

Gender equality in Lab our Market as a Birth Rare Factor in the Modern Globalized World

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Abstract The topic's pertinence stems from the progressive rise of the demographic threat to national security of certain countries and the world as a whole. That results from uneven population reproduction as birth rate in different countries and world regions differs dramatically. The article views the theoretical basis for women employment rate's impact on birth rate in developed and developing countries before and after their demographic birthrate transition. It states that after the demographic transition the functional connection between birth rate and economic employment changes to the opposite: women labour employment starts to impact positively the number of children being born. The article provides the proof of the functional connection of the birth rate measured in terms of an aggregate coefficient and the level of gender inequality in the modern labour market measured by the Global Gender Gap Index that is updated annually by the World Economic Forum; this connection is also examined for developed and developing countries. In conclusion, a deduction is made that in the majority of modern developed countries when in economy gender inequality decreases a woman has more opportunities to perform family and professional obligations, which therefore results in a rise in the birth rate. In developing countries the situation is generally reversed: the birth rate is higher as is the gender inequality level.

1. Introduction

In today's globalized world in the majority of developed countries birth rate has for many decades been below the level necessary even for the simple reproduction of the population. In developing countries, recent decades have also seen a consistent trend towards birth rate slowing down to the level of population replacement. As a result, the challenge of increasing birth rate and, therefore, of ensuring demographic security has moved to the top of the political agenda in countries and world communities being a complex multi-aspect problem. This research examines only one aspect of the birth rate increase issue, namely the birth rate in the context of gender discrimination in a labour market.

Thus **the research's pertinence** stems from growing demographic threat for the security of certain countries and the world as a whole that results from uneven population reproduction as birth rate in different countries and world regions differs dramatically.

The first research examining the impact of women's professional employment on the birth rate was conducted by A. Myrdal and W. Klein in the mid-XX-th century [9]. Nevertheless, empirically the differences in the birth rate in relation to women's employment in labour market of developed countries were proved only two decades later by R. Andorka and S. Lloyd [3,8].

Today it has already been scientifically proved that before the demographic transition in the birth rate in the majority of developed countries the level of women's employment in labour market and birth rate changed in opposite directions, and after it - unidirectionally. This is described, for instance, by such researchers as A. Andorka, S. Lloyd, N. Achn, P. Mir, G. Anderson, K. Scott, etc. [1, 2, 4, 5, 6, 7, 10, 11, 16, 20].



Studies examining the direction and/or the mechanism of the impact of gender discrimination in the market on the birth rate are almost non-existent besides a few publications researching the subject on the micro-level. For instance, these are S.Y.Roshchina, T.L.Kharkova.

Theory and practice analysis aimed at identifying a possible correlation between the birth rate and gender inequality is one of the main instruments to formulate effective demographic policy intended to stimulate birth rate and, therefore, to ensure demographic and national security of a country. That provides for a high level of the **scientific pertinence** of the studies designed to find the correlation between the birth rate and economic employment of women, gender inequality in labour relations.

We set **a research goal** of finding and identifying the direction of the correlation between the birth rate and gender inequality in today's globalized world. Does this correlation exist? And, if it does, does it have a positive or a negative impact?

2. Theory

Gender discrimination in the labour market is one of the most important factors related to women's employment and impacting the birth rate. Despite regulatory ban both on national and international levels, labour market discrimination today is present at all stages of professional career building of a woman in all the countries without exception.

Gender discrimination in the economy is also manifested by the fact that the solution to this problem is one of the Sustainable Development Goals 2016-2030 adopted at the New York summit in September 2015. Thus Goal 5 is to "achieve gender equality and empower all women and girls" [13].

The Russian Federation adopts an active position concerning being a side to international instruments, including those that ban labour market discrimination. However, the Russian legal system is based solely on the ban for women to practice certain professions.

Why then ensuring gender equality in labour market, first of all in developed countries, is a factor that primarily determines the birth rate?

Firstly, employers discriminate against women because of common persistent gender stereotypes about differences in labour productivity, career building strategies depending on an employee's gender. The employer understands that a modern woman tends to have double employment, at the labour market and in her family. Therefore women, especially at the age when the birth rate intensity is particularly high (20-29 years), are less likely to be employed and promoted and more likely to be fired. What is more, regardless of the age group, they pay less to women than to men for the same amount of work.

Secondly, women themselves knowing about gender discrimination in the labour market tend to assess their professional career building and its development as less bright.

Gender differences can already be seen in their future career choice. Women's rational behaviour determines their choice of occupations with relatively high initial payments and the lowest return of experience in order to reduce as much as possible losses in gains related to leaving the labour market due to the pregnancy and parenthood. Therefore women are more likely to choose professions, employment areas, and economic sectors that take fewer labour efforts in terms of time, qualification and labour intensity.

Women's labour strategies are also influenced by their reproductive plans: thus women that intend to have a family with several children more often choose employment which guarantees a job with stable labour compensation that is though generally lower. Women that do not plan to have a family with children in the near future are more likely to choose less stable jobs but with higher salaries.

It is worth mentioning that due to active development of information technologies many professions die out and are replaced by new professions, new types and forms of employment that are related to modern information and communication technologies that enable effective work from home in any corner of the world. All this enables women to choose more freely the most convenient forms and working hours that thus gives them an opportunity to reconcile family and professional employment and to provide for stable family budget during a child-care leave.

The best example is the IT that due to its unique features naturally gives women considerable opportunities to work remotely. Besides, IT-employees are generally representatives of the younger generation (20-35 years old, as a rule) and are therefore less exposed to gender stereotypes in comparison with the older ones.

Also, there are modern multinationals that often outsource their jobs engaging professionals from other countries for remote work. This also provides additional flexible jobs conditions, for women as well as for men.

Thus we can conclude that, firstly, in today's labour market gender discrimination is still present and it contributes to women's forcing out to less promising and less well-paid professions and sectors or their complete withdrawal from professional to family employment. Secondly, double discrimination in the labour market (practiced by employees and employers) is self-replicating which perpetuates gender inequality.

Greater gender equality in today's global labour market in developed countries will give women more opportunities for professional self-fulfillment. Recent studies of birth rate and reproductive behaviour conducted for European countries with low birth rate identify the strongest positive connection between a possibility of having a second child and policy measures in gender equality [1]. Therefore, we can say that greater gender equality in today's labour market, most of all in developed countries, can in several decades result in a birth rate growth for new generations of women.

3. Experimental studies results

Let us consider this pattern using the example of four modern countries: Japan, Russia, Sweden and the USA (Table 1).

Japan is an interesting case in this context as unlike other developed countries it still has a developed family culture and predominating family values. For instance, in the Japanese society the still exists a clear division of responsibilities: in a family, a man is an earner and breadwinner, and a woman is a submissive housewife that 'has to' bear children for the society's benefit. That is why it is not surprising that Japanese women first seek self-fulfillment as professionals (till 30 years old) and then switch entirely to housewife responsibilities and child-caring: for Japanese women an official marriage and a birth of a child is a compulsory stage in their life that results in total withdrawal from the labor market.

However, despite the developed family dominant culture, the aggregate birth rate (hereinafter the ABR) in Russia is by 0.292 children per woman higher than in Japan: in 2016 the ABR in Russia was 1.762 and in Japan 1.47 children per woman [17, 21].

According to the Global Economic Forum's (hereinafter the GEF) research, in 2016¹ Russia ranks as the 41-st in the world (the index integral value 0.722) and Japan as the 118-th (the index integral value 0.569) by the Global Gender Gap Index (hereinafter the GGGI²) in economy [12]. Therefore from the GGGI comparison, we can say that in today's Russia the level of gender equality in labour market is higher than in Japan. In other words, today in Russia women have many more opportunities and a friendlier environment that enables them to reconcile family and professional life.

Thus in Russia in comparison with Japan, both the birth rate (by 0.292 children per woman) and the gender equality level in labour market (40 and 111 ranks respectively) are higher than in Japan that demonstrates positive correlation between the GGGI and the ABR.

Similar conclusions can be drawn for other developed countries in the modern globalized world as well (Table 1).

¹ Among 144 states.

² In this study the GGGI is a "Global Gender Gap Index" that has been updated by the Global Economic Forum since 2006.

Sweden is of special interest in this regard as among modern developed European countries it has the highest rate of marriages³ and births. For instance unlike other developed countries the total marriage rate in Sweden before the second demographic transition (in the 1970s) and now, after it has ended, is roughly speaking at the same level: 4.5-5,5% [14].

The same applies to the birth rate: in 1970 in Sweden, the ABR was 1.92, and in 2016 it was 1.85 children per woman [19]. Thus, in 2016 in Sweden, The ABR was by 0.088 higher than in Russia.

Since 2006 when the GGGI was first introduced by the GEF, Sweden ranks among the four world leaders in gender equality (in 2006 the index integral value was 0.815). By the GGGI for economy, Sweden ranks 11-th (the index integral value 0.802) [12].

Thus Sweden in comparison with Russia has both a higher birth rate (by 0.088 children per woman) and gender equality in labour market level (11-th and 40-th ranks respectively). Therefore on the basis of the comparison made between Sweden and Russia, we can again see a direct correlation between the GGGI and the ABR.

Making a comparison between Russia and the USA is also interesting as in 2016 the US by gender equality level in education were the first in the world that results in economic and financial independence of American women. Nevertheless, in 2016 by the level of economic opportunities for women, the US ranked as only the 26-th (the index integral value 0.752) [12]. Therefore by gender inequality in labour market, the US is far ahead of Russia.

In 2016 the ABR in the US was also higher than in Russia by 0.08 children per woman. For example, in 2016 the ABR in Russia was 1.762, and in the US it was 1.84 children per woman [17, 19]. Therefore on the basis of the comparison made between the US and Russia, we can again see a direct correlation between the GGGI and the ABR.

Table 1. The Global Gender Gap Index (GGGI) and the aggregate birth rate in developed countries in 2016 [12, 15, 17, 19].

Country	The GGGI (in economy) (integral value)	The GGGI rate (in economy)	The ABR, children per woman
Sweden	0.802	11	1.85
The USA	0.752	26	1.84
Russia	0.722	41	1.762
Japan	0.569	118	1.47

The comparative analysis of the GGGI and the ABR in four developed countries (Sweden, Russia, the USA and Japan) allows us to draw a conclusion that there tend to exist a direct correlation between the level of gender inequality in labour market measured by the GGGI and the birth rate measured by the ABR in the majority of developed countries of today's globalized world (socially and economically homogeneous groups of countries): if gender inequality in the labour market decreases a woman can reconcile her family and professional life easier and therefore she can more easily satisfy a need for children which results in a birth rate increase.

However, if we are to compare other groups of countries, namely developed and developing ones, there the correlation between the birth rate and gender inequality in the labour market will be inverse (Table 2).

³It must be said that the marriage rate and the birth rate in today's globalized world are still closely linked: the higher the marriage rate, the higher the birth rate. Though in recent decades these links are becoming less strong.

For instance, countries with greatest gender equality⁴ are represented by the majority of the world's developed countries that have the highest GGGI in their economies. These are, for example, Iceland, Finland, Norway, Sweden. The ABR in these countries hovers between 1.86 and 2.01 children per woman [15, 19].

Table 2. Global Gender Gap Index (GGGI) and aggregate birth rate, 2016 [12, 15, 17, 19].

Country	The GGGI (integral value)	The GGGI rating for 144 countries	The GGGI (in economy) (integral value)	The GGGI rating (in economy)	The ABR, children per woman
Iceland	0.874	1	0.806	9	2.01
Finland	0.845	2	0.794	16	1.75
Norway	0.842	3	0.818	7	1.86
Sweden	0.815	4	0.802	10	1.88
The Saudi Arabia	0.583	141	0.328	142	2.11
Syria	0.567	142	0.273	144	2.55
Pakistan	0.556	143	0.320	143	2.68
Yemen	0.516	144	0.352	141	3.77

The countries with the lowest gender equality levels are generally represented by developing countries, for instance, by the Saudi Arabia, Syria, Pakistan, Yemen. The ABR in these countries hovers between 2.11 and 3.77 children per woman [15, 18, 19].

It is worth noting that these are predominantly Muslim countries where due their history, cultural and religious peculiarities a woman enjoys freedom as a person neither in a family circle nor economy and politics.

Therefore, the comparative analysis of the GGGI and the ABR conducted for modern developed and developing countries of the globalized world lets us draw a conclusion that gender equality in labour market measured by the GGGI and birth rate measured by the ABR have a reverse connection between groups of countries (developed and developing).

The conducted research demonstrates that generally there is a reverse correlation between gender inequality in labour market and the birth rate between developed and developing countries: the majority of developed countries with the highest GGGI has lower ABRs (and vice versa). However, for homogeneous country groups (by socio-economic development), in particular for developed countries, the direct correlation between the GGGI and the ABR is predominant.

Conclusion

Today when there is a prevailing trend towards having fewer children, even the difference in 0.1-0.2 children per woman between countries that have or have not active gender equality encouraging policy in their labour markets is of utmost importance. Today it is essential to develop not only demographic policy measures that recognize more fully women's employment factor in the labour market but also a set of steps aimed at encouraging gender equality in economy. As this research demonstrates gender

⁴ On the basis of the 2016 GGGI rating

equality in labour market has predominantly positive effect on the birth rate. Therefore demographic, economic and gender policies in European countries must be more closely connected. Such connections will make birth rate increase policy more effective, reach the birth rate that ensures stable population reproduction and therefore will provide greater national and international security.

References

- [1] N Ahn, Mira P A 2002 note on the change in fertility and female employment rates in developed countries *Journal of Population economics* vol. 15 p. 668.
- [2] Anderson G, Scott K 2007 *Childbearing: Demographic research* vol. 17 (30) p. 930.
- [3] Andorka R 1978 *Determinants of Fertility and Advanced Societies* London: Methuen.
- [4] Heer D 1968 *Society and Pop Population. Englewood Cliffs* Reducte - Well.
- [5] Boom B 1993 The Compatibility of Employment and Childbearing in Contemporary Sweden *Acta Sociologica* vol. 36 pp.101-120.
- [6] Kharkova T L, Andreev E M 2000 There was no evidence of the 1995 microcensus *European journal population* vol. 16 pp. 211–233.
- [7] Kohler H P, Kohler I 2001 *The European Journal of the population* vol. 18 pp..233-262.
- [8] Lloyd C 1991 The Contribution of the World Fertility Surveys to Understanding the Relationships of Family Work vol. 22 (3) pp. 144–161.
- [9] Myrdal A, Klein W 1956 *Womens Two Roles: Note and Work* London: Routledge, Kegan Paul.
- [10] Fawcett T 1973 *Psychological Perspecffnes Rohrulion* N.U. p.65.
- [11] Sweet J A 1973 *Woman in the Labor force* New York: Seminar Press.
- [12] *The Global Competitiveness Report 2016* The official website of the World Economic Forum. - [Electronic resource] - URL: http://www3.weforum.org/docs/WEF_GenderGap_Report_2016.pdf.
- [13] 2015 Transforming our World: the 2030 Agenda for Sustainable Development. United Nations p. 45.
- [14] The overall marriage rate *Database of OECD countries* - [Electronic resource] - URL: <http://stats.oecd.org>. [date of visit 04.03.2018].
- [15] Rating of countries by the level of total fertility rate *Ratings of countries and companies of the world* - [Electronic resource] - URL: <http://total-rating.ru/1841-summarnyy-koefficient-rozhdaemosti-v-stranah-za-2016-god.html>. [date of visit 04.03.2018].
- [16] Parents and children, men and women in the family and society 2007 M . NISP vol.1 pp. 171–216.
- [17] *Russian statistical yearbook*. 2017: Stat. Sat / Rosstat. - M. p.109.
- [18] Sultanov Sh M 2006 *Tajikistan economy: state and development prospects* The Economist vol. 6 pp. 68–77.
- [19] Total fertility rate 1970–2015 *Application Demoscope Weekly*. [Electronic resource] - URL: <http://www.demoscope.ru/weekly/app/app4007.php>. The date of the appeal: [the date of visit 04.03.2018].
- [20] Tevenon O 2008 Family policy in developed countries: contrasting models *Population et societies* vol. 448.
- [21] *Japanese Statistical Yearbook* 2017 The official website of the statistical office of Japan. - [Electronic resource] - URL: <http://www.stat.go.jp>. [date of visit 04.02.2018].