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## Article

# Gender and economic growth: Is there a correlation? The example of Kyrgyzstan

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## GENERAL & APPLIED ECONOMICS | REVIEW ARTICLE

# Gender and economic growth: Is there a correlation? The example of Kyrgyzstan

Nurkhodzha Akbulaev<sup>1\*</sup> and Basti Aliyeva<sup>2</sup>

**Abstract:** The article is focused on the study of gender equality issues as a necessary factor in the economic growth of the state. The work notes that the economic growth is traditionally considered as an important quantitative characteristic of the development in a country's economic system, but this concept is complex and multifaceted, which makes it difficult to assess its scale, factors, sources and consequences. Therefore, through a theoretical analysis, the author identified main factors of the influence on country's economic growth. Also, on the basis of an analytical review in relevant sources in this area, the current situation of women in the society was examined and the examples of state programs for ensuring gender equality in all social sectors of state functioning were given. In consideration of the foreign and the internal experience in strategy for gender equality achievement in the society, as well as conditions and factors of the economic growth in Kyrgyzstan, comparative analysis of key indicators of given categories was carried out in order to determine the existence of correlations between the studied concepts. As a result of research, the author proposed perspective directions of perfection in the existing system for gender equality ensuring in Kyrgyzstan with the aim of achieving a new level of country's economic development.

**Subjects:** Gender Studies - Soc Sci; Economics; Development Economics



Nurkhodzha Akbulaev

### ABOUT THE AUTHORS

Nurkhodzha Akbulaev since 2008, he has been working as a contracting teacher at the Faculty of Business Administration of the Turkish World at the Azerbaijan State University of Economics. He has published more than 30 scientific articles in international scientific conferences and publications in Turkish, Russian and English. Financial Management, Production Cost Accounting, Investment Analysis, Financial Statement Analysis, Budget Planning teaches such classes.

Basti Aliyeva, teach mathematics and data processing systems course in the Azerbaijan State Economic University. My articles were published in many local and foreign journals (in azerbaijanki, russian, turkish and english). I have published articles in conference journals. In addition, I am the author of a number of textbooks. Presently, I continue to work at the same university.

### PUBLIC INTEREST STATEMENT

The article is devoted to the study of issues of gender equality as a necessary factor in the economic growth of the state. The paper notes that economic growth is traditionally considered an important quantitative characteristic of the development of the country's economic system, but this concept is complex and multifaceted, which makes it difficult to assess its scale, factors, sources and consequences. The basis of the analytical review of competent sources in this area studied the current status of women in society, gives examples of state programs to ensure gender equality in all social areas of the state. Taking into account the foreign and domestic experience of the strategy of achieving gender equality in society, as well as the conditions and factors of economic growth in Kyrgyzstan, a comparative analysis of key indicators of these categories was carried out in order to determine the presence of correlation links between the studied concepts.

| **Keywords:** gender equality; economic growth; development; women; economics

### 1. Introduction

The economic growth is used by most economists as the highest possible development of the economic system by improving structure of the economy, technology, social product and the intensification of social production in a certain period of time that is reflected in positive dynamics of key indicators in national accounts, production and socio-economic standards.

The economic growth phenomenon from the standpoint of its quality and stability has the following characteristic features of the economic growth is characterized by structure, factors and sources that determine, ultimately, its quality. In modern conditions, the study of gender equality as one of the factors in the economic growth becomes relevant as an uneven process that determines direction of the economic policy to ensure its stability. As part of factors in the economic growth, it is not limited to positive dynamics of key indicators in national accounts, because its quality and stability should be assessed from the perspective of micro- and macro-economic subjects. Quality and stable economic growth have systemic nature that is impossible by influencing of separate group factors.

The economic growth requires a comprehensive approach to formation and the implementation of all areas in the economic policy, including strategies for ensuring gender equality in the state.

The purpose of this work is to determine the impact of gender equality in Kyrgyzstan on the economic growth in the current market. In connection with intended purpose it is planned to solve the following problems: exploring of conceptual framework on studied topic; searching for data on gender equality and the economic growth; comparison of data and designation of links for founded materials; defining role and place of gender equality among basic factors with effect of the economic growth in the country.

### 2. Research methodology

The study of the socio-demographic and socio-economic aspects of gender problems in labor potential using economic growth as a key factor is a relatively new direction of domestic economic science although there is already a significant theoretical and methodological basis for this issue in world practice (Hughes, 2015, pp. 181–213).

The analytical review method of competent literary sources in this study revealed gender features of the labor potential in the Kyrgyz Republic (KR). The study adopted a means of comparison and synthesis that created a gender portrait for a country and implemented the development of practical recommendations on how gender equality can ensure the stable economic growth of the Kyrgyz Republic. Among the main objectives of the study are analyses of the socio-demographic situation and the socio-economic status of men and women in the country.

### 3. Literature review

According to R. Pearce and R. Connell in their studies, the concept of human development proves that economic growth is necessary but not a sufficient condition (factor) to improve the population's welfare. The defining factor here is the evolutionary transformation of all production relations, changes in the labor process, the disappearance of heavy physical labor and the dominance of mental and creative labor (Pearce & Connell, 2016, pp. 30–53). At the same time, state activity should be directed towards facilitating the acceleration of evolutionary transformations in the process of social labor and the formation of conditions for the creative development of a person in the process of the economic activity. In fact, work, not social policy, is the source in the reproduction of human capabilities and development of its potential (Kabeer, 2016, pp. 295–321).

In recent years, the issue of gender inequality in the economy has become popular in research and discussion. For example, in 2015, the UN introduced an initiative of women's support by men with the HeforShe project, which has received billions of reviews in social networks. In turn, the authoritative magazine "The Economist" draws attention to the fact that women are increasingly in demand in the labor market, so support requires less adaptation to new realities for men (Tao, 2016, pp. 69–89).

M. Neumann and S. Lathem, in their research, argue that the insurance of gender equality is a matter of social justice in terms of distribution of wealth and access to resources, the essential component of the economic and social dimensions of stable social development (Neumann et al., 2016, pp. 139–158).

At the current stage, a three-dimensional model of civilization development on the principles of constancy (instead of the two-dimensional model, based on the ecological and the economic dimensions) has turned social dimension, in the opinion of B. Pettit and J. Hookah, including gender equality, into one of its mandatory indicators of the leading factor (Hook & Pettit, 2016, pp. 329–362). It is driven by a genuine interest in the issue, based on stable social development in Kyrgyzstan from the achievement of gender parity.

Since the second half of the 1990s, the subject of research was the formation and implementation of gender policies, the achievement of gender justice and equality (Drucker, 2016, pp. 1560–1571). S. Faria and S. Mollet state that from the beginning of the XXI century among social components of stable development, more attention is paid to the analysis of gender dimension in social and economic development (Faria & Mollett, 2016, pp. 79–93). However, studies on relations between gender equality and constant social development are not systemic.

The gender component is an element of an entire complex of tasks for development in society and the economy (Card et al., 2016, pp. 633–686). Since the beginning of this century, among the indicators of socioeconomic development, gender equality is mandatory and is an important hallmark of civilized society from the perspective of S. Adams and S. Miller (Adams & Miller, 2016, pp. 245–257). In the twenty-first century, according to the study by Smith-Doer L., Vardi I. and Kroisant J., gender equality insurance has become a priority political direction for the world's development. The authors refer to the definition of gender equality as equal legal status for women and men and equal opportunities for its realization, which allow people of both sexes to participate equally in all spheres of society (Smith-Doerr et al., 2016, pp. 49–68). M. Williams and S. George-Jackson see the equal rights of women and men as the absence of restrictions or privileges on the basis of sex as well as equal conditions for the realization of equal rights for women and men (Williams & George-Jackson, 2014, pp. 99–126) (Williams & George-Jackson, 2014, pp. 99–126).

Bazer T., Niederl M. and Ousterbek H. in their studies determine the social component of stable development as something directly related to the human potential, recognized as the main goal and main factor of social and economic development at the end of the twentieth century (Buser et al., 2014, pp. 1409–1447). From the point of view of Möller S. and Rajiv J., sustainable economic and social development means achieving stable economic growth with equitable provision in the needs of present and future generations; the preservation and restoration of the environment imply active participation of all citizens and population groups in the achievement of the elimination or limitation for non-viable production and consumption patterns (Møller & Rangvid, 2015, pp. 136–154).

Conversely, the achievement of stable economic growth is assumed to be linked to the equitable distribution of its results to ensure present and future human needs and human development, including women's empowerment (Kızılca, 2016, pp. 1–30).

Without achieving gender equality in the economic, social and political sense, ensuring stable development seems impossible today, says researcher A. Bandara (Bandara, 2015, pp. 162–186). That is, literary analysis proves that an increase in the economically active population due to

greater participation of women in all spheres of society, using the potential of both sexes, contributes to the economic growth and stable development of any state.

#### **4. The concept of economic growth and its affecting factors**

At the beginning of the third millennium, scientists revised their understanding of the process of economic development; the interaction between economic gender equality and economic growth is analyzed and evaluated from a new perspective. Gender equality has a purely economic meaning because a country that does not fully use the potential of its entire population may not be successful economically. Women constitute more than 50% of the Kyrgyzstan population, and their representation at the level of political and economic decision-making should be appropriate to this ratio.

In leading research sources, the concept of economic growth remains the same and is an undeniable condition for poverty reduction and the main goal of economic development. It is a category in quantitative order that reflects the increase in volume indicators of sectors in a country's regions (production outputs in the industry, agriculture, etc.) as well as gross domestic product in general and per person, in particular. Economic development is a category of qualitative order, which, in addition to the growth of the final product, includes a social and environmental effect. That is, development involves the emergence of something new for the long-term perspective of the economy when all the parameters of the system characterizing market supply react to changes in those economic indicators, reflecting demand (cash incomes and consumer spending, market price levels) (Bandara, 2015, pp. 162–186).

Thus, economic growth can be interpreted as a positive component in economic dynamics and as a criterion of economic development. However, not all economic growth is equivalent to real growth, if actual growth is traced but with physical and moral depreciation of fixed assets and decline in the quality of labor, qualifications, health and standard of living, in the long term, this development will lead to a decline in and degradation of the economy.

Therefore, in a broad sense, economic growth is a multifactorial process within the framework of reproduction in the economic system, consisting in dynamic quantitative achievement and qualitative changes in welfare and national wealth as well as the development of the state's economy under the exogenous influence and the endogenous factors of the economic, social, organizational, structural and institutional nature.

Structural factors in the economy serve production and human capital. Higher quality of economic growth is typical for more mature stages of development in a postindustrial society. Intense information growth is inherent to what is achieved by efficiently increasing the economy through investment in people as producers and consumers of the entire spectrum of material and spiritual wealth. The consequence of these changes is that education and science are turned in key sectors of the economy, leading to dramatic transformational changes in the national economy.

As a function of factors, depending on the process of economic growth, level and dynamics of changes, and type of economic growth, the efficiency of social reproduction is determined (Kabeer, 2016, pp. 295–321).

Thus, with changes of the influence factors, the changing nature of economic growth is observed. There are different interpretations of the factors in economic growth in the economic literature: terms of GDP growth, resources involved in the production process, sources of economic growth and basic elements of growth potential. The representatives of various schools and tendencies have investigated these questions with focus on the influence of certain factors in the economic development of certain periods and within certain spatial boundaries, ways of their rational combinations and search for new sources of growth.

The current state of the economy is characterized by instability, development slowdown, inflation, reduction in investment flow, etc. In such conditions, the negative influence of factors, many of which are latent, on economic development increases; it is impossible to forecast long-term development of the state. Therefore, the implementation of planned programs and plans for the economic and social development in the country becomes difficult. All of this increases the importance of constant control and monitoring of the socio-economic situation, which should be continuous, timely and reliable. Also, it is important to determine the object of monitoring, which will most fully reflect the real situation. In this study, such object is understood as equality.

### 5. Correlation of the economic and gender indicators in the Kyrgyz Republic

To understand the range of issues related to the correlation of gender equality and economic growth in Kyrgyzstan, it should initially be noted that psychoanalyst Robert Stoller preceded the emergence and development of such a problem area of knowledge in 1958. Notice that in Soviet psychology, the issues of gender were poorly represented, and only in the 1970–80s did foreign works begin to appear. Soviet psychology research only began in the 1990s, aimed at studying “gender differences”, which were not limited by the concept of biological sex. But, in these studies, not enough attention was paid to the gender problems of the potential use of labor and ways of solving gender inequality in relation to the economic growth of the country.

Thus, the United Nations publishes “Human Development Report”, which contains two indicators: the Gender Development Index and the Gender Inequality Index for 188 countries (UN, <http://hdr.undp.org/en/2018>). We took the gross national income (GNI) per capita (in US dollars) and GDP as key indicators of the economic condition in Kyrgyzstan, and these two indices according to UN data as indicators of gender equality in the country, but the inequality index was taken into account when calculating the Human Development Index Adjusted for Inequality (IHDI). In addition, a correlation was established with indicators for the education and health in the Kyrgyz Republic over the same study period: the index expectancy of women and the indicator of the female population with, at least, some secondary education (% in age 25 and older).

The index series for the period 2015–2017 became data for search of correlation between the levels of gender equality and of the economic development in Kyrgyzstan (Tables 1 and 2).

**Table 1. Data for correlation analysis (2012–2017) <sup>1</sup>**

Year	2012	2013	2014	2015	2016	2017
GNI (million dollars)	2764	2927	3026	3086	3113	3255
GDP (million dollars)	1166	1270	1267	1109	1110	1208
Gender Inequality Index	0.38	0.383	0.38	0.393	0.392	0.392
Gender Development Index	0.959	0.958	0.961	0.966	0.96	0.96
Women Expectancy Index	73.9	74.3	74.6	74.8	75	75.1
Female Population with Secondary Education	96.2	97.1	97.9	98.8	98.7	98.6

**Table 2. Correlation coefficients among indicators <sup>2</sup>**

	<b>Gender Inequality Index</b>	<b>Gender Development Index</b>	<b>Women Expectancy Index</b>	<b>Female Population With Secondary Education</b>
GDP	−0.65248	−0.53057	−0.28181	−0.39032
GNI	0.78468	0.34271	0.97905	0.91773

As shown by the correlation analysis, GNI index and gender development index correlate with the correlation index of 0.34 in the Kyrgyz Republic, that is, correlation is insignificant. The correlation between the GNI indicator and the gender inequality index was 0.784; the correlation level is high. Appropriately, the correlation of GDP by the indices is −0.53; −0.65. The last fact reflects inverse correlation, that is, GDP is in the average inverse relationship to gender inequality and gender development in the country. These data can be explained by the low levels of health and education accessibility for women because wide participation of the population in the economic management and the economy of a country leads to a decrease in GDP and has virtually no effect on GNI, and in the case of correlation between GNI and inequality, the gender aspect even negatively affects the level of the first one. The women expectancy index and GNI correlate at the level in correlation indicator of 0.98, which indicates a strong correlation between female life expectancy and the GNI indicator. Also, a high correlation can be traced between GNI and women's education—the correlation index was 0.91, and this reflects close, directly proportional relations between the level of education of this segment of the population in the Kyrgyz Republic and the country's GNI.

The econometric modeling shows that each increase in this index by 1% leads to an increase of 345 USD in GNI. In other words, the more equitable our society is, the richer it is; consequently, people themselves are interested in the development of gender balance. Thus, the more equal a society is, the more it is involved in the processes of world globalization, and the less protected it becomes during global crises (“Kochkina and Stavitsky,” 2017).

## 6. Gender equality issues

Gender equity means the fair treatment of women and men. Gender equality involves equal status for men and women. That is, women and men should enjoy the same social status, have the same conditions for the realization of all human rights, and the same opportunities to contribute to national, political, economic, social growth and enjoy its results (Austen & Mavisakalyan, 2016, pp. 183–210).

It will be fair to consider that gender equality is not only equality of legal rights for women and men but also the equality of conditions and the opportunities for the realization of these rights (Carter-Johnson et al., 2016, pp. 223–243).

Thus, gender inequality is one of the manifestations in the socio-economic differentiation of the population, which leads to the impossibility of self-realization for women and men in society (Nix et al., 2016, pp. 349–374).

Gender inequality in the socio-demographic and socio-economic spheres has consequences for the welfare and social development of the population when they reduce the opportunities for economic growth and prosperity by the effective use of human resources. In the framework of socio-economic efficiency, gender inequality:

- degrades the quality of the human potential;
- undermines prospects for economic development;
- diminishes the system of government;
- reduces the effectiveness of development and poverty reduction strategies.

Thus, in the context of the key aspects of gender equality's (inequality) impact on the country, the American authors distinguish decision-making procedures (Rigg et al., 2015, pp. 125–140). Women and men have unequal access to decision-making in France, Greece and Slovenia (Pajnik et al., 2016, pp. 345–364). In the government, the presence of women in senior positions is quite rare. Even in those ministries and departments where women traditionally occupy a lot of positions (education, culture, social protection), the percentage of their involvement is rather low.

Also, British researchers identify differences in the level of participation in the economic life of society (Stewart et al., 2016, pp. 23–47). That is, women and men have different spheres of duties, participate in various types of economic activities, occupy different positions and have different earnings. Even in countries where women have managed to maintain their position in the labor market, they cannot work alongside men. They have different professions, career opportunities and salaries in India, Turkey and CIS countries (Smith & Lucena, 2016, pp. 199–221). The gap in the average wages of women and men in the Kyrgyz Republic is also significant, as women earn about 20–25% less than men (Ministry of Economy in the Kyrgyz Republic 02.15.19).

Women are more likely to be employed as office workers, as well as in the service sector, but are rarely invited to such sectors of the economy as transport or industry. Even within the same professional group, women always occupy less prestigious positions and earn less. Almost always, women are paid lower wages than men for doing the same work. The fact that women and men employed in different sectors of the economy have different occupations and family responsibilities has different impacts on these two categories. It can be concluded that, at different levels and stages of their working life, women and men experience various effects of unemployment.

Viewing the current situation in relation to economic growth in Kyrgyzstan, it is worth noting that this is a middle-income country with a small economy dominated by mining, agriculture and remittances from citizens working abroad. Kyrgyzstan has achieved great success since getting independence in 1991. Overall, the macroeconomic context in Kyrgyzstan is improving, but its openness to trade and dependence on its neighbors (particularly, Russia) make it vulnerable to events outside its borders (OECD, 2018). In recent years, Kyrgyzstan has followed a clear development program with the aim of poverty reduction through inclusive economic growth.

Unequal access to economic opportunities and business development in the Kyrgyz Republic (Kyrgyz Republic) is partly due to the problems of shortage of qualified labor and uneven access to quality education. For modern development, it is necessary for the country to improve the quality and relevance of its education for the labor market, as well as ensure equal access to opportunities for female and male specialists through education and training. It is important to broaden female political education to increase political awareness across genders (UNDP, 2016).

The analysis of the distribution of the economically active population, as well as of employed and unemployed citizens by sex in 2018 among the entire population, shows that the employment rate of women is 47.4% against 65.7% for men. Accordingly, the unemployment rate for women is 14.3%, which is 3.1% higher than that of men. Comparing with 2017, the unemployment rate among women rose by 4.5 points and among men by 5 points (National Statistical Committee of the Kyrgyz Republic. 15.02.19).

The special part in correlations of the gender status of women in the country has access to education (Wood et al., 2016, pp. 159–181). Remarkable progress has been made in the education sphere in the Kyrgyz Republic. The proportion of females enrolled in various educational institutions is considerable. However, the percentage of women who have completed higher education does not exceed the corresponding level of education among men. In the Kyrgyz Republic, education does not necessarily open doors for women in employment, earnings, career advancement and improvement of social status. Among key programs and strategies contributing to the level of improvement of gender equality in education in the country, the following should be

highlighted: Education Development Strategy in the Kyrgyz Republic for 2012–2020, Export Development Strategy Draft in the Kyrgyz Republic for 2013–2017, Development Program in Jalal-Abad Region for 2013–2017, Program for Naryn Region Development for 2012–2017, Medium-term Strategy for Development of the Power Industry in the Kyrgyz Republic for the period 2012–2017; Draft Strategy for Development of Agriculture in the Kyrgyz Republic until 2020; concept of environmental safety of the Kyrgyz Republic; Medium-term Strategy Draft for Tourism Development until 2017; Development Program for Bishkek city “Renewed capital” 2009–2012; Development Strategy for Chui Region 2011–2013; Development program of Batken Region for 2011–2014; plan of the activities for development in Osh Region for 2013; Draft Strategy for the socio-economic development “Ordoluu Osh” for 2013–2017; Development strategy of Issyk-Kul Region for 2012–2014; Medium-term program for development of Talas Region for 2012–2014 (Ministry of Economy of the Kyrgyz Republic, 02.15.19)

At the initial stage of gender statistics development, it has already been demonstrated that based on biological factors and socio-economic conditions, women’s concerns about health are fundamentally different from men’s (Scott & Martin, 2014): pp. 235–256. Women and men lead different lifestyles and have different needs in health care. Various factors affect the incidence of diseases in women and men, prevention and treatment of diseases and access to health services (Ko et al., 2014, pp. 171–195).

High rates of maternal and child mortality are consistently present in the statistics of the Kyrgyz Republic as the country has the highest maternal mortality rate among the countries of Eastern Europe and Central Asia (according to the NSC, in 2012 it was 49.1 per 100,000 children born alive; for comparison, in Sweden, this figure does not exceed 3.0). Also, the high rate of anemia among pregnant women in Kyrgyzstan is daunting; every second pregnant woman suffers from anemia, 52.8% in 2012. Moreover, a gap exists in the life expectancy of men and women—the national average is 8–12 years less for men. Alcohol dependency among men raises this indicator in women by 8 times. Male mortality in working age is several times higher than female mortality by 3 times in the republic, while mortality from external causes and suicide among men are also several times higher than among women—on average 3.4 times in the country. Disability among men exceeds this indicator in women by 19% due to work injury as does professional disease by 18 times. Mortality from tuberculosis is 2.6 times higher among men than women. Girls and women have less access to sporting activities because most facilities and clubs are focused on men’s sports (Ministry of Economy of the Kyrgyz Republic, 02.15.19).

The above indicates that women and men perform various functions in society have accesses to different resources and feel the influence of both politics and various kinds of events differently. If adequate attention is not paid to gender differences, the political course may lead to the persistence or exacerbation of the existing system of inequality.

## 7. Conclusion

For qualitative renewal of the economy of the Kyrgyz Republic, a new model of economic growth is required, which in the transition to a post-industrial society should be based on the prior development of gender equality. At the same time, we propose to consider economic growth as a long-term change in real output relative to natural values caused by the development of women’s participation in the human capital of the country on the basis of high technology introduction into production, using new methods in the organization, management and development of social sectors with the new quality in labor force as well as accelerating social capital accumulation. It all suggests that transition to a new model of economic growth is impossible without appropriate institutional foundations supporting the generation of knowledge, social stability for all citizens, growth of the level and quality of gender equality and increasing investment in human capital, which in the future women may represent.

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## Notes

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2. Compiled by the author according to data (Human Development Reports//UN Development Programme). URL: <http://hdr.undp.org/en/2018-update> (date of the application: 15.02.19).

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