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Original Research Article

Trends, Structural Break and Factors of Gender Gap in Labour Force Participation in India

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Abstract: Despite economic growth and human development advances, India's gender gap in labor force participation remains large, raising worries about its inclusive development trajectory. This research uses World Development Indicators secondary time-series data to evaluate gender differences in labor force participation in India from 1990 to 2024. The gender gap the disparity between male and female labor force participation rates is analyzed using multiple regression with GDP, birth rate, life expectancy, and inflation. Furthermore, the Bai–Perron structural break test detects substantial labor market developments over time. GDP growth does not considerably lower the gender gap, suggesting that economic development alone cannot increase women's employment participation. Life expectancy decreases the gender gap, showing that health improvements increase gender equality. Conversely, greater fertility rates increase the gender gap since women shoulder more caring and household duties. Inflation narrows the gender gap due to distress-induced female labor supply. Economic disruptions like the global financial crisis and demonetisation disproportionately hurt women's employment, according to structural break research. The results suggest that tailored policies that address institutional, social, and demographic restrictions alongside economic development are needed to reduce the gender gap in labor force participation.
Keywords: Gender inequality; Labor market participation; Employment; Fertility; Structural Break Analysis.

1. INTRODUCTION

One essential component of inclusive economic development and social advancement is gender equality in labour force participation. The degree to which women engage in economic activities alongside males is a reflection of a nation's larger social, institutional, and cultural context as well as the effectiveness of labour markets. Participation in the labour force allows people to exercise economic agency, earn money, raise living standards, and contribute to production. Macroeconomically speaking, increased labour force participation broadens the economy's base of production, boosts growth potential, and promotes sustainable development. From a gender viewpoint, women's involvement in paid work has far-reaching effects, such as increased intergenerational mobility, better health and educational outcomes, less poverty, more bargaining power, and higher household welfare.

Gender differences in labour force participation persist despite widespread acknowledgement of the value of women's economic involvement, especially in developing nations. India stands in stark contrast to many other nations where female labour force participation has increased in tandem with economic growth and demographic shifts. The Indian economy has grown significantly throughout the 1990s, yet female labour force participation has remained consistently low and has even decreased at times. Male labour force participation, on the other hand, has stayed steady and comparatively high. Due to this discrepancy, there is a continuous and occasionally growing gender gap in labour force participation, which raises significant concerns about the inclusiveness and character of India's growth process.

The gender disparity in labour force participation is a consequence of ingrained systemic injustices rather than just a statistical issue. It draws attention to the unequal distribution of paid and unpaid labour and depicts how men and women have differing access to economic possibilities. Women in India are still disproportionately responsible for unpaid caregiving and home duties, which restricts their capacity to engage in paid work. Women's labour supply is further limited by social standards, safety concerns, labour market fragmentation, and limited access to suitable occupations. Therefore, the gender disparity in labour force participation has not been reduced by economic growth alone.

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When considering India's experience from the perspective of traditional economic theory, it becomes extremely difficult to understand. According to development economics, labour moves from agriculture to industry and services as economies expand and diversify, opening up new job options for women. According to the much-discussed U-shaped hypothesis of female labour force participation, women's engagement first decreases as incomes rise but then rises when education increases and employment in the service sector increases. India seems to depart from this anticipated trend, nevertheless. Female labour force participation has not demonstrated a consistent increasing trend despite structural transformation and rising educational attainment among women, suggesting the existence of barriers beyond income and education.

The gender disparity in labour force participation is thought to be influenced by a number of macroeconomic and demographic factors. GDP, a measure of economic growth, influences household income levels and employment prospects. Although increased GDP growth is anticipated to create jobs and promote labour market participation, the type of growth whether it is jobless or employment-intensive determines how it affects gender inequality. India's capacity to absorb female labour and close the gender gap has been hampered by the concentration of growth in capital-intensive or male-dominated industries.

Another significant factor influencing women's labour market behaviour is demographic transition, namely shifts in fertility rates. It is anticipated that declining fertility will lessen childcare obligations and free up women's time for paid employment, reducing the gender disparity in labor force participation. Over the past few decades, India's fertility rates have significantly decreased, with many states either approaching or reaching replacement-level fertility. However, female labor force participation has not increased in pace with this demographic trend. This implies that in the absence of supportive institutional and social frameworks, fertility decrease alone is insufficient to change women's labour market performance.

Health outcomes, which are frequently measured by life expectancy, have an impact on people's capacity to work effectively throughout their lives, which in turn affects labour force participation. Increases in life expectancy are a reflection of improved human development, healthcare access, and nutrition. It is anticipated that longer life expectancy for women will improve work capability and increase the number of productive years. Gender disparities in survival rates have decreased as India's female life expectancy has steadily increased. However, women's labour force participation has not increased proportionately as a result of these health benefits, suggesting that health improvements may be required but insufficient prerequisites for economic engagement.

Labor force dynamics are further shaped by macroeconomic stability, especially inflation, which affects real earnings, living expenses, and household financial security. The impact of inflation on the labour supply of women can be unclear. As households look for extra revenue to deal with financial strains, rising prices may force women into the workforce. Inflation also raises the price of necessities like food and fuel, increasing unpaid household labor and caregiving duties that disproportionately affect women. Therefore, depending on the larger economic and social circumstances, inflation may either reduce or increase the gender gap in labour force participation.

The labour market outcomes in India have been significantly influenced by institutional changes and economic shocks in addition to these macroeconomic and demographic factors. Major economic reforms, policy changes, and external shocks such as liberalization, global financial crises, domestic slowdowns, and governmental interventions like demonetization have characterized the years since the early 1990s. These developments have changed labor demand, sectoral composition, and employment patterns, with varying effects on men and women. A thorough examination of labour market inequality requires an understanding of how such structural changes impact the gender gap in labour force participation.

In light of this, it becomes essential to expressly focus on the gender gap as a measure of inequality rather than just analysing female labour force participation. The gender gap gives a more comprehensive view of labour market differences by capturing both male and female participation trends. However, the majority of the literature currently in publication focuses only on female labour force participation, with little attention paid to the factors that influence the gender gap as a dependent variable. Furthermore, rather than being studied in an integrated empirical framework, macroeconomic variables like GDP, fertility rate, life expectancy, and inflation are frequently studied independently.

By analysing the factors influencing the gender disparity in labour force participation in India between 1990 and 2024, the current study aims to close these disparities. The study directly addresses disparity in labour market outcomes by defining the gender gap as the difference between male and female labour force participation rates. It looks into how important demographic and macroeconomic factors such as GDP, life expectancy, fertility rate, and inflation collectively affect this disparity over time. Examining both short-term and long-term patterns in labour force participation is made possible by the lengthy time frame.

In terms of methodology, the study uses multiple regression analysis to determine how the chosen explanatory factors relate to the gender disparity in labour force participation. This method makes it possible

to evaluate each variable's relative significance and direction of influence while accounting for other factors. Additionally, the study uses the Bai–Perron multiple structural break test to pinpoint times when the gender gap's behaviour significantly changed. In the Indian context, where labour market dynamics have been regularly changed by economic reforms, policy initiatives, and foreign shocks, structural break analysis is especially pertinent.

The study offers a more comprehensive view of the evolution of the gender gap in labor force participation in India by integrating multiple structural break tests with multiple regression analysis. It draws attention to the timing and effects of significant economic upheavals in addition to the long-term causes of gender disparity. By providing empirical data on how macroeconomic growth, demographic transition, health improvements, and price stability interact to determine gender gaps in the labour market, the study's findings are anticipated to add to the body of current literature.

From a policy standpoint, creating successful interventions requires an understanding of the factors that contribute to the gender disparity in labour force participation. Complementary policies that address childcare, skill development, job creation, and social standards become crucial if economic growth is not enough to alleviate gender inequities. In a same vein, policymakers might create integrated programs that address social and economic barriers to women's labour force participation by acknowledging the importance of inflation, health, and fertility.

The overall goal of this research is to present a thorough and empirically supported analysis of India's gender disparity in labor force participation. It aims to improve understanding of the enduring nature of gender inequality in India's labor market and provide insights that are pertinent for both academic research and policy formulation by concentrating on important macroeconomic and demographic factors and taking structural changes over time into account.

Considering the background Firstly, this article to assess the magnitude of gender gap in employment participation in India by scrutinizing the gender gap in employment participation rate from the year 1990 to 2024 and secondly, to find out the structural break and factors affecting the gender gap for labor force participation in India.

2. LITERATURE REVIEW

It is commonly acknowledged that gender equality in labor force participation is essential to social fairness, inclusive economic growth, and sustainable development. By facilitating the effective use of human capital, labour force participation improves productivity, income creation, and long-term growth, according to classical economic theory (Becker, 1964). Women's involvement in paid work has wider social consequences from a gender viewpoint, such as enhanced household welfare, increased bargaining power, decreased fertility, and improvements in health and educational performance across generations (Schultz, 1988). As a result, reducing the gender gap in labour force participation has emerged as a key goal of national development plans and international policy frameworks like Sustainable Development Goal 5, which supports women's empowerment and gender equality.

India still has one of the lowest percentages of female labour force participation among emerging nations, despite consistent economic growth and demographic shifts. A persistent gender gap has resulted from female labour force participation showing a falling or static tendency over extended periods of time, while male labour force participation has remained relatively consistent. Numerous reasons, including deeply ingrained socio-cultural norms and institutional restraints, as well as macroeconomic situations, demographic shifts, health outcomes, and price volatility, are identified in the research as contributing to this phenomenon.

A substantial body of research looks at the connection between female labor force participation and economic growth as determined by GDP. Because of the structural shift from agriculture to industry and services, development theories frequently propose a positive correlation between economic growth and women's employment options. According to the U-shaped theory, female labour force participation first decreases as incomes rise but then rises as education increases and the number of employments in the service sector rises. Empirical research on India, however, casts doubt on this theory's application. According to Kapsos *et al.,* (2014) and the OECD (2018), India's economic growth has been predominantly male-biased and jobless, with little job creation in fields that are accessible or appropriate for women. The gender gap has widened as a result of rising GDP not translating into increased female labour force participation. Numerous studies contend that when household earnings rise, income effects and social norms that link women's employment to financial hardship deter women from entering the workforce. Therefore, it seems that GDP growth in India has little, if any, effect on closing the gender gap in labour force participation.

Women's labour market behaviour is significantly influenced by demographic considerations, especially fertility rates. According to economic theory, women can devote more time to paid work and have fewer childcare duties as a result of decreased fertility. Over the past few decades, India's fertility rates have significantly decreased, with many states already approaching replacement-level fertility. However, empirical data indicates that female labor force participation has not increased in proportion to the drop in fertility. Research shows that although fewer children

mean fewer time limitations, women are still disproportionately responsible for unpaid caregiving and household tasks, which restricts their capacity to work in the market. Bhalla and Kaur (2011) contend that rather than persistent labour market entry, India's fertility decrease has been followed by an increase in female educational enrolment. As a result, the gender gap in labour force participation endures despite demographic change, and the anticipated fertility–employment relationship has remained modest.

Another significant factor influencing labour force participation is health outcomes, which are frequently measured by life expectancy. Better nutrition, access to healthcare, and general human capital development all contribute to longer life expectancies. It is anticipated that longer life expectancy for women will increase productivity, prolong working life, and promote labour market involvement. India's female life expectancy has steadily increased, reducing the gender disparity in survival rates. However, research indicates that improved health outcomes are not enough to guarantee higher rates of female labour force participation. According to studies by the OECD (2018) and Costagliola (2021), women are living longer and in better health, but they are unable to convert these improvements into economic involvement due to safety, mobility, skill mismatch, and a lack of appropriate employment options. Therefore, increases in life expectancy have only had a delayed or indirect impact on closing the gender gap in labour force participation.

Through its effects on real wages, household spending, and economic security, macroeconomic stability, especially inflation, also affects labour force dynamics. There is conflicting information in the literature about how inflation affects the labour supply of women. On the one hand, as households look for extra money to cover rising living expenses, rising inflation may encourage women to enter the workforce. However, as the price of food, fuel, and other essentials rises due to inflation, women are disproportionately responsible for unpaid domestic work and caregiving. According to empirical research on rural employment programs like the National Rural Employment Guarantee Act (NREGA), women's participation in public employment may rise during times of economic hardship and price volatility because of salary stability and local employment availability. However, studies with an urban concentration reveal that job uncertainty and unemployment brought on by inflation disproportionately deter women from looking for work, hence increasing the gender gap. In general, the connection between inflation and the gender disparity in labour force participation is still unclear and situation-specific.

Beyond specific macroeconomic factors, an increasing amount of research highlights how societal norms, sexism, and institutional limitations influence women's employment prospects in India. While paid work is sometimes seen as secondary or undesirable, especially for married women, traditional gender roles assign women main responsibility for domestic and caregiving tasks. According to Costagliola (2021), women's mobility and decision-making power are restricted by patriarchal norms and limited autonomy, which keeps them from joining or returning to the workforce even in favourable economic times. The anticipated benefits of growth, demographic change, and health advancements on female labour force participation are weakened by these norms' interactions with macroeconomic variables.

There are still a lot of gaps in the body of research on female labour force participation. Many studies do not specifically analyse the gender gap as a dependent outcome, instead concentrating only on female participation rates. Furthermore, rather than being analysed within an integrated empirical framework, macroeconomic variables like GDP, fertility rate, life expectancy, and inflation are frequently studied separately.

By explicitly modelling the gender gap in labour force participation as the dependent variable and investigating how important macroeconomic and demographic indicators GDP, fertility rate, life expectancy, and inflation jointly influence this gap across Indian states over time, the current study aims to close these disparities. The study adds to the body of knowledge by providing an understanding of the structural causes of gender inequality in India's labour market through the use of a multiple regression method and multiple structural breaks.

3. METHODOLOGY AND DATA SOURCE

3.1 Methodology

This study applies and empirical method based on time series data to understand the relationship between gender gap in labor force participation and specific economic factors in India such as GDP, fertility rate, inflation rate, life expectancy. Regression techniques are used to estimate the influence of important economic factors and identify structural changes in gender gap in labor force participation over the time.

The study uses the following techniques: Multiple Structural Break Test (Bai – Perron Test) and Multiple Regression Analysis

Variables Description

This study is based on secondary time-series data covering the period 1990 to 2024, which provides a long run view of gender gap in labor force participation in India.

The dependent variable used in the analysis is:
Difference in labor force participation.
Data on gender gap in labor force participation were collected from World Development Indicators (WDI).

The independent variable used in analysis is:
- GDP
- Fertility rate
- Life expectancy
- Inflation rate

Thess variables are obtained from WDI
This study uses difference male and female labor force participation.

Multiple Structural Break Test (Bai-Perron Test)

Since gender gap in labor force trends may be influenced by economic reforms, policy changes, and unexpected shocks in the economy, the Bai-Perron multiple structural break test is applied to detect shifts in gender gap in labor force participation behavior over time.

This method helps us:
- Detect multiple breakpoints in the data
- Identify periods of structural change
- Analyses variations across different economic phase

Although the breakpoints obtained may differ depending on the model specification they are retained in the study as they reflect statistically identified policy and structural changes in the economy.

Multiple Regression Model

Multiple regression is used to study the effect of more than one independent variable on a single dependent variable.

Multiple regression equation:
Gender Gap_t= ($MALEP_t$ – $FEMALEP_t$)= $DIFF_t$ =β0+β1 GDPGt+β2FRt+β3INFt+β4Let+ U_t

Where, Gapt= $DIFF_t$ = Male and female labour force participation difference, MALEPt = Male labour force participation rate, FEMALEPt= Female labour force participation rate, GDPGt= Gross domestic product growth, FRt= Fertility rate, INFt= Inflation rate, Let= Life expectancy rate

The analysis examines:
- GDP represents economic growth and employment opportunities, which can influence gender gap in labor force participation.
- Life expectancy reflects health and human development, affecting individual ability to work.
- Fertility rate captures demographic factors and household responsibilities, which mainly affect women's labor participation.
- Inflation rate show price instability and changes in real wages, influencing labour supply decisions.

The results are interpreted based on estimated coefficients and their significance levels. No additional diagnostic tests such as autocorrelation, heteroscedasticity, or multicollinearity tests are conducted.

3.2 Data and Variables:

In the present paper, five variables are used, difference in female and male labor force participation, GDP Growth, inflation rate, fertility rate, life expectancy, inflation rate have been used. The study is based on time series data from year 1990 to 2024 of India. These secondary data is collected from World Development Indicators (WDI), published by World Bank.

4. ANALYSIS OF THE RESULT

Table 1: Gender Gap in Labour Force Participation

YEAR	MALEP	FEMALEP	DIFF
1990	65.949	25.571	40.378
1991	65.828	25.623	40.205
1992	65.684	25.678	40.006
1993	65.519	25.72	39.799
1994	65.329	25.774	39.555
1995	65.803	26.178	39.625
1996	66.273	26.586	39.687
1997	66.741	26.998	39.743
1998	67.205	27.415	39.79
1999	67.666	27.835	39.831
2000	68.124	28.259	39.865
2001	67.019	27.861	39.158
2002	65.894	27.466	38.428
2003	64.752	27.074	37.678
2004	63.592	26.687	36.905
2005	62.416	26.302	36.114
2006	60.448	24.762	35.686
2007	58.444	23.283	35.161
2008	56.413	21.868	34.545
2009	54.359	20.515	33.844
2010	52.291	19.225	33.066
2011	50.798	18.163	32.635
2012	49.304	17.148	32.156
2013	48.859	16.645	32.214
2014	48.261	16.095	32.166
2015	47.501	15.505	31.996
2016	46.692	14.923	31.769
2017	45.836	14.34	31.496
2018	44.931	13.73	31.201
2019	43.988	13.094	30.894
2020	43.12	12.489	30.631
2021	43.168	13.245	29.923
2022	43.378	14.127	29.251
2023	43.752	15.135	28.617
2024	44.008	16.163	27.845

Note: MALEP, labor force participation rate for male, FEMALEP labor force participation rate for female, DIFF difference between male and female participation in workforce OECD (2018); World Bank (2024).
Source: Authors Calculation

Table 1 presents the trends in male and female labour force participation rates in India from 1990 to 2024 and highlights the persistent gender gap in workforce engagement. In 1990, male participation stood

at about 66 per cent, while female participation was only 25.6 per cent, resulting in a wide gender gap of over 40 percentage points. During the 1990s, both male and female participation rates increased gradually, but the gap remained largely unchanged, hovering around 39–40 percentage points, indicating that women's entry into the labour market did not keep pace with men's. From the early 2000s onward, a notable decline in participation is observed for both genders, with a sharper fall among women, leading to a gradual narrowing of the gap from about 39.9 per cent in 2000 to nearly 33 per cent by 2010. This convergence, however, reflects declining male participation rather than substantial improvements in female employment. Between 2011 and 2019, female participation continued to fall steadily, reaching a low of around 13 per cent, while male participation also declined, keeping the gender gap persistently high at over 30 percentage points. The period after 2020 shows a modest recovery in female labour force participation, rising from 12.5 per cent in 2020 to over 16 per cent in 2024, alongside a mild rebound in male participation. Consequently, the gender gap narrows further to about 27.8 percentage points in 2024, suggesting early signs of improvement, though substantial inequality in labour market participation remains entrenched.

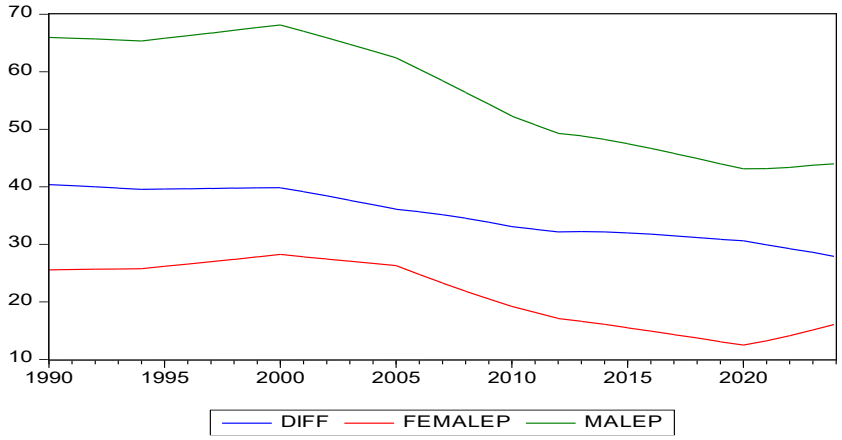

Figure 1: Gender gap in labour force participation

Note: DIFF male and female labour force participation difference, FEMALEP female labour force participation, MALEP male labour force participation.

Source: Authors Calculation

The graph that depicts trends in male labour force participation (MALEP), female labour force participation (FEMALEP), and male and female labour force participation difference (DIFF) from 1990 to 2024. Male participation remains high but shows a gradual decline after the early 2000s. Female participation is consistently much lower and decline more sharply, especially after 2005s, with a slight recovery in recent years. As a result, the gender gap in labour force participation remains large and persistent throughout the period, mainly driven by the decline in female participation, ILO (2014), OECD (2018), and Costagliola (2021).

Multiple Structural Break Test

Table 2: Multiple Structural Break Test for Male Labour Force Participation

Null Hypothesis	F-statistic	Decision
0 vs 1 breaks	69.725	Reject H_0
1 vs 2 breaks	16.049	Reject H_0
2 vs 3 breaks	15.168	Reject H_0
3 vs 4 breaks	5.332	Fails to reject H_0
Break Year		
1	2004	
2	2009	
3	2016	

Note: This break tests with trimming parameter of 0.15 and maximum break allowed are 5, HAC, allowing heterogenous errors. The test is significant at the 5% level. Structural break significant at the 5% level.

Source: Authors Calculation

Around 2004, India's economy began to recover rapidly after the downturn in the early 2000s. This growth was primarily due to the expansion of services, industry, and construction, which led to an increase in male employment, particularly in metropolitan regions (Government of India, 2003). The second structural break happened in 2009 as a result of the Global Financial Crisis, when male employment in

manufacturing, construction, and export-oriented industries decreased due to declining exports, decreased investment, and slower GDP growth (IMF 2009; World Bank, 2010). Demonetization, which negatively impacted cash-intensive industries like construction, trade, and small companies, is linked to the third break in 2016. This resulted in a brief drop in employment and modifications to labor force participation trends (RBI, 2017; World Bank, 2018).

Table 3: Multiple Structural Break Test for Female Labour Force Participation

Null Hypothesis	F-statistic	Decision
0 vs 1 breaks	72.454	Reject H_0
1 vs 2 breaks	15.022	Reject H_0
2 vs 3 breaks	4.168	Fails to reject H_0
Break Year		
1	2009	
2	2014	

Note: This break tests with trimming parameter of 0.15 and maximum break allowed are 5, HAC, allowing heterogenous errors. The test is significant at the 5% level. Structural break significant at the 5% level.
Source: Authors Calculation

The 2009 disruption is a reflection of the global financial crisis, which disproportionately affected women in low-wage, informal, and unstable professions. As a result of job losses and low labor demand, many women, particularly in metropolitan areas, left the workforce (IMF, 2009; World Bank, 2010). The second break in 2014 is associated with a protracted economic slowdown and high inflation, during which women's household responsibilities increased and job creation was restricted; concurrently, higher enrolment of young women in school and enduring social norms further decreased female labor force participation, leading to a discernible structural shift (RBI, 2014).

Table 4: Multiple Structural Break Test for Gender Gap Labour Force Participation

Null Hypothesis	F-statistic	Decision
0 vs 1 breaks	48.138	Reject H_0
1 vs 2 breaks	24.519	Reject H_0
2 vs 3 breaks	10.795	Fails to reject H_0
Break Year		
1	2002	
2	2007	

Note: This break tests with trimming parameter of 0.15 and maximum break allowed are 5, HAC, allowing heterogenous errors. The test is significant at the 5% level. Structural break significant at the 5% level.
Source: Authors Calculation

The first break around 2002 coincided with a major drought and an agricultural downturn, which sharply reduced rural employment opportunities and widened the gender gap as women who are highly dependent on agriculture and related activities were more adversely affected (Government of India, 2003). The second break in 2007 reflects the combined effects of the pre-crisis economic boom and the global financial crisis, during which women, particularly in the informal sector, experienced greater job losses, leading to a structural change in the gender gap despite initial gains in male employment (IMF, 2009; World Bank, 2010).

Table 5: Determinants of Gender Gap in Labor Force in India

Explanatory Variable	Coefficient	t-statistic	p-value
C	58.81807***	3.742568	0.0008
GDPG	-0.028620	-0.664790	0.5113
LE	-0.490729**	-2.600310	0.0143
FR	3.645775***	3.229397	0.0030
INF	-0.271254***	-5.168782	0.0000
Adjusted R-squared	0.970655		
F-statistic	282.1595		
Prob (F-statistic)	0		

***, **, * represent statistical significance of 1%,5%,10% respectively
Source: Authors Calculation

Table 5 explains the macroeconomic and demographic determinants of the gender gap in labour force participation in India. The regression results show a high explanatory power, with an adjusted R-squared of

0.97, indicating that GDP growth (GDPG), inflation (INF), fertility rate (FR), and life expectancy (LE) jointly explain most of the variation in the gender gap over time. GDP growth has a negative but statistically insignificant coefficient, suggesting that economic expansion by itself does not meaningfully reduce gender disparities in labour force participation. This supports the argument that growth in India has been insufficiently inclusive and has not generated adequate or suitable employment opportunities for women. Life expectancy exhibits a negative and statistically significant effect, implying that improvements in health and longevity contribute to narrowing the gender gap by enhancing women's ability to participate in the workforce. In contrast, the fertility rate has a positive and highly significant coefficient, indicating that higher fertility widens the gender gap by increasing women's unpaid care and domestic responsibilities, thereby restricting their labour market engagement. Inflation shows a negative and strongly significant relationship with the gender gap, suggesting that rising prices push more women into the labour force due to economic distress, often as a coping mechanism for household income shocks. The significant F-statistic confirms the overall robustness of the model, reinforcing the conclusion that demographic and macroeconomic factors, rather than growth alone, play a decisive role in shaping gender disparities in India's labour market.

5. CONCLUSION AND RECOMMENDATIONS

The research shows that gender gaps in labor force participation in India have persisted from 1990 to 2024, despite economic development and structural change. involvement rates show that decreased male involvement has narrowed the gender gap rather than sustained advances in women's employment, highlighting the fragility and non-inclusivity of labour market results. Structural break analysis shows that agricultural downturns, the global financial crisis, prolonged slowdowns, high inflation, and demonetisation disproportionately affected informal, low-paid, and insecure women. The econometric findings show that GDP development alone has not reduced gender disparity in labor force participation, showing that India's economic model has not created enough opportunities for women. Life expectancy increases women's economic engagement, whereas more fertility widens the gap by increasing unpaid care obligations. Although inflation reduces the gender gap, this impact is mostly distress-driven, reflecting women's forced admission into low-quality work. The findings suggest that India's inclusive and sustainable labor market outcomes require targeted, gender-responsive policies on health, fertility, care responsibilities, job quality, and social norms, as well as macroeconomic stability, rather than economic growth alone. The results suggest a comprehensive, gender-responsive policy framework to narrow India's labor force participation gap. Employment plans must concentrate on good, secure, and women-friendly jobs rather than GDP development as it has not appreciably improved gender inequities. Life expectancy emphasizes the need to invest in women's health, nutrition, and excellent healthcare to maintain labor market participation. The considerable beneficial influence of fertility on the gender gap emphasizes the need for accessible family planning, inexpensive daycare, and supportive maternity policies to lessen women's unpaid care burden. Despite inflation narrowing the gender gap, this impact is mostly distress-driven, as women enter low-quality jobs due to home economic demands. Thus, price stability, social safety, skill development, and labor market institutions are needed to promote productive, voluntary, and sustainable women's employment participation and genuinely inclusive economic growth.

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