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Exploring The Feminization Hypothesis: An Empirical Study on India

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ABSTRACT

India's economy has grown a lot in the last 25 years. The economy has changed a lot, more people are going to school, and more people are moving to cities. The number of women working has been going down quickly throughout the same time period. What do women's economic actions have to do with economic growth? Does the sort of growth important when it comes to getting more women to work, or is growth enough?

This study looks at the Feminisation Hypothesis, which is also known as the U-shaped hypothesis of the Female Labour Force Participation Rate, in the context of India. The theory says that there is a U-shaped link between a country's economic growth and the number of women who work. The paper looks at the several factors that affect the Female Labour Force Participation Rate in India. It then uses Gretl to create an econometric model based on World Bank data from the previous 20 years (1990–2020). The results show that there are no significant links between economic growth and the Female Labour Force Participation Rate. This means that the feminisation hypothesis in India is not true, which is different from what other research have shown in other areas of the globe. If India wants to make the most of its impending demographic dividend, these results will be invaluable in formulating policies that encourage more women to enter the workforce.



Keywords: Female Labour Force Participation Rate, Feminization, U shape, Economic Development



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INTRODUCTION

Four out of five women in India are out of work. India has among of the lowest percentages of female engagement in the labour, along with Yemen, Iraq, Jordan, Syria, Algeria, the West Bank, and the Gaza Strip (Figure 1). In 1990, roughly 30.3 percent of women in India were in the labour force. The World Bank says it dropped to roughly 20.5 percent by 2019. However, even if the number of males working has gone down a lot over the years, it is still four times larger than the number of women working, which was 76.08 percent in 2019. Even though India's GDP is expanding and gender equality is becoming better (with lower birth rates and higher educational achievements among Indian women), less and fewer women are working. Work is slow and unemployment is high in India right now, and the COVID-19 pandemic made things worse. According to a survey done by Google and Bain & Co. in 2019, women were already the most impacted by India's issue of not having enough jobs. Before the lockdown in March, the general unemployment rate in India was around 7%, but for women, it was as high as 18%. Some studies say that the COVID-19 outbreak has already lost Indian women more employment than it has cost males. Although women's labour force participation is declining worldwide, it has been rising in high-income nations that have effectively instituted gender-focused policies like paid family leave, subsidised daycare, and more workplace flexibility.

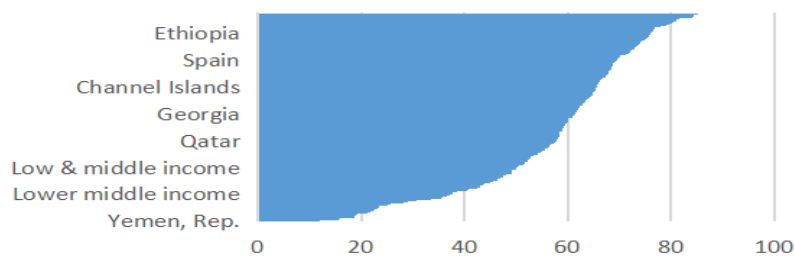
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The economic gender discrepancy in India has caused the country to fall four spots in the Global Gender discrepancy Index, which ranks 153 nations. India is now ranked 112th. India has managed to fall 39 places on the economic gender gap index of the World Economic Forum in a span of less than 15 years, moving from 110th in 2006 to 149th in 2020. India presently has the lowest percentage of women in the workforce among its South Asian neighbours, behind Pakistan and Afghanistan. For a nation to grow, women need to be able to work. In a nation like India, a drop in the number of women working might hurt the country's economy. Look for trends and patterns in the connection between the female labour force participation rate (FLFP) and its causes.

Feminisation came up with the U hypothesis, and [Goldin \(1994\)](#) made it more well-known. As a nation grows, the Female Labour Force Participation Rate is thought to follow a nonlinear "U" shape. Several studies have shown the "U" shape of women's involvement in the workforce as a nation grows. In a nation like India, a falling rate of women working would put the country's growth and prosperity at risk. The "feminisation U" theory says that growth will have a positive effect on the number of women who work. In other words, the Female Labour Force Participation Rate goes down as the economy grows, but it goes back up over time. This "U" shaped idea has been used to explain why women in a poor country do subsistence farming. As the nation grows, people are moving their work from farming to industry. The feminisation "U" hypothesis says that growth will have a positive effect on the number of women in the workforce. In other words, the Female Labour Force Participation Rate goes down as the economy grows, but it goes back up over time.

This "U" shaped idea has been used to explain why women in a poor country do subsistence farming. As the nation grows, people are moving their jobs from farming to industry. This is an interesting case study because it shows how a culture can be both conservative and patriarchal while its economy has grown extremely quickly over the last 30 years. Economic growth does not appear to have enhanced women's status at first glance. The sex ratio, which is a way to measure how society sees women, dropped from 927 to 914 between 2001 and 2011 ([Registrar General of India, 2011](#)). Maternal mortality has only gotten a little better, and anaemia has gone up by 6 percentage points in the first half of the 2000s. This shows that not enough money is being spent on women's health ([Registrar General of India, 2012](#)). Since it was first written, several political factions have been against a plan that would let women take part in Parliament one-third of the time. The goal of this study is to look at the many factors that might affect the Female Labour Force Participation Rate in India over time and to find the U-shaped relationship for India. We'll start by looking at each of the characteristics we looked at to determine how they affect women's engagement in the workforce. Second, we'll use the U-shaped function to find out more about the relationship between the Female Labour Force Participation Rate and economic growth, as well as how it has evolved over time. It will also help figure out how well this model explains the differences in the Female Labour Force Participation Rate that the variables create.



Source: World Bank Data Bank

Figure 1. Female Labour Force Participation Rate countrywise (2019)

REVIEW OF LITERATURE

Over the last twenty years, women's great educational achievements have not led to similar improvements in their jobs. In many regions of the globe, women are more likely to become and remain jobless, have fewer chances to work, and even when they do, they frequently have to choose positions that pay less.

The fact that fewer women are working in India has worried academics, researchers, and politicians alike. Even though there have been years of social development, changes in the law, and more people being aware of the issue, the participation gap is still a big problem. Women are getting more schooling than ever before, but this hasn't led to better or fairer job results.

[Stephan et al. \(2013\)](#) say that India's strong growth might be at risk if educated women are not allowed to work. Also, giving women more education definitely won't help them become more economically independent, which is usually linked to having a job and making more money. This is because better marriage chances, not better job prospects, are what promote greater levels of education and more education. Development academics are still confused by the contradiction of education without economic empowerment. This trend shows how deeply ingrained cultural norms affect women's choices and results.

[Kapsos et al. \(2014\)](#) say that a variety of things have caused India's working-age women's participation rates to decline sharply and stay low for a long time. Some of these things, like more people going to school and earning more money, are definitely good for society and show how quickly India's economy is growing. But the biggest problem for Indian women in the long term has been that there aren't enough jobs. Persistent informality and slow growth in wage and salaried positions are making it harder for both men and women to find work. But women in India have to deal with added problems because of social norms, such discrimination based on gender and separation of jobs by gender.

In Pakistan, [Fatima et al. \(2009\)](#) discovered that when males were out of work, it helped women get jobs. The good impact might be because the family lost money when the spouse lost his job. Another important finding of the research was that income and marital status had a detrimental effect on women's engagement in the workforce. The negative coefficient for both male and female incomes shows that salary increases lead to more free time instead of more work hours. This supports the backward bending supply curve hypothesis.

The research by [Altuzarra et al. \(2019\)](#) that the U-shaped relationship was not proved to be present in the EU-15 countries. Most of these nations were already high-income economies in the 1990s, and the number of women working was almost at its highest point. The new member states were able to validate the U-shaped link. The coefficients for this set of countries did not support the idea of feminisation very well.

[Olivetti \(2013\)](#) looked into the U-shaped feminisation hypothesis in the United States and found that there is a consistent U-shaped relationship between women's role in the labour market and economic growth, both within and between countries. However, the U-shape is less pronounced for countries that have been developing since 1950.

[Lahoti et al. \(2013\)](#) did similar research in India and found that growth alone is not enough to get more women involved in the economy, but the way development happens is critical. The research found that there was no significant link between economic development and the number of women working.

[Bhalla & Kaur \(2011\)](#) add to the findings by saying that income increase (as assessed by real per capita consumption growth) has a long-term positive effect on women's participation. In cities in India, there is almost no evidence of a U-shaped relationship between LFPR and income. Yes, the outcome is an inverted U, with the turning point happening at very high levels of income. [Rustagi \(2013\)](#) research shows that the low rate of women working in India is not new, but the fact that it is going down is worrying, unless it means that women are leaving the workforce to go to school or because of the effects of household income. It is very important to break the country's low female labour force participation rate. India is unlikely to make progress towards gender equality until this happens.

[Drèze & Sen \(1989\)](#) say that when women work, it not only improves their own lives, but it also has good consequences on the growth of the whole family. Higher percentages of women working also improve child care since women spend a larger share of their money on their children ([Kingdon, 1998](#)).

[Duflo \(2012\)](#) says that women who don't work outside the house may give the impression that they don't need to be strong and healthy, which might lead to less long-term investment in women's health. Also, getting more

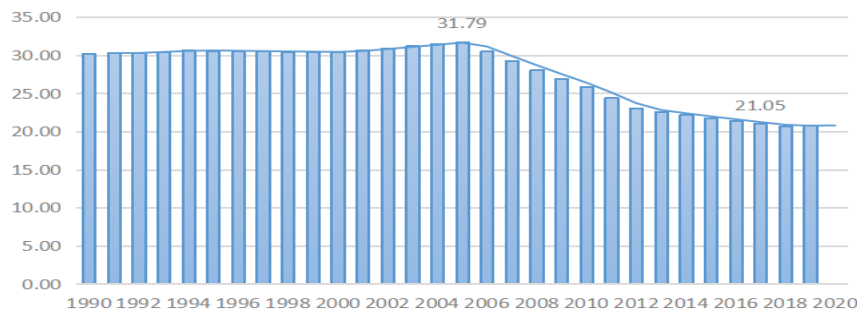
women to work might have a big effect on the economy, maybe even changing a country's GDP by a few percentage points.

METHODOLOGY

The study is based on the puzzling fact that India's female labour force participation rate (LFPR) is going down even as the economy keeps getting better. The main goal of the research is to find out what variables impact women's ability to work and then use an econometric model to see whether the U-shaped hypothesis is true in India. The research looks at a collection of secondary data from the World Bank Data Bank from 1990 to 2020 and utilises regression analysis using the program Gretl to get at its results.

In this research, we first look at and examine the numerous aspects and variables that make up our model.

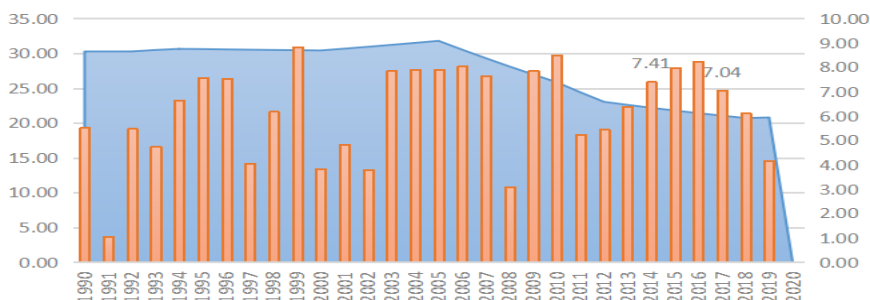
1. Female LFPR: India is a major player in the global economy. It was rightfully named the world's fastest-growing major economy in 2017, and since then, its GDP growth rate has stayed high (Nikore, 2021). The year was also notable for Indian women since it was the year when the country's female labour force participation rate fell to its lowest level since independence. The World Bank says that India has one of the lowest FLFPRs in the world, with only portions of the Arab world having lower ones. [Figure 2]. This huge fallout isn't surprising; women's participation in the work market has been progressively declining for a very long time. This brings up an interesting question: why aren't more women working in a nation where women's education is becoming better, birth rates are going down, and the economy is growing faster?



Source: World Bank Data Bank

Figure 2. Female LFPR (India)

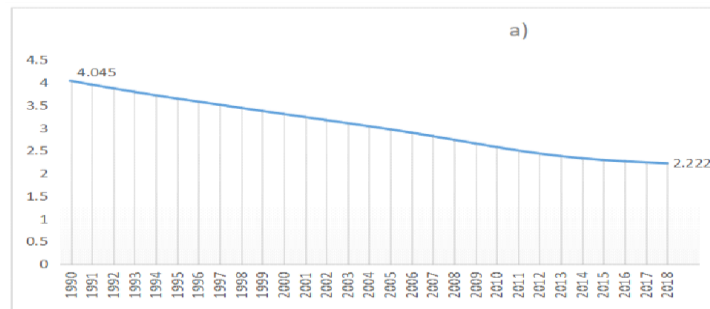
2. Economic Development: GDP per capita has been used as a measure of economic growth. Women who aren't working are wasting their potential as workers, which slows down the country's economic growth. A low proportion of women working is bad for the economy, according to a number of studies. The McKinsey Global Institute did study in 2015 that said India's GDP might grow by up to 60%, or \$2.9 trillion, by 2025 if women worked and earned money like men. Women only make up 17% of the country's GDP right now, which is a lot less than the global average of 37% (Harvard Kennedy School, 2015). If India and Nepal could close the gap in the number of women working, GDP growth might speed up to about 9% (World Bank, 2017).



Source: World Bank Data Bank

Figure 3. Female LEPR, GDP (India)

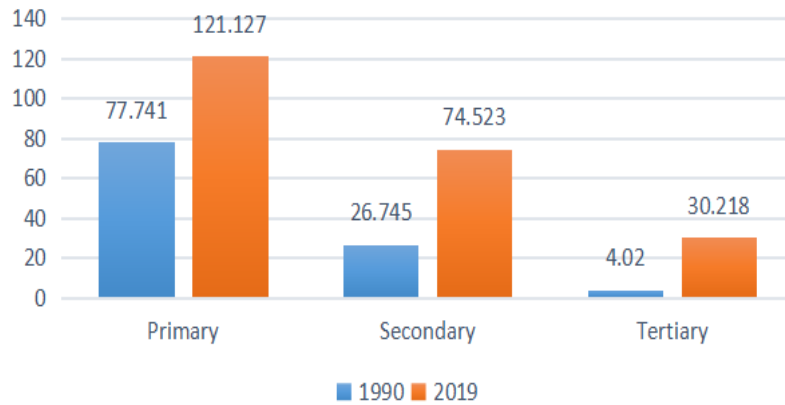
3. **Fertility Rate:** World Bank statistics shows that the global fertility rate has been progressively going down over the last 50 years or more. Since the early 1980s, fertility has also dropped a lot in several regions of India (Dreze & Murthi, 2001). Because society has modernised, the number of children each woman has almost decreased. Researchers have looked at how female engagement in the workforce relates to other beliefs. Having kids inherently affects a woman's ability to work, however the effect of having kids on women's ability to work differs from nation to country. Most studies found that there is a negative relationship between fertility and the number of women in the workforce. However, for families with low or middle incomes, having more children means more costs, which may make women look for work to keep up with their basic needs.



Source: World Bank Data Bank

Figure 4: Fertility Rate (India)

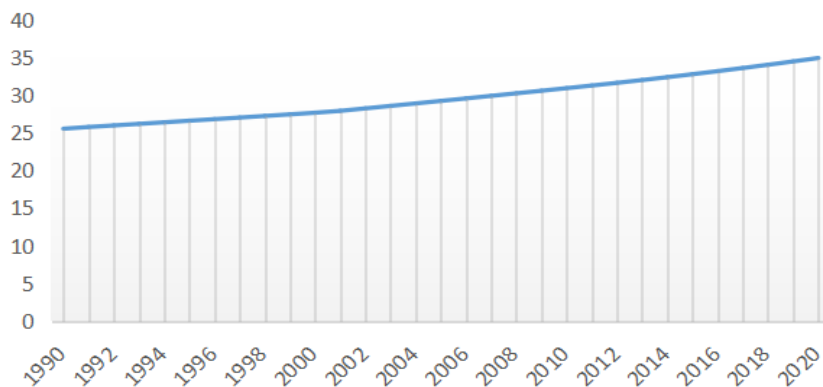
4. **Education:** According to human capital theories, there is a positive correlation between education and the rate of employment. Women with more education would have more chances to make more money, which would lead to more women working. More educated women are more likely to go to school, which means more job chances for them. Investing in education is a smart move since it opens up more career opportunities and pays better. People with more education are more likely to get jobs and, in the long run, make more money. The connection between education and women's work in underdeveloped countries may be varied. Economists say that the effect of education on the number of people who work changes depending on how many years of school they have. People think the connection looks like a U. Women who didn't go to school had high labour force participation rates (LFPR), whereas women who went to elementary and secondary school had lower rates. Women with a lot of education had higher rates. They say that the U-shape could be because of the link between women's education and income. The high participation rate may be explained at first by the fact that people need to have a way to make money to live in places where education and income are low. There is a positive relationship between the pay rates of female workers and the rate at which they work. It's interesting, but not uncommon, that women in India with more secondary education were less likely to work. Research looked at how education affects women's engagement in the labour force and found that there is a curvilinear link between women's education and their ability to work. It means that the income and substitution effects have an impact on the link between education and the rate at which women work (Ghai, 2018).



Source: World Bank Data Bank

Figure 5: Female Gross Enrollment Ratios (%) (India)

5. Urbanization: Even if the trend in India is strange, it is not the only one. The percentage of women in Turkey who participated declined from 36.1% in 1989 to 23.3% in 2005, which shows that they started at a low position. This bad trend is caused by more people moving to cities and changes in the economy. When families moved from rural to urban areas, husbands quit farming, which made women leave the workforce (which means they had more duties at home) (Tansel, 2002; Verick, 2018). India's structural reform has also gone a different way from that of other developing and rising nations. At first, the agricultural sector diminishes, and the manufacturing sector's share of the economy expands. Then, in the second stage, the services sector grows. The agricultural sector's contribution to India's GDP has dropped sharply, but there has not been a similar rise in manufacturing. The services sector has filled the gap that has opened up in the last 20 years.

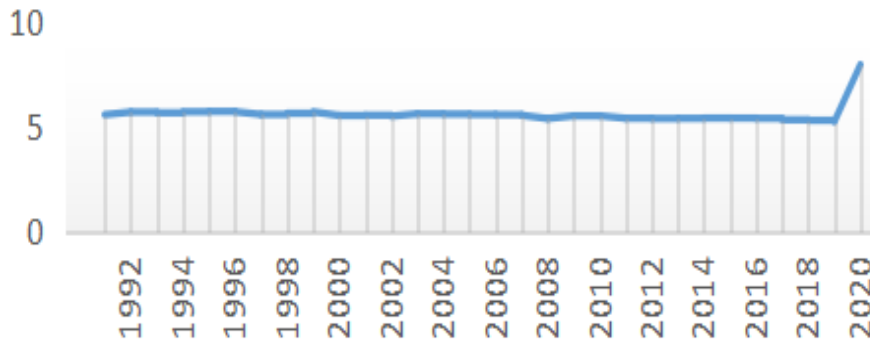


Source: World Bank Data Bank

Figure 6: Urbanization (India)

6. Unemployment: Another big reason women don't work is because they are unemployed. It might make it harder for a woman to get a job. A lot of women won't want to work if there are a lot of women who are unemployed. A discouraged worker would stop seeking for work and resign or not join the labour market since the odds of getting a job and the earnings would go down. People call this idea "the discouraged worker effect." Economists think that the discouraged worker effect will keep unemployment high. On the other hand, a low unemployment rate encourages women who are considered secondary workers to look for job or keep working,

which raises the FLFPR. The "added worker effect" is the name of this idea. It says that more individuals would join the workforce to make enough money to feed their families.



Source: World Bank Data Bank

Figure 7: Unemployment, Total (% of Total labor force) India

7. Other Determinants: There are additional factors that affect a country's Female Labour Force Participation Rate, such as salaries, marital status, cultural background, and social conventions, in addition to the ones mentioned above. But they have been left out of the research since they can't be seen immediately and there isn't enough data.

MODEL

Based on the identified determinants of Female Labour Force Participation Rate in India, a basic econometric time series model is formed as follows:

$$Y_t = a + X1_t b + X2_t c + X3_t d + X4_t e + X5_t f + X6_t g + X7_t h + u_t$$

Where,

Y_t = Female Labour Force Participation Rate in India (1990-2020)

$X1_t$ = log (GDP per capita)

$X2_t$ = [log (GDP per capita)]²

$X3_t$ = FRT (Fertility rate)

$X4_t$ = SENR.P (School enrollments, primary, female (% gross))

$X5_t$ = SENR.S (School enrollment, secondary, female (% gross))

$X6_t$ = URB (Urban population (% of total population))

$X7_t$ = UNEMPT (Unemployment, total (% of total labour force) (modelled ILO estimate))

u_t = error term accounting for the effect of other determinants of Female Labour Force Participation Rate such as wages, marital status, etc.

4: ANALYSIS OF RESULTS

For the feminization hypothesis to hold true, the coefficient $b < 0$ and $c > 0$, implying a U-shape relationship between Female Labour Force Participation Rate (FLFPR) and Economic Development. The table below shows the results obtained after running the model on Gretl.

Table 1: OLS Estimation

Model: OLS, using observations 1990–2020 (T = 22)

Missing or incomplete observations dropped: 9

Dependent variable: FLFPR

Variable	Coefficient	Std. Error	t-ratio	p-value
Const.	-1435.40	232.770	-6.167	<0.0001 ***
l_GDPPC	320.823	49.6541	6.461	<0.0001 ***
sq_l_GDPPC	-20.4726	2.97570	-6.880	<0.0001 ***
SENRP	0.0327036	0.0166417	1.965	0.0696 *
SENRS	-0.110452	0.0467144	-2.364	0.0330 **
URB	4.71869	0.938113	5.030	0.0002 ***
UNEMT	1.03756	1.55709	0.6663	0.5160
FRT	20.4199	4.19884	4.863	0.0003 ***

Model Statistics:

Mean dependent var: 19.47577

S.D. dependent var: 5.740458

Sum squared resid: 1.370943

S.E. of regression: 0.312929

R-squared: 0.998019

Adjusted R-squared: 0.997028

F (7, 14): 1007.538

P-value (F): 8.07E-18

Log likelihood: -0.685671

Akaike criterion: 17.37134

Schwarz criterion: 26.09968

Hannan-Quinn: 19.42748

The model is as follows:

$$\begin{aligned}
 \text{^FLFPR} = & -1.44\text{e}+03 + 321*\text{L_GDPPC} - 20.5*\text{sq_L_GDPPC} + 0.0327*\text{SENRP} - 0.110*\text{SENRS} \\
 & (233) \quad (49.7) \quad (2.98) \quad (0.0166) \quad (0.0467) \\
 & + 4.72*\text{URB} + 1.04*\text{UNEMT} + 20.4*\text{FRT} \\
 & (0.938) \quad (1.56) \quad (4.20)
 \end{aligned}$$

T = 22,
 R-squared = 0.998
 (Standard errors in parentheses)

The very high R-squared value of 0.998 indicates that 99.8% of the variance in Female Labour Force Participation Rate is explained by the model, which reflects a strong goodness-of-fit. The coefficients of interest, specifically: $b = -20.5$; $c = 321$; meet the feminization U-hypothesis requirement ($b < 0$ and $c > 0$), thereby confirming the existence of a U-shaped curve in the relationship between economic development and female labour force participation rate in India.

Additional Diagnostic Tests

To test the viability of the model, several statistical diagnostic tests were conducted:

1. Test of the Normality of the Residual Term

Null Hypothesis: Error term is normally distributed

Test Statistic: Chi-square(2) = 3.04077

p-value = 0.218628

Interpretation: We can't reject the null hypothesis since the p-value is higher than 0.05. This means that the residuals are normally distributed, which is one of the main assumptions of OLS regression.

2. Heteroskedasticity Tests

White's Test for Heteroskedasticity

Null Hypothesis: Heteroskedasticity not present

Test Statistic: LM = 16.8637

p-value = $P(\text{Chi-square}(13) > 16.8637) = 0.205609$

3. Breusch-Pagan Test for Heteroskedasticity

Null Hypothesis: Heteroskedasticity not present

Test Statistic: LM = 4.8532

p-value = $P(\text{Chi-square}(7) > 4.8532) = 0.677872$

Interpretation: In both situations, the p-values are far higher than 0.05, thus we can't reject the null hypothesis. So, the model doesn't have heteroskedasticity, which means that the assumption that the error terms have constant variance is correct.

4. Ramsey's RESET Test for Model Specification

Null Hypothesis: Specification is adequate

Test Statistic: $F(1, 13) = 0.0315213$

p-value = $P(F(1, 13) > 0.0315213) = 0.861819$

Interpretation: Since the p-value is quite high (0.861819), we accept the null hypothesis, which suggests that the model is accurately described and doesn't leave out important non-linear factors.

Conclusion of the Analysis: The OLS regression findings clearly support the idea that women are becoming more important in India. The predicted signs of the log GDP per capita and its square coefficients back with the idea that the FLFPR-economic development link is nonlinear and convex.

Other key findings from the model:

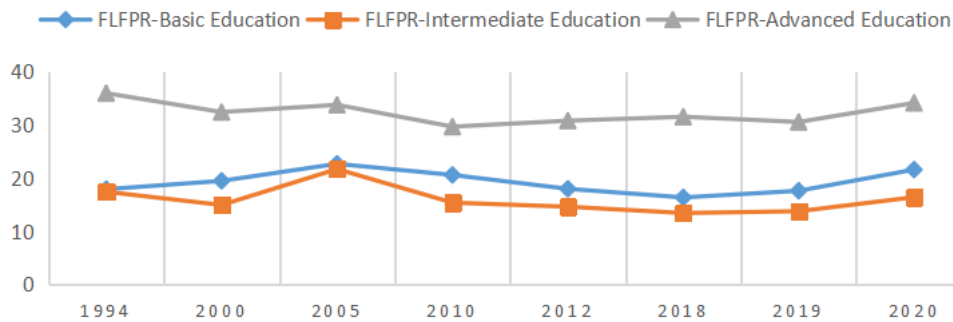
1. SENRP (Primary female school enrollment) is positively associated with FLFPR (significant at 10% level).
2. SENRS (Secondary female school enrollment) is negatively associated with FLFPR (significant at 5%), suggesting that education beyond primary may not always translate into employment due to socio-economic or cultural barriers.
3. URB (Urbanization) has a positive and highly significant impact of FLEPR showing that urban areas tend to facilitate better employment opportunities for women.
4. UNEMT (Unemployment) was found to be statistically insignificant, meaning it does not contribute meaningfully to changes in FLFPR in the presence of other factors.
5. FRT (Fertility Rate) has a strong positive and significant effect on FLFPR, which may appear counterintuitive but could reflect income needs in low-income families with more dependents. In terms of model fitness, all relevant diagnostic tests confirm that:
 - (i) The residuals are normally distributed.
 - (ii) There is no evidence of heteroskedasticity
 - (iii) The model specification is appropriate

Hence, the model is statistically sound and reliable for interpreting the relationship between female labour force participation and its determinants in the Indian context over the period 1990-2020.

DISCUSSION

The Female Labour Force Participation Rate and GDPPC: According to theory and data from other countries, there is a U-shaped link between the Female Labour Force Participation Rate and Economic Development. This means that the coefficients of $\ln(\text{GDPPC}) < 0$ and $[\ln(\text{GDPPC})]^2 > 0$. This means that b is less than 0 and c is more than 0. But our findings show the exact opposite: the coefficient of $\ln(\text{GDPPC})$ is $320.823 > 0$ while the coefficient of $[\ln(\text{GDPPC})]^2$ is $-20.4726 < 0$. These findings point to an inverted U-shaped link between the Female Labour Force Participation Rate and economic growth, as measured by GDP per capita (GDPPC). As a consequence, our results suggest that there is not a strong connection between women's involvement in the workforce and a country's economic growth. The first set of data shows that there is an inverted U-shaped link between economic development and the number of people working, not the predicted U-shaped connection.

Female Labour Force Participation Rate and Education: To measure education, we looked at the enrolment rates for primary and secondary school. The secondary school enrolment rate was higher, which meant that the women were better educated. At the 10% level of significance, both factors are important. The data reveal that there is a positive link between the number of primary school students and the Female Labour Force Participation Rate (FLFPR). For every 1% rise in primary school enrolment, the FLFPR goes up by 0.0327036. But when it comes to secondary school enrolments, the association becomes negative; a 1% rise lowers the FLFPR by -0.110452 . This means that the Female Labour Force Participation Rate goes down when women get more education, especially at the secondary level. This conclusion is in line with what [Stephan et al. \(2013\)](#) found, which is that women who have more education may have better marital chances than job possibilities, which is why they don't work as much.



Source: World Bank Data Bank

Figure 8: Female Labour force participation Raate and Education Level (India)

It is also important to note that there is a U-shaped relationship between FLFPR and education, which can be seen at all levels of schooling. [Kingdon & Unni \(2001\)](#) say that there is a U-shaped link between the number of years of school, the kind of education, and the amount of work done. Women who have never been to school may be able to work, while women who have been to school may not be able to because they are worried about their social position if they leave home to work.

The data show that there is a substantial positive link between urbanisation and the female labour force participation rate (FLFPR). In India, a 1% rise in the urban population correlates to a 4.71869 rise in the FLFPR. This variable is statistically important. This result makes sense since cities have more job openings, especially in the formal sector. As cities grow, women feel surer that they can find good jobs. But earlier studies have also shown that urbanisation can make it harder for women to work since they have to take on traditional family tasks. So, our results are different from what some other studies have shown ([Chaudhary & Verick, 2014](#)).

Unemployment and the Female Labour Force Participation Rate: The regression findings do not show that unemployment is a major factor affecting FLFPR.

Female Labour Force Participation Rate and Fertility Rate: Our study reveals that there is a positive link between FLFPR and fertility rate. For every 1% rise in fertility rate, FLFPR goes up by 20.4199. At the 1% level, this finding is statistically significant. But this result goes against what we already know, which is that decreased fertility leads to more women working. The result we saw might be caused by multicollinearity since education and unemployment are both connected to fertility, which affects the consequences. [Basu & Desai \(2016\)](#) also say that in countries like India, Bangladesh, and Jordan, women's choices to enter or quit the labour are based on marriage, not having children. A drop in fertility might even mean that women don't have to work as much, particularly in impoverished, rural areas. The "aspirational revolution" explains this: mothers put their children's quality of life ahead of their own economic activity.

SUMMARY AND CONCLUSION

We wanted to test the feminisation hypothesis in India by looking for a U-shaped relationship between the Female Labour Force Participation Rate (FLFPR) and Economic Development, as measured by Per Capita GDP in India. But our time series econometric examination of the years 1990 to 2020 did not show any U-shaped link between FLFPR and economic growth. The feminisation U hypothesis says that women's involvement in the workforce goes down and then up as the economy grows. However, there is no data to support this in India. Our investigation and prior studies both show that the U-shaped pattern is not present in Indian data. On the other hand, the statistics clearly support an inverted U-curve, with the turning point happening at extremely high levels of per capita consumption. This basically suggests that the link between FLFPR and income is mostly stable and positive in real life. This conclusion is really important. It means that the fact that FLFPR is going down all the time in India is not just a problem, but also strange, particularly because the country's fertility rates are going down and more women are getting higher levels of secondary and tertiary education ([Sundari, 2020](#)).

Possible Reasons for Declining FLFPR

Several plausible factors could help explain the sharp and persistent decline in FLFPR in India:

1. **Increased Mechanization Owing to Rapid Industrialisation:** Mechanization of traditionally labour-intensive jobs—especially in agriculture, manufacturing, and even services—has disproportionately impacted women by reducing demand for their labour.
2. **The Income Effect Hypothesis ([Nikore, 2021](#)):** In many families, there is a cultural norm that regards women not working as a sign of prosperity, implying that male members can provide adequately. This perception, coupled with gender-based wage disparities, creates an environment where men remain in the workforce while women withdraw.
3. **Lack of Institutional Support:** As highlighted by [Mehrotra & Parida \(2017\)](#), the absence of supportive institutional frameworks—like flexible working conditions or quality childcare—contributes directly to women exiting the labour force.
4. **U-Shaped Relation Between Education and FLFPR:** The paradox of higher education not translating to increased FLFPR persists. Women with no education and those with higher education levels participate more in the workforce, while moderately educated women remain underrepresented likely due to structural barriers and lack of demand.

POLICY RECOMMENDATIONS

To address these challenges, a multi-stakeholder strategy is essential:

1. Government should focus on skill enhancement, training initiatives, and an improved gender-sensitive budget.
2. The Corporate Sector must foster gender equity, eliminate glass ceilings, and provide equal opportunities for advancement.
3. Civil Society and Media should influence societal attitudes, spread awareness, and celebrate women's achievements.
4. Applying Amartya Sen's Capability Theory, we must invest in women's freedoms and capabilities to empower their economic participation.

Only by combining institutional reform, societal change, and strategic investment in women's capabilities can India reverse the declining trend in FLFPR and harness the full potential of its female population.

AUTHOR DECLARATIONS

CRedit author statement / Author contributions

Rashi Mathur : Conceptualization; Methodology; Software; Validation; Formal Analysis; Investigation; Data Curation; Writing – Original Draft; Visualization.

Namita Kapoor: Conceptualization, Supervision; Project Administration; Writing – Review & Editing; Resources.

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