

Human Capital Investment and Retirement Investments in Indonesia

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Pension Investment Illustration, Photo by Andrea Piacquadio (Hungary)

Abstract :We investigate whether income-inducing human capital investment also impacts awareness of the importance of pension investment by using the Family Panel Study of sampling and applying trend and difference score matching to examine this study's causal effects. This study used random sampling of 325 families in Jakarta and Bandung. We divided into three groups, namely middle to lower-income, which we define as families having income below the regional minimum wage, medium, which we define as families with a payment equal to the regional minimum salary up to 50% more than regional minimum wage, and the third group of upper-middle-income groups with incomes more than 50% above the regional minimum wage. The results show that awareness of the importance of investing in pensions for old age preparation is positively related to investment in human capital in households. In particular, education spending for children aged zero to 16 increases substantially due to the awareness of the importance of investing in human capital. The higher the level of education in the family, especially parents, tends to encourage their children to increase human capital and be more aware of the importance of investing in retirement preparation, which we call pension investment.

Keywords: Retirement Investments, Human Capital, Indonesia

JEL Classification : C23, J24,N36

1 INTRODUCTION

The accumulation of human capital has become a critical factor in driving rapid economic growth. Investments in human resources can be the solution to reduce poverty and economic development (Basu et al,2010). Investing in human resources can be a solution in breaking the chain of poverty through the education and training system to increase human productivity so that income can be improved and help get out of poverty. Education is the government, and individuals took a consumption behavior and a conscious productive investment action to increase future productivity. Investments in family education in children, especially from the age of zero to 16 years, are significant for accumulating children's human capital and increasing income in the future. Equal learning opportunities for citizens are something the government must do to help the community develop its human capital, such as compulsory education programs. In addition to exploring the impact of education-related policies on children's human capital investment, children's participation rate in families that participate in social security programs is higher than that of uninsured families (Gillies et al,2017).

This paper investigates how human capital investment affects income in children aged zero to 16 in their future or working years, based on a representative sample of 325 families from three groups grouped by household income, using in-depth online interviews with the method of matching the similarities and differences of each family that is reported on a Likert scale, which is then regressed to see the relationship of accumulated human capital, which is calculated by considering the health, education, and occupational aspects of family members, understanding of the family retirement investment being sampled, the level family income. This paper contributes to research on awareness of the importance of pension investment and accumulative human capital.

2 LITERATUR REVIEW

Problems of poverty and income inequality, as well as aging populations with low levels of welfare, are common issues in many countries (Department of Economic and Social Affairs,2020). The Government needs policies to address the problem of poverty, especially poverty in retirement (Hujo,2014). Investments in human capital have long been considered a fundamental route to solving social issues (Bromberg,2016). The investment in human capital that parents make in themselves increases the human capital of their children significantly. Educated or educated parents provide hope, opportunities, and educational performance for children so that children are motivated to go to school and invest in themselves in investment in human capital from an early age (Ermisch,2016). Pension investment useful for maintaining the standard of living or quality of life of humans in old age is essential. However, pension investment and human capital investment are less popular in developing countries (Zainhofer,2008).

Human resource development aims to alleviate poverty and break the poverty chain by increasing population productivity and increasing population income (Garavan et al,2016). The aging population worsens the situation due to increasingly tricky jobs, so pension investment is needed for citizens of productive age who are expected to realize the importance of setting aside a portion of their income to invest in preparing for old age (Park et al,2012). The population aged 16 to 21 years is the study age that prepares them to enter the world of work. An understanding of investment is fundamental to be instilled in people with this age range (Heider & Jalongo,2014). Income significantly affects the population's willingness to invest in the future, whether it is a financial investment or human or non-financial capital (Stooker,2020).

3 RESEARCH OBJECTIVE AND METHODOLOGY

We calculate the human capital investment in families using household expenditure, which focuses specifically on the total household education expenditure for the full year for children aged 0-16 years, adolescents 16-21 years, and costs of skills training of working family members. Household expenditures under the knowledge of family health protection include health insurance, food expenditures with balanced nutrition including supplements, sports equipment, or sports expenses such as going to the gym or attending self-defense training and other costs aimed at maintaining health, including the expenditure of medicines first aid. We also consider family size, medical history of family members, family income sources, and family investment instruments, both financial and non-financial. We collect and sort data, both numerical data, which can be in costs and Likert scale data. We formulate all data into a regression formula as follows:

$$RI_t = C_t + \beta_1 EF_{t1} + \beta_2 EM_{t2} + \beta_3 FS_{t3} + \beta_4 HCI_{t4} + e_t$$

Where,

- RI = Pension Investment
- EF = Father's education
- EM = Mother's education
- FS = Family size or number of family members
- HCI = Human Capital Investment
- e = error term

5 RESULTS AND DISCUSSION

The estimation results are as follows:

$$RI = 0.325167 + 0.437013*EF + 0.212341*EM + 0.542512FS + 1.832163*HCI$$

From the OLS estimation results, father's education (EF) affects the decision to make a pension investment by 0.437013 when calculated. If the father's education in the family increases by 1%, pension investment will also increase by 0.437013%. Maternal education (EM) has a positive effect along with other variables. Table 1 describes the estimation

results as follows:

Table 1. Estimation Results

Dependent variable IFDM			
Variable	Coefficient	t-Statistic	Prob
C	0.325167	1.124815	0.0007
EF	0.437013	-0.573118	0.4021
EM	0.212341	-0.811209	0.251
FS	0.542512	2.478543	0.0130
HCI	1.832163	1.544823	0.1126
R-squared	0.687142	Mean dependent var	63.75185
Adjusted R-squared	0.797204	S.D. dependent var	32.6114
S.E. of regression	121.4231	Sum squared resid	7.43265
F-statistic	41.1721	Durbin-Watson stat	0.421272
Prob(F-statistic)	0		

Stoiker,R.(2020).Income Investing Secrets.New york : Gold Egg Investing

Zainhofer,F.(2008).Life Cycle Investing and Occupational Old-Age Provision in Switzerland.Cham : Springer

The estimation results and table 1 indicate that human capital investment in the past and previous generations and human capital investment made in the present and future are interrelated between ages in the family. Human capital in the family environment is significant in national development in Indonesia.

6 CONCLUSION

Human capital investment and pension investment are positively related where human capital investment in the past and previous generations has contributed to the current generation's decision to invest in themselves in the form of human capital investment, which has an impact on the income of themselves and their children so that human capital investment is significant in human capital development in Indonesia.

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