# The Trend of Women's Participation in Labor Force in Iran and its Deviations from the World Trends 

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#### Abstract

This study investigates the trends of women's participation in labor force in Iran between 1956 and 2006. Data from six censuses has been analyzed using decomposition technique of mathematical demography. Results show that in spite of some changes in women's participation in labor force, the activity rate is still very low. Another feature of women's participation in labor force is transformations in age patterns of activity so that during five recent decades women's participation in labor force has had many fluctuations. Except 1966 and 1996, a great number of active women did not return to work after marriage and childbearing. Using decomposition method for crude activity rate of women, we conclude that most of changes in crude activity rate are due to changing in age specific activity rates and age composition has low effects. Along with macro level factors such as social and economic problems, other factors like fertility decline, rise of life expenditure and higher education had great impact on women's activity rates.


Keywords: Women, Decomposition, Crude activity rate, Age pattern.

[^0]Introduction. The distinction between roles of men and women was not so clear in premodern societies where the working life was not separated from home life. In feudal period the home and work spheres were generally the same where both women and men contributed to the family economy. The gradual shift from peasantry work to wage labor meant that women's tasks of child bearing could less easily be combined with the production work which was increasingly being performed in a setting away from the home(Watson, 2003). After the separation of work place from home life during $19^{\text {th }}$ century and early $20^{\text {th, }}$, women found a new role of marriedemployed woman(Ezazi, 1997).

As the process of development became the focus of attentions, women's employment was considered from two aspects. On the one hand increasing female participation implied the employment of more labor force. Development specialists believed that human capital is the most important elements of development and progress and those societies who are inefficient in employing human capabilities would not develop(Todaro, 1981). Where the women's employment rate is low, dependency rate increases and causes some pressure on active labor force (Mahmoodian, 2004). Since Iran population will be aged in the future -not so much late- it is necessary to provide women's participation conditions in labor force because aged population implies higher dependency rate. On the other hand women's participation leads to their empowerment as well as improvement of their status.

In recent decades Iranian women have increasingly occupied universities so that in 2006, 51.1 per cent of college students have been females. But respectively their share of employment has remained low. This problem has drawn many attentions however most of these studies view the case sociologically or economically. The present study applies mathematical demography technique to investigate this phenomenon. At the first step we take a look at the trend of women's participation in labor force during 1956- when the first census was done- 2006. In this part women's age pattern will be examined and then we investigate the effects of demographic phenomena on activity levels.

Method. This study applies census data from 1956 to 2006. We have used decomposition technique to analyze women's activity dynamics. This technique decomposes demographic measures into two elements which help us better understanding (Canudas Romo, 2003). Applying this technique helps us to control the effect of age structure on activity rate.

Terms and definitions used in this study are based on the definitions of Iran Statistics Center. According to the noted office, economic active population includes all the people aged 10 and older which in seven days before collecting data have been employed or unemployed. Students, households and other people who earn money without job are not included in the definition except those who are employed or unemployed. Also employed population include all people aged 10 or more who during the week leading to interview at least had worked one hour or for any reason had leaved the work temporarily.

Findings. As figure 1 illustrates the investigation of women's activity trend shows that within the population aged 15-64, the per cent of active females -the sum of employed and unemployed women- increased from 9.6 in 1956 to 14 in 1976 and then plummeted to $9.3 \%$ in 1986 and soared to $11.21 \%$ in 1996 and finally in 2006 it rose to $14.44 \%$. When the per cent of employed and unemployed women was studied separately we found out that the highest per cent of unemployed population belongs to year 2006 and only 11 percent of women have been employed during the last noted decade.

The activity rate of urban women has nearly remained stable during 1976 to 1996 but that rural women between 1976 and 1986 decreased intensively and from 1986 until 1996 increased considerably (Alaeddine and Razavi, 2004).

Figure 1- percent of active women. 1956-2006


Figure 2 shows the percentage of active women in each age group, from 1966 to 2006. The study of age pattern of active women indicates that this pattern does not follow M shape in all censuses except 1966 and 1996. In other word young women do not return to work after marriage and childbearing-which increases the probability of leaving economic activity. Age
pattern in 1966 and 1996 approaches the M shape. It seems that in these years, the impact of marriage and childbearing on women's employment decline has decreased. This trend has not continued since then and in 2006 we do not observe the rise of activity rate after its drop.

As figure 2 shows the age pattern of activity has shifted significantly. During 1966-1986 the activity rate of all age groups has slumped. The activity rate of all age groups except 15-19 has increased during 1986 until 1996. In the last decade (1996-2006) we observe an increase of activity rate in most of age groups especially two groups 25-29 and 30-34.

Figure 2- The percentage of women, activity in each age group.1966-2006


At the present Iran is passing the last stage of demographic transition. The first signs of demographic transition appeared with the decline of mortality rates during 1921-1941(Amani, 1996 and Mirzayi, 2005) and then fertility transition has occurred during 1991 until 2000(Abbasi-Shavazi and others, 2009). Throughout the transition the age structure of the population shifts from a young structure to an aged one. Between these two positions there is demographic window in which the potential active population ratio is higher than any other time and dependency ratio falls under 0.5 . This stage longs about four decades and occurs just one time for every population. From the near 1985 Iran has had a young population and it is predicted that after 2030 Iran will have an aged population(Mirzayi and Moshfegh, 2008).

To investigate the impact of demographic transition on activity levels, we studied the age pyramid of women in activity ages in 1966, 1986 and 2006. Comparing age pyramids showed that it has had some changes in 2006 so that the base length of pyramid has decreased and the
population of 15-19 age group is smaller than the rest. Since the decline of population in this age group is due to fertility decline between 1986 and 1996, and also the decline trend continues, we can conclude that during next decades, most of women at the age of activity-particularly three age group of $15-19,20-24$, and $25-29$ who have the highest active population- will be transformed to retirement age and thus young labor force will be under a great pressure. For more accurate investigation we used Kitagava decomposition technique. As we showed in figure1 the trend of women's activity, is descending during 1966-1986 and ascending during 1986-2006. Thus it is better to do the decomposition trend for these two periods separately.

Results - as it can be seen in table 1-indicated that age structure has an increasing role however totally it does not explain the variance of crude activity rate so much so that the age structure effect has changed from $3.5 \%$ in first twenty years to $5.1 \%$ in the second twenty years. Consequently the variations in crude economic activity rate of women are directly under the influence of the variations in the activity rates of different age groups.

Table 1- Decomposition of women's activity change over time from 1966 to 2006

|  | $\begin{aligned} & \hline 1966- \\ & 1986 \end{aligned}$ |  | $\begin{aligned} & 1986- \\ & 2006 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Value | Percent | Value | Percent |
| Crude activity rate at the beginning years of the period | 0.126 |  | 0.0931 |  |
| Crude activity rate at the final years of the period | 0.0931 |  | 0.144 |  |
| Changes in crude activity rate | -. 0329 |  | 0.0512 |  |
| Contribution of age structural differences | 0/0011 | \% 3.5 | 0.0026 | \% 5.1 |
| Contribution of activity rate differences | -0.0341 | \% 103.5 | 0.0485 | \% 94.9 |

Conclusion. The trend of women's activity in Iran has not been ascending during five decades. Except 1966 and 1996, a great number of active women did not return to work after marriage and childbearing. Prskawetz and others (2005) showed that the role of age structure element in France, West Germany and Spain between 1985 and 2000 has been lower than 10\%
but in United States and England has been higher than 10\%. In Iran in spite of great changes in age structure of women, the role of social and economic factors is so much that does not allow age structure to influence women's activity considerably. It is necessary for further studies to analyze the impact of two influential macro events -Islamic revolution and imposed war- on women's activity.

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