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Variables Affecting Multiple Job Holding Status among Older Workers in Indonesia

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Abstract

As economic and social demands increase, many individuals are compelled to take on multiple jobs, a phenomenon known as multiple job holding (MJH). In Indonesia, the rate of multiple job holders has been rising yearly, and the aging population phenomena increases the potential for older workers to take on multiple jobs. While MJH can offer financial benefits, it may also pose significant challenges, particularly for older workers. Although Indonesia records the highest rate of multiple job holders in Southeast Asia, research on this topic remains limited, and no studies specifically focusing on older workers. This study aims to examine the characteristics of older multiple job holders in Indonesia and the variables that affect them. The data used is Sakernas August 2022 microdata, which is analysed descriptively and inferentially using binary logistic regression. The results reveal that 18.16percent of older workers hold multiple jobs. Older workers who tend to have multiple jobs are young elderly, male, married, educated up to primary school, live in rural areas, have shorter working hours in their main job, and work in the informal sector. The high rate of MJH among older workers shows the need for targeted government interventions, such as intensifying school programs for older adults to improve the quality of their competencies and providing social assistance for older adults according to their age.

Keywords: multiple job holding, elderly workers, binary logistic regression

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1. Introduction

The concept of welfare is dynamic, continuously adapting to the evolving needs of individuals and societies (Zahrotun & Linarti, 2016). This evolution drives people to seek employment and earn a living to secure their necessities (Ginting, 2018). While a declining unemployment rate in Indonesia suggests a growing number of people are gainfully employed (BPS, 2023a), simply having a job doesn't guarantee a person can meet their essential needs

(Martinez, Western, Haynes, Tomaszewski, & Macarayan, 2014). This disparity often arises when wages are insufficient to cover the cost of living. One common strategy to bridge this gap is multiple job holding (MJH). Multiple job holding (MJH) refers to individuals simultaneously working two or more jobs (ILO, 2004). This trend has been on the rise in Indonesia, with the percentage of workers engaged in MJH increasing annually, as shown in Figure 1. Although there was a temporary decline in 2020 and 2021 due to the recession caused by the COVID-19 pandemic, the recovery of MJH since then highlights its growing significance as a strategy for enhancing income and improving economic well-being.

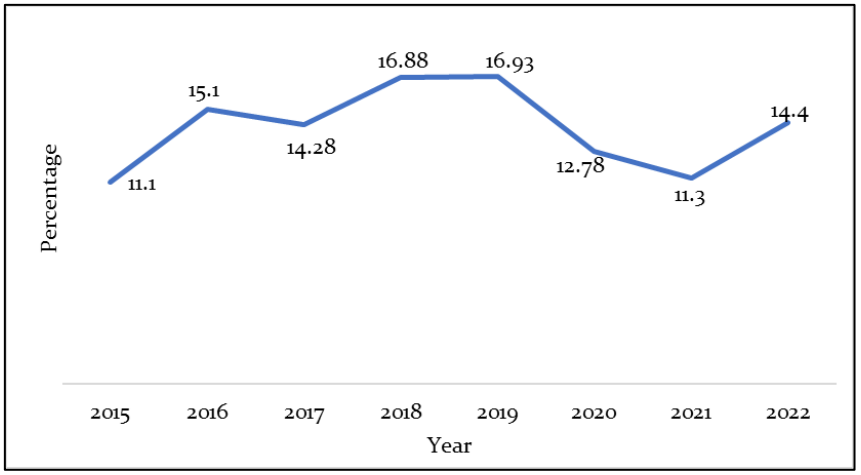

Figure 1. Percentage of multiple job holder in Indonesia in August 2015 – 2022
Source: International Labour Organization (2015 – 2022)

The MJH is a non-standard job that presents both positive and negative impacts (Osborne & Warren, 2006). On the positive side, MJH can lead to increased income, greater job satisfaction, the development of new skills, and the opportunity to pursue a career aligned with one's interests (Pouliakas, 2017). Meanwhile, the negative impacts associated with MJH include causing potential conflicts between the demands of the main job and its part-time job, the risk of injury and health problems, and not being able to divide time between responsibilities other than work (ILO, 2004; Pouliakas, 2017). The positive effects, beyond just higher income, may be more pronounced when workers take on multiple jobs for career advancement and personal fulfilment. Meanwhile, the negative impact of MJH tends to be felt more acutely when workers take multiple jobs due to economic motives (Campion, Caza, & Moss, 2020).

A person's motive for having multiple jobs varies according to age. Young workers aged 18 – 34 in New Zealand often hold multiple jobs for various reasons, such as expanding their skills and experience, meeting job expectations, and increasing income (Osborne & Warren, 2006). Meanwhile, older workers in Christchurch, New Zealand, take multiple jobs due to financial reasons (Girvan, 2003). These findings suggest that older workers may experience greater negative impacts from holding multiple jobs than their younger counterparts. This viewpoint is supported by the findings of Bouwhuis et al. (2018) which states that older workers in the

Netherlands who take on multiple jobs due to financial needs and live in low-income households usually have a bad experience. In addition, a decline in physiological function due to degenerative and psychosocial challenges has the potential to cause older adults to experience health problems (Dahlan & Umrah, 2018). With this condition, the negative impact of MJH, especially regarding health problems, will have a big effect on older workers.

Since 2021, Indonesia has entered a period of an ageing population, with the percentage of older individuals exceeding 10 percent and showing an upward trend. An increase follows this in the number of older adults who are still working (BPS, 2022). The primary reason for this trend among the older population in Indonesia is economic motives (BPS, 2023b). This finding is consistent with Jamalludin (2024), who highlighted that economic factors remain the dominant driver for elderly employment in Indonesia. However, the average income of older workers in 2022 was significantly lower than the government-set minimum wage and the average income of residents aged 15 and older (BPS, 2023). According to data from the Susenas survey in March 2022, 41.11 percent of older adults living in households were in the bottom 40 percent of expenditure groups (BPS, 2022). The growing percentage of older workers in Indonesia, combined with their low incomes and the increasing number of individuals holding multiple jobs, indicates that many older workers are taking on additional jobs out of economic motives.

There are indications that older workers in Indonesia become multiple jobholders because economic motives are a challenge for the government to suppress the negative impacts that can arise. There is limited information and studies on MJH, particularly among older workers in Indonesia. In fact, among several developing countries in Southeast Asia, Indonesia is among the countries with the highest MJH rates from year to year (ILO, 2023). Previous research on MJH in Indonesia had been conducted by Citra, Elfindri, & Bachtiar (2020); Martinez et al. (2014); and Wijayanti & Adrison (2018) focusing on workers in general and not specifically on older workers. Meanwhile, Research on older workers holding multiple jobs has been conducted in other countries through qualitative approaches, as demonstrated by Bouwhuis et al., (2018) and Girvan (2003). Thus, this study aims to provide new insights into MJH in Indonesia, particularly for older workers, using a quantitative approach. This study aimed to 1) find out the general characteristics of older workers who have multiple jobs in Indonesia in 2022, 2) identify the variables that affect the status of MJH in older workers in Indonesia in 2022, and 3) analyzing the tendency of the variables in objective point (2) in influencing the MJH status of older workers in Indonesia in 2022.

This study uses data from the National Labor Force Survey (Sakernas). However, the data collected through Sakernas does not include detailed information on jobs other than the main job. Respondents only identified information about MJH through more than one job ownership question over the past week. In addition, the absence of income-related information on workers with family/unpaid worker status who have multiple jobs makes it difficult to identify the motive for having multiple jobs, especially the economic motive. The analysis was then only carried out

on older workers with a status other than family/unpaid workers, which later, for brevity, referred to as older workers.

2. Literature Review

Older workers are residents aged 60 years and older who have been working or temporarily not working in the past week (BPS, 2022). Multiple job holding (MJH) is a condition when individuals work in more than one job at the same period (ILO, 2004). Thus, older workers with MJH status are those aged 60 and above who held more than one job in the past week. There are two factors for a person to hold multiple jobs: driving and pulling factors. The driving factors consist of economic motives, while the pulling factors consist of career development motives and psychological fulfillment motives (Campion et al., 2020). Economic motives are the basis for the hours-constraint model (Shishko & Rostker, 1976).

A person receives a salary as a form of compensation for his work. The time a person spends working to earn this salary is called Forgone Leisure. In the **Kesalahan! Sumber referensi tidak ditemukan.**, there are a set of indifference curves that show equal-utility combinations of income and leisure. Point B shows the maximum amount of leisure time a person has per period. The slope of line AB is the negative of the prevailing wage rate, which indicates the level of free time that can be used to earn an income. Suppose a person is assumed to maximize his utility. In that case, he will choose a job or make an agreement in such a way with the company that the prevailing wage rate will be equal to the marginal rate of the substitution between income and leisure. An example of this condition is point P, which is the tangency point between the Ω_2 curve and the wage line AB. However, when the hours worked at his main job are not able to provide wages that match his desired income target, there is a possibility that he will take a second job as described in the hours-constraint model (Shishko & Rostker, 1976).

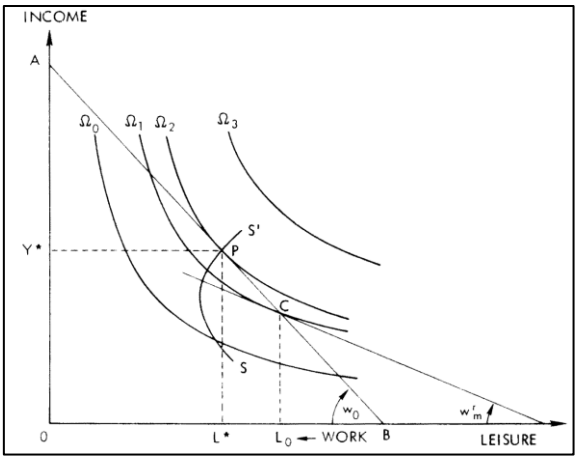

Figure 2. Maximum utility between income and leisure time
Source: Shishko & Rostker (1976)

A person who can only work for L_0 on the main job but actually wants to increase his working hours by $L^* - L_0$ again causes him to be forced to indifference curve Ω_1 at point C. Changes in wages in the main job can cause an increase or decrease in the minimum wage that applies to a person deciding whether to do a second job depending on the greater or smaller wage of the side job. If a person has enough leisure time and the income from the side job is less than the main job, then when the working hours at the main job increase, the working hours at the side job will decrease. However, if the income from the side job is higher than the main job, then the increase in hours worked on the main job will result in an ambiguous decision on the hours of the side job. If the income from all jobs is the same, there will be trade-offs (Shishko & Rostker, 1976).

In addition to income and leisure time, heterogeneity in utility functions is also influenced by individual characteristics (Renna & Oaxaca, 2006). Dickey, Watson, & Zangelidis (2011) stated that workers' decisions to perform MJH are usually influenced by individual and household characteristics, financial status, and information about the main job.

3. Research method

3.1. Scope of Research

The data used in this study is secondary data obtained from BPS-Statistics Indonesia, namely microdata from the National Labor Force Survey (Sakernas) in August 2022. Sakernas is a survey organised by BPS that is specifically designed to gather employment data relevant to this research topic. The employment theory employed by Sakernas to generate official statistics is based on the Standard Labour Force Concept outlined in the 13th International Conference of Labour Statisticians (13^{th} ICLS). The number of August Sakernas samples is 300,000 households.

The unit of analysis in this study is the population aged 60 years and above (older workers) whose main activity is work, namely doing work with the intention of obtaining or helping to obtain income or profits for at least one hour in the past week, including temporarily not working and having a status other than family/unpaid workers in Indonesia in 2022. The focus of this study is on older workers. However, family or unpaid workers in this category are excluded from the analysis due to the lack of income information for their primary job, which is crucial for the hours-constraint model. As a result, out of the initial 57,779 observations of older workers, only 49,888 were included in the analysis.

The dependent variable in this study is the multiple job holding (MJH) status of older workers, categorised as either multiple job holding (MJH) or single job holding (SJH). This variable was derived from question 28A of the 2022 Sakernas questionnaire, which inquired if respondents held an additional job. Responses of "Yes" were coded as MJH, while responses of "No" were coded as SJH. According to the concept and definition of Sakernas, recorded work refers to the work performed in the previous week or that the respondent has temporarily left. Then, the main jobs are identified based on the time spent on those jobs over the past week. If the time spent is the same, the main job is determined by the highest income. The independent variables are age, sex, marital status, education level, area of residence, number of working hours

in the main job, and main job sector. Of the seven variables, only the number of hours worked in the main job is numerical data. The operational definition of the research variables is summarized in Table 1.

Table 1. Operational definition of research variables

Variable Name	Notation	Category
Dependent Variable		
Multiple Job Holding Status	Y	1 = Multiple Job Holder (MJH) 0 = Single Job Holder (SJH)*
Independent Variable		
Age	X_1	1 = Young elderly (60 – 69 years old) 0 = Non-young elderly (> 69 years)*
Sex	X_2	1 = Male 0 = Female*
Marital status	X_3	1 = Married 0 = Unmarried*
Education level	$X_{4(1)}$	1 = Not graduated elementary school 0 = Junior high school and above*
Education level	$X_{4(2)}$	1 = Elementary school 0 = Junior high school and above*
Area of residence	X_5	1 = Rural 0 = Urban*
Working Hours on Main Job	X_6	-
Main Job Sector	X_7	1 = Informal 0 = Formal*

Note: *) reference category

3.2. Method of Analysis

The analysis methods used in this study are descriptive analysis and inferential analysis. The descriptive analysis aims to identify the general characteristics of older workers who are multiple jobholders in Indonesia, using a pie chart and a table of proportions. Additionally, an inferential analysis is employed to determine which variables significantly impact the MJH status of older workers and to assess the strength of these effects. The analysis utilised binary logistic regression method, which was deemed suitable for handling the binomially distributed dependent variables in this study (Azen & Walker, 2011). Inferential analysis steps are 1) the identification and formation of the model, 2) parameter estimation using the maximum likelihood method, 3) simultaneous parameter significance testing using the likelihood ratio test method, 4) partial parameter significance testing using the Wald test method, 5) Goodness of fit test using the Hosmer-Lemeshow test, and odds ratio interpretation. The model of this study is expressed in Equation 1.

$$\ln\left[\frac{\pi(\mathbf{X})}{1-\pi(\mathbf{X})}\right] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_{4(1)} X_{4(1)} + \beta_{4(2)} X_{4(2)} + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 \quad (1)$$

Description:
$\pi(\mathbf{X})$: conditional probability of the outcome $Y = 1$ given the predictors X
β_0 : intercept
$\beta_{1,2,\ldots,7}$: regression coefficient for the 1,2,...,7-th independent variable
$X_{1,2,\ldots,7}$: 1,2,...,7-th independent variable

4. Results and Discussion

4.1. Overview and Characteristics of Older Workers Engaged in Multiple Job Holding

An overview of employment is crucial for understanding the state of the labor market in Indonesia. BPS-Statistics Indonesia has gathered data on employment, including information on multiple job-holding status for workers. However, BPS has not published aggregate data regarding the multiple job-holding status of workers in general or specifically for older workers. According to Figure 3 this study shows that 18.16 percent, or 2.62 million elderly workers in Indonesia in 2022, have MJH status. This result reveals that even with a decline in their physical and psychological well-being, some older adults remain employed, with a few holding multiple jobs.

Furthermore, the percentage of older workers with MJH status is higher than that of workers aged 15 years and older, which stands at 14.40 percent (ILO, 2023). This fact suggests that the economic conditions of older workers warrant special attention compared to the general workforce. In addition, the older workers who are included in vulnerable populations still have to work and even work in more than one job, which can have a greater negative impact on their health conditions. In addition to the economy, the health condition of the older workers, especially those with MJH status, also needs more attention.

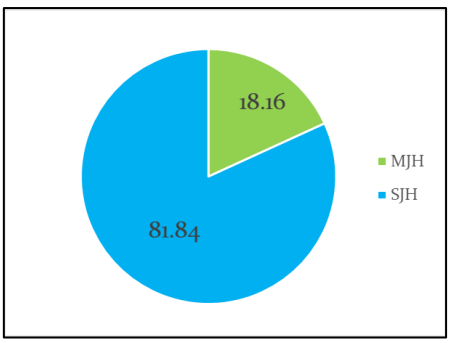

Figure 3. Percentage of older workers by MJH status
Source: Author's computation using data from Sakernas August 2022

The result in Table 2 characterise older workers and elucidate the factors driving Multiple Job Holding (MJH). Column 3 reveals that the typical older worker is a young elderly individual, male, married, having low educational attainment (less than elementary school), residing in a rural area and has working hours on the main job ≥35 hours per week, in the informal sector. While most older workers are already in full-time main jobs, Column 4 highlights that those

engaging in MJH share similar demographics but are working <35 hours per week in their main/primary job. This indicates that when main job hours fall short of standard full-time work, economic necessity compels these workers to seek secondary employment to fulfil their needs. This reliance on multiple jobs is often a consequence of insufficient pension savings and the prevalence of low education levels among older workers (Affandi, 2009; Kudrna, Le, & Piggott, 2021).

Table 2. The Overview of MJH Status based on the characteristic of older workers

Variable	Category	Older Workers		MJH Status			
				MJH		SJH	
		Million	(%)	Million	(%)	MIllion	(%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age	Non-young elderly	3.84	26.66	0.62	16.12	3.22	83.88
	Young elderly	**10.57**	**73.34**	**2.00**	**18.90**	8.57	81.10
Sex	Female	4.67	32.41	0.56	12.01	4.11	87.99
	Male	**9.74**	**67.59**	**2.06**	**21.10**	7.68	78.90
Marital Status	Unmarried	4.27	29.61	0.53	12.40	3.74	87.60
	Married	**10.14**	**70.39**	**2.09**	**20.58**	8.05	79.42
Education	Not graduated elementary school	**6.11**	**42.43**	**1.22**	**19.89**	4.90	80.11
	Elementary school	5.49	38.08	1.02	18.61	4.46	81.39
	Junior high school and above	2.81	19.49	0.38	13.49	2.43	86.51
Area of Residence	Urban	6.99	48.52	0.90	12.84	6.09	87.16
	Rural	**7.42**	**51.48**	**1.72**	**23.17**	5.70	76.83
Working Hours on Main Job	≥ 35 hours	**7.45**	**51.68**	1.14	15.22	6.31	84.78
	< 35 hours	6.96	48.32	**1.48**	**21.30**	5.48	78.70
Main Job Sector	Formal	2.29	15.88	0.28	12.23	2.01	87.77
	Informal	**12.12**	**84.12**	**2.34**	**19.27**	9.78	80.73
Total		14.41	100	2.62	18.16	11.79	81.84

Source: Author's computation using data from Sakernas August 2022

4.2. Variables Affecting MJH Status among Older Workers

To rigorously analyse the variables affecting Multiple Job Holding (MJH) status among older workers, both simultaneous (omnibus) and partial parameter significance tests are conducted. The simultaneous parameter test using the Likelihood Ratio (LR) test evaluates the simultaneous effect of all predictor variables on the MJH status of older workers in Indonesia in 2022. The test yields a statistic of G = 1934.75, which significantly exceeds the critical value of $\chi^2_{(0.05,8)} = 15.507$, a and an associated p-value of 0.000, falling below the α (0.05) significance threshold. Consequently, the null hypothesis (Ho), which posits that all independent variables are simultaneously non-significant, is rejected. This result provides strong statistical evidence, at the 5 percent significance level, to conclude that at least one independent variable significantly affects the MJH status of older workers in Indonesia. Partial parameter testing using the Wald test

assesses the effect of each independent variable on the MJH status. The complete results of the Wald test, including the test statistics and Odds Ratios, are presented in Table 3. The results of the partial parameter test indicated that all seven independent variables significantly affect the MJH status of older workers in Indonesia in 2022.

Table 3. Partial parameter test results

Variable	**Category**	$\widehat{\beta}$	$\widehat{SE}(\widehat{\beta})$	***p-value***	**exp** $(\widehat{\beta})$
(1)	(2)	(3)	(4)	(5)	(6)
Intercept	-	-2.680	0.061	0.000*	0.069
Age	Young elderly	0.307	0.029	0.000*	1.360
	Non-young elderly (ref)				
Sex	Male	0.514	0.032	0.000*	1.672
	Female (ref)				
Marital Status	Married	0.331	0.033	0.000*	1.392
	Unmarried (ref)				
Education	Not graduated elementary school	0.233	0.035	0.000*	1.262
	Elementary school	0.282	0.035	0.000*	1.325
	Junior high school and above (ref)				
Area of Residence	Rural	0.508	0.028	0.000*	1.661
	Urban (ref)				
Working Hours on Main Job	< 35 hours	-0.015	0.001	0.000*	0.985
	≥ 35 hours (ref)				
Main Job Sector	Informal	0.325	0.038	0.000*	1.383
	Formal (ref)				

Note: **ref**) denotes the reference category; *) significant at α=0.05

Source: Author's computation using data from Sakernas August 2022

Thus, the binary logistic regression equation is as follows:

$$\hat{g}(\boldsymbol{X}) = -2.680 + 0.307X_{1i} + 0.514X_{2i} + 0.331X_{3i} + 0.233X_{4(1)i} + 0.282X_{4(2} + 0.508X_{5i} - 0.015X_{6i} + 0.325X_{7i} \quad (2)$$

4.3. Tendencies of Significant Variables Affecting MJH Status among Older Workers

The analysis of Column 6 in Table 3 which presents the estimated Odds Ratios (ORs), reveals a significant relationship between age category and the propensity for Multiple Job Holding (MJH). Specifically, the OR for the young elderly (as the comparison group) is 1.360 times that of the non-young elderly group, holding all other predictor variables constant. This result demonstrates that older workers classified as young elderly are 36.0 percent more likely to engage in MJH compared to their non-young elderly counterparts. This finding is highly consistent with existing literature. The conclusion that younger workers have a greater opportunity for MJH than older workers is supported by Citra et al. (2020). Furthermore, this age-related dynamic aligns with the inverted U-curve pattern of MJH participation identified by Wijayanti & Adrison (2018) which suggests that the probability of holding multiple jobs declines as workers advance into

older age brackets. The underlying mechanism for this difference is likely rooted in physiological and health-related factors. As Dahlan & Umrah (2018) noted, the decreased physiological function due to degenerative processes and psychosocial decline associated with advanced age can directly impact health and, consequently, hinder work productivity. Crucially, evidence from the Older Population Statistics 2022 indicates that the young elderly have the lowest incidence of health complaints and illness rates when compared to the older sub-categories of the non-young elderly. This superior health status provides the necessary physical capacity and endurance to undertake the demands of holding more than one job, thereby strengthening the conclusion that better health among the young elderly population underpins their higher probability of participating in MJH.

The analysis of gender as a determinant of Multiple Job Holding (MJH) status reveals a significant disparity, with male older workers exhibiting an estimated Odds Ratio of 1.672, indicating they are 67.2 percent more likely to have MJH status compared to their female counterparts, holding all other variables constant (ceteris paribus). This finding is consistent with Citra et al. (2020); Martinez et al. (2014); Wijayanti & Adrison (2018) which reporting higher MJH rates for men. The primary driver is the traditional socio-economic role of men in Indonesia as the head of the household and chief economic provider (Rimbawan, 2008). supported by data showing 86.46 percent of the older workers with MJH status were also heads of households. The greater tendency of male older adults with MJH status than female older adults can also occur due to patriarchal culture (Fransiska, 2022) which imposes caregiving responsibilities that limit their access to the economy and capacity for multi-job demands. However, 13.54 percent of female older workers who engage in MJH and head a household are predominantly those with unmarried status (e.g., divorced or widowed); for this group, the loss of spousal economic support necessitates employment (Rimbawan, 2008) , suggesting that economic imperative acts as a powerful counter-force to cultural constraints, driving their participation in MJH.

The analysis of marital status reveals a statistically significant and positive relationship with the probability of Multiple Job Holding (MJH). Holding all other variables constant (ceteris paribus), older workers who are married are 1.392 times more likely to engage in MJH compared to those who are unmarried. This finding strongly corroborates that of Citra et al. (2020), Martinez et al. (2014), who established that workers with marital status possess a greater propensity for MJH. By having marital status, workers are responsible for meeting their own needs and those of their spouses, so the income obtained must be divided among their dependents (Hermanto, Zulham, & Seftarita, 2016). Furthermore, the motivation for MJH can escalate when facing potential income shortfalls. Data processing supports this, indicating that 73.56 percent of older workers with MJH status have spouses who do not hold multiple jobs, suggesting the primary worker takes on extra work to compensate for their spouse's potentially lower or lack of secondary income. This compensatory behaviour aligns with findings that workers increase their labour supply to mitigate the loss or insufficiency of a spouse's income(Radl & Himmelreicher, 2015).

The level of educational attainment is a critical and significant determinant of an older worker's propensity for Multiple Job Holding (MJH). Analysis reveals a clear inverse relationship: holding all other variables constant (ceteris paribus), older workers with an elementary school education are 1.263 times more likely to engage in MJH than those with junior high school education and higher. This tendency is even stronger for those who did not graduate from elementary school, who are 1.326 times more likely to pursue MJH compared to the reference group (junior high school and higher). This finding is in line with Martinez et al. (2014), which stated that workers with low education are more likely to commit MJH. The necessity for MJH among low-educated, and thus often low-income, workers transcends choice; as Panos, Pouliakas, & Zangelidis (2014), argue, for such vulnerable groups, multiple job holding becomes an economic imperative. The high prevalence of low education among Indonesia's older workforce is largely a historical artefact, stemming from limited access to education in past decades (BPS, 2022). Consequently, jobs held during their productive years typically provided limited income, often resulting in inadequate savings or old-age security (Junaidi, Erfit, & Prihanto, 2017). Therefore, low education is not merely a demographic factor but a powerful proxy for economic insecurity, compelling older workers to undertake multiple jobs to meet essential living expenses.

Older workers living in rural areas are 1.661 times more likely to have MJH status than older workers living in urban areas, assuming other variables are constant. These findings are in line with Martinez et al. (2014); Wijayanti & Adrison (2018). Both studies stated that workers living in rural areas had a greater chance of doing MJH. Rural areas often show higher levels of MJH due to lower wages, fewer economic opportunities, and different economic structures (Pouliakas, 2017). Rural communities are generally farming communities (Robertson, Perkins, & Taylor, 2008). The income of older workers in agriculture is the lowest compared to other business fields (BPS, 2022). This can be a driver for older workers in agriculture to do MJH.

The number of hours worked per week in the main job is a highly significant factor inversely associated with the probability of Multiple Job Holding (MJH) status. The odds ratio for this variable is 0.985, which indicates that for every additional 10 hours worked per week, the likelihood of older workers having MJH status decreases by a factor of 0.985, assuming all other variables remain constant. In addition, it can also be interpreted that every increase in the number of working hours in the main job of 10 hours per week will reduce the tendency of older workers to have MJH status by 0.861 times, assuming that other variables are constant. This finding is in line with Martinez et al. (2014) which stated that workers with less than 35 hours of work in a week are more likely to perform MJH, so the hypothesis of the hours-constraint model has been confirmed. Citra et al. (2020) also stated that workers with working hours for a week of less than 40 hours have a greater chance of doing MJH. Based on the hours-constraint model, the fewer hours worked in the primary job, the more leisure available to be used in the second job (Shishko & Rostker, 1976).

The tendency of older workers working in the informal sector to have MJH status is 1.384 times greater than that of older workers working in the formal sector, assuming other variables are constant. This finding is in line with Conen and de Beer (2021) which states that workers with temporary contracts and self-employed are more willing to increase their working hours than workers with permanent contracts. Jobs with temporary contracts usually have a small number of hours worked (Bouwhuis et al., 2018). In addition, informal sector workers tend to have low incomes (Nariswari, 2020). Even so, based on the results of data processing, it turns out that there are formal older workers who are also MJH status who are dominated by laborers/employees/employees and workers in non-agricultural business fields, especially in the processing industry.

5. Conclusion and Recommendations

This study successfully analysed the determinants of Multiple Job Holding (MJH) status among older workers in Indonesia, utilising a model informed by established theories and previous research. The descriptive analysis indicated that 18.16 percent of older workers are Multiple Job Holders. The subsequent inferential analysis conclusively demonstrated that all predictor variables utilised significantly affect MJH status, confirming the robust empirical fit of the model. The results highlight that the tendency to engage in MJH is significantly higher among older workers possessing the following characteristics relative to their reference categories: being classified as young elderly, male, married, having low educational attainment, residing in rural areas, working less than 35 hours per week in their main job, and being employed in the informal sector. Collectively, these characteristics suggest that MJH among older, non-family workers is primarily an economic necessity driven by: sufficient residual physical capacity (younger age), heavy dependency burden (male and married status), lack of formal retirement security (low education), and underemployment or low wages in the primary role (low main job hours and informal sector employment).

Based on these findings, specific policy interventions are warranted. The government should: Intensify and expand school programs for older adults, particularly in rural areas, to enhance their competencies and improve their competitive position in the labour market. Re-evaluate and improve the provision of social assistance for older adults, ensuring support is tailored to age and economic vulnerability to reduce the compulsive need for MJH. BPS-Statistics Indonesia should take steps to clarify the official definition of MJH and collect more detailed information on the nature and characteristics of a person's secondary job. This would significantly improve the comprehensiveness and utility of basic statistical data for future research on multi-job holding.

A key limitation of this study is its exclusive focus on older workers with non-family worker status. Since the motivational dynamics (e.g., wage differentials) for family workers may differ, the results do not comprehensively describe the entire older worker population. Future research should extend this analysis to older workers with family worker status and explicitly incorporate

motives for MJH as a key variable to achieve a deeper understanding of the labour supply decisions within this demographic group, as well as further exploration of differences between regions – for example, between islands, between eastern and western regions, etc.

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