volume proves to be high. The exporting companies (two-way traders and exporters) for which it was possible to link data accounted for 93% of total export value, while the same figure for the importing companies (two-way traders and importers) stood at 66%.

2.2 Analysis of the results

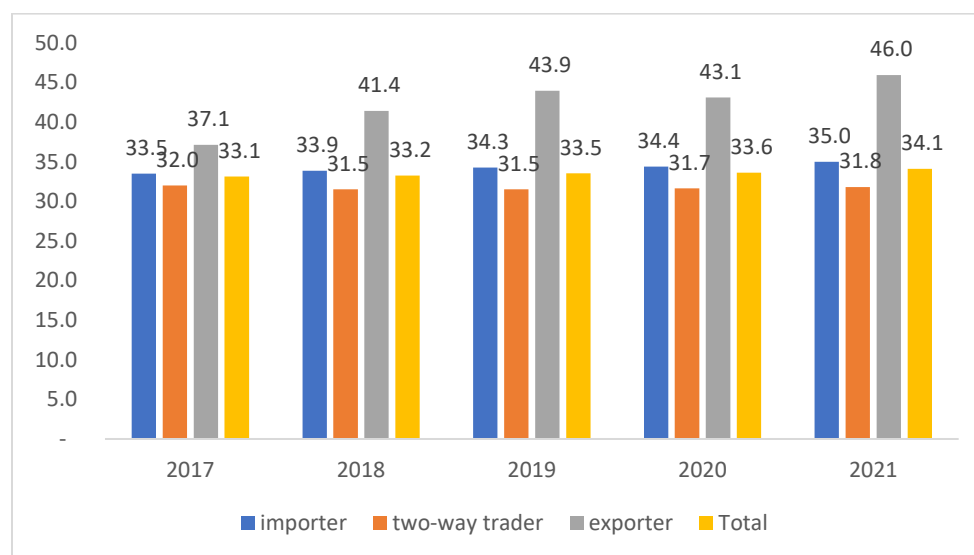
Based on the results of the microlinking, the remaining part of this section provides the analysis of the gender-in-trade estimates. It should be noted that given the enterprise-level dataset, various types of analysis can be performed depending on the researchers' interests. We will look into the three main dimensions of gender-in-trade analysis – i.e., employment, wages, and ownership – while also looking into additional disaggregations (e.g. employment indicators by company size or gender-specific ownership/management of companies). A particularly important disaggregation includes gender differences in employment and wages by occupations.

2.2.1 Employment and wages

The basic gender-in-trade indicators that can be derived from the enterprise data include the share of women's employment and the gender pay gap in the trading enterprises. The annual data on employment and wages come primarily from labour statistics surveys.

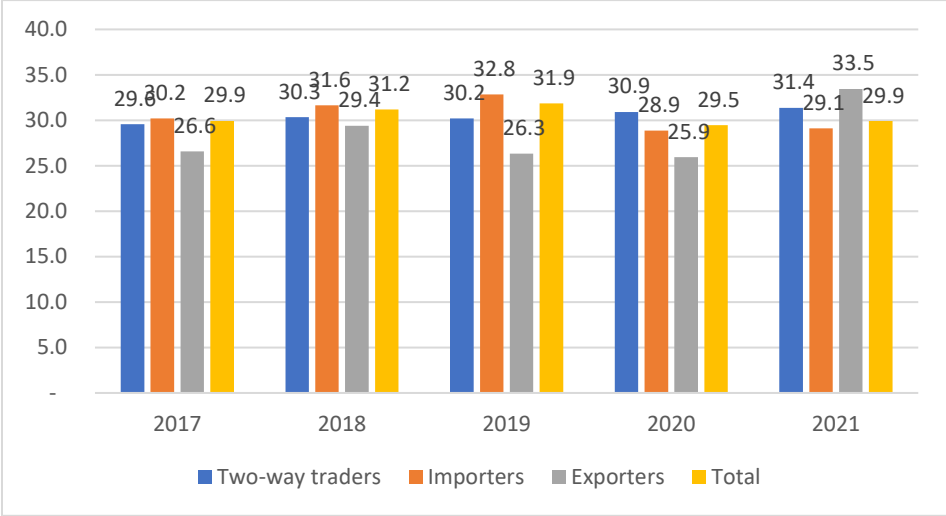
The results show that the share of employed women in the trading companies constituted approximately one-third, and it slightly increased in 2017-2021 (Figure 2.1). It is interesting to point out that in 2017-2021 exporters showed a significantly higher share of employed women compared to two-way traders and importers, while also registering the largest increases in the share of employed women (from 37.1% in 2017 to 46.0% in 2021).

Figure 2.1. Share of employed women in trading companies by trade status, %



The gender pay gap in the trading enterprises (Figure 2.2) manifested an uptrend in the years prior to the pandemic increasing from 29.9% to 31.9%, ultimately falling to the 2017 level in 2021. The differences in the gender pay gap levels among two-way traders and importers were insignificant, while relatively higher gender pay gap oscillation among exporters is mostly explained by a small number of these companies.

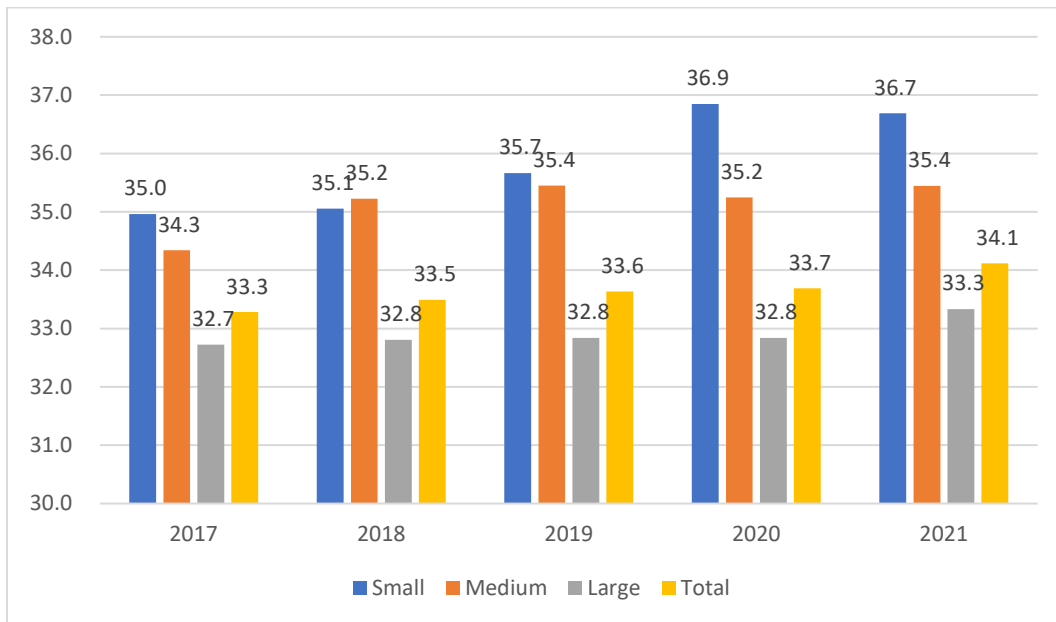
Figure 2.2. Gender pay gap in trading companies by trade status, %



The distribution of trading companies by size shows that large enterprises (i.e., companies employing more than 250 persons) accounted for approximately 70% of the total employment in the trading companies. The disaggregation of gender-in-trade basic indicators shows that the enterprise size represents an important source of gender differences.

The women’s share in employment (Figure 2.3) is inversely related to enterprise size, as throughout 2017-2021 this indicator proved to be the highest for small enterprises and the lowest for large enterprises. The largest difference in the share of employment (36.9% and 32.8% for small and large companies, respectively) was recorded in the 2020, likely owing to the pandemic effects.

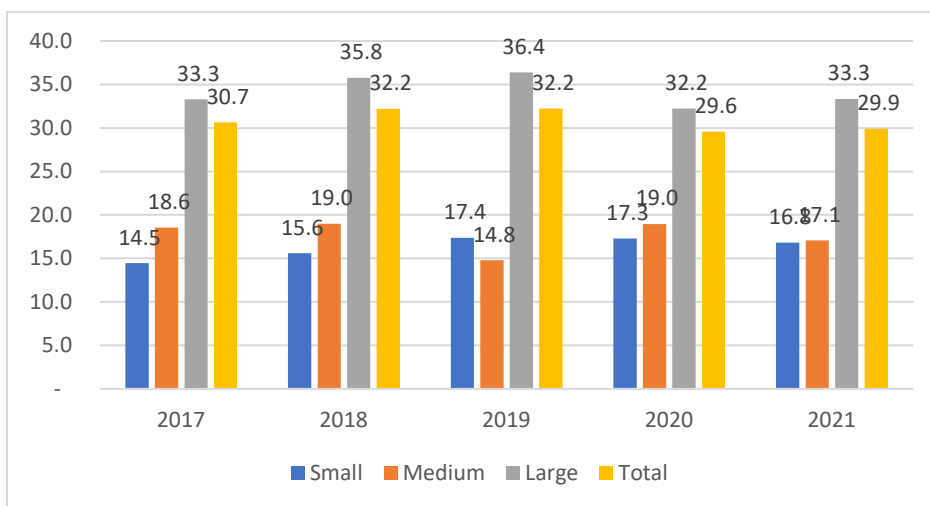
Figure 2.3 Women’s share in employment in trading enterprises by company size, %



Source: BNS data on external trade and labour statistics

Similarly, the enterprise size negatively affects the relative women’s wages, another important dimension of gender equality. Expressed as the gender pay gap (Figure 2.4), the gender differences in earnings are particularly pronounced for large enterprises, exceeding the gender pay gap levels for small and medium enterprises almost twice. The highest gender pay gap level was recorded for large enterprises in 2019 (36.9%).

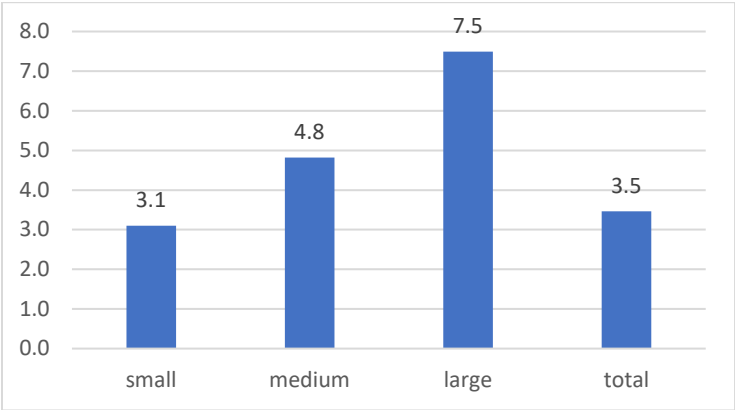
Figure 2.4 Gender pay gap in trading enterprises by company size, %



Additional insights about gender differences with regard to employment and earnings may be obtained from the SBR data on company management by sex. In total, the available data shows that in 2021 5.5 thousand companies were men-led and 1.6 thousand companies were women-led. The disaggregation by sex of company managers in Kazakhstan confirm the main results which are similar to international experience: women-led companies i) have smaller size; and ii) employ a larger share of women compared to men-led companies.

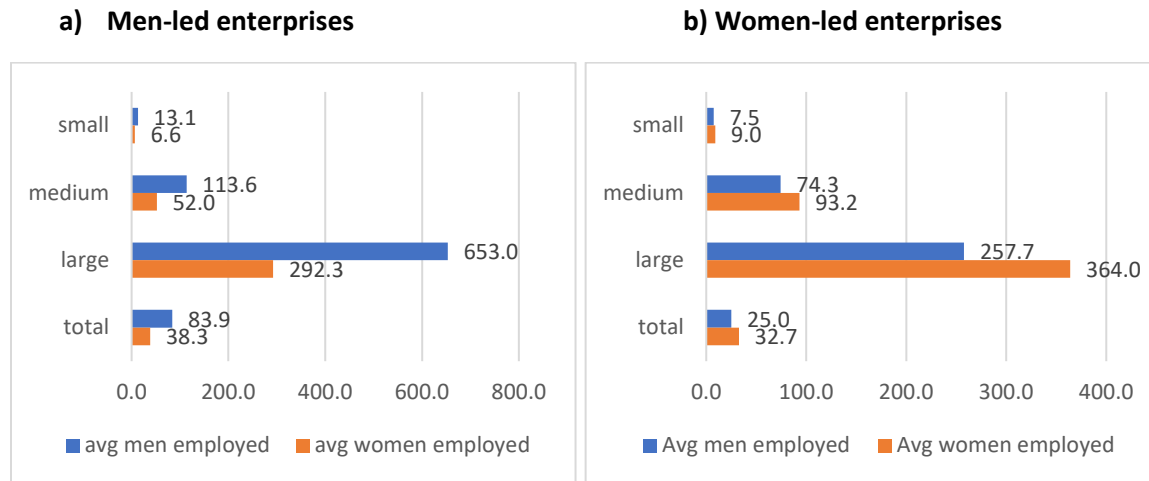
While the number of men-led companies in total exceeded that of women-led companies approximately 3.5 times, the differences were more significant for larger companies. Thus, in 2021 the number of men-led companies was 3.1 times higher for small companies, but 7.5 times higher for large companies (Figure 2.5)

Figure 2.5 The ratio of men-led companies to women-led companies in 2021.



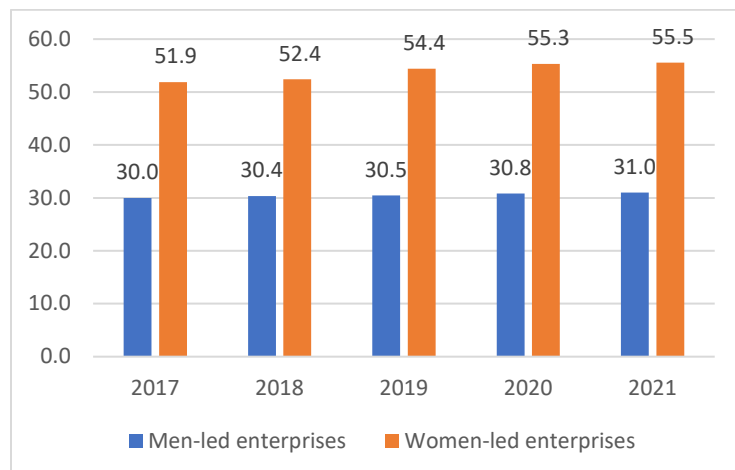
The average number of employed men and women in total is higher in men-led companies, standing at 83.9 employed men and 38.3 employed women in 2021 (vs. 25.0 men and 32.7 women employed in women-led companies). However, it should be noted that when disaggregated by size, the average number of employed women in women-led enterprises is higher for all sizes of enterprises (Figure 2.6a and 2.6b). This seemingly confusing result is due to the distribution of men- and women-led enterprises by size: as shown in the previous picture, there are significantly more large men-led enterprises in the country compared to women-led ones.

Figure 2.6. Average numbers of employed persons in men- and women-led enterprises, by sex and enterprise size



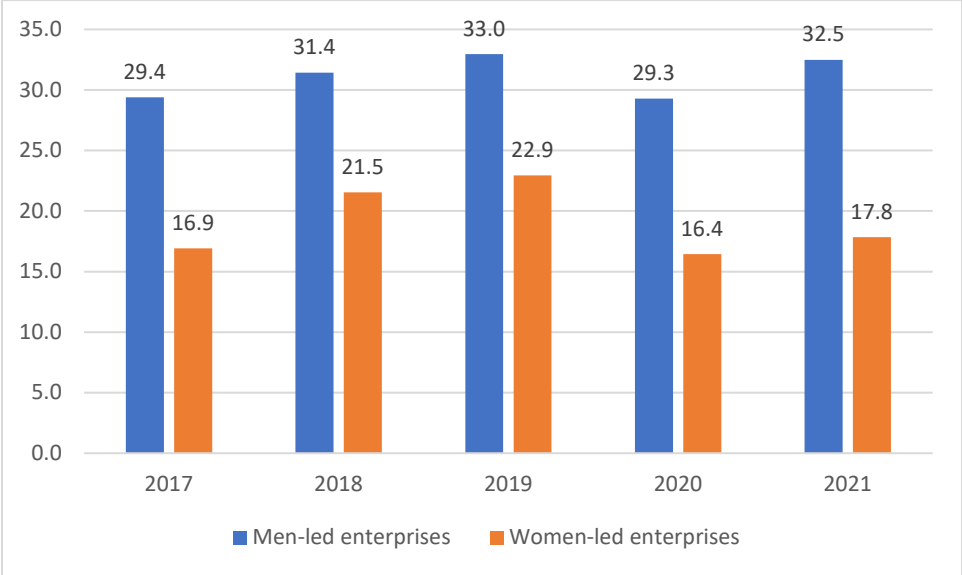
As it can be seen from 2021 data above, data disaggregation by sex of company managers provides remarkable results and should be further highlighted. Similar to 2021, during 2017-2021 the women-led companies employed more women than men even in absolute numbers, with the women’s share in total employment standing at 55% in 2021 (Figure 2.7). It should also be noted that the uptrend in women’s relative employment has been recorded throughout 2017-2021, and it was particularly evident in women-led enterprises (a 3.6 percentage point increase), while in companies led by men the share of women’s employment increased more modestly (1.0 percentage point).

Figure 2.7. Women’s share in total employment in women- and men-led companies, %



In 2017-2021 the differences in remuneration were significantly lower in the companies led by women. The gender pay gap in men-led companies stood at 32.5% in 2021, significantly exceeding the same indicator for women-led companies of 17.8%. The significant drop in the gender pay gap rates in 2020, likely reflecting the pandemic effects, was registered for both men- and women-led enterprises

Figure 2.8 Gender pay gap in trading companies, by sex of company managers, %



2.2.2. Employment and wages by occupations

The labour statistics surveys annually collect data not only on general levels of employment and wages, but also with disaggregations by occupations. It is obvious that basic gender-in-trade indicators such as the women's share in employment or the gender pay gap provide only a general picture and do not fully explain differences in employment and wages among men and women. Hence, the availability of detailed labour data broken down by skill levels represent an important and extremely valuable source for analyzing gender differences in trading companies.

For the purposes of gender-in-trade statistics the data on occupation was used at one-digit level of the International Standard Classification of Occupations (ISCO-08). As a result, the sex-disaggregated data on employment and wages data was used for the following nine⁵ large occupation groups:

- 01 Managers
- 02 Professionals
- 03 Technicians and associate professionals
- 04 Clerks
- 05 Service and sales workers
- 06 Skilled agricultural, fishery, and forestry workers
- 07 Craft and related trades workers
- 08 Plant and machine operators and assemblers
- 09 Elementary occupations

The first important insight about the gender differences in employment is seen in the structure of employed men and women by large occupation groups. For convenience only the 2021 data is provided in Table 2.2 below, as the percentage distribution is similar for the previous four years. It can be seen that the small women's share in employment - 31.9% vs. 68.1% for men – is almost fully explained by two largest occupation groups of “craft and related trades workers” and “plant and machine operators and assemblers”. In these occupation groups men constitute 37% of total employment while the same figure for women stands at only 5.6%.

⁵ The data also contained employment and wage numbers for a tenth occupation group “employed workers, not elsewhere classified” which were not used in calculations due to their insignificance.

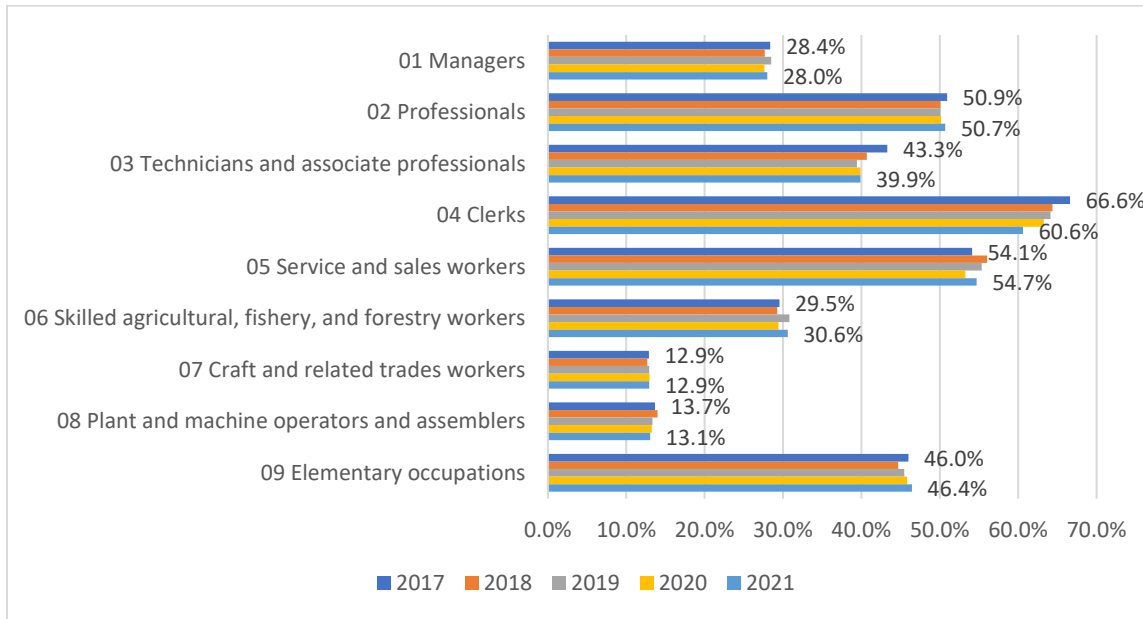
Table 2.2. Percentage distribution of employed men and women in trading enterprises in 2021, by one-digit ISCO occupation groups, %

| Occupations | Men's share in total employment, % | Women's share in total employment, % |
|--|---|---|
| 01 Managers | 5.9 | 2.3 |
| 02 Professionals | 8.8 | 8.7 |
| 03 Technicians and associate professionals | 5.0 | 3.6 |
| 04 Clerks | 1.3 | 2.6 |
| 05 Service and sales workers | 3.2 | 3.8 |
| 06 Skilled agricultural, fishery, and forestry workers | 1.0 | 0.4 |
| 07 Craft and related trades workers | 19.9 | 2.9 |
| 08 Plant and machine operators and assemblers | 17.2 | 2.7 |
| 09 Elementary occupations | 5.8 | 4.8 |
| Total: | 68.1 | 31.9 |

For other occupations it should be noted that in the third largest occupation group of “professionals” the shares of employed women and men were at a near gender equality level. On the other hand, employed women outnumber men in the occupation groups of “clerks” and “service and sales workers”. Finally, there 2.5 times more men managers than women managers.

The relative employment of women over the years of 2017-2021 is presented in Figure 2.9 below. It can be seen that over the five-year period the indicator remained stable for most occupation groups. Particular attention should be paid to the occupation group of “clerks”. Women’s share in employment for clerks has the maximum value among all nine occupation groups, standing at 66.4% in 2017. On the other hand, this group also shows the largest change in the women’s share in employment: during the five-year period the share of women-clerks was falling and finally reached 60.6% in 2021.

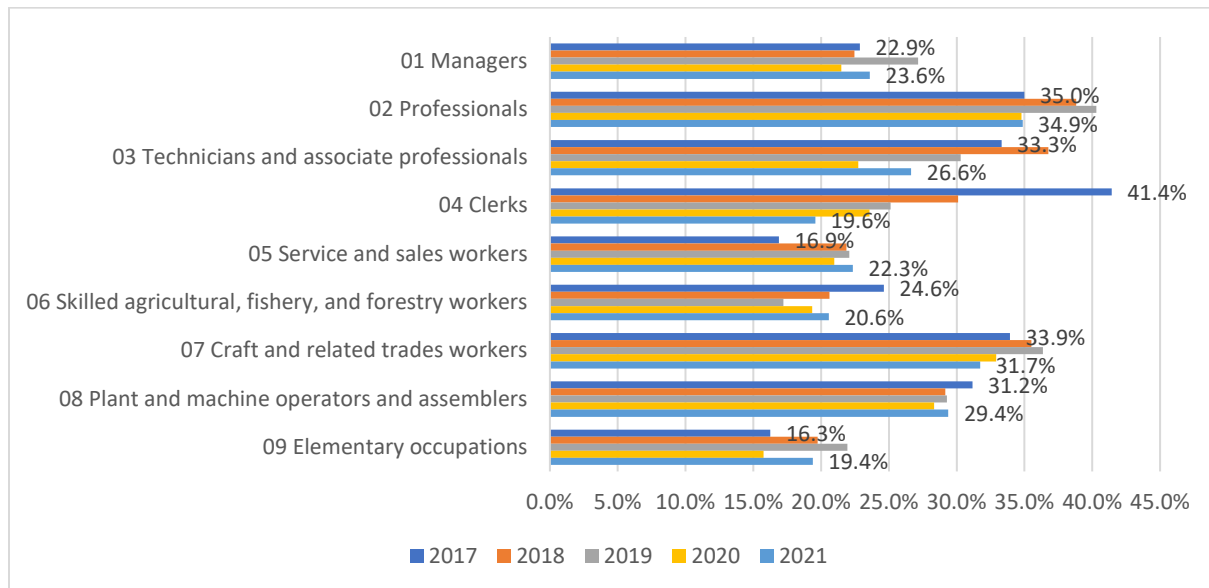
Figure 2.9 Women’s share in employment in trading enterprises in 2017-2021, by one-digit ISCO occupation groups, %



Sex-disaggregated wage data broken down by occupation groups also reveal interesting peculiarities with regard to gender differences in earnings. It turns out that gender pay gap for managers is not extremely high standing at 23.6% in 2021. Relatively low gender pay gap rates (near 20%) are also observed in “elementary occupations”, “skilled agricultural, fishery, and forestry workers” and “service and sales workers”.

The highest gender pay gap rates in 2021 are observed for “professionals” (34.9%) and “craft and related trades workers” (31.7%). It is interesting to note a significant decline in the gender pay gap for the occupation group of “clerks” from 39.6% in 2017 to less than 19.6% in 2021. Incidentally, the higher remuneration for women in this group coincided with higher demand for the clerks’ jobs from the part of men: as it was shown above, in the same years the respective share of men’s employment increased by almost 6 percentage points (from 33.6% in 2017 to 39.4 in 2021).

Figure 2.10 Gender pay gap in trading enterprises in 2017-2021, by one-digit ISCO occupation groups, %



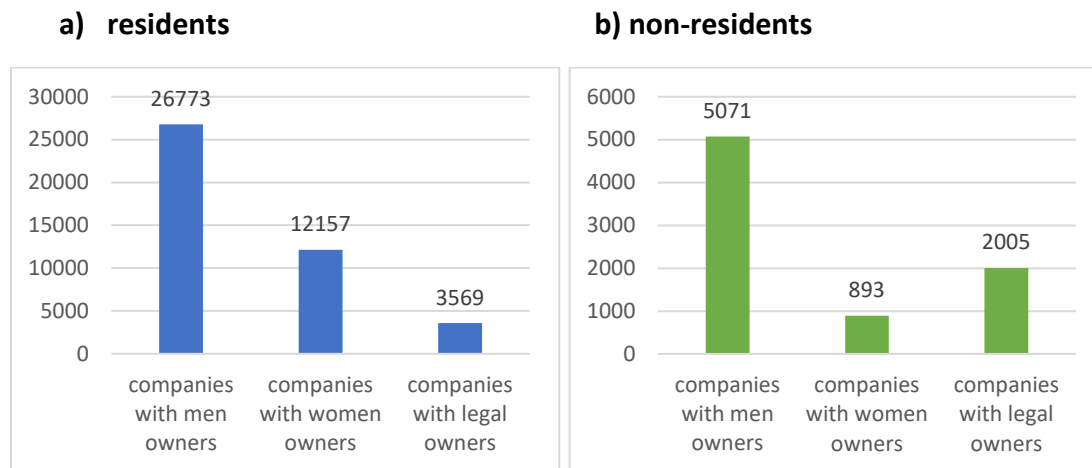
2.2.3. Ownership

The statistical business register contains data on ownership of enterprises by men- and women-owners (physical persons) and legal owners. The ownership variables can be further disaggregated into resident and non-resident owners. It should be noted that further disaggregation of legal owners into men and women owners was not possible which sets certain limitations to the analysis of ownership of trading enterprises from gender perspective, as we shall see below. However, the existing figures already provide important insights about gender differences in terms of ownership.

Through the microlinking the ownership data was linked to about a half of the trading companies. Below a number of uses of ownership-related data are presented.

The simple indicator of men and women owners shows that the number of companies with at least one men owner exceeds that with at least one women owner 2.15 times among residents and 5.1 times among non-residents (Figure 2.11a and 2.11b)

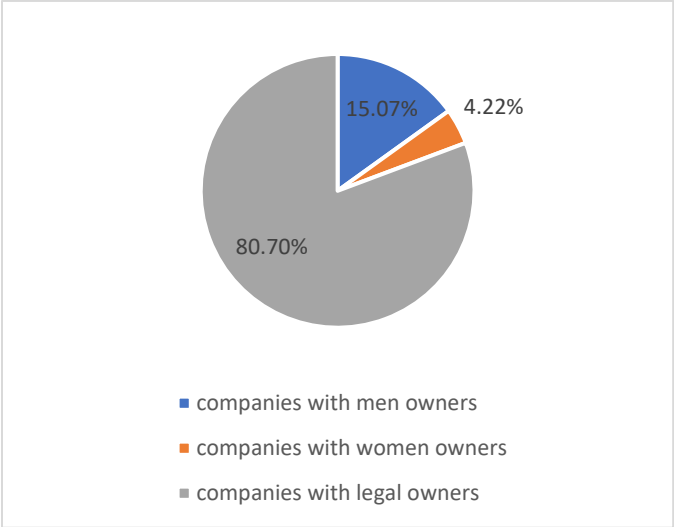
Figure 2.11. Number of companies with at least one man, woman, or legal owner



Calculation of a more complex indicator which takes into account the value of the trading enterprises is also possible due to the availability of data on enterprise assets. Using this approach for 2021 asset values of enterprises, it turns out that among physical persons men owned almost 4 times more of resident enterprise assets than women. The conclusions are clearly not complete due to the fact that more than 80% of the enterprise asset value of the resident trading companies was owned by legal entities, and sex-disaggregated data on those legal owners was not available. However, given the almost universal international experience

showing that men are primary owners of large legal companies, it can only be expected that ownership-related gender differences will only increase if additional data on the sex of owners of legal entities becomes available.

Figure 2.12. Owners' shares in enterprise asset value of resident trading companies, as of 2021, %



Finally, it should be added that the availability of ownership data can also be used for the purposes of calculating basic and differentiated employment and wage indicators given the gender-specific ownership (e.g., women's share in employment of gender pay gap for enterprises where men or women own more than 50%).

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

As it was already mentioned, the advantage of producing gender-in-trade statistical indicators through the microlinking approach consists in processing already available data. The microlinking method allows for maximum flexibility of using enterprise-level data and does not require additional funds for collecting gender-related information on trade.

However, the production of gender-in-trade statistics obviously needs human resources for linking, processing and analyzing the data. Hence, one of the objectives of the current work was to assess the volume of required effort for producing statistical indicators and present the preliminary results to potential users of gender-in-trade statistics

Below we describe in detail the process of the cooperative work with the BNS on the statistical indicators. Apart from highlighting the positive sides of the cooperation, certain challenges are also discussed.

Finally, we provide the outcome of the first discussions with potential users of gender-in-trade statistics.

Bureau of National Statistics

It goes without saying that the strong cooperation of BNS represented one of the most important pre-requisites for the UNECE project. The other important aspect for successfully performing the data microlinking and calculating estimates of gender-in-trade statistics was the availability of all necessary data at BNS. Full access to customs trade data, use of common identifiers (BINs) for business entities represented sufficient conditions for conducting necessary preparations for microlinking.

From the very beginning of the project in end-September 2022 the Department of SDGs and International Relations of BNS efficiently coordinated the process of identifying non-trade data sources. Responsible persons from the key subject matter units (external trade statistics, structural business statistics, labour statistics, statistical business registers and classifications) were involved in online discussions and provided necessary details on the respective methodologies as well as practical aspects of statistical production.

Initially, the necessary trade variables were identified and the full trade dataset was prepared by external statistics department staff. Using the common identifiers of trading enterprises from the trade dataset, non-trade data sources were gradually added and with the consultant's support a comprehensive dataset for gender-in-trade analysis was obtained.

A large number of variables were prepared within less than a month by the time of the UNECE Workshop on Communication of Official Statistics and Gender-in-Trade Statistics held in Astana during October 19-21, 2022. The availability of data made possible to calculate a number of

gender-in-trade statistical indicators which were part of the interactive session of the Workshop.

The interactive workshop session on the gender-in-trade statistics was attended by the relevant BNS staff from various subject matter departments. In total three presentations were given covering i) the gender-in-trade methodology and calculation of statistical indicators; ii) international experience and country case studies, with a particular emphasis on the gender-in-trade pilot work in Georgia as a proposed model for the work in Kazakhstan; and iii) initial assessment of data sources for the gender-in-trade statistics work in Kazakhstan and preliminary outcomes. The slides presented during the interaction session of the Workshop are given in the Annex.

Apart from conducting the interactive session, the visit to the Astana Workshop allowed for face-to-face discussions with the BNS responsible staff to ensure that linked data was of proper quality and the preliminary estimates were sensible.

The outstanding issues related to the data microlinking and calculation of indicators were the subject of the consultant's second visit to Astana during November 22-25, 2022. During the visit discussions with BNS staff touched upon the data quality and data calculations, as well as the next steps for statistical production of gender-in-trade indicators.

It can be thus summarized that the overall process of the project cooperation with the BNS and the Department of SDGs and International Relations was very positive, and the stated results for the consultancy were well achieved within the expected timeframe.

The cooperation project also revealed certain challenges that are likely to be encountered in the process of independent production of gender-in-trade statistics and new indicators, in general. It is expected that the production of the gender-in-trade indicators will be performed by the Department of SDGs and International Relations. At the same time, the preparation of datasets as well as the calculation of indicators in the BNS is still done by the Computing Centre which represents a separate institutional unit and includes economists who may not be fully aware of the methodological details for the indicators to be calculated. The knowledge of the methodology remains in the subject matter departments which do not see full details related to data processing and only use final products of the calculations (mostly tables with ready-made indicators). While this approach works with standard indicators which have been calculated over many years (with respective production risks), this type of organizational setup presents particular difficulties with calculating new indicators when there is a need for detailed data analysis by the respective methodologists. Separate physical location of subject matter departments and the Computing Centre (data for the gender-in-trade statistics was produced in Almaty) adds to complexities of the process.

In this regard, there is a need to establish close cooperation with the view of bridging the gap between the producers of indicators (Computing Centre) and the methodologists (subject matter

departments). The ultimate goal is for the methodologists to be fully aware of the practical aspects of the calculation of gender-in-trade indicators.

Discussions with potential users

The ultimate goal of any type of statistics is to be useful. Thus, within the project framework the meeting with outside users of trade statistics was organized during the consultant's second visit. It was possible to discuss the preliminary results with the representatives of business community as well as with the quasi-government organization involved in the trade policy issues, both being active counterparts of BNS

As it was found out currently there were no initiatives in the country related to the gender issues in trade. This also can be explained by the lack of relevant data. Hence, the preliminary results of the work presented to the participants of the discussion were new.

During the discussion a very pertinent practical issue raised by the representatives of the trade policy organization was related to various possibilities of using gender-in-trade datasets. In particular, they asked about certain exogenous shocks, in particular the COVID pandemic or introduction/removal of certain trade tariffs, and their influence on the trade with "gender-sensitive" products (e.g., cosmetics). It was explained that enterprise level time-series data do allow for such type of analysis, as all the necessary components (e.g., HS codes for goods) are available.

It was seen that more information and explanations was necessary for explaining the purpose and scope of the gender-in-trade statistics to the representatives of the business community. In this regard, examples of gender clauses in bilateral trade agreements (which are already used by a number of South American countries as well Canada, Australia and New Zealand) represent a good illustration of using gender statistics in practice for trade policies.

To summarize the discussion, it was obvious that, just as in the case of introducing any new statistical indicators, there is a need of active communication with various users to explain the benefits of gender-in-trade indicators. It is thus expected that the work performed within the UNECE cooperation project will be useful for establishing such communication.

4. Action plan for production of gender-in-trade statistics

Next steps which are proposed for production of gender-in-trade statistics in Kazakhstan are based on the overall assessment of the project cooperation which was described in the previous section.

The strong commitment of BNS to the cooperation project and its results as well as availability of all necessary data represent a good foundation for producing and disseminating gender-in-trade indicators. From the discussions with the BNS staff, the idea is to start regular production of gender-in-trade statistics on an annual basis.

In this regard, a number of recommendations are seen pertinent. First, it is recommended to start with a production of *basic gender-in-trade indicators on employment and wages* in key disaggregations, such as

- Women's share in employment disaggregated by companies' trading status/company size/skill levels (occupations)
- Gender pay gap by companies trading status/ company size/ skill levels

In identifying concrete gender-in-trade indicators for statistical production it is recommended to use the *UNCTAD's Compilation Guidelines* which are expected to be available by the end of 2022 – early 2023 and which will also contain the list of recommended indicators. However, one should not be limited only with the recommended list – gender-in-trade datasets obtained through microlinking have big flexibility to be used for production of gender indicators at different disaggregations which may be of interest to the country.

A second set of recommendations is related to the organization of the production process. As discussed in the previous section, insufficient involvement of a subject matter department in the process of practical calculations by the Computing Centre will present significant difficulties for production of new gender-in-trade indicators. Hence, it is recommended for the Department of SDGs and International Relations to work closely with the Computing Centre in order to manage full datasets and acquire necessary practical skills in handling data.

Finally, BNS should actively reach out to different potential users of gender-in-trade indicators in the government, international organizations, academia, media, etc. The evolving field of gender-in-trade statistics will continue to expand globally and thus will increase the number of its users in the coming years.

Annex 1. List of persons consulted within the framework of the project

Bureau of National Statistics

1. Ms Ainur Dossanova, Director of International Cooperation and Sustainable Development Department
2. Mr Arman Khaletov, Head of Statistics Division, International Cooperation and Sustainable Development Department
3. Mr Daniar Imanbaev, Head of Mutual Trade and Trade Markets Division, Department of Services and Energy Statistics
4. Ms Natalia Belonosova, Director of Labour and Living Conditions Statistics
5. Ms Nadezhda Maiorova, Head of Economic Register Division, Department of Statistical Registers and Classifications
6. Ms Aigul Aubakirova, Specialist of International Cooperation and Sustainable Development Department
7. Assemgul Abraeva, Senior Specialist of International Cooperation and Sustainable Development Department
8. Ms Aidana Baikanova, Senior Specialist of National Accounts Department

National Chamber of Entrepreneurs

1. Ms I.V. Turina, Deputy Director of Trade Department
2. Mr A.A. Momyrbekov, Expert of Trade Department

QazTrade, Centre for Development of Trade Policy

- Ms. D.E. Tastembekova, Chief Expert of International Integration Department
- Ms. A.Z. Mukashova, Chief Expert of International Integration Department