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THE IMPACT OF DEMOGRAPHIC FACTORS ON HOUSEHOLDS' SAVINGS IN MALAYSIA: A CROSS-SECTIONAL STUDY

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Abstract:

This paper examines the impact of demographic factors on savings using World Values Survey 7 (2017-2022) data on a sample household size of 1313 individuals. Descriptive analysis and generalized ordered logit regression (gologit2) was applied to analyze the data. Output from gologit2 analysis stated that; age, middle education level, private industry are having negative relationship with Savings, while income and employment status factors are having positive relationship between Savings. This study is consistence with the life cycle hypothesis theory which stated that; with increasing age, the saving level tend to reduce. Other than that, the results on income and savings relationship also provide confirmation to the permanent income hypothesis. The overall conclusion that can be established based on the results obtained is in the future, the government should give focus on the household with significant demographic results as documented in this study, in the mission to increase household saving. Through guided action, the targeted objectives have higher inclination to be successfully achieved. The cross-sectional data for this study, which spans the years 2017 to 2022, limits its applicability. It would be preferable if the surveys were collected annually. Furthermore, the data in this study are limited as they cannot be combined with demographic and macroeconomic variables to provide a more comprehensive picture of the study.

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Keywords:

Household's Savings, Demographic Factors, Logistic Regression, Economic Growth, Malaysia

Introduction

A crucial saving is financial protection in emergencies such as sudden loss of income or unexpected expenses. This study is timely as the pandemic COVID-19 has brought many of us the importance of saving. Saving is an essential ingredient for economic growth and development. Saving only affects investment and leads to higher output, employment, and sustainable economic growth (Ribaj & Mexhuani, 2021; Larissa et al., 2020). Therefore, saving is one of the essential and critical elements for the sustainable economic development of a country (Baidoo et al., 2018).

The household in both developed and developing countries believe that saving and investment are forms of financial security and people should be serious when considering these two activities (Amu & Amu, 2012). In the case of Malaysia, this statement is not practically true. Figure 1.0 shows the trend of Gross Saving as a percentage from Gross Domestic Product (GDP) in Malaysia from 1974 to 2020. According to World Bank (2022), the Gross Savings (% GDP) trend keep decreasing from the year 2008 until to date. This due to global financial economic crisis that hit Malaysia on 2008. Not only that global financial crisis, the Covid-19 pandemic also one of the sources contributed to lower saving rate among Malaysian (Arulthevan, 2022).

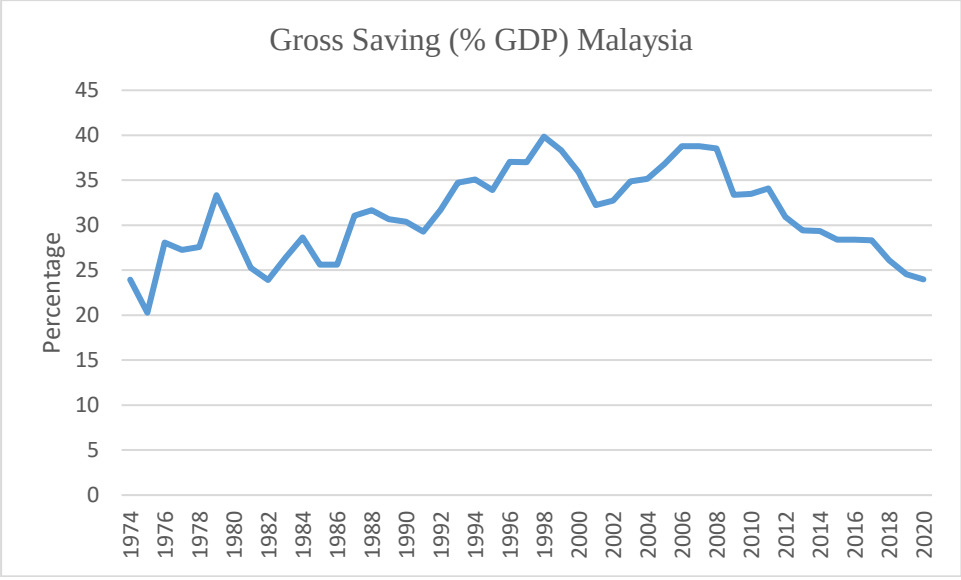

Figure 1: Gross Saving (% of GDP)

Source: (World Bank, 2022)

In Malaysia, unexpected economic events in recent years that have affected the economic landscape in Malaysia either downwards or upwards, leaving the citizens in Malaysia to face consequences. Therefore, their financial management varies regarding their savings behavior. The Astro Awani reported the number of Malaysians who said they are unable to save money

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every month has increased by two percentage points this year to 21 per cent compared to 19 per cent last year, according to the RinggitPlus Malaysian Financial Literacy Survey (Ringgit Plus, 2021) survey. Focusing on the same subject matter the New Straits Times reported that, draining retirement savings from the Employees Provident Fund (EPF) Account 1, serves to underscore how financially ill-prepared some Malaysians are for rainy days. This situation has been happening even before the Covid-19 pandemic began. Such a move during the pandemic would only compound the adverse effects on Malaysians as they had enough savings barely in Account 1 to tide them through retirement said the Federation of Malaysian Consumers Associations (FOMCA, 2021). In addition, as of 1st April 2022 there are 4 types of EPF withdrawal starts with i-Lestari, i-Sinar, i-Citra, and one-off RM 10,000 withdrawal for the purpose of helping the public to cope with financial difficulties during covid-19 pandemic. According to Employees Provident Fund (EPF) in a statement, the exceptional withdrawals from 1st and 2nd account contributed to 6.1 million people having less than RM10,000 and 3.6 million people having saved less than RM1,000. (KWSP, 2021). Constant withdrawal from EPF could increase the risk of insufficient fund upon retirement.

Awareness among working people in Malaysia to build additional savings for old age is still low. This situation also affects the younger generation. They think that planning for retirement is a burden for them because it is long-term planning. Nevertheless, uncertainty and ignorance about future risks (inflation, serious illness, etc.) can lead to lower level of saving among individual. Household should increase responsibility for their financial security after retirement. With declining employment opportunities, income instability and the dwindling purchasing power of Malaysian households, workers must decide not only how much to save for retirement but also how to allocate their retirement assets (Delafrooz & Paim, 2011).

Although the low savings rates have become a major source of concern in recent years, not much attention has devoted to highlight the key determinants of saving in developing countries. In recent years, few studies have been done on this issue using both the time- series and cross-sectional data. While there has been much empirical work in this important research area for the other developing countries, little empirical work has been conducted in the case of Malaysia. Therefore, this study aim to analyze the impact of demographic factors on household's saving in Malaysia. The paper proceeds as follows. In section 2 cover reviews of literature on factors affecting individual's savings and theoretical framework. Section 3 presents the model specification, data source and methodology adopted in the study. The section 4 discusses the findings followed by conclusion in section 5.

Literature Review

The decisions of savings affected by various demographic factors include age, gender, marital status, income level, education level, and employment status, the number of children in a family and job category. Several studies have been conducted to examine the relationship between socio-demographic factors and savings. Many studies were conducted in developing and developed nations (study by Gedela, 2012, India from Southeast Asia; Attanasio and Székely, 2000, in Zimbabwe; Teshome et al, 2013, in Ethiopia).

Age

Age tends to have positive relationship with savings (Swasdpeera & Pandey, 2012; Beckmann et al., 2013) while expected to have negative relationship with savings (Sakyi et al., 2021; Brounen et al, 2016) and no significant relationship with savings (Issahaku, 2011). Zuanazzi & Fochezatto (2021) in a recent study find that younger generations tend to save less due to

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high commitment. As they getting older, the savings increase and reduce again in older generations. This study shows that, age and birth cohort affect the saving performance of the Finnish households. The finding revealed that the Finnish households remain saving even in the old age and younger cohorts tend to save more than the older ones Mäki-Fränti, 2022). In low-income Asian countries age were found to be determinants of financial literacy (Morgan & Trinh, 2019). The current finding revealed age have a tendency to significantly impact saving behaviour (Bhat,Gomero & Khan, 2024).

Income

Incomes are most likely to have positive relationship with savings (Hong et al, 2002). Gaisina (2014) use a sample of 704 individuals and binomial probit models to identify the demographic determinants of savings in the rural area of Kazakhstan. The results show that high income and wealthy individuals are most likely to save more compared to having lower income and less wealthy. Kusairi and Zamri (2021) in their attempt to examine the saving behaviour of bottom income group by using 479 respondents in Peninsular Malaysia concluded that B40 individuals are willing to take risk by not saving. However, in Japan, some demographic characteristics, such as income, significantly affect the level of financial literacy (Kadoya & Khan, 2019). Moreover, family incomes shows significantly impact the saving behavior (Bhat,Gomero & Khan,2024).

Gender

Kusairi and Zamri (2021) reported insignificant relationship between gender and savings. The study reveals that females tend to save more compare to male. Similar pattern was reported by Swasdpeera & Pandey, 2012; in which gender and savings having insignificant relationship. Kodom (2013) examine the factors that influencing savings by using logit regression techniques suggested that females with higher income tend to save more compare to male. Eventually in Japan, demographic characteristics, such income, significantly affect the level of financial literacy (Kadoya & Khan, 2019).According to some scholar male financial literacy is greater than that of females, some studies have not yet established differences between the two genders in financial literacy levels (Lethepa & Matemane, 2020).There is researcher revealed in their study that women are more cautious of the saving aspects (Guliman and Uy 2019).

Marital Status

Rengarajan et al (2016) analysed the effects of demographic variables on rural household's saving behavior in Sriperumbur, Chennai in which marital status has no significant relationship between savings by rural household. Study by Mirach and Hailu (2014) reveal that marital status has a negative relationship between savings in which married couple save lesser due to higher responsibilities compare to single individuals. Tandoh and Tandoh (2015) uses 129 sample households and ordinary least squares estimation techniques stated that being employed and married tend to save less but this relationship is insignificant.

Number of Children

Yilmazer (2008) has studied the impact of children's college expenses on household savings. The result shows that number of children is negatively correlated to household saving. Baidoo, Boateng, and Amponsah (2018) test the determinants of saving and financial literacy in Ghana by using ordinal logistic regression and output shows that there is a significant negative relationship between household size and savings. Household with larger members are tend to save less compare smaller household size. The family size has significant impact on saving

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behaviour (Bhat, Gomero & Khan,2024).The increase of number of children in the family reduces the saving behavior because of expenditure increases as well (Li & Wang, 2022).

Employment Status

Study by Baidoo et al. (2018) shows the positive relationship between employment status and savings. The study has been conducted in Ghana by using sample of 800 respondents from Population and Housing Census (PHC). The employment status variable has been divided into public sector employees, private sector employees, self-employed, and unemployed. The individuals employed in private sector, and self-employed are able to save more compared to public sector employees and unemployed individuals.

Education Level

Education level and savings has a positive and significant relationship (Hunt, Jeon & Lee, 2021; Swasdpeera & Pandey, 2012; Lidi et al, 2017). The marginal propensity to save increase as the education level increases. Education level increase the savings level by inducing the level of income (Beckmann et al., 2013). Study by Ky et al. (2017) with sample of 500 individuals from Burkina Faso in West Africa has utilized the logistic regression model and the output shows that education level shows positive relationship with saving. Recently, in Japan, some demographic characteristics, such as income, significantly affect the level of financial literacy (Kadoya & Khan, 2019). According to some scholar male financial literacy is higher that female and some studies not yet revealed difference between the two genders in saving behaviour (Lethepa & Matemane, 2020).

Category of Job

Job status in which shows the consumer sentiment has a positive relationship with savings level. The sector of employment will contribute to stable income throughout life and high level of savings (Ewing and Payne, 1998). Santos (2021) examines the public sector and private sector employment on household savings and labor supply by using employer-employee micro-data from Brazil (RAIS). The analysis shows that public sector employee saves less compare private sector employee and 70% gap in savings between them. According to Lethepa and Matemane (2020) hypothesized that as a results, job status of financial literacy for banking employees is limited in both developed and emerging economies.

Theoretical Framework

Life Cycle Hypothesis

This article employs the life cycle hypothesis (LCH) paradigm, developed by Modigliani and Brumberg (1954), Ando and Modigliani (1963), and Boivin et al. (2010), to investigate individuals' saving behavior. The LCH is founded on the notion that households' savings behavior and the reduction or elimination of desires are not solely determined by their present income. Instead, it considers future expected circumstances and is influenced by past experiences (Ando & Modigliani, 1963; Danziger et al., 1982; Hunt et al., 2021). Darma et al. (2020) have said that the saving level decreases as age increases, in accordance with the LCH. Furthermore, one's income fluctuates throughout their lifetime, particularly during retirement. Darma and his colleagues (2020) assert that the majority of individuals intend to cease employment between the ages of 60 and 65, and they contend that their earnings will decline upon retirement. Nevertheless, they are not interested in experiencing a substantial decrease in their consumption-based indicator of living standards. In order to sustain their level of consumption post-retirement, individuals must accumulate money throughout their working

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years. However, the life cycle model affirms that individuals with higher salaries in adulthood possess a greater ability to save compared to young individuals (Zuanazzi and Fochezatto, 2021).

Permanent Income Hypothesis

The Permanent Income Hypothesis (PIH), pioneered by economist Milton Friedman in 1957, posits that individuals' spending behaviors are primarily shaped by their long-term income trends rather than their immediate earnings. This theory suggests that people strive to stabilize their consumption patterns over time by adjusting spending based on their expectations of future income stability, rather than reacting significantly to short-term fluctuations. Friedman's framework incorporates the life cycle concept, implying that individuals may borrow or save depending on their income levels to maintain a consistent standard of living throughout their lifetimes. The PIH is underpinned by the principle of rational expectations, asserting that individuals make spending decisions based on their most accurate predictions of future incomes.

Empirical validation of the PIH, as highlighted by Roche (1995), carries significant policy implications, particularly in the realm of income tax policy. Tax reductions perceived as permanent by consumers are more likely to have a substantial impact on consumption behavior. Tax cuts targeted at lower-income individuals, who exhibit a higher Marginal Propensity to Consume (MPC), are argued by Palley (2008) to be more effective in stimulating economic growth compared to those aimed at higher-income groups. Furthermore, the PIH contributes to theoretical debates such as the concept of expansionary fiscal contractions. This idea suggests that reductions in government spending, leading to future reductions in income tax, can boost consumption expenditure and output as forward-thinking rational agents anticipate an increase in their permanent disposable incomes (Fuchs-Schündeln et al., 2020).

Behavioural life-cycle theory (BLCT)

The behavioural life-cycle theory (BLCT) focuses on the concepts of self-control, mental accounting, and framing. Shefrin and Thaler (1988) define the BLCT as an enhancement of the conventional life-cycle theory of saving, although it obviously introduces factors that are contrary to the neoclassical paradigm. The Behavioral Life Cycle Theory (BLCT) posits that consumers, because to their impatience, create mental accounts that cause them to view different aspects of their wealth as distinct and not interchangeable. The BLCT employs a notion of impatience that contradicts the neoclassical theory of consumer behavior. Impatience can be understood as more than just having a high discount rate. It can also be described as "akrasia," which refers to a lack of will. (Refer to Elster, 1986 for further discussions.) Thaler and Shefrin (1981, p. 394) adopt Schelling's (1978) suggestion and conceptualize the individual as divided into a "farsighted planner" and a "myopic doer," which gives rise to challenges about agency inside each person. According to their observation, these concepts are widely accepted in fields other than economics, such as psychology (Freud, 1958) and philosophy (Berlin, 1969). Similar to Ulysses intentionally getting tied to the mast, a forward-thinking strategist may employ tactics to control the impulsive individual (Elster, 1977). The behavioral life-cycle theory of consumption predicts that individuals are unable to achieve their optimal consumption plans. Similarly, practical solutions to agency problems are typically not the most optimal.

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Data and Methodology

This focus of this study is to examine the impact of demographic factors on household's savings in Malaysia. The secondary data were collected from the World Values Survey 7 (WVS7) (Haerpfer, et al, 2022). World Values Survey 7 used a stratified sampling method covering all states in Malaysia with target respondents of 1313 Malaysian citizens. The dependent variable in this study is savings in which ordinal scale, therefore the data is analysed using ordinal logistic regression model (ologit) (Liu, 2015). A definition and measurement of dependent and independent variables are presented in appendix 1. Initially, chi-square tests of distribution were tested to determine the significant relationship between two categorical variables and presented in appendix 2. Based on chi-square tests of distribution, the education, sector of employment, income and employment status shows significant relationship with savings level. However, the data violated the parallel lines assumption of the ordinal logistic regression model, therefore generalized ordered logit regression (gologit2) was utilized for empirical analysis (StataCorp, 2017; Williams, 2016**).** This gologit2 analysis method is widely used in social research, mainly in analyses related to ordinal based dependent and independent variables (Boes & Winkelmann, 2007; Long, 1997; Williams, 2006).

The specification for the gologit2 model can be expressed as follows:

$$P(Y_i > j) = g(X\beta_j) = \frac{\exp(\alpha_j + X_i\beta_j)}{1+[\exp(\alpha_j + X_i\beta_j)]}, \text{j } = 1, 2, ..., \text{M} - 1 \quad (1)$$

The Y_i denotes the savings level of the respondent; M signifies the number of ordinal categories for savings. The probabilities of Y for 1, 2, ..., M can be expressed in three different ways, as illustrated in equations (2), (3), and (4):

$$P(Y_i = 1) = 1 - g(X_i\beta_1) \quad (2)$$
$$P(Y_i = j) = g(X_i\beta_{j-1}) - g(X_i\beta_j) \quad j = 2, \ldots, M-1 \quad (3)$$
$$P(Y_i = M) = g(X_i\beta_{M-1}) \quad (4)$$

The study used the gologit2 model is based on its capability to produce more reliable output in compared to the multinomial logistic model (MNL). The MNL empirical analysis is basically not able to capture the ordinal dependent variable (savings) and does not impose the parallel lines assumption across the independent variables. Furthermore, the MNL model tends to generate more coefficients in empirical output compared to gologit2 (Boes & Winkelmann, 2007; Hosmer et al., 2000). Therefore, gologit2 was used to estimate the empirical model, with all the independent variables were constrained to meet the parallel lines assumption, and robust variance estimators were applied for analysis using Stata SE15 (StataCorp, 2017).

Findings

The output of this study is reported in the following order; Demographic Profile, generalized ordered logit regression (gologit2) output.

Table 1: Demographic Profile

Variables	Category	Percentage
Dependent:		
Savings	Save money	39.38
	Just get by	35.95
	Spent savings and borrowed money	24.68
Independent Variables		

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Gender	Male	50.04
	Female	49.96
Marital Status	Married	63.37
	Not married	36.63
Education	Primary	52.25
	Secondary	18.66
	Tertiary	29.09
Sector of employment	Government Institution	23.31
	Private Sector	68.24
	Non-Government organization	8.45
Income Category	Low Income	32.34
	Medium Income	57.28
	High Income	10.37
Number of Children	No Children	40.43
	Having more than one child	59.57
Employment status	Unemployed	25.78
	Employed	74.22
Continuous Variable	**Mean**	**Standard Deviation**
Age	38.33	13.21

Source: (Author's own calculations)

The demographic profile is shown in Table 1. The savings variable shows that 39.38% and 35.95% declared that they were able to save money and just get by accordingly, meanwhile 24.68% of household's spend the savings and borrowed the money to continue the life. Households in the sample are equally distributed by gender, in which 50.04% being male and 49.96% being female. The mean and standard deviation of household's age was 38.33 and 13.21 years old. The income category was recoded into low, medium and high income in which 32.34%, 57.28%, and 10.37% accordingly. The majority of households were employed (74.22%), having more than one child (59.57%), and completed their education to secondary level (18.66%). Majority of household's working with private sector or industry about 23.31% and only 23.31% of household's working with government institutions.

Initially, ordinal logistic regression model (Ologit) was used to estimate this model. But, the Brant test results (Long & Freese, 2006) shows that the estimated output has violated the parallel lines assumption, as shown in Table 2. Subsequently, this study has used the gologit2 regression in which imposing parallel lines assumptions on all independent variables. The output summary are shown in Table 3.

Table 2. Brant Test Output

Variables	Chi2	p>chi2
Age	0.32	0.574
Gender	0.02	0.877
Marital Status	7.58	0.006
Secondary	7.61	0.006
Tertiary	16.47	0.000
Private Sector	5.79	0.016
Non-Government Organization	0.28	0.595

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Medium Income	19.00	0.000
High Income	12.47	0.000
Number of children	14.50	0.000
Employment Status	0.30	0.582

Source: (Author's own calculations)

Table 3. Generalized Ordered Logit Estimates for All Variables, OR (SE)

Variables	Odds ratios (OR)	Robust S.E.
Age	0.9236	0.0313***
Age Squared	1.0008	0.0003***
Female	0.9617	0.1102
Married	0.8633	0.2023
Secondary	0.6767	0.2161***
Tertiary	0.9713	0.1304
Private Sector	0.7849	0.1618**
Non-Government Organization	1.0241	0.2086
Medium Income	1.6957	0.0697***
High Income	2.7445	0.0734***
Having more than one child	1.1828	0.1524
Being Employed	1.6596	0.0778***

Notes:
1. Exponentiated coefficients ***, **, and * significant at 1%, 5%, and 10%, respectively.
2. Pseudo R^2 for happiness is 0.0239.
3. VIF (the highest value) is 2.55

The aim of this study to examine the demographic factors affecting savings in Malaysia, therefore, we use the most recent survey in which 7th wave of World Value Survey (WVS) (Haerpfer et al, 2022). We used ordered logistic regression model (gologit2) for our regression. Based on Table 3, age shows a negative relationship with savings (OR=0.9236). For each unit of age increase, there is a 7.64% reduction in savings level among households. This outcome consistent with the life cycle hypothesis in which younger individuals who is within active working group are most likely to save more compared to those in older ages (Bekata, 2016). In addition, younger individuals tend to save in the younger age to make sure that the saving is enough during unforeseen circumstances in the future (Baidoo et al, 2018). This finding confirmed past studies by Amu & Amu, 2012 in Ghana; and Komla, 2012. The age squared has added into regression will allow the gologit2 model to estimate the effect of age on savings more accurately.

We also note that the secondary education level and savings having negative relationship. For the households in secondary education level tend to save less (OR=0.6767), given the effects of other predictors are held constant in the model. Specifically, attaining secondary education level reduce the probability of savings by 32.33%. This result is consistent with past studies on Zimbabwe (Chikoko et al, 2013) but contradicts to study by Hunt et al, 2021. Usually, it is expected that people higher education tends to earn more contributing to higher savings. But the negative relationship may arise due to precautionary motives for savings. Higher education tends to reduce the income volatility and by any chance to be unemployed, people tend to be employed again due to education.

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We find that individuals employed in private sector tend to save less compared to public sector employees and employees in non-governmental organization. The odds ratio of 0.7849 indicates that being the private industry employees, reduced the probability of saving by 21.51% at 5% significance level. This result can be attributed to the fact that the current income level received by private industry employees makes them unable to save more for future. According to the latest household income classification in Malaysia based Department of Statistics Malaysia (2020), the B40 category household received income below RM4850 and B40 comprising the bottom 40% of Malaysian. As we can see this latest B40 income classification, it hard for many households to reach the threshold level of RM4850 combined with rising cost of living caused them save less. Besides that, the current income received by household only able to meet the basic needs. By implication, this situation not only complicate the financial well-being of the household but the chances to save for retirement also drop. This finding confirms past study by Sabri and Zakaria (2015) in Malaysia and but disagrees with Baidoo et al, 2018.

The strong and positive relationship of income level and savings confirms the permanent income hypothesis theory. As expected, our results show that medium and high income increases the probability of saving in which the odds ratios are 1.6957 and 2.7445 accordingly. Households that earning higher income able to meet the basic needs and remaining portion of income will be saved and be more financially independent. This result agrees with Tandoh and Tandoh, 2015; and Liu and Hu, 2013. We find a strong relationship between employed household and savings level among Malaysian households. The odds ratio of 1.6596 show that being employed relative to excluded reference category of unemployed increase the chances of saving among households. The steady income received by household may help them to fulfill the social and economic needs and remaining income will be saved. This finding consistent with study conducted in Bulgaria by Denizer et al, 2002 but not consistent with Hong et al, 2002). The results also show the insignificant relationship between gender, marital status, higher education level, non-profit organization, and number of children with level of savings.

Conclusion And Recommendation

In this study, we examined the factors that influencing household saving among Malaysian with an emphasis on demographic factors. We use the secondary data to analyze the demographic profile and generalized ordered logistic regression estimation (gologit2). The conclusion arise from our findings are as follows: (1) as household age increase by one year, the likelihood of savings has reduced; (2) the household in middle education level saved lower portion of income, (3) being the private industry employee, the household records lower savings, (4) as predicted the higher level of income able to increase the savings, and (5) being employed household has secured the higher level of savings.

This paper provides some important policy implication in which it is worth noting. The financial knowledge among middle education level should be increased in order to increase the financial knowledge and secured savings. This will improve the household understanding and knowledge of financial management. Government should implement more policies in increasing private industry workers. Despite the implementation of minimum wage RM1500, government should focus on working earning within RM4000 especially B40 category. Thus, government policies have to implement in order to improve the saving level among Malaysians. The key limitation of this study is that the cross-sectional data for this study is from 2017 to 2022 only measure data at a single point in time. This means that the data is not suitable for

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studying behavior over a period of time. It would be better if study related questionnaires were collected annually, and studies conducted in long period of time.

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Appendix 1. Definition And Measurements Of Variables

Variable Name	Definition
Dependent Variable Savings	During the past year, did you; Scale "1" to "3", 1=save money, 2= Just get by, and 3=Spent savings and borrowed money
Independent variables:	
Age:	Continuous variable starting from 18-80 years old
Gender: **Female** **Male***	Scale "1" to "2", 1=Male, 2= Female
Marital Status: **Unmarried*** **Married**	Are you currently: Scale "1" to "2", 1=Single, Divorced, Separated, Widowed, 2= Married
Education: **Lower*** **Middle** **Higher**	 No formal education & complete primary school Secondary school, vocational type, and university preparatory type Bachelors. Master's, & Doctoral
Sector of employment: **Government Institution*** **Private Sector** **Non-Government organization**	Are you working for the government or public institution, for private business or industry, or for a private non-profit organization? Scale "1" to "3", 1= Government institution , 2= Private Sector , and 3= Non-Government Organization
Scale of Income (Income):	Scale "1" to "3", 1=Low income, 2= Medium Income, and 3=High Income
Children: **No children***	 No children (1=yes)
Having more than one children	Having more than one children (0=no)

Appendix 2. Chi-square Test and Cramer's V Test Results

Variables	Pearson Chi(2)	Probability	Cramer'V
Gender	1.8403	0.606	0.0375
Marital Status	2.2356	0.525	0.0413
Education	39.4629	0.0000	0.1227
Sector of employment	12.8841	0.045	0.0701
Income Category	67.9190	0.0000	0.1609
Number of Children	4.3885	0.222	0.0579
Employment status	17.5962	0.001	00.1159