

Gender features of the Kazakhstan labour market in the context of sustainable development

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Abstract

Kazakhstan is demonstrating its commitment to promoting gender equality and working closely with the global community. Over the past decade, the gender gap in the structure of labour force of Kazakhstan has slightly decreased. However, gender gaps persist. Women in Kazakhstan make up slightly more than half of the total population of the country, but their contribution to indicators of economic activity, growth and well-being of republic is significantly below their potential. In this article, gender dynamics of Kazakhstan labour market are explored at macro and micro levels using GIS. In this article, authors tried to answer the following questions: What is the gender situation in the labour market of Kazakhstan, as a country of Central Asia region with an Eastern mentality? Does the growing number of employed women lead to higher levels of gender equality in the Kazakhstan labour market? What are the characteristics of women's employment compared to men's? The results of research show that women's increased access to jobs has not led to a significant reduction in the gap in earnings and incomes between men and women. This is due to the gender segregation of vocational education, which lays the foundation for sectoral differentiation of employment with different geographical distributions. Also, the so-called "glass ceiling" or low accessibility to leadership positions hinders women's greater competitiveness. In addition, such an important element of labour market as unpaid domestic work, which is mainly occupied by women, is still not recognized.

Keywords: gender inequality, labour market, labour force, GIS, Sustainable Development Goals (SDG), human capital, regions, spatial differentiation.

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Introduction

Significant progress has been made recently in moving towards gender equality, and the position and activities of the governments of several countries of the world have been characterized by a positive attitude towards this problem. Ensuring gender equality is one of the factors for achieving sustainable development and effective economic growth of the country and region. Despite the growing attention to the problems of gender inequality, professional segregation, and insufficient use of women's human capital in the economy, most countries are not able to overcome barriers to equal rights for men and women. The

gender factor determines educational and career opportunities, influences the social status of an individual in society, influences professional self-determination and self-realization.

Representatives of various scientific schools of the 17th–18th centuries, studying market relations, paid attention primarily to men as active participants in production and social processes, not taking into account the subordinate position of women, who for a long time were not considered as social units, which did not allow assessing the domestic work of women and mothers as a process of reproduction of human capital.

The involvement of women in social production in the 18th–19th centuries did not lead to an

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active study of the problem of social equality of the sexes, and the justification of discrimination against women by property relations excluded gender aspects from the analysis of society and caused gender deformation in the social policy of “real socialism” as classical Marxists declared (O Zhenskom Voprose... 1971).

Only in the 19th century researchers of the concept of “living productive forces” in the context of approaches to the assessment of human capital in their works, assessing the human capital of the nation, considered it as a combination of the male and female human capital of the country. This was the starting point for further gender-based labour market research by scholars such as SINHA, J.N. (1967), who looked at the impact of economic growth and education on women’s labour force participation, LINCOVE, J. (2008) who studied the relationship between national income and women’s labour market participation, LAM, D. and DURYEY, S. (1999), MATAS, A. et al. (2010), CONTRERAS, D. et al. (2011) highlight the importance of education in women’s labour force participation. HAN, J-S. and LEE, J-W. (2020) made an analysis and assessment of human capital in terms of the composition of the labour force by age, gender, education and wage level.

Gender aspects of inequality in the world of work are described by different scientists using different bases. KESSLER-HARRIS, A. (1982) explains the current position of women in the structure of labour relations through the concept of the ideology of the family, which for a long time kept women away from jobs, from reaching the heights of their profession, giving much more importance to their reproductive function.

HARTMANN, H. (1976) argues that capitalism seeks to maintain a patriarchal society in which men can exercise control over women’s labour, ensuring and protecting their own privileged position. In conditions where women are not allowed to enter highly paid and prestigious professions, they look at marriage as a means of resolving material problems and are ready to put up with domestic exploitation.

GAME, A. and PRINGLE, R. (1983) in “Gender at Work” describe the situation of women working in the context of the development of computer technology. According to their observations, the growth of computerization did not lead to a decrease in labour market segregation, but only secured a certain area of professional activity in the field of information technology for women, blocking access to more prestigious activities.

MIES, M. (1986) in “Patriarchy and Accumulation on a World Scale”, argues that considering housekeeping as a natural role for women means reducing her paid work to just a source of “additional” income, thus, justifying lower wages for women) and isolating women workers from each other and from working men (which prevents collective struggle in the workplace).

AGARWAL, B. (2007) in her work on gender, property and power “Towards freedom from domestic violence” demonstrates that the ability of women to own and inherit property acts as a serious deterrent to spousal violence.

Women’s empowerment is one of the 17 sustainable development goals. SDG 5 is not only a vital goal in its own right, but it is also a cross-cutting goal for all SDGs by virtue of the recognition that economic and social development depends on the achievement of gender equality (BUSHATI, B. and GALVANI, A. 2017). The relationship of gender equality and religion, ethnicity, age and environment studied by KUMAR-PATHANIA, S. (2017). Gender equality issues within the SDGs were also considered by KÜFEOĞLU, S. (2022) and ZAMPONE, G. et al. (2022).

The majority of women in the world work long hours a day, although most of their work is related to family or childcare responsibilities, which prevents them from working outside the home (ILO, 2017). A study of the correlation between fertility and female employment showed that until the mid-1970s, a strong negative relationship prevailed in developed countries, but subsequently the correlation became low (ENGELHARDT, H. et al. 2004). This was due to greater availability of childcare services, family policies

(maternity leave), changing attitudes towards working mothers, and an increase in part-time jobs (RINDFUSS, R. and BREWSTER, K. 2000). Although the balance between motherhood and employment is still negative in some developing countries, even though they are experiencing strong economic growth (CONTRERAS, D. *et al.* 2011). KERN, L. explores gender processes from the point of view of geography, the role of a woman living in an urban environment (SÁGI, M. 2022).

BURIBAYEV, Y.A., KHAMZINA, Z.A., YERMUKHAMETOVA, S., TURLYKHANKYZY, K., YESSENGAZIEVA, A. and ORYNTAYEV, Z. studied the possibilities of ensuring equal employment for men and women in Kazakhstan, proposed measures to improve legislation on labour protection and working conditions, improve working conditions, as well as the possibility of introducing and expanding flexible forms of employment, studied the role of international legal instruments in the formation of national methods for ensuring gender equality in Kazakhstan (see BURIBAYEV, Y.A. and KHAMZINA, Z.A. 2019; KHAMZINA, Z. *et al.* 2022).

GIS tools have also been used to highlight issues of gender inequality. BROWN, S. (2003) used field research and GIS to explore gender roles, responsibilities and workloads in a spatial context. Considered women's employment in Oman and modelled the women's employment rate based on GIS (SHAWKY, M. 2018). A GIS platform has been created to visualize gender inequality at the subnational level in the Lower Mekong region (see <https://servirmekong.maps.arcgis.com/apps/webappviewer/index.html?id=3867739472d14d9f9f6bebb17f6f976b>). Scientists from Shahid Chamran University studied and analysed women's socio-cultural barriers to using public transport in Iran using GIS tools (GOODARZI, M. *et al.* 2020). In the book edited by OZDENEROL, E. (2021), scholars have explored using the latest mapping and GIS applications, contemporary issues of gender inequality such as the visualization of gender dynamics at the macro and micro levels, the role of GIS in the context of gender inequality, the adaptation of GIS for

the criminal justice response to domestic violence, and to address gender-based violence, spatial inequalities in gender representation across industries, social and environmental injustice faced by female migrant workers, a social vulnerability index is presented to identify spatial patterns of social vulnerability and gender inequalities.

The gender gap in the global labour force participation rate has narrowed. Despite the progress made, some gender gaps remain and greater efforts are needed to close them. In particular, the gender gap in unemployment remains large, especially for young women. In addition, women continue to be disproportionately represented among contributing family workers and in other forms of informal employment. Despite some improvements, women continue to face significant pay gaps caused by occupational segregation and discrimination, as well as different working hours compared to men in paid and unpaid work (ASIF, I. *et al.* 2018).

According to World Bank research, women are excluded from working life in some societies. In the world, the share of working women is 49 percent, and the share of working men is 75 percent. Gender inequality persists in the distribution of power. Globally, women head less than 20 percent of all businesses (World Bank, 2019). Women work in economically less productive sectors and in occupations that offer potentially fewer opportunities for on-the-job learning.

In the process of employment, women face industry-specific legislative restrictions. In 65 countries women are prohibited from working in the mining industry, in 47 countries employment opportunities for women in the manufacturing industries are limited, and 37 countries do not allow women to work in the construction industry. Moreover, in 29 countries around the world, women have shorter hours of work than men (World Bank, 2019).

In the development strategies of international organizations, the problem of gender equality as a component of socio-economic development is perceived as an important direction of state policy.

The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), adopted in 1979 by the UN, defines the imperative of equality in results, not just equality in opportunities: it is not enough to develop anti-discrimination laws, it is necessary to form a mechanism for their application in public life and the economy, to guarantee true gender equality, so that women enjoy equality in their daily lives. The dual goal of achieving gender equality should be taken into account: on the one hand, it is the expansion of opportunities and choices for women, on the other hand, the realization of national potentials for a positive response to the interests and problems of women.

In the Synthesis Report of the UN Secretary-General on the Sustainable Development Agenda prepared for the Global Summit (September 2015), 12 out of 17 goals are gender-sensitive. Of course, the position of women in the world over the past quarter century has undergone significant changes for the better in areas such as education and health care, as well as the level of employment in the labour market, sources of income.

And what is the situation in Kazakhstan, in the country of the Central Asian region with an Eastern mentality? What are the characteristics of women's employment compared to men's? With over a decade of experience in implementing a comprehensive gender equality strategy and an updated policy approved in 2017, Kazakhstan demonstrates an unwavering commitment to promoting equality between women and men.

Over the past two decades, Kazakhstan has committed itself to some international agreements, adopted many laws and developed government measures that have become a key condition for increasing the participation of women in public life. Based on the observance of international agreements, such as the Beijing Declaration and Platform for Action (1995), the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1998), the Millennium Development Goals, the republic has developed its Gender Equality Strategy for 2006–2016, which until

recently served as the main reference point for government activities in the gender area. In connection with the completion of the implementation of the Gender Strategy 2006–2016. The Government has prepared a Concept for Family and Gender Policy until 2030.

Programs within the framework of gender policy should be developed based on legislative and socio-economic factors, but it is also necessary to take into account the established ethno-economic and geopolitical conditions, including national and cultural traditions. However, the assessment of indicators of socio-economic development of the regions of the Republic of Kazakhstan indicates gender disproportions associated with existing national traditions, which is especially evident in the southern regions of the country due to various mental, national and religious characteristics that determine attitudes towards women. In the south of Kazakhstan, the population is territorially and historically closely connected with the peoples of Central Asia and adheres mainly to the views characteristic of eastern countries in relation to women. Whereas, the inhabitants of Northern, Northwestern, and Eastern Kazakhstan border on Russia, which causes the concentration of the European contingent in the regions and a more loyal attitude towards women (SHATROV, M. 2013; UN News. 2016; Representation... 2020).

Data and methods

This article assesses progress and gaps about gender equality and women's empowerment in Kazakhstan, based on information from global databases and available in the country, with a focus on the following key areas of SDG 5: women's access to decent work, low-paid female labour, increase in women's unpaid work, overrepresentation of women in the informal sector, women's participation in decision-making, women's and girls' access to education and training.

The analytical part of the study began with an analysis of the level of participation of women in the labour force of the Republic of

Kazakhstan in comparison with other countries. For country analysis, the statistical database of the International Labour Organization (ILO) was used. When selecting indicators, we relied on a system of indicators to track progress towards the SDGs and key ILO indicators. Also, these indicators seemed relevant to us, since in the analysis the gender imbalance was clearly expressed in them. The gender characteristics of some key demographic indicators, labour market indicators (Labour force participation rate, Employment rate, Employment by sectors of the economy, Wages, Employment in the informal economy, Unemployment, Unpaid domestic work) were analysed in the context of the regions of the Republic of Kazakhstan. For this purpose, statistics were collected for the last 20 years (2000–2021) from statistical collections, the “Taldau” information and analytical system, the national SDG reporting platform of the Bureau of National Statistics of the Republic of Kazakhstan to analyse gender dynamics in the context of the regions of Kazakhstan. Although gender statistics are available in Kazakhstan compared to other Central Asian countries, many indicators are missing at the micro level, which does not provide a clear picture of gender differences and hinders regional analysis of gender processes. The general legislative framework for statistics is generally gender-neutral.

For the assessment, a mixed methods approach was adopted, including spatial comparative, statistical analysis, GIS methods. Gathering gender statistics in a geographic context and retaining baseline location information can reveal patterns in data that would otherwise be missed, draw insights into gaps, missed opportunities and, ultimately, entry points for policy agendas. The use of GIS in the analysis of gender issues will help to identify spatial patterns of gender imbalance and with the presence of a relationship with the location of certain objects. GIS will allow not only to make a quantitative analysis, but also to bring the results to an understanding through visualization. The result of the spatial analysis will be thematic maps reflecting the results of the research work.

The geo-information part of the study is based on the scientific and methodological principles and ideas of the general theory of cartography of domestic and international integrated mapping. A geodatabase (DB) was developed on objective indicators of the labour market. The database consists of two types of information: statistical and spatial. Vector layers are created and processed in GIS and meet the basic requirements of vector information (required detail, reliability, accuracy, compliance with the requirements for the coordinate system and cartographic projection, data exchange format, etc.). Vector layers are loaded into the database as a cartographic base for all thematic maps and contain information about the boundaries and settlements of administrative-territorial entities. The basis of computer software is the instrumental geographic information system ArcGIS.

Results and discussion

Kazakhstan, being a country with a vast territory, has difficulty balancing regional differences between a few centres and a vast periphery (Nyussupova, G. et al. 2021). Differences across regions make it difficult to achieve gender equality and the empowerment of women and girls in the country (SDG 5), as well as an obstacle to other Sustainable Development Goals, such as ensuring healthy lives and promoting well-being for all at all ages (SDG 3), inclusive and quality education (SDG 4), promoting sustained, inclusive and sustainable economic growth (SDG 8), building resilient infrastructure and promoting sustainable industrialization and innovation (SDG 9).

The article presents an analysis of gender differences in Kazakhstan with a focus on the following areas of SDG 5: women’s access to decent work, women’s low-paid work, increase in women’s unpaid work, women’s overrepresentation in the informal sector, women’s participation in decision-making, women’s and girls’ access to education and training. These areas highlighted in SDG 5 continue to seriously undermine the potential to achieve

equal rights, opportunities and quality of life for women not only in Kazakhstan but also in many other countries of the world.

Women’s access to decent work

According to official statistics, at the beginning of 2021, 9,719.2 thousand women lived in the Republic of Kazakhstan, which is 51.5 percent of the total population of the country. The number of women exceeds the number of men,

while the life expectancy of women is on average 10 years longer than the life expectancy of men in all regions of Kazakhstan (Figure 1).

In Kazakhstan, according to the ILO, the participation rate of women in the labour force in 2019 was 62.8 percent. The republic maintains a stable level of employment of women and is not inferior in this regard to many countries, including countries with highly developed economies (Figure 2). However, the contribution of female labour to the indicators of economic activity, growth,

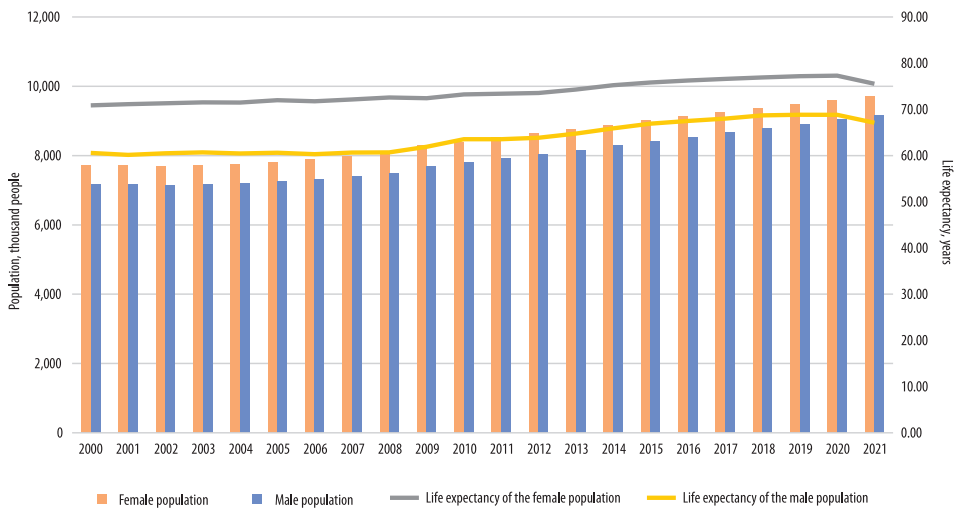


Fig. 1. Dynamics of the sex structure of the population and life expectancy of the male and female population in the Republic of Kazakhstan, 2000–2021. Source: Bureau of National Statistics of the Republic of Kazakhstan.

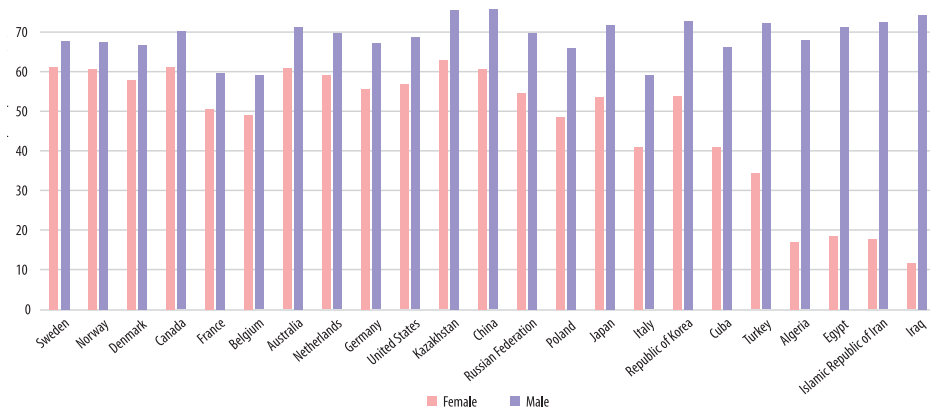


Fig. 2. The share of the male/female population in the labour force for 2019. Source: ILOSTAT, <https://ilostat ilo.org/>

and the well-being of the population is much lower than its potential.

According to the International Monetary Fund, the global economy is losing from 10 percent of GDP in developed countries to 30 percent in South Asia, the Middle East and North Africa due to inequality between women and men (KALPANA, K. *et al.* 2017). In addition, the study shows that increasing the participation of women in the labour force significantly increases the rate of economic growth and the well-being of the country (JONATHAN, D.O. *et al.* 2018).

However, there is a significant gap in the gender structure of the labour force. If, in developed countries, the gap is about 6 percent, then in Kazakhstan this figure is twice as large. Thus, in the republic, the level of participation of women in the labour force in 2020 was 63.7 percent, which is 11.8 percent lower than among men. The gender gap in the labour force shows no signs of narrowing. In the republic, by region, the same trend is observed in the gap between the share of women and men in the labour force (Figure 3). In all regions of the republic, the male population prevails in the structure of the labour force.

According to the Bureau of National Statistics, gender differences in employment status are small. The employment rate of women in Kazakhstan in 2020 amounted to 94.6 percent or 4,212.5 thousand people. Over the past 20 years, the employment of women in the republic has had a positive trend. Thus, compared with 2001, the employment rate of women by 2020 increased by 6.6 percent, or by 983.9 thousand working women (Figure 4). About 76.6 percent of the employed population, both women and men, are employed, about 23.4 percent are self-employed. The main area of female employment is the service sector. It employs 55.2 percent of women.

The global pandemic and the state of emergency introduced in connection with this in 2020 have seriously affected the Kazakhstan labour market. The acceleration of the transition to flexible forms of employment due to COVID-19 in 2020 is now reflected in the wide spread of remote work in Kazakhstan. The result of this in Kazakhstan was the development of alternative forms of employment, the active involvement of women and rural residents in labour activities. Thus, every 3rd remote worker in the country is a rural resident.

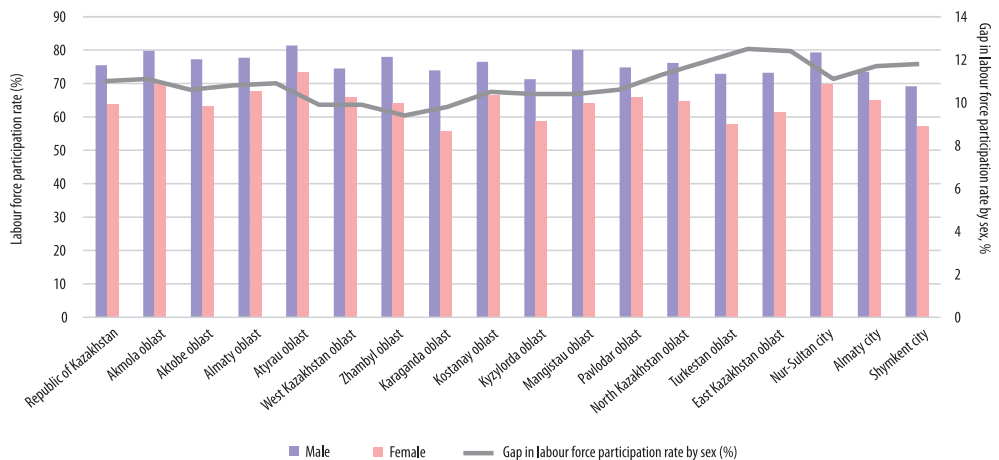


Fig. 3. The share of the male/female population in the labour force for 2020 by regions of the Republic of Kazakhstan (see left axis). Dynamics of the gap in the coefficient of the female and male population in the labour force in the Republic of Kazakhstan (see right axis). Source: <https://taldau.stat.gov.kz/>

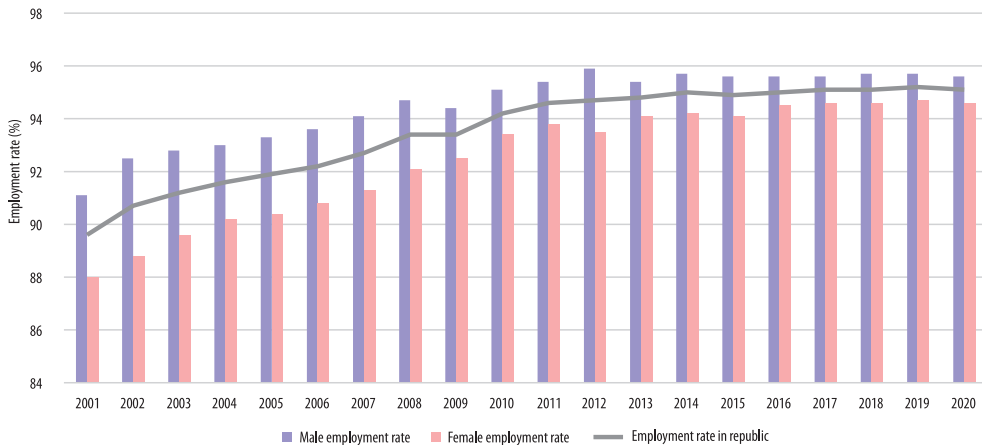


Fig. 4. Dynamics of the level of employment by sex in the Republic of Kazakhstan, 2001–2020.

Source: <https://taldau.stat.gov.kz/>

Many organizations in Kazakhstan have transferred employees to remote work (70% of employees), using online technologies as much as possible, but faced issues of proper design and organization of work processes. As a result of the state of emergency in 2020, Kazakhstan adopted legislative amendments to the Labour Code to improve the legal regulation of remote work. Now in the legislation, there are such concepts as “remote work” and “combined remote work”.

Although, in general, there is an increase in the employment of women in the republic, a regional analysis shows that the growth in the use of female labour is due to cities of republican significance (Nur-Sultan, Almaty and Shymkent), and several regions (Almaty, East Kazakhstan, Karaganda and Turkestan oblasts) (Figure 5). The growth of women’s employment in large cities of the country is explained by the predominance of the service sector in them, where women’s labour is most concentrated. Almaty and Turkestan oblasts are adjacent to large cities of the republic, where women from the oblast come to work.

At the same time, the distribution of men and women by sectors of the economy differs markedly. Thus, in the areas of transport and construction, 23.3 percent of employees

in each area are represented by women. In addition, the proportion of women is 1/3 of workers in the industry.

The highest concentration of women (over 72%) was noted in the areas of education, health care, as well as in the field of accommodation and food services (63.5%). Also, women accounted for about 60 percent of all workers employed in trade and financial activities compared to men (Figure 6) (see Gender statistics of the Bureau of National Statistics of the Republic of Kazakhstan, <https://gender.stat.gov.kz/>).

There are several reasons for the uneven distribution of women and men across sectors of the economy. Thus, the choice of activity is accepted by many women in favour of more flexible work schedules to combine work and family responsibilities. Gender stereotypes also influence the professional self-determination and career development of women. As a rule, only a small share of women has a technical education and relevant qualifications. Until recently, women in the republic were denied access to 191 types of work related to adverse working conditions, hard physical work (until 2018 there were 287) (Labour Code of the Republic of Kazakhstan, 2021). In October 2021, a law

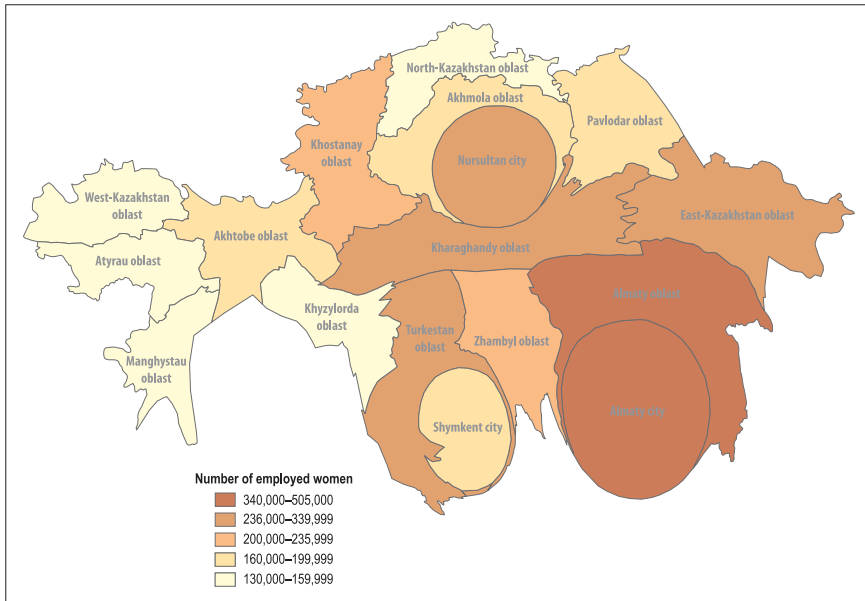


Fig. 5. Employment of women by regions of the Republic of Kazakhstan, 2020. Source: <https://taldau.stat.gov.kz/>

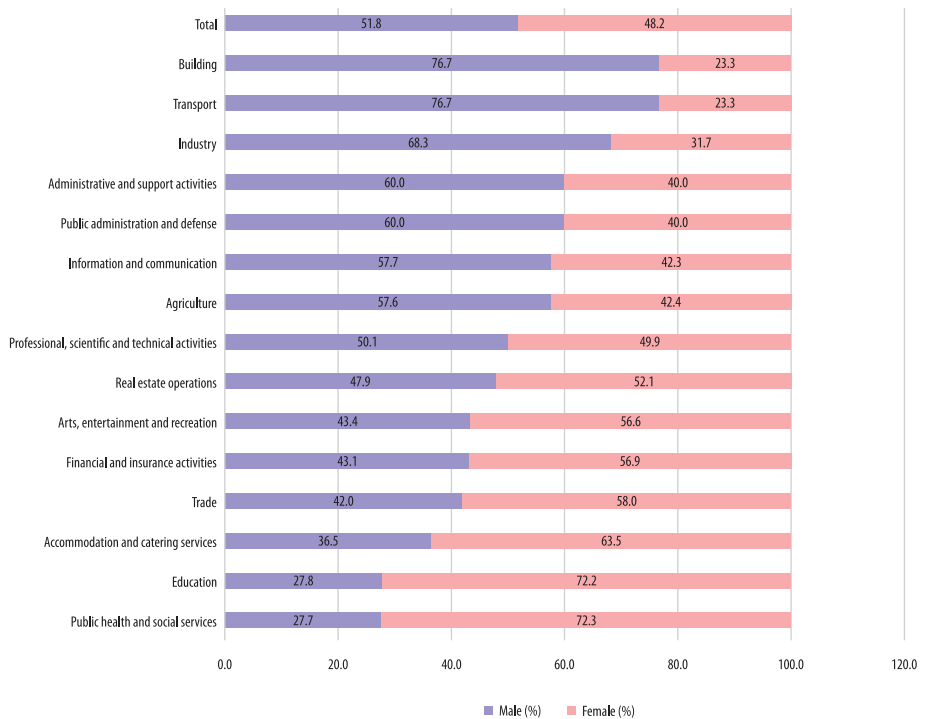


Fig. 6. Share of employed by groups of types of economic activity by sex in the Republic of Kazakhstan, 2020. Source: <https://taldau.stat.gov.kz/>

was signed that removes restrictions on the employment of women from the Labour Code (Law of the Republic of Kazakhstan, 2021). This action to eliminate discrimination against women became part of the Human Rights Priority Action Plan approved on 11 June 2021. However, the most overriding factor remains the gender segregation of vocational education, which lays the foundation for sectoral employment differentiation.

Women’s low-paid work

Women’s greater access to jobs has not led to a significant reduction in the gap in earnings and incomes between men and women. Some of the countries where the income gap between men and women is particularly large are among those that have experienced the fastest growth in female employment in recent years. As a rule, these are countries

with pronounced export orientation, such as China, the Republic of Korea, Singapore and Chile. This trend suggests that the traditional pattern of discrimination against women’s access to employment appears to be giving way in some cases to a targeted preference for female workers. It should be emphasized here that this preference is usually based on the consent of women to perform unskilled work, receive low wages, as well as their reputation as obedient and uncomplaining workers.

In the regions of Kazakhstan, as well as the average for the republic, women’s wages are 30–35 percent lower than men’s ones. In 2020, women’s wages were 75 percent of men’s wages. Over the past 10 years, the dynamics of the ratio of wages of men and women shows that women, on average, earned 32 percent less than men (Figure 7), women received the least wages in 2018 (65.8% of men’s wages), but 2020 saw a sharp drop in the male-to-female wage ratio of 9.2 percent from its

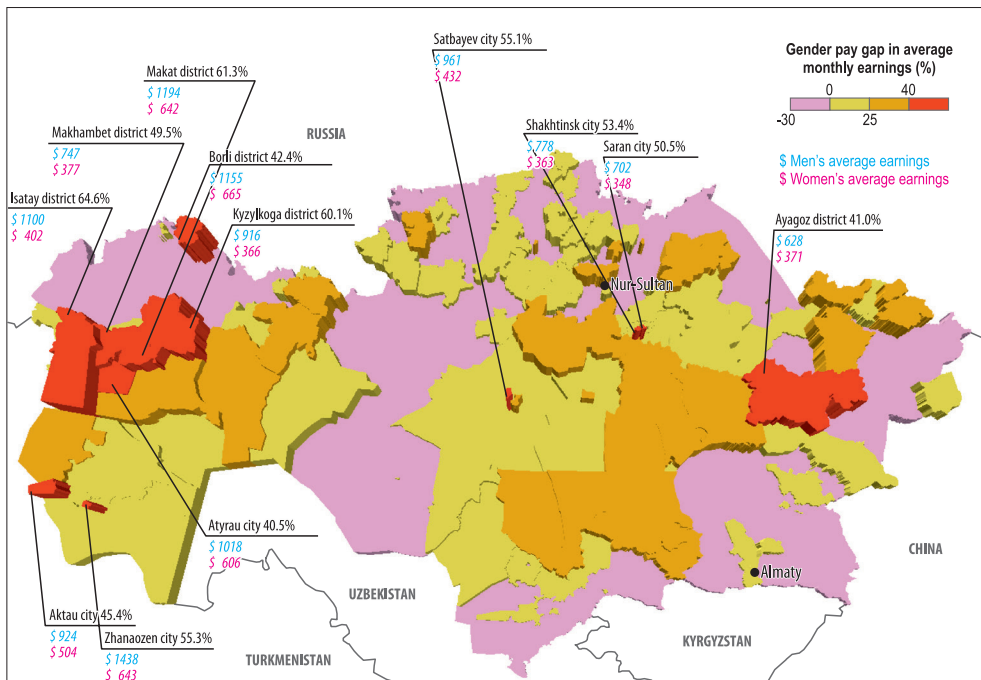


Fig. 7. Differences in earnings of men and women in Kazakhstan, 2020, in percent.

lowest point in 2018. This phenomenon is explained by a 25 percent increase in the salaries of teachers from 1 January 2020, 72.2 percent of which are women, as part of the execution of the order of the President of the Republic of Kazakhstan Kassym-Jomart Tokayev (Law of the Republic of Kazakhstan, 2019).

The gender pay gap tends to be much lower among first-time labour market entrants and tends to widen as workers age. Thus, in 2020, the largest gender pay gap was noted in the age groups of 35–44 years (36.7%) and 45–54 years (35.0%), the smallest in the age groups of 65 years and older (25.3%) and below 25 years (16.9%) (see “Taldau” information and analytical system, <https://taldau.stat.gov.kz/>).

The gender pay gap is largely affected by socio-economic factors – the number of men and women in a certain type of economic activity, their profession, education, age, length of service, and so on in Kazakhstan.

A regional analysis of the gender pay gap shows that this indicator deserves special attention in Atyrau and Mangystau regions, where the difference is 45–50 percent, and in some areas of Western Kazakhstan, women earn about 35 percent of the wages of men (Isatay, Makat, Kzylkoga, Borli, Makhabet districts, and Zhanaozen, Aktau, Atyrau cities) (see *Figure 7*). This imbalance is explained by the predominance of the oil and gas sector of the economy in these regions, where female labour is less competitive. A high gender imbalance in wages is also characteristic of regions where the metallurgical sector of the economy is developed (Satpaev, Shakhtinsk, Saran cities and Ayagoz district). In the capital of the Republic of Kazakhstan in Nur-Sultan city, the imbalance is explained by the fact that construction is developed here, where mainly men work and the civil service, where senior positions with high wages are occupied mainly by men.

Investments in women as human capital are higher than the return on these investments as a result of the incomplete demand for women in the field of employment, which reduces their level of economic activity and manifests itself in lower wages compared to men by 30–35 percent.

Increase in women's unpaid work

The gender imbalance in wages in the republic is also partly explained by the fact that women have less time for paid work because they are engaged in unpaid household chores. As in most parts of the world, a significant proportion of unpaid domestic work is done by women. As a result, women tend to work longer hours than men. For example, according to the International Labour Organization, on average in the world, women spend 4.4 hours on unpaid work, while men spend only 1.7 hours. The smallest gap remains in Norway, where women work 3.7 hours without pay, while men work 3 hours. In the US, the figure is 3.8 hours versus 2.4 hours (GEORGIEVA, K. et al. 2019).

In Kazakhstan, a woman spends an average of 2.2 hours per day in paid work and 4.1 hours in unpaid care work and household work. For comparison, one day in the life of an ordinary Kazakhstani man is 3.3 hours at a paid job and 1.8 hours doing unpaid household chores (ILO, 2019).

It is worth noting the uneven impact of the pandemic on men and women. The COVID-19 pandemic has not only exacerbated inequalities around the world but also exposed many of the gender-based issues that exist in Kazakh society. As mentioned above, of course, teleworking gives women the opportunity to work and combine household chores, thereby allowing them to feel satisfied with financial independence and the availability of free time for the family. But this situation is not ideal either. It is worth noting that the boundary between the workplace and home disappears, the boundary between work and personal time and other side costs are erased.

With the closure of kindergartens and schools due to the dangerous sanitary and epidemic situation, women began to work even more due to the increased burden of caring for children. The number of paid hours at best has not changed, and at worst it has decreased or disappeared altogether. On average, the volume of women's household chores increased by 1.5–2 times.

Many studies show that gender imbalances in unpaid work not only deprive women of economic opportunities but also impede the qualitative growth of the economies of countries. The ILO estimates that 16.4 billion hours a day are spent on unpaid care work worldwide. This is the equivalent of 2 billion people working an 8-hour day every day without pay (ILO, 2018). In Europe and Central Asia, women devote 2 times more time to unpaid care work than men (4.5 versus 2.2 hours). And when we consider paid and unpaid work together, women generally work longer hours than men (ÇAĞATAY, N. *et al.* 2017).

Oxfam experts concluded that the value of women's unpaid labour is 10 billion USD a year or 1/8 of the world's GDP (Oxfam International, 2022). In Australia, the contribution of unpaid care work to GDP is 41.3 percent (of which women account for 26.8%). In Kazakhstan, unpaid work is estimated at 2.5 percent of GDP (of which 1.8% is the contribution of women). Gender disparity in the distribution of unpaid care work leads to growing gender gaps in the labour market and in other areas that affect the position and status of women in society. There is an inverse relationship between the length of time spent on unpaid care work and women's labour force participation. Care responsibilities also affect the quality of women's employment. In some countries, due to gender inequality in the distribution of unpaid work, the reduction of the gender gap in education did not bring significant changes to the labour market (FERRANT, G. *et al.* 2014). The relationship between a woman's role in the family, occupational choice, and income suggests that narrowing the gender pay gap could lead to a reduction in violence against women.

Employment of women in the informal sector

Work in the informal sector lacks security and social protection, is associated with hard work, is poorly paid and provides limited opportunities for the development of human

capital. There is a certain gender imbalance in official unemployment figures in Kazakhstan. In 2020, the share of unemployed women was 5.4 percent compared to 4.4 percent for men. In 2020, the share of women in the unemployed population amounted to 53.3 percent and the economically inactive population –62.3 percent (<https://taldau.stat.gov.kz>). Part of this gap can be explained by the fact that women are more likely to take maternity leave.

Self-employed women and men in Kazakhstan do not contribute to a pension fund or receive social insurance and are therefore economically less secure and have precarious working conditions. Measures have been taken to reduce informal self-employment, including among women. Thus, in 2001, women accounted for 47.7 percent of the self-employed, but by 2020 the share of self-employed women has decreased to 45.5 percent. The majority of self-employed women work in agriculture (38.7%) and trade (40.4%). Self-employed men also tend to work in these sectors, as well as in transport, warehousing and construction (<https://gender.stat.gov.kz/>).

Participation of women in decision-making

In addition to sectoral differentiation, the labour market of Kazakhstan is characterized by professional segregation. This means that women are underrepresented in senior leadership in most sectors of the economy. Women have the right to participate in public life and hold public office, according to the Beijing Platform for Action, women's participation in political life should be at least 33 percent. Despite some progress in promoting gender equality in the country, Kazakhstan has a lot of work to do in achieving SDG 5 to ensure full effective participation and equal opportunities for women at all levels of decision-making in political, economic, and public life.

Thus, in 2020, women headed only 17.9 percent of large enterprises, 28.3 percent of small and 33.2 percent of medium-sized enterprises

in Kazakhstan. Education is the only field of activity where the prevailing share of managers is women (64.4%). 47.4 percent of top managers in health and social services are women. In the financial and insurance sector, 41.7 percent are women managers, in the hotel and restaurant business 41.1 percent. A small number of women leaders are noted in agriculture (14.8%), mining (12.7%) and construction (16.9%).

In addition, the higher the position, the smaller the number of women holding it compared to men. So, according to the Bureau of National Statistics, in 2020, the average salary of men working as heads of all levels of organizations was 1,417.7 USD, a labour protection engineer 638.4 USD, and an economist 508.9 USD. This is 1.1–1.5 times higher than the average salary of women in similar positions and professions (<https://gender.stat.gov.kz/>).

Access of women and girls to education and training

Kazakhstan has approved a Roadmap for the Development of Higher Education until 2020, which outlines the role of education and research institutions in the development of a knowledge-based economy and the preparation of a modern skilled workforce. The transition to a more knowledge-based economy significantly accelerates the advancement of gender equality. There is a high level of gender segregation in Kazakhstan's labour force. The pre-requisites for this begin already from the moment the applicants choose higher educational institutions. Gender differences are especially evident in vocational education. Vocational schools must attract a gender-balanced number of students in in-demand majors to meet future labour demand. A learning environment that offers a wide variety of careers and is free from gender stereotypes will allow students to freely express their abilities and interests, which will ultimately lead to optimal educational outcomes.

Conclusions

The Republic of Kazakhstan has maintained a stable level of women's participation in the labour market, which distinguishes it favourably from most other Central Asian countries. However, a geographical analysis of women's employment shows that women's employment is territorially differentiated. The growth of women's employment in the republic is provided by the cities of republican significance (Nur-Sultan, Almaty and Shymkent), and a number of regions (Almaty, East Kazakhstan, Karaganda and Turkestan oblasts). The main factor in the regional differentiation of the female labour force is the disproportion in the incomes of the regions, the predominance of the service sector in the economy of these regions. High economic growth smooths out gender disparities. Regions with middle and low income in the republic – Almaty and Turkestan oblasts are regions – “donors” of commuting labour migration for the cities of Almaty and Shymkent.

In the republic, there is also an uneven gender distribution across sectors of the economy. Women are employed mainly in lower paid sectors such as health and social work (72%), education (72%) and other services.

In addition to sectoral differentiation, the labour market of the Republic of Kazakhstan is characterized by professional segregation. Women are underrepresented in senior leadership in many sectors of the Kazakh economy. On the basis of ADB (2018) data, sociological research by SARSEMBAYEVA, R. (2017), we believe that the main reasons for gender segregation are gender stereotypes common among the population of Kazakhstan, which affect professional self-determination and career growth of women. Thus, according to the analysis of public opinion conducted by SARSEMBAYEVA (2017) on attitudes towards gender equality and the beliefs of women and men in this regard, many respondents associate the role of women to a greater extent with the family and home than with the economic and political spheres. Moreover,

the percentage of women who share this belief (39%) exceeds the percentage of men who share this opinion (25%). Similarly, the EBRD report “Life in Transition” (2016) found that two-thirds of both men and women in Kazakhstan surveyed believe that men are better at political leadership than women. According to about 86 percent of respondents, a woman should do household chores, even if her husband does not work, this opinion is shared by both women and men.

The wide access of Kazakhstan women to jobs has not reduced the gap in earnings and incomes between men and women. In terms of wages, there remains a gap between the pay of men and women. In some regions of the republic (Atyrau, Mangystau oblasts), the difference in wages between men and women is more than 50 percent. For example, statistics show that in some districts of the Atyrau oblast (Isatay, Makat districts) women earn 394 USD against 1,083 USD of men’s wages, which is about 35 percent of men’s wages.

The pay imbalance is partly since women have less time for paid work because they are doing unpaid household chores. In particular, women take breaks from work to have children, and significantly more often than men take extended maternity leave. Women also have more responsibility for housework, including caring for elderly family members, which forces them to leave their jobs. Gender disparity in the distribution of unpaid care work leads to growing gender gaps in the labour market and in other areas that affect the position and status of women in society. The Kazakh government is in no hurry to recognize unpaid female labour worthy of material compensation, and even the COVID-19 pandemic, which has exacerbated the problem many times, is still unable to change the current situation. In developed countries, the policy of employment of women in the labour market is more flexible.

Many women choose to work in favour of more flexible work schedules to balance work and family responsibilities. The prerequisites for this begin already from the

moment the applicants choose higher educational institutions. Thus, the basis for sectoral differentiation of employment is laid. Thus, gender stereotypes influence the professional self-determination and career development of women. As a rule, only a small proportion of women have a technical education and relevant qualifications.

Despite some progress in promoting gender equality in the country, Kazakhstan still has a lot of work to do in achieving SDG 5. To further empower women, the country needs:

- Development of gender statistics. Although gender statistics are available in Kazakhstan compared to other Central Asian countries, many indicators are missing at the micro-level, which hinders the regional analysis of gender processes.
- Increasing the representation of women in politics and leadership positions in national, regional and local governments;
- Development of the service sector, expansion of women’s telecommuting or part-time employment as an alternative form of employment. What would be a powerful factor in increasing women’s participation in the labour force;
- Ensuring the availability of childcare services, family policy (maternity leave), changing attitudes towards working mothers;
- Eliminating stereotypes in education and the professional field, encourage the promotion of women to leadership positions and reduce the wage gap;
- Introduction of gender planning of the state budget, which can provide a more effective policy aimed at achieving gender goals. At present, gender budgeting in Kazakhstan is still at an early stage of development.

The under demand of women in employment, the decline in their level of economic activity, lower wages, and the increased burden of childcare and unpaid domestic work all negatively affect the quality of life of women and reduce the return on women’s human capital.

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