

Gender Equality and Progress Analysis in Representative Regions Based on Maslow's Hierarchy of Needs

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Abstract: Thousands of years ago, the emergence of patrilineal society replaced the matriarchal society, and humans have lived under this social system ever since. Although Darwin's theory of evolution and many scholars believe that this change is a symbol of human progress, with the continuous progress of human civilization, the patrilineal social system that is almost equal to the history of mankind is being overthrown by the torrent of the times. With the perseverance of the past few generations, people can clearly feel that the status of women is constantly improving, and the boundaries between the sexes are continuously blurring. But in some areas and regions, the movement appears to have reached a dead end. This article quantifies the achievements of the gender equality movement in the global region over the past few decades from the data level and indicates the areas we still have work to do through data analysis. Starting from data processing, the author first showed the current situation of gender equality, then proposed the concept of closing the loop on gender equality issues, and analyzed the efforts made by human beings in the gender equality movement since 2000 from the aspects of health, education and work and existing problems. Finally, this paper analyzes the gaps in the movement in various regions. Undoubtedly, affirmative action movements of gender in various countries and regions are making progress in line with local characteristics. However, in contrast, some fields have not made significant progress due to special historical and cultural reasons.

Keywords: gender equality, human society, pay gap, Maslow's hierarchy of needs

1. Introduction

In the section on human biological evolution, the difference in a pair of sex chromosomes created the sex difference today. Like many other creatures, human ancestors chose the so-called male farming and female weaving on the future evolutionary path and formed today's patriarchal society. But with the emergence of civilization and the development of science and technology, the enlightenment of human thinking has given everyone the power to express themselves and find a way out. As one of two groups of human society who are genetically divided, women's affirmative action has been heard and accepted over the centuries.

There is no doubt that the human gender equality movement has accomplished a great deal over the past few generations. However, in some corners of the world, due to economic, cultural, and historical reasons, the mainstream feminist movement is blocked everywhere. Misperceptions about

gender equality and practices in promoting gender equality can also lead to large efforts with negligible results. So, analysis and productive efforts to ensure that the concept of gender equality is clear are necessary; otherwise, using these data and measuring progress as intended outcomes may decline significantly [1].

Gender inequality is usually interlocking. Another similar problem causes many gender equality problems. The pay gap is one of the most critical manifestations of gender inequality. However, the remaining unexplained pay gap is much smaller if the education difference due to gender discrimination is controlled to remove its effect on the pay gap [2]. This phenomenon shows that gender inequality surrounds every individual who suffers from injustice and follows them everywhere. It also shows that the problems people face in this regard have taken root in human society. Stereotypes about both genders are a good example. Children get their first impressions of both sexes from the relationship of their native families and have a deeper stereotype of both sexes in future social communication and network media. In this process, the content of the media actually reflects the value model and mainstream attitude of society. But at the same time, the media can reinforce gender-based discrimination by portraying stereotyped and lurid images of women and providing fair and balanced reporting that exposes gender-biased practices [3]. Female decision-makers are another example of being caught in an inequality loop. Although gender equality requires the joint efforts of both sexes, many related policies and systems are more convenient for women to formulate and implement. However, the injustice to women in politics makes the number of women who have decision-making power in relevant bills far less than that of men, so the relevant bills cannot be firmly implemented, thus forming a closed loop. Only a handful of countries worldwide have women's share of seats in major national legislatures above 30%, which is often considered the critical mass necessary for women to play a role in having a significant impact on politics. Globally, the average is only 10% [4]. Differences in regional culture and economic development also significantly impact gender equality. Developing and underdeveloped countries attach different importance to gender equality from children to adolescents. Although many developing countries have managed to make female students' time allocation and the types of activities they engage in more similar to their male peers in school, females continue to have heavier workloads and less leisure time than males during adolescence [5].

In summary, gender inequality is still widespread around the world, and the way it is addressed varies across regions. At the same time, the issue of inequality has received extensive attention from scholars at home and abroad, but few papers have discussed and analyzed global data. This article, therefore, examines the course of the movement worldwide over the past few decades in order to achieve the ultimate goal of gender equality. This article will start with the fundamental rights of women and use Maslow's hierarchy of needs as a standard to analyze the existing problems in the achievements of various regions in the past layer by layer. This article quantifies the power of women when performing the same activities as men and compares it with the rights that men can exercise to analyze whether there will be injustice between men and women in related events. And it uses a lot of data that can intuitively reflect that men and women are treated differently in society for analysis. This paper also analyzes the progress and development direction of human society in this process from the longitudinal analysis of the changes of various variables over time.

2. Methodology

2.1. Source of Data

Based on the Gender Statistics Data 2022 by World Bank, this article classifies and analyzes a large amount of data. This dataset contains 991 various unique indicators of the treatment of women from

birth to school to retirement in 265 various regions since 1960, covering the comparison of the treatment of men and women in all aspects of society.

2.2. Data Processing

For 262616 rows of information and data, the method this paper adopt is to digitize and standardize each piece of information first. There are basically two different data collections in this data set, one is to directly indicate whether women can be treated like men in one aspect of society, such as whether women can apply for loans like men, and the other is whether men and women Separate statistics for women on the same events such as a change in average salary for women in North Africa and change in average salary for men in North Africa. For the unification of these two data types, the method adopted in this paper is to compare each data of the latter with the female as the numerator and the male as the denominator. This method can not only unify each set of data to prepare for the next analysis, intuitively reflecting the different treatment of men and women at all levels of society, but also effectively reduce the amount of data under the premise of reflecting the same amount of information.

This paper puts forward the concept of inequality ring, that is, gender inequality has taken root in human society for thousands of years and has its own closed system. Therefore, considering any one section of this system in isolation is incomplete and insufficient. Therefore, the author will start from the pyramid of human needs, consider the difference between the treatment of women and men in the most basic needs, and take the inequality ring into account.

This paper first demonstrates how far humanity has come in terms of gender equality. This paper randomly selects the performance of 50 unique indicators in 2022 and calculates the average value of these data in each region of the world to show the results that have been achieved in today's class. Then, from the three most basic perspectives, the author analyzes the changes in women's treatment in health, education, and work since 2000 to show the progress of society and analyze the direction that needs to be worked hard. Finally, the author randomly selected ten regions around the world and analyzed the differences in wages between women and men in these ten regions in the past 20 years based on wages and introduced the GDP of each region to make the data more objective to show the progress of the gender equality movement in each region difference.

3. Analysis

3.1. Sampling Analysis

First of all, this article randomly selected 50 pieces of random data from the data showing the difference between women's treatment and men's treatment in different aspects in one region and found these 50 indicators in other regions for analysis.

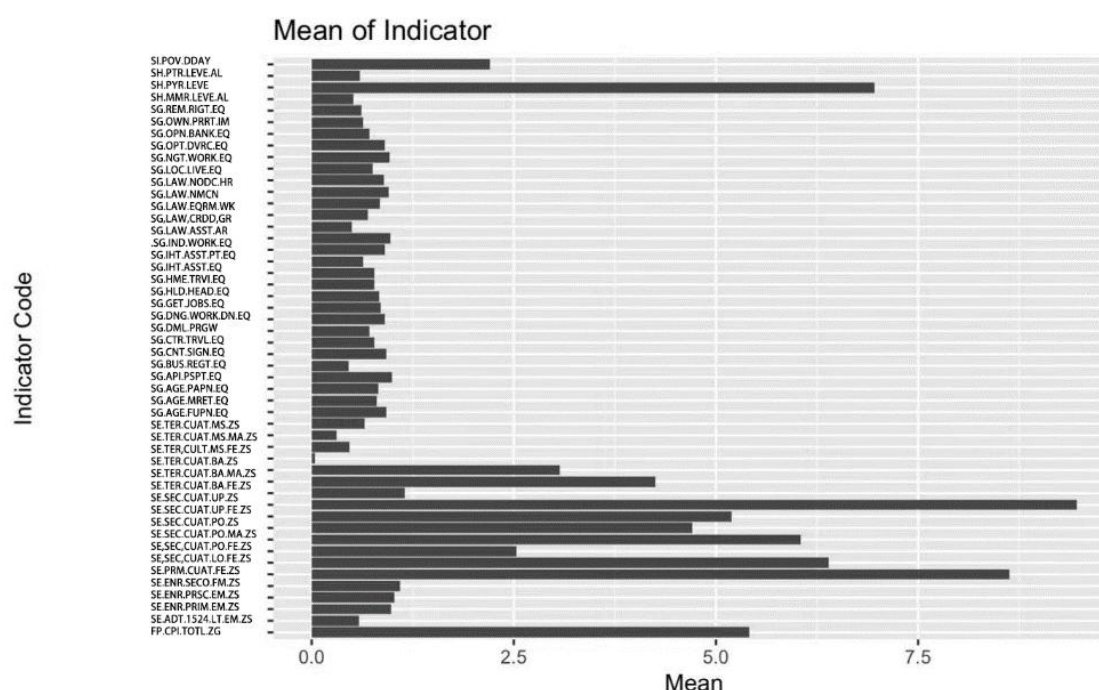


Figure 1: Behavior of mean of 50 indicators in 2022.
(Photo credit: Original)

Figure 1 shows the performance of the 50 Stochastics globally in 2021. Due to the different units and measurement standards of each indicator, there are also very obvious differences in data. For more than half of the data, the numerical intervals are between 0 and 1. They reflect whether women can do certain things like men. For example, A woman can travel outside her home in the same way as a man (1= yes; 0=no) is replaced in the figure by the abbreviation SG.HME.TRVL.EQ. For these data, only a very small number can be close to 1 (women have the same treatment as men in this respect), and for more than half of the data, they are between 0.5-0.8, which means that even in 2021, in the majority of society, women are not treated the same as men in most fields and aspects. The large standard deviation of these data also shows that in various parts of the world, the process of gender equality in human society is uneven.

3.2. Treatment Difference Analysis Based on the Three Most Basic Perspectives

In the patrilineal society for thousands of years, the respect of men has long been engraved in people's hearts and rooted in the deepest part of society. Injustice against women has already formed a closed loop. Girls are more likely than boys to be abandoned at birth. Next, women will get fewer educational opportunities than men on average, which makes women less competitive than men when they enter the working stage. In the decision-making positions of the government, the number of female decision-makers is much less than that of male decision-makers, which leads to a gender equality bill not being valued and implemented, which also means that women's treatment has not been improved for a long time, thus forming a closed loop. In the following analysis, the author will start with medical health, education and income, and analyze the changes in the treatment of women in various fields in the past few decades on a global scale and the differences in the treatment of women in various regions of the world.

3.2.1. Health

This article starts with the health and safety of female puberty. There are three curves in the graph, which represent the change of each activity on a global scale since 2000.

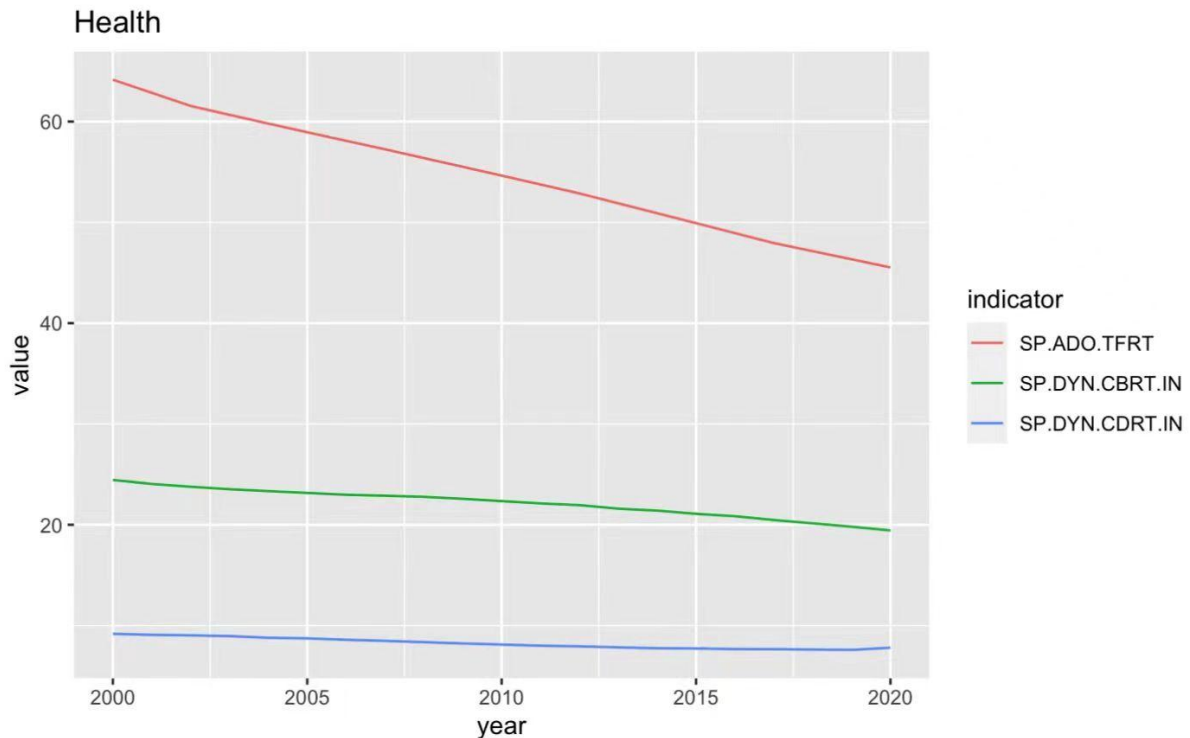


Figure 2: Change of 3 indicators about women's health from 2000 to 2020.
(Photo credit: Original)

SP.ADO.TFRT represents the Adolescent fertility rate (births per 1,000 women ages 15-19). Since 2000, there has been a dramatic reduction in female fertility during puberty. Together with the reduction in the crude fertility rate (SP.DYN.CBRT.IN), it appears that more women have the power to choose, or their desire to bear children has decreased. The small reduction in crude death rate (SP.DYN.CDRT.IN) is the result of medical progress. The decline in fertility is one symptom of women's increased independence. Studies have shown that women tend to voluntarily choose to have fewer children compared to the family size imposed by their husbands. From another perspective, more women receiving education and spending more time on work is also one of the important reasons for the lower birth rate [6,7]. The decline in the birth rate of adolescents is even more telling. According to research, since 2000, the fertility rate of female adolescents has declined from small to large ages. This shows that adolescent girls are increasingly protected by society, and related education is popularized [8].

3.2.2. Education

Women's education is another key link in breaking down gender discrimination. This section will analyze the changes in basic education for women after 2000, starting with the proportion of basic education between the two sexes. After the millennium, the rate of Children out of school (% of primary school age) has been significantly reduced, and the enrollment of primary school increased dramatically due to the emphasis on education. It is worth noting that in the past 20 years, the basic education rate of women has been guaranteed. We can see from the figure that the proportion of

women receiving basic education has gradually become the same as that of boys of the same age. The change curves of the two are basically equivalent to the primary school enrollment rate, which proves that gender equality in the basic education stage is developing steadily and benignly in this century and has achieved phased results. At the same time, the proportion of female teachers in basic education has been steadily increasing in recent years and will exceed 70% of the total by 2020. The proportion of female teachers in high school education has also risen from slightly over 50 percent in 2000 to nearly 60 percent now.

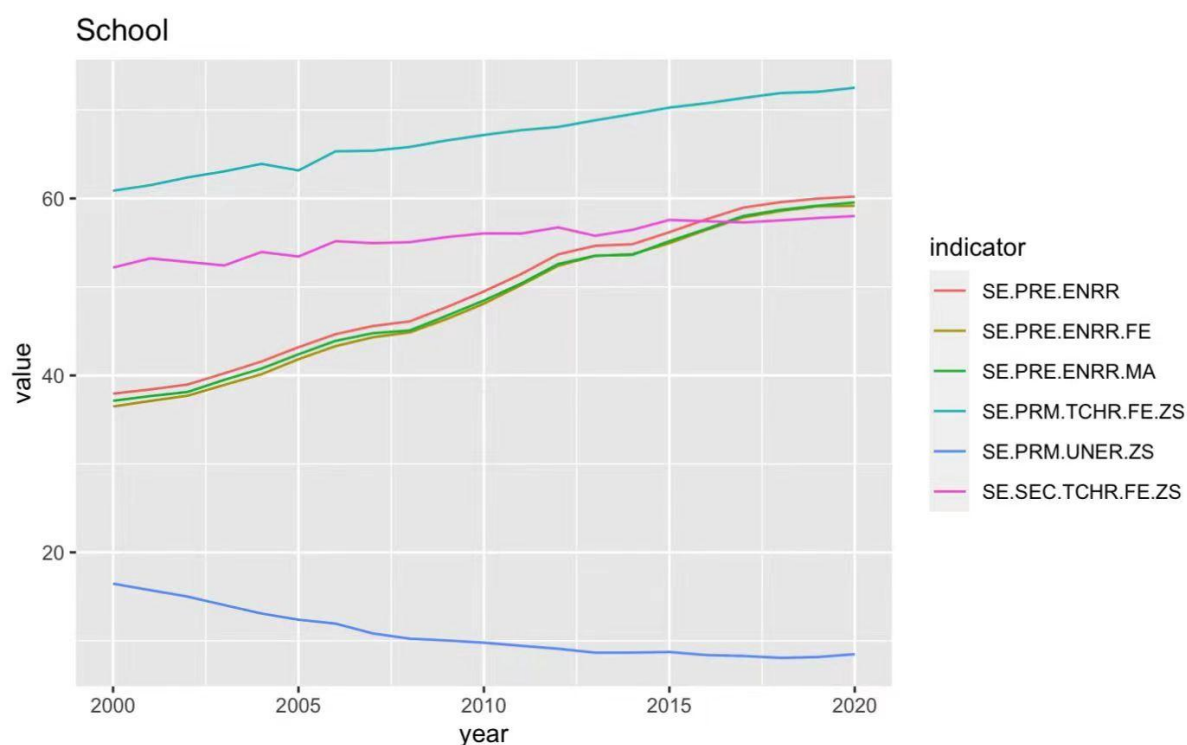


Figure 3: Change of 6 indicators about women's education from 2000 to 2022.
(Photo credit: Original)

Related research suggests that there may be a link between teacher gender and classroom management. Research consistently shows that men are more likely to control conversations by choosing topics, interrupting more often, and running them for longer. Women, on the other hand, were more likely to use helplessness as a way of influencing others. Girls are more polite and less competitive than girls, while boys tend to be more assertive, aggressive and dominant [9]. Although there is no doubt that the increase in female teachers has its reasons and implications in education area, there are historical reasons for analyzing the reasons for the feminization of teaching from another perspective. In most countries, female teachers are a relatively low-status profession, and the entry of young women into the profession ensures its low prestige. A study of the growth of the percentage of female teachers in the United States shows that the main factor behind feminization is the economic demand for cheap teaching labor as education becomes universal in the United States. Others say that perceptions of what a teacher should be are constantly changing and that perceptions of women are constantly evolving, making women good candidates for teaching. Some scholars also argue that society's submissive and moral definition of young women makes it easy for them to indulge in standardized forms of education designed by male experts. Still, others said that men left teaching because they were increasingly demanding and could get better jobs, while young women were qualified, cheap, and easy to hire and had few other careers. All these factors work together in

different ways to lead to the feminization of primary and secondary school teaching to the present day [10]. But there is no doubt that the profession of teaching offers a wealth of employment and many opportunities for females.

3.2.3. Employment

The difference in income between men and women can directly reflect society's perception and positioning of men's and women's abilities and social status. Next, this article will analyze society's perception of men and women at work, starting with the unemployment rate since 2000. Over the past 20 years, the unemployment rate for men has been slightly below the average unemployment rate, while the unemployment rate for women has been consistently higher than the average unemployment rate.

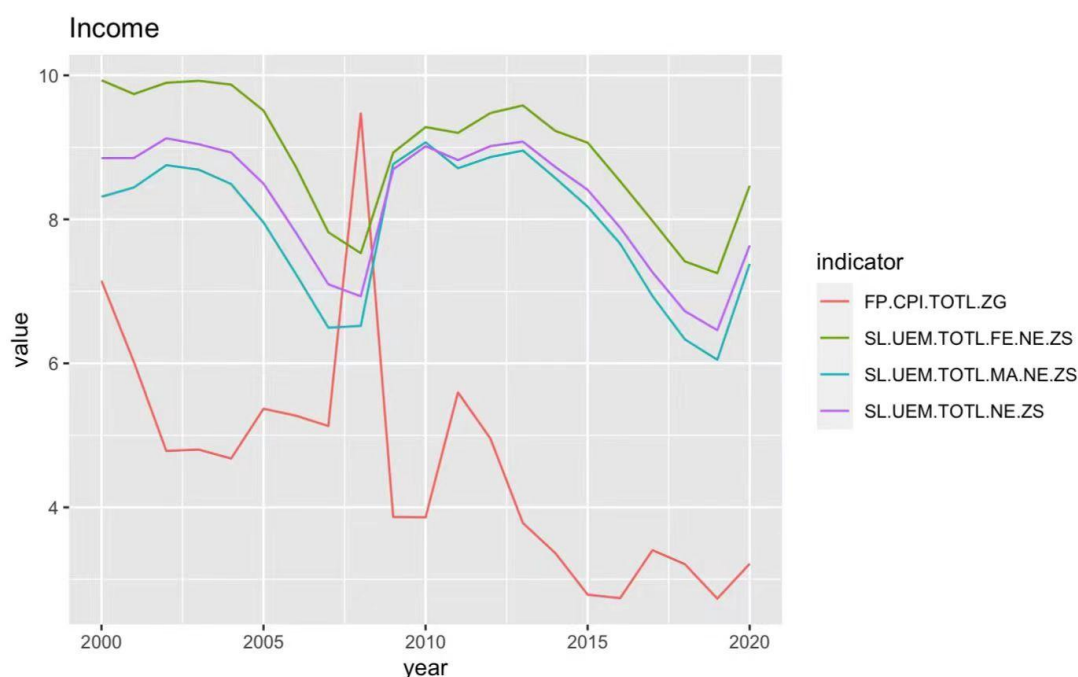


Figure 4: Change of women's employment from 2000 to 2022.
(Photo credit: Original)

Gender differences in industry composition are a major source of cyclicity in the unemployment gap. The distribution of female and male workers has consistently varied widely across different industries. In general, commodity-producing industries such as construction and manufacturing employ more male workers, while most female workers are employed in service-providing industries [11]. The size of these industries in society as a whole and the total number of jobs also have a great influence on the higher unemployment rate of women than that of men [11]. Another compositional change in the labor force is the difference in skill levels and educational attainment between men and women. Combining the changes in the educational level of women in the previous chart, it can be seen that the educational level of women has increased significantly after 2000, and the gap in the unemployment rate between women and men has also decreased to a certain extent.

In addition, the curves in this figure have obvious abnormal fluctuations between 2005 and 2010, so the author deliberately introduced Inflation, consumer prices (annual %) to explain this anomaly data. The energy and food crisis peaked at inflation in 2007. The combination of excessive inflation

and a sustained reduction in unemployment resulted in abnormal fluctuations in the unemployment rate between 2005 and 2010 [12].

3.3. Region Gap

Since 2000, humanity has come a long way toward gender equality in health, education, and work. But it is undeniable that due to different historical, political and cultural reasons in various countries and regions, the progress of gender equality has always been uneven.

This article randomly selected ten regions from 256 regions, starting from the changes in the wage gap between men and women since 2000 and showing the differences in the results of the affirmative action movement in different regions. We can see that in different countries and regions, men's wages are generally higher than women's wages almost all the time after 2000, and the difference in higher wages can reach several times. During these 20 years of changes, the wage gap between men and women in various regions reached its peak around 2007 when inflation occurred, indicating that women's wages are far less firm than men's wages and can resist risks. At the same time, the author concludes that when the global economic situation is better, the wages of women in various regions will be closer to that of men.

Subsequently, this paper introduces the GDP of each region as a reference. Among the 10 randomly selected regions, 5 regions have achieved close to zero wage gap between men and women, but there are still 5 regions with a significant gender wage gap. In two African regions (AFE, AFW), this wage gap is at its peak. But the good news is that the salary gap in each region has gradually decreased over time.

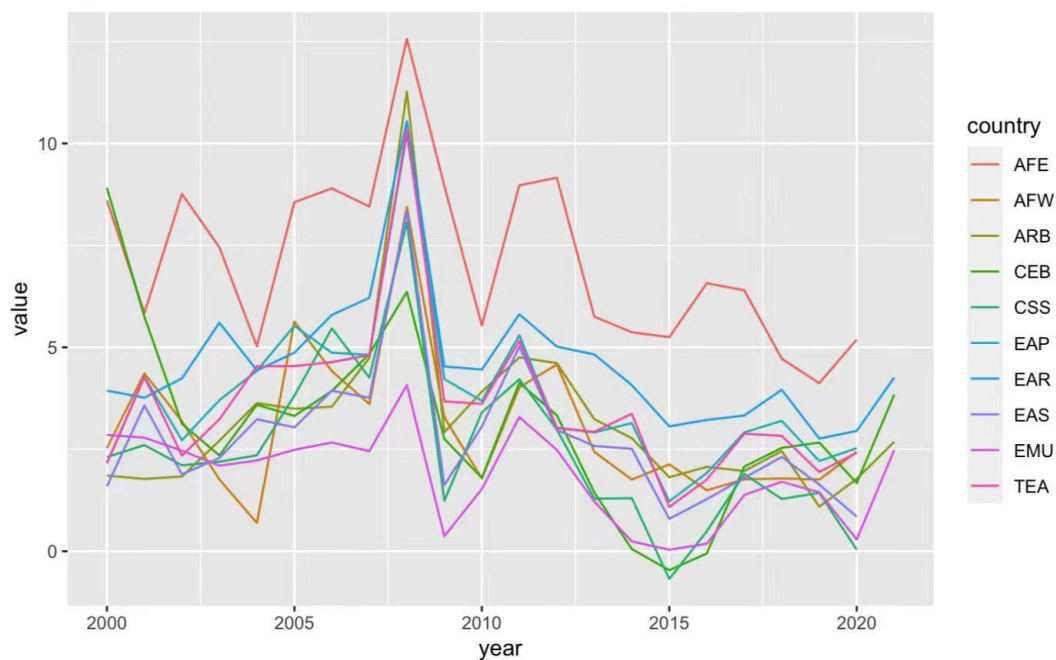


Figure 5: Change of income differences between two genders in 10 regions from 2000 to 2022.
(Photo credit: Original)

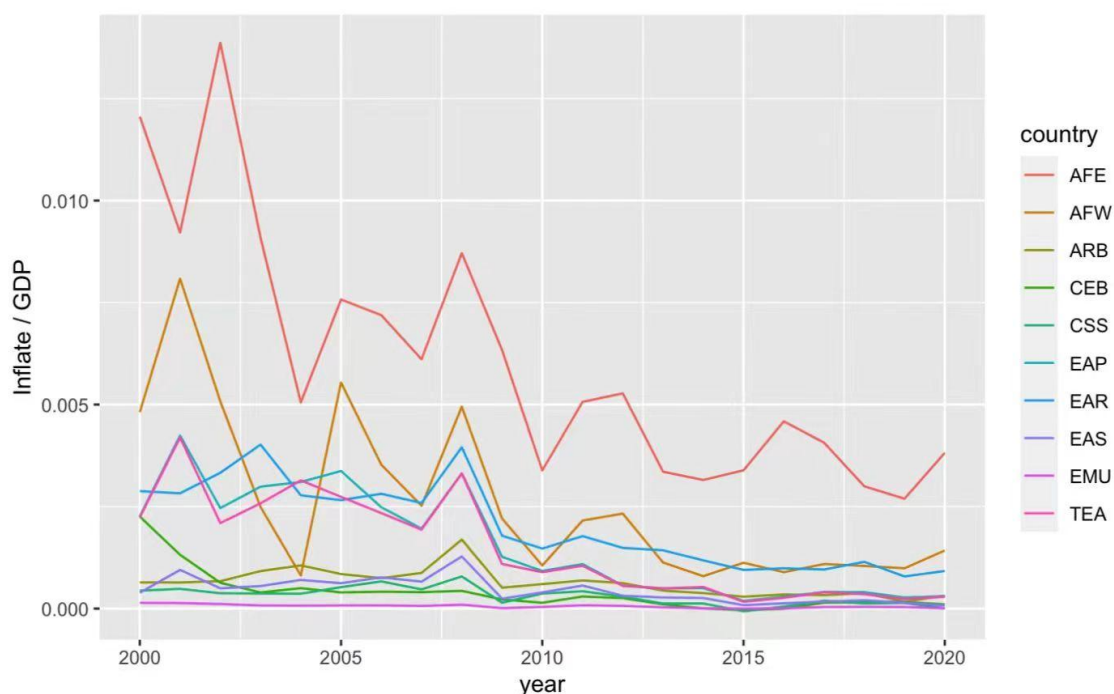


Figure 6: Change of income differences between two genders in 10 regions from 2000 to 2020 considering regional GDP.
(Photo credit: Original)

4. Conclusion

Starting from health, education and income, this paper studies and analyzes the achievements of human society in terms of gender equality since 2000. In terms of health, the protection of the health of young women is steadily improving. In terms of education, in basic education, human beings have achieved staged results that men and women enjoy equal basic education, and female teachers in primary and secondary schools. The proportion of female teachers has also been steadily increasing in the past 20 years. Among them, the proportion of female teachers in elementary schools has exceeded 70% and the proportion of female teachers in high schools has also approached 60%. Although there are complex reasons behind this large proportion of jobs for women, it is always in the interests of women to provide jobs and more opportunities for women. In terms of employment, women have always been in a disadvantaged position in this century. No matter how the economy develops, the unemployment rate of women is always higher than that of men, but the gap between the two is gradually decreasing. In terms of income around the world, this paper finds that there are significant differences in the comparison of women's income and men's income around the world. This difference persists even when GDP is introduced as a parameter. The authors found that this difference was relatively small in the more developed regions.

Overall, humanity has achieved remarkable results in the gender equality movement over the past 20 years. But pulling out a nail that has existed in human society for thousands of years is not something that can be done in a few decades. So far this gender gap still exists and is particularly serious in some fields and regions.

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