

www.europeanproceedings.com

e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2020.03.03.28

ICMR 2019 8th International Conference on Multidisciplinary Research SAVING DETERMINANTS AMONG CAREER WOMEN IN PRIVATE SECTORS IN PENANG

Nur Shazlina Mohd Sulaiman (a), Zarina Md Nor (b)* *Corresponding author

(a) Tenaga Nasional Berhad, Penang, Malaysia, nur.shazlina@yahoo.com(b) School of Distance Education, Universiti Sains Malaysia, Penang, zarina.nor@usm.my

Abstract

This study focuses on saving characteristics among career women working in service and manufacturing industries in Penang, Malaysia. It is important to understanding their saving characteristics because previous studies indicate that women are likely to earn less income and have lower wealth than men and working in private sectors mean that there will be no regular pension payment amidst escalating prices of necessities and healthcare expenses. This study analyses saving characteristics that include socio demographic factors, financial awareness, financial literacy and the types of saving instruments used by the respondents. For this research, quantitative methodology was employed whereby questionnaires were distributed to 500 women working in service and manufacturing industries. Our findings indicate that marital status, income, working experience and locality of the respondents show a significant relationship with their savings. Also, saving awareness and financial literacy of the respondents determine their savings as well. Therefore, apart from demographic characteristic, it is important to create saving awareness and educate the career women on financial issues that could enhance their tendency to save for the future, particularly for their retirement years. This study has important implications for policy maker and financial sectors working on improving the financial wellbeing of the society as a whole.

2357-1330 © 2020 Published by European Publisher.

Keywords: Saving, saving determinants, career women, Penang.



Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Previous literature has shown that saving behaviours of men and women differ significantly (Fisher, 2010; Schmidt & Sevak, 2006; Wu, 2005). A survey released in Britain on "Gender differences in saving" found that men are more dedicated to saving than women due to their desire to own property and having financial security. Savings and financial wellbeing are also crucial in retirement years. Prawitz et al. (2006) stated that many people do not have sufficient retirement funds during their retirement years. Therefore, they have to live a rather uncomfortable life post retirement. In general, many people concern about the sufficiency of their savings. For example, 77% of Americans have always wanted to save but many of them do not manage to save enough. This study is supported by Hurd and Zissimopoulos (2003) whereby they found that most of the respondents have saved insufficiently within the past 20-30 years.

In Malaysia, the current report shows that Malaysians are saving less nowadays which is partly due to the rising level of household debt-to-gross domestic product ratio and also rising income inequality in the country (https://www.theedgemarkets.com/article/it-concern-malaysians-are-saving-less-now). Previously, HSBC Bank reported that in 2010 Malaysians saved approximately 25% of their income and most savings are dedicated for emergency purposes. The report also shows that many Malaysians do not have proper retirement savings, health care schemes or investment for their future. Another report from Khazanah Research Institute shows that between 2006-2013, household savings averaged at only 1.6% of adjusted disposable income. Alarmingly, only 10.8% of the households in Malaysia can withstand any financial uncertainties caused by unplanned factors such as unemployment, change in their marital status and changes in the financial market.

Women, in particular, have been recorded to have lower savings as compared to men. There are many factors have been studied elsewhere such as dependency on men (Schmidt & Sevak, 2006), employment characteristics (Sierminska, Frick, & Grabka, 2008; Eberharter, 2001), less risk tolerance (Sung & Hanna, 1996) and higher risk aversion (Maxfield, Shapiro, Gupta & Hass, 2010; Borghans, Heckman, Golsteyn, & Meijers, 2009). Accordingly, women are more susceptible to have lower financial wellbeing and which in severe cases, to be living in poverty. Therefore, it is important to investigate saving determinants among women in Malaysia. This paper particularly focuses on identifying saving determinants among women working in the service and manufacturing sectors in the state of Penang. This study employs quantitative approach in identifying the relationship of variables such as sociodemographic factors, saving awareness and financial literacy, on savings.

2. Problem Statement

In Malaysia, labour force participation for women is always lower than men. In 2019, there are about 6 million women in the labour force with the participation rate of 55.7% compared to 80.9% for men in the first quarter. Employed women earn their income. As the literature suggested, women seem to save less for various reasons including their attachment to labour force. Rapid economic development in Malaysia has witnessed an increase in women participation in labour force, particularly in the service and manufacturing sectors to support the nation's export growth. As Malaysia making its way to becoming a high income country, women contribution to the workforce is undeniable. By doing so, their earnings could improve

their current standard of living but more desirably, their future standard of living during retirement years as well. Therefore, it is important to focus on saving determinants of women working in public and private sectors, as well as those working in informal sectors. For this study, we specifically focus on women working in the service and manufacturing sectors in the state of Penang, Malaysia. In current economic condition where rising prices of everyday necessities are unavoidable and beyond the control of ordinary people, saving could be challenging to many especially among working women with children as childcare and child rearing expenses are escalating as well. The household expenses could be shared among married couples yet for unmarried women or single mothers, in many cases, they have to bear the expenses themselves. However, the financial burden of single working mothers would be huge compared to married working women and single women in general. The divorce rate in Malaysia is increasing over the years particularly among Muslim couples whereby there were 21,140 cases in 2007 and the number increased to 27,355 cases in 2011.

Apart from demographic characteristics of working women that may determine saving behaviours among career women, financial literacy and saving awareness may also contribute to actual saving by working women in this study. The importance of savings could not be stressed more as people face uncertainties as they live. In an event of an emergency, for example, saving may act as a safety net to those involved. As we are all aware, medical expenses are skyrocketing, therefore, some savings may provide a buffer as people grow older and need more medical attention as demographic reports show that women on average live longer than their male counterpart in Malaysia. And Malaysia is currently preparing to have more ageing society whereby population aged 65 and over increased from 6.5% to 6.7% in 2019 and it is expected to resume following advancement in medical fields. This phenomenon emphasises the need for saving for retirement years particularly for women whose life expectancy is estimated to be longer than men.

In Penang, it seems that many private companies and factories are reducing their workforce through retrenchment or offering Voluntary Separation Scheme (VSS) for their employees although the regularity has decreased (Penang Labour Department various reports). Also, the influx of foreign workers from neighbouring countries adds to the uncertainty of job security for women working in the service and manufacturing industries in Penang. The scenarios stated here need to be taken seriously by women from all walks of life. They should take more control of their finances and start to increase their knowledge of financial matters and start saving for the future.

3. Research Questions

Research questions developed for this study are as followed:

- 3.1. Does marital status affect savings?
- 3.2. Does education level affect savings?
- 3.3. Does income affect savings?
- 3.4. Does locality (urban or rural) affect savings?
- 3.5. Does age affect savings?
- 3.6. Does saving awareness influence savings?
- 3.7. Does financial literacy influence savings?

4. Purpose of the Study

The purpose of this study is to identify saving determinants of women working in private sectors in the state of Penang. These women need a to start saving early so that sufficient fund and wealth could be accumulated to be used during retirement years. One of the main reasons for women working in private sectors to save some of their income is because they are not going to receive a regular pension payment like those working in public sectors do. Moreover, previous studies have also shown that women have lower rate of participation in retirement plans as compared to men and are more likely to be living in poverty during retirement (Brown, Rhee, Saad-Lessler, & Oakley, 2016). By understanding the saving determinants among career woman, it helps to create proper financial planning for this group of women, probably by personal financial planner or saving institutions such as banks and investment agencies. This study focuses on Penang because it has the highest level of per capita Gross Domestic Product in the northern region in 2017 which is RM 49,873 compared to Perlis and Kedah at RM 23,372 and RM 20,372 respectively. Therefore, while people living in Penang may enjoy a higher standard of living, the living costs are relatively higher as well. Hence, stressing the importance of prudent financial planning to balance the amount of spending and saving among the respondents of this study. Besides that, this study also decided to choose the service and manufacturing industry because the two sectors produce the highest number of GDP in Penang. In 2014, the manufacturing industry produces per capita income of RM30,803 while the service industry produces RM32,262.

5. Research Methods

This research employs the quantitative methodology to identify the saving determinants among career women in private sectors in Penang. The purpose of this research is to identify whether a significant relationship exists between the variables.

5.1. Research Design

An applied research will be used to have a better insight and understanding of the existing problem. Applied research requires the researcher to go to the field to explore the environment and obtain data and information. A survey has been conducted and data will be gathered through questionnaires.

5.2. Sampling Method

This study uses simple random techniques in selecting the respondents whereby the respondents in the chosen industries have been selected randomly. Questionnaires have been distributed to various factories and private companies around Penang. The population of this research is all women working in private sectors in Penang. However, since there are many sectors in Penang, only two major and dominating industries in Penang have been chosen for this research namely the service and manufacturing industries in Penang. Based on the data obtained from the Department of Statistics, the total labour force in Penang in these two industries is about 258,000 employees. Therefore, the population for this research is approximately 258,000 employees.

5.3. Sample Size

The calculation for sample size is done by determining the suitable confidence level and confidence interval for this research. This method has been proven to be easy, practical and reliable. The confidence level in for this research is set at the value of 95% whereas the confidence interval is set at the value 9. Therefore, the sample size for this study is 500 respondents which consist of women working in the service and manufacturing industries in Penang. A large number of respondents is included in this study to ensure that the sample is representative of the target population and the findings can be generalized accordingly.

5.4 Research Instrument

The research instrument used for this research is a set of questionnaires. In this study, the questionnaire is divided into 3 sections which are Section A: Saving Profile, Section B: Awareness and Section C: Financial Literacy.

6. Findings

The results of simple linear regression between the saving determinants (dependent variables) and demographic variables (independent variables) indicate that demographics variables accounted for 57.3% of the variation in saving determinant. The results indicate that the model was a significant predictor of saving determinants, F(6,492)=110.256, p<.001. In regard to the predictors investigated, the results are as follows:

Age. The results suggest that age significantly predicts saving among the respondents (β 1= 4.50, p<.001). Therefore, it supports previous findings by Higgins and Williamson (1997) whereby age composition of the population seems to affect aggregate domestic investment opportunities by causing the investment rates to sharply increase among younger adult ages whilst saving rates peak among well-paid older workers. Further, the life cycle model states a positive relationship between saving rate and age. Hence, as age increases to a certain number, saving may increase as well (Burney & Khan, 1992).

Marital status. The results indicate that marital status significantly influences saving among the respondents (β 1= 5.37, p<.001). This finding confers with Mazzocco (2007) who shows that when marital instability increases, saving during marriage becomes riskier. Besides that, higher economic uncertainty may increase risk aversion, thereby reduce the holdings of risky assets (Viceira, 2001; Haliassos & Michaelides, 2003). According to the Life Cycle Model, substantial financial changes occur upon marriage and having children, or separated by divorce or death. Also, younger households tend to be borrowers and single female households tend to have a lower probability of saving than married ones (Yuh & Hanna, 2010).

Education level. The results suggest that education level significantly predicts saving among the respondents ($\beta 1= 6.94$, p<.001). The results show that the saving rate is higher among respondents who have completed high school. Other studies show that the saving rates could be higher from 2 to

6 percentage points annually (Acemoglu & Angrist, 2000; Oreopoulos, 2006). It is found that education attainment tends to increase financial literacy and the use of financial planners, among others (Calvet, Campbell, & Sodini, 2009; Lusardi & Mitchell 2010; Lusardi, Michaud, & Mitchell 2013).

Income. The results show that the respondents' income significantly affects their savings (β 1= - 8.68, p<.001). Khan, Hasan, and Malik (1992) have found that saving rate in Pakistan is positively affected by per capita income and the real interest rate while Abdelkhalek, Arestoff, De-Freitas, and Mage (2010) have found that income had a positive effect on households' saving in Morocco.

Locality. The results suggest that the respondents' locality has significantly affected their saving ($\beta 1= 5.02$, p<.001). Vincelette (2006) indicates that demographic changes due to urban migration have positively influenced average national saving rate. This finding could also be explained by the fact that wealthier households in urban areas have easier access to saving and could be more aware of financial planning and consumption smoothing. On another note, Khan et al. (1992) shows that people who move from urban to rural areas tend to save more due to lower consumption level in the rural areas compared to urban areas.

Variable	В	β	t	ρ
I know how much I spent	6.480	.488	13.072	.000
last week				
I have a good	-4.620	343	-8.780	.000
understanding of how to				
invest my money				
I have a good	-2.644	191	-9.243	.000
understanding of how to				
manage my credit expenses				
I am happy with my	-4.611	330	-18.908	.000
budgeting skills				
I am highly indebted	-13.321	896	-42.818	.000
$\mathbf{R}^2 = .88$				

 Table 01. Regression results for awareness

Note: Significance level: * p < .05. ** p < .01. *** p < .001.

Table 01 indicates that awareness is a significant predictor of savings F(5,493)=747.021, p<.001. All the variables tested include 'I know how much I spent last week', 'I have a good understanding on how to invest my money', 'I have a good understanding on how to manage my credit expenses' and 'I am happy with my budgeting skills' show significant results when tested with saving determinants. Karlan, McConnell, Mullainathan, and Zinman (2016) have stated that awareness affects saving and saving reminders has been postulated to increase saving.

Variable	В	β	t	ρ
Ability to maintain	1.142	.062	1.911	.057
financial records				
Understanding on financial	-5.126	280	-7.907	.000***
instruments				
I know how much I pay for	1.164	.064	1.616	.107
housing/rental				
Monthly charges on current	4.673	.261	10.404	.000***
& saving accounts				
Exchange rate	11.595	.902	29.614	.000***
$\mathbf{R}^2 = .73$				

Table 02. Regression results for financial literacy

Note: Significance level: * p < .05. ** p < .01. *** p < .001.

The results presented in Table 02 show that financial literacy is a significant predictor of saving among the respondents, F(5,493)=267.471, p<.001. This finding is consistent with Delafrooz and Paim (2011), indicating that the level of financial literacy affects the intention to save and actual saving by individuals. Therefore, financial literacy may encourage personal saving and improve overall financial wellbeing including retirement saving, while those who lack it would rely on others for financial advice (Lusardi & Mitchell, 2008). The importance of saving for retirement could not be stressed more as retirement preparedness should be taken seriously by women though in general, they are less literate than men in financial matters.

Table 3 presents the summary of the findings form the hypotheses testing.

	Hypothesis	Results
HA ₁	Marital status has a significant relationship with saving	Accepted
	among career women	
HA ₂	Education level has a significant relationship with saving	Accepted
	among career women.	
HA ₃	Income has a significant relationship with saving among	Accepted
	career women.	
HA ₄	Locality has a significant relationship with saving among	Accepted
	career women.	
HA ₅	Age has a significant relationship with saving among career	Accepted
	women.	
HA ₆	Awareness has a significant relationship with saving among	Accepted
	career women.	
HA ₇	Financial literacy has a significant relationship with saving	Accepted
	among career women.	

Table 03. Hypothesis testing results

7. Conclusion

This study seeks to identify the saving determinants among women working in private sectors in the state of Penang. In conclusion, the findings suggest that demographic characteristics namely, marital status, income, working experience, and locality are significant in determining the saving of the respondents.

Further, awareness of the importance of saving and financial literacy are also found to encourage the saving of the respondents. Hence, this study confers to the existing literature on saving. The findings have important implications for policy makers in particular as the saving rate for Malaysian is relatively low amidst escalating prices of goods and services. We would suggest that financial literacy and saving awareness should be included formally or informally in teaching syllabus in schools and institutions of higher learning. Indeed, our country needs financially literate women and men who can make wise financial decisions for the betterment of their financial wellbeing and to protect themselves from fraud and financial scams which are quite rampant nowadays. The findings are also beneficial for financial institutions to design a dedicated financial saving scheme for women by taking into consideration the unique demographic saving determinants found from this study.

References

- Abdelkhalek, T., Arestoff, F., De-Freitas, N. E., & Mage, S. (2010). A Micro-Econometric Analysis of Households Saving Determinants in Morocco. *African Review of Money Finance and Banking*, 7-27. Retrieved from www.jstor.org/stable/41803204
- Acemoglu, D., & Angrist, J. (2000). How large are human-capital externalities? Evidence from compulsory schooling laws. NBER Macroeconomics Annual, 15, 9–59.
- Borghans, L., Heckman, J. J., Golsteyn, B. H. H., & Meijers, H. (2009). Gender Differences in Risk Aversion and Ambiguity Aversion. *Journal of the European Economic Association*, 7(2-3), 649-658.
- Brown, J. E., Rhee, N., Saad-Lessler, J., & Oakley, D. (2016). *Shortchanged in Retirement: Continuing Challenges in Women's Financial Future*. National Institute on Retirement Security.
- Burney, N. A., & Khan, A. H. (1992). Socio-economic Characteristics and Household Savings: An Analysis of the Household's Saving Behaviour in Pakistan. *Pakistan Development Review*, 31, 11-30.
- Calvet, L., Campbell, J., & Sodini, P. (2009). Measuring the Financial Sophistication of Households. *American Economic Review*, 99(2), 393–398.
- Delafrooz, N., & Paim, L. (2011). Determinants of Saving Behaviour and Financial Problem among Employees in Malaysia. *Australian Journal of Basic and Applied Sciences*, 5(7), 222-228.
- Eberharter, V. V. (2001). Gender Roles, Labour Market Participation and Household Income Position. *Structural Change and Economic Dynamics*, 12(3), 235-246.
- Fisher, P. J. (2010). Gender Differences in Personal Saving Behaviours. *Journal of Financial Counselling* and Planning, 21(1), 14-24
- Haliassos, M., & Michaelides, A. (2003). Portfolio Choice and Liquidity Constraints. International Economic Review, 44(1), 143-177.
- Higgins, M., & Williamson, J. G. (1997). Age Structure Dynamics in Asia and Dependence on Foreign Capital. *Population and Development Review*, 23(2), 261-293.
- Hurd, M. D., & Zissimopoulos, J. (2003). Saving for Retirement: Wage Growth and Unexpected Events Paper 2009-213. Michigan Retirement Research Centre. Research Paper No. WP 2003-045. Retrieved from https://dx.doi.org/10.2139/ssrn.1090900
- Karlan, D., McConnell, M., Mullainathan, S., & Zinman, J. (2016). Getting to the Top of Mind: How Reminders Increase Saving. *Management Science*, 62, 3393-3411.
- Khan, A. H., Hasan, L., & Malik, A. (1992). Dependency Ratio, Foreign Capital Inflows, and the Rate of Savings in Pakistan. *Pakistan Development Review*, 31(4), 843-856.
- Lusardi, A., & Mitchell, O.S. (2008). Planning and Financial Literacy. How Do Women Fare? *American Economic Review*, 98(2), 413-417.
- Lusardi, A., & Mitchell, O.S. (2010). How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness. CFS Working Paper no. 2010/11. Frankfurt: Centre for Financial Studies.

- Lusardi, A., Michaud P. C., & Mitchell, O.S. (2013). Optimal Financial Knowledge and Wealth Inequality. NBER Working Paper Series, no. 18669. Cambridge, Massachusetts: National Bureau of Economic Research.
- Maxfield, S., Shapiro, M., Gupta, V., & Hass, S. (2010). Gender and Risk: Women, Risk Taking and Risk Aversion. *Gender in management: An International Journal*, 25(7), 586-604.
- Mazzocco, M. (2007). Household Intertemporal Behaviour: A Collective Characterization and a Test of Commitment. *Review of Economic Studies*, 74(3), 857-895.
- Oreopoulos, P. (2006). The Compelling Effects of Compulsory Schooling: Evidence from Canada. *Canadian Journal of Economics*, 39(1), 22–52.
- Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge Financial Distress/Financial Well-being Scale: Development, Administration and Score Interpretation. *Financial Counselling and Planning*, 17(1), 724-750.
- Schmidt, L., & Sevak, P. (2006). Gender, marriage, and asset accumulation in the United States. *Feminist Economics*, 12(1), 139-166.
- Sierminska, E. M., Frick, J. R., & Grabka, M. M. (2008). Examining the gender wealth gap in Germany. DIW Discussion Paper #806. Berlin.
- Sung, J., & Hanna, S. (1996). Factors related to risk tolerance. *Financial Counselling and Planning*, 7, 11-20.
- Viceira, L. M. (2001). Optimal Portfolio Choice for Long-Horizon Investors with Nontradable Labour Income. *Journal of Finance*, 56(2), 433-470.
- Vincelette, G. A. (2006). Determinants of Saving in Pakistan. South Asia Region PREM Working Paper Series, Report No. SASPR-10. World Bank.
- Wu, K. (2005). The Material Consequences of How Social Security Keeps Older Persons Out of Poverty Across Developed Countries. Luxembourg.
- Yuh, Y., & Hanna, S. D. (2010). Which Households Think They Save? Journal of Consumer Affair, 44(1), 70-97.