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FAMILY TRANSFERS, CORESIDENCY, ELDERLY LABOR SUPPLY AND WELFARE PERSPECTIVE: EVIDENCE FROM INDONESIA

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ABSTRACT

Baik negara maju maupun negara berkembang telah menghadapi fenomena yang sulit dihindari, yaitu populasi yang menua. Hal yang membedakan adalah negara maju memiliki strategi dan program yang lebih terstruktur dan matang untuk menghadapi fenomena ini daripada negara berkembang, termasuk Indonesia. Dengan tidak adanya bantuan formal yang memadai dan komprehensif dari pemerintah Indonesia, orang lanjut usia bergantung pada dukungan antargenerasi dan pendapatan dari keikutsertaan mereka di pasar tenaga kerja. Penelitian ini membahas hubungan antara dukungan antar generasi (transfer keluarga dan koresidensi) dengan pasokan tenaga kerja lanjut usia dan perspektif kesejahteraan orang lanjut usia yang menerapkan metode kuantitatif. Dengan menggunakan data IFLS, penelitian ini menemukan bahwa transfer keuangan keluarga dan koresidensi mengurangi keputusan orang lanjut usia untuk bekerja pada masa pensiun sedangkan hanya mempunyai pengaruh yang relatif kecil terhadap perspektif kesejahteraan orang lanjut usia. Selain itu, karakteristik anak-anak dan orang tua, seperti kesehatan, usia, status pernikahan, gender dan level pendidikan adalah faktor penting yang mempengaruhi transfer keuangan keluarga dan keputusan untuk tinggal bersama.

Both developed and developing countries have faced a phenomenon that is difficult to avoid, namely an ageing population. While developed countries have structured and mature strategies and programs to deal with this phenomenon, developing countries, including Indonesia, face the opposite direction. In the absence of adequate and comprehensive formal assistance from the government of Indonesia, elderly people depend on intergenerational support and income from their participation in the labor market. This paper discusses the relationship between intergenerational support (family transfer and coresidency) with elderly labor supply and elderly welfare perspective implementing quantitative methods. Utilizing IFLS data, this study finds that family transfer and coresidency reduce the decision of elderly people to work during retirement while have only a small probability magnitude on their welfare perspective. Moreover, the characteristics of children and parents such as health, age, marital status, gender, and education level are essential factors to motivate family transfer and coresidency.

1. INTRODUCTION

Ageing of the population is one of the crucial issues faced by many countries in the world today. The composition of the old society is increasing rapidly both in developed and developing countries. The increase is due to a decrease in fertility (birth) and mortality (death) and an increase in life expectancy, which changes the structure of the population as a whole. Based on United Nations data on World Population Prospects, there were around 962,3 million elderly people in the world in 2017 and is expected to reach 2 billion by 2050.

In the 1970s, the role of government programs such as family planning had contributed positively to the decline in fertility levels that were too high in Indonesia. On the other hand, the government program in the form of improving the quality of people's health through social security and health insurance has created an increase in individual life expectancy for the elderly. Thus, the decline in fertility and improvement in life expectancy has changed the demographic structure in Indonesia. The figure explains the change in population structure in Indonesia from 1971 to

estimation in 2035 based on the BPS Population Statistics 2017 (see appendix, figure 1).

An increase in the number of elderly people in all parts of the world has triggered countries to issue policies and programs to prevent potential negative impacts. However, the programs and policies implemented in developed countries are more mature and structured rather than in developing countries. For example, pension plans and social assistance programs in developed countries cover almost all the elderly population. Meanwhile, in developing countries, the same program does not cover all eligible residents and is still not structured or "small and meager" (Kaushal 2014: 214). The figure 2 in appendix shows the recipient of a pension fund, by region in the world.

Moreover, the United Nations claimed developing countries like Indonesia are more constraint to prepare and deal with the consequences of ageing than developed countries (as cited in Kaushal 2014: 215). Although, Indonesia has applied social security programs such as retirement programs as a tool that can support and generate incentives for retirements, the Indonesian Central Bureau of Statistics (BPS) 2017 report shows that the social security only cover 12.67 percent of elderly people. This number shows that the Social Security Program is already prevalent in Indonesia, but the number of Social Security Program recipients is still minimal and generally only aimed at middle-income and high-income groups. This condition of Indonesia reflects the findings in Cameroon and Cobb Clark's research. They found that due to inadequate pension and social assistance systems, the elderly population in developing countries will depend on income in the labor market, family transfer assistance (Cameron & Cobb-Clark, 2002).

According to Kreager (2006:49), families have a crucial role in providing informal support for the elderly. One of the potential determinants that influence the elderly labor supply that has not been widely studied is family transfers (Cameron & Cobb-Clark, 2002). Family transfers can be seen as a substitute for parents' income so they can enjoy their retirement without having to work, or at least they reduce their working hour. They also mentioned coresidence as another factor affect the decision of the elderly to work.

In Indonesia, as in other developing countries, transfers are commonplace (Park, 2003:929). According to Park, the majority of household in developing countries (around 20% -90%) receive family transfers, while in developed countries like the United States, it is only 15%. It reveals that family support has a potency to complement the social security program issued by the government. Hence, the main objective of this study is to investigate how the association between family support in the form of family transfer and coresidency with the elderly labor supply and welfare perspective. In addition, we will also evaluate demographic factors as a control variable

that plays an essential role in influencing the elderly labor supply and welfare perspective of the elderly.

This study will also explore the factors influencing transfer behavior and coresidency in exploratory models to conduct a complete and comprehensive research. We divided these factors into two, which are parents' characteristics and children's characteristics such as health, age, marital status, gender, and education level.

Therefore, this research presents six chapters. The first chapter will provide an introduction that contains background and research problems. The second chapter shows previous studies. The third section presents data and methodology. The Fourth chapter focus on the result and findings. The next chapter will reveal the conclusions. Finally, implications and recomendation will be presented in the last section.

2. LITERATURE REVIEW AND HYPOTHESIS

2.1 Family Transfer

Family is an entity that has a vital role in carrying out functions to provide support among family members. The support can be in the form of financial assistance or taking time to help family members who need help. In some developing countries, no exception to Indonesia, family support is the primary means of ensuring the survival of elderly family members (Frankenberg et al., 2002). Studies by Cameron and Cobb-Clark (2008), Frankenberg et al. (2002) show that family transfer is a dominant mechanism and has a significant influence to support the elderly compared to government social security, which is very limited in developing countries.

Cameron and Cobb-Clark (2008) analyzed the effect of intergenerational transfer and coresidency on the elderly labor supply. They used the IFLS 1 data with sample size of 1,429 parents. They used measurements in the form of working hours of the elderly to reflect on the elderly labor supply and established control variables consisting of coresidency in gender, marital status, and education status. Overall, they show that social family transfer has an small probability relationship to parents' decisions to reduce working hours, while significant effects only occur where family transfers are addressed to noncoresiding women. They argue that the reason why family transfer does not affect the decision of the elderly to reduce their working hour is because the number of transfer is too small and unpredictable. Utomo et al. (2018) using a sample of 2,750 respondents in 10 villages claimed that although the effect was little, there was a significant negative relationship between the decisions of the elderly people to work with remittances.

Nguyen et al. (2012) examined the impact of family transfers on elderly labor supply in Vietnam. Using national survey data containing 6,000

households, they utilized 2,843 samples of older people in Vietnam. Considering the endogeneity problem between family transfer and elderly labor supply, they implemented two equations by using Full Information Maximum Likelihood strategy. The results show that although financial transfers from children cannot replace the income received from participation in the labor market, they are seen as effective tools in reducing the risk of vulnerable parents at age, health conditions and natural disasters in Vietnam. Additionally, as older people advance in age, and they have poor health, they tend to decide not to work again in their retirement. Overall, family transfers are a fundamental means of ensuring the wellbeing of the elderly population when facing the risk of illness and ageing (Nguyen et al., 2012).

Interestingly, this study also explore the relationship between family transfer and welfare perspectives which previous studies do not cover this discussion. Silverstein et al. (2006) investigated the effects of intergenerational transfer and household arrangements on elderly psychological wellbeing in rural China. They used old residents as respondents in six villages in the Chaohu region, and they identified 1,800 individuals as accurately respondents. Overall, the result is that older people who receive more massive family transfers and feel emotional support from their children will be more satisfied with their lives than parents who receive little family transfer or who don't.

Finally, this study will use the concept in Cameron and Cobb-Clark (2008) and Utomo et al. (2018) to examine the social impact of family transfers on the elderly labor supply. Interestingly, this study will use two waves of IFLS, which makes it different from previous studies. The reason for utilizing two waves is because to reduce the potential for endogeneity problems where the variable Family transfer and the elderly labor supply indicate influencing each other. By using two waves, this study will also focus more on changing in elderly decision to working due to the influence of Family transfer. Moreover, this research will also discuss the association between family transfer and elderly welfare perspective which the prior researches do not explore this area.

2.2 Coresidency

Government programs concentrating on the welfare of the elderly community such as pension schemes, health insurance and social institutions are still very limited in developing countries, including Indonesia (Schwarz et al., 2010). This condition results that the majority of the elderly population in Indonesia depend on their participation in the labor market. However, according to Kreager (2006), families have a crucial role in providing informal support for the elderly, especially those who are sick and weak. The informal support is coresidency, a condition where parents live with adult children.

Then, we will discuss correlation between coresidency and elderly labor supply in Indonesia. Because research linking coresidency with elderly labor supply is very limited, we will focus on some of the literature. Cameron & Cobb-Clark (2008: 1018) argue that non-coresiding elderly man who has a lower education level will decide to work longer than a non-coresiding man who has higher education. A more significant difference also occurs in a non-coresiding woman. Thus, there are two factors affecting decision of elderly to work, which are coresidency and education level.

Another result said that the coresiding-man (woman) who before retirement worked in the public sector choose fewer working hours than the coresiding-man (woman) who previously worked in the private sector. Those results show that the coresidency and previous working sector have an important role in determining whether or not to work for the elderly in Indonesia. Furthermore, Cameron and Cobb-Clark (2002) concluded that in the recent period, due to modernization and industrialization in urban areas, many Indonesian younger have moved towards the city thereby reducing the opportunity to live with their parents. Consequently, it could affect the decision of parents to enter the labor market at their retirement age.

The results of other studies came from Pakistan. Kochar (2000) examined the impact of increasing child income on the number of working hours of the coresiding father. Children finance expenses related to ceremonial expenditure and durable goods of family needs, then this causes a reduction in father's working hours. The results of the study are that the benefits obtained by the father come from joint consumption in the family. In addition, Utomo et al. (2018) also found that coresiding parents reduce the number of hours worked.

This paper also adds the discussion of relationship between coresidency and welfare perspectives since previous studies skip this session. Silverstein et al. (2006) examined the effect of coresidency or household composition on the level of depression of parents and well-being psychology parents. They found that parents who live with their children and grandchildren have lower levels of depression than parents who live alone. In addition, the coresidency of elderly people has higher life satisfaction than noncoresidency-elderly people. Chen and Silverstein (2000) argue that intergenerational coresidency increases the morale of parents since they receive emotional and financial support from the children. Lastly, Teerawichitchainan et al. (2015), they explained that coresidency has a significant positive correlation with the emotional health of the elderly population in Vietnam and Thailand. They argue that living with a daughter increases parents' psychological well-being rather than living with a son in Thailand.

2.3 Demographics Variables (Age, Education, Health)

Kaushal (2014), using Indian statistics utilized age and education as a control variable, examine the impact of program pension schemes in India on elderly employment and family expenditure. He found that older men who had an education under secondary education tend to continue working when they were older. On the other hand, older men with higher education tend to reduce working hours when they are older. He also found similar results in elderly women. He suggests that educated people usually have a higher income so that their savings are enough when they have entered retirement age. Moreover, they are entering retirement age due to mandatory retirement.

Utomo et al. (2018), using 1,500 respondents from independent surveys in 10 villages in Indonesia, divides the age of respondents into six groups which are 60-64, 65-69, 70-74, 75-79, 80-84 and above 85. He found that the older man tends to reduce their working hours as they are getting older. A similar result is found for elderly women. Combining the age of older people and level of education, both elderly man and woman with older age and high level of education tend to decide not to work. Conversely, the elderly people who have a low level of education will tend to continue working during their retirement age. Hence, based on previous studies, education level and age which is getting older have a significantly negative relationship with the intensity of the elderly entering the labor market.

Some research also states that good health conditions have a positive correlation with the activity of the elderly in deciding to work in retirement. French (2005) states that health is one of the main factors influencing labor participation in the United States. Using the Panel Study of Income Dynamics (PSID) method and US population data, He illustrates that the number of working hours owned by workers who have good health status is higher than workers who have poor health status. Furthermore, these results apply to every age of the workforce from the age of 30 to 70 years. Other results report that good health influences the level of participation in the labor force.

2.4 Determinants of Family Transfer and Coresidency

Frankenberg et al. (2002) explained that the characteristics of children as transfer providers and characteristics of parents as recipients of transfers are factors that motivate transfer behaviour from children to parents or vice versa. In line with Frankenberg et al. (2002), Sun (2002) states that the quality and quantity of family support is influenced by the resources of the giver and the needs or conditions of the recipient. Some of the characteristics of the child are level of education of the child, status of marriage, and gender of the child. Meanwhile, the characteristics of parents include age and health conditions. Another supporter, Park (2003: 942) claimed that there is no single factor that

determines family transfers in Indonesia. For transfers from children to parents, widowed mothers receive a larger family transfer than other parents. He also mentioned that age is an essential factor in influencing transfer behaviour.

Besides, transfers from children, coresidency is another way to support parents in their retirement period. As explained earlier, the increase in the number of elderly people in the world, including Indonesia, essential questions. When government programs are not optimal in resolving these issues, the critical question is how and who will take care of the old population. Because social security is undeveloped, very fundamental tool to guarantee the basic needs of the elderly population is coresidency (Chaudhuri & Roy 2009). Even some researchers claim that because of the power of "this conventional wisdom" or the childcare for parents, the government pays less attention to policies that focus on the welfare of the elderly (Hugo 1992 as cited in Frankenberg et al. 1999: 65).

According to Beard and Kunharibowo (2001), the majority of elderly Javanese, the most dominant tribe in Indonesia, prefer to live with their children rather than reside alone. The reason parents want to live with their children is that they will obtain material and immaterial support (Johar and Maruyama 2011). Research in Japan and United Stated conducted by Johar et al. (2010) and Dostie and Léger (2005) show that there is a positive correlation between the needs of parents and the decision of parents to live with their children.

Lee et al. (1994: 1011) argue that there is no single motivation that influences coresidency. Parents face the choice of whether they will choose to live with their child or not. Some researchers combine the characteristics of children and parents as important factors that influence coresidency such as gender, marital status, education level and a number of children's wealth, parent's health, and age in Indonesia (Frankenberg et al. 1999, Cameron & Cobb-Clark 2008). Chaudhuri and Roy (2009) also used variables of age, health status and property ownership as characteristics of parents that influence coresidency in India. Although they did not utilize children's features because of limited data, Chaudhuri and Roy also acknowledged that children's characteristics such as marital status, location and income are also factors that play an important role in determining coresidency decisions. Other studies focus more on the parent's income and housing prices as a determinant factor of coresidence (DaVanzo and Chan 1994).

3. DATA AND METHODOLOGY

In this research, sources of primary data are taken Indonesian Family Life Survey (IFLS), and the data used is from community facility survey from IFLS 4 and 5. IFLS is "the only large-scale longitudinal survey" exist in Indonesia (Strauss et al. 2016: 1). It provides data for investigating behaviours and outcomes. It also

represented 83% of Indonesia's population and was conducted in 13 provinces in Indonesia.

For the main model in this research, the primary respondent is people who are fifty years old or more (namely elderly people). This paper decides 50 years old as a starting age for adding range of respondents This purpose is also supported by the availability of IFLS data. Moreover, the study will also focus on their economics behaviour. Thus, the data used in this study is the individual level. Furthermore, we will apply multiple regression and use two variables as a dependent variable and several variables as independent variables. The dependent variable in this study is older people who decide either to work or not in their retirement period and their welfare perspective. Meanwhile, the independents variable are classified into two categories which are family transfer from elderly people's children and coresidency with their children.

For the exploratory models, we will put family transfer and coresidency as dependent variables. Moreover, for independent variables, this study will use children's characteristics and characteristics of parents. Characteristics of children include marital status, gender and educational achievements of children who have income. While the features of the parents used are age, health conditions, gender and marital status. Research for exploratory models will use IFLS 5 data.

Methodology

This Research paper will apply a quantitative method that compares three statistical methods in which the Linear Probability Model (LPM), Logit Method and Fixed Effect. First, we will examine the use of the LPM method and Logit Method to investigate the effects of family transfers and coresidency on the elderly labor supply and the elderly welfare perspective. The reason behind the use of these both methods is that the dependent variable in this study is the categorical variable, and this requires specific treatment in estimating the results. So, if we only use the Ordinary Least Square (OLS) method, estimation results and assumptions may be interrupted. Therefore, this paper proposes to compare the estimation result of implementing these methods. Finally, if the estimation results look identical, then the two models are feasible to be used as estimators.

Next, we will compare the estimation results using LPM and Fixed Effect method. The reason why this study does not use OLS/LPM in investigating the effects of financial family transfers and coresidency on the elderly labor supply and welfare perspective is the potential for endogeneity problems. The potential for endogeneity problems arises because there is a correlation between independent variables with residuals or Cov(x, u) = 0. There are two main reasons why violations of this assumption occur, namely, first Omitted Variable, which occurs if we do not enter a variable into the model (and it should exist). As a result,

when y and x vary, u also varies in a predictable direction (Wooldridge 2015: 463). Secondly, simultaneity, it occurs due to the existence of explanatory variables that are supposed to be shared with dependent variables and the value is determined through a system (Wooldridge 2015: 499). This happens when regresses, and one/several regresan is influenced by one/more variables which are not in the regression model (outside the model).

According to Wooldridge (2015: 461-462), there are several popular approaches used to solve the problem of endogeneity, namely the Instrument variable method. Instrument Variables (IV) can be used to get consistent estimators even though there are cases of omitted variables. However, there are two requirements that must be generated to obtain a unbias and robust IV in order to overcome endogeneity problems in the model (Wooldridge 2016: 464). Firstly, correlation between instrument and treatment variables has to be strong. Moreover, this instrument can be explained as having a robust in the initial stage. Secondly, there are not correlation between instrument variable and error terms or instrument variable may not have direct relationship with outcomes. In this case, this research does not find a variable that fulfill the two conditions. This condition is in line with strategy applied by Pal (2007) since it is not simple to find approriate instruments for these decisions. Moreover, when the variable is found, it also has to be available in IFLS data. Because of these limitation, finally, this paper implements individual fixed effect to obtain a consistent estimator and unbiased result.

Comparing LPM, Logit Method, Fixed Effect

First of all, we will estimate the main model by using both the LPM and Logit method. On the one hand, Wooldridge (2015: 265) claimed that "when the dependent variable *y* is a binary variable, the model must contain heteroskedasticity, unless all of the slope parameters are zero". In addition, he also proposed that "OLS estimation of the LPM is simple and often produces a satisfactory result". On the other hand, multinomial logit is the right method for measuring dependent variables is categorical (Wooldridge 2015). Therefore, this study will use these two methods and compare the results.

Secondly, after processing and merging IFLS data 4 and 5, we will compare the use of the LPM method to the LPM with Fixed effect. Although Fixed Effect method is not the best method to tackle the endogeneity problem, the use of fixed effects is useful to account the effects of the unobservable heterogeneity and is expected to produce unbiased and consistent estimators. In addition, analysing the association between changes in family transfer and coresidency and also changes in outcomes over time will control individual behavior which is constant over time.

As mentioned before, the whole data is taken from IFLS 4 and 5, especially in book 3A within the RE section (retirement period), and another information is utilized from book 3B. For more detail presentation, we provide a table below that summarizes the entire data that we will use.

Table 1. Data of Main Model

No	Variable	Description	Frequency (after combining IFLS 4 and 5 data)
Dun	nmy Variable		
1	Elderly Labor	Decide to not working (0)	1,080
	Supply	Decide to working (1)	4,718
2	Welfare	Less Sufficient (0)	1,388
	Perspective	Sufficient (1)	4,407
3	Family	Receive (1)	3,841
	transfer from Children	Not Receive (0)	1,957
4	Corecidency	Live with the children (1)	3,858
		Not live with the adult children (0)	1,940
5	Education	Up to Elementary school=1	3,202
		Up to Senior high school=2	1,204
		Up to higher education=3	395
		Not attend school=0	997
6	Health	Good (1)	4,271
		Poor (0)	1,527
Con	tinuous Variabl	le	
	Age	Age range between 50 and 94 years old	5,798

Data Source: STATA output from elaborating IFLS 4 and 5 data

Thus, this research proposes and modify the model used in the previous study by Cameron and Cobb-Clark (2008). The main model is as follow:

$$Ls_{i,t} = \alpha_1 + \alpha_2 Trans f_{i,t} + \alpha_3 Cores_{i,t} + \alpha_4 X_{i,t} + \delta_i + \varepsilon_{i,t}$$

$$\begin{aligned} Welf_{i,t} &= \alpha_1 + \alpha_2 Transf_{i,t} + \alpha_3 Cores_{i,t} + \\ \alpha_4 X_{i,t} + \delta_i + \varepsilon_{i,t} \end{aligned}$$

Where:

Ls : Labor supply (proxy:decision to

working) of elderly people

Welf : Welfare perspective (satisfying of

family life) of elderly people

Transf : Family transfer
Cores : Coresidency

X : Demographic Variables, such as:

Age, Education and Health

 α_1 : Intercept

 $\alpha_2, \alpha_3, \alpha_4$: The coefficient of variables δ_i : Individual Fixed Effect

ε : Error term

i : Individual of respondent t : Waves of IFLS (IFLS 4 and 5)

Treatment for Exploratory model

For this sub-chapter, we will provide a data summary from exploratory models to support the story of the main model. Specifically, the author takes the data set from the control book and covariant book 3A from IFLS 5. To clarify the variables of this exploratory model, we provide the table below:

	Table 2	. Data of Explo	ratory Model
No	Variable	Description	Frequency (IFLS 5)
1	Family Transfer	Not Receive (0)	1,625
		Receive (1)	2,850
2	Coresidency	Not Living together (0)	1,075
		Living together (1)	3,400
Paren	ts Characteristic	S	
3	Health	Bad (0)	1,503
		Good (1)	2,972
4	Gender	Female (0)	2,008
		Male (1)	2,467
5	Marital Status	Unmarried (0)	1,032
		Married (1)	3,443
	Age	Age range between 50 and 94 years old	4,475
Childı	ren Characteristi	CS	
7	Marital Status	Unmarried (0)	1,751
		Married (1)	2,724

8	Gender	Female (0)	1,668
		Male (1)	2,807
9	Education Level	Not attended school (0)	31
		Up to Elementary (1)	884
		Up to Secondary School (2)	2,638
		Higher education (3)	922

Data Source: STATA output from elaborating IFLS 5 data

As mentioned above, the use of exploratory models is to examine the determinants that affect family transfer and coresidency. The data used in this model is IFLS 5 data, with a total of 4,475 respondents. The reason why we only use IFLS 5 data (one wave) is because in the exploratory model, there is no potential endogeneity problem and the purpose of the exploratory model is only to support and complement the exposure of the main model to be more comprehensive. Thus, the use of one-wave IFLS data is sufficient to reflect the determinants of family transfer and correlation. Exploratory models are as follows:

$$Transf_{i,} = \alpha_1 + \alpha_2 X_i + \alpha_4 Y_i + \varepsilon_i$$

$$Cores_i = \alpha_1 + \alpha_2 X_i + \alpha_3 Y_i + \varepsilon_i$$

Where:

Transf : Family transfer
Cores : Coresidency

X : Children Characteristics which are marital status, gender and

educational achievements of children

who have income.

Y : Parent Characteristics which are age, health conditions, gender and marital

status of eldelry who is 50 years old

or more.

 α_1 : Intercept

 α_2, α_3 : The coefficient of variables

 ε : Error term

i : Individual of respondent

Based on the literature review and methodology in previous studies, this study will propose several hypotheses as follows:

H1: Family transfer and coresidency have no relationship with the decision of elderly people to work during retirement and elderly welfare perspective.

H2: Family transfer and coresidency have a relationship with the elderly labor supply and the elderly welfare perspective as follow:

No.	Independent Variables	Depeendent Variables	Expected Signs
l.	Family		Negative
	Transfer	Elderly Labor	
2.	Coresidency	Supply	Negative
3.	Family		Positive
	Transfer	Welfare	
4.	Coresidency	Perspective	Positive

4. RESULTS AND FINDINGS

The next step, we will present a table that contains tabulation information for each variable categorized by gender (see appendix, table 3). As mentioned earlier, the total respondent for the main model is 5798 people, which is divided into 2591 for female and 3207 for male. From the table, we can see that the elderly male who decided to work in his retirement period was more than the female elderly (2701 versus 2017). This statistics is probably because the head of household factors and male elderly still have more abilities than female elderly. For the welfare perspective, the number of male elderly who feel sufficient in their households is also higher than the number of female elderly.

In contrast, for variable family transfers, the number of female elderly who received transfers from their children was more than that of the male elderly. But overall, the majority of elderly people receive transfers from their children by 66%. Both male elderly and elderly women prefer to live with their children in their old age. For health conditions, 73% of the total male and female claim to have good health conditions. Next, from all levels of education, the number of male elderly is always more than the female elderly.

Moving to an exploratory model (see appendix, table 4), we will focus more on the independent variables which are characteristics of the child and the characteristics of the parents. Since the explanation of dependent variables which are family transfer and coresidency in term of the arrangement of variables and the interpretation of the data is almost the same as the main model. First, the table says that the majority of parents claim to have good health and married status. The largest number of elderly residents is in the age range of 50-59 years. Second, we collect data on adult children who have worked and earned income for less than five years or more. Then we chose the gender, marital status and education level as the characteristics of the child. So, based on IFLS 5 data, a respondent male child was more than a female child, and the majority of respondents were married. For the level of "higher than secondary school" education, there are more women than men, but for other levels of education, male are always more than female.

4.1 Exploratory model using IFLS 5 Data

Based on the regression results (table 5), parents and children characteristics have a critical role in

influencing the behaviour of transfer and coresidency. It can be seen that the parents' characteristics, which are health, age and gender of elderly people have a significant relationship with the family transfer at the 1% level of significance. Moreover, the result said when the health condition of older people decreases as one percentage point, the family transfer they receive will increase by 5.04 percentage points. Although the health variable has a significant negative relationship with family transfer, the coefficient of the regression results shows small probability magnitude. Regarding to Indonesia context, this result confirms that because social security does not cover the entire population of parents, children have a reason that their parents need financial support to cover their medical or health care needs.

As seen in the result table, although the age variable has a significant positive relationship, this variable has a non-strong magnitude. In addition, we can also identify that children tend to give transfers to older and female parents. This is due to the fact that elderly people who are getting older and female elderly are also a strong reason to accept transfers because they may no longer have the ability to generate income from the labor market. In terms of children's characteristics, only the variable marital status of the child has a significant negative relationship with the family transfer at the 10% level of significance but the coefficient indicates small probability at 2,57 percentage point. Further, if the child who has income is married, then the family transfer given to parents will decrease.

These results are in line with previous research which states that family transfers are influenced by the characteristics of transfer recipients and givers (Chaudhuri & Roy 2009, Cameron & Cobb-Clark 2008, Frankenberg et al. 2002, Sun 2002). In addition, these results also confirm that there is no single factor affecting family transfer behaviour in Indonesia (Lee et al. 1994, Park 2003).

Now, we discuss coresidency as a dependent variable. Factors of parental characteristics that influence coresidency are age, gender and marital status of parents. All these variables have a strong correlation with coresidency at 1% level of significance. However, the coefficients of regression result reveal that the magnitude of those variables in influencing dependent variable is small probability which is only below 5 percentage point.

For example, result in column 2, table 5 said that as parents advance in age by one unit, the decision of coresidency will decrease as 0.87 percentage point. The results are also in line with the context of Indonesia where when parents get older the children tend not to coreside with parents. This explains that coresidency is like a cycle in Indonesia (Cameron & Cobb-Clark, 2008). It means that when parents get older, the child will also enter the age of marriage, so when the child is married, parents will not live together with their child. The table

also reports that when elderly people who are male and do not have a married status tend to coreside with their children. Conversely, the gender and marital status variables present that the elderly female who have married status tend to not live together with their child. This condition could be changed if an elderly female is a widow. Widow will tend to live with their children. Logically, the elderly widows are a group of elderly who are most vulnerable and require informal support from families, especially children.

For children's characteristics, the level of significance of the variables varies, but almost all have a significant correlation except children education for the highest level of education. It could be seen that female child who already have income, are not married and have elementary or secondary school education tend to live with their parents. Overall, the magnitude of children characteristics is greater than parents characteristic in influencing behaviour of coresidency.

Table 5. Regression Result using LPM (IFLS 5 data)

	(1)	(2)					
VARIABLES	Family	Coresidency					
	Transfer						
1. Parents							
Characteristics							
Health	-0.0504***	-0.0203					
	(0.0148)	(0.0132)					
Age	0.0064***	-0.0087***					
	(0.0010)	(0.0009)					
Gender	-0.2162***	0.0364***					
	(0.0154)	(0.0137)					
Marital status	-0.0200	-0.0485***					
	(0.0182)	(0.0163)					
2. Children							
Characteristics							
Marital Status	-0.0257*	-0.1516***					
	(0.0145)	(0.0130)					
Gender	0.0025	-0.0307**					
	(0.0145)	(0.0130)					
Education Level							
a. Elementary	0.0232	0.1253*					
	(0.0851)	(0.0760)					
b. Secondary	0.0338	0.1265*					
	(0.0843)	(0.0753)					
c. Higher	-0.0783	0.1166					
	(0.0852)	(0.0760)					
Ctt	0.4210***	1 2022***					
Constant	0.4318***	1.2933***					
	(0.1087)	(0.0971)					
Observations	4,475	4,475					
R-squared	0.0718	0.0625					
Standard errors in parentheses							
*** p<0.01, ** p<0.05							
Data Source: STATA output							

Data Source: STATA output

4.2 Main Model Using IFLS 4 only (Before Combining IFLS 4 and 5)

The table six in appendix shows the regression results by using LPM and Logit Method for IFLS 4 data.

There are many consideration why this study utilizes the LPM method rather than Logit methods. First is in analyzing and interpreting the magnitude of the impact of independent variables. By implementing LPM, we can analyze and interpret directly from the variable coefficients. Meanwhile, by using the Logit Method, we should analyze coefficients through odds ratios and marginal effects. Thus, the ultimate advantage of the linear model is easier to be interpreted or interpretability (Hellevik 2007). Second, according to Hellevik (2007), in many conditions the linear model is suitable as well, or almost as well, as the logistic model. We can see from the table six that the P-values of almost all independent variables in the LPM and Logit methods are statistically significant in explaining dependent variables. The regression results from using the LPM and Logit methods in the table above are not too different in term of association between dependent and independent variables. This result indicates that LPM methods can be appropriately used in estimating outcomes in the main model.

Elderly Labor Supply as Dependent Variable

In this session, we will discuss the regression results for the elderly labor supply as a dependent variable using the LPM and Logit method. Specifically, the regression results using LPM indicate that family transfer and coresidency have a significant negative relationship to the elderly labor supply. Parents who get transfers from their children have 6.35 more likely to decide not to work than parents who do not receive transfers. If we compare to the regression result of Logit method, family transfer and coresidency also have a statistically negative significant marginal effect. The possibility of parents receiving transfers from their children to work at retirement is 51 percentage points less likely than those who do not get transfers. For coresidency variable, implementing LPM method, parents who live with their children have 4.82 percentage points more likely not to participate in the labor market than parents who do living alone. Compared to the result of using the Logit method, the probability of parents coresiding with their children to work at retirement is 28 percentage points less likely than those who do not live with their children.

For demographic variables, by using LPM method, the result reveals first, the probability of male elderly to work is 10.39 percentage points more than female elderly. Second, elderly people who claim to have good health conditions will tend to work 15, 54 percentage points more likely than unhealthy elderly people. Third, the level of education has a negative correlation with the elderly labor supply. Parents who have a higher level of education tend to decide not to work again than parents who do not attend school. Finally, the result shows that when elderly people who are getting older, then they will decide not to work in his retirement.

We turn to discuss the regression results using the logit method for demographic variables. The results

show that health and gender of older people have a statistically positive significant marginal effect. In contrast, education and age variables have a statistically negative significant marginal impact. It can be seen that the magnitude of the probability of male elderly and having good health to work is 71.68 and 90.73 percentage points respectively than female elderly and elderly who have health problems. Moreover, highly educated parents have a reduction in the marginal effect to work again at 98.5 and 99.5 percentage points for secondary levels and higher-level education, respectively, rather than parents who do not attend school. Lastly, older parents are less likely to work at 11.10 percentage points rather than those who are younger.

Welfare Perspective as Dependent Variable.

Only health and education variables have a significant correlation with the elderly welfare perspective. The result underlines that health is a variable that is consistent in influencing the elderly welfare perspective. Based on the regression results of LPM method, we can identify that parents who have better health conditions will have the psychology that they feel sufficient in their household life by 13.22 percentage points more likely rather than unhealthy parents. Moreover, by using the Logit method, the probability of healthy elderly to be satisfied with their household condition is 69 percentage points more likely rather than elderly who have health problems. For education variables, we can see from the table that education also has an essential role in determining older people's satisfaction in their households. Estimated results from the LPM said that elderly people who have higher levels of education would have a higher level of satisfaction in their households than elderly people who do not attend school. Additionally, using Logit methods, the probability of parents who attained secondary and higher-level education to feel sufficient in their households life is 69.6 and 147 percentage point.

4.3 Main Model Using IFLS 4 and 5

This subchapter will explain the results of multiregression using a combined data of IFLS 4 and 5 (see table 7 in appendix). As mentioned earlier, the author will use a fixed effect and then compare with the LPM method using the same data. In applying the fixedeffect model, we will gradually regress with other independent variables to investigate the consistency of the impact of the main independent variables on the dependent variable. The results are as follows:

First of all, we will discuss the regression results using the LPM. The family transfer has a significant negative relationship with elderly labor supply when it is either without covariates or with covariates. The difference is only in the magnitude of the influence of the independent variable or the coefficient (6.21 and 4.70 percentage point). For the coresidency variable, there is a change in significance between the models without covariate and the complete model. The

coresidency variable has a significant relationship with the elderly labor supply when we add other explanatory variables to the model.

Using the fixed effect model above, we find that the two main independent variables which are family transfer and coresidency have a significant negative relationship with the elderly labor supply at the 5% and 1% respectively level of significance. The result also indicates that the main independent variables have a consistent significant negative relationship (see column 3-7). The result of the fixed-effect model with all covariates reveals that if there is an increase in family transfer by one percentage point toward elderly people, the decision of the older people to work at their retirement will decrease by 3.13 percentage points, while the other control variables remain constant (column 7). In addition, the result also shows that an increase of coresidency by one percentage point will reduce the elderly labor supply as 4.48 percentage points.

The regression results using the LPM method and LPM with fixed effects show the same correlation between family transfer and coresidency and the elderly labor supply. The difference is only in the magnitude of the impact or coefficient. When we utilize the LPM method with fixed effects, the effect of family transfers on elderly labor supply is smaller than the results of the LPM method only. Moreover, for coresidency, the results of the LPM method with fixed effects are higher than the results of LPM. From the above findings, this also implies that although independent variables have a significant correlation to the dependent variable, the economic impact is not substantial enough, less than ten percentage points.

These results confirm previous research. First, although the effect of family transfer was relative small, there was a significant negative relationship between the decisions of the elderly people to work with remittances or family transfers (Nguyen et al. 2012, Utomo et al. 2018). In addition, the coresidency variable has an essential role in determining whether or not to work for the elderly in Indonesia (Cameron & Cobb-Clark 2008). Moreover, the benefits obtained by the coresiding father come from joint consumption such as financing of expenses related to ceremonial expenditure and durable goods of family needs, Thus, it affect the father's decision to reduce the number of hours worked (Kochar 2000).

Furthermore, column 7 in table result also presents other results regarding control variables. It exhibits that variable age and age square variables show different correlations with elderly labor supply. It implies that elderly people who are 50-60 years old tend to decide still to work, but parents who are getting older will choose not to work in retirement Another variable that has a significant positive correlation is health. In a complete fixed-effect model and the LPM method, we can identify that health has the same level of significance, which is at 1% level of significance. The

table said an increase of health by one percentage point would raise decision of elderly people to work by 6.23 percentage point. This result means that elderly people who claim having good health conditions will decide to enter the labor market in retirement. Indeed, if we look back at the results of past regressions, health is the most consistent variable that has a significant positive correlation to the dependent variable.

In addition, the multi regression results in table 8 in appendix show only the control variables, namely age and health, which have a significant correlation with the elderly welfare perspective. Using LPM with fixed effects, health has a significant positive relationship with the welfare perspective at the 1% level of significance. It implies that the elderly which has good health conditions, will feel sufficient and satisfied in its household life. If the health variable increases by one percentage point, it will increase the welfare perspective as 9.07 percentage points. The age variable also indicates the same significant correlation. In the fixed-effect model, this shows that at the younger age, the elderly people feel satisfied with their household welfare, but when elderly people get older, their welfare perspective decreases.

Some of the results of this study are also consistent with previous studies, but several other results are different if we use two waves of IFLS data. For example, when we use IFLS 4 and 5 data separately, the results are in line with (Kaushal 2014, Cameron & Cobb-Clark 2008, Utomo et al. 2018, French 2005) which states that firstly, older people have higher education will reduce working hours when they are older. Secondly, the elderly women who get older will reduce the number of hours they work even more than the reduction in the older man. The most logical explanation is that educated people usually have a higher income so that their savings are enough when they have entered retirement age. Lastly, the number of working hours owned by workers who have good health status is higher than workers who have poor health status.

5. CONCLUSIONS

An ageing population is a phenomenon which is widespread in all parts of the world both in developed and developing countries. This phenomenon has triggered countries to issue policies and programs to prevent potential negative impacts. However, the programs and policies implemented in developed countries are more mature and structured rather than in developing countries. Consequently, due to inadequate pension and social assistance systems, the elderly population in developing countries will depend on income in the labor market or family support in the form of family transfer and coresidency.

This study aims to evaluate the impact of family transfer and coresidency on the elderly labor supply and their welfare perspective by implementing three statistical methods (LPM, Logit and LPM with Fixed Effect method). This research will also explore the

factors influencing transfer behaviour and coresidency in exploratory models to conduct a complete and comprehensive research. We divided these factors into two, which are parents' characteristics and children's characteristics such as health, age, marital status, gender, and education level

Based on the results and analysis, the parents' characteristics, which are health, age and gender, have a significant relationship with the family transfer behavior. Elderly people with poor health will gain more family transfer. Our result also indicate that children tend to give transfers to older and female parents. In terms of children's characteristics, only the variable marital status of the child has a significant negative relationship with the family transfer. If the child who has income is married, then the family transfer given to parents will decrease. Next, we discuss coresidency as a dependent variable. Factors of parental characteristics that influence coresidency are age, gender and marital status of parents. For children's characteristics, the level of significance of the variables varies, but almost all have a significant correlation except children education for the highest level of education. It could be seen that female child who already has an income, are not married and have elementary or secondary school education tend to live with their parents.

Although the effect of family transfer was small, there was a significant negative relationship between the decisions of the elderly people to work and family transfers. In addition, the coresidency variable has an essential role in determining whether or not to work for the elderly in Indonesia. The results of the regression reflect conditions in the context of Indonesia. Although family transfer and coresidency behaviour are widespread in Indonesia, the activity of the majority of older people in Indonesia is work. This situation can happen because maybe the nature of the family transfer is uncertain in terms of the amount and time of administration. Additionally, the amount of transfer that is too small is also an important factor in influencing elderly people to choose to participate in the labor market or not. Furthermore, the possible reasons why parents continue to choose to work even though the child lives with them is first, based on the literature, children's income is not sufficient to cover all household needs, especially secondary and tertiary needs such as recreation expenses, health care and others. Second, coresidency provides benefits to both parents and children. Thus, the reason parents keep working is simple to want to provide care for children even though they are adults.

Some of the results of this study related to demographic variables are firstly, older people have higher education will reduce working hours when they are older. Secondly, the elderly women who get older will reduce the number of hours they work even more than the reduction in the older man. The most logical explanation is that educated people usually have a higher income so that their savings are enough when

they have entered retirement age. Lastly, the number of working hours owned by workers who have good health status is higher than workers who have poor health status.

6. IMPLICATIONS AND RECOMENDATIONS

6.1 Implications

This research might enrich the literature relating to family transfer, coresidency and elderly labor supply and update the literature with more updated data and more comprehensive sample size. As mentioned before, there is still very limited research focused on the topic in Indonesia. There is only similar research in the previous two decades with smaller data and different methods. This research proposes a method using fixed effects for two-wave data. The purpose of using this method is in order to cover the endogeneity problem in the model. Lastly, this paper is expected to be used as an alternative in estimating the impact of intergenerational support towards elderly labor supply in the future.

6.2 Recommendation for Future Policy and Future Research

Because the impact is relative small, family transfer and coresidency might not be able to replace official government assistance such as pension schemes, social security and social institutions. However, these intergenerational support makes an important contribution to parents who are vulnerable to their health condition and old age. Future policies might be designed to encourage transfers from children to parents, such as taxes for children to ensure parental needs. In addition, policies also need to be focused on parents who have poor health conditions and older parents. Family transfer and coresidency also cannot fully replace the income of older people when they participate in the labor market. Therefore, the government needs to review and plan programs such as pensions without contributing to improving the welfare of the elderly society.

Regarding data source and time limitations, several points cannot be fully carried out in this paper. First, to overcome potential endogeneity problems, it might be more appropriate to use instrument variables as a solution rather than panel data. Secondly, the results will be stronger and representative if using IFLS data from IFLS 1 to IFLS 5. Thirdly, adding other variables besides the characteristics of the recipient and transfer provider to examine the motivations and determinants of family transfer and coresidency, such as parents' home prices, economic and social shocks.

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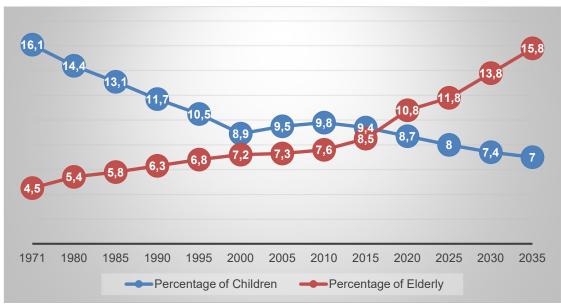
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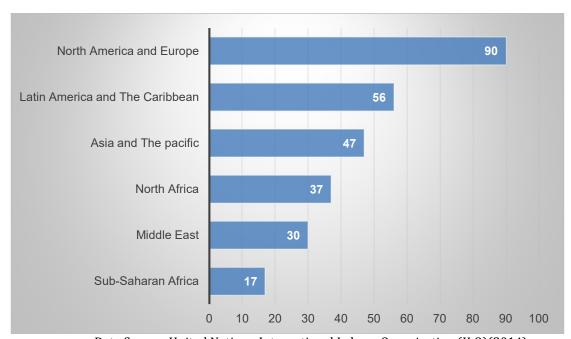
APPENDIX

Figure 1. The Changing of Demographic Structure in Indonesia



Data Source: Statistic Indonesia 2017

Figure 2. Percentage of Older Persons in Receipt of Pension by Region



Data Source: United Nations-International Labour Organization (ILO)(2014)

 $Table\ 3.\ Characteristics\ of\ Respondent\ in\ the\ Main\ Model$

Characteristics	Tot	Total		ale	Female	
	N	%	N	%	N	%
Sex	5798	100	3207	55.31	2591	44.69
Labor Supply						
1. Working	4718	81.37	2701	84.22	2017	77.85
2. Not Working	1080	18.63	506	15.78	574	22.15
Welfare Perspective						
1. Sufficient	4410	76.06	2462	76.77	1948	75.18

2. Not Sufficient	1388	23.94	745	23.23	643	24.82
Transfer	1500	23.54	, 13	23.23	043	24.02
	2041	CC 25	1072	F0 27	1000	75.00
1. Receive	3841	66.25	1872	58.37	1969	75.99
2. Not Receive	1957	33.75	1335	41.63	622	24.01
Coresidency						
1. LivingTogether	3858	66.54	2215	69.07	1643	63.41
2. Not Living	1940	33.46	992	30.93	948	36.59
together						
Health						
1. Good	4271	73.66	2446	76.27	1825	70.44
2. Bad	1527	26.34	761	23.73	766	29.56
Education						
1. Not Attend	997	17.20	296	9.23	701	27.06
2. Up to Elementary School	3202	55.23	1816	56.63	1386	53.49
3. Up to Secondary School	1204	20.77	820	25.57	384	14.82
4. Higher Education	395	6.81	275	8.57	120	4.63
Age						
1. from 50 to 59	2615	45.10	1399	43.62	1216	46.93
2. from 60 to 69	2302	39.70	1302	40.60	1000	38.60
3. from 70 to 79	770	13.28	437	13.63	333	12.85
4. from 80 to 89	102	1.76	61	1.90	41	1.58
5. from 90 to 94	9	0.16	8	0.25	1	0.04

Data Source: STATA output

Table 4. Characteristics of Respondent in The Exploratory Model

Characteristics	To	tal	Male		Female	
	N	%	N	%	N	%
Sex	44.87	100.00	2467	2008	2008	44.87
Family Transfer						
1. Receive	75.55	63.69	1333	54.03	1517	75.55
2. Not Receive	24.45	36.31	1134	45.97	491	24.45
Coresidency						
1. Living Together	75.25	75.98	1889	76.57	1511	75.25
2. Not Living Together	24.75	24.02	578	23.43	497	24.75
Parent Characteristics						
Health						
1. Good	2972	66.41	1713	69.44	1259	62.70
2. Bad	1503	33.59	754	30.56	749	37.30
Marital Status						
1. Married	3443	76.94	2250	91.20	1193	59.41
2. Others	1032	23.06	217	8.80	815	40.59
Age						
1. from 50 to 59	2590	57.88	1328	53.83	1262	62.85
2. from 60 to 69	1391	31.08	831	33.68	560	27.89
3. from 70 to 79	449	10.03	271	10.99	178	8.86
4. from 80 to 94	45	1.01	37	1.50	8	0.40
Children Characteristics						
Sex	4475	100.00	2807	62.73	1668	37.27
Marital Status						
1. Married	2724	60.87	1679	59.81	1045	62.65
2. Others	1751	39.13	1128	40.19	623	37.35
Education						

Characteristics	•	Total	Male		Female	
	N	%	N	%	N	%
1. Not Attend	31	0.69	16	0.57	15	0.90
2. Up to Elementary						
School	884	19.75	589	20.98	295	17.69
3. Up to Secondary School	2638	58.95	1751	62.38	887	53.18
4. Higher Education	922	20.60	451	16.07	471	28.24

Data Source: STATA output

Table 6. Regression Result using LPM and Logit Method (IFLS 4 data)

VARIABLES	(1) Elderly Labor Supply	(2) Elderly Labor	(3) Welfare	(4)
VARIABLES		_	Welfare	TAT 1C
		Supply	Perspective	Welfare Perspective
Family transfer	-0.0635***	-0.5174***	-0.0041	-0.0353
	(0.0126)	(0.0939)	(0.0134)	(0.0815)
Coresidency	-0.0482***	-0.2803***	0.0013	0.0129
	(0.0119)	(0.0800)	(0.0127)	(0.0745)
Gender	0.1039***	0.7168***	-0.0078	-0.0439
	(0.0114)	(0.0776)	(0.0121)	(0.0713)
Health	0.1554***	0.9073***	0.1302***	0.6900***
	(0.0129)	(0.0785)	(0.0137)	(0.0745)
Education Level				
1. Elementary	-0.0078	-0.0589	0.0261*	0.1391
	(0.0142)	(0.0937)	(0.0151)	(0.0849)
2. Secondary	-0.1433***	-0.9850***	0.1129***	0.6967***
	(0.0176)	(0.1148)	(0.0187)	(0.1155)
3. Higher Educ.	-0.1366***	-0.9954***	0.1823***	1.4695***
	(0.0266)	(0.1782)	(0.0283)	(0.2416)
Age	-0.0187***	-0.1110***	0.0000	0.0571
	(8000.0)	(0.0053)	(0.0008)	(0.0443)
age2	0.0000***	0.0001***	-0.0000	-0.0004
	(0.0000)	(0.0000)	(0.0000)	(0.0003)
Constant	1.7857***	7.6086***	0.6365***	-1.2908
	(0.0507)	(0.3518)	(0.0538)	(1.4355)
Observations	5,246	5,246	5,246	5,246
R-squared	0.1730		0.0349	
Standard errors in p	arentheses			
*** p<0.01, ** p<0.05				

Data Source: STATA output

Table 7. Regression Result using LPM with Fixed Effect and LPM (IFLS 4 and 5 data)

LPM			LPM with Fixed Effect				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
VARIABLES	Elderly Labor Supply	Elderly Labor Supply	Elderly Labor Supply	Elderly Labor Supply	Elderly Labor Supply	Elderly Labor Supply	Elderly Labor Supply
Family Transfer	-0.0621***	-0.0470***	-0.0321**	-0.0312**	-0.0312**	-0.0322**	-0.0313**
	(0.0108)	(0.0104)	(0.0144)	(0.0144)	(0.0144)	(0.0143)	(0.0143)

Coresidency	-0.0016	-0.0492***		-0.0483***	-0.0481***	-0.0457***	-
-							0.0448***
	(0.0108)	(0.0107)		(0.0166)	(0.0166)	(0.0165)	(0.0165)
Age		-0.0147*			-0.0056	0.0450***	0.0448***
		(0.0081)			(0.0058)	(0.0125)	(0.0124)
Age2		0.0000				-0.0004***	-
							0.0004***
		(0.0001)				(0.0001)	(0.0001)
Health		0.0889***					0.0626***
		(0.0112)					(0.0152)
Year_base			-	-0.1185***	-0.0800**	-0.0894**	-0.0812**
			0.1123***				
			(0.0083)	(0.0085)	(0.0403)	(0.0402)	(0.0401)
Constant	0.8560***	1.6590***	0.8911***	0.9258***	1.2519***	-0.3198	-0.3780
	(0.0113)	(0.2604)	(0.0116)	(0.0166)	(0.3338)	(0.4787)	(0.4776)
Observations	5,798	5,798	5,798	5,798	5,798	5,798	5,798
R-squared	0.0057	0.0805	0.0601	0.0629	0.0632	0.0699	0.0753
Number of pidlink			2,899	2,899	2,899	2,899	2,899
Standard error	rs in parenth	eses					
*** p<0.01, ** p							

Data Source: STATA output

Table 8. Regression Result using LPM with Fixed Effect and LPM (IFLS 4 and 5 data)

	LI	PM	LPM with Fixed Effect				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
VARIABLES	Welfare	Welfare	Welfare	Welfare	Welfare	Welfare	Welfare
	Perspectiv	Perspectiv	Perspectiv	Perspectiv	Perspectiv	Perspectiv	Perspectiv
	e	e	e	e	e	e	e
Family Transfer	-0.0305**	-0.0245**	0.0210	0.0213	0.0213	0.0206	0.0219
	(0.0118)	(0.0117)	(0.0172)	(0.0172)	(0.0172)	(0.0172)	(0.0171)
Coresidency	-0.0018	-0.0126		-0.0183	-0.0180	-0.0162	-0.0150
	(0.0119)	(0.0120)		(0.0199)	(0.0199)	(0.0199)	(0.0198)
Age		-0.0013			-0.0100	0.0275*	0.0272*
		(0.0092)			(0.0069)	(0.0150)	(0.0149)
Age2		-0.0000				-0.0003***	-0.0003***
		(0.0001)				(0.0001)	(0.0001)
Health		0.1542***					0.0907***
		(0.0127)					(0.0182)
Year_base			-0.0631***	-0.0655***	0.0027	-0.0043	0.0076
			(0.0099)	(0.0102)	(0.0483)	(0.0483)	(0.0482)
Constant	0.7820***	0.7605***	0.7783***	0.7914***	1.3686***	0.2053	0.1209
	(0.0124)	(0.2934)	(0.0139)	(0.0199)	(0.4002)	(0.5753)	(0.5732)
Observation	5,798	5,798	5,798	5,798	5,798	5,798	5,798
S		0.0000	0.01=1	0.01==	0.04.54	0.0101	
R-squared	0.0011	0.0282	0.0154	0.0157	0.0164	0.0191	0.0275
Number of pidlink			2,899	2,899	2,899	2,899	2,899
Standard errors in parentheses							
*** p<0.01, ** p<0.05, * p<0.1							

Data Source: STATA output