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THE MOST IMPORTANT COMPONENT OF THE STANDARD OF LIVING ARE THE INCOMES OF THE POPULATION

Abstract. The wage payment is an important factor affecting the wealthier of nations. This article presents various factors that, in the opinion of the author, affect the level of wages. In this work, a survey was conducted and conclusions were drawn that confirmed or disproved the hypotheses about the influence of various factors on wages. During this work was made a survey to collect data. Also this work could be useful to understand the basic principles of how to make economical researches. This work will analyze the indicators that can affect the level of income of the population.

Key words: econometrics, economics, salary, Lithuania, social survey, factors, analysis.

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Аннотация. В данной статье представлены различные факторы, которые, по мнению автора, влияют на уровень заработной платы. Размер заработной платы является важным фактором, от которого зависит благосостояние народа. В статье представлены различные факторы, которые влияют на уровень заработной платы. В ходе исследования был проведен опрос и сделаны выводы, которые подтвердили или опровергли гипотезы о влиянии различных факторов на размер заработной платы. Предложенные алгоритм и результаты исследования могут быть полезны для понимания основных принципов организации и проведения экономических исследований. В дальнейшей работе автор планирует проанализировать показатели, которые могут повлиять на уровень доходов населения.

Ключевые слова: эконометрика, экономика, зарплата, Литва, соцопрос, факторы, анализ.

The linear regression equations it is the main method which used in this researches. I will include 7factors which can effect on income:

- Gender
- Years of schooling
- Years of experience
- Number of children
- Hair color

- City size
- Position

Education is a long-term investment project that takes time and money to generate income in the future, higher than people who do not invest in training. Experience is also an investment that requires time which influence on future income.

The appearance plays an important role. Further aspect of the physical appearance. Research "Fund-raising success and a solicitor's beauty capital: do blondes raise more funds?" found that workers' hair color was related with their earnings.

All calculations will be made with GRETL

Example of table

Wage	Male (1 if male, 0 if female)	Female	Years of schooling	Years of experience	Number of children	Hair Color	City size	Position
1	1	0	16	4	2	2	1	Doctor
0	0	1	17	7	1	1	1	Specialist
1	0	1	16	21	2	1	1	Specialist
1	0	1	12	1	0	2	0	Programmer
0	1	0	15	1	0	3	0	Clerk

*Hair color
1=Dark
2=Blond
3=Red

I will use linear regression equation to calculations

$wage=b_1+b_2educ+b_3exp+b_4exp^2+b_5child+b_6hcol+u$

Data will be collected through a survey

Example of questionnaire

1.Gender
- Male
- Female

2.How many years did you spend on education?

3.How much experience do you have?(please write the number of years)

4.How many children do you have?

5.Position

6.City size

- Big city
- Small city

7.What is your hair color?

- Dark
- Blond
- Red
- Grey

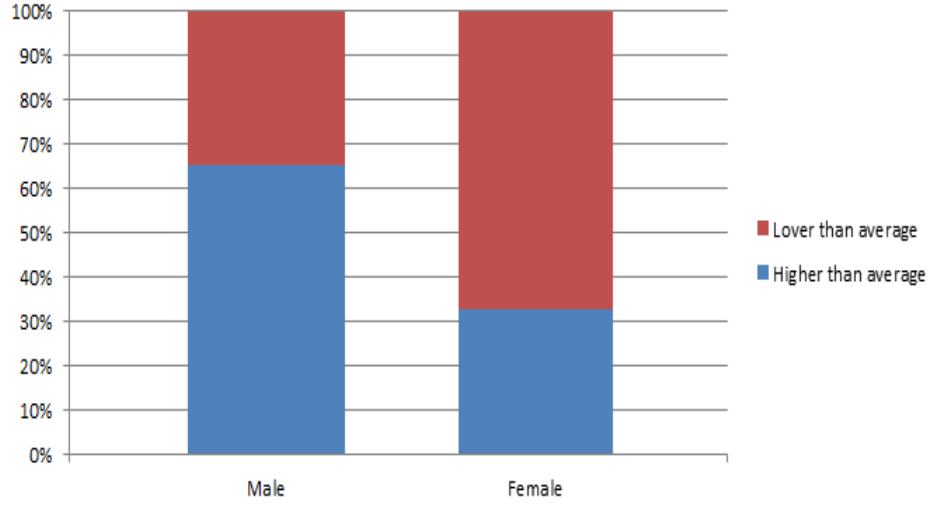
8.Wage(lower than average, higher than average)

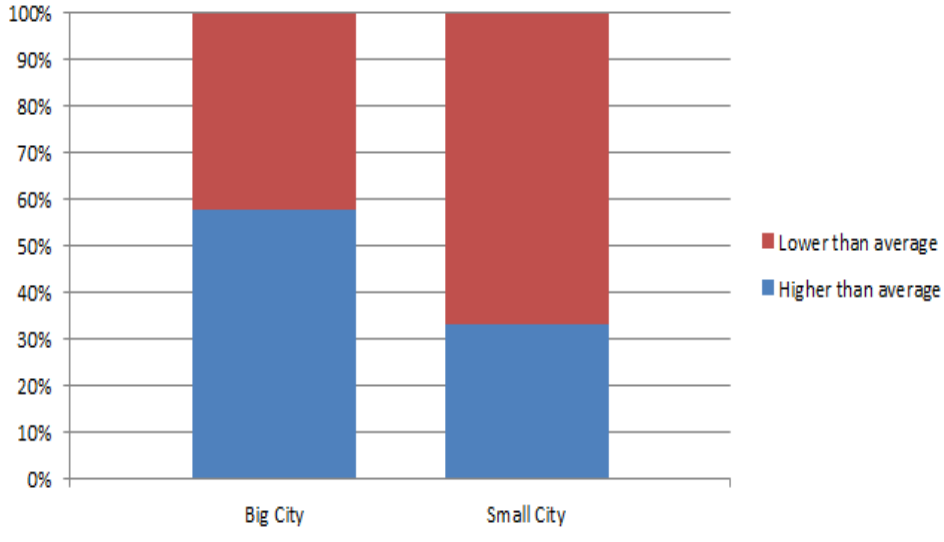
Hypotheses

There will be no correlation between wage and hair

It will be strong correlation between wage and gender, wage and education and wage and experience

Negative sign of exp^2





Wage	Experience
Higher than average	23,48881
Lower than average	16,5723

Wage	Education
Higher than average	17,35075
Lower than average	15,5361

	coefficient	std. error	z	p-value	
const	−6.56607	2.13690	−3.073	0.0021	***
Male	1.51232	0.360150	4.199	2.68e−05	***
Educ	0.332051	0.0876045	3.790	0.0002	***
Exp	0.244181	0.0654324	3.732	0.0002	***
sq_Exp	−0.00370994	0.00138374	−2.681	0.0073	***
Smallcity	−0.980699	0.354204	−2.769	0.0056	***
Children	0.00139266	0.198025	0.007033	0.9944	
Doctor	−0.732950	1.31987	−0.5553	0.5787	
Teacher	−2.80356	1.37117	−2.045	0.0409	**
Programmer	0.650401	1.53893	0.4226	0.6726	
Clerk	−1.89721	1.21279	−1.564	0.1177	
Director	−0.238241	1.26522	−0.1883	0.8506	
Public_servant	−1.84281	1.37758	−1.338	0.1810	
Service_worker	−1.35377	1.26529	−1.070	0.2847	
Specialist	−2.47979	1.26378	−1.962	0.0497	**
Black	−0.861240	0.756088	−1.139	0.2547	
Blond	−0.562406	0.778546	−0.7224	0.4701	
Red	−0.180807	0.941787	−0.1920	0.8478	

Mean dependent var	0.446667	S.D. dependent var	0.497978
McFadden R-squared	0.384883	Adjusted R-squared	0.297604
Log-likelihood	−126.8582	Akaike criterion	289.7163
Schwarz criterion	356.3844	Hannan-Quinn	316.3970

Number of cases 'correctly predicted' = 237 (79.0%)
f(beta'x) at mean of independent vars = 0.242
Likelihood ratio test: Chi-square(17) = 158.752 [0.0000]

		Predicted	
		0	1
Actual	0	140	26
	1	37	97

The table shows that only 8 variables have p value less than 0.1. That's mean that other variables are not significant and we can conclude H0 for: professions like doctor, programmer, director, public servant, service worker and for hair color.

Before I had the hypothesis that hair color wouldn't have influence on wage. Now we can confirm this hypothesis. The first reason why we can't see here any relationships between hair color and wage it is small number of observations. The second reason is that we don't have professions for which appearance is important.

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              coefficient   std. error      z       p-value
  ---------------------------------------------------------
  const        -8.94463      1.40372      -6.372   1.86e-010 ***
  Male          1.64633      0.338706      4.861   1.17e-06  ***
  Educ          0.407647     0.0800570     5.092   3.54e-07  ***
  Exp           0.207979     0.0564102     3.687   0.0002    ***
  sq_Exp       -0.00290237   0.00125545   -2.312   0.0208    **
  Smallcity    -1.03572      0.328060     -3.157   0.0016    ***
  Teacher      -1.96928      0.677380     -2.907   0.0036    ***
  Clerk        -1.13204      0.358898     -3.154   0.0016    ***
  Specialist   -1.83713      0.510759     -3.597   0.0003    ***

Mean dependent var   0.446667   S.D. dependent var   0.497978
McFadden R-squared   0.359078   Adjusted R-squared   0.315438
Log-likelihood      -132.1801   Akaike criterion     282.3602
Schwarz criterion    315.6942   Hannan-Quinn         295.7005

Number of cases 'correctly predicted' = 239 (79.7%)
f(beta'x) at mean of independent vars = 0.243
Likelihood ratio test: Chi-square(8) = 148.108 [0.0000]

           Predicted
              0     1
  Actual 0  137    29
         1   32   102
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		Exp(b)	1/exp(b)
Male	1,64633	5,187905	
Educ	0,407647	1,503276	
Exp	0,207979	1,231187	
sq_Exp	-0,00290237	0,997102	1,002907
Smallcity	-1,03572	0,354971	2,817134
Teacher	-1,96928	0,139557	7,165515
Clerk	-1,13204	0,322375	3,101978
Specialist	-1,83713	0,159274	6,278493

Analyzing results we can see that for man opportunity to achieve salary which is higher than average it is 5,19 times higher.

For people from small cities 2,81 times more likely to achieve salary which is lower than average

If we have two employees who has the same gender, work in the same field, has the same experience and work at their present employer for the same time, the one with one year more education will have 1,5 times opportunity to achieve higher salary.

There is reason to believe that experience has a large effect on wages initially, but at later phases this effect fades away. This is simply because the first few years are crucial to learn all those skills that are necessary for you to be an effective employee, but once you have acquired those skills, your efficiency will not improve much simply by doing the same thing for a longer time. This is what we find here as well. The positive coefficient of the experience suggests that at low levels of experience, any further years have a

positive impact on wages, but this diminishes as shown by the squared experience.

For teachers it is 7 times more likely to achieve salary which is lower than average.

For clerk 3 times more likely to achieve salary which is lower than average.

For specialist it is 6 times more likely to achieve salary which is lower than average.

Conclusion

The results shows us that the main factors which are influences on wage are gender, education, experience and city size.

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