

Determinants of Satisfaction Elderly in Rural: Labor or Leisure Choice

Joko Triyanto¹, Jihad Lukis Panjawa²

¹young statistics, statistics of Sragen Regency, Indonesia

²Dept. Economic Development, Tidar University, Indonesia

ABSTRACT : The purpose of this study was to analyze the determinants of satisfaction of the elderly to work or enjoy leisure time in rural areas in Central Java. This study used a positivism perspective with a deductive approach. The analysis tool used is the logit regression. The findings in this study were male elderly as head of household with low education had a greater chance to decide to work. The elderly who work are also experienced by those who are not married. Partially, gender, relationship of the head of household, marital status and education level significantly influence the decision of the elderly to work, but the factor of pension insurance is not significant.

Keywords: *Elderly Labour Participation , Labour Supply.*

I. INTRODUCTION

The last two decades, population dynamics have been experienced by Indonesia. The population dynamics in question are from high birth and death rates to low birth and death rates (increased life expectancy). Based on that report Statistics Indonesia [1], trend Life Expectancy at Birth in Indonesia is increasing. Number life expectancy at birth in 2010 amounting to 69,81 year and increase to 70,78 year on 2015. In line with this, the report International Labor Organization [2], in 2020 estimated the number of elderly people in Indonesia increased to 28.8 million (11 percent from the whole population).

Life expectancy and the elderly are increasing nationally was also followed by the province, one of which is Central Java. Based on that report Statistics Indonesia [1], numbers Life Expectancy at Birth in Central Java shows an upward trend and more high compared national number. On in 2010, Life Expectancy at Birth as big as 72,73 years old and increase on in 2015 to 73.96 years.

Statistics Indonesia [1] add that proportion population the elderly in Central Java against total population increases from 4,2 percent in 1971 to 10,3 percent in 2010. The level of participation Force Elderly employment in Central Java in 2014 was 51,29 percent, which means as much as 51,29 percent of the total population the elderly is force work that is those who are currently working, temporarily not work, search work, and prepare something effort. The number this higher when compared to numbers of national (47,48 percent).

Based on table 1 shows that equal to 59,02 percent the elderly work located live in rural areas of the total population of the elderly in Central Java. Proportion population working elderly who are housed live in rural areas too more high from on living in the city that is as big as 57,40 percent. While work elderly population proportion who live in the city as big as 44,41 percent. this the meaning the place live in rural areas more many absorb power work especially in sector agriculture (informal) and located the place stay someone too indicates desire, ability, and chance to do the job.

Table 1. Proportion of Elderly Population according to Working Status and Domicile, Central Java, 2017

Domicile	Work		leisure		Total		Proportion of Elderly Working (%)
	N	%	N	%	N	%	
Urban	892.259	40,98	1.116.685	53,94	2.008.944	47,30	44,41
Rural	1.284.916	59,02	953.660	46,06	2.238.576	52,70	57,40
Total	2.177.175	100,00	2.070.345	100,00	4.247.520	100,00	51,26

Source: Statistics of Central Java Province (SAKERNAS 2017, processed)

The phenomenon described above shows that there has been a demographic transition. That is, there has been a transition from growth rates at high levels and births to low growth rates at low birth and death levels. The mortality rate is declining more rapidly as a result of improved nutrition, a Knowledge science, and technology in the field of health or development brief. In addition, the birth rate has gradually declined as a result of development which has caused structural changes and social change. As for the forms of structural change such as industrialization and urbanization, social change includes increased education levels, declining birth rates, and increased health levels. Therefore with the existence of structural changes and social changes, the impact of increasing life expectancy is that the presence of the elderly population is higher.

Increase total elderly, many give away consequences in aspect life. The demands of socio-economic life force everyone to work for life, including the role of the elderly population. The elderly are actively seeking existing employment opportunities to fulfill life needs and improve living standards and improve the economic status of their families. Williamson and McNamara [3] explain that problem the elderly decide for work background by many factors between another geography, social, economy and demography.

The geographical location is the location the place stay to have a role in influence population the elderly decide for work or whether or not [4,5]. While from the social and demographic aspects, the work participation of the elderly population is also influenced by several factors including gender, marital status, and education level. Women with a low level of education are more difficult to get a job when compared to men who have the same level of education. Education is in line with the level of income earned and motivated the elderly to work in addition to the number of family dependents and health. Married male workers are more productive than married women so that the elderly population with the status of husband (head of household) is more in the labor market than the elderly who have the status of a wife [6-12].

While from the economic side of the elderly population decides to work influenced by social security factors. Guarantee institutionalized social with good, then some big power work will have access to some form guarantee social [13]. Guarantee social too give away contribution real to decline participation the elderly for work [14,15].

Look the above situation, the impact increase total population the elderly need immediately anticipated and got handling comprehensively, considering condition the elderly different with condition population in structure others. In This at least the elderly not so obstacles development, however permanent become development capital, though in a manner physical, mental and social they already many experience setback compared with population young. Ideally, the elderly who work have jobs that are in accordance with their physical and mental conditions, while the elderly who do not work can also prosper because there is a guarantee for their survival. If this materialized then view that the elderly only depend on part Other residents could be reduced.

In relation to this study, an analysis of the supply of elderly labor will be explored. According to Borjas [16], the supply of labor is illustrated by the decision of the elderly to work or leisure. In economic theory, labor supply is based on the concept of alternative costs (opportunity cost) related to one's decision to work. If someone doesn't work, then he gives up the opportunity to earn income. Conversely, someone can also decide to spend his time for leisure such as household activities, study, worship and others that are basically for the purpose of having fun. In this free time condition, for the elderly who have economic abilities is certainly a very pleasant thing. But unfortunately this is not experienced by all the elderly, many of them are still in the labor market to make ends meet.

Based on this, the elderly who cannot enjoy this free time become very sad considering that when this free time arises it will be covered by the high needs of life that must be fulfilled. On the other hand, the behavior and constraints (dynamic factors) faced by the elderly at the age that should have retired are complementary to the polemic of these elderly people. According Hao [17] and Chen et al. [18], this problem appears with the diminishing energy and mind caused by the declining physical abilities of the elderly. The influence of psychological factors is often angry, stressed, selfish, and memory that continues to decline is a determining factor for their lack of acceptance in the labor market.

On the other hand, the choice of the elderly not to work is one of them based on the value in the community that keeping elderly parents is the duty of children as their offspring, including in this case the child must meet the economic needs of his elderly parents. However, the values of respect for these parents will not be able to survive given the changing values of life as times change.

The contradiction in the number of elderly people is an interesting thing to study because it is suspected that there are determinants of the elderly to work or choose to enjoy leisure time. Therefore, the purpose of this

study is to analyze the determinants of satisfaction of the elderly to work or enjoy leisure time in rural areas in Central Java.

II. RESEARCH METHOD

Positivism which explains causal relationships which are logically taken from general theory. This approach logically connects abstract ideas with precise measurements in the social world [19]. The positivist perspective in this study leads to the type of quantitative research with the type of primary data in this study obtained through the 2017 National Labor Force Survey (SAKERNAS) published by Statistics of Central Java Province. In this case, the researcher remains separate, neutral and objective when measuring various aspects of social life, investigating the evidence and making replicas of other people's research. Therefore, this study uses a positivist perspective with a deductive approach. The population in this study were all SAKERNAS 2017 respondents, while the sample was elderly residents who referred to Law Number 13 of 1998 concerning Elderly Welfare aged 60 years and over and lived in the village. The sampling technique used was purposive sampling.

This study uses a logit model. The use of logit models because the dependent variable is a categorical variable (nominal scale) with two categories. In this model, independent variables can be either quantitative or category data. But in this study, all independent variables are categorical data. In the analysis of this logit model, it will use a model that includes characteristics relating to social, economic and demographic conditions which include gender, relationship with the head of the household, marital status, education level, and pension guarantee. According to Latan [20] to look at the logit dichotomy regression model, the dependent variable is expressed in the logit function for $Y = 1$ compared to the logit function $Y = 0$. Regression coefficients are used to interpret the dependent variable by showing an increase or decrease in the probability prediction of the characteristics of the independent variable. In order to support the logit model, it is necessary to test the model carried out to examine the role of independent variables on the dependent variable simultaneously and partially. This simultaneous test is also called the G test and the partial test using the Wald test. The logit dichotomy model in this study is denoted as follows:

$$\ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 jk + \beta_2 hk + \beta_3 sk + \beta_4 educ + \beta_5 jp + e_i \quad (1)$$

where $P_i/(1-P_i)$ is an Odd Ratio or the probability ratio of an event; P is the work participation of the elderly population (1 for work and 0 for leisure); jk is gender (1 for men and 0 for others); hk is the relationship of the head of the household (1 for the head of the household = 1, and the other 0); sk is marital status (1 for unmarried and other 0); $educ$ is the level of education (1 for education below or equal to high school / equivalent and 0 other); jp is a pension guarantee (1 for not having a pension guarantee, and 0 for owning); β_i is a parameter and e_i is an error term.

III. RESULT AND DISCUSSION

Logit regression models for rural areas were tested using the Chi-square test statistic. From the processing results obtained a p-value of 0.0000 smaller than α (0.05), it can be concluded that this logit regression model is significant. The logit regression model formed for rural areas is as follows:

$$\ln\left(\frac{P_i}{1-P_i}\right) = 20,252 + 0,716jk + 0,621hk - 1,324sk + 0,867educ - 21,476jp \quad (2)$$

Partial hypothesis testing of logit regression coefficients using the Wald test as presented in table 2 are as follows:

Table 2. Results of Estimated Coefficient of Rural Models for Elderly Population, Wald Test Value and Odd Ratio Value

Nama Variabel	B	Wald	Sig.	Exp(B)/Odd Ratio
jk	0,716	40424,764	0,000***	2,046
hk	0,621	30868,983	0,000***	1,861
sk	-1,324	3673,987	0,000***	0,266
educ	0,867	3136,472	0,000***	2,381
jp	-21,476	0,002	0,961	0,000
Constant	20,252	0,002	0,963	624226149,3

Description: *** significant at α (0,01); ** significant for α (0,05); * significant at α (0,1)

Source: Statistics of Central Java Province (SAKERNAS 2017, processed)

The variable gender value (jk) is 0,716, which means that the elderly male population tends to be bigger to work than the elderly female population. With a coefficient of 0,716 which means the Odd Ratio value is 2,046 which indicates that the tendency of the elderly male population to work is 2,046 times the population of elderly women.

The coefficient of the relationship variable of the head of the household (hk) is positive, indicating that the elderly population with the status of head of household tends to be bigger to work than the other elderly population with status. With an Odd Ratio value of 1,861, it shows that the tendency of the elderly population to work is 1,861 times compared to the elderly population with another status in the household. This can be understood because the status of the head of the household becomes the backbone for fulfilling family needs so that it is expected that a household head must work.

Variable marital status (sk) of the elderly population in this study are categorized into two, namely not married and others. Other categories here include marital status, divorce and divorce. Sk variable coefficients are - 1,324, which means that the elderly population with unmarried status tends to be smaller to work compared to those with another marital status. Skeletal Odd Ratio value of 0,266 shows that the tendency of elderly people who have not married to work is 0,266 times compared to the elderly population with another marital status. This can be understood because those who are not married have no dependents to fulfill. This condition indicates that those who are not married only live alone or become members of the household.

Variables in the level of education (educ) in this study are categorized into two, namely the elderly population with less than or equal to high school education and others. Other categories here include those who are highly educated (diplomas and scholars). The variable education level has a positive coefficient, this implies that the elderly population with less than or equal to high school education tends to be bigger to work than those who are highly educated elderly (diploma and undergraduate). An odd Ratio value of Educ level equal to 2,381 means that the elderly population with less than or equal to high school education has a tendency to work at 2,381 times compared to the elderly population who are highly educated.

Table 2 shows that the pension guarantee variable (jp) is not significant. This is because many elderly residents in their productive age work in the informal sector which is not covered by pension insurance. In addition, the elderly population in their productive age does not invest or save for the guarantee of their old age.

The implication of this study is that male sex has a tendency to work more than women, because of the physical and energy of an elderly male, it is stronger than women. This is what causes more elderly men to decide to work. In addition, the status of the head of the household has a tendency to work more than the others. This can be understood because the status of the head of the household becomes the backbone for fulfilling family needs so that it is expected that a household head must work.

IV. CONCLUSION

The results of the inferential analysis for rural models showed that gender, the relationship of the head of household, marital status, and level of education significantly influenced the decision of the elderly population to continue working, but the pension guarantee factor was not significant. When referring to the Odd Ratio, the male sex variable has a tendency to work greater than 2,046 times compared to women, the elderly population with the status of head of household has a tendency to work bigger 1,861 times than others, unmarried marital status has a tendency to work smaller 0,266 times compared to other marital status and the elderly population with less than or equal education with high school has a tendency to work greater than 2,381 times compared to higher education.

Changes in population structure, one of which is marked by an increase in the elderly population, need to strengthen the role of families, communities and the government in terms of improving the welfare of elderly residents, especially the elderly who work. needs to be improved. The increasing elderly population is very urgent for the need for special social protection for the elderly, as well as government assistance for school children, pregnant women and the poor.

Government programs that focus on the survival and empowerment of the elderly population. Repair of facilities and services in the education and health sector which is a long-term investment for the community. If, from a young age, high public education and good health, in the old age they can still work in sectors that show professional work and not much physical drainage, but more on the contribution of ideas and creative ideas.

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