A HUMAN CAPITAL APPROACH TO INCOME OF YOUNG LABORERS: VIETNAM'S CASE

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1. Introduction

Statistical data gathered in 2008 show that Vietnamese population of 86.5 million people ranked 13th in the world and third in Southeast Asia. The working population comprises 44 million laborers representing 55% of the population; and 45% of the working population was under 54 (Molisa, 2007). The young labor force was on the increase. In 1999, proportion of young labor force was 36%. It rose to 38% in 2004; 47% in 2006 and 45% in 2007.

The huge working population makes employment a great difficulty for young laborers in a competitive market. Finding a job is hard and securing a well-paid one is much more difficult. To help deal with this situation, this paper examines factors affecting income of young laborers and measures effects of these factors on the income of young laborers in Vietnam.

The paper uses data from the 2004 VHLSS project based on interviews with 46,500 households. In addition, the paper also employs other sources of information, such as reports, numerical data and comments from the Internet and workshops. From the 2004 VHLSS, we pick up 14,403 young people in the 18–35 age bracket, but only 3,872 of them (2,312 are male and 1,560 are female laborers) provide us with information about their income that could be used in the paper.

Table 1: Data about young laborers in the 18–35 age bracket

	Total	Gender	
		Male	Female
Observed cases	3.872	2.312	1.56
Monthly income	693.57*	731.25*	637.73*
(VND1,000)	(604.58)**	(660.82)	(505.00)
Schooling years	8.27*	8.12*	8.48*
	(3.50) **	(3.42) **	(3.60) **
Experience years	4*	4*	4*
	(3) **	(3) **	(3) **

*Mean; ** Standard deviation

Source: Calculation based on 2004 VHLSS

2. Approaches

Various theories of laborers' income have been developed. Based on some of them, we work out the following analytical framework:

The first is the Efficiency Wage Theory introduced by Riveros and Bouton (1991). Main arguments of this theory could be summarized by two factors that affect the laborer income: (1) Interaction between supply of and demand for labor; and (2) Employer's willingness to offer higher pay to encourage better productivity and retain laborers. The second is the Behavioral Approach discussed by Bowles, Gintis and Osborne (2001). These au-

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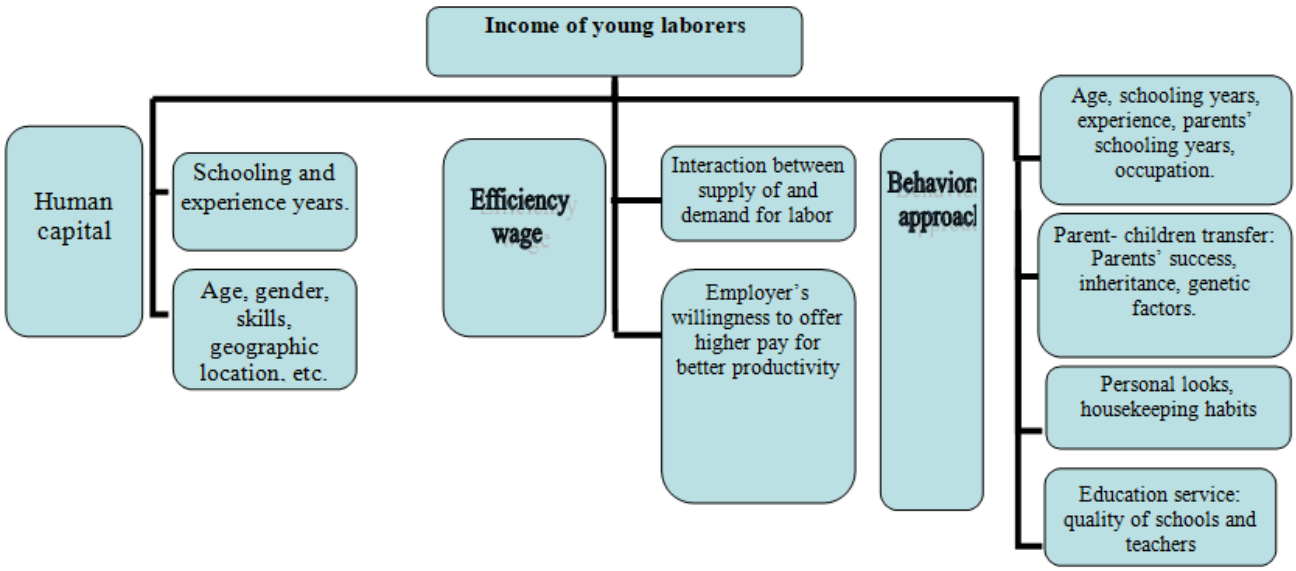
thors introduce four groups of major factors that affect the laborer income. The first group comprises factors related to laborers' background (age, schooling years, experience years, parents' schooling years and kind of occupation). The second group includes parents' success transferred to children, inheritance and genetic factors. The third group is related to personal appearance and habits. The fourth one refers to the education the laborers receive.

going to school while others stop doing so when they are still young.

We can see clearly that of these approaches, the one introduced by Bowles, Gintis and Osborne is the most perfect. The VHLSS date, however, include all factors/ variables related to the human capital theory, which encourage us to take this approach.

Most of previous studies were based on Becker's human capital theory and Mincer's earn-

Figure 1: Three approaches to laborer income



The third approach is introduced by the Human Capital Theory first presented by Becker (1964) and Mincer (1974). Human capital is defined as the stock of competences, knowledge and personality attributes embodied in the ability to perform labor so as to produce economic value. It is the attributes gained by a worker through education and experience. The core of this theory is the idea that increases in investment in education help improve skills and competences of laborers, thereby increasing productivity and income. The higher the investment in human capital, the better the laborer's opportunity to get a well-paid job. Investment in the human capital means the one in education and working experience, which helps improve laborers' productivity and value, and then, their income. The human capital theory aims at analyzing differences in wage/ income of laborers and explaining why some laborers keep

ings function. Mincer carries out the least square regression with natural logarithm of earnings as dependent variable; and schooling years, experience years and square of experience years as independent variables. Estimated coefficients on schooling show how much the earnings increase when the schooling increases one year. Positive coefficient on work experience and negative coefficient on the square of experience years show that increases in the experience help improve the earnings but at a degressive rate. Examining past studies, we see that most factors that affect the earnings have a positive relation with earnings, such as schooling years; experience years (all authors); schooling years of parents/ household heads (Antonji and Dunn, 1996; Laszlo, 2002. Ashenfelter and Krueger, 1994; Card and Krueger, 1992;) households (Kessler, 1991); development level of the area (Laszlo, 2002; Huy, 2003); and

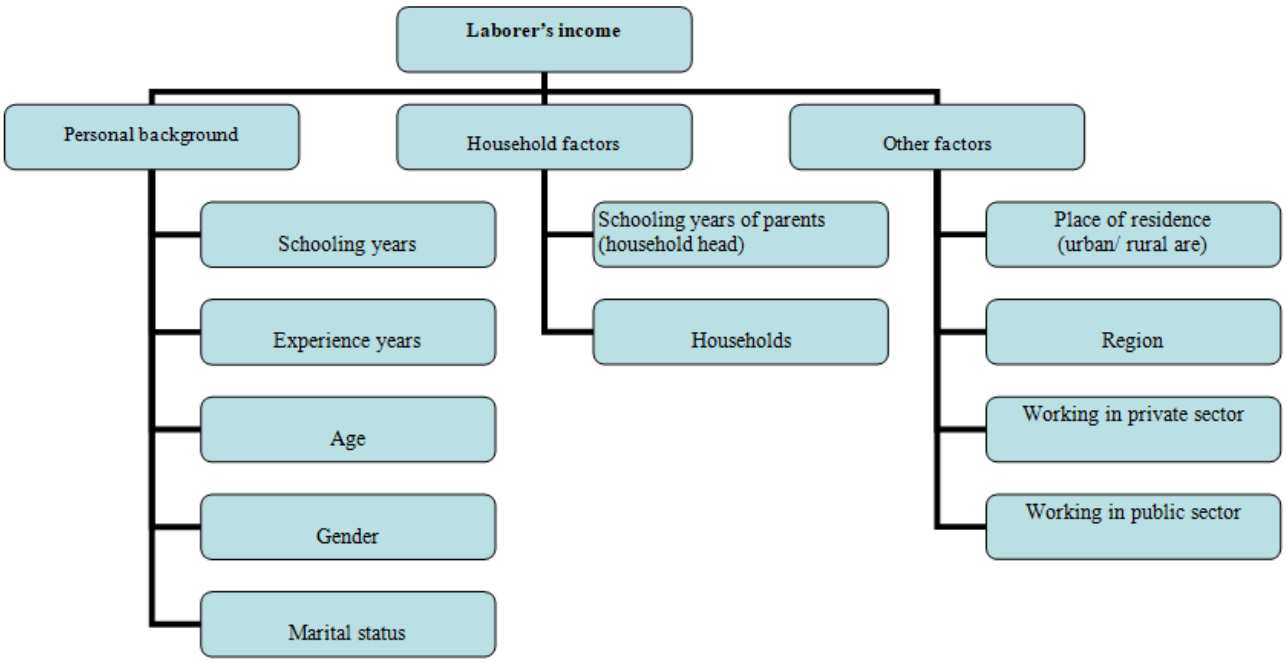
quality and quantity of schools (Card and Krueger, 1992; Altonji and Dunn, 1996). In addition, gender also has its own effect. Namely, there is a gap in earnings between male and female workers: men earn more than women do (Ashenfelter and Rueger, 1994; Psacharopoulos, 1993).

The following is an analytical framework of factors affecting the earnings based on the human capital theory.

(+) and negative (-) signs as results produced by past studies. Considering two human capital factors (schooling year and experience year) we see that the human capital produces positive effects on the laborer's income. Of these factors, the work experience has a very strong effect. The more experience the laborers get, the higher their incomes.

As for differences in earnings between male

Figure 2: Factors affecting income of young laborers in Vietnam according to Becker's human capital theory



a. Model:

Model of relationship between income and its factors based on the Mincer earnings function is as follows:

Ln(income) = β_0 + β_1 schooling + $\beta_2$experience + $\beta_3$experience^2 + other variables + ε

b. Some principal regression results:

- Dependent variable (monthly income)

(See next page)

3. Conclusion

Regression results show that, factors related to the human capital are meaningful to income of Vietnamese young laborers due to the fact that one more year of schooling increases their income by 4.2%. Effects of experience year and square of the experience year have the same expected positive

and female workers, data show that male laborer's income is 23.27% higher than the female one. This explains great appeal by working in cities for young people in rural areas. In addition, income from the private sector is 27.02% higher than the one in other sectors. This result is reasonable because in that sector young laborers can find well-paid jobs appropriate to their skills.

4. Suggestions

The study proves that the schooling year, as a factor in the model, is very important to young laborers' income. Education provides them with basic knowledge and an ability to take part in the labor market, which allows them to find jobs with reasonable incomes. Many programs should be carried out to help the public, especially young laborers, improve their education and skills, thereby

Independent variable	Estimated coefficients				
	-1	*-2*	*-3*	*-4*	*-5*
Schooling	0.067851	0.050770	0.049893	0.040021	0.042463
	(19.75)	(12.57)	(12.28)	(9.42)	(9.99)
Experience	0.119720	0.116021	0.118627	0.123238	0.125192
	(10.77)	(10.77)	(10.96)	(11.49)	(12.02)
Experience^2	-0.006874	-0.006545	-0.006566	-0.006801	-0.006804
	(-9.48)	(-9.31)	(-9.33)	(-9.77)	(-10.07)
Age	0.026112	0.022018	0.027935	0.026045	0.024411
	(10.00)	(8.65)	(9.47)	(8.90)	(8.57)
Gender		0.204139	0.199421	0.215636	0.234783
		(8.73)	(8.51)	(9.25)	(10.36)
Parents' schooling		0.013740	0.016141	0.014570	0.017440
		(3.68)	(4.29)	(3.90)	(4.68)
Urban area		0.343083	0.331067	0.308020	0.242786
		(13.43)	(12.93)	(12.11)	(9.64)
Households			0.023566	0.022272	0.016677
			(3.71)	(3.55)	(2.71)
Private sector				0.293315	0.270232
				(8.90)	(8.43)
Adjusted R^2	0.181804	0.233247	0.237525	0.255124	0.299690

Statistically significant at 5%. The t-value is in parentheses

creating a well-trained labor force.

Secondly, Work experience is the second important factor to young laborers' income. This means that they should try their best to learn, improve their skills, and increase their experience of working to do their jobs better. They should invest all their energy and time in working and learning with a view to getting ready for better jobs. Their future is in their own hands.

Thirdly, the Government should develop rural and urban areas proportionally in order to create new jobs in rural areas and reduce flows of migration to cities; and adopt more policies to support and encourage development of the private sector, especially in rural areas■

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12. Data from GSO and Ministry of Labor, Invalids and Social Affairs (Molisa)

APPENDIX

Dependent Variable: LOG(INCOMEMONTH)

Method: Least Squares

Included observations: 3871

Excluded observations: 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SCHOOLYEAR	0.042463	0.004247	9.997.780	0.0000
EXPERIENCE	0.125192	0.010412	1.202.399	0.0000
EXPERIENCE2	-0.006804	0.000675	-1.007.573	0.0000
AGE	0.024411	0.002848	8.571.542	0.0000
GENDER	0.234783	0.022659	1.036.156	0.0000
PARENTEDU	0.017440	0.003726	4.680.818	0.0000
URBAN	0.242786	0.025179	9.642.243	0.0000
HHSIZE	0.016677	0.006132	2.719.491	0.0066
WORKPRIVATE	0.270232	0.032039	8.434.398	0.0000
REGION1	-0.007513	0.034552	-0.217448	0.8279
REGION2	-0.108015	0.044711	-2.415.862	0.0157
REGION3	-0.073435	0.088619	-0.828657	0.4073
REGION4	-0.123298	0.048280	-2.553.790	0.0107
REGION5	-0.022983	0.041950	-0.547853	0.5838
REGION6	-0.124769	0.056277	-2.217.040	0.0267
REGION7	0.393897	0.033729	1.167.834	0.0000
C	4.436.402	0.077287	5.740.177	0.0000

R-squared	0.302947	Mean dependent var	6.248.014
Adjusted R-squared	0.299690	S.D. dependent var	0.809949
S.E. of regression	0.677802	Akaike info criterion	2.064.973
Sum squared resid	1.769.668	Schwarz criterion	2.095.705
Log likelihood	-3.977.755	F-statistic	9.300.685
Durbin-Watson stat	1.634.269	Prob(F-statistic)	0.000000