Investigation the Effect of Gender, Experience and Education on the Earning of Urban and Rural Employees

Masoumeh moshtaghi, Hamidreza Alipour, Shahryar Zaroki, Seyedali Mirebrahimi and Sanaz Ghavidel

Abstract: due to the necessity for determining effective factors on peoples income and the rate of effectiveness, In this article, the effect of main variables in human capital, such as, official education and work experience years along with gender variable on employees' income in urban and rural areas in Mazandaran have been examined during 1989 to 2008. The results which have been gained by the Mincer's earning function for every year show that, in urban and rural areas, education had positive and significant effect on employees' income in urban and rural areas and this effect increases by increasing the educational category. The years of work experiences, has significant and positive effect and the urban and rural employees reach the highest income at age of 47 and 51. Also, due to significant coefficient of gender variable, men have more income than women on average and this discrimination is more obvious in rural areas.

Key words: Education, Experience, Mincer's Earning Function, Iran.

INTRODUCTION

The economic development Structure of developed countries is based on human force investment. These countries due to emphasize on capital and human wealth have gained a lot of benefits, so, for saving the developing countries from poverty, we should pay attention to human capital. The researches show that one of the determining factor's in confirming human welfare, is the investment in people and education, education is a powerful engine in increasing sufficiency, and we should consider education as an investment that leads to economy growth.

In the modern world, the country in which people do not move with modern explanation can not have modern economy. By this explanation, we can understand that not only there is a direct relation between education and level of income but also, this complicated relation of education economy is a new scientific branch that has been started for 2 decades. This branch which is a sub branch of economy science, especially for developing countries like Iran in which education is one of the development factors, has important advices.

The human capital which includes constituting the knowledge in human and different aspects such as, sanitation, experience and … etc which is examined from two aspects: the role of human capital in economy growth which is the big aspect and the small aspect is the private education output, in which the income aspect is studied.

The education request which was studied shows that, apparently the motivation for education request is economy especially in developing countries. The individual expects that along with increasing the level of education, his income also increases. Most of the people in developing Countries and undeveloped ones usually do not request education without economical request or benefits, but education is a means for providing employment in economy sections especially new sections.

Nowadays, for society or people especially the youth in their working age, who are looking for job, the main issue is that whether they follow more education or try more to work in job market or try to be employed in private section or governmental section. In reality, they are looking for earning more during their working course or working period and for this reason we should examine which factors are effective on incomes or how is the structure of working income.

Producing effective human capital and more powerful human capital in solving growth problems and development, and also having big extension of population in this space of scientific production, are the main issues in development.
Of course, higher development needs more developed human, and the more we have high level of knowledge and more number of developed persons, we can make it possible to constitute and internalize the growth and development.

Economically knowledge needs higher level of skills in the work force blend. In OECD economies, the rate of employees with higher education is on the increase, and it has been double more in 2000 in regards to 1975 and it reached to 41 percent from 22 percent of all employees (World Bank 2002).

Studies in job market of countries such as Canada, England and America show an increasing rate for young's with higher university education. The recent studies on higher education output rate in many countries of Latin America show that, the trend of human capital development is in direction with their success in economy development.

For instance, in Argentina and Brazil, Mexico. The higher education output rate, show a significant growth in 1990s and 1980s in comparison with 1970s and 1980s.

The increase for requesting labor force with higher skill not only has effect on wage but also, has effect on employment opportunities. The Russian experiences emphasize on this matter. At the time of previous U.S.S.R collapse, the unemployed people in Russia were a blend of educated and uneducated persons, whereas this ratio decreased very much for persons that have higher education in 1996 (Foley 1997).

Research Background:
- Stephanite kent and tony chan estimate the Mincer's earning function for Hong Kong in 1981, 1986, 1991 and 1996. Their study shows the increase for output rate and decreasing the job experience output for studying years, which is compatible with human capital theory. He claims that, with attention to structural changes and economical reforms in recent decades in Hong Kong, people understood that, just having experience is not enough for their confidence for having job, and the role of higher education for people is more obvious in their level of income. The results of their study show that, the Hong Kong market pay less to those who have low education during the time. Also the education output and education; the education during job, both have increasing and decreasing trend.

- Moock and Venkataraman, estimated the earning function of mincer for Vietnam and show that, the higher education output for men is more than 10 percent and for women 12 percent and the output for employees of private section on average is more than governamental section. One surprising result in this research is that, the output of younger workers in Vietnam is incredibly higher than old workers (14 percent to 4 percent) and the output rate in every year of extra education is 5% and this amount for women is 3% and 7%.

- Pscharopoulos and Layard gain a powerful connection between education and the education after graduation with people's earning, by using earning function of Mincer and the budget information of England family in 1979.

- Perston's study in 1997 for Australia shows that, the education outcome rate for different jobs, industries and other sections is different. Also, he found out that, the earning among the public and private sections are different. In addition, the men employees in public or governamental section have 6% percent earning more than private section.

- Z. M. Nasir and Nazli (2000) by using the Mincer's extended earning function, they have estimated this dependent for Pakistan and they found out that, in Pakistan every year of extra education have 7% percent extra earning and the effect of reading and writing skills, have been big and significant.

- The Stefan.C. Wolter and Bernhard A. Weber’s study for Sweden in 2000 shows that, the educational output for women is a little more that men. But the output in job experience years is lower for them. In addition the cure of (age- earning) women is more flatter than men. They used expanded form of earning function by Mincer.

3- Methodology and materials:

The income dependents are used for explaining the difference in income. Based on the human capital theory, the incomes are gained directly from personal properties. The most important properties are as follow; The education years, education quality, the work experience rate, intrinsic abilities, family support or economy social situation of the parents and … which can be showed be a dependent connection as follow:

\[ Y_t = f(S, S_q, T, A, F, ..., \varepsilon) \]  

\( Y_t \) is income, \( S \) is education years, \( S_q \) education quality, \( T \) is the education during work time, \( F \) economic – social situation, \( \varepsilon \) other variables.
Other people like Mincer (1974), Ghosh (2001), Chisvik (2002) explain or show the connection between education years and experience with incomes by using math prove as a stoical math dependent like the follow:

\[ Y = Q(s, x) + u \]  

(2-3)

It is considered that \( u \) is independent of \( X \) and \( S \). Form their point of view, the most important factors on incomes are, the education years, education quality, education during working, people’s abilities and the parent’s social- economical stability. Form which the official education years and the educations during work are the most effective factors. The earning function are based on some assumptions as follow,

1. The increase in earning in respect to every education year during different levels is the same.
2. The crossing effect during education years and work experience years.
3. There is not continual effects and it is considered that the real world categorizing, has similar and the same effect on people’s earning.
4. The variance for deranging sentence is similar in all observations.
5. Persons can immediately enter job market after graduation from university in any education level; it means that we can write the work experience of people as follow:

\[ x = t-s-6 \]

It has to be mentioned that, Mincer introduce his earning primary dependent as follow:

\[ \ln y_i = \beta_0 + \beta_1 s_i + \beta_2 x_i + \beta_3 x_i^2 + e_i \]  

(3-3)

In which \( e, x, s, y \) are the logarithm for people's earning, education years, the experience years and deranging sentence.

As the recent estimation in earning function show, the effective factors on people's earning, are the amount of official education and education during work in which the number of education years and also people's work experience years are used as substitution for them.

The present study, pay attention to the human capital effect or official education and people's work experience on employee's income by using Mincer's earning function and the budget information of urban and rural areas in Mazandaran province during 2008 to 2008, also to examine the difference between the women employee's earning and men's earning, the gender variable also is considered in Mincer's earning function. The final pattern for estimating and examining the hypothesis are as follow:

\[ \ln Y = \alpha_0 + \alpha_1 \text{gender}_i + \alpha_2 \text{Experience}_i + \alpha_3 \text{Experience}_i^2 + \alpha_4 \text{Education}_i \]  

(3)

In which:

\( \ln Y \) is the annual earning logarithm of urban and rural employees in Mazandaran province form Jobs that have salary based on rail.

\( \text{Jens} \) is gender variable for employees person that us entered the model as virtual variable (number 1 for one man and 2 for woman).

\( \text{Experience} \) is the employee's working experience years. \( \text{Experience}^2 \), the square of employee's working experience years, is control variable in the model and show the non linear relation between income and people's working experience years- \( U \) from relation.

\( \text{Education} \) is show the employee's education level that are divided in to 6 guidance school and lower, Diploma and Lower, Diploma, undergraduate, B.A , MA and higher.

It has to be mentioned that, this variable enter the pattern as virtual variable, in such a way that, the numbers 0, 1, 2, 3, 4 and 5 are considered for education levels.

After estimating the pattern (for every year and every one of the two urban and rural areas), we can measure the average years of maximizing working experience of employee's in come by deriving from \( \ln Y \) in regard to \( \text{Experience} \) variable. As follow;

\[ \frac{\partial \ln y}{\partial \text{Experience}} = 0 \Rightarrow \text{Experience}_{\text{max}} = -\frac{\alpha_2}{2\alpha_3} \]
4- Explaining the Data and Information:

In this section before analyzing the results caused by estimating the pattern, we take a look at the persons in the sample in the from of tables Like the following.

Table 1: Number, average age and the average education years of persons in sample

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>The average age</th>
<th>The average years of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>1989</td>
<td>76</td>
<td>33</td>
<td>36.5</td>
</tr>
<tr>
<td>1990</td>
<td>355</td>
<td>369</td>
<td>33.7</td>
</tr>
<tr>
<td>1991</td>
<td>383</td>
<td>349</td>
<td>34.8</td>
</tr>
<tr>
<td>1992</td>
<td>359</td>
<td>303</td>
<td>33.7</td>
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</tr>
<tr>
<td>1994</td>
<td>372</td>
<td>339</td>
<td>34.1</td>
</tr>
<tr>
<td>1995</td>
<td>544</td>
<td>339</td>
<td>35.2</td>
</tr>
<tr>
<td>1996</td>
<td>369</td>
<td>652</td>
<td>33.7</td>
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<td>671</td>
<td>33.8</td>
</tr>
<tr>
<td>1998</td>
<td>400</td>
<td>695</td>
<td>34.9</td>
</tr>
<tr>
<td>1999</td>
<td>305</td>
<td>667</td>
<td>36.5</td>
</tr>
<tr>
<td>2000</td>
<td>272</td>
<td>608</td>
<td>35.1</td>
</tr>
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<td>2001</td>
<td>328</td>
<td>564</td>
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<td>2002</td>
<td>223</td>
<td>315</td>
<td>34.7</td>
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<td>2003</td>
<td>243</td>
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<td>331</td>
<td>387</td>
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<td>35.1</td>
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<tr>
<td>2006</td>
<td>316</td>
<td>327</td>
<td>36.5</td>
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<td>2007</td>
<td>413</td>
<td>426</td>
<td>36.1</td>
</tr>
<tr>
<td>Source: Author's measurements</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

From table (1) it is obvious that, in all years from 1989 to 2008 the average employee's education years, in urban areas are bigger than rural areas.

Table 2: The average urban employee's income in different levels of education

<table>
<thead>
<tr>
<th>Year</th>
<th>Guidance and lower</th>
<th>Under diploma</th>
<th>Diploma</th>
<th>Undergraduate</th>
<th>BA</th>
<th>MA and higher</th>
</tr>
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<tbody>
<tr>
<td>1989</td>
<td>850879</td>
<td>726254</td>
<td>787927</td>
<td>852175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>696004</td>
<td>601678</td>
<td>701658</td>
<td>1063797</td>
<td>1342727</td>
<td>1547388</td>
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<tr>
<td>1991</td>
<td>879863</td>
<td>1177212</td>
<td>1096210</td>
<td>1072889</td>
<td>1489671</td>
<td>2316200</td>
</tr>
<tr>
<td>1992</td>
<td>1082676</td>
<td>1320404</td>
<td>1539397</td>
<td>1773114</td>
<td>2190785</td>
<td>2316000</td>
</tr>
<tr>
<td>1993</td>
<td>1236594</td>
<td>1631251</td>
<td>2038151</td>
<td>1994393</td>
<td>3035341</td>
<td>3150023</td>
</tr>
<tr>
<td>1994</td>
<td>1588036</td>
<td>1797611</td>
<td>2011102</td>
<td>1954751</td>
<td>2869812</td>
<td>4469081</td>
</tr>
<tr>
<td>1995</td>
<td>1979220</td>
<td>2705406</td>
<td>2388741</td>
<td>2437313</td>
<td>2816714</td>
<td>2847869</td>
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<td>1996</td>
<td>2136999</td>
<td>2395360</td>
<td>3323831</td>
<td>3518500</td>
<td>3824537</td>
<td>6993478</td>
</tr>
<tr>
<td>1997</td>
<td>312268</td>
<td>3657654</td>
<td>5023500</td>
<td>5352020</td>
<td>6228636</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>4046633</td>
<td>3669039</td>
<td>6052316</td>
<td>6790174</td>
<td>8705708</td>
<td>1021950</td>
</tr>
<tr>
<td>1999</td>
<td>4283682</td>
<td>3787699</td>
<td>59525267</td>
<td>7599318</td>
<td>8258939</td>
<td>1113219</td>
</tr>
<tr>
<td>Source: Author's measurements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 3: The average rural employee's income in different levels of education

<table>
<thead>
<tr>
<th>Year</th>
<th>Guidance and lower</th>
<th>Under diploma</th>
<th>Diploma</th>
<th>Undergraduate</th>
<th>BA</th>
<th>MA and higher</th>
</tr>
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<tbody>
<tr>
<td>1989</td>
<td>5091740</td>
<td>7074179</td>
<td>8138322</td>
<td>1079490</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>6143844</td>
<td>4800395</td>
<td>7985091</td>
<td>8134709</td>
<td>1256238</td>
<td>21402240</td>
</tr>
<tr>
<td>1991</td>
<td>8045392</td>
<td>11027955</td>
<td>11661943</td>
<td>15617035</td>
<td>1819957</td>
<td>26808859</td>
</tr>
<tr>
<td>1992</td>
<td>8546794</td>
<td>12651092</td>
<td>14455129</td>
<td>16666904</td>
<td>22025155</td>
<td>27203088</td>
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<tr>
<td>1993</td>
<td>1251586</td>
<td>8459982</td>
<td>17184624</td>
<td>22413456</td>
<td>22205311</td>
<td>32328686</td>
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<tr>
<td>1994</td>
<td>15021089</td>
<td>10127955</td>
<td>20742162</td>
<td>28405842</td>
<td>31262410</td>
<td>34810449</td>
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<td>1995</td>
<td>16145371</td>
<td>15552954</td>
<td>23424713</td>
<td>3385645</td>
<td>49274970</td>
<td>73588417</td>
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<td>1996</td>
<td>24258560</td>
<td>23805824</td>
<td>28760634</td>
<td>42866928</td>
<td>42331055</td>
<td>61470596</td>
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<td>1997</td>
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<td>43464025</td>
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<tr>
<td>Source: Author's measurements</td>
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Table 3: Continue

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<th>Value3</th>
<th>Value4</th>
<th>Value5</th>
<th>Value6</th>
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<td>211793</td>
<td>428549</td>
<td>501779</td>
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<td></td>
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<td>317160</td>
<td>693988</td>
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<td>775896</td>
<td></td>
</tr>
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<td>1999</td>
<td>286715</td>
<td>342473</td>
<td>846639</td>
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<td>806965</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>391575</td>
<td>431199</td>
<td>806965</td>
<td>593678</td>
<td>806965</td>
<td></td>
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<td>2001</td>
<td>434915</td>
<td>552215</td>
<td>742987</td>
<td>546023</td>
<td>103061</td>
<td></td>
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<tr>
<td>2002</td>
<td>518047</td>
<td>656146</td>
<td>101034</td>
<td>892962</td>
<td>113220</td>
<td></td>
</tr>
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<td>2003</td>
<td>664840</td>
<td>782321</td>
<td>167123</td>
<td>202254</td>
<td>212464</td>
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<td>2004</td>
<td>761461</td>
<td>853034</td>
<td>177567</td>
<td>205433</td>
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<td>981567</td>
<td>380854</td>
<td>419259</td>
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<td>2006</td>
<td>180962</td>
<td>214003</td>
<td>326019</td>
<td>415536</td>
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</tr>
<tr>
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<td>256254</td>
<td>339615</td>
<td>408974</td>
<td>583474</td>
<td></td>
</tr>
</tbody>
</table>

Source: measurements of Authors

Table 2 and (3) shows the average employee's income in urban and rural areas based on education levels. As the numbers in table show, the average employee's income not only increased in equal education levels during 2008 to 1989 but also it has increased in a specified year for different education levels and this increase show bigger gap in average income in education level of MA and higher in regard. To other education categories. Another point is that, in all years, the average income of urban employees has been more than rural employees in educational Levels of guidance and lower, undergraduate, BA, MA and higher, and in other levels also this has been similar or the same.

5- Discussion and results:
In this section, the Mincer's earning function are presented and estimated for urban and rural areas separately during 1989 to 2008.

5-1- Estimation the Mincer's earning function for urban areas and presenting the results
In this part the equation or relation (1) has estimated and the results have been presented in tables (4), (5), (9) and (10) for urban areas in Mazandaran.

Table 4: The estimating results of pattern for urban employees in 1989 and the first program

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.13*</td>
<td>11.7*</td>
<td>11.8*</td>
<td>12.6*</td>
<td>12.4*</td>
<td>12.8*</td>
</tr>
<tr>
<td>Jens</td>
<td>-0.33*</td>
<td>-0.25**</td>
<td>-0.04</td>
<td>-0.15***</td>
<td>-0.03</td>
<td>-0.19***</td>
</tr>
<tr>
<td>Experience</td>
<td>0.052*</td>
<td>0.14*</td>
<td>0.131*</td>
<td>0.092*</td>
<td>0.118*</td>
<td>0.123*</td>
</tr>
<tr>
<td>Sq. Experience</td>
<td>-0.0006**</td>
<td>-0.0019*</td>
<td>-0.002*</td>
<td>-0.0012*</td>
<td>-0.0019*</td>
<td>-0.002*</td>
</tr>
<tr>
<td>Education</td>
<td>0.26*</td>
<td>0.25*</td>
<td>0.21*</td>
<td>0.29*</td>
<td>0.32*</td>
<td>0.26*</td>
</tr>
<tr>
<td>R²</td>
<td>0.41</td>
<td>0.49</td>
<td>0.32</td>
<td>0.40</td>
<td>0.34</td>
<td>0.36</td>
</tr>
<tr>
<td>F</td>
<td>12.1</td>
<td>80.2</td>
<td>44.4</td>
<td>58.03</td>
<td>48.8</td>
<td>52.5</td>
</tr>
</tbody>
</table>

Source: Author's measurement

Note: The symbols *, ** and *** show the significant estimated parameter in level of 1, 5 and 10 percent.

Table 5: The estimating results of pattern for urban employees in the years of second program

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>13.7*</td>
<td>13.5*</td>
<td>13.8</td>
</tr>
<tr>
<td>Jens</td>
<td>-0.29*</td>
<td>-0.25***</td>
<td>-0.48*</td>
<td>-0.24</td>
<td>-0.61*</td>
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<tr>
<td>Experience</td>
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<td>0.129*</td>
<td>0.102*</td>
<td>0.10*</td>
<td>0.13*</td>
</tr>
<tr>
<td>Sq. Experience</td>
<td>-0.0017*</td>
<td>-0.002*</td>
<td>-0.0014*</td>
<td>-0.0012*</td>
<td>0.0019*</td>
</tr>
<tr>
<td>Education</td>
<td>0.26*</td>
<td>0.27*</td>
<td>0.34*</td>
<td>0.41*</td>
<td>0.35*</td>
</tr>
<tr>
<td>R²</td>
<td>0.33</td>
<td>0.33</td>
<td>0.34</td>
<td>0.38</td>
<td>0.37</td>
</tr>
<tr>
<td>F</td>
<td>66.5</td>
<td>44.8</td>
<td>53.9</td>
<td>32</td>
<td>42.6</td>
</tr>
</tbody>
</table>

Source: Author's measurement

Note: The symbols *, ** and *** show the significant estimated parameter in level of 1, 5 and 10 percent.

Table 6: The estimating results of pattern for urban employees in the years of the third program

<table>
<thead>
<tr>
<th>Variables</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>13.5*</td>
<td>14.5*</td>
<td>14.9*</td>
<td>14.5*</td>
<td>15.1*</td>
</tr>
<tr>
<td>gender</td>
<td>-0.32**</td>
<td>-0.33**</td>
<td>-0.45*</td>
<td>-0.29**</td>
<td>-0.66*</td>
</tr>
<tr>
<td>Experience</td>
<td>0.158*</td>
<td>0.09*</td>
<td>0.0857*</td>
<td>0.108*</td>
<td>0.0927*</td>
</tr>
<tr>
<td>Sq. Experience</td>
<td>-0.0026*</td>
<td>-0.0014*</td>
<td>-0.0013*</td>
<td>-0.0015*</td>
<td>-0.0012*</td>
</tr>
<tr>
<td>Education</td>
<td>0.32*</td>
<td>0.25*</td>
<td>0.32*</td>
<td>0.38*</td>
<td>0.32*</td>
</tr>
<tr>
<td>R²</td>
<td>0.48</td>
<td>0.28</td>
<td>0.38</td>
<td>0.46</td>
<td>0.27</td>
</tr>
<tr>
<td>F</td>
<td>68</td>
<td>26.2</td>
<td>48.6</td>
<td>45.9</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Author's measurement

Note: The symbols * and ** show the significant estimated parameter in level of 1 and 5 percent.
Table 7: The estimating results of pattern for urban employees in the first 4 years of the fourth program

<table>
<thead>
<tr>
<th>Variables</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>14.8*</td>
<td>15.7*</td>
<td>15.9*</td>
<td>16.1*</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.41*</td>
<td>-0.58*</td>
<td>-0.12*</td>
<td>-0.3*</td>
</tr>
<tr>
<td>Experience</td>
<td>0.1444*</td>
<td>0.1028*</td>
<td>0.1179*</td>
<td>0.0945*</td>
</tr>
<tr>
<td>Sq. Experience</td>
<td>-0.00023*</td>
<td>-0.00014*</td>
<td>-0.0018*</td>
<td>-0.0016*</td>
</tr>
<tr>
<td>Education</td>
<td>0.29*</td>
<td>0.3*</td>
<td>0.29*</td>
<td>0.22*</td>
</tr>
<tr>
<td>R²</td>
<td>0.39</td>
<td>0.41</td>
<td>0.39</td>
<td>0.27</td>
</tr>
<tr>
<td>F</td>
<td>51</td>
<td>45.3</td>
<td>49.6</td>
<td>38.6</td>
</tr>
</tbody>
</table>

Source: Author's measurement

Note: The symbols * shows the significant estimated parameter in level of 1 percent.

The results gained by estimating the pattern for urban areas of mazandaran province during 1989 to 2008 show that:

The first result: Due to significant of gender variable in most of the years (except 1991, 1993, 1998) there is a meaningful difference between woman employees and men employees, and the man employees on average have higher earning than woman employees.

The second result: the education variable also has been positive in all the years which show positive effect of this factor on employee's earning. And since the education has entered the pattern as virtual variable, it show that there is meaningful difference in employee's earning at different education rows. In other words, by promoting the person's education category, his income will also increase meaningfully.

The third result: The estimated index of experience variable is positive and significant in all years. It shows that, by increasing the work experience years, the urban employee's earning of mazandaran province has increased, which is the same as theoretical expectation. Analyzing the estimating numbers for index of this variable is in such a way that, for example, for 1989, by increasing every year of employee's work experience, their earning increases in logarithm rate about 0.052.

The fourth result: The estimated square of experience variable is negative and significant in all years. The negative sign of this index is based on theoretical basis and shows that, there is a second rate relation between working experience years and employee's earning, in such a way that, in beginning of work time by increasing experience the persons earning also increase and then reach it's maximum amount and start a descending trend. In other words, there is reversed U relation between work experience years and urban employee's earning. Based on this reality, we can measure the working experience year of income maximizing for urban employees with attention to (2) relation and we can gain the age in which persons on average reach to maximum income by adding number six and average education year.

The measurements show that, from the first program to the third year of fourth program, the urban employee's on average reach their maximum income earned by jobs and their income in 50, 52, 51 and 50 and during the study years (1989 to 2008) almost in 52 years old.

5-2- The estimation of Mincer's earning function for rural areas and presenting results

In this section also, the same as previous section, the (1) relation for rural areas of mazandaran province has estimated and its results have been mentioned in table (8), (9), (10) and (11).

Table 8: The results of pattern estimating for rural areas in 1989 and the first program

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>12.4*</td>
<td>11.8*</td>
<td>11.9*</td>
<td>12.4*</td>
<td>12.9*</td>
<td>12.9*</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.80**</td>
<td>-0.59*</td>
<td>-0.48*</td>
<td>-0.53*</td>
<td>-0.74*</td>
<td>-0.6*</td>
</tr>
<tr>
<td>Experience</td>
<td>0.146*</td>
<td>0.1164*</td>
<td>0.1137*</td>
<td>0.1002*</td>
<td>0.0968*</td>
<td>0.0908*</td>
</tr>
<tr>
<td>Sq. Experience</td>
<td>-0.0026**</td>
<td>-0.0018*</td>
<td>-0.0015*</td>
<td>-0.0014*</td>
<td>-0.0013*</td>
<td>-0.0012*</td>
</tr>
<tr>
<td>Education</td>
<td>0.2*</td>
<td>0.16*</td>
<td>0.49*</td>
<td>0.49*</td>
<td>0.42*</td>
<td>0.43*</td>
</tr>
<tr>
<td>R²</td>
<td>0.44</td>
<td>0.28</td>
<td>0.29</td>
<td>0.29</td>
<td>0.32</td>
<td>0.32</td>
</tr>
<tr>
<td>F</td>
<td>5.4</td>
<td>34.7</td>
<td>35.9</td>
<td>31.1</td>
<td>34.2</td>
<td>39.8</td>
</tr>
</tbody>
</table>

Source: Author's measurement

Note: The symbols * and ** show the significant estimated parameter in level of 1 and 5 percent.

Table 9: The results estimated pattern for rural employees in the years of second program

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>13.3*</td>
<td>12.9*</td>
<td>13.1*</td>
<td>13.9*</td>
<td>13.3*</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.71*</td>
<td>-0.68*</td>
<td>-0.68*</td>
<td>-0.93*</td>
<td>-0.39*</td>
</tr>
<tr>
<td>Experience</td>
<td>0.0861*</td>
<td>0.1175*</td>
<td>0.1213*</td>
<td>0.0952*</td>
<td>0.1085*</td>
</tr>
<tr>
<td>Sq. Experience</td>
<td>-0.0013*</td>
<td>-0.0018*</td>
<td>-0.0016*</td>
<td>-0.0013*</td>
<td>-0.0013*</td>
</tr>
<tr>
<td>Education</td>
<td>0.34*</td>
<td>0.47*</td>
<td>0.45*</td>
<td>0.46*</td>
<td>0.39*</td>
</tr>
<tr>
<td>R²</td>
<td>0.23</td>
<td>0.32</td>
<td>0.33</td>
<td>0.31</td>
<td>0.25</td>
</tr>
<tr>
<td>F</td>
<td>24.4</td>
<td>76</td>
<td>83.4</td>
<td>44.7</td>
<td>58.3</td>
</tr>
</tbody>
</table>

Source: Author's measurement

Note: The symbols * shows the significant estimated parameter in level of 1 percent.
As the tables above show, we can have the following result by estimating pattern for rural areas of Mazandaran province during 1989 to 2008:

First: due to significant of gender variable in all years has meaningful difference between woman employees and man employees.

And in rural areas the same as urban areas, the man employees have higher earning in regard to woman employees.

Second: the education variable in rural areas has been positive and significant during all years that show positive effect of this factor on employees earning.

Also, since the education is entered pattern as Virtual variable, it shows that there is meaningful difference in employee’s earning of different education Categories. In other words, by promoting person’s education row, his income is increased meaningfully.

Third: The estimated index of experience variable is positive and significant for rural employees in all years. It shows that, by increasing the work experience years, the urban employees earning in province also has increased, which are the same as theoretical expectation.

The analyzing of this variable is, for example in 2000, by increasing every years of employees work experience, their earning is increased about 0.12 in logarithm rate.

Fourth: for rural areas also the same as urban areas the estimated square of experience variable is negative and significant in all years. The negative sign of this index is the same as theoretical basis and shows that, there is a second rate relation between working experience years and employee's earning, and in the beginning of working time, by increasing the experience, person's earning will increase and then reach its maximum amount and start descending trend. In other words, there is a diverse U relation between working experience years and urban employee's earning. Based on this case, we can measure the maximizing working experience years of urban employee's income, by (2) relation and by adding number six (the years entering school) and the average years of education in every years, the age in which people reach their maximum in come is achieved.

By comparing estimating pattern in urban and rural areas, we can have the following result:

First, the comparison of estimated parameters show that, in all years (except 2004 and 1999), the in come gap of man urban employee's is far lower than woman urban employee's in urban areas in respect to rural areas.

It means that, the gender discrimination effect in jobs that receive salary is more in rural areas.


Third, comparing the estimated index of working experience show that, during 1989, 1992, 1997, 2002, 2003, 2004, 2006, 2008 the experience gained by working in rural areas has more effect on urban employee's earning, in regard to urban areas and in other years, this effect is bigger in urban areas.
Fourth, the measurements in regard to average education year, the age of entering school and estimated indexes of experience and square experience:
Show that, the urban employee's in rural areas, on average reach to their maximum income in work in Lower age in regard to urban employee's (47 against 52).

Recommendations:
Since, the urban and rural urban employee's reach their maximum income in job at 51 and 47 years of age and after this age it is expected to have decrease in income. If the government want to prepare a social insurance coverage for people, it is better that the persons higher than 47 and 51 in urban and rural areas be in priority.

In the present research the micro data of mazandaran province have been used. It is recommended that, in later works, the statistic data of other province should be used and a comparison should be made among provinces. It is also recommended; that the effect of education on income distribution should also be studied by using inter province data.
Due to gender discrimination in gaining employee's income in Mazandaran province and the increasing rate of entering girls student to high educational centers, it is recommended that, more job opportunities should be created this groups.

REFERENCES