M. Narikbayev KAZGUU University

Higher School of Economics

Ibragimova A.S.,

Ramazan S.Zh.,

Tyulepbergenova Zh.N.

"The gender pay gap in Kazakhstan: evidence from the EBRD Life in Transition Survey"

6B04104 Finance

6B04102 Economics

Supervisor: Kemelbayeva S.S.

Nur-Sultan, 2022

Table of contents

Abstract

1. Introduction

2. Literature review

3. Country context: overview

4. Data and methodology

5. Results and outcomes

6. Conclusion

References

Abstract. The purpose of this study is to empirically analyze the gender pay gap in Central Asia and Russia and to place Kazakhstan in the context of comparison with these countries. The authors of this article reviewed more than ten publications in the area to understand what is the gender pay gap, why it could exist and how it affects the economy. We then estimated the gender pay gap in Kazakhstan and its neighboring countries – Russia, Uzbekistan, Kyrgyzstan and Tajikistan - on the European Bank for Reconstruction and Development survey data for 2016.

We have found that the gender pay gap has expected signs and magnitude in three countries (Kazakhstan, Russia and Uzbekistan) where we found that women earn about 25% less than men, but is not statistically significant in Kyrgyzstan and Tajikistan. We believe that this should be explained by a worse economic situation in these countries where possibly all people earn low wages independent of where they work and what is their gender. This is not testable with our data; therefore we leave it for future research.

Keywords: gender wage gap, segregation, human capital.

1.Introduction

The gender pay gap is a concept that assesses the measure of unequal pay between the genders. Women's equal participation in politics, society and the economy of a country is recommended as a necessary basis for achieving growth in social and economic development while addressing current issues in culture, society, ethnicity and other spheres. Meanwhile, the gender pay gap is still an issue nearly in all countries around the globe. According to a study by the International Labor Organization, the gender pay gap was 16% worldwide in 2020 (www.ilo.org). Another study - the Global Gender Gap Report 2021 by the World Economic Forum – suggests that women globally earn around 37% less than men in similar roles (WEF, 2021). Geographically, the top 10 countries with the smallest gender gap are dominated by Nordic countries, such as Iceland, Norway, Finland and Sweden in the top five. On the contrary, the Middle East and South Asia are the regions with the largest gender pay gaps, namely Iraq, Yemen and Afghanistan. We can assume that the reason is hidden in cultural norms affecting the political and economic state of the country.

The gender pay gap is an important topic of socio-economic research, since the UN initiated one of the Millennium Development Goals to promote gender equality and women's empowerment. It is also worth noting that the UN General Assembly designated September 18 as International Equal Pay Day.

The research question we address with this study is what the gender pay gap is in Kazakhstan and its neighboring countries. Estimating the gender pay gap is the first step toward understanding this phenomenon. This motivates us to consider possible factors influencing this indicator.

A significant amount of research is devoted to the gender analysis of women and men in the labor market because most men and women are wage earners, for whom income and employment opportunities largely determine their economic status.

The average level of wages between women and men in many countries is also taken into account. The gender wage gap can have various social and economic consequences. However, research on labor market inequality in gender in Central Asian countries, and in particular in Kazakhstan, is limited.

The relevance of the study stems from the fact that, despite the fact that women's wages remain low, women's labor is in considerable demand, and at present the position of women in in the labor market of Kazakhstan is high. For countries such as Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Russia, the gender pay gap is a significant "female gender problem. The central characteristic of women's employment is based on the prevalence of ideas of "women's occupations" and "double responsibility" of women. In connection with this rather serious problem, first of all, the search for effective ways and means to influence the motivation of managers and employees of companies is required.

The study is structured as follows. The first section presents a review of the literature on gender stereotypes and the gender pay gap, and an overview of the countries under consideration. The second section presents the methods and data used in this work. The last section presents the results of the study.

2.Literature review.

Gender inequality in the labor market often starts with systematically unequal distribution of family duties with regard to raising children and running the household. As a result, women find it more difficult to find work because they are more busy caring for children, the elderly in the family, and often doing other household chores. The situation is particularly acute in Central Asian countries. Report shows that gender discrimination applies to women in hiring and promotion in Central Asia (Gender Study for Central Asia 2017). Despite high levels of education, there is no guarantee that women will receive a decent wage, and they are not protected from losing their jobs. As a consequence, women more and more often prefer to be self-employed, especially in the countryside.

The theory that discriminatory social institutions restrict women's economic opportunities was developed by Khamzina and Buribayev in their 2020 article “Is it possible to achieve gender equality in Kazakhstan: Focus on employment and social protection” (Khamzina and Buribayev, p. 6 and p. 7). In this article, Khamzina and Buribayev argues that the economy of Kazakhstan does not employ its full capacity because there are factors of infringement and restriction of the rights of women, which in turn hinder about 50% of the country's population. The result is gender inequality, coupled with evidence that

women on average have higher level of education in Kazakhstan. (Khamzina and Buribayev, p. 6). The authors of the article propose methods of examining the laws of the country and identifying laws that discriminate against women's rights to their honest work and the path to a source of income; regulation of gender equality in places of work, namely, protection of the employment of pregnant women during pregnancy and after childbirth (for childcare), equal wages and equal access to jobs; social protection with gender equality. Thus, according to this theory, the lack of employment of women in highly qualified jobs with the appropriate education indicates the waste of high human capital, the inefficiency of returns from female education.

According to research by Grybaite (2006) “Analyzing Theoretical Approaches to the Gender Pay Gap”, suggests that theoretical solutions to the main economic problem are unequal pay between men and women. Grybaite explores the difference in qualifications between the genders using a human capital model. The model indicates that all people have a certain form of human capital, determined by the potential, skills and knowledge of people, which they acquired as a result of formal education, various training and life and work experience. According to this model, women can receive less wages than men only if women have less experience, knowledge and other factors.

Recently, many sociologists have come to the conclusion that the age of women is another important cause of the pay gap. The head of the Equality and Human Rights Commission Brynin opens his article “The Gender Pay Gap” by saying that the pay gap is proportional to age, which means older women have a larger pay gap than their peers men than young women with their male peers. (Brynin p. 9). This is because women are more likely than men to enter the labor market to take care of children and families. This can slow down a woman's career. Statistical analysis showed that shorter time spent in the workplace, a likely consequence of family duties, is a factor that determines the pay gap.

Yanovskaya et al. (2020) investigated a number of issues concerning problems of women's non-paying work at home as a factors of gender imbalance in their professional practices, because the level of educated women in Kazakhstan is higher than the level of educated men. The fact is that women with a high level of education work more than women with a low level of education. This paper focuses only

on analyzing secondary data and observing what is happening in Kazakhstan based on various sources. The authors of the article state that men's time usually is made up of paid work and freetime, while women are occupied with both paid and unpaid work, for example, housework, childcare, and attending to the needs of other family members. This result is supported by data showing that working women and men in Kazakhstan are confident in meeting the requirements of the job. Regarding domestic relations, the burden of unpaid work falls on women: women are spending approximately 2 hours more on housework and their daily use of time, women spend 25.4% of their time on domestic work, compared to 21.8% for men. During one year, the time of non-payment is about two months or 53 days on average (Asian Development Bank, 2013). Similarly, the study by McKinsey suggests that if females' unpaid housework was accounted for by GDP, the world GDP would increase by 13% (McKinsey, 2015).

Since men and women have different qualifications and individual characteristics, there is professional segregation in the labor market, i.e. division into "male" and "female" professions. According to statistics, already when entering higher education, girls in Kazakhstan choose medical and pharmaceutical, humanities, economic, and social education, while men prefer the education of a lawyer, engineer, oil and gas, metallurgical, construction, agriculture, etc. (Women and men of Kazakhstan 2016-2020).

Table 1. Percentage ratio of men to women by occupational group.

Specialty groups	Distribution by gender, in percent	
	women	men
Social Science, Journalism, and Information	77,8%	22,2%
Medicine, Pharmaceuticals	77,5%	22,5%
Arts and Humanities	71,6%	28,4%
Service, Economics and Management	66,4%	33,6%

Agriculture and Bioresources	48,7%	51,3%
Law	39,9%	60,1%
Information and communication technology	30,4%	69,6%
Engineering, manufacturing and construction industries	29,1%	70,9%
Oil, gas and chemical production	24,3%	75,7%
Construction and utilities	18,6%	81,4%
Metallurgy and mechanical engineering	13,5%	86,5%
Source: Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan, 2020		

Thus, the professions that men choose are paid more than those that women choose, this is also confirmed by the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan

Emelina and Roshchin (2020) argue that occupations involving physical labor characterize male labor qualities and are better paid. Similarly, work in factories and construction sites has unhealthy and dangerous working conditions compared to those spheres of activity preferred by women. For this reason, Kazakhstan has a "List of professions prohibiting the employment of women," which was approved in 2007. Due to the difficult working conditions, wages for professions on this list are higher than the average wage in Kazakhstan.

In addition to "female" and "male" occupations, there are gender-neutral occupations with low, medium, and high wages in the labor market. Such specializations as finance, information technology,

and science, where the ratio of men and women is almost equal, are highly paid (Women and men of Kazakhstan 2016-2020). Therefore, it cannot be argued that women prefer low-paying occupations.

Skinder (2007) in her article divides gender segregation into horizontal and vertical. She writes that the division of occupations by gender is referred to as the horizontal gender segregation, and the unequal division of males and females in positions is referred to as the vertical gender segregation.

According to Becker (1971), while horizontal segregation comes from a person's voluntary choice, vertical segregation is caused by discrimination against women by employers. This phenomenon is also defined by the term "glass ceiling. Gurieva and Belova (2019) argue that the term "glass ceiling" was first used since the 1970s in the United States, denoting an invisible career barrier for successful women built on prejudice. The underestimation of women's leadership abilities is shaped by traditional unspoken opinions about their function in family life. This prejudice creates gender inequality, and women often lose decision-making power, which then has a negative impact on the country's economic development.

Moreover, Winkenburg et al. (2011) write in their article that women and men have different leadership styles. While female executives are flexible and seek to resolve disputes in the workplace, male executives are domineering and seek to take advantage of everything. Therefore, in the eyes of the employer, men are often a higher priority than women.

3.Country context: overview

In the following section, we estimate the gender pay gap in Kazakhstan and place it in the context of comparison with its neighboring countries - Russia, Uzbekistan, Kyrgyzstan and Tajikistan. Therefore, in this part of the article provides an overview of these countries and their labor markets. This will help us to understand the differences in the gender pay gap across the countries under analysis. The efficiency of a labor market is directly related to the development of the economy in a country. Consequently, one of the primary tasks will be to consider the main indicators of the economy of the countries under consideration.

At first glance, the economies of these countries, as well as their socio-cultural values, are partially similar, but still, each country has its own characteristics. Using the World Bank's economic indicators below, we can compare their economies. Russia and Kazakhstan have more developed economies relative to other countries. This is confirmed by the low rate of unemployment, as well as high rates of education attainments and labor force participation rate. On average, there is an equal number of females in all countries. According to the modern views of the economists, an unemployment rate of 4-5% is regarded as the norm. However, it is higher in Kyrgyzstan, Uzbekistan and Tajikistan. According to the analysis of the International Labor Organization, the level of unemployed women around the world in 2019 was 5.5%. The highest rate of unemployment among women is in Kyrgyzstan. A possible reason for the high unemployment rate is a society significantly affected by traditional gender roles and stereotypes. The roles are separated into "male" and "female" roles, with the latest paying lower and irrationally. In Uzbekistan and Tajikistan, women's unemployment rates in 2019 are at the same level, despite a large gap in unemployment rates. Kazakhstan has the higher labor force participation rate, while the situation in Tajikistan is much worse. The labor force participation rate is the portion of the population 15 years and older that is considered economically active, that is, all persons who provide labor to produce goods and services. In today's world, women represent more than 40% of the workforce, with about 70% of women employed in developed countries and 60% in developing countries. Among the countries, Kazakhstan is the leader in this indicator, we can assume that this is facilitated by the level of education, in which Kazakhstan also ranks first among the countries under consideration.

Table 2. Comparative statistics on the economic indicators of countries for 2019

Economic indicators	Russia	Kazakhstan	Kyrgyzstan	Uzbekistan	Tajikistan
Population, mln	146.75	18.6	6.39	32.98	9.29

Population, female (% of total population)	53.7	51.5	50.5	50.1	49.6
Unemployment rate	4,6	4,8	6,9	5,8	7,1
Unemployment rate, female	4,3	5,3	6,1	5,6	5,6
Labor force participation rate, female %	55,31	64,01	43,97	46,6	30,8
Education school enrollment (secondary), %	91	100	84	91	83
Source: World Bank data					

4.Data and methodology

We use a quantitative method in this study, specifically, regression analysis with the survey data. It has both strengths and weaknesses. The strength is that the quantitative methodology allows us to understand and specify what are the main determinants of the gender pay gap, or at least, estimate to what extent observed factors determine it. These factors can be seen in the econometric equation below developed by the famous labor economist Jacob Mincer in the 1970s and known as Mincer's wage equation. This equation is the main way to estimate wage inequalities including the gender wage gap. The weaknesses are that often a kind of nuance in the form of discrimination and unobserved factors the data for which is not collected by the survey might be overlooked.

We use the following econometric equation:

Log(Wage)=β0+β1*Schooling + β2*Age+ β3* Age^2+ β4*Gender β5*Residence + β6*Sector

β4 is the coefficient of interest representing the gender pay gap.

The data from the European Bank for Reconstruction and Development (EBRD) collected by the Life in Transition Survey is used for this analysis. There is a wide statistics on the population in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Russia available in this data aimed at understanding and evaluating public opinions, well-being, and the effects of economic and political change. It is constructed as repeated cross-sectional data, which gives a picture to compare and evaluate data. We use the data for the last survey wave, 2016.

According to the national statistics of the countries in question in 2020, average wages in dollar terms are highest in Russia and lowest in Tajikistan. This indicator depends on the economic situation and the labor market of the countries. Also, according to statistics, the average wage of women is highest in Russia and lowest in Tajikistan. In Russia, the ratio of women's wages to men's wages was 72.1%. In Tajikistan, women earned 60% of what men earned.

Table 3. Comparative statistics of average wages of countries for 2020

Country	Russia	Kazakhstan	Kyrgyzstan	Uzbekistan	Tajikistan
Average wage, $	903,72	590,15	238,24	288,99	142,891

Average wage, female $	576,74	432,37	181,40	208,30	83,07

In order to understand the employment of women and men in the countries under consideration, information on employment by industry was collected.

In Kyrgyzstan, women are prevail in such activities as real estate operations (93%), health and social services (82%) and education (78%), men are greater numerous in areas such as mining (96%), construction (99%), transport activities and storage of goods (97%).

In Russia, there are more men in mining (82%), construction (87%), transportation and storage (78%), and more women in education (82%) and health activities (80%).

In Uzbekistan, the proportion of women working in education, healthcare and social services was 77% and 78%, respectively. Meanwhile, the proportion of women employed in construction was 5.8% and in transportation and storage was 8.5%.

In Kazakhstan, men are most represented in transport and storage (78%), construction (76%), industry (69%), and women are most represented in education (74%), healthcare and social services (72%), accommodation and food services (70%).

In Tajikistan, a large proportion of men are in the construction (89.4%), mining (89.3%), electricity, gas and water supply (87.3%) sectors and a high proportion of women are in the health and social services (70%) and education (59.7%) sectors.

Thus, we can see that in all countries there is horizontal segregation of genders by industry.

5. Results and outcomes

Table 4. Results of the estimations

Variables/ Countries	**Kazakhstan**	**Kyrgyzstan**	**Uzbekistan**	**Tajikistan**	**Russia**
Schooling	0.091***	0.081*	0.134***	0.047**	0.114**
	(0.025)	(0.038)	(0.022)	(0.015)	(0.037)
Age	0.036	0.036	0.042	-0.019	0.105**
	(0.024)	(0.036)	(0.03)	(0.018)	(0.033)
Age squared	-0.0004	-0.0005	-0.0005	0.0002	-0.001***
	(0.0003)	(0.0005)	(0.0004)	(0.0002)	(0.0004)
Gender Male	0.244**	-0.0209	0.259**	0.0663	0.219*
	(0.763)	(0.108)	(0.086)	(0.06)	(0.103)

Residence Urban	0.208** (0.075)	0.494*** (0.11)	0.055 (0.079)	0.278*** (0.07)	0.455*** (0.114)
Sector Agriculture, Forestry, and Fishing	-0.674* (0.328)	-0.185 (0.345)	-0.58 (0.316)	-0.932** (0.281)	-0.534 (0.384)
Sector Construction	-0.426 (0.272)	-0.257 (0.327)	-0.545 (0.313)	-0.171 (0.282)	-0.013 (0.226)
Sector Manufacturing	-0.396 (0.275)	-0.533 (0.365)	-0.228 (0.313)	-0.07 (0.302)	-0.169 (0.211)
Sector Mining	-0.804* (0.342)	0.166 (0.401)	-0.221 (0.447)	-0.356 (0.598)	0.131 (0.601)
Sector Non classifiable Establishments	-0.51 (0.26)	-0.87* (0.341)	-0.346 (0.327)	-0.437 (0.312)	-0.08 (0.215)

Sector Public Administration	-0.344 (0.25)	-0.407 (0.278)	-0.207 (0.294)	-0.461 (0.27)	-0.028 (0.212)
Sector Retail Trade	-0.78** (0.264)	-1.153*** (0.341)	-0.382 (0.359)	0.022 (0.326)	-0.215 (0.214)
Sector Services	-0.637* (0.247)	-0.412 (0.286)	-0.41 (0.293)	-0.617* (0.284)	-0.183 (0.194)
Sector Transportation and Public Utilities	-0.291 (0.269)	-0.531 (0.327)	-0.078 (0.325)	-0.267 (0.304)	0.132 (0.218)
Sector wholesale Trade	-0.339 (0.299)	-1.071** (0.399)	0.926* (0.448)	-0.626 (0.463)	-0.334 (0.276)

based on their estimations in R

Figure 1. Gender pay gap (%)

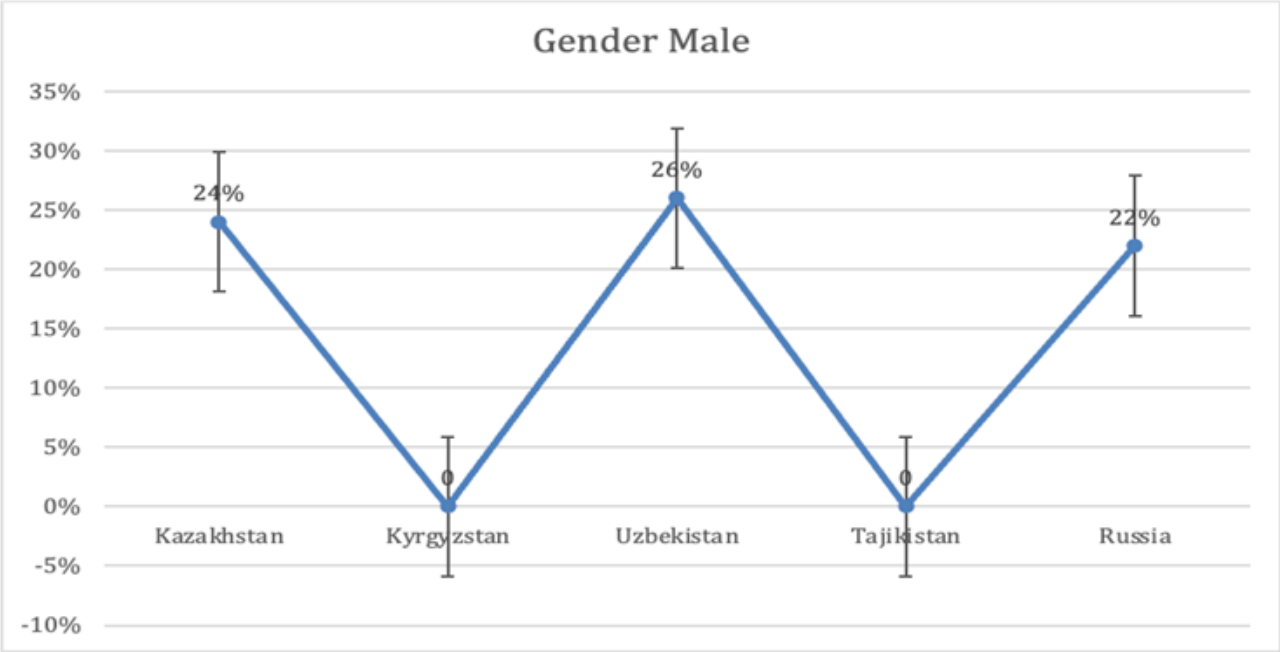

Table 4 provides the results of our regressions estimated separately for each country. The main variable of interest is a variable "Gender" the coefficient for which shows how much in percentage are males' wages higher than females' wages and is this difference statistically significant. We use other variables as important control variables, and we are not primarily interested in them. Additionally, we plot the gender pay gap in figure 1.

The plot shows us that the gender pay gap is very similar in Kazakhstan, Uzbekistan and Russia where men earn about 25% higher wages than women. However, in Kyrgyzstan and Tajikistan, there is no statistically significant difference is found between the earnings of men and women. This possibly should be explained by the fact that female labor force participation is smaller in these two countries, as is seen in Table 2. While in Kazakhstan 64% and in Russia 55% of women work, in Kyrgyzstan only 44% and in Tajikistan – 31%. Most of the females in these two countries do not have paid employment and are probably engaged in housework. Therefore, female labor becomes a rare factor of production and is paid not less than male labor. However, this hypothesis hardly explains the observed wage gap in Uzbekistan

where females' participation in the labor market is also low. Another hypothesis that we can suggest to explain the observed phenomenon of zero gender gap in Kyrgyzstan and Tajikistan is that these two countries are the poorest among the countries which we analyze. In all countries under consideration, women work mostly in industries with public ownership: healthcare and social services, and men – in mining, construction and manufacturing. In richer countries, like Russia, Kazakhstan and Uzbekistan, "male" industries are better paid because of the better economic situation. But in poorer countries, like Kyrgyzstan and Tajikistan, they are not paid better than "female" industries.

However, we should not forget that there are other possible factors that affect each country in its own way. Low and statistically insignificant gender pay gaps in Kyrgyzstan and Tajikistan could be explained by unobserved factors for which we do not have data. The R-squared is low in all countries, thus, our models do not take into account all the factors that determine wages. Since there is a possibility of insufficient data and data limitations. Also, insignificant results could be because of a small sample size.

6. Conclusion

In this study, we have estimated the gender pay gap in Kazakhstan and its neighboring countries – Russia, Uzbekistan, Kyrgyzstan and Tajikistan - on the EBRD survey data for 2016.

We have found that the gender pay gap has expected signs and magnitude in three countries (Kazakhstan, Russia and Uzbekistan) where we found that women earn about 25% less than men, but is not statistically significant in Kyrgyzstan and Tajikistan. We believe that this should be explained by a worse economic situation in these countries where possibly all people earn low wages independent of where they work and what is their gender. This is not testable with our data; therefore we leave it for future research.

A more in-depth investigation of the interaction impact observed in this article between the pay gap and gender discrimination might be another area for future research. A reasonable question is to ask if gender discrimination is a primary source of the salary disparity between men and women.

The assumption that wages and economic growth are inextricably connected has extensive support, both theoretically and empirically. Therefore it is important for all countries to eliminate the gender pay gap to effectively exploit all peoples' economic capacities.

Bibliography

1. Becker, G. (1971). The Economics of Discrimination. *The University of Chicago Press*.

2. BNS. (2016-2020). *Женщины и мужчины Казахстана* [*Women and men of Kazakhstan*]. Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan http://www.demoscope.ru/weekly/2021/0903/biblio03.php

3. BNS. (2017). *Оплата труда в Казахстане* [*Wages in the Republic of Kazakhstan*]. Bureau of national statistics of the Agency for strategic planning and reforms of the Republic of Kazakhstan https://www.gov.kz/memleket/entities/stat?lang=ru

4. https://www.ebrd.com/what-we-do/economic-research-and-data/data/lits.html

5. Brynin, M. B. (2017, August). The Gender Pay, *Research report*, https://www.equalityhumanrights.com/sites/default/files/research-report-109-the-gender-pay-gap.pdf

6. OECD (2014). SIGI: Social Institutions and gender Index, https://www.oecd.org/dev/development-gender/BrochureSIGI2015-web.pdf

7. Khamzina, Z., Buribayev, Y., Yermukanov, Y., & Alshurazova, A. (2020). Is it possible to achieve gender equality in Kazakhstan: Focus on employment and social protection. *International Journal of Discrimination and the Law, 20(1), 5–20.* https://doi.org/10.1177/1358229120927904

8. Khitarishvili, T. (2019). Gender pay gaps in the former Soviet Union: A review of the evidence. *Journal of Economic Surveys*, 33(4), 1257-1284. https://onlinelibrary.wiley.com/doi/10.1111/joes.12321

9. Global Gender Gap Report 2021, World Economic Forum, http://reports.weforum.org/globalgender-gap-report-2021/dataexplorer

10. Grybaite, V. (2006) Analysis of theoretical approaches to gender pay gap, *Journal of Business Economics and Management, 7:2, 85-91,* DOI: 10.1080/16111699.2006.9636127

11. Gurieva S.D., Belova O.E. (2019), «Стеклянный потолок» в профессиональной карьере женщин ["The Glass Ceiling" in Women's Professional Careers] https://ntk.kubstu.ru/data/mc/0064/2725.pdf

12. McKinsey (2015) The power of parity: how advancing women's equality can add $12 trillion to global growth, www.mckinsey.com

13. Sergey Yu. Roshchin, Natalya K. Yemelina (2020) Gender differentiation in wages in Kazakhstan.

14. Skinder N.V. (2007), Стереотипы в сфере занятости как причина гендерной сегрегации [*Stereotypes in Employment as a Cause of Gender Segregation*] https://cyberleninka.ru/article/n/stereotipy-v-sfere-zanyatosti-kak-prichina-gendernoy-segregatsii

15. Vinkenburg, C., Engen, M., Eagly, Al., Johannesen-Schmidt, M. (2011). An exploration of stereotypical beliefs about leadership styles: Is transformational leadership a route to women's promotion?

16. Yanovskaya, O., Rajasekhara Mouly, P., Nazyrova, G. and Salimzhanova, A. (2020). Women's Unpaid Work as a Factor of Gender Inequality: A Case of Kazakhstan. *Journal of Business, Economics and Environmental Studies 10-2 (2020) 17-21* from https://www.weforum.org/reports/global-gender-gap-report-2021/

Data used:

1. https://www.theglobaleconomy.com/Kazakhstan/Female_unemployment/
2. https://kyrgyzstan.un.org/sites/default/files/2021-03/3%20pager_UNW_FV_14.03.2021.pdf
3. https://gender.stat.gov.kz/page/frontend/detail?id=21&slug=-17&cat_id=7&lang=ru
4. https://rosstat.gov.ru/storage/mediabank/yhNtbedG/Wom-Man%202020.pdf
5. https://www.ilo.org/wcmsp5/groups/public/---europe/---ro-geneva/---sro-moscow/documents/publication/wcms_776477.pdf
6. https://stat.ww.tj/posts/May2021/Tajikistan_Statistical_Publication.pdf

https://data.worldbank.org