



#### **Conference Paper**

# Saving Behavior Determinants in Malaysia: An Empirical Investigation

Shafinar Ismail<sup>1</sup>, Wei-Loon Koe<sup>1</sup>, Mohd Halim Mahphoth<sup>1</sup>, Rizuwan Abu Karim<sup>1</sup>, Noorhidayah Yusof<sup>1</sup>, and Suzila Ismail<sup>2</sup>

<sup>1</sup>Faculty of Business and Management, Universiti Teknologi MARA Cawangan Melaka, 110 Off Jalan Hang Tuah, 75300 Melaka, Malaysia

#### **Abstract**

This study investigates the determinants of saving behavior among government servants. The study focused on financial knowledge, financial self-efficacy, financial attitude and financial management practice in relation of saving behavior. The respondents were government servants in Kuala Lumpur, Malaysia. Convenience sampling was used for this study. 150 questionnaires were distributed to 150 respondents to answer the questionnaires. The questionnaire was designed in two sections, one consisting of demographic information and the second relating to the selection determinants of saving behavior. Result indicates that financial self-efficacy becomes the important factor that influences the saving behavior. Financial self-efficacy is the best predictor as most of government servants are managed to make progress towards financial goals. These findings could be useful references for related organizations as well as body of knowledge and practical implication that are interested in developing personal saving in a context of avoiding from bankruptcy.

Keywords: Saving Behavior, Financial Knowledge, Financial Attitude, Financial Self-Efficacy, Financial Management Practice

Corresponding Author: Shafinar Ismail shafinar138@gmail.com

Received: 7 February 2020 Accepted: 9 March 2020 Published: 23 March 2020

#### Publishing services provided by Knowledge E

© Shafinar Ismail et al. This article is distributed under the terms of the Creative Commons
Attribution License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICE-BEES 2019 Conference Committee.

# 1. Introduction

This study investigates the factor affected saving behaviour among government servants and focused on financial knowledge, financial attitude, financial self-efficacy and financial management practice in relation with saving behaviour. Money management is very important for every employee either in public or private sector. This is because managing money is more difficult compared to making or earning money. Every individual must know how to manage their money in term of saving and investment. According to Keynesian economics, saving can be defined as the balance amount after deducting the cost of expenditure from the amount of disposable income. Saving plays an important role in our economy since it is promote long run economic growth (Aghion, Bacchetta,

**□** OPEN ACCESS

<sup>&</sup>lt;sup>2</sup>School of Applied Psychology, Social Work and Policy; Universiti Utara Malaysia, Sintok, 06010 Kedah, Malaysia



Rancie, Rogoff, 2009). Saving happens when an individual able to save some money from their income instead of overspending the money. Besides that, saving also means sacrifice some current consumption in order to improve the living standard in the future.

If people do not save and failed in managing their money properly, it can lead to the financial problem such as bankruptcy. Bankruptcy case is one of the major problems in Malaysia especially from government servants. The number of bankruptcy in Malaysia slightly increased which is 22,581 cases that had been recorded between 2012 until September 2016 (Bernama, 2016). This is due to failure to settle vehicle hire purchase loans, followed by personal loans and housing loans. This problem occurred due to lack of financial planning and financial knowledge toward the financial behavior. When they do not have any saving and at the same time they involved in any debt, it will lead to the feeling of embarrassment and stress.

Malaysia has a large number of government servants compared to another country with the ratio one government servant equal to 19.37 peoples (Lo, 2017). The government servants caused the government expenditure become increased every year. Other than that government servants also lead to the increasing number of loans in Malaysia. However, government servants should not be involved in bankruptcy because as we know government servant is the largest contributor to the gross domestic product and for economic development (Lo, 2017). Other than that, when they involved in bankruptcy, it will be effect to their career and families. Due to the problem, the government servants should understand the importance of saving money and implement the saving behaviour. There are a few determinants that can be influenced the saving behaviour which is financial knowledge, financial attitude, financial self-efficacy and financial management practice. Thus, this study intended to investigate the relationship between those variables.

#### 2. Literature Review

## 2.1. Financial knowledge and saving behavior

The term of financial literacy, financial knowledge and financial education are always used interchangeably in the literature and among popular media (Huston, 2009). The term of financial knowledge is related with the financial behaviour and consequently to the term of borrowing, saving and investment decision of individuals (Lusardi & Mitchell, 2014). Individuals who have a good financial knowledge will able to make a good sound of financial decision and have a good planning in finance. So that, the individuals would

know how to manage their money properly and understand how the financial institutions work (Mahdzan & Tabiani, 2013). A research has found that individuals who have a higher knowledge of finance are more capable in preparing themselves through better saving and insurance plans (Hinga, 2014). Moreover, the financial knowledge tends to be higher among adults in the middle age compared to young and elderly individuals who have lower financial knowledge (Potrich, Vieira, Kirch, 2015). The individuals who have less financial knowledge tends to apply for more loans, accumulate less wealth and pay for more fees for financial products (García, Santillán, Tiburcio, 2013). The individuals tend to less invest, face more difficulties with debts and the most limited sectors in financial education are represented by certain economic, in general women and people with less education(García, et al, 2013). Frankly, the higher of financial knowledge of one individual does not automatically turn into the better financial management unless the values of living are cultivated along the financial knowledge (Qamar, Khemta & Jamil, 2016). Such proposition can be formulated in the following manner:

 $H_1$ : There is a positive relationship between financial knowledge and saving behavior.

### 2.2. Financial attitude and saving behavior

Financial attitude is about one's perception about money. The previous study has proven that financial attitude is an important factor because it can be strongly influence the saving behavior (Hrubes, Ajzen, & Daigle, 2001). The attitude among individuals are differences and may influences the perception of one's income and the effects on social preferences or self-esteem (Gasiorowska, 2015). Individual differences in the way of people attach to money, understanding the function of money in life which can be function of various factors like age, wealth, social class or personality that will reflected to the concepts of attitude toward money (Gasiorowska, 2015). Meanwhile the financial attitude will form the way on how people used their money, saving attitude and misspend their money. Financial attitudes held by low and moderate income individuals and a research found that these peoples do not have enough money to save because they need to support their daily life (Hayhoe, Cho, DeVaney, Worthy, Kim & Gorham, 2012). However, the attitudes of holding money can significantly affect the way of they spend, save and manage their financial skills. This hypothesis can be formulated in the following

 $H_2$ : There is a positive relationship between financial attitude and saving behavior.



#### 2.3. Financial self-efficacy and saving behavior

Financial self-efficacy defined as an individuals' ability to handle their financial (Lapp, 2010) and it is correlated with the self-confidence and could reflect the financial skill (Lown, 2011). The importance of financial self-efficacy is when an individual seeking for good financial decisions and the self-efficacy may influence the financial decisions (Lown, 2011). Moreover, self-efficacy is an important concept in social psychology that refers to a feeling of being able to deal with a situation effectively (Letkiewicz, Domian, Robinson, Uborceva, 2014). Then, financial self-efficacy examines the tendency of psychological that encourages behavioral habits that will lead to a better financial wellbeing and financial decisions. Individuals who have higher self-efficacy will be more confident and more successful than those who have a lower self-efficacy in handling financial difficulty (Kraft, Rise, Sutton, & Røysamb, 2005). Other than that, individuals who have a high level of self-efficacy are expected to produce well-being for them not only in physically and mental health, but also will influences the behavioral changes. Individuals who have high financial self-efficacy have an ability to manage their financial affairs and seek help when they needed (Letkiewicz et al, 2014). However, for those have a low financial self-efficacy will unable to manage their financial affairs and unable to seek help when they needed. In addition, for those have a higher financial self-efficacy associated with the lower debt, have a fewer financial problem, less facing financial stress and have a higher saving (Lapp, 2010). Hypothesis related to these issues can be formulated in the following way.

 $H_3$ : There is a positive relationship between financial self-efficacy and saving behaviour.

#### 2.4. Financial management practice and saving behavior

Financial management also refers to a set of behaviour that related to the management of money, financial planning, investment, insurance and retirement. Financial management is the determination, acquisition, allocation and utilization of financial resources (Mien, & Thao, 2015). Furthermore, individuals should avoid the excessive consumption and must aware the practices of a financial management system (Pham, Yap, Dowling, 2012). Financial management also involved a variety of decisions that have a connection with the importance, frequency and the amount of money. Then, the individuals who neglect with money will do not practice a good financial management. The financial management in household involved in budgeting for expenditures, provide funds to

meet the budget, evaluate and controlling the spending (Krah, Aveh, Addo, 2014). There are four different characteristics of financial management among individuals and household which are allocation of financial such as for consumption and saving, contribution of money toward paying bills, day-to-day spending and control over small personal spending (Krah et al, 2014). Individuals who apply the financial management in their daily life tend to have a positive attitude and money confidence not only in present but also in future period. For example, individuals who practice financial management in their life will more like to save money for their future use instead of spending now with the limited amount. Then, individuals who consistently applied the financial management will be more optimistic because they will most perceive themselves as being well-prepared and feel more confidence in their ability to save money. Peoples should decide how much to allocate their income over multiple time periods in order to maintain at a constant level of consumption because the level of income may change over the life cycle. These hypothesis can be formulated in the following way.

 $H_4$ : There is a positive relationship between financial management and saving behaviour.

The hypothesis as derived above from the review of the literature can be conceptualized in a model form as follows:

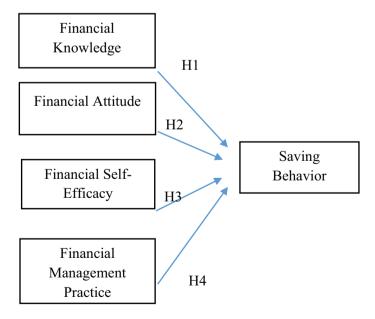


Figure 1: Conceptual framework for the study.



# 3. Methodology

In this study, the respondents were government servants in Kuala Lumpur, Malaysia. Convenience sampling was used for this study. 150 questionnaires were distributed to 150 respondents to answer the questionnaires. All instruments were adapted from previous study which is saving behavior; which consists of 8 items adapted from Ahmad, Simun and Masuod (2010), financial knowledge items consist of 5 questions adapted from Mien & Thao (2015), financial attitude questions consist of 9 items adapted from Potrich et al, (2015), financial self-efficacy questions adapted from Lown, J. M. (2011) and financial management practice consist of 6 questions adapted from Delafrooz, & Paim (2011). All variables used a 5 likert scale point from one (1) strongly disagree to (5) strongly agree. SPSS 21 was used to record the data. Content validity tested using reliability test, Cronbach alpha. The hypothesis tested using regression analysis.

# 4. Findings

#### 4.1. Frequency statistics

A total of 150 respondents co-operated by returning the questionnaires that resulting in 100% rates of return. Table 1 summarizes the demographic information. The sample was diverse in several aspects. Approximately, 38.0% of the samples (57) were male and 62.0% (93) were female. 138 subjects (92.0%) were Malay, 4 subjects (2.7%) were Chinese, 3 subjects (2.0%) were Indian and 5 subject (3.3%) were others ethnicity. Meanwhile, majority of the respondents (53) aged between 21 and 30 years old (35.3%), (47) aged between 31 and 40 years old (31.3%), and there is same frequency (25) between the aged of 41 and 50 years old and above 51 years old (16.7%). The table also shows that 34.0% (51) of them earn RM2001-3000 per month, followed by 25.3% of samples (38) received more than RM4000, 22.7% (34) of them earn RM 3001- RM 4000 per month and 18.0% (27) of the samples earn RM 1001-RM 2000 income per month. On the other hand, 40% (60) of the samples have a Degree background followed by 38.7% (58) of the samples have a Diploma background, 10.7% (16) of the samples have a SPM background, 8.7% (13) of the samples have a Master background and only 2.0% (3) of the samples have a certificate only. Besides that, majority of the respondents (85) are married (56.7%), 39.3% of the respondents are single (59) and only 4.0% of the respondents are divorced (6).

TABLE 1: Sample Characteristics.

Demographic Factors	Categories	Percentage
Gender	Male	38.0
	Female	62.0
Ethnicity	Malay	92.0
	Chinese	2.7
	Indian	2.0
	Others	3.3
Age	Below 21	0
	21 – 30	35.3
	31 – 40	31.3
	41 – 50	16.7
	Above 50	16.7
Income Per Month	Less than RM1000	0
	RM 1001 – RM2000	18.0
	RM 2001 – RM 3000	34.0
	RM 3001 – RM 4000	22.7
	Above RM 4000	25.3
Education Background	SPM	10.7
	Certificate	2.0
	Diploma	38.7
	Degree	40.0
	Master	8.7
Marital Status	Single	39.3
	Married	56.7
	Divorced	4.0

#### 4.2. Descriptive result

Table 2 illustrates the descriptive analysis results. For saving behaviour, the item of 'emergency' is the highest score of mean with 4.08, meaning that that is the most influence items for saving behaviour variable. Meanwhile the item of 'financial problem is the lowest mean with 3.54, meaning that most of respondent disagree with the statement. The standard deviation of 1.05 shows how much variation exists from its mean.

Next, for financial knowledge, the item of 'manage personal finance' scores the highest mean with 4.37. It shows that majority of respondents agree that the way they manage their personal finance. Meanwhile the item of 'balance on bank statement'



score the lowest mean with 4.01. The standard deviation of 0.75 shows how much variation exists from its mean.

For financial attitude, the item of 'monthly basis' scores the highest mean with 4.17. It shows that majority of respondents agree that saving money in monthly basis is important. Meanwhile the item of 'budget' score the lowest mean with 2.76. The standard deviation of 0.94 shows how much variation exists from its mean.

The highest mean for financial self-efficacy variable is 'financial goal' which is the 3.77 while the lowest mean is 'stick spending plan' at 3.24 respectively. The respondents mostly not agreed that they do not feel it is a burden if they stick to their spending plan when unexpected expenses arise.

Lastly, the highest mean among all item under financial management practice variables is 'personal saving account' and the lowest mean is 'income for retirement' is 4.32 and 3.68 respectively. The respond show that it was agreed by the respondents that 'I have my own personal saving account'. Meanwhile the respondents fell neutrally regarding to the statement of 'I have divided my income for retirement'.

TABLE 2: Descriptive Result.

Variables	Items Mean S		SD
Saving behavior	<b>behavior</b> Monthly financial planning		0.94
	Observed financial planning strictly	3.57	1.03
	Know the value of entire assets owned	3.95	0.81
	Save every month	3.88	1.04
	Always review financial position	3.59	0.80
	Investment is important	3.86	0.81
	Have emergency savings	4.08	0.71
	Preparedness to face any financial problem	3.54	1.05
Financial knowledge	Knowledge about interest rate and borrowing rate charged by bank	4.35	0.53
	Credit rating	4.30	0.51
	Manage personal finance	4.37	0.65
	Stock market	4.23	0.82
	Balance on bank statement	4.01	0.75
Financial Attitude	Control monthly expenses	3.57	1.14
	Establish financial target for future	3.89	0.94
	Save money on monthly basis	4.17	0.75
	Manage money today affect future	3.97	0.75
	Follow a monthly expenses plan	3.59	0.97
	Pay full credit card balance	3.19	0.92



Variables	Items	Mean	SD
	Compare credit offers	3.63	0.81
	Stay within a budget	2.76	0.94
	Invest regularly	3.97	0.78
Financial Self-Efficacy	Can stick to spending plan if unexpected expenses arise	3.24	0.83
	Can make progress towards financial goal	3.77	0.70
	Not always use credit when unexpected expenses occur	3.74	0.93
	Can figure out solution when face with financial challenge Have confidence in ability to manage finance	3.29	0.89
	Confident to manage finances	3.69	0.79
	Did not worry about running out of money after retirement.	3.47	1.08
Financial Management Practice	Have own personal saving account	4.32	0.61
	Prepared for emergency saving	3.99	0.73
	Prepared my long term savings for future	4.04	0.72
	Have own retirement savings	3.71	1.14
	Have divided income for retirement	3.68	1.01
	Have own life and health insurance	3.84	1.20

#### 4.3. Reliability Analysis

The Cronbach"s Alpha for saving behavior (0.825), financial knowledge (0.821), financial attitude (0.790), and financial management practice (0.823) are considered as high reliability. However, the Crobanch's Alpha for financial self-efficacy is small (0.606) but according to Moss, Prosser, Costello H, et al., 1998) cronbach's alpha more than 0.6 is generally acceptable. Thus, coefficient was obtained from all questions in likert scale are reliable. In a nutshell, the cronbach"s alpha above 0.70 suggests that the specified indicators are good to use (Nunnally, 1978).

#### 4.4. Regression Analysis

In order to determine the significant relationship, the value of p should be less than 0.05. As referred to the table 4.5.3, financial self-efficacy has the highest value of Beta (standardized coefficient) is 0.389 and the significant value is 0.00 which is less than

TABLE 3: Reliability	Results.
----------------------	----------

Variables	Number of items	Cronbach's Alpha
Saving Behavior	8	0.825
Financial Knowledge	5	0.821
Financial Attitude	9	0.790
Financial Self-efficacy	6	0.606
Financial Management Practice	6	0.823

p value (0.05). Meanwhile financial management practice has the second highest Beta value (standardized coefficients) is 0.337 and the significant value is 0.00 less than p value (0.05). In addition, financial knowledge has the value of Beta (standardized coefficient) is 0.245 and the significant value is 0.00 which is less than p value (0.05). However, financial attitude has no significant relationship between saving behavior since the significant value is 0.756 which is more than 0.05.

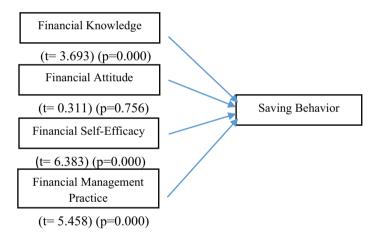


Figure 2: Hypothesis Testing Result.

TABLE 4: Regression Result.

Hypothesis	Beta	t-value	p-value	Supported?
H1	0.245	3.693	0.000	Yes
H2	0.020	0.311	0.756	No
Н3	0.389	6.383	0.000	Yes
Н4	0.337	5.458	0.000	Yes

#### 5. Conclusion and Discussion

The aim of this study to investigate the factors affected the saving behavior among government servants in Malaysia. Based on a combination of research findings from

previous saving behavior literature, and also the theoretical relationships observed empirically, this result provides further insight into the factors determining saving behavior. This study found that financial knowledge, financial self-efficacy and financial management practice as other previous studies (Mien & Thao, 2015). have been proven to have a significant relationship with saving behavior. Similarly, financial self-efficacy and financial management practice also found to have a significant relationship with saving behavior (Letkiewicz et al, 2014; Delafrooz & Paim, 2011). However, different with financial attitude which found to be not significant with saving behavior (Rajna A., Ezat W.P.S, Junid S. A., Moshiri H., 2011).

This study has gained a better understanding on the determinants of saving behavior among government servants. Every individual must know the importance of saving behavior and the impact of saving behavior for the future period. The financial self-efficacy can be improved for every individual in order to encourage saving behavior. An individual who have a higher level of self-efficacy can be more confident in managing their financial and handling their financial difficulty.

The limitation of this study was the sample size might be too small which is only focused on Kuala Lumpur respondents therefore, the findings cannot be generalized. Other than that, the respondents also might be biased and the data is inaccurate. This is because the respondents might put random answer. More studies needed to investigate the relationship using more sophisticated method.

#### References

- [1] Ahmad, Z, Simun, M. and Masuod S.M. (2010), Determinants of Financial Behaviors among Malaysians, *Indonesian Capital Market Review*, 2(2):121-132.
- [2] Aghion P., Bacchetta P., Rancie R., Rogoff K., (2009). Exchange rate volatility and productivity growth: The role of financial development. Journal of Monetary Economics 56 (2009) 494-513.
- [3] Andrew Lo, "Bloated civil service", *The Star Online: https://www.thestar.com.my/metro/views/2017/02/03/bloated-civil-service-high-amount-of-taxpayers-money-is-used-to-pay-salaries-and-pensions-of-govt-st/*
- [4] Bernama, "Alarming 22,581 M'sians aged 25 to 34 declared bankrupt in last four years", New Straits Time: https://www.nst.com.my/news/2016/11/189631/alarming-22581-msians-aged-25-34-declared-bankrupt-last-four-years
- [5] Delafrooz N., & Paim L. H., (2011). Determinants of Saving Behavior and Financial Problem among Employees in Malaysia. Australian Journal of Basic and Applied



- Sciences, 5(7): 222-228, 2011.
- [6] García E. M., Santillán A. G., Tiburcio J. P. M., (2013). Some aspects about financial knowledge of undergraduate students. International Journal of Management and Sustainability, 2013, 2(4):40-62.
- [7] Gasiorowska A., (2015). The Impact of Money Attitudes on the Relationship between Income and Financial Satisfaction. Polish Psychological Bulletin 2015, vol 46(2), 197-208.
- [8] Hayhoe, C.R., Cho, S.H., DeVaney, S.A., Worthy, S.L., Kim, J., & Gorham, E. (2012). How do distrust and anxiety affect saving behavior? Family and Consumer Sciences Research Journal, 41(1), 69-85.
- [9] Hinga G. K., (2014). Relationship of Financial Literacy On Individual Savings of Employees of Postal Corporation of Kenya Based in Nairobi. http://erepository.uonbi. ac.ke/bitstream/handle/11295/74700/Hinga
- [10] Hrubes, D., Ajzen, I., & Daigle, J. (2001). Predicting hunting intentions and behaviour: An application of the theory of planned behaviour. Leisure Sciences, 23, 165-178.
- [11] Huston S. J., (2009). Measuring financial literacy. The Journal of Consumer Affairs, Summer 2010, Volume 44(2), pages 296-316.
- [12] J.C Nunnally, "Psychometric Theory (2nd ed)". New York; McGraw-Hill, 1978.
- [13] Jodi C. Letkiewicz, Dale L. Domian, Chris Robinson, Natallia Uborceva. (2014). Self-Efficacy, Financial Stress, and the Decision to Seek Professional Financial Planning Help. Academy of Financial Services.
- [14] Kraft, P., Rise, J., Sutton, S., & Røysamb, E. (2005). Perceived difficulty in the theory of planned behaviour: perceived behavioural control or affective attitude? The British Journal of Social Psychology / the British Psychological Society, 44(Pt 3), 479-96. http://doi.org/10.1348/014466604X17533
- [15] Krah R. Y., Aveh F. K., Addo R., (2014). An exploratory study of financial management practices among ghanaian households. International Journal of Management and Sustainability, 2014, 3(7): 393-414.
- [16] Lapp, W. M. (2010). The missing link: Financial self-efficacy's critical role in financial capability. San Francisco, CA: EARN Research Institute.
- [17] Lown, J. M. (2011). Development and validation of a financial self-efficacy scale. Journal of Financial Counseling and Planning, 22(2), 54–63
- [18] Lusardi A. & Mitchell O. S., (2014). The Economic Importance of Financial Literacy: Theory and Evidence. Journal of Economic Literature 2014, 52(1), 5–44.



- [19] Mahdzan, N.S., Tabiani, S. (2013). The Impact of Financial Literacy on Individual Saving: an Exploratory Study in the Malaysian Context. Transformations in Business & Economics, Vol. 12, No 1 (28), pp.41-55.
- [20] Mien N. T. N., & Thao T.P., (2015). Factors Affecting Personal Financial Management Behaviors: Evidence from Vietnam. http://globalbizresearch.org/ Vietnam\_Conference/pdf/VL532.pdf
- [21] Moss SC, Prosser H, Costello H, et al. Reliability and validity of the PAS-ADD Checklist for detecting psychiatric disorders in adults with intellectual disability. Journal of Intellectual Disability Research 1998; 42, 173-183.
- [22] Pham T. H., Yap K., Dowling N. A., (2012). The impact of financial management practices and financial attitudes on the relationship between materialism and compulsive buying. Journal of Economic Psychology 33 (2012) 461–470
- [23] Potrich A. C.G., Vieira K. M., Kirch G., (2015). Determinants of Financial Literacy: Analysis of the Influence of Socioeconomic and Demographic Variables.
- [24] Qamar, M. A. J., Khemta, M. A. N., & Jamil, H. (2016). How Knowledge and Financial Self-Efficacy Moderate the Relationship between Money Attitudes and Personal Financial Management Behavior. European Online Journal of Natural and Social Sciences, 5(2), 296.
- [25] Rajna A., Ezat W.P.S, Junid S. A., Moshiri H., (2011). Financial Management Attitude and Practice among the Medical Practitioners in Public and Private Medical Service in Malaysia. International Journal of Business and Management Vol. 6, No. 8; August 2011.