

Labor Force Participation between Developed and Least Developed Countries: A Comparative Study

Md. Tanvir Alam*
Sabrina Afrin Tonny**

Abstract

Female participation in labor force has always been both socially and economically a crucial and sensitive issue, Participation of female in labor force not only indicates the level of advancement of a society, but also it implies that it has made remarkable progress in the field of women empowerment. Despite being matter of great significance, this issue often went unnoticed by academicians and researchers, let alone male participation in labor force. The study intends to find out the present situation and trends of male and female participation in labor force between developed and least developed countries. This is a cross sectional study where secondary source of data was collected from World Bank open-data repository. Quantitative data collection method was used in this study. All of 36 Least Developed Countries and 47 Developed countries were taken as sample to enhance the accuracy of research finding. The study finds out that the gap between male and female participation in labor force is consistently decreasing in most of developed and least developed countries. The study also finds out that in majority of Developed and Least developed countries, the male participation in labor force is consistently decreasing and female participation is increasing, but least developed countries have a higher unstable rate in labor force participation than developed countries and gap between male and female participation in labor force went from as low as 0.02% to as high as 71.8%.

Keywords: Labor Force, Male Participation, Female Participation, Developed Countries, Least Developed Countries.

Introduction

The pattern of labor force participation of any society or country has always been a crucial determining factor for socio-economic development, which recently gained rapid momentum by drawing global concentration from the Sustainable Development Goals 8; Decent

* Undergraduate Student, Department of Public Administration, Stamford University Bangladesh

** Undergraduate Student, Department of Sociology, East West University

Labor Force Participation between Developed

economic work and growth. The pattern of labor force participation means the percentage of total population out of a country which involved with labor force. In common parlance employment percentage rate of working population, now this particular population can further be divided into male and female participation. The first remarkable rise of female participation in workforce can be traced back to as early as 1960, when women movement was at peak and highly associated with it (Stoper. E. 1991). Though there were discrimination, unequal pay, and lots of other obstacles, but it was quite noticeable for the inception. Since then the struggle for women to ensure equal rights in workplace has come a long way, but the developed countries were always one step ahead than other countries especially least developed countries.

There are 36 least developed countries and 47 developed countries throughout the world, apparently between them there are many distinctions, which ranged from per capita income to standard of living through GDP and GNP, most of the distinctive factors are determined by their mode of production and undoubtedly the mode of production is mainly influenced by pattern of labor force participation. Because of the initiatives of both MDGs and SDGs, the world has seen a massive surge of developmental project aimed at women empowerment; as a result expecting a remarkable change in those oppositional countries cannot be unexpected, so to analyze the scenario, labor participation data from 2005 to 2018 was collected from all of those 83 countries.

Because of the wide spread industrialization, and recently emerged 4th industrial evolution, muscular labor pattern have little or low impact over the mode of production, besides female empowerment has always been so persuasive to get on the ground of workforce equally as males not to mention there are many emerging industries that consider female as more potent workforce than male. There is no denying that female participation in labor force adds a whole new layer on the equation of global labor force. There are many research, workshop, conferences to promote women empowerment through ensuring female labor participation. But little study concerns about male participation in labor force, though they affect each other equally as the number of vacant places in job market is limited. This paper equally addresses both male and female for labor force participation to have the complete scenario of current global labor force market along with its trends and patterns of all developed and least developed countries. Because of its sophisticated sample size, it may help to add another layer of insights in both academic and practical sector. Academician can use the findings to better understand current trend of labor force in both type countries and try to find out the triggering factor behind it, concomitantly practitioners can use the data to formulate specific policies to ensure global balance in

workforce or to proposed particular gender based policy in order to meet the objective. This paper intentionally focuses to compare and contrast on labor force participation by male and female in both developed and least developed countries.

Research question

The research question of this paper is as follow;

- What is the present scenario of labor force participation in developed and least developed countries around the world?

To answer the research question, research objectives are given below;

- To identify the developed and least developed countries.
- To collect the data of labor force participation.
- To find out the trend and patterns of labor force in those countries.

Literature review

The history of human civilization is much interesting when it comes to analyzing the pattern of labor force participation. One may find it very hard to believe that when women still struggles to have their right in society even in this modern society, in hunting and gathering civilization they dominated the entire society (Sankrityayan. R. 2014).

There is no denying that involvement with labor force has always been a determining factor of rights and privileges in society for women, and the path of obtaining the scope of participation in labor force wasn't so easy, besides casual protests and typical demonstration the history has witnessed armed revolution from women for their right and amenities (Lafargu. Paul. 1890).

Since the advent of modern civilization, upon realizing the significance of female participation in labor force as women constitutes more than half of entire global population, considerable attention was given by both academician and practitioner to address this issue. As stated earlier the rapid momentum of female participation in labor force was gained in 1960 after women movement, after that many research and study took place about this issues, many of these studies focuses on the problem of this issue, emphasizes on the timeliness of this issue, highlighting required initiatives along with other aspects of it, and most of the study was primarily focused on females with involvement of individual nations states in some extent comparative regional nation states, leaving many other crucial aspects of it, thus a complete picture of both male and female participation in labor force has always gone unnoticed by both researcher and practitioners. This study focuses on to portray a complete scenario of both male and female participation in labor force in from two oppositional economic attributed countries of the world, developed and least developed countries.

Labor Force Participation between Developed

The term Labor force refers to the individual who are economically active; in common parlance the term includes both employed and unemployed population, but in reality the terms implies to those person who are directly engaged in paid employment. (Psacharopoulos G, and Tzannatos, Z, 1989)

Early works regarding labor force participation was mainly limited to females only, where the primary focus was revolved around financial aspects of women. A popular study shortly after women movement by author Mincer Jacob revealed critical information about married women and labor force participation in relation to income. In his study titled 'Labor Force Participation of Married Women: A Study of Labor Supply' (Mincer 1962) showed that there is a correlation between high income and lower labor force participation, indicating that the income effect has triumphed over the price or substitution effect, another study was conducted by Cain in the year of (1966) on same area titled "Married women in the labor force: an economic analysis". Cain in his study finds out that the married women from industrialized countries prefers wage, wealth even leisure as determining factor for labor participation, the results of the study suggested a turning point of female participation in labor force, when women was began to consider participating in labor force as not for only mere income source but also means of independence and source of additional facilities.

The first influential study on male labor force participation was conducted on national level by Parsons Donald in the early 80s. In his paper titled 'The Declining in Male Labor Force Participation' he revealed that unchecked social security problem can lead to Decline in Male Labor Force Participation, in addition to that he showed that the impact can affect all age group of male workers (Parsons D. O, 1980).

Following the study of Cain, another research called "LABOR SUPPLY OF MEN: A SURVEY" by John Pencavel (1986) revealed relationship between wage structure and hours of work, though the size and structure of the population was not addressed, which made the study questionable.

During the late 80s, a study conducted by Psacharopoulos and Tzannatos (1989) examining theories and definitions of female labor supply of 136 countries, indicates that significant female participation in labor force requires at least a moderate level of development, they also suggested that education works as an auxiliary force behind involvement of female in work labor force. But Lee in his influential study (1997) titled "WHY DO SOME WOMEN PARTICIPATE IN THE LABOR FORCE WHILE OTHERS STAY AT HOME?" argued that education plays insignificant role on female participation in labor force, rather he suggested that opportunity on job market can cause considerable impact

on labor force participation especially for females, supporting the argument of Lee, another author named Verick Sher (2014) identified job creation as a crucial factor of labor force for females moreover he suggested that high female participation rate in labor force can be reflected by poverty.

After a decade The theme of Psacharopoulos and Tzannatos was again taken by another researcher named Tansel, his study (2002) was based on turkey and provided time series based evidence supporting positive impact of education on female participation in labor force, though drawing such conclusion was comparatively unreliable as he used only 10 years of data with interval of 5 years. However another turkey based study by Ozsoy and Atlama (2009) showed precise results, Ozsoy and Atlama revealed that the equation of female participation is not so simple, many aspects like cultural values, religious ethics, marketable skills, unfavorable market environment, and wage gap play vital role in female participation in labor force, and in addition to that the study also reveals that higher rate of female enrolment in educational institutes prevents the early female participation in labor force.

Another study by Schultz and Paul (1989) addressed the problem of how market regulations affect males and females differently during economic development; this study sharply indicates that women are more sufferer than men. In addition to that the study also revealed the trend of women's perception towards formal and informal labor market, which is greatly affected by labor cost, experience, skill etc, though they find out that same trends doesn't works equally on different regions throughout the world. The next year a study by Rachel et al (1990) supports the gender discriminative market regulation claim by Paul and Schultz , they showed that women are more likely to pay amercement in part time jobs comparing male workers. The response to their claim of victimization of female in labor force, Van der Lippe and Fodor (1998) argue that the women didn't suffered compared to men as much as they claim after fall of socialism, though they didn't deny the existence of inequality before 1988,

The idea of typical labor force participation was further carried away by Vendrik and Frank (2009), in their article they performed a critical error-correction models (ECMs) for participation rate of male and female and find out that the trend for female participation is autonomous as well as have strong positive impact on labor market.

It is a matter of wonder that, significance of female participation in labor force always went unnoticed, but in research and literature male participation is the one that was neglected. The study on female participation went to such extents that even study on relationship between female participation in labor force and personality traits in addition to that

Labor Force Participation between Developed

positive relationship between Grandparents' childcare and female labor force participation took place, both study revealed that positive relationship between personality traits along with Grandparents' childcare and female participation in labor force (Laura and Winfried, 2010; Posadas and Frenandez 2013).

However recent changes in the trend of male participation was first noticed by Aguila(2014) in his influential paper titled 'Male labor force participation and social security in Mexico', in that paper he clearly stated that male participation in labor force was started to decline, he portrayed the scenario is same even in Latin America and some other developing economies, the idea of declining male participation was further reinforced by Falzone (2015) in his study, in addition to that falzone argued that the male participation labor force has been going downwards for over a century.

Another study conducted by Schaner and Das (2016) finds out that the tendency of participation in labor force is more prevalent among urban women, and less common among rural women, they also suggested that women prefers wage jobs than informal (household) job. This study proves that determining factor for participating in labor force as women hasn't changed much since early 60s.

Recent studies about labor force participation has begun to take sharply turn by extending its scope of literature and analyzing additional components with it, such as critical study by Beck and Park (2018) finds out that even globalization can have negative impact if it's integrated with rigid social spending and tax policy of a particular region, mean while another study conducted by Altuzarra et al (2019) based on 30 years of data revealed that feminization hypothesis is seems to at par with other determining factor behind female participation labor force in some part of the world.

Many of the mentioned research works was conducted using quantitative method, covering particular regions of world which is quite inadequate considering the significance of the issue, besides above discussion on literature indicts that majority of scholarly works were focused on female involvement in labor force along with its different aspects, few works were on male participation and even fewer works attempted to provide insight about both male and female participation in single framework, leaving the scope of a complete scenario of this crucial issue.

Methodology

The study intends to find out the trends of both male and female participation in labor force between developed and least developed countries, which is statistically a sensitive topic, not to mention

challenging as well, because it requires cent percent accurate data along with sophisticated analyzing tools to reach on an actual conclusion. Though Salahuddin M Aminuzzam (2011) said, “it is not feasible to study every member of population” but due to sensitivity of this topic all of 36 developed and 47 least developed countries were taken as sample, but 1 country from least developed country list was excluded because the unavailability of required data of that country, hence the authors followed convenience sampling style. The study was conducted based on secondary source of data, which was collected following quantitative method, online version of census data of the years 2005, 2010 and 2018 was collected from various census report and UN data, World Bank open-data repository because of the unavailability of printed version. Collected data was arranged using Microsoft excel before putting in SPSS for analyzing, then a graph-board analysis was done by using SPSS and the findings were shown by parallel illustration.

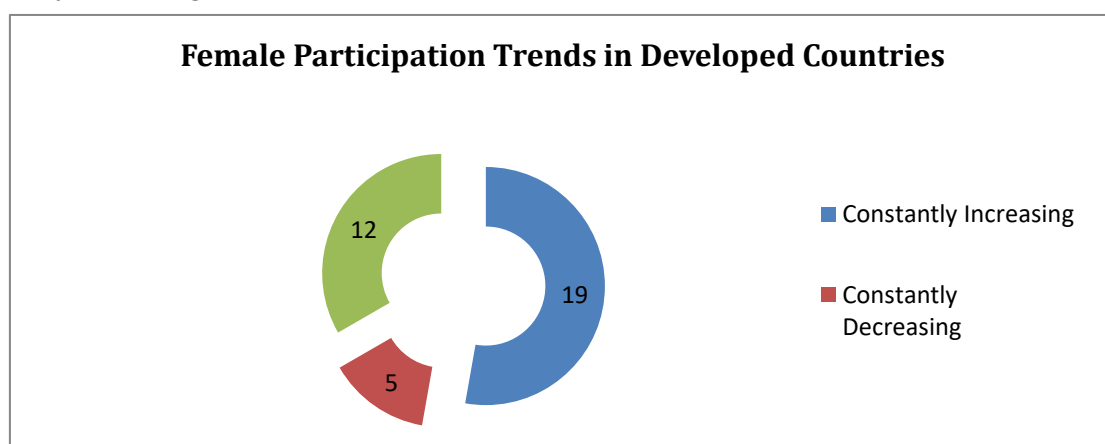
Country Type	Data source	Data Collection Method	Type of data source	Version
Developed & Least developed	Secondary	Quantitative	Annual Report, Census report, UN data, World Bank open-data repository	Online

Analysis

As the study analyzes trends of labor force participation in both developed and least developed countries, the analysis part was done separately from each section with proper caution.

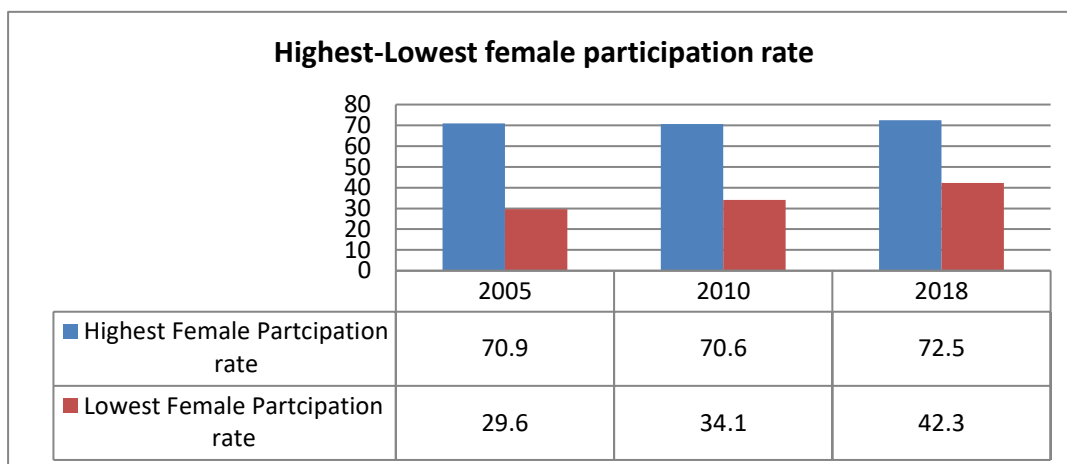
Trend of Labor Force Participation of Developed Countries

Analyzing the trend of labor force participation of developed countries was conducted in two stages; first one focusing the female participation, and second one was focused on male participation, illustrations of both analyses are given below;

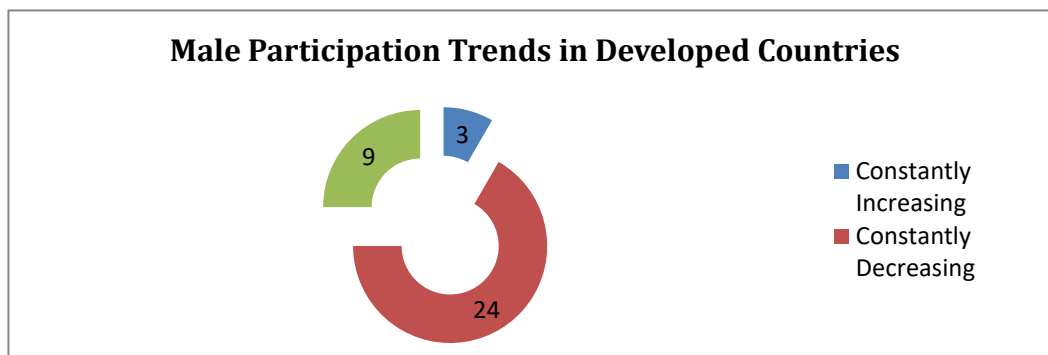


Labor Force Participation between Developed

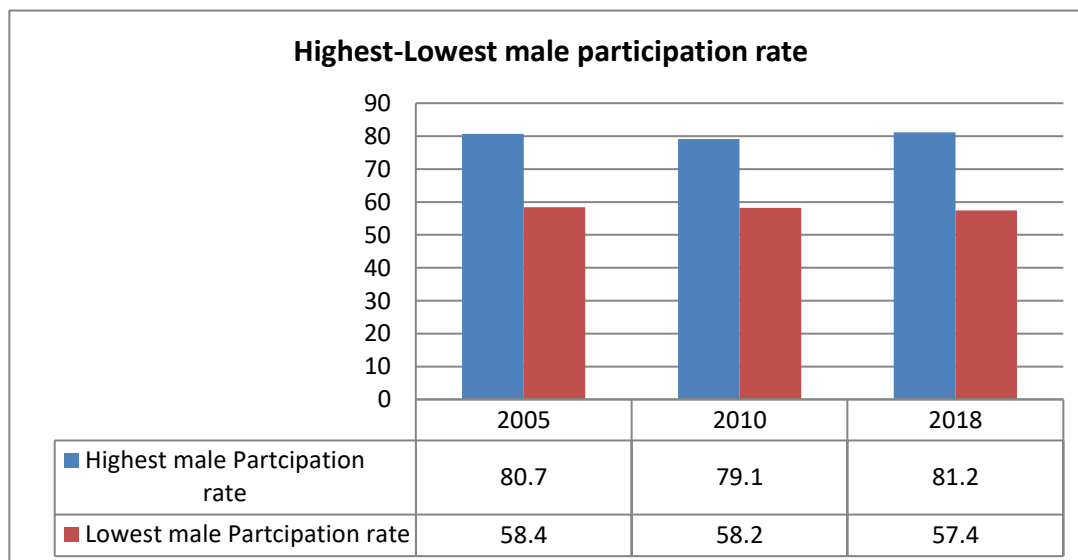
Graph 1: Graph 1 shows that among 36 developed countries, the female participation in labor force is constantly increasing in 19 countries, where decreasing in only 5 countries, and in 12 countries the participation rate is unstable.



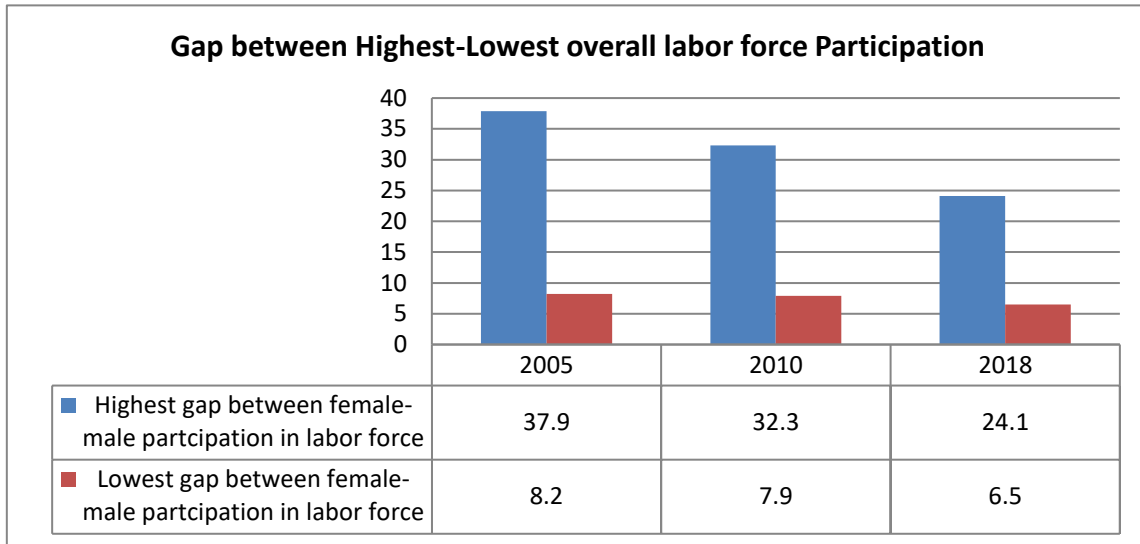
Graph 2: Graph 2 shows that among 36 developed countries the highest female participation rate was 72.5% and lowest female participation rate was 29.6%.



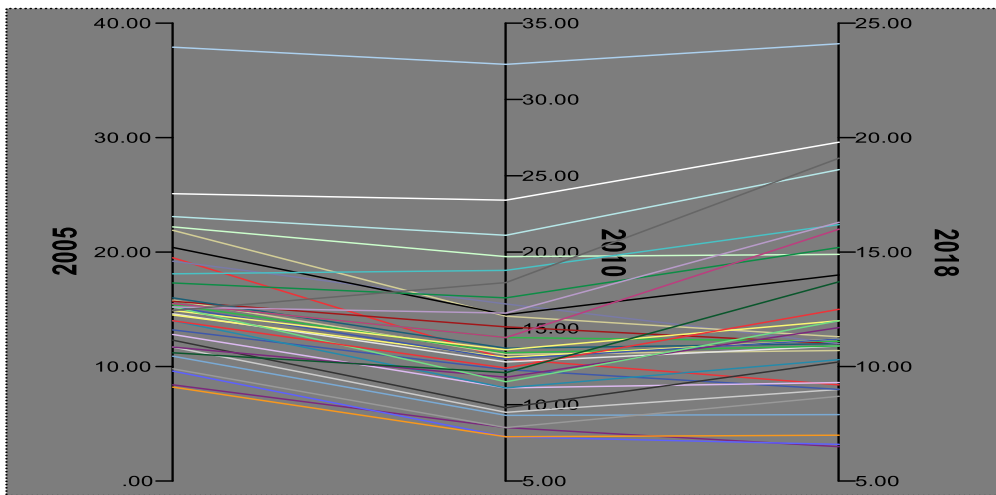
Graph 3: Graph 3 shows that among 36 developed countries, the male participation in labor force is constantly decreasing in 24 countries, where increasing in only 3 countries, and in 9 countries the participation rate remains unstable.



Graph 4: Graph 4 shows that the highest male participation rate among 36 developed countries was 81.2 % and lowest male participation rate was 57.4%.



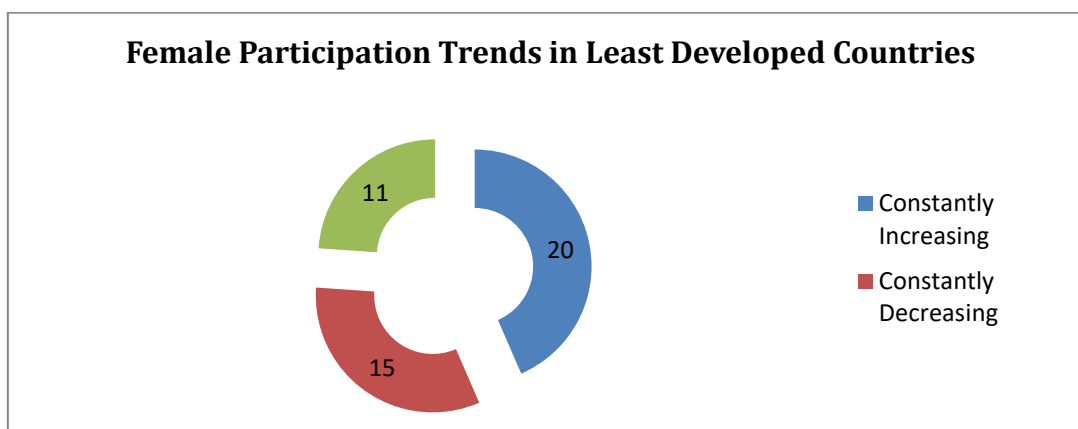
Graph 5: Graph 5 shows the highest and lowest gap between female-male participation in labor force among 36 developed countries of following years, the overall highest gap is 37.9% and lowest is 6.5%.



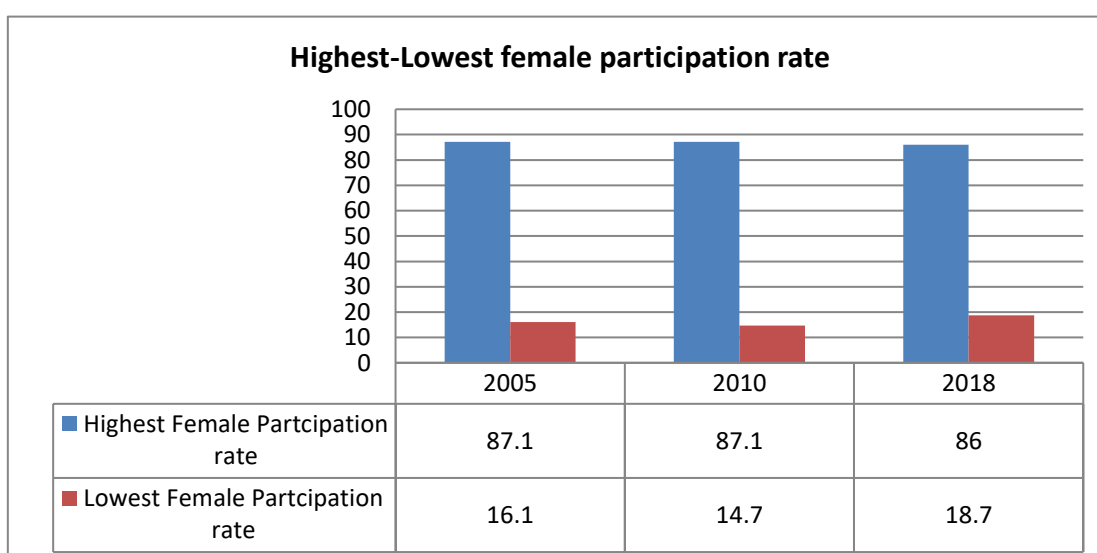
Graph 6: A graph-board analysis conducted by SPSS, for visualizing overall trends of both male and female participation using parallel illustration shows that, among the 36 developed countries, in 25 countries the gap between male and female participation in labor force is constantly decreasing, where increasing in a very smaller scale of 3 countries, however 8 countries still have a unstable rate.

Trend of Labor Force Participation in Least Developed Countries

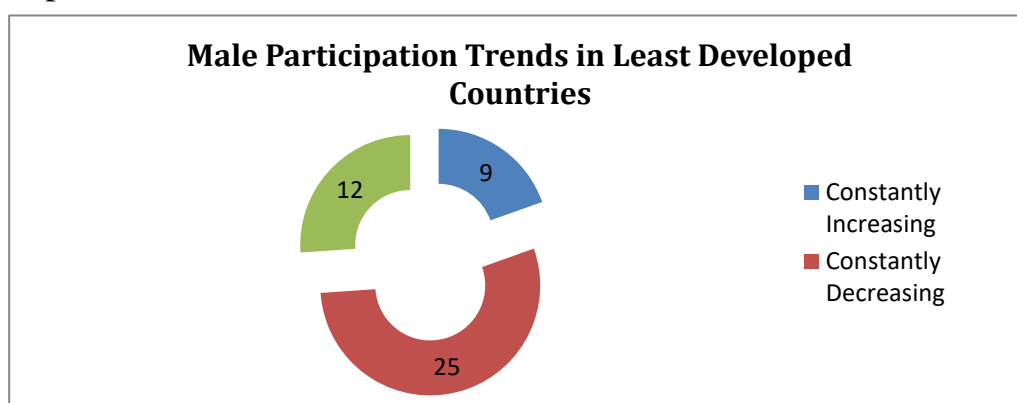
The trend of labor force participation of least developed countries was conducted in two stages; first one focusing the female participation, and second one was focused on male participation. An illustration of first analysis is given below;



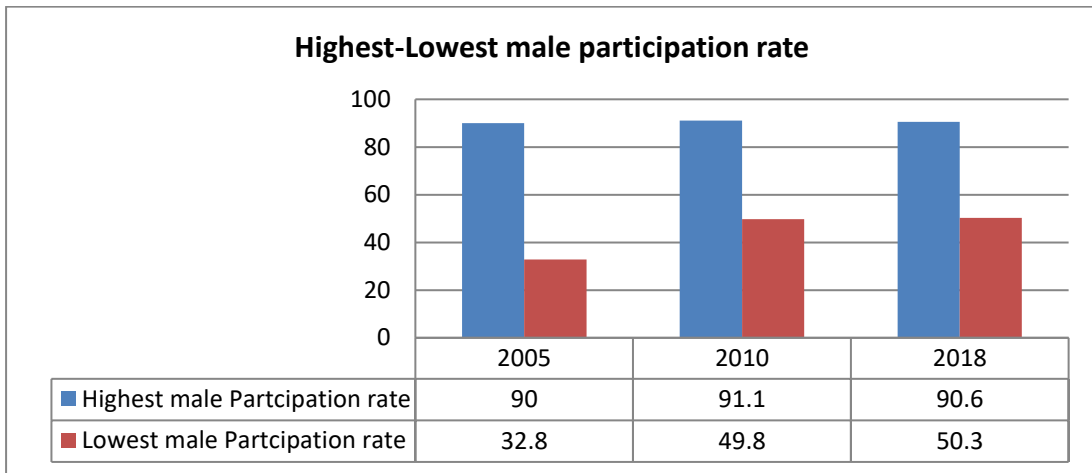
Graph 7: Graph 4 shows that among 47 least developed countries, the female participation in labor force is constantly increasing in 20 countries, where decreasing in 15 countries, and in 11 countries the participation rate is unstable.



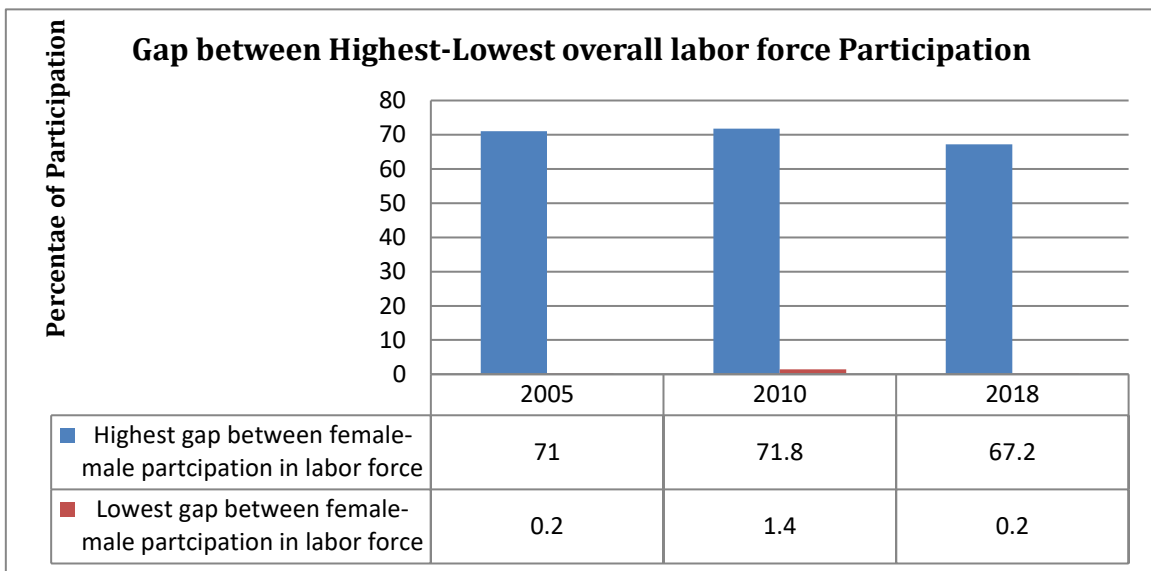
Graph 8: Graph 8 shows that among 46 Least developed countries the highest female participation rate of was 87.1% and lowest female participation rate was 16.1%.



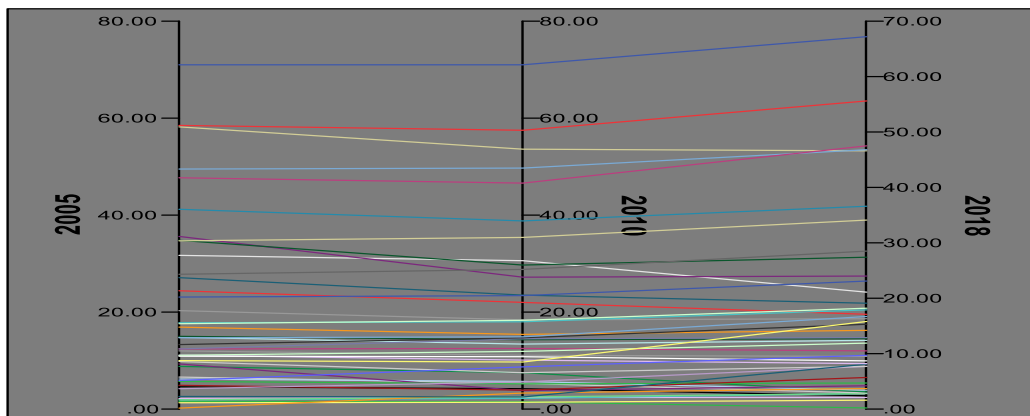
Graph 9: Graph 9 shows that among 47 least developed countries, the male participation in labor force is constantly decreasing in 25 countries, where increasing in 9 countries, and in 12 countries the participation rate is unstable.



Graph 10: Graph 10 shows that the highest male participation rate among 46 least developed countries was 91.1 % and lowest male participation rate was 32.8%.



Graph 11: Graph 11 shows the highest and lowest gap between female-male participation in labor force among 46 least developed countries of following years, the overall highest gap is 37.9% and lowest is 6.5%.



Graph 12: A graph-board analysis conducted by SPSS, for visualizing overall trends of both male and female participation using parallel

Labor Force Participation between Developed

illustration shows that, among the 46 developed countries, in 20 countries the gap between male and female participation in labor force is constantly decreasing, where increasing in a smaller scale of 9 countries, however 17 countries still have a unstable rate.

Discussion

Unlike any other previous study, this study intends to provide a complete scenario of labor force participation between Developed and Least developed countries. The result indicates that;

- Male participation rate in labor force is constantly decreasing in 67% of Developed and 54% of least developed countries.
- Female participation rate in labor force is constantly increasing around 53% of the developed countries, and 44% of least developed countries.
- The highest female participation rate in labor force among 36 developed countries is 72.5% and lowest is 29.6%, constitutes a gap of 42.9%, while the highest male participation rate in labor force is 81.2% and lowest is 57.4%, constitutes a gap of 23.8%.
- The highest female participation rate in labor force among 46 least developed countries is 87.1% and lowest is 14.7%, constitutes a gap of 72.4%, while the highest male participation rate in labor force is 91.6% and lowest is 32.8%, constitutes a gap of 58.8%.
- Among 36 developed countries, the gap between female-male participation in labor force is constantly decreasing in around 70% countries, while in 46 least developed countries the gap is constantly decreasing in around 44% countries.

The result might suggest that the tendency of gap between male and female participation in labor force is decreasing in developed and least developed countries, however it cannot be consider as a complete positive scenario, because the decreasing gap is mainly influenced by declining male labor force participation rate from both developed and least developed countries. This study confirms few previous studies that revealed the declining trend of male participation rate in addition to that it adds many unaddressed dimensions such as unstable rate, the gap between highest and lowest participation rate etc. the results of this study can be used by government to precisely formulate policy regarding any specific gender group, besides non-governmental organization can use this results to determine their zone of concentration when achieving their own agenda. Though 1 least developed country was excluded from analysis due to the unavailability of data, but it could hardly made any differences.

Conclusion

By analyzing the changing trends of labor force participation of developed and least developed countries of past 14 years, this study has shown sensitive emerging trend of labor market, which have direct influence over the socio-economic infrastructure. This study clearly illustrates the significance of participation of women in labor force but it also raise the question of the negligence towards male participation, practitioner should use the findings of this study to make both genders friendly working policy, further research can be carried out by researcher to identify any relationship between age, urban/ rural, and education, wage and participation trend.. And finally the government should address this issue to ensure peaceful and prosperous governance.

Reference

- AGUILA, E. (2014). Male labor force participation and social security in Mexico. *Journal of Pension Economics and Finance*, 13(2), 145-171. doi:10.1017/S1474747213000292
- Altuzarra, A., Gálvez-Gálvez, C., & González-Flores, A. (2019). Economic Development and Female Labour Force Participation: The Case of European Union Countries. *Sustainability*, 11(7), 1962. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/su11071962>
- Aminuzzaman, S M (2011), *Essential of Social Research*, Osder Publication, ISBN 978-984-33-2347-7, P-115
- Beck, S., & Park, S. (2018). Globalization and Labor Force Participation. *Journal of Economic Integration*, 33(3), 433-465. Retrieved from <https://www.jstor.org/stable/26484507>
- Cain G (1966), *Married women in the labor force: an economic analysis*, University of Chicago press, p- 5
- Falzone Joseph S (2015), *On the Sidelines: Labor Force Participation of Prime Age Men*, Sage Open, Volume: 5 issue: 1, <https://doi.org/10.1177/2158244015575557>
- John pencavel (1986), *LABOR SUPPLY OF MEN: A SURVEY*, Handbook of Labor Economics, Elsevier Science Publishers Volume I, P 94
- Lafargu. Paul. 1890, *The Evolution of Property from Savagery to Civilization*, Swan Sonnenschein & Co. London, P 33
- Laura Wichert & Winfried Pohlmeier. (2010). *Female Labor Force Participation and the Big Five*. Center for European Economic Research, ZEW Discussion Papers. 10.2139/ssrn.1551258.
- Mijeong Lee(1997), *Why Do Some Women Participate In The Labor Force While Others Stay At Home?*, Korea Journal Of Population And Development, Volume 26, Number 2.

Labor Force Participation between Developed

- Mincer J (1962), Labor Force Participation of Married Women: A Study of Labor Supply, Princeton University Press, ISBN: 0-87014-305-0, P 100
- Ozsoy C. Atlama S (2009). An analysis of trends in female labor participation in turkey, Unidocument Kft, ISBN 978-963-06-9558-9
- Parsons D O (1980), The Decline in Male Labor Force Participation, *The Journal of Political Economy*, Vol. 88, No. 1. (Feb., 1980), p 117.
- Posadas, J. & Vidal-Fernandez, (2013), M. IZA J Labor Policy 2: 14. <https://doi.org/10.1186/2193-9004-2-14>
- Psacharopoulos George and Tzannatos Zafiris (1989), FEMALE LABOR FORCE PARTICIPATION: AN INTERNATIONAL PERSPECTIVE, Research Observer 4, no. 2, publishers: The International Bank for Reconstruction and Development/THE WORLD BANK, p-187-188
- Psacharopoulos George and Tzannatos Zafiris (1989), FEMALE LABOR FORCE PARTICIPATION: AN INTERNATIONAL PERSPECTIVE, Research Observer 4, no. 2, publishers: The International Bank for Reconstruction and Development/THE WORLD BANK, p-187-188
- Rachel A. Rosenfeld and Arne L. Kalleberg (1990), A Cross-National Comparison of the Gender Gap in Income, *American Journal of Sociology* 96, no. 1, 69-106. <https://doi.org/10.1086/229493>
- Sankrityayan, Rahul (2014), Manab Somaj, Rukku Shah Creative Publishers, ISBN: 978-984-8928-02-8, P 38
- Schaner S and Das S, (2016), Female Labor Force Participation in Asia: Indonesia Country Study, ADB Economics Working Paper Series no 74.
- Schultz, T and Paul, (1989). [Women's changing participation in the labor force : a world perspective](#), [Policy Research Working Paper Series](#) 272, The World Bank
- Stoper, E. (1991). Women's Work, Women's Movement: Taking Stock. *The Annals of the American Academy of Political and Social Science*, 515, 151-162. Retrieved from <http://www.jstor.org/stable/1046935>
- Tansel, Aysit (2002), Economic Development and Female Labor Force Participation in Turkey: Time-Series Evidence and Cross-Section Estimates, METU/ERC Working Paper No. 02/3. Available at SSRN: <https://ssrn.com/abstract=301946> or <http://dx.doi.org/10.2139/ssrn.301946>
- Van der Lippe, T., & Fodor, É. (1998). Changes in Gender Inequality in Six Eastern European Countries. *Acta Sociologica*, 41(2), 131-149. Retrieved from <http://www.jstor.org/stable/4201072>
- Vendrik, M and Frank C (2009). Male and female labour force participation: the role of dynamic adjustments to changes in labour demand ; government policies and autonomous trends.
- Verick Sher(2014), Female labor force participation in developing Countries, IZA World of Labor, International Labour Organization doi: 10.15185/izawol.87