Growing Economy and Declining Female Employment: An Indian Paradox

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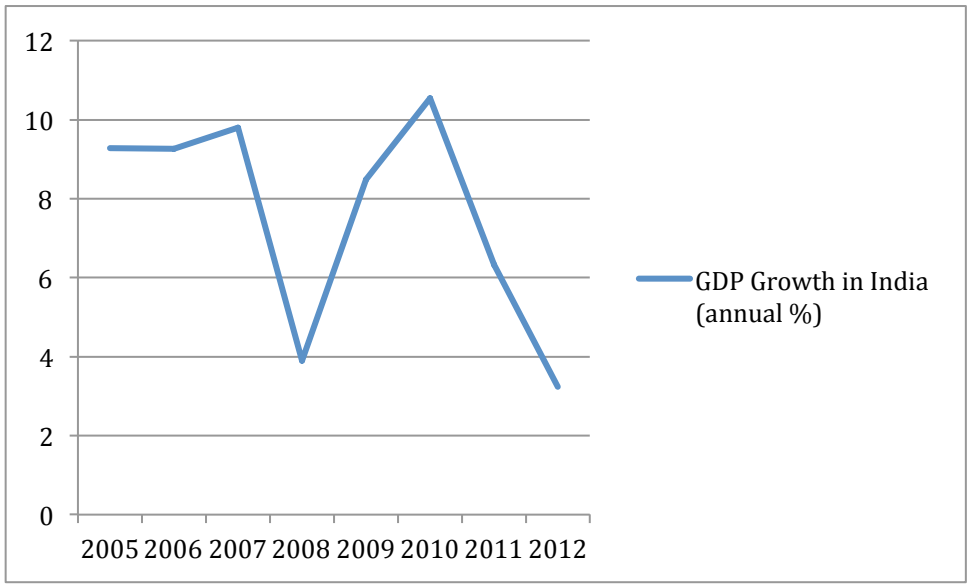
Introduction

A U –shaped relationship between economic development, growth and women's workforce participation has been observed in many countries. In India, unlike other South-Asian countries, women continued to remain at the bottom of the U-curve over the decades, even though economic growth has been steadfast. Economic growth has occurred without substantial expansion of opportunities in the formal sector (World Bank 1991; Swaminathan 1994; Desai et al, 2004). Moreover, an increased economic growth has not been followed by 'feminization of the labor force' (Desai et al, 2003; Das Bordia, 2006). However, the reason behind this pattern is not clear since much of the analysis is based on cross-sectional data or cross-national comparisons.

The 68th round of the National Sample Survey Organization data (2011-12) shows a large decline in women's labor force participation rate (LFPR) in India falling from employment rates of 28.7% to 22.5% for the female population as a whole. This substantial decline is surprising given the fact that the economy has mostly grown rapidly during this period. The following figure illustrates the annual growth rate of India's gross domestic product from 2005-2012.

Figure 1 GDP Growth in India (annual %) (2005-2012)

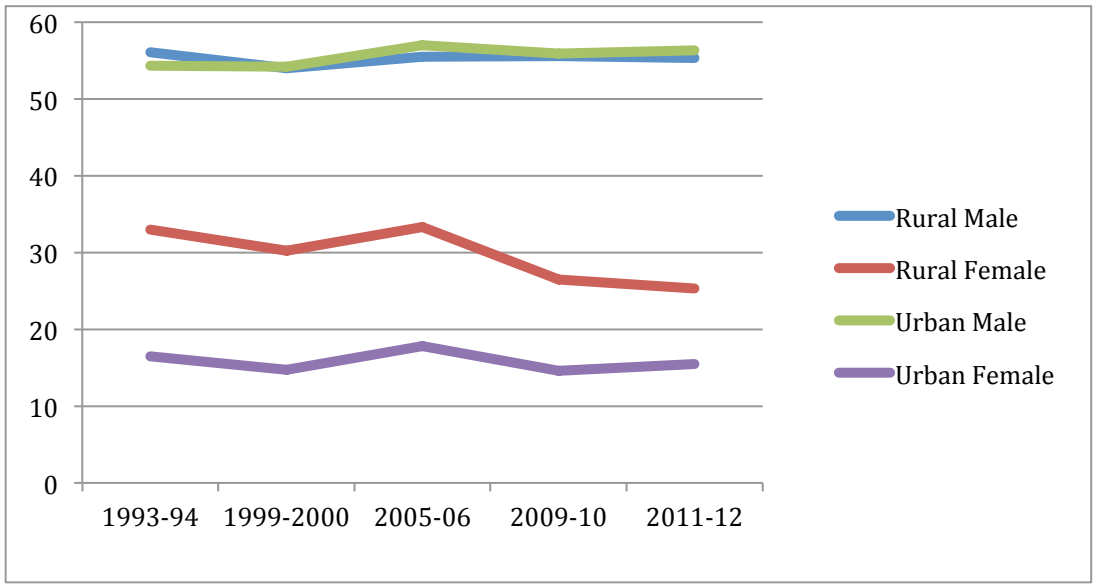


Source: World Bank

It maybe said that India experienced jobless growth. The figure 2 shows the trends in LFPR in India from 1993-94 to 2011-12. Men's LFPR as expected is above that of women. For men, in urban areas, there was a slight decline in LFPR in 2011-12 compared to 2004-05, whereas for men residing in rural areas LFPR remained almost constant over the years. However, the decline in LFPR particularly between 2004-05

and 2009-10 is evident for women. It can be seen that LFPR is the lowest for rural women in the year 2011-12 and the lowest for urban women in 2009-10. From figure 2 it appears that while women's LFPR in urban areas has remained more or less stable, women's unemployment in rural areas fell by almost 5.5 percentage point between 1994 and 2005.. It is even more surprising that rural employment for women fell inspite of the launch Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), in 2006-07 (then known as NREGA). NREGA guaranteed atleast100 days of employment to people in the rural areas who were willing to do unskilled manual work in Government sponsored projects for a given wage. The program requires that atleast one-third of the people benefitting from this were women, and that women and men be paid the same amount of wages.

Fig 2. Trends in Work Participation Rates



Source: NSSO

Women constitute around 48% of the population but they are behind men with respect to social indicators such as "health, education and economic opportunities". Srivastava et al (2010) report that amongst the group of workers, women are marginalized and women from rural parts are worse off than their urban counterparts. Due to limited access to resources and their susceptibility, special attention should be given to ensure gender equality with respect to access and use of resources. In order to achieve gender mainstreaming the Government of India has initiated gender budgeting in 2005. The size of gender budgeting as a proportion of the total budget has increased from 2.79 % in 2005-06 to 6.22 % in 2011-12 (Economic Survey of India, 2011-12). It is to be seen whether this leads to better educational access and improved job opportunities for women in the future.

Some of the reasons that have been cited for explaining the fall in women's employment include: a larger number of women in the age-group 15-24 are going for higher education and thus withdrawing from the workforce; the recession in 2008 that

affected the export sector led to many women losing their jobs; and, a decline in the share of jobs in the agricultural sector and the manufacturing sector (though this was compensated by employment in construction work, attributable to the NREGA) (Chowdhury, 2011). However, these speculations have not been empirically examined in a rigorous fashion.

India Human Development Survey (IHDS) data (conducted across two waves, one in 2005 and the other in 2012) in conformity with the NSS data show a decline in women's LFPR over time. In 2005, women's LFPR was 31.12% whereas in 2012 it fell to 24.77%. The present paper looks to analyze the causes behind the fall in women's employment over time, using IHDS data. Three main hypotheses thought to be particularly important are briefly illustrated below.

1. An increase in women's education over time:
Theories of human capital predict that an increase in skills would provide women a greater opportunity to earn higher wages, and this in turn would increase women's labor force participation rates (LFPR). Therefore, with an increase in the levels of education as the opportunity cost of staying at home and taking care of household activities increases, women would have a higher incentive to work (Goldin, 1990; Smith et al, 1985; England et al, 2005).

In most developed countries it is observed that an increase in education causes an increase in women's LFPR (Cain, 1966; Tienda, Donato and Cordero- Guzman, 1992; England et al 2012).

In the Indian context, on one hand, some studies show that women's LFP decreases with a rise in education, whereas other studies find a U-shaped or a J-shaped relationship between women's LFPR and their education levels. (Visaria, 1971; Reddy, 1979; Nirmala et al, 1992 ; Kingdon and Unni ,1997; Sathar and Desai, 2000; Bordia Das and Desai, 2003; Das Bordia , 2007). Complex socio-economic phenomena underlie this paradox. Measuring women's employment could also be challenging, because women many a times could be involved in part time jobs, they could work from home and may participate in the labor market only at times of family crisis. (Beneria, 1982; Folbre, 1995; Hirway, 2002; Das Bordia, 2006).

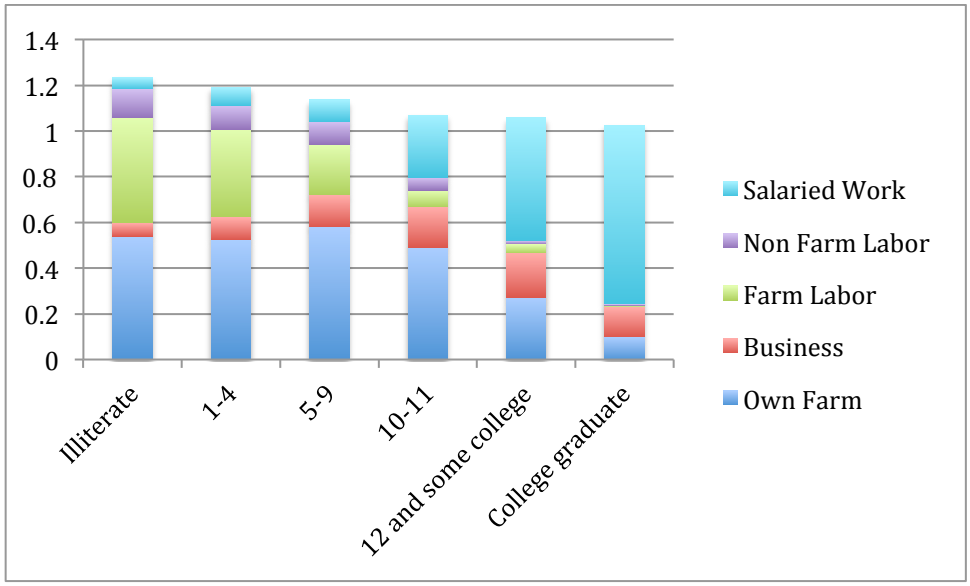
In an earlier study using India Human Development Survey (IHDS) 2005, the authors found that an increase in education leads to an increase in women's LFPR only for post-secondary school education (for currently married women between 25-49). This basic relationship holds even after controlling for husband's education level and other family income. Social stigma associated with working outside home, in jobs that one considers to be beneath ones education level, along with different areas of residence (rural versus urban) were found to hinder women's' participation in the labor force.

Data on jobs held by working women shows that, most of the women who are employed work as farmers, farm laborers or non-agricultural laborers. The figure 3 shows that the proportion of salaried jobs for women increases only post secondary school education.

With a lack of acceptable jobs for those with moderate levels of education (say primary or secondary school education), more women might tend to withdraw from

the labor force. With the average years of educational attainment increasing over time a larger proportion of women could be concentrated in the bottom of the U-shaped curve, and maybe that could cause a decline in women's workforce participation.

Figure 3 Manual work dominates, good jobs only after secondary education[1]



Source: IHDS 2005

2. An increase in other family income over time

An increase in women's LFPR with an increase in education (as predicted by the theory of human capital) could be depressed somewhat due to the "income effect". More educated women would be likely to marry more educated men, who would be likely to have higher income than uneducated men. If family income is high, women might have less incentive to work (Goldin 1992, England 2012). Poverty rates in India have fallen substantially between 2004-5 and 2011-12 and income has increased for most segments of the society (National Sample Survey Office 2013). Thus, if over time between 2005 and 2012, a woman's husband's income has increased, it will become more likely for the woman to quit the labor force.

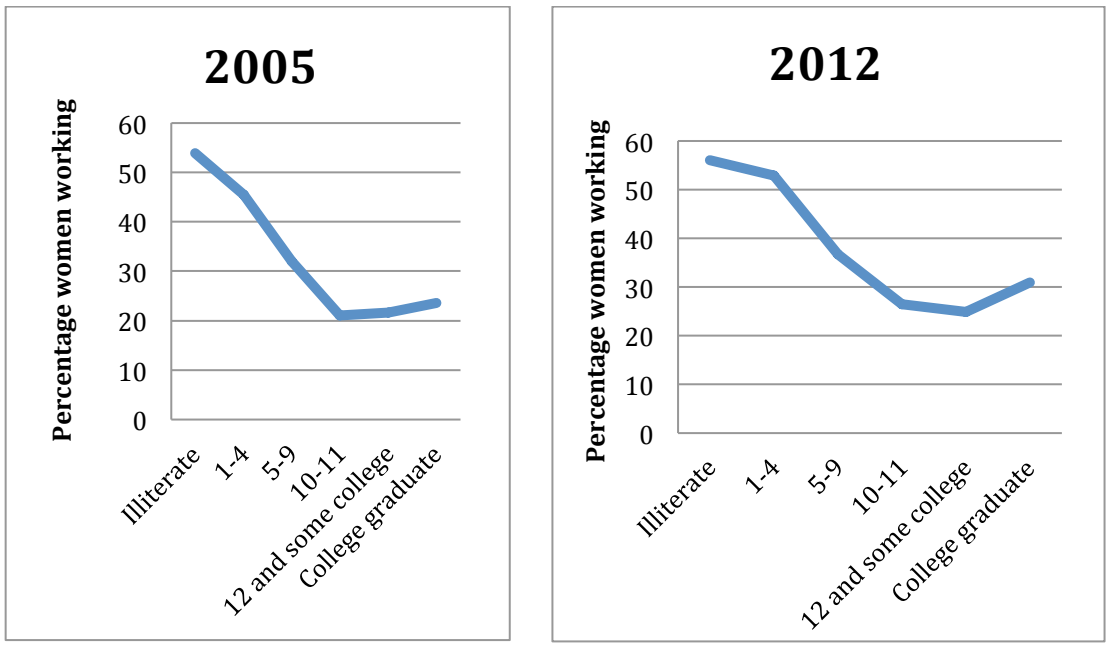
3. Change in the relationship between women's education level and her LFP over time

Whether the "opportunity cost" effect prevails over the "income effect" or whether it is the other way round, could be verified empirically. However, the underlying relationship between education and might also change with time. It would be interesting to observe how the availability of acceptable jobs for educated women changes with time and the manner in which it affects the U-shaped curve between women's education and employment. Attitudinal change of women with time can also affect the U-shaped curve. In this context it would be intriguing to examine whether

[1] Note: In some cases total can add up to a little greater than 1 because a woman might be involved in multiple jobs.

the educational attainment level at which the U-turn happens, has shifted over time. For e.g. if there is a shift in the level of educational attainment where the U-turn takes place, say it shifts from middle school to secondary school, this would indicate that it is becoming more difficult for women with some higher education to get "acceptable jobs". It might imply that women's aspirations are increasing, or that fewer respectable jobs are available over time.
Figure 4 illustrates the relationship between women's LFPR and her education level (for married women in the age group 25-49) using IHDS 2005 and 2012.

Figure 4 Women's work force participation (in %) by her own education (2005 & 2012)



Source: IHDS 2005 and 2012.

Data and methods

The present study uses data from the two waves of IHDS. IHDS 2005 is a nationally representative sample of 41,554 households that are spread across all the States and Union Territories of India (except for Andaman Nicobar and Lakshadweep), 384 districts, 1503 villages and 971 urban blocks. These 41,554 households include 215,754 individuals. The IHDS covers different modules in the household and covers topics related to health, education, employment, marriage, economic status etc. The household questionnaire was answered by the head of the household, who had sufficient knowledge about the income, expenditure etc of the household (often a man). Women in the household answered questionnaires on health and education. In 2011-12 there was a second wave, where these households were re-interviewed with an 83% re-contact rate and the sample was augmented to make up for the attrition in urban areas.

The IHDS survey is unique because it has better measures of women's workforce participation compared to other surveys. Unlike the NSS that asks about a woman's

principle status activity, the IHDS accounts for all types of work. In the present study anyone who works for a total of, greater than or equal to 240 hours/year is considered to be employed. Another advantage of the IHDS is that it has direct measures of other family income.

The present study uses standard decomposition analysis to decompose the change in women's labor force participation to: (a) changes due to rising income; (b) changes due to rising education; (c) changes attributable to the changing relationship (if any) between education and labor force participation.

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