

SAVINGS AND INVESTMENT BEHAVIOUR
OF HAJJ FUND CONTRIBUTORS:
A CASE STUDY OF SELECTED CITIES IN INDONESIA

BY

FITRI HASTUTI

A thesis submitted in fulfilment of the requirement for the
degree of Doctor of Philosophy in Islamic Banking and
Finance

IIUM Institute of Islamic Banking and Finance
International Islamic University Malaysia

SEPTEMBER 2020

ABSTRACT

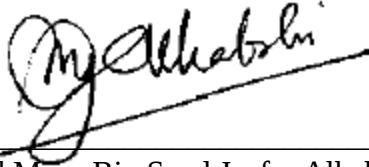
This research conducted an assessment on determinants that rationalize Hajj funds contributors' savings and investment behaviour from a dual objective perspective towards needs fulfilment and religious-socio obligation as an obedient Muslim. Structural Equation Modelling employed in this research utilised independent variables adopted from Fisher's Intertemporal Choice Theory and the Theory of Planned Behaviour. Both Fisher's personal factors, saving horizon and impatience are the determinants of the Intertemporal Choice Theory, whereas religious beliefs and perceived behavioural control are the elements from the Theory of Planned Behaviour are explored. Furthermore, psychological variables and knowledge are two additional independent variables which are also assessed in this study. Moreover, moderation effects analysis were performed using the two variables: Fisher economic factors and product features; whilst multigroup analysis was conducted using different factors of demographic aspects. Primary data were collected from a sample of 408 individual contributors from two provinces who performed Hajj in 2016. It was found that both Fisher's Intertemporal Choice Theory and the Theory of Planned Behavior could explain Hajj savings behaviour with reference to the significant findings of Fisher's personal factors, saving horizon and perceived behavioural control. These theories were also able to explain Hajj investment behaviour through the presence of Fisher's personal factors, impatience and perceived behavioural control. Risk adjusted return preference was the psychological factor that affected Hajj savings-investment behaviour. The moderation role of Fisher's economic factors and product features in the model were also supported. The effects of Fisher's Intertemporal Choice Theory, the Theory of Planned Behavior, and psychological factors are also significant across different across groups of age, gender, education, working status, income, house ownership and wealth.

خلاصة البحث

الهدف الرئيسي من هذا البحث هو إقامة تقييم للعوامل المحددة الأساسية التي تبرر سلوك استثمار المدخرات لدى المساهمين في صندوق الحج بهدف مزدوج نحو تلبية الاحتياجات والالتزام الديني والاجتماعي كمسلم مُطيع. تم استخدام نمذجة المعادلة الهيكلية (Structural Equation Modelling) في هذا البحث المتغير التابع في هذا البحث هو سلوك استثمار مدخرات الحج لدى المساهمين في صندوق الحج. هذا البحث يستخدم المتغيرات المستقلة المأخوذة من نظرية فيشر للخيار الزمني (Fisher's Intertemporal Choice) ونظرية السلوك المخطط (Theory of Planned Behaviour). عوامل فيشر الشخصي، وأفق الادخار (saving horizon) وعدم الصبر هما العاملان المأخوذان من استطلاع لنظرية الخيار الزمني، أما المعتقدات الدينية، والسيطرة السلوكية الملموسة فهما من العوامل المحددة لنظرية السلوك المخطط. علاوة على ذلك، فإن المتغيرات المستقلة الإضافية وهي: العوامل النفسية والمعرفة اللتان ساهمتا في هذا البحث. تم أداء تحليل تأثير التوسط باستخدام متغيرين: عوامل فيشر الإقتصادي وخصائص المنتج، أما تحليل المجموعات المتعددة فقد تم باستخدام عوامل مختلفة تخص الجوانب الديموغرافية. تم جمع البيانات من عينة تتكون من 408 أشخاص مساهم أدى مناسك الحج في 2016م من محافظتين اثنتين في إندونيسيا. تم إثبات أن كلاً من نظرية فيشر للخيار الزمني والسلوك المخطط بإمكانهما تفسير سلوك الإدخار للحج مع وجود عوامل فيشر الشخصي، وأفق الإدخار والسيطرة السلوكية الملموسة. هذه النظريات أيضاً استطاعت أن تُفسر سلوك استثمار الحج مع وجود عوامل فيشر الشخصي، وعدم الصبر والسيطرة السلوكية الملموسة. تفضيل الخطر كان العامل النفسي الذي أثر على سلوك استثمار المدخرات، أما المعرفة فقد أثرت فقط على سلوك الإدخار للحج. تم دعم دور التوسط الخاص بعوامل فيشر الاقتصادي وخصائص المنتج في هذا النموذج. تأثيرات نظرية الخيار الزمني، ونظرية السلوك المخطط والعوامل النفسية كانتا مختلفتين بشكل كبير عبر المجموعات العمرية، والجنسية، والخلفية التعليمية، وحالة العمل، والراتب، وامتلاك بيت، والثروة.

APPROVAL PAGE

The thesis of Fitri Hastuti has been approved by the following:



Syed Musa Bin Syed Jaafar Alhabshi
Supervisor

Abideen Adeyemi Adewale
Co-Supervisor

Azman Mohd Noor
Internal Examiner

Rosylin Mohd Yusof
External Examiner

Saiful Azhar Rosly
External Examiner

Akram Zeki Khedher
Chairman

DECLARATION

I hereby declare that this thesis is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Fitri Hastuti



Signature

Date

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

**DECLARATION OF COPYRIGHT AND AFFIRMATION OF
FAIR USE OF UNPUBLISHED RESEARCH**

**SAVINGS AND INVESTMENT BEHAVIOUR
OF HAJJ FUND CONTRIBUTORS:
A CASE STUDY OF SELECTED CITIES IN INDONESIA**

I declare that the copyright holders of this thesis is Fitri Hastuti

Copyright ©2020 Fitri Hastuti and International Islamic University Malaysia. All rights reserved.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below

1. Any material contained in or derived from this unpublished research may be used by others in their writing with due acknowledgement.
2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
3. The IIUM library will have the right to make, store in a retrieved system and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledged that I have read and understand the IIUM Intellectual Property Right and Commercialisation policy.

Affirmed by Fitri Hastuti



.....
Signature

.....
Date

This thesis is dedicated to my dearest parents.

Anything good that has come to my life has been because of
your example, guidance, and love

ACKNOWLEDGEMENTS

All glory is due to Allah, the Almighty, whose Grace and Mercies have been with me throughout the duration of my programme. Although, it has been tasking, His Mercies and Blessings on me ease the herculean task of completing this thesis.

I am most indebted to my supervisor, Assoc. Prof. Dr. Syed Musa Bin Syed Jaafar Alhabshi, whose enduring disposition, kindness, promptitude, thoroughness and friendship have facilitated the successful completion of my work. I put on record and appreciate his detailed comments, useful suggestions and inspiring queries which have considerably improved this thesis. His brilliant grasp of the aim and content of this work led to his insightful comments, suggestions and queries which helped me a great deal. Despite his commitments, he took time to listen and attend to me whenever requested. The moral support he extended to me is in no doubt a boost that helped in building and writing the draft of this research work. I am also grateful to my co-supervisor, Asst. Prof. Dr. Abideen Adeyemi Adewale, whose support and cooperation contributed to the outcome of this work.

I also would like to acknowledge with gratitude, the support and love of my family – my husband Fahmi Alli Sarosa; my children Fazla Alyna and Aryawastu Daneshvar; my parents Udji Subadri and Sumarsih, Eddy Sariganda and Rosmini. Your prayers, understanding and support strengthen me through all the way. Lastly, I wish to present my special recognitions to Indonesia Endowment Fund for Education (LPDP) who has sponsored this unforgettable journey.

Once again, we glorify Allah for His endless mercy on us one of which is enabling us to successfully round off the efforts of writing this thesis.

Alhamdulillah.

TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	iii
Approval Page.....	iv
Declaration.....	v
Copyright Page.....	vi
Dedication	vii
Acknowledgement	viii
List of Tables	xiii
List of Figures	xvi

CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statement of the Problem.....	6
1.3 Purpose of the Study	8
1.4 Significance of the Study	9
1.5 Research Objectives.....	10
1.6 Research Questions.....	11
1.7 Research Hypothesis.....	12
1.8 The plan of the Study.....	14
1.9 Chapter Summary	15

CHAPTER TWO: THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT	16
PART ONE: Theoretical Framework	16
2.1 Introduction.....	16
2.2 Saving Habits, Motivation and Rationale	17
2.3 Intertemporal Choice Theory of Saving	20
2.3.1 Historical Stages of Intertemporal Choice Theory	21
2.3.2 Fisher's Theory of intertemporal Choice	26
2.3.3 Saving Behaviour and Time Inconsistency Problem	30
2.4 Theory of Planned Behaviour	34
2.4.1 Behaviour Specific Factors in the Framework of the Theory of Planned Behaviour.....	34
2.4.2 The Role of Beliefs in Human Behaviour.....	38
2.4.2.1 Behavioural Beliefs and Attitudes towards Behaviour	39
2.4.2.2 Normative Beliefs and Subjective Norms.....	40
2.4.2.3 Control Beliefs and Perceived Behavioural Control	40
PART TWO: Research Hypotheses Development	41
2.5 Fisher's Intertemporal Choice Theory and Savings-Investment Behaviour	41
2.6 The Theory of Planned Behaviour and Savings-Investment Behaviour	47
2.7 Psychological Factors and Savings-Investment Behavior	55
2.8 Knowledge and Savings-Investment Behaviour	58
2.9 Moderation Variables and Savings-Investment Behaviour.....	61

2.9.1 Fisher's Economic Factors.....	61
2.9.2 Product Features.....	63
2.10 Demographic Factors and Savings-Investment Behaviour	69
2.11 Conceptual Framework	74
CHAPTER THREE: HAJJ FUNDS MANAGEMENT IN INDONESIA	76
3.1 Introduction.....	76
3.2 Hajj Fund Management in Indonesia based on Law No. 13 Year 2008..	79
3.3 Hajj Fund Management in Indonesia based on Law No. 34 Year 2014..	83
3.4 Hajj Funds Management in Other Countries	85
3.5 Chapter Summary	87
CHAPTER FOUR: RESEARCH METHODOLOGY	89
4.1 Introduction.....	89
4.2 Philosophical Worldviews	89
4.3 Research Design	90
4.3.1 Population and Sample of the Study	91
4.3.2 Measurement of Constructs	95
4.3.3 Data Collection	100
4.3.4 Data Analysis	102
4.3.4.1 Confirmatory Factor Analysis	104
4.3.4.2 Structural Equation Modelling	105
4.4 Chapter Summary	109
CHAPTER FIVE: DATA ANALYSIS AND EMPIRICAL FINDINGS	110
5.1 Introduction.....	110
5.2 Examination of Data	111
5.2.1 Data Entry and Data Missing.....	111
5.2.2 Assessment of Normality and Outliers	112
5.2.3 Bivariate Correlations	114
5.3 Respondents demographic profile	116
5.4 Initial Findings.....	118
5.4.1 Hajj Savings-Investment Behavior	120
5.4.2 Fisher's Intertemporal Choice Theory	122
5.4.2.1 Fisher Personal Factors	122
5.4.2.2 Saving Horizon and Impatience	123
5.4.3 Theory of Planned Behavior	125
5.4.3.1 Personal Religious Beliefs.....	125
5.4.3.2 Perceived Behavioral Control	126
5.4.4 Psychological Factors and Knowledge	128
5.4.4.1 Risk Preference.....	128
5.4.4.2 Saving Motive	129
5.4.4.3 Knowledge on Hajj Savings-Investment Product	131
5.4.5 Moderator Variables	132
5.4.5.1 Fisher's Economic Factors	132
5.4.5.2 Product Features	134
5.5 Model Testing	135
5.5.1 Exploratory Factor Analysis	135
5.5.2 Confirmatory Factor Analysis.....	139

5.5.2.1 Internal Consistency	139
5.5.2.2 Overall Measurement Model Fit	141
5.5.2.3 Composite Reliability and Convergent Validity	143
5.5.2.4 Discriminant Validity	144
5.5.3 Structural Equation Modelling.....	145
5.5.3.1 Hypothesized Structural Equation Model with Latent Constructs.....	145
5.5.3.2 Hypothesized Structural Equation Model with Observed Variables.....	148
5.5.3.3 Bootstrapping Approach for Hypothesized Structural Equation Model with Observed Variables	152
5.5.3.4 Hypothesized Structural Equation Modelling after Bootstrapping with Observed Variables	156
5.5.4 Moderation Effects Analysis.....	158
5.5.5 Multigroup Effects Analysis	163
5.5.5.1 Multigroup Effects Analysis within Model.....	166
5.5.5.2 Multigroup Effects Analysis within Individual Path.....	169
5.6 Chapter Summary	176
CHAPTER SIX: DISCUSSIONS OF RESEARCH FINDINGS	179
6.1 Introduction.....	179
6.2 Summary of Main Findings	180
6.3 Fisher's Intertemporal Choice Theory And Hajj Savings-Investment Behavior.....	181
6.3.1 Fisher Personal Factors	181
6.3.2 Saving Horizon	184
6.3.3 Impatience.....	184
6.4 Theory of Planned Behavior And Hajj Savings-Investment Behavior....	186
6.5 Psychological Factors and Hajj Savings-Investment Behavior	188
6.6 Knowledge and Hajj Savings-Investment Behavior.....	190
6.7 Moderation Effects Analysis	192
6.8 Multigroup Effects Analysis of Demographic Factors	195
6.9 Chapter Summary	199
CHAPTER SEVEN: CONCLUSION, LIMITATIONS AND RECOMMENDATIONS.....	201
7.1 Introduction.....	201
7.2 Conclusions of the Study	201
7.3 Limitations of the Study and Suggestions for Future Research.....	204
7.4 Contributions of the Study	206
REFERENCES.....	211
APPENDIX A: QUESTIONNAIRE.....	235
APPENDIX B: HAJJ PILGRIMAGE WAITING PERIOD IN INDONESIA..	239
APPENDIX C: RESEARCH METHODOLOGY	240
C.1 Research Instruments	240
C.2 Research Methodology of Previous Studies	243

APPENDIX D: DATA ANALYSIS	244
D.1 Initial CFA Loop Model	244
D.2 Hypothesized Structural Model of SEM	245
APPENDIX E: OUTLIER AND NORMALITY TEST RESULT	246
E.1 Mahalanobis Outlier Test Result	246
E.2 Normality Test Result	246
APPENDIX F: DESCRIPTIVE STATISTICS	248
APPENDIX G: EXPLORATORY FACTOR ANALYSIS RESULT.....	263
APPENDIX H: CONFIRMATORY FACTOR ANALYSIS RESULT	267
H.1 Overall Initial Standardized Loadings after Reliability Test....	267
H.2 Overall Final Standardized Loadings	269
APPENDIX I: STRUCTURAL EQUATION MODELING RESULT	272
I.1 Initial Result of Structural Equation Model.....	272
I.2 Observed Variables Structural Equation Model	276
APPENDIX J: MODERATION EFFECTS ANALYSIS RESULT	283
APPENDIX K: PEARSON’S CHI SQUARE TEST RESULT.....	286

LIST OF TABLES

Table 4.1	Number of Hajj Pilgrims in Indonesia	92
Table 4.2	Survey Area of the Study	93
Table 4.3	Distributions of Research Samples	94
Table 4.4	Types of Data Collected	102
Table 4.5	Fit Indices for Structural Equation Modelling	107
Table 5.1	Number of Samples and Survey Area of the Research	112
Table 5.2	Normality Test Result for Data Collected	113
Table 5.3	Correlation Coefficient between Dependent Variables	114
Table 5.4	Correlation Coefficient between Demographic Factors	115
Table 5.5	Correlations Coefficient between Latent Variables	115
Table 5.6	Descriptive Statistics of Respondents Demographic Profiles	116
Table 5.7	Descriptive Statistics of Variables based on Respondents' Income Level	119
Table 5.8	Initial Findings of Hajj Savings-Investment Behaviour	121
Table 5.9	Initial Findings of Fisher Personal Factors	123
Table 5.10	Initial Findings of Saving Horizon and Impatience	124
Table 5.11	Initial Findings of Personal Religious Beliefs	125
Table 5.12	Initial Findings of Perceived Behavioral Control	127
Table 5.13	Initial Findings of Risk Preference	128
Table 5.14	Initial Findings of Saving Motive	130
Table 5.15	Initial Findings of Knowledge	131
Table 5.16	Initial Findings of Fisher's Economic Factors	133
Table 5.17	Initial Findings of Product Features	134

Table 5.18	The Summary of Exploratory Factor Analysis Indicators	136
Table 5.19	The Result of Extraction Communalities	137
Table 5.20	The Result of Total Variance Explained	138
Table 5.21	The Result of Anti-Image Correlation	138
Table 5.22	Reliability Test Result for Ordinal Data	140
Table 5.23	Summary of Overall Standardized Loading	142
Table 5.24	Composite Reliability and Convergent Validity for Latent Constructs Independent Variables	144
Table 5.25	Discriminant Validity for Latent Constructs Independent Variables	145
Table 5.26	Standardized Coefficient and P-value of Structural Equation Modeling with Observed Variables	146
Table 5.27	Assessment of Normality Result for SEM with Latent Constructs	147
Table 5.28	Bootstrap Model Result for SEM with Latent Constructs	148
Table 5.29	Standardized Coefficient and P-Value for SEM After Bootstrapping with Observed Variables	150
Table 5.30	Assessment of Normality for SEM with Observed Variables	151
Table 5.31	Bootstrap Model Result for SEM with Observed Variables	152
Table 5.32	Critical Ratio and P-value Comparison between Maximum Likelihood and Bootstrap Estimation for SEM with Observed Variables	153
Table 5.33	Comparison between Maximum Likelihood and Bootstrap Estimation Result for SEM with Observed Variables	154
Table 5.34	Correlation Coefficient from Bootstrap Result for SEM with Observed Variables	155
Table 5.35	Standardized Coefficient and P-Value for SEM after Bootstrapping with Observed Variables	157
Table 5.36	Moderation Effect Analysis for Fisher's Economic Factors as Moderator Variables	158

Table 5.37	Moderation Effect Analysis for Product Features as Moderator Variables	161
Table 5.38	The Summary of Pearson's Chi-Square Test of Demographic Factors to Hajj Savings-Investment Behavior	163
Table 5.39	The Variation of Hajj Savings-Investment Behavior Explained by Demographic Factors	164
Table 5.40	Chi-Square Difference Test for Groups of Analysis	167
Table 5.41	P-value based on Chi-Square Comparison Test Result within Individual Path	169
Table 5.42	Standardized Coefficient of Structural Weight Model Based on Gender, Education and Working Status within Individual Path	170
Table 5.43	Standardized Coefficient of Structural Weight Model Based on House Ownership, Income and Wealth within Individual Path	172
Table 5.44	The Summary of Multigroup Effects Analysis	174
Table 5.45	Summary of Research Questions, Hypothesis Statements and Empirical Findings	176
Table 6.1	The Result of Structural Equation Modeling	180

LIST OF FIGURES

Figure 1.1	Waiting Period for Hajj in Indonesia (Years)	3
Figure 2.1	Intertemporal Choice Determinants and Its Phase	25
Figure 2.2	Fisher Intertemporal Choice Curve	27
Figure 2.3	Summary of the Theory of Planned Behavior	35
Figure 2.4	Conceptual Framework	75
Figure 3.1	Hajj Pilgrimage Satisfaction Index	77
Figure 3.2	Hajj Fund Management in Indonesia Based on Law No. 13/2008	80
Figure 3.3	The Management of Hajj Fund Based on Law No. 34/2014	83
Figure 4.1	Stages of the Research	103
Figure 4.2	Hypothesized Structural Equation Modelling with Interaction Variables	106
Figure 5.1	Hypothesized Structural Equation Modeling with Observed Variables	149
Figure 5.2	Moderation Effect Analysis of Fisher's Economic Factors	160
Figure 5.3	Moderation Effect Analysis of Product Features	162

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Hajj is one of the five fundamental pillars of Islam and is an obligation of every Muslim who has the capacity to perform the prescribed ritual. The performance of Hajj has both individual and community considerations. Foremost, the title “Hajji” is given as a sign of respect in Muslim archipelago communities to a religious person who has fulfilled this fifth pillar of Islam.

Hajj may have impacts on both the personal life (individual) and the collective life (social). Allah says in the Holy Quran, "That they may witness the benefits (provided) for them, and celebrate the name of Allah..." (Al-Hajj 22:28). Hajj is the way of perfecting one's faith; as Muslims who perform the pilgrimage carry only the intention of pleasing Allah, they will be in the state of virtue and piety, they become purer in thought and deed, their pride and vanity will disappear, and at the same time they will forget material comfort (Khan, 2012). Furthermore, by performing Hajj, people from diverse cultures and socio-economic backgrounds become acquainted with each other and appreciate each other's differences. They bring themselves together to achieve their goals and remove the barriers (Khan, 2012).

As mentioned by Agarwala et al. (2019), not only does religious value shape an individual's ecstatic acquaintance, but also their psychological well-being, that altogether contribute to strengthen individual's decisions and actions. Clingingsmith et al. (2008) mentioned three manifestations about how Hajj affects both religious practice and beliefs. First, the Hajj improves an individual's religious practice within five to eight months post-Hajj. It also increases the regularity of fasting outside of *Ramadan*

(the obligatory month of fasting) and the frequency of performing *Tahajjud* (supererogatory) prayers by approximately twofold. Second, Hajjis display more positive views towards other nationalities and social groups, higher tolerance, and are more peacefully inclined. Third, the Hajj also improves the index that captures the awareness of women's quality of life as well as increases favourable views towards education for girls.

Although the obligation of Hajj pilgrimage is mandatory only on a person with physical and financial abilities, devout Muslims with any financial condition can accomplish the Hajj pilgrimage using certain schemes. There are several alternatives for potential Hajj pilgrims in preparing Hajj funds, from the traditional practices which do not involve the financial sector, to a more advanced one utilising the financial sector instruments. Swapping or selling certain assets for cash to pay the cost of Hajj pilgrimage is considered a traditional practice. The assets may take the form of gold, land, or vehicles. Furthermore, the financial sector has provided significant services in assisting potential Hajj pilgrims with Hajj saving schemes offered not only by banks but also by non-bank financial institutions. This type of saving scheme is not much different from other types of traditional savings for various purposes.

Saving is an alternative that would enable Muslims to plan their finances to meet the expenses of performing the pilgrimage; it comes in the form of a Hajj deposit fund that could cover the Hajj cost and all related Hajj expenditures during the pilgrimage in Mecca. Upon attaining sufficient savings, they can register with the Ministry of Religious Affairs to obtain a Hajj registration serial number and be eligible for Hajj, and then wait for several years to be granted the visa to perform the Hajj. The timeframe of the process requires a careful saving plan to realise the opportunity of fulfilling one's religious obligation.

According to economic theories, personal saving is part of income that is left after tax payment and consumption in a given period of time (Audenis et al., 2002). Personal saving increases as people continually postpone their current consumption to meet future consumption. Some people have preference to change their saving into investment to accomplish certain objectives. Hence, the motivation to save is accompanied by pecuniary or other incentives. In the case of the Hajj, saving provides not only pecuniary motivation but also bountiful religious benefits.

With a quota of 204,000 pilgrims for regular Hajj and as many as 600,000 people registered each year, The Ministry of Religious Affairs stated until April 2018 Indonesia has an accumulation of 3.7 million Muslims registered for Hajj with an average waiting period of nineteen years. The shortest waiting period on the same year was eleven years and the longest was twenty nine years. As seen in figure 1.1 the average waiting period for Hajj in Indonesia was sixteen years on June 2016 and twenty years on February 2019.

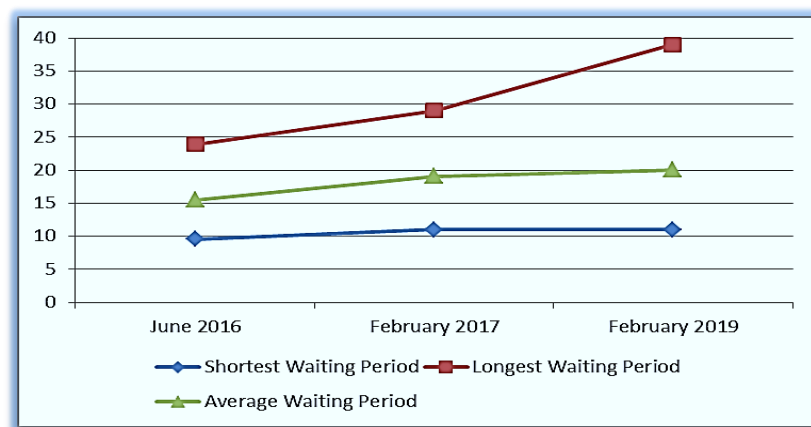


Figure 1.1 Waiting Period for Hajj in Indonesia (Years)

It is required for Muslims to deposit initial Hajj payment of IDR 25 million (USD 1950 approximately) to appointed financial institutions. In Indonesia, it is not only the banking sectors that provide Hajj savings-investment plan service for future pilgrims, but also insurance companies. However, by using the Hajj savings-investment plan from the bank, future pilgrims would be automatically registered with the Ministry once their savings amount has met the required threshold. In October 2014, the Hajj Fund Management Agency (*Badan Pengelola Keuangan Haji*) was established with the special duty to manage Hajj funds deposited by future pilgrims. However, the agency is not tasked to assist future pilgrims in preparing for the expenses they might incur during their pilgrimage. Therefore, it is necessary for Muslims to save timely into an investment fund to support their Hajj journey.

In comparison, potential pilgrims in Malaysia who make deposits in Lembaga Tabung Haji do so primarily as a religious obligation (Mannan, 1996). Tabung Haji of Malaysia is considered a pioneer Islamic financial institution which has mobilised savings of individuals and successfully operated a shariah-compliant investment fund to fulfil the life long-desire of many individuals of performing the Hajj ritual (IRTI-IDB, 1995). The simple deposit procedures and cooperation with other similar institutions have enabled Tabung Haji depositors to make deposits through any of the following means: Tabung Haji office, post office, monthly deduction by their employers, direct mail of deposit to Tabung Haji Head Office, and saving scheme for dependants.

The behaviour attached to saving for Hajj pilgrimage may be different from that with other types of savings. First, saving for Hajj provides a good feeling even though the return on saving is relatively low. Second, saving is planned but not a fixed binding commitment. Hence, it should be flexible to accommodate savers' personal needs.

Third, the funds in trust are kept with religious intent and bountiful benefits in mind. Clingingsmith et al. (2008) proved that the substantial financial expenditure required for Hajj does not create financial stress that leads to negative feelings. The hypothesis that the Hajj has an adverse effect on satisfaction with finances is also rejected. The Hajj does not affect monthly household consumption expenditures and is not a measure of household assets. The respondents also revealed that most do not consider the pool of savings for the Hajj as fungible; those who are unable to go keep their Hajj funds for future reapplication, and it took them at least four years to save money for Hajj.

Based on a conventional point of view, saving can become a problem for certain people because it involves making choices in different time periods (Fisher, 1930). The difficulties in making a saving decision, particularly for the long term, are mainly related to self-control and time inconsistency as individuals are impatient, they cannot delay any immediate gratification and sequence temptation, and they are also present-biased, which imply they have a strong tendency to make inconsistent choices between today and tomorrow.

On the contrary, Islam considers the existence of the afterlife to be inseparable from the belief in God. This extends a Muslim's time horizon beyond death and the belief that life after death is closely interrelated in a sequential manner. Therefore, the utility derived from a choice of action is the total of the present value of its immediate effect in this life and its later effect in the life to come. Muslims are more selective in spending their income on things that yield benefit not only in this life but also in the afterlife through reward from God (Khaf, 1996). Islam promotes a proper financial behavior by reducing debt taking and performing investment as the future arrangement (Kassim, 2019). In the Holy Quranic verse 12:47-49, the God Almighty (Allah) says in this regard where Yusuf said Muslim is encouraged to work hard, save wisely and consume efficiently without being lavish.

This study is motivated by a strong enthusiasm among most Muslims to fulfil the Hajj pilgrimage obligation, which in turn encourages them to save a certain amount of money for that purpose. Therefore, the aim of this research is to explore, describe, and assess factors influencing a Muslim savings-investment behaviour by employing Fisher's intertemporal choice theory and The theory of planned behaviour. Fisher's intertemporal choice theory is chosen because saving for future consumption is always connected with a decision to lower current consumption. The consequences of choosing present and future consumption result in the saving behaviour. The theory of planned behaviour will specify dimensions that include attitude and perceived behavioural control of Muslims who intend to fulfill the Hajj obligation.

1.2 STATEMENT OF THE PROBLEM

Hajj savings-investment behaviour can increase a Muslim's awareness about the importance of planning and participating in a saving-investment product and provide financial readiness for Muslims to perform the Hajj pilgrimage obligation. However, current studies on saving and investment are scarce especially on economic, personal, and religious belief factors that explain a Muslim's decision to commit and contribute to a Hajj savings-investment product.

Several theoretical and simulation studies have analysed saving for selected motives such as retirement plan (Brown, 2007; Hardcastle, 2012; Knoll, 2011; Koe Hwee Nga & Ken Kyid Yeoh, 2018; Yu-Jen Hsiao et al., 2016), precautionary reasons (Carroll and Kimball, 2001; Gourinchas and Parker, 2002; Hubbard et al., 1994), and saving with a bequest motive (Horioka et al., 2003; Kopcsuk and Lupton, 2007; Lockwood, 2010). However, empirical studies of saving for specific motives have been few (Horioka and Watanabe, 1997), particularly regarding religious obligation as a

motive for saving. Several studies on saving behaviour in general have considered religion and religiosity as exogenous variables that significantly influence the saving behaviour (Klaubert, 2010; Nyhus, 2002; Otto, 2009; Yayeh, 2014). In this context, saving-investment behaviour is associated with an explicit religious obligation motive.

Generally, Muslims understand that their family needs fulfilment or assurance before they perform their Hajj pilgrimage. This understanding is mainly because Hajj is only mandatory for those who have the financial capacity while the capability of a Muslim to perform the Hajj is subject to his personal livelihood. This issue represents a research gap as to whether Muslims are proactive or reactive in their saving-investment behaviour for the Hajj.

Alternatively, some Muslims are less likely to save for all Hajj-related expenditure. Instead, they realise their illiquid wealth or assets to finance their Hajj expenditure, for instance by selling their idle assets such as land or a house. Muslims who save in the long term for the purpose of performing the Hajj pilgrimage by setting up a pool of funds in certain saving plans provided by financial institutions or by investing in other types of assets such as gold would be considered as demonstrating a planned behaviour, unlike those who liquidate their financial position at a short notice to fulfil their Hajj obligation. This study focuses on the planned saving-investment behaviour and not liquidation strategy for Hajj purpose.

The lack of policy initiatives to encourage active rather than passive saving-investment behaviour motivates this research to determine the important and significant variables to support the need for such a policy. In October 2014, the Hajj Fund Management Agency (*Badan Pengelola Keuangan Haji*) was established with the special duty to manage Hajj funds deposited by future pilgrims. However, the agency does not have any particular task in helping future pilgrims to prepare for their Hajj

expenditure. Meanwhile, most financial institutions in Indonesia offer Hajj saving schemes merely to accommodate the potential market that Hajj investment products seem to disregard. In addition to the contract of *wadiah* and *mudarabah muqayyadah*, Hajj saving schemes also uses *mudharabah mutlaqah*, which allows banks to manage future pilgrims' funds with more flexibility because of fewer restrictions. However, there are no alternatives for Muslims in choosing Hajj investment products that provide more aggressive returns so that they can perform their Hajj at the earliest.

1.3 PURPOSE OF THE STUDY

The aim of this research is to explore, describe, and conduct an assessment of significant determinants that explain contributors' saving-investment behaviour, particularly in relation to the obligation to fulfil one of the pillars of Islam, the Hajj pilgrimage. In light of the above, the primary objectives of the research are divided into three components.

First, by learning from the savings-investment behaviour towards Hajj, this research will be beneficial in terms of ascertaining the determinants comprising contributors' personal factors, personal religious belief, perceived behavioural control, psychological factors in the aspect of risk tolerance and saving motive, and also contributors' knowledge as significant factors that affect savings-investment behaviour for the Hajj pilgrimage purpose. Second, this paper is intended to analyse and identify Fisher's economic factors and product features and assess the moderation effect of those two factors on contributors' savings-investment behaviour. Third, this study aims to analyse the influence of demographic factors on Hajj savings-investment behaviour as well as to conduct a multigroup effect analysis based on demographic factors.