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Ruslan, Kadir and Sukma, Weni Lidya

BPS-Statistics Indonesia, BPS-Statistics Indonesia

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Employment Formalization in Indonesia: Role of Parents' Employment Mobility Toward Children's Employment Mobility

Kadir¹, Weni Lidya Sukma²

^{1,2}BPS-Statistics Indonesia

ABSTRACT

This study aims to analyze the impact of parents' employment status mobility on the children's employment status mobility. In doing so, we applied a two-stage multinomial logistic regression model. In this research, employment status mobility refers to a mobility status from informal to formal jobs and vice versa. Using data from the Indonesian Family Life Survey (IFLS) for the period 2007 and 2014, the profile of the Indonesian workforce was dominated by stayers. The estimation results of multinomial logistic regression indicate that only fathers' employment status mobility has a significant effect on the children's employment status mobility, where fathers who are stayers and experiencing upward mobility will provide greater opportunities for their children to be stayers and fewer opportunities to experience downward mobility. Moreover, the employment status mobility of mothers does not have a significant impact on their children's employment mobility. Our study points out the pivotal role of fathers in influencing employment formalization in Indonesia. Our findings could be valuable inputs for policy-making regarding employment formalization in Indonesia.

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Keywords:
formal, informal, Recommendation 204, parents' employment, job mobility, upward mobility, downward mobility

JEL Code: J01, J46, J62

1. Introduction

To provide decent work for all, the International Labor Organization (ILO) through Recommendation 204 emphasizes that the transition from the informal economy to the formal economy is very important (ILO, 2015). However, making the transition to formal work cannot easily occur. Data show that the contribution of informal workers is quite large in Indonesia. The informal employment trend in the period 1986-1997 declined because the Indonesian

¹ Corresponding Author at Directorate of Food Crops, Horticulture, and Estate Crops Statistics, Statistics Indonesia, Jalan Dr. Sutomo No. 6-8, Jakarta 10710, Indonesia.
E-mail address: kadirsst@bps.go.id, wenilidya@bps.go.id

economy experienced rapid growth as a result of structural transformation during the period (Nazara, 2010). After the economic crisis in 1998, the contribution of informal employment increased and in contrast, formal employment also declined. It is because many companies went out of business and eventually workers were laid off (Allen, 2016; Bappenas, 2009). However, in the past ten years, the contribution of informal employment has declined again and at the same time, the contribution of formal employment has increased. Although experiencing a downward trend, the trend has slowed since 2015, which also reflects a slowdown in the formalization of employment. It may also indicate that formal and informal economic segmentation between generations persists.

Job mobility from the informal to formal sectors or vice versa by someone is influenced by job choice decisions (Ehrenberg & Smith, 2012; Ng, Sorensen, Eby, & Feldman, 2007). One factor that influences the choice is the social environment including the job type of the parents. The main focus of this research is to examine how a parent's job can affect the type of job their children do. The study aims to scrutinize the effect of parents' jobs on their children's opportunities for labour mobility from informal to formal jobs. Parents' occupations in this study refer to the mobility of parent employment statuses for the period 2007-2014 (7 years). Previous research on formal and informal jobs has focused more on the reasons a person becomes an informal employee (Angel-uridinola & Tanabe, 2012; Carneiro & Henley, 2001; Herwantoko, Handayani, & Indrayanti, 2018; Porta & Shleifer, 2014; Tannuri-pianto & Pianto, 2002).

Research that has focused on the effect of parent employment mobility on child employment mobility has not been done much in Indonesia. Besides, studies analyzing the transition from informal to formal jobs in the case of Indonesia, as in Taufiq (2018), generally use the concept of formal-informal categorization based only on employment status and viewed within three years period. In this study, the formal-informal category is analyzed based on status and type of work, so that it can reflect the class status of a formal job that is more precise and higher than an informal job. Also, the job transfer experience was analyzed over seven years.

The results of this study are expected to enrich the literature on formal and informal jobs, specifically related to the role of parents' employment status mobility towards the mobility of their children's employment status. They are also expected to provide input to policies regarding employment formalization in Indonesia by presenting empirical findings on the transition from informal to formal jobs as the impact of parents' employment mobility.

Our paper is divided into five sections. The second part presents a literature review and conceptual framework. The third part contains some explanations of the methodology covering data sources, research variables, and specifications of the econometric model applied. The results of the model estimation and discussion are presented in the fourth section. Section five then presents conclusions and suggestions for further research.

2. Literature Review

Employment formalization is affected by the employment mobility done by someone. In carrying out job mobility, a person will consider his choice of work to be addressed (Ehrenberg

& Smith, 2012; Ng, Sorensen, Eby, & Feldman, 2007). The determination of job choices by an individual can be influenced by several factors. Patton and McMahon (2006) argue that job choices can be influenced by intrapersonal factors and external factors. The former includes demographic, physical, and psychological variables. Meanwhile, the latter consists of the social environment (parents and other family, friends, community) political situation, labour market, etc.

Mobility or changes in employment status, including from the formal sector to the informal one or vice versa, are also influenced by some factors that reflect individual and family characteristics such as gender (Danish Technological Institute, 2008; DeJong, Brawer, & Robin, 1971), age (Danish Technological Institute, 2008; Kronenberg & Carree, 2012; Li, 2013; (Bartel & Borjas, 1981; Berg, 1992; Green, 2010; Sousa-poza & Henneberger, 2004; Joseph, Ang, & Slaughter, 2015), marital status (Berg, 1992; Looze, 2017; Munasinghe & Sigman, 2004; Sousa-poza & Henneberger, 2004) location of residence (Brooks, Lee, Berry, & Toney, 2010; Kronenberg & Carree, 2012; Lehmer & Ludsteck, 2011), and household income (Looze, 2017; Sørensen, 2007).

Inkson (2004) explained that there are nine forms of work choices, namely inheritance, construction, cycle, suitability, experience, meetings and relationships with others, roles, resources, and information/stories. As a legacy, a job can be passed down from one generation to the next. The socioeconomic and employment status of children in the family is affected by pre-work experience and work expectations in childhood.

Following the parent's jobs is one of the ways children choose their jobs. For instance, children follow their parent job since they are comfortable and accustomed to the job. Children of parents who become entrepreneurs tend to also become entrepreneurs (Aldrich & Kim, 2015; Colombier & Masclet, 2007; Sørensen, 2007). The type of job desired by children is also much influenced by family background (Arvinta, 2018; Egerton, 1997). For example, children from farming families tend to become farmers (Arvinta, 2018).

The strength of the parent's job influence on their children's jobs indicates the existence of the intergenerational transmission of employment (Dunn & Holtz-eakin, 2000). That intergenerational transmission also reflects the occurrence of low mobility (Hout, 2018; Ji, 2018) showing that the next generation only changes their jobs to other kinds of jobs that have similar properties as the previous ones. Also, unbalanced wage structures and unequal opportunities for employment intergenerational transmission can increase poverty (Emran & Shilpi, 2011). Parents who work in a low-income job and transmit it to their children can cause the family to persist in poverty (vicious circle).

Several studies analyzing the effect of parents' jobs on children job found that those who work in a certain job have a greater chance of having children with the same type of job (Aldrich & Kim, 2015; Arvinta, 2018; Colombier & Masclet, 2007; Emran & Shilpi, 2011; Gubler et al., 2017; Hout, 2018; Hundley, 2006; Laband & Lentz, 1983; Lambert, Ravallion, & Walle, 2014).

Children tend to follow their parent's jobs because they have been exposed to the job since they were young (Aldrich & Kim, 2015). Besides, when they are teenagers, parents often participate

in determining educational majors related to work interests in the future (Aldrich & Kim, 2015; Borjas, 2016).

Parents' income is also one of the reasons children pursue their parent's job, especially when it comes to an entrepreneurial job (Hundley, 2006). Besides, the family background can also influence children's employment choices (Arvinta, 2018), especially in the case of family businesses. It could be explained as children will benefit by continuing their parent business or what is so-called premium earnings. In addition to income, parents' jobs will motivate children to choose the kind of education or training to obtain a job. The transmission of expertise from parents will be passed on to children by choosing the same occupation. Besides, parental education can indirectly affect the work of their children as adults (Davis-kean, 2005; Dubow, Boxer, & Huesmann, 2009). This study examines the impact of the parent's employment status mobility on their children's employment status mobility by controlling the influence of child characteristics and household characteristics. By doing so, this study wants to analyze whether the impact can push employment formalization in Indonesia. The conceptual framework of the study can be summarized in Figure 1.

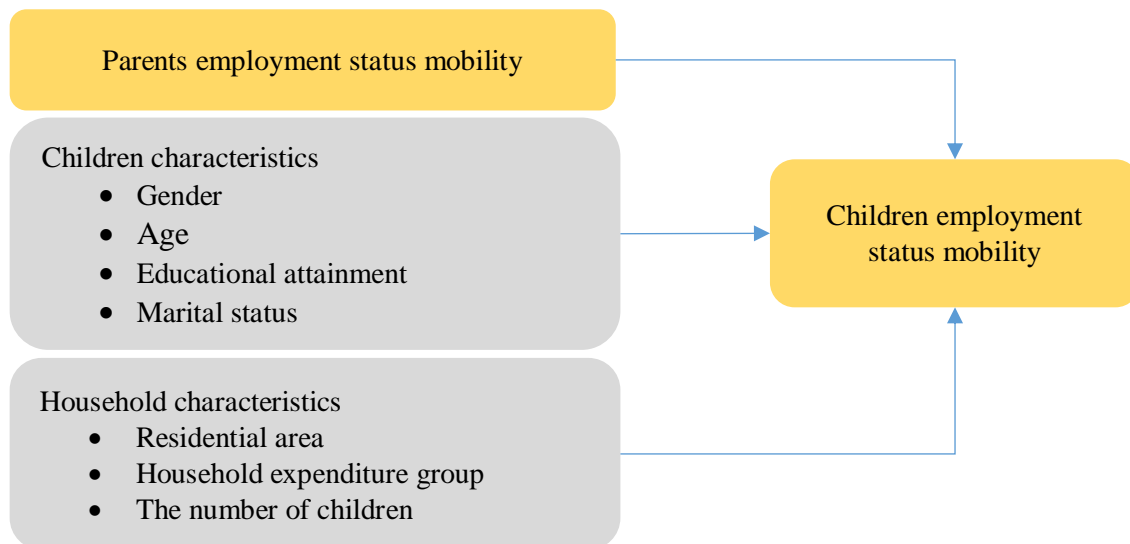


Figure 1. Conceptual framework

3. Method, Data, and Analysis

This research analyzed data on the results of the 2007 and 2014 Indonesia Family Life Survey (IFLS). We observed individuals who were children in a household, aged 15-64 years old, not in school and had an employment status and information about the job of their parents. To investigate the effect of parents' job mobility on their children's employment status mobility, ideally, we not only observe someone who lives with their parents but also those who no longer live with their parents. However, due to limited information, this study only focused on individuals living with their parents. By following Hout (2018), the impact of parents' employment status is separated between the influence of the father's job and the mother's job. Among the 5,063 individuals that live with their parents and have information about the employment status of their parents, 1,661 individuals were analyzed using the child-father

model to investigate the impact of father employment status mobility, and 3,172 individuals were analyzed with the child-mother model to investigate the impact of the mother employment status mobility.

Data used in this study did not provide information that allows the definition of formal and informal workers according to the 17th International Conference of Labor Statistics (ICLS) to be applied. It potentially causes bias in the definition of the formal and informal job that is evolving along with the development of the digital economy. This study also does not cover employment mobility related to resettlement. Thus, the impact of migration cannot be investigated. Also, employment mobility in this study only captures the mobility experienced by individuals in 2014 to one-time experience in the past in different jobs. In other words, this study overlooked the inter-year dynamics of individuals' employment mobility between 2007 and 2014.

Employment status mobility in this study only covered the main occupation of individuals, whereas additional occupation was not analyzed. About 23.41 per cent of individuals in the study have an additional job. Among those who have additional work, individuals, who work as formal workers in their main jobs and have additional work as informal workers, make up about 56 per cent of the total observations. Meanwhile, individuals, who work as informal workers in their main jobs and at the same time have additional work as formal workers, account for 23.40 per cent of the total observations. However, the combined mobility of main and additional occupations was not the focus of this study.

This study uses a two-stage multinomial logistic regression to analyze the effect of parents' employment status mobility on the children's employment status mobility. This approach was applied since the individuals observed only those who worked in 2014, which raises the issue of sample selection bias (Cameron & Trivedi, 2005; Heckman, 1979; Lee, 1982).

In this study, selectivity bias may occur when the unit of analysis is only those who have a job and at the same time people who do not work are not included in the model. In general, the probability of work exists for everyone who works or does not on the data, where the opportunity is between 0 and 1. To avoid this bias, the employment probability is estimated from the probit model of person participation in the labour market. Then, the predicted value of the job probability will be used in the next model or known as the two-stage regression. The treatment of selectivity bias in this study follows a procedure developed by Lee (1982).

The dependent variable is the children's employment status mobility in households. The variable consists of three categories, namely stayer, upward mobility, and downward mobility. The term upward mobility means that a person moves from one social status to a higher one, and vice versa with downward mobility which direction goes down to a lower status (Collins, 2015; Danish, 2008; El-mallakh & Wahba, 2016).

We assume that the labour market consists of two sectors namely formal and informal. Therefore, the mobility of employment status in this study is defined as a change in the status of the main jobs from the informal sector to the formal sector or vice versa. If there is no change in employment status during the period 2007-2014, the observation unit is categorized as a stayer and coded "0" which will then be used as a base category. If the job in 2014 was a formal

job and the previous job in the period 2007-2013 was (at least once) an informal job then it is categorized as upward mobility and will be coded 1. And if the job in 2014 was an informal job and the previous job in 2007-2013 is (at least once) a formal job then categorized as downward mobility.

The way we group the parent's employment status mobility is almost the same as in the children's employment status mobility. The variable consists of four categories: others coded "0", stayers coded "1", upward mobility coded "2" and downward mobility coded "3". Others used as a base category, is another type of mobility, including for a change from unemployed to employed status. Whereas categories 1 to 3 have the same definition as child mobility. For parents living with their children in 2014, the employment status is determined by investigating the status of job in 2014 and the history of work in the period 2007-2013. Whereas for parents living with children in 2007, the employment status is determined from 2007. An explanation of the variables used in this study is presented in Table 1.

Table 1. Definition of dependent and explanatory variables

Dependent variables: Children employment status mobility (0 stayers; 1 upward mobility; downward mobility)	
Parents employment status mobility	0 others (reference category); 1 stayer; 2 upward mobility; 3 downward mobility
Gender	"0" women (reference category); "1" men.
Age	Numerical variable
Age squared	Squared (capturing the quadratic impact of age)
Marital status	"0" single (reference category); "1" married, and "2" ever married (divorce).
Educational level attained	"0" no school (reference category); "1" elementary education; "2" secondary education, "3" higher education.
Residential area	"0" rural (reference category) and "1" urban.
Household expenditure group	"0" 40 per cent low (reference category); "1" 40 per cent medium; and "2" 20 per cent high.
The number of children in the household.	Consisting of two variables, namely the number of pre-school children aged 0-6 years old; and the number of school-age children aged 7-17 years old.

Before estimating the main model for employment mobility, estimation was conducted for the selection model. Therefore, the first step regression is done by applying the probit model to estimate the probability of employment participation as follows.

$$\Phi^{-1}(Pr(y_i = 1|x_i)) = x_i' \beta + \varepsilon \quad (1)$$

Where:

y_i = employment status ("0" work as reference categorized, and "1" not work)

β = vector of parameters

x_i = vector of explanatory variables consisting of gender, age, educational, marital status, number of children, residential area, and household expenditure.
 ε = error term

The estimation results of the model are presented in the Appendix.

In the second step, the employment mobility model was estimated. We applied the multinomial logistic regression model as follows.

$$\Pr(y_i = o_j | \alpha_i, \delta_j \beta, x_i, \lambda) = \frac{\exp(\alpha_i + \delta_{1j} \text{stay_par} + \delta_{2j} \text{upward_par} + \delta_{3j} \text{downward_par} + x_i' \beta_j + \lambda)}{1 + \sum_{j=1} \exp(\alpha_i + \delta_{1j} \text{stay_par} + \delta_{2j} \text{upward_par} + \delta_{3j} \text{downward_par} + x_i' \beta_j + \lambda)} \quad (2)$$

Where:

y_i = children employment status mobility (0 *stayers as base*; 1 *upward mobility*; and 2 *downward mobility*)
 β = vector of parameters
 x_i = vector of control variables
 δ = parameter of parents employment status mobility
stay_par = parent as stayers
upward_par = parent experiencing *upward mobility*
downward_par = parent experiencing *downward mobility*
 λ = *Selection correction* obtained from the selection model (Equation 3.1)

The model in Equation (2) was presented in the form of the child-father model and child-mother model separately. It is applied since there are differences in the influence of father and mother employment status mobility on children employment status mobility. The presentation of inferential analysis was given in the form of marginal effects.

4. Results and discussion

The general profile of workers captured by IFLS shows that it is dominated by workers who do experience employment status mobility. This is consistent with ADB's report (2018) stating that workers in Indonesia have a long tenure period for one type of job. More than half of the employees work for ten years or more. Meanwhile, those who work less than three years only made up less than 25 per cent of the total workers. The situation continued throughout the years 2010-2016. Moreover, the results of the 2017 National Labor Force Survey show that the average length of employment tenure is 9.57 years. The worker with the longest working period had the status of assisted by temporary workers for 14.13 years (BPS, 2009-2018).

Table 2 presents the distribution of the independent variables used in this study. Numerical independent variables are presented in average along with the standard deviations in the parentheses according to the categories of the dependent variable. Meanwhile, the independent variables in the form of categorical data are presented in percentages according to the categories of the dependent variable.

Based on Table 2, parents, both fathers and mothers who are stayers, have the most children who are also stayers. For fathers experiencing upward mobility, the highest proportion of children performed upward mobility. Conversely, for fathers experiencing downward mobility, the largest proportion of children experienced downward mobility. Meanwhile, the majority of children experienced downward mobility both for mothers experiencing upward and downward mobilities.

Table 2. Children employment status mobility during 2007-2014 by parents' employment status mobility and characteristics of children and household

Variable		Children employment status mobility		
		<i>Stayer</i>	<i>Upward mobility</i>	<i>Downward mobility</i>
Numerical variable (mean [std. deviation])				
Children characteristics	Age	32,87 (8,62)	33,62 (7,96)	32,37 (7,84)
Household characteristics	Number of pre-school children aged 0-6 years old	0,64 (0,48)	0,64 (0,48)	0,67 (0,47)
	Number of school-age children aged 7-17 years old	1,35 (1,05)	1,36 (1,04)	1,24 (1,10)
Categorical variable (%)				
Father employment status mobility	Others	59,80	64,81	72,40
	<i>Stayer</i>	32,65	26,54	20,40
	<i>Upward mobility</i>	4,62	2,47	2,40
	<i>Downward mobility</i>	2,93	6,17	4,80
Mother employment status mobility	Others	72,07	81,43	77,47
	<i>Stayer</i>	23,95	15,00	17,47
	<i>Upward mobility</i>	2,22	2,14	3,04
	<i>Downward mobility</i>	1,75	1,43	2,03
Gender	Women	55,03	28,36	36,39
	Men	44,97	71,64	63,61
Education	No school/low education	15,61	18,46	15,57
	Elementary education	36,62	41,34	40,10
	Secondary education	35,10	34,40	37,41
	Higher education	12,67	5,80	6,92
Marital status	Single	16,15	15,69	14,92
	Married	80,27	80,53	81,21
	Ever married (divorce)	3,59	3,78	3,86
Residential area	Rural	39,38	40,89	47,40
	Urban	60,62	59,11	52,60
Expenditure household	40% low	32,71	35,17	37,42
	40% medium	44,19	45,89	42,55
	20% high	23,11	18,93	20,02

Source: IFLS 2007 and 2014, authors' calculation

Individual and household characteristics can also describe the profile of workers performing employment mobility. Individuals experiencing employment mobility are dominated by workers aged 32-34 years old, less educated, married, living in urban areas, coming from households with medium expenditure, and having around 1-3 children aged 0-17 years old in their household. Moreover, the majority of women became stayers, whereas the highest proportion of men experienced employment mobility both upward and downward mobilities.

Regarding education, the higher the education, the greater the proportion of individuals to become stayers. Whereas the lower the education, the greater the proportion of individuals doing job mobility. When it comes to the residential area, individuals living in urban areas have the greatest proportion to become stayers. In contrast, individuals living in rural areas have a greater proportion of experiencing employment status mobility than individuals in urban areas. Furthermore, the higher the household expenditure the higher proportion of individuals to become stayers. Contrary, the lower the household expenditure, the higher proportion of individuals doing job mobility.

4.1. Impact of father employment status mobility

Estimation results show that λ is not statistically significant confirming the absence of any selectivity bias (Lee, 1982). However, we keep selection treatment maintained.

Table 3. Marginal effects of the child-father model

Dependent variables		Children's employment status mobility					
		<i>Stayer</i>				<i>Stayer</i>	
		dy/dx	S.E	dy/dx	S.E	dy/dx	S.E
Mother employment status mobility	Others	Base					
	Stayers	0.084 ***	0.021	-0.021	0.013	-0.063 ***	0.017
	Upward mobility	0.081 *	0.044	-0.020	0.030	-0.061 *	0.034
	Downward mobility	-0.049	0.061	0.041	0.044	0.008	0.048
Presence of father	Yes	Base					
	No	0.025	0.077	-0.027	0.056	0.002	0.057
Gender	Woman	Base					
	Man	-0.015	0.117	0.002	0.080	0.013	0.098
Age		**	0.013	0.018 **	0.008	0.013	0.012
Age (quadratic)		0.001 **	0.000	0.000 **	0.000	0.000	0.000
Education	No education	Base					
	Primary education	0.012	0.034	0.000	0.023	-0.012	0.030
	Secondary education	0.066 *	0.035	-0.011	0.023	-0.055 *	0.030
	Higher education	0.165 ***	0.046	-0.045	0.031	-0.120 ***	0.037
Marital status	Single	Base					

Dependent variables		Children's employment status mobility					
		Stayer				Stayer	
		dy/dx	S.E	dy/dx	S.E	dy/dx	S.E
	Married	-0.039	0.027	0.005	0.018	0.034	0.022
	Ever married	-0.038	0.060	-0.031	0.026	0.069	0.057
Residential area	Rural	Base					
	Urban	0.034	0.022	-0.010	0.015	-0.024	0.018
Household expenditure group	40% low	Base					
	40% medium	-0.026	0.022	0.014	0.014	0.012	0.018
	20% high	-0.074 ***	0.029	0.021	0.018	0.052 **	0.025
Number of pre-school children (0-6 years old)			0.022	-0.007	0.016	0.001	0.019
Number of school-age children (7-17 years old)			0.010	0.007	0.006	-0.012	0.009
λ (selection correction)		-0.220	0.316	0.133	0.216	0.087	0.269

Note: * is statistically significant at the 10 % level, ** is significant at 5% level, *** is significant at 1% level, SE: standard error

Estimation results point out that the employment status mobility of the father only impacts the mobility of the child to become a stayer and experiencing downward mobility. The probability of children for not being stayers is larger for those having a father as stayers and experiencing upward mobility. Conversely, the probability of children experiencing downward mobility is smaller for those having a father as stayers and experiencing upward mobility. This pattern applies to all ages (see Figure 2 through Figure 4).

Figures 2 through Figure 5 show that the probability of children, having a father as stayers and experiencing upward mobility, to become stayers decreased as they get older. The probability will return to climb up after the age of 30. On the other hand, the probability of a child, having a father as a stayer and experiencing upward mobility, to perform downward mobility consistently goes up along with the age. However, the probability starts to drop when the child aged 30 years old.

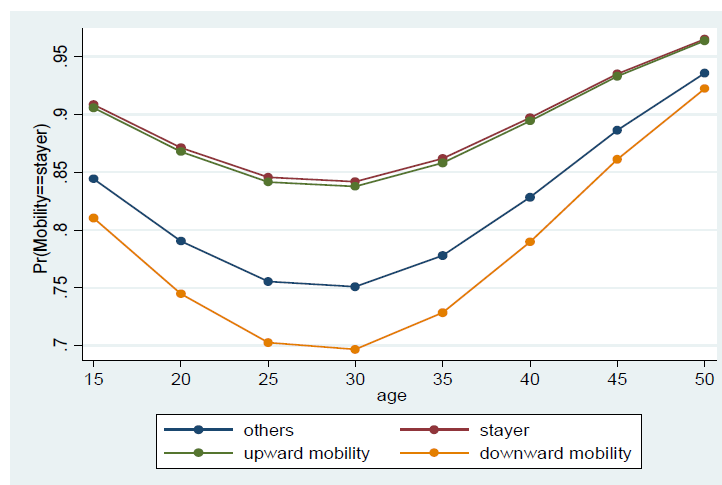


Figure 2. Predicted probability of children becoming stayers by fathers' employment status mobility and children age

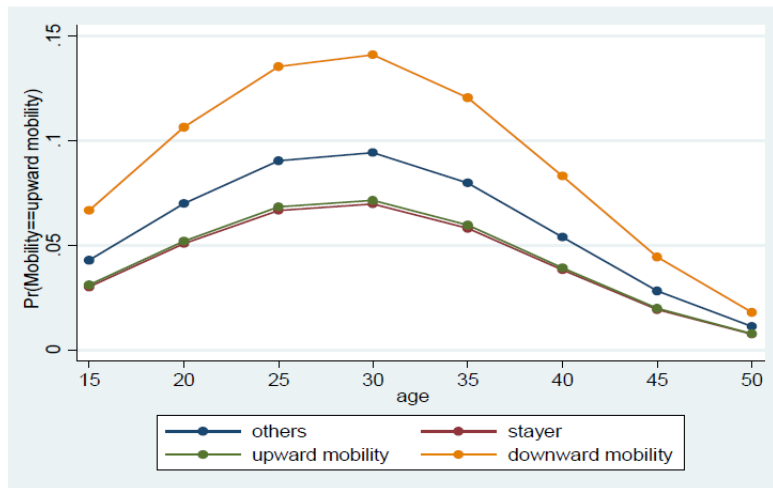


Figure 3. Predicted probability of children experiencing upward mobility by fathers' employment status and children age

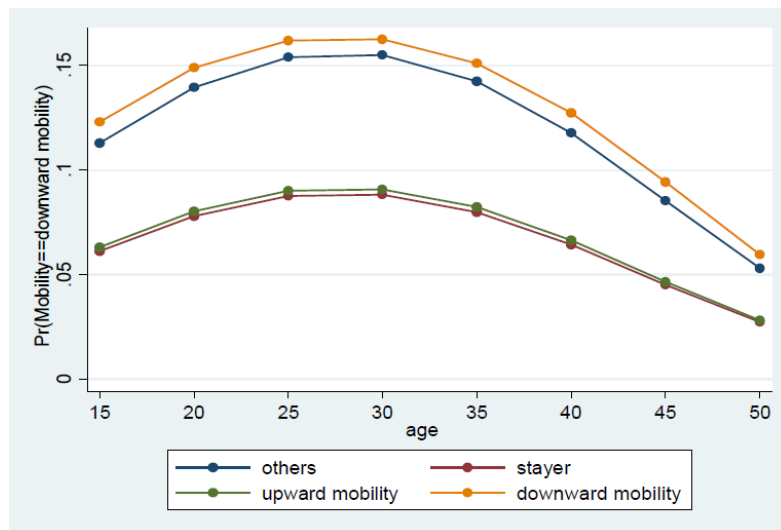


Figure 4. Predicted probability of children experiencing downward mobility by fathers' employment status mobility and children's age

The estimation results (Table 3) show that the probability of a child experiencing upward mobility is only affected by age. While other variables only affect the probability to become a stayer or experiencing downward mobility. The influence of age on the children's employment status is quadratic in both women and men. As a child gets older the probability of a child experiencing upward mobility is greater and will decrease at the age of 30. It is consistent with the previous studies that employment status mobility mostly occurs in the age of 15-34 (Danish Technological Institute, 2008; Kronenberg & Carree, 2012).

It can be seen from Figure 5-7 that the probability of women to become stayers is higher than men for all ages. Conversely, the chances of women experiencing downward mobility are lower than men of all ages. It can also be seen that the probability gap between men and women becoming stayers and experiencing downward mobility is larger at the age of less than 30 than at the larger ages. The smallest gap occurs when individuals are 50 years old. In contrast, there

is no difference between men and women regarding the probability of experiencing upward mobility.

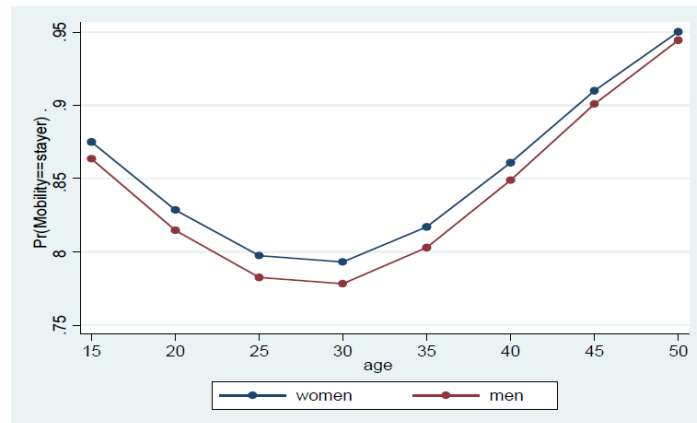


Figure 5. Predicted probability of children becoming stayers by age and gender

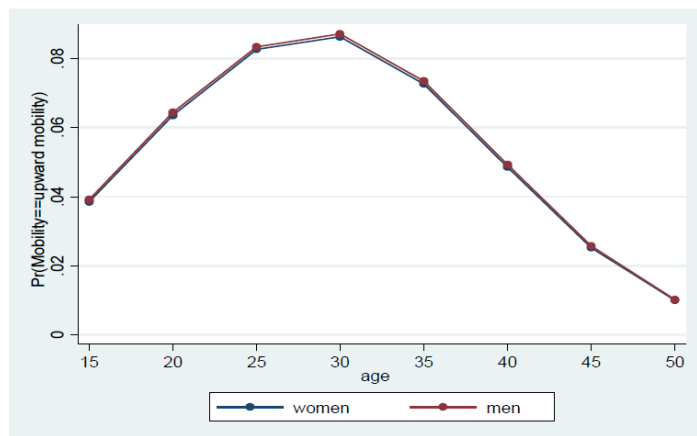


Figure 6. Predicted probability of children experiencing upward mobility by age and gender

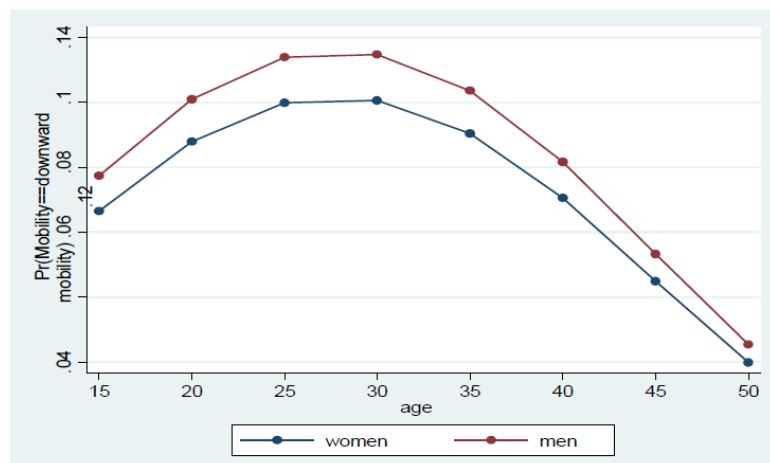


Figure 7. Predicted probability of children experiencing downward mobility by age and gender

When it comes to the impact of education, children having secondary education and above are more likely to become stayers and less likely for experiencing downward mobility than those who do not attend school. The higher the education, the greater the probability to become a stayer, and vice versa. Meanwhile, household expenditure has a significant impact on the employment status mobility of a child. In this study, household expenditure groups are used as proxies of income. Regression results show that children coming from households with higher incomes are less likely to become stayers and more likely for experiencing downward mobility. Other control variables, namely gender, the presence of the mother in the households, marital status, residential area, and the number of children did not have a significant impact on the mobility status. However, the impact still has the same direction as previous studies.

Estimation results show that the presence of working fathers can affect the employment status mobility of their children. The probability of a child becoming a stayer is larger in the household where a father is also a stayer and experiencing upward mobility. Conversely, the chances of a child experiencing downward mobility will be smaller in the household where the father is a stayer and experiencing upward mobility. It can be explained through the transmission of father human capital. Children get the experience of pre-work from their fathers when making the transition to work (Dunn & Holtz-eakin, 2000; Laband & Lentz, 1983; Sørensen, 2007). Through that mechanism, fathers becoming stayers in a formal job tend to have children who are also stayers in a formal job.

4.2. Impact of mother employment status mobility

As stated earlier, this study also estimated the child-mother model to investigate the impact of mother employment status mobility on children's employment status mobility. It was conducted to follow the previous studies (Emran & Shilpi, 2011; Gubler et al., 2017; Hout, 2018).

The estimation results point out that there is a significant impact of the mother's employment status mobility on their children's employment status mobility. Only other control variables have significant effects on children's employment status mobility. The direction of the relationship of each variable in the estimated model is the same as in the previous one, but the magnitude of the impact is slightly different. It can be seen that age, the presence of a father in the household, education, marital status, and the number of children have statistically significant effects on the transition of children to formal employment.

Table 4. Marginal effects of the child-mother model

Dependent variables		Children's employment status mobility					
		<i>Stayer</i>		<i>Upward mobility</i>		<i>Downward mobility</i>	
		dy/dx	S.E	dy/dx	S.E	dy/dx	S.E
Mother employment status mobility	Others	Base					
	Stayers	0.000	0.018	0.006	0.014	-0.006	0.014
	Upward mobility	-0.067	0.049	0.004	0.034	0.062	0.046
	Downward mobility	-0.014	0.051	0.009	0.035	0.005	0.041
Presence of father	Yes	Base					
	No	0.035 *	0.021	-0.028 *	0.015	-0.006	0.017
Gender	Woman	Base					
	Man	0.036	0.074	0.000	0.049	-0.036	0.066
Age		-0.037 ***	0.009	0.016 ***	0.006	0.021 ***	0.007
Age (kuadratic)		0.001 ***	0.000	0.000 ***	0.000	0.000 ***	0.000
Education	No education	Base					
	Primary education	0.022	0.022	-0.004	0.016	-0.018	0.019
	Secondary education	0.049 **	0.024	-0.018	0.016	-0.031	0.020
	Higher education	0.142 ***	0.029	-0.054 ***	0.020	-0.088 ***	0.024
Marital status	Single	Base					
	Married	-0.039 **	0.019	0.023 *	0.013	0.016	0.015
	Ever married	-0.018	0.035	-0.008	0.018	0.026	0.032
Residential area	Rural	Base					
	Urban	0.030 **	0.015	0.011	0.010	-0.041 ***	0.012
Household expenditure group	40% low	Base					
	40% medium	-0.008	0.015	-0.002	0.010	0.010	0.012
	20% high	-0.012	0.020	0.002	0.014	0.010	0.016
Number of pre-school children (0-6 years old)		0.013	0.016	-0.005	0.011	-0.008	0.013
Number of school-age children (7-17 years old)		-0.006	0.007	0.008 *	0.004	-0.003	0.006
λ (selection correction)		-0.486 **	0.200	0.206	0.142	0.281 *	0.166

Note: * is statistically significant at the 10 % level, ** is significant at 5% level, *** is significant at 1% level, SE: standard error

The effect of age on the mother-child model is the same as in the father-son model. The effect is quadratic on the children's probability of experiencing employment status mobility. The turning point of the impact is at the age of 30. Regarding the presence of a father in the household, it can be seen that although the employment status mobility of the mother is not significant, the presence of the father has a significant impact on the children's employment status mobility. The estimated model shows that children are more likely to become stayers and less likely to experience upward mobility due to the presence of a father in the household. It could be explained as a child will be more affected by changes in the father employment

status than the mother (Heinrich, 2014). Besides, the existence of a patriarchal culture in Indonesia (Aisyah & Parker, 2014) resulted in the crucial role of fathers in providing all financial needs compared to mothers (Becker, 1991; Heinrich, 2014).

Children who are married and live with their mothers are more likely to become stayers and more likely to experience upward mobility. It can be seen from Figures 8-10 that married women are less likely to become stayers and more likely to perform downward mobility than those who are married. In experiencing upward mobility, there is no significant difference between married women and married men.

The finding that men are more likely to experience employment status mobility than women is consistent with previous studies. It could be explained as men are more mobile than women due to the traditional roles tied to women in households (Danish Technological Institute, 2008; DeJong et al., 1971). Meanwhile, the finding that men are less likely of doing upward mobility and more likely of doing downward mobility could be explained since the type of work of men in the IFLS is dominated by manual work (Herwantoko et al., 2018). Thus, men are more likely to find additional work outside their main job, which generally reduces work time in the main job.

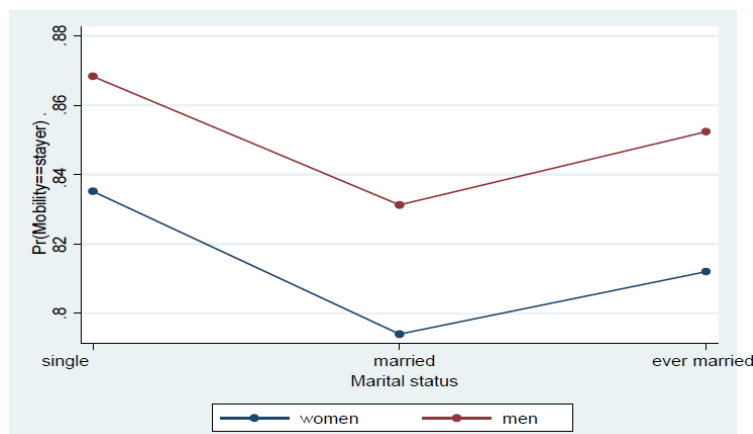


Figure 8. Predicted probability becoming stayers by gender and marital status

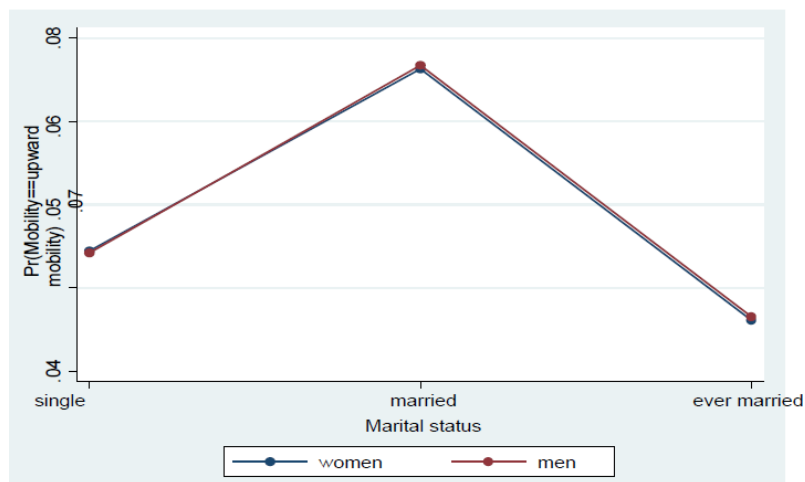


Figure 9. Predicted probability of children experiencing upward mobility by gender and marital status

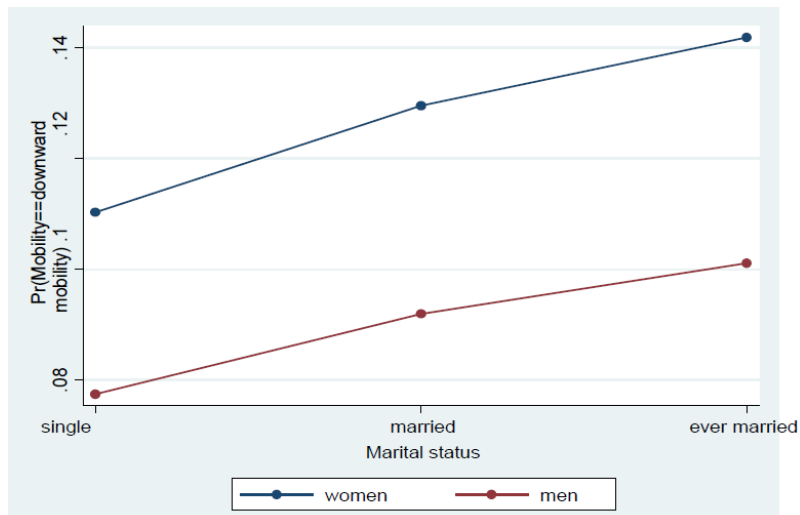


Figure 10. Predicted mobility of children experiencing downward mobility by gender and marital status

The estimation results of the model also show that children who live in urban areas are more likely to become stayers and less likely to perform downward mobility with the presence of mothers in the household. When it comes to the number of children, the existence of school-age children in the household increases the possibility of children experiencing upward mobility. Moreover, the economic status of the household does not affect the employment status mobility of children living with their mothers.

5. Conclusion and Suggestion

This study aims to examine employment formalization in Indonesia through the impact of the parent's employment status mobility on their children's employment status mobility. The estimation results of the two-stage multinomial logistic regression show that only the father's employment status mobility significantly affects the opportunity of children to perform employment status mobility. Children with fathers who become stayers and experience upward mobility are more likely to become stayers and less likely to perform downward mobility. It means that the father's work experience can be transmitted to his children, but it cannot affect the probability of their children doing upward mobility.

The results of this study also indicate that the presence of parents in the household does not significantly boost the formalization of their children's employment status. The transition experience of parents to a formal job could only reduce the probability of their children not working a worse job, and could not be the main driver for their children to transition from informal to formal jobs (upward mobility).

Future studies are expected to cover children who are not living with their parents. Related to job mobility. Further research is also expected to consider the dynamics of employment mobility between years. The definition of formal and informal jobs can be improved based on the 17th ICLS in longitudinal employment data. Besides, if possible, further research can consider additional job beside the main job in analyzing employment mobility.

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Appendix

Marginal effects of selection model

Predict outcome = 1 (Bekerja)

Average marginal effects (AME)

Number of observation = 22.445

Independent variables		dy/dx	Std. Error	z	P> z	[95% Conf. Interval]	
Gender	Women	Base					
	Men	0.318	0.005	65.120	0.000	0.309	0.328
Age groups (years)	15-18	Base					
	19-24	0.108	0.018	6.060	0.000	0.073	0.143
	25-49	0.206	0.018	11.600	0.000	0.172	0.241
	50-64	-0.229	0.196	-1.170	0.243	-0.613	0.155
Education	No School	Base					
	Elementry education	0.004	0.008	0.490	0.625	-0.011	0.019
	Secondary education	0.007	0.008	0.850	0.394	-0.009	0.023
	Higher education	0.105	0.009	11.160	0.000	0.086	0.123
Marital status	Single	Base					
	Married	0.006	0.009	0.610	0.542	-0.013	0.024
	Ever married (divorce)	0.089	0.014	6.150	0.000	0.061	0.117
Number of children in the households		-0.013	0.005	-2.520	0.012	-0.024	-0.003
Number of children in the households squared		0.001	0.001	0.920	0.355	-0.001	0.003
Residential area	Rural	Base					
	Urban	-0.027	0.005	-5.260	0.000	-0.037	-0.017
Household expenditure group	40% low	Base					
	40% medium	0.022	0.006	3.850	0.000	0.011	0.034
	20% high	0.022	0.007	3.060	0.002	0.008	0.036

Source: IFLS 2014. authors calculation