

Comparison of women's employment situation in the labor market --- A case study of European countries and Asian countries

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Abstract: The lack of female labor participation is a fundamental issue that has been raised as a result of workplace gender discrimination, which has prevented economies to reach their full potentials as Human Resources are wasted. In order to resolve this issue, it is vital to investigate the trend of female participation in the labor force, as well as the underlying factors behind such trends. We gathered substantial data from the International Labor Organization and the World Bank for this report to analyze women's work situations in Europe and Asia in a larger context. We've also made assumptions about the situation's likely underlying causes. As a result of our research, we observed a clear gender gap in terms of female and male employment rates in both Europe and Asia, with the causes being the level of economic development, urbanization, labor policies, education level, and cultural differences. Fortunately, women are becoming more conscious of their economic and social rights, resulting in a reduction in gender gaps in the labor market. Even though gender discrimination still exists in the labor market and workforce and is difficult to eliminate, this study provides a comprehensive overview of the situation and discusses the causes for it to stimulate future research on solutions to such problems.

CCS CONCEPTS • female labor • gender equality • labor economics

1. Introduction

With the development of the world economy and the impact of globalization, women's economic independence and awareness of self-rights have gradually enhanced their social status and weakened the division of labor between men and women. However, there is still obvious gender discrimination in recruitment requirements, salary, and position allocation in real life. The goal of every enterprise is to maximize economic benefits at the lowest cost. In terms of employment, Emer Smyth and Stephanie Steinmetz states that the threshold for women to enter the market is expected to gradually increase, especially when the labor market oversupply, female workers will be impacted before their male counterparts [2]. According to a report by António Guterres of the UN office on the employment of women [12], there are reasons to believe that gender discrimination still exists around the world and is serious in some countries. In the West, Handbook of Labor Economics analyzed gender discrimination in the labor market from the perspective of employment economics and human capital [3]. Through the basic theory of human capital, it is believed that workers with the same education, ability, and experience will have inequality in employment, job selection, and promotion due to non-economic reasons.

According to World Bank data up to 2020, women account for half of the world's population. Yet, both the lack of female labor participation as well as the low educational achievements and opportunities manifests a lack of female contributions to economic production. This inefficient use of female labor has had unneglectable negative impacts on economies and societies due to many factors as addressed in Psacharopoulos and Tzannatos' research study [17]. The factors affecting women labor

force differentiate geographically, thus the level of female participation in the labor force varies in different countries, especially at a continental level. In Vlasblom and Schippers's research study [15], it is argued that the change in behavior, as well as the change in the social and institutional context, are the main factors that led to the increase in female participation rate in Europe. Suggesting that despite their significant increase in educational level and decrease infertility, the impact on female labor participation was relatively minor. Asia presents itself in a different light as Cameron, Dowling, and Worswick [16] used comprehensive models to suggest that the level of education received by women has significant impacts on labor market participation, especially tertiary education. The implication behind such limitations of education in affecting female labor is the traditional cultural context and their defined gender roles combined with conservative thinking. Fortunately, nowadays, according to an official report by UN [19], female workers have become more and more aware of Rights and interests and actively seek reasonable Rights and interests for themselves. Many countries have introduced many welfare policies and relevant laws and regulations to promote gender equality in the labor market. To achieve a higher participation rate of female labor, and utilize Human Resources efficiently, it is thus necessary to examine the trend of female participation in the labor force, as regarded as the underlying causes for such trends.

2. Background

To display the general situations of women in Asia and Europe, Labor Force Participation Rate (LFPR) and Unemployment Rate are selected to statistically express the phenomenon in the recent decade. LFPR is defined as the percentage of working-age people who are actively seeking a job or is currently employed, so it may imply women's attitudes toward work, which is useful for showing evidence. For example, gender difference in working intention and status. As to the unemployment rate, it is the number of persons who are unemployed but actively seeking employment as a proportion of the labor force. Therefore, this indicator may be useful to illustrate the working status of the labor force. As Verick [14] said that in addition to women's participation reflecting changes in economic activity, educational attainment, and socio-culture, employment quality is also important, so factors such as policy and education are necessary to consider as well. Thus, this paper mainly analyzed potential causes from five aspects, which are economics, urbanization, policy, education, and culture.

Economic development and urbanization are related to each other, and at the same time, to the conditions of the labor market. Karl Marx [11] in *das Kapital* emphasizes that the strength of economic development is the foundation of a country, representing the average real welfare growth of the country's population. And Urbanization is a manifestation of economic development, which occurs as countries shift the sector composition from agriculture to industry, and as technological advances in domestic agriculture release labor from agriculture to cities [13]. To a certain extent, urbanization is gradually expanding along with economic development, and the premise of urbanization is good infrastructure and an appropriate number of people to complete the urbanization process. Hence, urbanization, economic development, and the labor market are closely linked concepts.

Binti et al. [6] states that labor and national economic development situation into a positive relationship, when the quantity and quality of labor force are sufficient, it will help the country's economic construction, gross national product, but also can improve the level of national economic development, and the steady growth of the national economic good, will drive the increase jobs, create jobs, We should improve the employment atmosphere, provide a favorable employment environment for the labor force and encourage its development.

In a similar vein, a positive correlation is presented between the level of education and labor participation [4]. Research [18] has shown that a higher level of education can result in a higher employment rate and a rise in income, which can also act as incentives for more labor participation. (In-Depth Analysis of the Labor Market Relevance and Outcomes of Higher Education Systems: Analytical Framework and Country Practices Report, 2017) Furthermore, education can also guarantee people more security against unemployment. At a national level, highly educated workers are essential for countries to promote economic development. Thus, it is necessary to explain the role of education

in affecting labor participation when analyzing the underlying causes for the low female participation rate in the workforce.

Cultural backgrounds are also strongly interlinked with the level of education. The traditional take in women's roles within the society can be a major factor that is preventing them from joining the labor force. Many cultures are unfamiliar with the idea of women getting paid outside of their households [1]. However, this can vary depending on the level of economic development, characteristics of certain cultures, or the level of education received.

3. Method

Data about labor force participation rate and unemployment rate in Asia and Europe are collected from International Labor Organization (ILO), which is a United Nations agency aiming at labor-related information to develop social and economic justice. Those data are ILO modeled estimates because they are focused on regions instead of various countries with accurate data. After collection, visualization is conducted by organizing them as tables and charts to assist the evidence inferred in this paper. Additionally, there will be several figures from the World Bank as well, such as GDP per capita and literacy rate in certain areas and countries, which are used to support analysis of underlying causes in this paper.

4. Results

4.1 LFPR by sex in Asia and Europe

Table 1. Labor force participation rate by sex (%) (2010-2019).

Reference area	Sex	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Asia and the Pacific	female	47.1	46.5	46	45.7	45.4	45.2	44.8	44.6	44.3	44.1
	male	79.1	78.9	78.7	78.3	78	77.7	77.3	77	76.7	76.5
Eastern Europe	female	52	52.1	52.1	52.1	52	52	52	51.9	51.9	51.5
Northern Europe	male	66.7	66.9	67.1	67.3	67.4	67.7	67.8	67.8	67.6	67.3
	female	56.2	56.3	56.5	56.8	56.9	57.1	57.3	57.5	57.9	58.2
Southern Europe	male	68.1	67.9	67.9	67.8	67.8	67.8	67.8	67.6	67.8	67.7
	female	44.7	44.9	45.5	45.5	45.6	45.6	46	46.1	46.2	46.5
Western Europe	male	62.7	62.3	62.2	61.6	61.4	61.4	61.5	61.6	61.6	61.4
	female	52.6	52.9	53.1	53.4	53.4	53.5	53.6	53.7	54	54.2
Europe	male	65.4	65.2	65.3	65.2	64.8	64.6	64.5	64.5	64.7	64.7

Source: ILOSTAT, International Labour Organization.

The data on LFPR by sex demonstrates a general overview of the trend of female labor participation in Asia and Europe. As well as a clear comparison of male and female labor participation in the workforce. According to the data, the female participation rate in Asia and the Pacific has gradually decreased over the past nine years. Whereas in Europe in general, an increasing trend in female labor participation is shown. The significant difference between female and male labor participation can also be seen in both Asia and Europe with no exceptions.

4.2 Asia

4.2.1 LFPR

Figure 1. Labor force participation rate in Asia, 15+ (%) (2010-2021).



Source: ILOSTAT, International Labour Organization.

According to the data collected from ILO modeled estimates (see figure 1), the LFPR evidently shows. For Eastern Asia and South-Eastern Asia, female and male LFPR steadily fluctuated around 60% and 80% respectively and maintained a 20% gap approximately. However, as to LFPR of Western and Southern Asia, there was a larger gender gap than other regions in Asia, especially Southern Asia, whose gap reached about 60%, and female LFPR was just around 20%.

4.2.2 Unemployment Rate

Figure 2. Unemployment rate in Asia, 15+ (%) (2010-2021).



Source: ILOSTAT, International Labour Organization.

The gender gap of the unemployment rate in Central Asia, South-Eastern Asia and Southern Asia was relatively small, while much more salient in Eastern Asia and Western Asia, whose female unemployment rate has always been higher than their male counterpart in the past decade. Notably, the unemployment rate for both women and men in Western Asia showed an obvious upward trend in recent years and is estimated to reach 15% in the future. (See figure 2)

4.3 Europe

4.3.1 LFPR

Figure 3. Labor force participation rate in Europe, 15+ (%) (2010-2021).

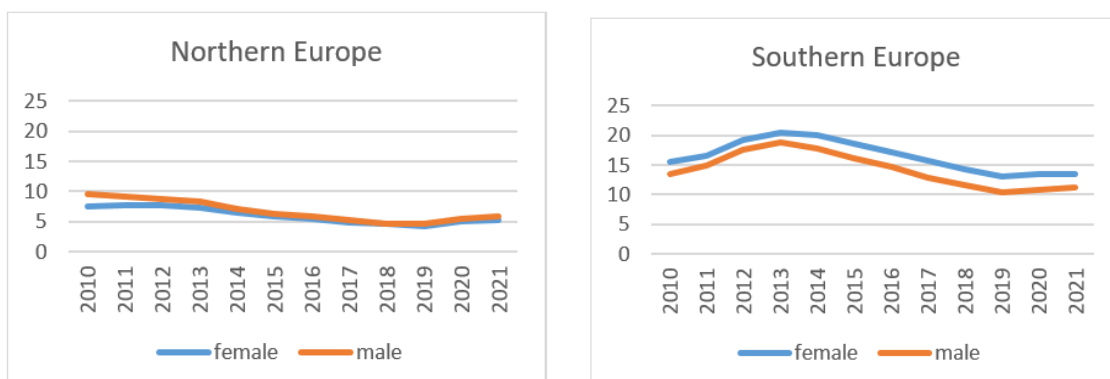


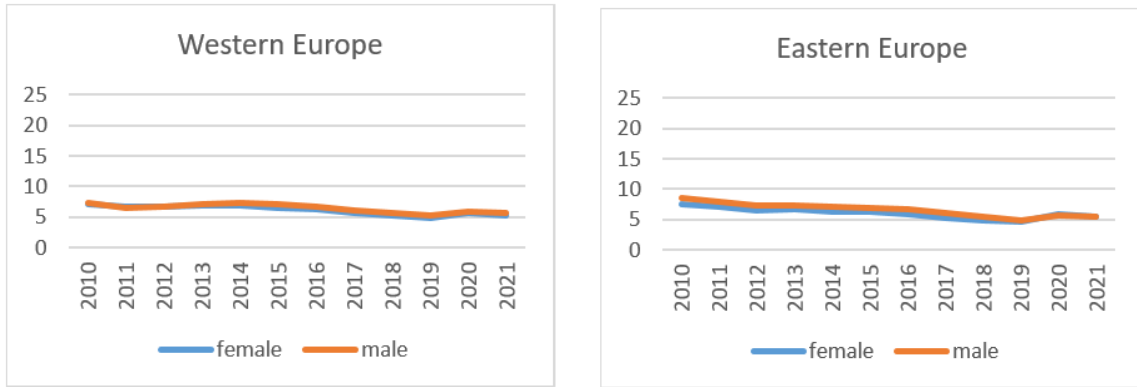
Source: ILOSTAT, International Labour Organization.

The gender gap of LFPR in different regions in Europe was more similar than that in Asia, data of these four regions steadily maintained a gap of about less than 20% but still obvious. However, like situations of women in Asia, women in Europe have always shown lower intention of work than men over the past decade. (See figure 3)

4.3.2 Unemployment Rate

Figure 4. Unemployment rate in Europe, 15+ (%) (2010-2021).





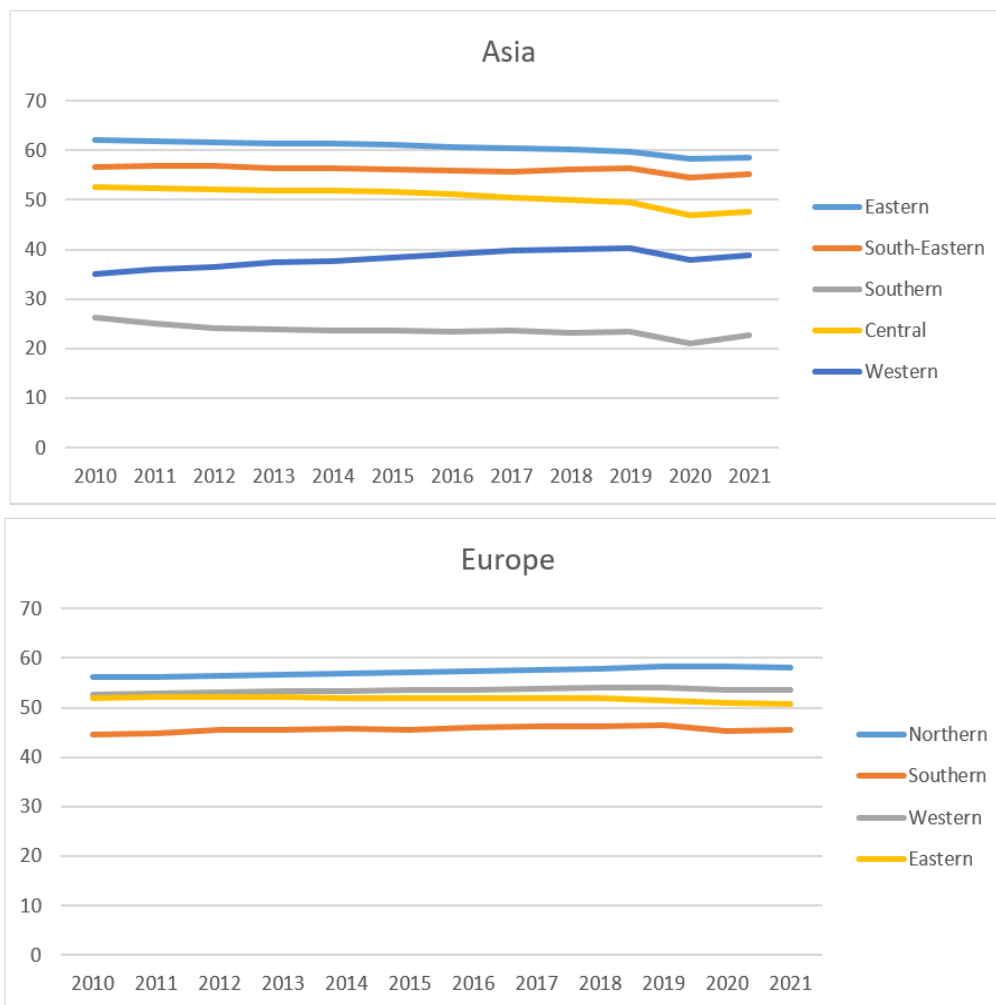
Source: ILOSTAT, International Labour Organization.

Compared with the Asian data, the unemployment rate of Europe was higher in general. That of Northern Europe, Western Europe and Eastern Europe all expressed a downward trend, and the gender gap there became relatively smaller. However, as to Southern Europe, there was a clear gap between males and females, and the data there was much larger than that of other regions in Europe. (See figure 4)

4.4 Comparison of female data in Asia and Europe

4.4.1 LFPR

Figure 5. Labor force participation rate, female, 15+ (%) (2010-2021).



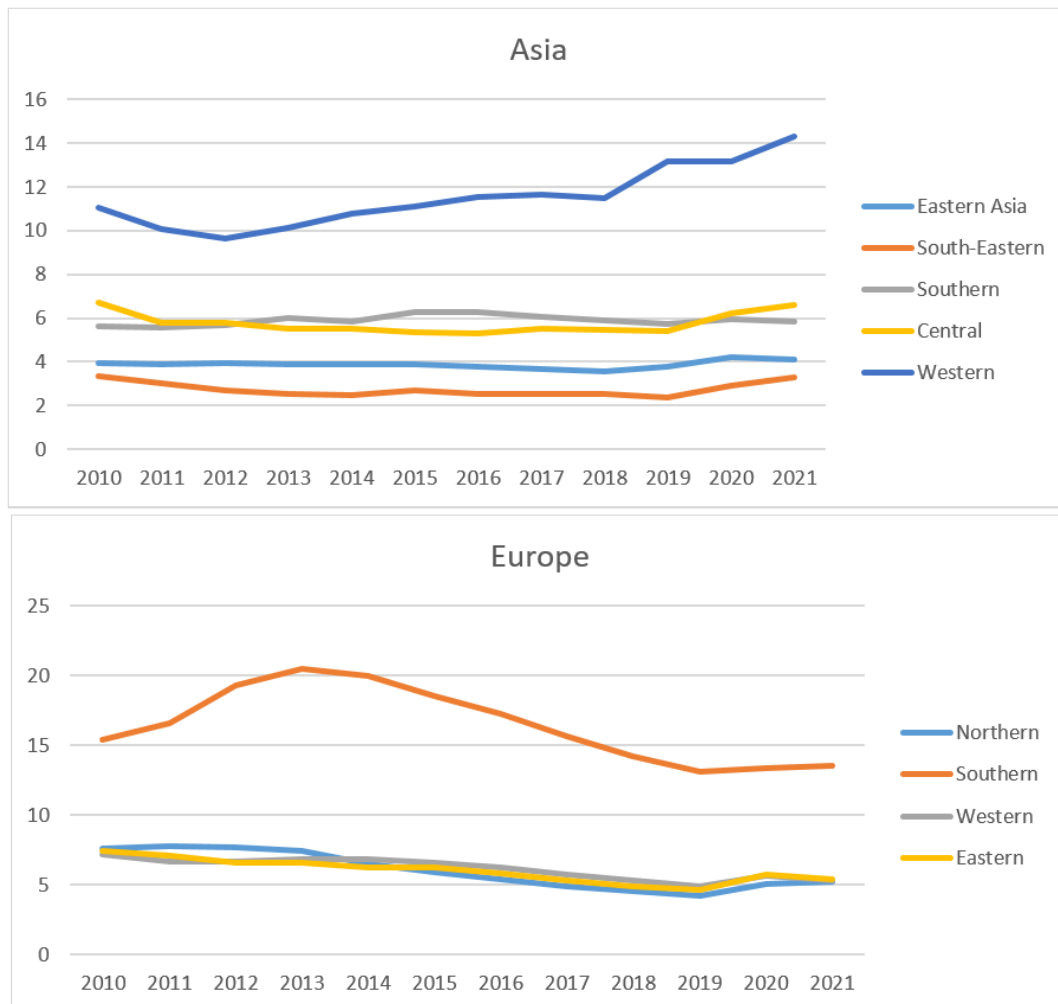
Source: ILOSTAT, International Labour Organization.

According to figure 5, it expresses a distinct comparison of female LFPR between Asia and Europe. Around 50% of women over 15 years old in Europe were willing to work during this decade and this

data has kept steadily for the recent decade, while Asian women showed different intention in different regions. Female LFPR of Eastern Asia, South-Eastern Asia, and Central Asia were between 50% and 60% for most of the time. In contrast, women in Southern Asia were more unwilling to work than other regions in both Asia and Europe, data there kept decreasing to around 20%.

4.4.2 Unemployment Rate

Figure 6. Unemployment rate, female, 15+ (%) (2010-2021).



Source: ILOSTAT, International Labour Organization.

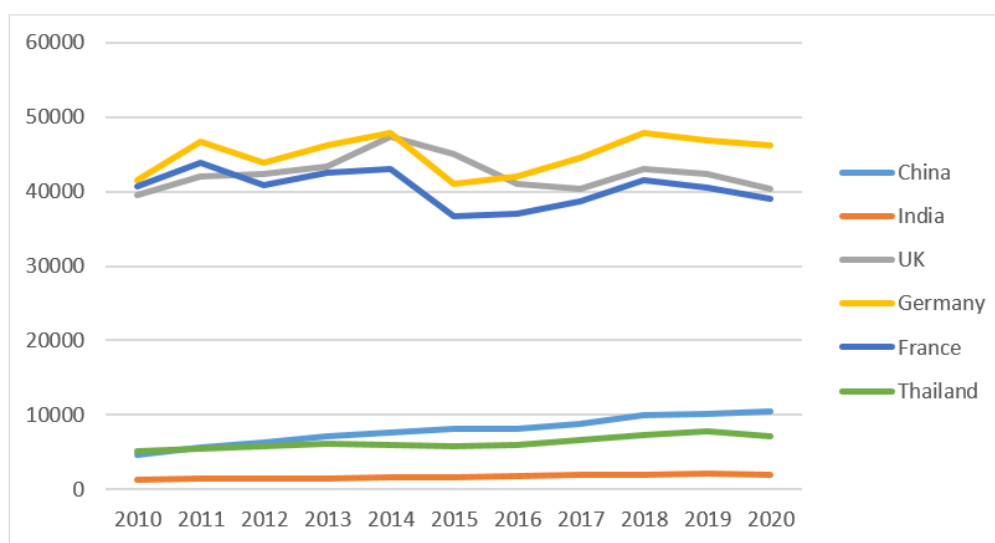
The female unemployment rate of Asia is relatively dispersive between 7% and 3%, and it had the smallest value in South-Eastern Asia, while a large value in Western Asia, whose data had an upward trend and was usually above 10%. Different from data of Asia, the female unemployment rate of most of the European regions held a similar trend and value in the past 10 years. Whereas female data of Southern Europe reached over 20% in 2013, although it decreased gradually until now, it still above about 13%.

5. Discussion: underlying causes

5.1 Level of economic development

We believe that it is closely related to the situation of the female labor force in the job market. It is thereby evident that the level of economic development is proportional to the position of women in the labor market.

Figure 7. GDP per capita (US \$), China, India, United Kingdom, Germany, France, Thailand (2010-2020).



Source: The World Bank.

Based on measuring the GDP per capita of six representative countries between 2010 and 2020, it is clear from this chart that there is a significant gap between European countries and Asian countries, while within the continents there are closer. Among them, the per capita GDP of Germany, Britain, and France are concentrated between \$37 - \$48 thousand, while that of China, Thailand, and India are all below 12 thousand. Until 2018, only China has gradually increased to more than 10 thousand, while the situation of India is the most outstanding, which has been maintained between 2 and 3 thousand, and its development is very stable, with almost no growth.

Combining the participation rate of the female labor force in the labor market and the unemployment rate of the female labor force in various countries, we can see that the degree of economic development is indeed related to the status of the female labor force. First, because European countries have a higher level of economic development than Asian countries and their people have better well-being, there are more opportunities for women to work and participation rates are higher. Finally, we believe that the hypothesis is valid and that the level of economic development is positively correlated with the employment situation of women.

5.2 Urbanization

We believe that urbanization level is related to female employment, we already know from actual data that women in Europe have a better employment situation. Therefore, it is assumed that the higher the urbanization level is, the more relaxed the employment environment is, and the better the position of women in the job market is.

According to the UN's Revised World Urbanization Prospects 2018 [10], Africa and Asia were home to nearly 90% of the world's rural population in 2018. For Asia, India has the largest rural population (893 million), followed by China (578 million). In 2018, the urbanization level of Asia is about 48%, but it accounts for 54% of the world's urban population, indicating that Asian countries are densely populated but have a low urbanization level. European countries account for 13% of the world's population but are already 74% urbanized, making them among the most urbanized regions in the world.

Asian countries also have cities that contain large concentrations of people, such as Tokyo, the world's largest city, but because of the widespread rural areas, the level of urbanization in Asia is still low and somewhat uneven. It shows that the urbanization process in Asia should be more equal and more sustainable.

Therefore, we can conclude that the urbanization level is also related to the employment status of women. The higher the urbanization level is, the better the employment situation of women is, while

the lower the urbanization level is, the lower the social status, employment participation, and employment environment of women are, which is most obvious in India in Asia [7].

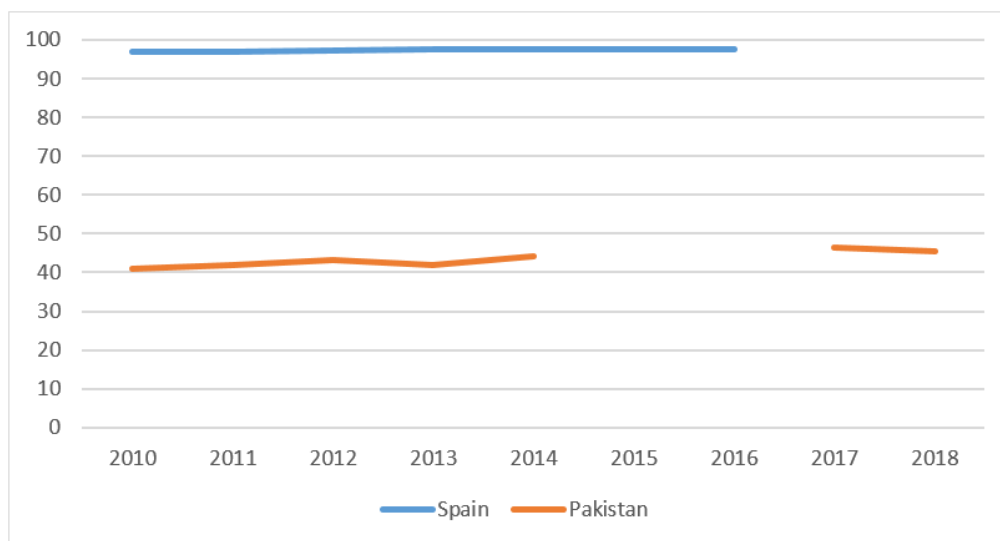
5.3 Labor policy

There are also major differences between European and Asian Labor policies. Gender Gap and Labor market participation: According to the survey of composite indicators for the Ranking of European Countries [8], European countries have better social welfare policies and a more relaxed female labor market access system. By comparing women's and men's levels of job satisfaction, the gender gap index is linked to national gender inequality policy frameworks and related policy outcomes in most surveyed countries to assess its effectiveness and determine the most appropriate measures [9]. From the data of the International Labor Association, we find that Asian countries have adopted mostly negative policies in the past, such as increasing the threshold for women to enter some positions, allowing gender inequality to occur in enterprises, and many policies to encourage women to stay at home and subsidize such women. Leaving many women without a chance to enter the labor market at all.

5.4 Level of education

According to data from the U.S. Bureau of Labor Statistics (BLS), an increase in education attainment leads to increased income and decreased unemployment. Thus, we assume that the level of education closely interlinks with the level of female employment and participation rate in the labor force.

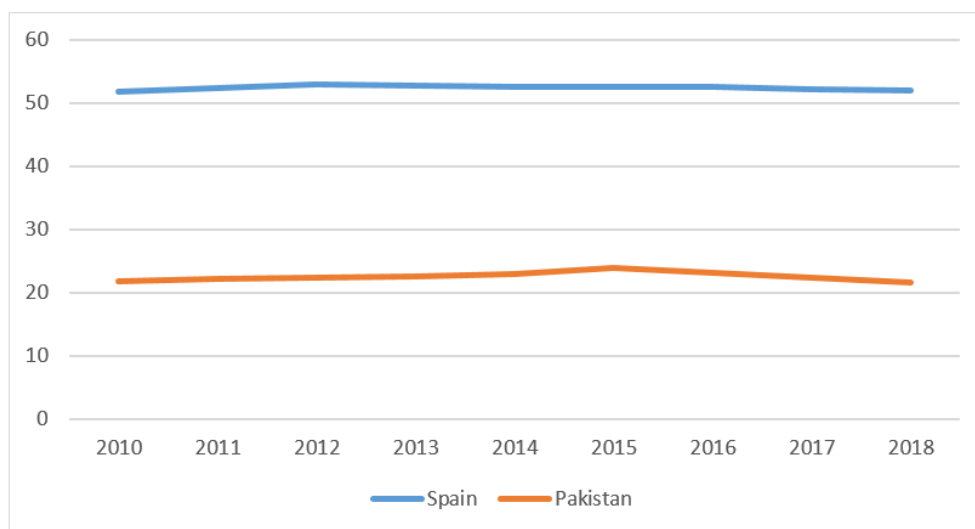
Figure 8: Literacy rate, adult female, Pakistan and Spain (%) (2010-2018)



Source: The World Bank.

According to the data on the adult female literacy rate in Spain and Pakistan between 2010 and 2018, there is a significant gap between Spain and Pakistan. The literacy rate in Spain is 97.974 percent whereas the literacy rate in Pakistan is only 46.468 percent, leaving 51.506 percent of difference. Throughout the 8 years, Spain has managed to maintain their female literacy rate above 90 percent with stable, minor growth. On the other hand, Pakistan stays below 50 percent and has a relatively bigger change in the percentage.

Figure 9. Labor force participation rate, female, Pakistan and Spain (%) (2010-2018).



Source: ILOSTAT, International Labour Organization.

A significant gap between female labor participation in Spain and Pakistan between 2010 and 2018 is again demonstrated on the graph provided by World Bank. This data then corresponds with the previous data on literacy rates. Therefore, it is obvious to see that there is a close relationship between the level of education and the level of employment. The occurrence of this phenomenon is explained when educational attainment rises, people tend to get more opportunities and better paid in the labor market, consequently, their participation in the labor market will be higher. As a result, we believe that our assumption is valid that a higher participation rate in the labor force will require a higher level of education.

5.5 Cultural background

According to research by ILO, other possible factors that can have considerable effects on the female participation rate in the labor force are the different cultural backgrounds. Many people still believe that it is unacceptable for women to work outside and get paid.

Table 2. Literacy rate, adult female, India (2010-2018).

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Literacy rate	/	59.28	/	/	/	/	/	/	65.79

Source: The World Bank.

In the case of India, the traditional Indian perception is that men are the “breadwinners” and women are “homemakers” that are supposed to serve the whole family. The duties of women are considered as domestic duties. This directly resulted in a low female participation rate in the labor force in India, which has deprived many opportunities of getting a suitable job. Even women with a higher level of education are affected by this conservative thinking, that although according to the World Bank, the literacy rate is roughly 66 percent, the participation rate in the labor force is only 20.71 percent, with an obvious downward-sloping trend. This indicates that even women with higher levels of education struggle to find jobs consistent with their qualifications.

However, in contrast, this traditional perception is not obviously presented in European countries such as Switzerland. Therefore, women tend to have a relatively higher participation rate in the labor force, as they reached 62.92 percent in 2018 with steady growth. Thus, from the comparisons of female labor participation rate between Switzerland and India from the World Bank, it is obvious that the gap between the two is significant.

Consequently, we can deduce that different cultural backgrounds can have great impacts on the level of female employment and their participation rate in the workforce.

6. Conclusion

Gender discrimination evidently still exists in the labor market despite a decrease in the division of labor by gender and enhanced social status for women. This indicates increasing economic independence and awareness of self-rights for females, which is a valuable field to explore. In this paper, female status in Asian and European labor markets illustrated by data collected from International Labor Organization and World Bank shows potential problems and possible causes. With the graphs showing female and male labor participation rate and unemployment rate in Asia and Europe in the recent decade, it is reasonable to state that women in Asia meet more serious situations than women in Europe.

Therefore, possible underlying causes are the main content discussed in this paper, because it may be meaningful for the future development of women's status and gender equality in the labor market. Five reasonable causes are depending on the analysis above, which are economic development, urbanization, labor policy, education, and cultural backgrounds. Notably, all five factors have a positive relationship with women's status in the labor market, meaning that a higher level of economic development, urbanization and education, more equal policy, and more free cultural backgrounds on women may contribute to higher women status in the labor market. In general, women's labor status is a meaningful area to explore, there are still valuable problems to research.

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