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Economics, Business, and Islamic Finance in ASEAN Economics Community Patricia Ordoñez de Pablos The University of Oviedo, Spain Mohammad Nabil Almunawar Universiti Brunei Darussalam, Brunei Muhamad Abduh Universiti Brunei Darussalam, Brunei A volume in the Advances in Finance, Accounting, and Economics (AFAE) Book Series Published in the United States of America by IGI Global Business Science Reference (an imprint of IGI Global) 701 E. Chocolate Avenue Hershey PA, USA 17033 Tel: 717-533-8845 Fax: 717-533-8661 E-mail: [cust@igi-global.com](mailto:cust@igi-global.com) Web site: <http://www.igi-global.com> Copyright © 2020 by IGI Global. All rights reserved.

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All work contributed to this book is new, previously-unpublished material. The views expressed in this book are those of the authors, but not necessarily of the publisher. For electronic access to this publication, please contact: [resources@igi-global.com](mailto:resources@igi-global.com). Names: Ordoñez de Pablos, Patricia, 1975- editor. | Almunawar, Mohammad Nabil, 1960- editor. | Abduh, Muhamad, 1981- editor. Title: Economics, business, and Islamic finance in ASEAN economics community / Patricia Ordonez de Pablos, Mohammad Nabil Almunawar, and Muhamad Abduh, editors.

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Organizational Factors and the Success of Technology Transfer .....

1 Md Zahidul Islam, Universiti Brunei Darussalam, Brunei Safayet Rahman, Southeast University, Bangladesh This chapter discusses the relationship between organizational culture, structure, complexity of technology, and the success of technology transfer. Technology is one of the key competitive advantages of any organization and plays an important role in the success of both international and domestic firms. Technology can be transferred within the boundaries of an organization, outside of organizational boundaries with strategic partners and also across national boundaries. As it transcends national borders, difficulties in transferring technology.

are likely to increase. To overcome the difficulties, certain organizational culture could play an important role in the efficient transfer of technology in an organization. Besides culture, organizational structure could also play a major role to achieve technology transfer success. Furthermore, the complexity of technology can also affect the success of technology transfer. Chapter 2

Spatial Dynamic Modeling for Increasing the Competitiveness of Small Medium Enterprises: Case Study of Bogor City, West Java, Indonesia ..... 16 Hartrisari Hanggoro Hardjomidjojo, IPB University, Indonesia Harry Imantho, SEAMEO BIOTROP, Indonesia Anissa Damayanti, IPB University, Indonesia The Role

of Small and Medium Enterprises (SMEs) in Supporting Indonesian Economic Activity are significant. SMEs face many obstacles in their business development. Empowerment of SMEs in Bogor by local governments carried out in conjunction with the Department of Cooperatives and SMEs. This study establishes the spatial model design of SMEs in Bogor area to improve the competitiveness of products in Bogor city. The analysis shows that SMEs in

Bogor. city. is. still. in. t  
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University Mala ysia, Mala ysia ? C o m m u n i t y . e c o n o m i c . d e v e l o p m e n t . i  
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income, and entrepreneurship activities in small town and communities. The Centre for Islamic Economics,

International Islamic University Malaysia (IIUM) has initiated a smart partnership with CIMB Islamic Bank to offer entrepreneurship training and Islamic microfinance facility to the poor in Malaysia. This project adopts several modes of Islamic microfinance financing instruments which include equity-based and debt-based financing. The program aims to educate the communities surrounding the IIUM campus with entrepreneurship knowledge and skill in addition to giving Shariah-compliant micro-financing facility for them to implement their business ideas. CIMB Islamic, which is the main partner for this project, provides funds for Islamic microfinance facilities.

and IIUM contributes expertise in providing entrepreneurship trainings to the communities located near IIUM campus. It is hoped that this smart partnership would empower the surrounding communities and create more successful entrepreneurs. Chapter 5 Halal Industry in ASEAN: Issues and Challenges ..... 77 Moha Asri Abdullah, International Islamic University Malaysia, Malaysia Md Siddique E Azam, International Islamic University Malaysia, Malaysia Amongst the three Muslim majority countries (Indonesia, Malaysia, and Brunei) of ASEAN,

Malaysia leads the halal industry globally and considered to be the global halal hub. Simultaneously, the market is growing tremendously in other member countries as well. It has been realized that a number of driving forces are responsible for boosting the expansion of Halal industry globally as well as in ASEAN. While there are a number of factors accelerating the growth of the Halal industry, there are many limitations and challenges that are hindering the market expansion. Therefore, this chapter introduces the overview of Halal industry globally as well as in ASEAN countries. The chapter explores the opportunities

of the Halal industry for ASEAN countries followed by identifying the issues and challenges confronted by industry players. Finally, it concludes by providing some recommendations in the ASEAN context based on the current global situation and findings of the Halal industry. The chapter adopts methodology of analyzing secondary data. Chapter 6 Analysis of Food Security Policy by Participatory Poverty Assessment (PPA) Effort: Case in Indonesia ..... 105 Muhamad Rusliyadi, Polytechnic of Agricultural Development Yogyakarta Magelang, Indonesia Azaharaini Hj. Mohd.



Jamil , College IGS Brunei Darussalam, Brunei Muhammad Anshari , Universiti Brunei Darussalam, Brunei ? This chapter evaluates food security policies and extension policies to the achievement of targets and the results of a development programme such as Food Self Sufficiency village (DMP). Participatory Poverty Assessments (PPA). The output obtained is information that is an evaluation of how the policy was planned, initiated, and implemented. Participatory Poverty Assessments (PPA) monitoring and evaluation analyse the outcome and impact of the DMP Programme. The output of the PPA process from this chapter is the agricultural policy.

formulated in terms of practical ways of approaching poverty problems from a local perspective. The success of alternative policy options applied by local government such as Physical, Human Resources, Institution development at the grassroots level should be adopted at the national level. It should represent the best example of a case of successful programme implementation at the grassroots level which can then be used in formulating national policies and strategies. Chapter 7 The Study of Digital Marketplace in Brunei Darussalam .....

128 Alif Azizi Abdullah , Universiti Brunei Darussalam, Brunei Mohammad Nabil Almuna war , Universiti Brunei Darussalam, Brunei Muhammad Anshari , Universiti Brunei Darussalam, Brunei A two-sided market or two-sided network is made up of two distinct user groups that provide each other with network benefits in which they interact through an intermediary or platform. A digital marketplace makes use of a two-sided market where the two distinct groups are the buyers and sellers. A digital marketplace is a type of e-commerce site where the sellers offer products or services to the buyers, and transactions are controlled and processed by marketplace operators.

With the rapid development and adoption of the Internet and digital marketplace globally and also regionally, businesses in Brunei Darussalam are slowly incorporating digital marketplace. This chapter provides an overview of the current state of the digital marketplace in Brunei, and thus, case studies of local digital marketplaces are discussed. A qualitative approach, which consists of interviews with companies, is made for the study. The strengths and problems of employing digital marketplace for businesses and analysis using Michael Porter's five models is also covered in this chapter. Chapter 8 A Study of Quality Tools and Techniques for Smart Manufacturing in Industry 4.0 in Malaysia: The Case of North Borneo Economic Region ....

155 Mohd Syaiful Rizal Abd Hamid , Universiti Teknik al Mala ysia Melak a, Mala ysia Saifuddin Isa , Universiti Teknik al Mala ysia Melak a, Mala ysia Che w Boon Cheong , Universiti Teknik al Mala ysia Melak a, Mala ysia ? This. chapter. explores. t he. key. factors. for. selecting. quality. tools. and. techniques. in. industr ial. revolution. 4.0, par ticularly. in. t he. smar t. manufactur ing. context.. What. are. t he. factors. deter mining. which. quality. tools. and. techniques. are. more. applicable. in. specific. circumst ances. related. to. quality. per for mance. in. Industr ial. Revolution. 4.0?. To. answer. t his. question, aut hors. employ. a. multiple. case. study. and. an. in-dept h. literature. review. as. t he. research. design. approach..

Two. key. dat a. collection. met hods. (qualit ative. met hods). are. used:. (1). Pr imar y. dat a. from. face-to-face. inter views. wit h. Toyo. Memor y. Technology. and. Intel. Malaysia. (2). Secondar y. dat a. from. previous. studies.. This. review, coupled. wit h. t he. case. study. analysis, leads. to. t he. identification. of. t he. real. implement ation. of. quality. tools. and. techniques. in. t he. industr ies.. The. chapter. can. enhance. t he. reader. underst anding. of. Industr ial. Revolution. 4.0. and. quality. management. practices. as. well. as. highlight. oppor tunities. for. fur t her. research. Chapter 9 Et hnicity.and.Household.Savings.in.Indonesia .....

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and. level. of. education. are. t he. consistent. var iables. affecting. t he. household. saving. behaviour. in. Indonesia. across. t he. t hree. wave. sur veys.. Meanwhile, as. for. t he. et hnic. g roup. var iable, t here. are. only. Sunda, Bat ak , and. Bima-Dompu. t hat. can. significantly. influence. t he. people's. saving. behavior.across.t he.t hree.wave.sur veys. Chapter 10 Strengt hening.Islamic.Finance.in.Sout h-East.Asia.Through.Innovation.of. Islamic.FinTech.in.Br unei.Dar ussalam .....

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the so-called 'Fourth Industrial Revolution' which is the movement towards combining everyday aspects of our lives, such as finance, into the digital realm that will help increase speed, efficiency, and convenience. The most significant challenge for all countries pursuing Fintech is regulating the industry. Following the issuance of the Financial Sector Blueprint, the Fintech Unit was established under Autoriti Monetari Brunei Darussalam (AMBD). AMBD envisions a vibrant economy powered by ICT through ICT-Smart Citizens as well as being a connected and efficient nation. This chapter discusses the application of Fintech specifically.

in Islamic finance sector based on the descriptive method of research by concentrating on its regulations. At the end, the research found that though Fintech in Islamic finance sector has been done since it's emerging through Guidelines Fintech Regulatory Sandbox Guidelines Islamic financial Fintech will be strengthened and developed and more diversified. Chapter 11 Opportunities and Challenges of Social Media to the Islamic Banks in Indonesia ..... 227 Ahmad Rafiki, Universitas Medan Area, Indonesia The Islamic banks in Indonesia have a serious issue of a low.

market share of 5%. This emerged due to the limited/unvaried product range, low literacy and inclusion level of Islamic finance, unfavorable perception for Islamic banking, and limited distribution networks and outreach. All of these causes could be resolved by using social media, which will bring several opportunities such as transparency and openness, effective marketing channels, stakeholders' relationship, social media content, brand image and reputation, sharia compliance activity, learning and knowledge, and greater personalization. Meanwhile, in using social media, the Islamic banks face few challenges such as network infrastructure, negative.

comments, information risk management, privacy, and deception. This chapter can be a reference to any institutions, particularly the Islamic banks which associated with digital interfaces and interactions in their daily businesses. Thus expectedly, the Islamic banks could enhance the public trust and establish a good Islamic identity. Chapter 12 The Loan Shark in ASEAN: Can Nanofinance With Qardhul Hassan Deal With It? Lesson Learned From Bank Wakaf Mikro in Indonesia ..... 252 Khairunnisa Musari, IAIN Jember, Indonesia Loan shark is a humanitarian problem faced by many countries in the world, including in Asia, even in the Association.

of Southeast Asian Nations (ASEAN)'s countries. Loan shark activities are found not only in Myanmar and Cambodia, which has the lowest per capita income in ASEAN but also in Indonesia, Thailand, Malaysia, Brunei, and even Singapore, which are the five countries with the highest gross domestic product (GDP) per capita in ASEAN. How are loan shark practices in ASEAN countries? Can nanofinance overcome the microfinance gap to fight the loan shark? How the practice of Bank Wakaf Mikro (BWM) in Indonesia to nanofinance with h.qardhul.hassan.contract? Find the answers in this chapter. ? Chapter 13 Factors That Influence Retail Equity Investors to Patronize Islamic

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funds. The results show that religiosity and product awareness significantly influence the patronizing behavior of Malaysian retail equity investors. On the other hand, economic motives, convenience, social influence, and attractiveness of stock investment ranked below religiosity and product awareness. In view of the findings, stockbroking industry players such as investment bank, stockbroking firm, or participating organization should take advantage of the religiosity and product awareness factors as a main focus to develop Islamic stockbroking service in Malaysia. Sales, marketing and business development strategies can be designed according to the said criteria. Chapter 14 Post-Crisis Interdependence Between Islamic Unit Trust Funds and Islamic Stock Market in Malaysia .....

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Association of Sout heast Asian Nations (ASEAN) is t he sevent h-largest economy in t he world. In 2015, members of ASEAN ag reed to est ablish t he ASEAN Economic Community (AEC), a regional economic integ ration.

This economic integ ration opens vast oppor tunities as t he market size is huge wit h a combined GDP reaches US\$2.6 tr illion. Collectively, AEC is t he t hird-largest economy in Asia and t he sevent h-largest in t he world. ASEAN has a young population as half of its 640 million people are less t han 30 years old. The g rowing number of t he middle-class segment, which will reach 400 million in 2020, couple wit h its more t han 339 million active Inter net users (more t han 300 million access t he Inter net from mobile devices) has made ASEAN an attractive digit al consumers. CONTENTS OF THE BOOK The book presents a collection of 15 chapters t hat addresses key topics to underst and business, economics and Islamic f inance in ASEAN region and also

explored trends and challenges in the region.

It aims to serve as an international platform to bring together academics, researchers, lecturers, decision makers, policy makers, and practitioners to share new theories, research findings, and case studies and have a better knowledge and understanding of problems and opportunities in the region. Chapter 1, titled "Organizational Factors and the Success of Technology Transfer" (authors: Md Zahidul Islam and Safayet Rahman) explores the relationship between organizational culture, structure, complexity of technology and the success of technology transfer. Technology is one of the key competitive advantages of any organization and plays an important role in the success of both international and domestic firms.

Technology can be transferred within the boundaries of an organization, outside of organizational boundaries with strategic partners and xviii Preface also across national boundaries. As it transcends national borders, difficulties in transferring technology are likely to increase. To overcome the difficulties, certain organizational culture could play an important role in the efficient transfer of technology in an organization. Besides culture, organizational structure could also play a major role to achieve technology transfer success. Furthermore, the complexity of technology is also can affect the success of technology transfer.

Chapter 2, titled "Spatial Dynamic Modeling for Increasing the Competitiveness of Small Medium Enterprises: Case Study Bogor City, West Java, Indonesia" (authors: Hartisari Hanggoro, Harry Imantono and Anissa Damayanti) states that the Role of Small and Medium Enterprises (SMEs) in supporting Indonesian economic activity are significant. SMEs face many obstacles in their business development. Empowerment of SMEs in Bogor by local governments carried out in conjunction with the Department of Cooperatives and SMEs.

This study aimed to establish the spatial model design of SMEs in Bogor area in order to improve the competitiveness of products in Bogor city. The analysis has shown that SMEs in Bogor city is still in the phase of development, market penetration and also product development. The model shows the average performance index of SMEs in Bogor is only 62.29, 19 among 41 have index values about 50. From the competitiveness analysis, we could see that among 41 SMEs can be categorized in 4 quadrants. Strategic program could be developed based on the position in the quadrant.

It can be concluded that in general SMEs in Bogor city have not been ready for internationally competition. Government should develop specific strategy for each SMEs

based on the quadrant position defined by the model. Chapter 3, titled "Exploring the Entrepreneurial Motivations and Barriers of Agripreneurs in Brunei Darussalam" (authors: Siti Fatimahwati Pehin Dato Musa, Pg Siti Rozaidah Pg Hj Idris and Muhammad Khair ul Hidayatullah Haji Basir) studies the motivations and institutional barriers of local agripreneurs who are involved in different branches of agriculture in Brunei. Descriptive analysis and thematic analysis were performed to analyse the data.

The agripreneurs in the study consider their venture into agriculture as an act of symbolic nationalistic support whereby they envision Brunei to be a nation less reliant on food imports, in line with the country's vision or better known as Wawasan 2035. In addition, their motivation is also based on Islamic values with the intention of seeking lawful earning and a path to a blessed monetary and hereafter rewards. The main problems faced by the agripreneurs are lack of access to finance, lack of infrastructure and technology and lack of exposure.

The research on local agripreneurs in the context of Brunei is scarce, thus this study aims to provide a better understanding of their motivations and constraints in order for Brunei to realize the potential of the agriculture sector as an important driver of the economy and thus develop the sector further. xix Preface Chapter 4, titled "Empowering Community Through Entrepreneurship Training and Islamic Microfinancing: Sharing the Experience of IIUM-CIMB Partnership" (authors: Nor ma Md Saad, Mustafa Omar Mohammad and Mohammed Aslam Haneef) states that community economic development is a relatively new strategy employed to increase employment, income, and entrepreneurship activities in small town and communities.

The Centre for Islamic Economics, International Islamic University Malaysia (IIUM) has initiated a smart partnership with CIMB Islamic Bank to offer entrepreneurship training and Islamic microfinance facility to the poor in Malaysia. This project adopts several modes of Islamic microfinance financing instruments which include equity-based and debt-based financing. The program aims to educate the communities surrounding the IIUM campus with entrepreneurship knowledge and skill in addition to giving Shariah-compliant micro-finance facility for them to implement their business ideas.

CIMB Islamic which is the main partner for this project provides funds for Islamic microfinance facilities and IIUM contributes expertise in providing entrepreneurship trainings to the communities located near IIUM campus. It is hoped that this smart partnership would empower the surrounding communities and create more successful entrepreneurs. Chapter 5, titled "Halal Industry in ASEAN: Issues and Challenges" (aut

hors: Moha Asri Abdullah and Md Siddique E Azam) affirm that amongst the three Muslim majority countries (Indonesia, Malaysia, and Brunei) of ASEAN, Malaysia leads the halal industry globally and considered to be the global halal hub. Simultaneously, the market is growing tremendously in other member countries as well.

It has been realized that a number of driving forces are responsible for boosting the expansion of Halal industry globally as well as in ASEAN. While there are a number of factors accelerating the growth of the Halal industry, there are many limitations and challenges that are hindering the market expansion. Therefore, the first objective of this chapter is to introduce the overview of Halal industry globally as well as in ASEAN countries.

Later section of the chapter will be exploring the opportunities of the Halal industry for ASEAN countries followed by identifying the issues and challenges confronted by industry players. Finally, it concludes by providing some recommendations in the ASEAN context based on the current global situation and findings of the Halal industry. The chapter adopts methodology of analyzing secondary data. Chapter 6, titled "Analysis of Food Security Policy by Participatory Poverty Assessment (PPA) Effort: Case in Indonesia" (authors: Muhammad Rusliyadi, Azaharaini Hj.

Mohd and Muhammad Anshari) aims to evaluate food security policies and extension policies to the achievement of targets and the results of a development programme such as Food Self Sufficiency village (DMP) used Participatory Poverty Assessments (PPA). The output obtained is information that is an evaluation of how the policy was planned, initiated and implemented. Participatory Poverty Assessments xx Preface (PPA) monitoring and evaluation analyse the outcome and impact of the DMP Programme.

The output of the PPA process from this study is the agricultural policy formulated in terms of practical ways of approaching poverty problems from a local perspective. The success of alternative policy options applied by local government such as Physical, Human Resources, Institution development at the grassroots level should be adopted at the national level. It should represent the best example of a case of successful programme implementation at the grassroots level which can then be used in formulating national policies and strategies.

Chapter 7, titled "The Study of Digital Marketplace in Brunei Darussalam" (authors: Alif Azizi Abdullah, Mohammad Nabil Almunawar and Muhammad Anshari) state that a two-sided market or two-sided network is made up of two distinct user groups that



provide each other with network benefits in which they interact through an intermediary or platform. A digital marketplace makes use of a two-sided market where the two distinct groups are the buyers and sellers. A digital marketplace is a type of e-commerce site where the sellers offer products or services to the buyers, and transactions are controlled and processed by marketplace operators.

With the rapid development and adoption of the Internet and digital marketplace globally and also regionally, businesses in **Brunei Darussalam** are slowly incorporating digital marketplace. This chapter aims to provide an overview of the current state of the digital marketplace in Brunei, and thus, case studies of local digital marketplaces will be discussed. A qualitative approach, which consists of interviews with companies, will be made for the study.

The strengths and problems of employing digital marketplace for businesses and analysis using Michael Porter's five models will also be covered in this chapter. Chapter 8, titled "A Study of Quality Tools and Techniques for Smart Manufacturing in Industry 4.0 in Malaysia: The Case of Northern Corridor Economic Region" (authors: Mohd Syaiful Rizal Abd Hamid, Saifuddin Isa and Chew Boon Cheong) analyses the key factors for selecting quality tools and techniques in industrial revolution 4.0, particularly in the smart manufacturing context. This study asked, "What are the factors determining which quality tools and techniques are more applicable in specific circumstances related to quality performance in Industrial Revolution 4.0?" To answer this question, a multiple case study and an in-depth literature review were employed as the research design approach.

Two key data collection methods (qualitative methods) were used: (1) Primary data from face-to-face interviews with Toyo Memory Technology and Intel Malaysia (2) Secondary data from previous studies. This review, coupled with the case study analysis, led to the identification of the real implementation of quality tools and techniques in the industries. Finally, this book can enhance the reader understanding of Industrial Revolution 4.0 and quality management practices as well as highlight opportunities for further research.

xxi Preface Chapter 9, titled "Ethnicity and Household Savings in Indonesia" (authors: Shochrul Rohmatul Ajija, Muhamad Abduh, Wasiaturrahma Wasiaturrahma and Ahmad Hudaifah) states that household saving is very important, not only for securing the future spending of the family but also for the country's economy. Using the logit analysis on data of The Indonesia Family Life Survey (IFLS) wave three, four, and five, this study attempts to analyze factors influencing, especially the role of ethnicity, upon the household savings in Indonesia.

The result indicates that gender, location, and level of education are the consistent variables affecting the household saving behaviour in Indonesia across the three wave surveys. Meanwhile, as for the ethnic group variable, there are only Sunda, Batavia, and Bima-Dompu that can significantly influencing the people's saving behavior across the three wave surveys. Chapter 10, titled "Strengthening Islamic Finance in South East Asia Through Innovation of Islamic Fintech in Brunei" (author: Abdurrahman Raden Aji Haqqi) observes that fintech solutions can revolutionize Islamic financial services and leverage on the so-called 'Fourth Industrial Revolution' which is the movement towards combining everyday aspects of our lives, such as finance, into the digital realm that will help increase speed, efficiency, and convenience.

The most significant challenge for all countries pursuing Fintech is regulating the industry. Following the issuance of the Financial Sector Blueprint, the Fintech Unit was established under Autoriti Monitori Brunei Darussalam (AMBD). AMBD envisions a vibrant economy powered by ICT through ICT-Smart Citizens as well as being a connected and efficient nation. This article discusses the application of Fintech specifically in Islamic finance sector based on the descriptive method of research by concentrating on its regulations.

At the end, the research found that though Fintech in Islamic finance sector has been done since its emergence but through Guidelines Fintech Regulatory Sandbox Guidelines Islamic financial Fintech will be strengthened and developed and more diversified. Chapter 11, titled "Opportunities and Challenges of Social Media to the Islamic Banks in Indonesia" (author: Ahmad Rafiqi) affirms that the Islamic banks in Indonesia have a serious issue of a low market share of 5%. This emerged due to the limited/unvaried product range, low literacy and inclusion level of Islamic finance, unfavorable perception for Islamic banking, and limited distribution networks and outreach.

All of these causes could be resolved by using social media which will bring several opportunities such as transparency and openness, effective marketing channels, stakeholders' relationship, social media content, brand image and reputation, Shariah compliance activity, learning and knowledge, and greater personalization. Meanwhile, in using social media, the Islamic banks face few challenges such as network infrastructure, negative comments, information risk management, privacy, and deception.

All the information in this chapter can be used as a reference to any xxii Preface institutions particularly the Islamic banks which associated with digital interfaces and interactions in its daily businesses. Thus expectedly, the Islamic banks could enhance t

he public trust and establish a good Islamic identity. Chapter 12, titled "The Loan Shark in ASEAN Can Nanofinance With Qardhul Hassan Deal With It? Lesson Learned From Bank Wakaf Mikro in Indonesia" (author: Khairunnisa Musari) states that loan shark is a humanitarian problem faced by many countries in the world, including in Asia, even in the Association of Southeast Asian Nations (ASEAN)'s countries.

Loan shark activities are found not only in Myanmar and Cambodia, which has the lowest per capita income in ASEAN but also in Indonesia, Thailand, Malaysia, Brunei, and even Singapore, which are the five countries with the highest gross domestic product (GDP) per capita in ASEAN. How are loan shark practices in ASEAN countries? Can nanofinance overcome the microfinance gap to fight the loan shark? How the practice of Bank Wakaf Mikro (BWM) in Indonesia to nanofinance with qardhul hassan contract? Find the answers in this chapter.

Chapter 13, titled "Factors Influence Retail Equity Investors to Patronize Islamic Stockbroking in Malaysia: An AHP Approach" (authors: Muhamad Abduh and Faizal Asfan Mohamad) analyses factors influence retail equity investors to patronize Islamic stockbroking in Malaysia and rank their level of importance using Analytical Hierarchy Process. Data are collected using questionnaire via online and offline survey among clients, individuals who work in the stockbroking industry and stockbroking related industry such as fund managers, unit trust managers and mutual funds.

The results show that religiosity and product awareness significantly influence the patronizing behavior of Malaysian retail equity investors. On the other hand, economic motives, convenience, social influence and attractiveness of stock investment ranked below religiosity and product awareness. In view of the findings, stockbroking industry players such as investment bank, stockbroking firm or participating organization should take advantage of the religiosity and product awareness factors as a main focus to develop Islamic stockbroking service in Malaysia. Sales, marketing and business development strategies can be designed according to the said criteria.

Chapter 14, titled "Post-Crisis Interdependence Between Islamic Unit Trust Funds and Islamic Stock Market in Malaysia" (author: Muhamad Abduh) explores the short-run and long-run relationship between 34 Islamic unit trusts and the Islamic stock market after the global financial crisis. The study collects the data from Bloomberg's database from 2009 until 2012 and employs J-J cointegration to identify the long-run relationship while Granger causality test is used to investigate how the changes in Islamic stock market can influence the changes in Islamic unit trusts in the short-run. The finding indicates that 61.76 percent out of the 34 Islamic unit trusts tested do not have long-run equilibrium with the Islamic stock market.

Furthermore, only a few Islamic trusts responded to the changes in the Islamic stock market. This study is important at least in two folds. Firstly is its role in fulfilling the gap in the literature of unit trust—stock markets nexus in Islamic finance. Secondly, the findings provide some relevant information to the investors and fund managers so they may take benefit from the situation.

The last chapter of the collection, Chapter 15, titled “Financial Accessibility and Small Medium Enterprise (SMEs) in Malaysia: The Role of Crowdfunding and Islamic Finance” (authors: Mohamed Asmy Bin Mohd Thas Thaker, Hassanudin Bin Mohd Thas Thaker and Choong Pai Wei) affirms that one of the common problems facing by worldwide SMEs including Malaysia is accessing external financial services. Given this fact, this paper attempts to offer a sustainable model of source of financing for Malaysian SMEs in meeting their financial need, which is known as Islamic Crowdfunding-Small and Medium Enterprises (ICSMEs) model.

We review comprehensive literature by focusing on the issues of financial accessibility faced by Malaysian SMEs, and the existing studies relating to SMEs, crowdfunding and Islamic finance in support to construct ICSME model. We discussed the modus operandi of the proposed ICSME model and offers several significances of the model. Before closing this preface, it is important to thank authors for their interest in participation in this book as well as the members of the Editorial Advisory Board of the book and reviewers for the time and efforts they invested in choosing the best collection of chapters for this book. Thank you very much to all of you.

Mohammad Nabil Almuna war Universiti **Brunei Darussalam**, Brunei Muhammad Abduh Universiti Brunei Darussalam, Brunei Patricia Ordóñez de Pablos The University of Oviedo, Spain November 2019 xxiv 186 Copyright © 2020, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited. Chapter 9 DOI: 10.4018/978-1-7998-2257-8.ch009 ABSTRACT Household saving is very important, not only for securing the future spending of the family but also for the country's economy.

Using the logit analysis on data of The Indonesia Family Life Survey (IFLS) wave three, four, and five, this chapter analyzes factors influencing, especially the role of ethnicity, upon the household savings in Indonesia. The result indicates that gender, location, and level of education are the consistent variables affecting the household saving behaviour in Indonesia across the three wave surveys. Meanwhile, as for the ethnic group variable, there are only Sunda, Batak, and Bima-Dompu that can significantly influence the people's saving behavior across the three wave surveys.

Ethnicity and Household Savings in Indonesia Shochrul Rohmatul Aji Universitas Airlangga, Indonesia Muhammad Abduh <https://orcid.org/0000-0002-1918-6525> School of Business and Economics, Universitas Brunei Darussalam, Brunei Wasiaturrahma Wasiaturrahma Universitas Airlangga, Indonesia Ahmad Hudaifah Universitas Internasional Semen Indonesia, Indonesia Copyright © 2020, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

187 Ethnicity and Household Savings in Indonesia INTRODUCTION Saving is believed to be one of the engines driving the economy of a country. Previous studies have shown that savings are able to boost economic growth in many countries such as Nigeria (Adelakun, 2011), Malaysia (Abduh, Omar, & Duasa, 2011), as well as Botswana (Jagadeh, 2015). The growth of the economy for countries with high capital accumulation, especially through savings, will be more sustain and higher compared to countries with low capital (Chow, 1993).

The low level of capital accumulation, one of the reasons is due to insufficient savings, is the common problem faced by developing countries (Wollasa, 2011). To date, Indonesia is still classified as a developing country and grouped under low and middle income countries (World Bank, 2017). Similar to other developing countries in this world, Indonesia is facing challenges on how to improve its capital accumulation, especially through the improvement of household savings which currently still in a considerably low level.

It is interesting to see that at the Association of Southeast Asian Nations (ASEAN) level, the amount of household savings in Indonesia that have been collected relatively higher and even better than Singapore and Brunei Darussalam as a high-income country, i.e. around 300 trillion US\$ a year. However, it is not surprising because the population of Indonesia is much greater than those two countries. The average percentage of savings to GDP from 2010 to 2015 shows that Indonesia is in the fourth position in ASEAN with only 34.4 percent (World Bank, 2017).

Unlike other low- and middle-income countries in ASEAN region such as Thailand, Cambodia and Laos, the growth of domestic savings in Indonesia is likely to decline since 2013 (World Bank, 2017). After a fantastic increase of 44 percent in 2010, the level of savings in Indonesia continue to fall with the rate of 0.3 percent in 2015. On the other hand, the same report said that domestic savings of Laos, Thailand, and Cambodia had increased dramatically by 34, 12, and 10 percent respectively.

Since domestic saving is one of the main components in developing the economy, it is then very important to investigate the determinant of domestic savings behavior in Indonesia especially at the private level since 91.97 percent of domestic savings in Indonesia are private savings (Vibr iyanti, 2014). However, according to (Scott, 2014), there is a link between ethnic group and economic behaviour including saving. Furthermore, (O'Connor, 2017) evidences that ethnicity greatly affects people's savings behaviour in the three countries of Australia, Canada and China, where Chinese descent can save more than Caucasians.

Since Indonesia is a country with more than 100 ethnic groups live together, it is interesting and important to know the saving behaviour of households in Indonesia with regard to their ethnicity. Hence, this study attempts to analyse factors, especially 188 Ethnicity and Household Savings in Indonesia the ethnicity, influencing the households' saving behaviour in Indonesia using nationwide Indonesian Family Life Survey (IFLS) wave 3, 4, and 5 data. The rest of this paper is structured as follows. In the second section, this study quotes literature reviews about savings, concepts of ethnicity, and how ethnicity can influence the households' saving behaviour.

Section 3 presents data and research methods utilized in this study while section 4 describes research finding and analysis. Lastly, Section 5 summarizes the main findings and their implications. LITERATURE REVIEW Generally, saving is defined as money not spent (Popovici, 2012). According to (Akram & Akram, 2015), the determinants of savings are including demographic factors, macroeconomic variables, and financial variables. The Classical Theory stated that savings have a positive relationship with interest rate (Vieneris, 1977; Mishkin, 2010). The high interest rate encourages people to save because they will earn more interest income through savings.

According to Keynesian, savings are highly determined by the disposable income or current income (Crouch, 1972). However, Post-Keynesian argued that savings depended on income ambiguously, but they stressed that savings are more influenced positively by one's income and affected negatively by the consumption at the same time (Grigoli, Herman, & Herbel, 2014). According to (Grigoli, et al., 2014), the starting point of theoretical research on savings is defined by the permanent income hypothesis (PIH) and the life cycle hypothesis (LCH).

Unlike Keynesian hypothesis, (Hall, 1978) stated that PIH concerns on a representative, infinitely lived consumer who equalizes the consumption to the permanent income net of the present value of taxes. Ricardian equivalence hypothesis (REH), the variant of the PIH, defines permanent income as net of the present value of the government spending (Barro, 1974). The REH estimates that the permanent gover

ment consumption will be fully compensated by the lower of private consumption if a huge number of stringent conditions has been fulfilled (Seater, 1993).

The PIH assumption of homogeneous consumers seems to contradict with the heterogeneity of some consumer dimensions, such as age, income, and access to borrow the money. Therefore, according to (Attanasio & Weber, 2010), the LCH had proposed that the age-related consumer heterogeneity stated that aggregate savings indicates the addition of savings by different age. Furthermore, saving habits seem to be also influenced by the level of one's financial literacy. One of the reasons of suboptimal saving and investments was the suffering of financial literacy (Hastings & Mitchell, 2011).

In addition, (Lusardi & Mitchell, 2007) and (Hasting & Tejada- Ashton, 2008) had mentioned that the lack of financial literacy also make people 189 Ethnicity and Household Savings in Indonesia to experience lack of saving for retirement, stuck in a lot of debt, take the wrong decision in the housing loan, and face many problems in the current sophisticated financial era. Ethnicity is something that is not given but as a result of social construction so that ethnicity itself is flexible and dynamic (Yang, 2000). Differences in ethnic groups are judged to influence different mindsets in terms of saving.

Honig (1996) argues that ethnic and gender differences influence a person's behavior in planning for retirement. Meanwhile, someone who is ready to face retirement must have a more planned savings since his youth. In addition, (Scott, 2014) stated that the difference in retirement savings behaviour based on race and ethnicity is due to cultural differences in the degree of financial interdependence expected by family members and one's social network. The group will usually save more because there is a more independent set of cultural assumptions in which everyone is responsible for his or her own pension outcomes and financial decisions more generally.

A person with a relatively similar level of wealth but coming from different ethnic groups can even have a degree of readiness to welcome a different retirement (Shapiro, 2004). One of the causes of differences in saving habits between ethnic groups is usually due to differences in cultural norms governing each group (Scott, 2014). For example, there are some ethnic groups who believe that real estate is the best source of wealth. As a result, people with these ethnic groups began to save funds in the form of a house or property at a young age.

This belief is born due to the prevailing norm around them, the ethnic group where they reside, so it also affects the way a person thinks in determining the technique

of saving or investment. DATA AND RESEARCH METHOD In order to measure the impact of the ethnic group upon household's saving behaviour in Indonesia, this study utilizes the longitudinal socioeconomic and health panel data of Indonesia Family Life Survey (IFLS) wave 3, 4, and 5 with household samples from 13 provinces in Indonesia conducted by the RAND Foundation in 2000, 2007/2008, and 2014/2015 respectively.

IFLS data used in this study is the data where respondents surveyed on wave 3, 4, and 5 are the same person. The goal is to see the development of savings character of respondents, whether it is true that ethnic variables affect them consistently or not. This study focuses upon the influence of demographic and cultural factor, such as ethnicity, upon the formal savings ownership among Indonesian.

Therefore, the ownership of formal saving becomes the dependent variable, whereas, ethnicity, gender, location, marital status, and years of school set as the independent variables. Furthermore, since the dependent variable is in nominal outcome; that is 1 if the 190 Ethnicity and Household Savings in Indonesia respondent has a formal household savings and 0 otherwise, so the binary logit model can be attained (Williams, 2017; Anderson, Hernandez, Jessup, & North, 2018).

The following binary logit equation is utilized to determine the probability of discharge (1) which indicates the respondent has household savings:  $P_{i1} = \frac{e^{\beta_0 + \beta_1 X_{i1}}}{1 + e^{\beta_0 + \beta_1 X_{i1}}}$  where,  $Z = \beta_0 + \beta_1 X_{i1}$  and  $P_{i1}$  is the probability of a household to have a formal household savings (the value of outcome  $Y_i$  is 1);  $1 - P_{i1}$  is the probability that  $Y_i = 0$  when the household does not have a formal household savings;  $\beta_i$  was the coefficients of the independent variables to be estimated;  $X_i$  were the explanatory variables (i.e.,

age of head of household; marital status of head of family; the gender of head of family; residential locations (rural or urban), year of school, and discrete data for ethnic groups in IFLS data);  $e$  denotes the base of the natural logarithm;  $e^i$  indicates the stochastic error term;  $\ln \frac{P_{i1}}{1 - P_{i1}} = Z_i$  was logit, that is the log odds ratio of the probability that a household has a formal saving. To measure the impact of a variable, this research uses marginal effect analysis (Fountas, Sarwar, Anastasopoulos, & Blatt, 2018).

It measures the impact of changes in independent variables on the likelihood of



respondents having savings in the bank. It is computed as follows (Greene, 2012: 674):

$$E(y_i | x_i) = \frac{\exp(\beta_0 + \beta_1 x_{i1} + \dots + \beta_k x_{ik})}{1 + \exp(\beta_0 + \beta_1 x_{i1} + \dots + \beta_k x_{ik})}$$

where,  $E(y_i | x_i)$  denotes the expected value of the logit probability,  $\beta_0, \beta_1, \dots, \beta_k$  are the parameters to be estimated, and  $x_{i1}, x_{i2}, \dots, x_{ik}$  are the explanatory variables. The density function of the general conditional mean function  $E(y_i | x_i)$ , respectively.

This study also utilizes a random effect binomial logit model on panel data to analyse the impact of demography and ethnicity variables to household savings ownership. The assumption of the random effects model is that the global error term ( $\epsilon_{it}$ ) consists of two independent components, i.e.,  $\epsilon_{it} = \mu_i + \nu_{it}$  where  $\mu_i$  is the individual effect and  $\nu_{it}$  is the error term for each individual and time period.

**EMPIRICAL RESULTS AND DISCUSSIONS**

**Overview of Respondents**

The respondents of this study are originated from 24 different tribal origins, such as Jawa, Sunda, Bali, Batak, Bugis, Tionghoa, Madura, Sasak, Minang, Banjar, Bima-Dompu, Makassar, Nias, Palembang, Sumbawa, Toraja, Betawi, Dayak, Melayu, Komerling, Ambon, Manado, Aceh, et cetera. After going through the data cleaning, the number of respondents of IFLS wave 3, 4, and 5 involved in this study 8,890; 9,693; and 10,773 respectively. Most of respondents in this study are from Jawa, Sunda, Minang, Bali, Sasak, Betawi, Bugis, Batak, Banjar, and Madura respectively.

With regard to these ethnics, Jawa is the largest ethnic group in Indonesia that live at the central and east part of 192 Ethnicity and Household Savings in Indonesia Java island. Sunda is the indigenous population in the western part of Java island and becomes the second largest ethnic group in Indonesia (Candramila, Sumarsono, Suryobroto, & Moeis, 2015). Minangkabau people, also known as Minang, is one of the biggest ethnic group in Indonesia and originally from Minangkabau Highlands of West Sumatera. Balinese people are living mostly in Bali and Lombok Island as well as in Banyuwangi.

It is the most eastern region of Java Island and most of them live in village called as desa tradisional (traditional village) in Lombok Island. Sasak

No	Ethnicity	2000	2007	2014	Total	Freq. %
1	Jawa	3,920	4,482	4,996	13,398	45.7%
2	Sunda	1,245	1,288	1,324	3,857	13.2%
3	Minang	466	509	575	1,550	5.3%
4	Bali	456	505	531	1,492	5.1%
5	Sasak	314	358	390	1,062	3.6%
6	Betawi	408	351	390	1,149	3.9%
7	Bugis	344	370	385	1,099	3.8%
8	Batak	273	349	428	1,050	3.6%
9	Banjar	296	367	366	1,029	3.5%
10	Madura	282	323	326	931	3.1%

931 3.2% 11 Bima-Dompu 145 1.6% 184 1.9% 240 2.2% 569 1.9% 12 Makassar 115 1.3%  
 134 1.4% 156 1.5% 405 1.4% 13 Melayu 26 0.3% 111 1.1% 81 0.8% 218 0.7% 14 Other  
 South Sumatera 197 2.2% - 0.0% - 0.0% 197 0.7% 15 Manado 4 0.0% 107 1.1% 67 0.6%  
 178 0.6% 16 Sumbawa 49 0.6% 46 0.5% 78 0.7% 173 0.6% 17 Tionghoa 62 0.7% 64 0.7%  
 41 0.4% 167 0.6% 18 Palembang 52 0.6% 41 0.4% 68 0.6% 161 0.5% 19 Toraja 48 0.5%  
 46 0.5% 45 0.4% 139 0.5% 20 Ambon 104 1.2% 7 0.1% 3 0.0% 114 0.4% 21 Nias 34 0.4%  
 23 0.2% 42 0.4% 99 0.3% 22 Komering 30 0.3% 12 0.1% 35 0.3% 77 0.3% 23 Dayak 8  
 0.1% 12 0.1% 6 0.1% 26 0.1% 24 Aceh 8 0.1% - 0.0% - 0.0% 8 0.0% Total 8,886 100.0%  
 9,689 100.0% 10,723 100.0% 29,298 100.0% 193 Ethnicity and Household Savings in  
 Indonesia people are the native inhabitants of Lombok Island. Betawi people are ethnic  
 group native to the Jakarta, the capital city of Indonesia.

Bugis people are originally from South Sulawesi, Indonesia. Batak people are the  
 indigenous tribe of North Sumatra Island, Indonesia, one of the significant tribes in  
 Indonesia. Banjar people are native ethnic group that live in South Kalimantan,  
 Indonesia. Madura, the third largest ethnic group by population in Indonesia, are  
 originally from Madura Island, East Java. The distribution of respondents according to  
 their tribes is shown in Table 1. Demographically, there is no significant difference on  
 the character of respondents of each period. Most of the respondents of each period  
 are women and married.

Furthermore, around half of respondents live in the city. The demography profile of the  
 respondents of each period is tabulated in Table 2 as follows: According to Table 3,  
 it can be asserted that the level of education of the respondents has been improved  
 gradually over periods. In 2000, the mean of years of school is 6.49 meaning that on  
 average, the respondents complete their education until elementary school but do  
 not finish their first stage in junior high school. Table 2.

Descriptive statistics of discrete variables

	2000	2007	2014	Frequency	Percentage	
Gender Male	2,160	2,131	21.99			
Female	1,854	17.29				
Other wise	6,726	75.69	7,558	78.01	8,869	82.71
Marital Status Married	8,881	99.94	9,689	100.00	10,720	99.97
Other wise	5	0.06	-	-	3	0.03
Location Urban	3,998	44.99	4,937	50.95	6,085	56.75
Other wise	4,888	55.01	4,752	49.05	4,638	43.25

Table 3.

Descriptive statistics of continuous variables

Variables	2000	2007	2014	Mean	Std. Dev	Min	Max
Years of School (old school, in years)	6.49	4.47	0.18	7.72	4.45	0.21	8.60
Age (years)	37.68	13.75	11.10	105.37	52.13	02.15	96.37
	99.99	12.43	14.93	194			

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Meanwhile in 2014, the education level of respondent increases because on average, they almost can complete their junior high school.

In addition, the average of age of IFL S's respondents is steadily same from 2000 to 2014. However, the oldest age in the IFL S survey declined, from 105 years in 2000 to 93 years in 2014. The inactivity of savings in Indonesia is also reflected in the IFL S data. Most respondents from all period do not have savings in the bank. There are only around one third of respondents owning saving account in the bank. This condition is tabulated as follows: Empirical Result The logit coefficient shown in the result indicates the impact of changes in the independent variables towards the dependent variable, while the coefficient cannot be directly interpreted. Therefore, the meaning of the estimation can be asserted from the odds ratio and marginal effect. The odds ratio is the ratio between two opportunities, i.e. having household savings or not.

Meanwhile, marginal effects indicate predicted probability changes in household saving ownership due to changes in independent variables. From the results of logit estimation in Table 5, it can be seen that age has a significant effect to the probability that someone has a savings account in the bank. The older a person, the greater the probability of having savings. The odd ratio stated that the older a person, then the possibility of having savings is double from the younger person. The impact of age upon saving behaviour can be explained from elderly perspectives whereby older people requires more spending.

Therefore, to manage financial planning for family, saving remains very good solution to secure future spending. The education background of respondents seems to have a consistent impact to the probability of owning the formal savings in Indonesia. The logit estimation from all three periods shows that the higher the education level of the respondent, the greater the chance of having a savings account in the bank. From the odds ratio it can Table 4. Saving ownership of respondents Saving Ownership 2000 2007 2014 Number % Number % Number % Yes 2,484 27.95 2,402 24.79 3,313 30.90 No 6,402 72.05 7,287 75.21 7,410 69.10 Total 8,886 100.00 9,693 100.00 10,723 100.00 195 Ethnicity and Household Savings in Indonesia Table 5. The logit estimation, odds ratio, and marginal effects results

Variables	2000	2007	2014	Logit Est.	Odds Ratio	Logit Est.	Odds Ratio
Constant	-3.271845	.0379364	-2.968988	.0513552	-2.578913	.0758564	1.16445***
age	.0067802	1.006803	.0086909	1.008729	.0076572	1.007687	.0021411 ***
Gender	-.4332406	.6484044	-.3065939	.7359494	-.2727505	.7612827	.0618184***
Year of School	.186598	1.205143	.1776443	1.1944	.1658167	1.180357	.0069823***
Location	.366811	1.443125	.3268783	1.386633	.2420336	1.273837	.0548376***
Sunda	-.1708183	.8429747	-.465879	.6275832	-.1656544	.847339	.0776361**

.0821306\*\*\* .0515438\*\*\* .0706661\*\*\* .0598782\*\*\* Bali .0820778 1.08554 .1282134  
1.136796 -.1695038 .8440835 .1187501 .128908 .1127014 .1281184 .1045707 .0882664  
Bat ak -.7529156 .4709913 -.7313796 .4812446 -.6461834 .524042 .1564906\*\*\*  
.0737057\*\*\* .1483597\*\*\* .0713973\*\*\* .119364\*\*\* .0625518\*\*\* Bugis .2211047 1.247454  
.3647989 1.440224 .0160498 1.016179 .1300909\* .1622824\* .1288146\*\*\* .1855219\*\*\*  
.1206085 .1225598 Tionghoa -.5340862 .5862047 .2114484 1.235466 .3729499 1.452012  
.2951097\* .1729947\* .2722447 .3363491 .3275265 .4755722 Madura .0239659 1.024255  
.0857734 1.089559 .1173877 1.124555 .1613487 .1652623 .1538848 .1676666 .1368626  
.1539095 Sasak -.1643032 .8484848 -.4168824 .6590984 -.1803111 .8350104 .1502312  
.1274689 .1564909\*\*\* .1031429\*\*\* .1070367\* .0893767\* Minang -.2187699 .8035066  
-.367144 .6927099 -.4759269 .6213089 .1151971\* .0925616\* .1142063\*\*\* .0791119\*\*\*  
.1007749\*\*\* .0626123\*\*\* Banjar -.3185345 .727214 .0500454 1.051319 -.2990575  
.7415167 .1523974\*\* .1108255\*\* .133001 .1398265 .130739\*\* .0969451\*\* Bima- Dompu  
-.5159655 .596924 -.4192392 .6575469 -.9955983 .3695023 .2371015\*\* .1415316\*\*  
.2065656\*\* .1358266\*\* .183229\*\*\* .0677035\*\*\* Mak assar -.8858852 .412349 .2657344  
1.304389 -.0613509 .9404931 .2826851\*\*\* .1165649\*\*\* .2023853 .2639891 .1820865  
.1712511 Nias -2.080715 .124841 -1.431438 .238965 -1.362519 .2560151 1.029738\*\*  
.1285535\*\* 1.042237 .2490582 .6208527\*\* .1589477\*\* 196 Ethnicity and Household  
Savings in Indonesia be estimated t hat when a respondent has a one level higher of  
education level, t hen t he chances of having savings increased 1.2 times more t han ot  
hers.

The f indings are interestingly consistent t hrough all waves. Savings behaviour in  
Indonesia was leveraged by gender. Men are more likely to have saving t han women  
consistently in all waves wit h t he odds ratio exemplif ied t hat t he probability of  
women to save are less t han one, or only 0.65 to 0.76 times t han men. However,  
getting closer to t he year 2014, women’s chances to have savings are also getting  
bigger alt hough t he addition is not really signif icant. The inclination of female’s  
educational backg round has reshaped t he saving behaviour in Indonesia.

Af ter completion of school, female is more aware of future generation Table 5.

Continued Var iables 2000 2007 2014 Logit Est. Odds R atio Logit Est. Odds R atio Logit  
Est. Odds R atio Palembang -.2842601 .7525709 -.5985885 .5495868 -.6546722 .5196124  
.3101118 .2333811 .3961437 .2177153 .2890527\*\* .1501954\*\* Sumbawa -.2095149  
.8109775 .1453626 1.156459 -.2886641 .7492639 .384231 .3116027 .3570626 .4129281  
.2692231 .2017191 Toraja -.4347159 .6474486 -.3801953 .6837279 -.1195459 .8873233  
.3882472 .2513701 .3774957 .2581043 .3305583 .2933121 Bet awi -.2329418 .7921997  
.1080184 1.114068 -.042749 .9581519 .1217748\* .0964699\* .1263806 .1407966 .1176025  
.112681 Dayak .0214852 1.021718 -.0152207 .9848946 .0477434 1.048901 .8099933  
.8275844 .6587665 .6488156 .8382052 .8791947 Melayu -.1094909 .8962903 .2373097

1.267834 -.3180043 .7275996 .4220392 .3782696 .2308434 .2926711 .2518996 .1832821  
 Komer ing .756091 2.129934 .2602096 1.297202 -.3904894 .6767256 .399912\* .8517861\*  
 .6152888 .7981538 .3844403 .2601606 Ambon -.5438382 .5805158 .9231985 2.517329  
 1.360754 3.899133 .2634453\*\* .1529342\*\* .7923318 1.99456 1.242069 4.842993 Manado  
 -.9405155 .3904265 -.1876173 .8289318 -.2243222 .7990577 1.177901 .4598839  
 .2559661 .2121784 .2937105 .2346917 Aceh -.6697572 .5118328 .7456963 .3816718 Ot  
 her (Sout h Sumatera) .0299899 1.030444 .1690951 .174243 Prob > chi2 0.0000 0.0000  
 0.0000 Pseudo R2 0.1167 0.1014 0.0823 197 Ethnicity and Household Savings in  
 Indonesia of her children by saving more money for education cost, health care  
 insurance and gold to be pawned or sold back in case of emergency.

In addition, the respondents' residence (whether in the city or village) also consistently influence saving behavior consistently. The respondents residing in cities have a greater probability to have savings at formal financial institutions than those living in the village. The odds ratio also evidences that respondents who reside in the city initially have a chance to have savings about 1.2 times bigger than those living in the village.

Regarding the influence of ethnic background upon saving behavior of households in Indonesia, it can be seen that the influence started from wave 3 survey. From the logit estimation it can be asserted that there are some ethnic groups that significantly and positively influencing their people to save money in formal financial institutions. Those are: 2000: Sunda, Batak, Makassar, Banjar, Bima-Dompu, Nias, Ambon, Bugis, Tionghoa, Minang, Betawi, and Komer ing 2007: Sunda, Batak, Bugis, Sasak, Minang, and Bima-Dompu 2014: Sunda, Batak, Minang, Bima-Dompu, Banjar, Nias, Palembang, and Sasak Therefore, ethnic groups that consistently affect the probability of owning a formal saving account on the three waves analyzed are Batak, Sunda, and Bima-Dompu.

Interestingly, as the most dominant tribe in IFLS respondents, Jawa ethnic does not have a significant effect on savings ownership opportunities. The difference in terms of geographical location between urban and rural area influences saving behavior among the respondents. Location of living and urban residential settlement are often surrounded by public facilities particularly banks and investment agent companies.

Therefore, people living in urban areas can easily save and invest their money into financial institutions and productive investment products. The world trend of preferable living location has moved into urban dwelling. Around 50 percent of world population, including in Indonesia, has chosen to reside in urban areas (World Bank, 2017). Several countries are experiencing urbanisation which more citizens are living in cities and

metropolitan. The result of study mostly indicates that geographical location has significant impacts upon saving behaviour.

**CONCLUSION AND RECOMMENDATION** The outcome of study established as a solid conclusion that several important determinants could prompt the saving behaviour. The results from logit estimation indicate that the age has a significant effect to the probability of someone has a savings 198 Ethnicity and Household Savings in Indonesia account in the bank. The education background of respondents also appears to lead a consistent impact to the probability of owning the formal savings in Indonesia.

In addition, savings behaviour in Indonesia is also stimulated by gender characteristic where women are more likely to save their money in formal financial institutions than men. The odds ratio interpreted from the logit model has exemplified that the probability of women to have a saving account is less than men. It can also be asserted from the logit model that there are some ethnic groups that have most significant impressions on the probability of savings in bank, namely Batak, Sunda, and Bima-Dompu.

Interestingly for Jawa, as the most dominant tribe in IFLS respondents, does not have a significant consciousness on savings ownership opportunities. The recommendations from this study is to provide financial literacy programmes for people living in villages and from the lower middle-income groups so that they understand the importance of financial planning and at the same time to boost the country's capital accumulation for better economic growth.

Meanwhile for the upper high-income family, policy makers could encourage them through many initiatives or programmes which can enhance their awareness upon saving proportion as internal source of investment within the country. REFERENCES Abduh, M., Omar, M., & Duasa, J. (2011). The Impact of Crisis and Macroeconomic Variables towards Islamic Banking Deposits. *American Journal of Applied Sciences*, 8(12), 1413–1418. doi:10.3844/ajassp.2011.1378.1383 Adelan, O. J. (2011). The Nexus of Private Savings and Economic Growth in Emerging Economy: A Case of Nigeria. *Journal of Economics and Sustainable Development*, 2(6), 31–45. Akram, N., & Akram, M. I. (2015).

Savings Behaviour in Muslim and Non Muslim Country in Context to the Interest Rate. *Pakistan Journal of Applied Economics*, 25(2), 161–177. Anderson, J. C., Hernandez, S., Jessup, E. L., & North, E. (2018). Perceived Safe and Adequate Truck Parking: A Random Parameters Binary Logit Analysis of Truck Driver Opinions in the Pacific Nor

West. International Journal of Transportation Science and Technology, 7(1), 89–102. doi:10.1016/j.ijtst.2018.01.001 Attanasio, O. P., & Weber, G. (2010). Consumption and Saving: Models of Intertemporal Allocation and Their Implications for Public Policy, Journal of Economic Literature. American Economic Association, 48(3), 693–751.

199 Ethnicity and Household Savings in Indonesia Barro, R. J. (1974). Are Government Bonds Net Wealth? Journal of Political Economy, 82(6), 1095–1117. doi:10.1086/260266 Candramila, W., Sumarsono, S. H., Suryobroto, B., & Moeis, M. R. (2015). Face Shape Variation Among Sundanese People from Western Java, Indonesia. Hayati Journal of Biosciences, 22(1), 34–40. doi:10.4308/hjb.22.1.34 Chow, G. C. (1993). Capital Formation and Economic Growth in China. The Quarterly Journal of Economics, 108(3), 809–842. doi:10.2307/2118409 Crouch, R. L. (1972). Macroeconomics. New York: Harcourt Brace Javanovich. Fountas, G., Sarwar, M. T., Anastasopoulos, P. C., & Blatt, A. (2018).

Analysis of Stationary and Dynamic Factors Affecting Highway Accident Occurrence: A Dynamic Correlated Grouped Random Parameters Binary Logit Approach. Accident ; Analysis, and Prevention, 113, 330–340 Greene, W. H. (2002). Econometric Analysis. New York: Prentice Hall. Grigoli, F., Herman, A., & Hebbel, K. S. (2014). World Saving. IMF Working Paper, 204(14), 1–55. doi:10.5089/9781498393454.001 Hall, R. E. (1978). Stochastic Implications of the Life Cycle-Permanent Income Hypothesis: Theory and Evidence. Journal of Political Economy, 86(6), 971–987. doi:10.1086/260724 Hasting, J., & Tejada-Ashton, L. (2008).

Financial Literacy, Information and Demand Elasticity: Survey and Experimental Evidence from Mexico, NBER Working Paper, 14538. Hasting, J. S., & Ashton, L. T. (2008). Financial Literacy, Information, and Demand Elasticity: Survey and Experimental Evidence from Mexico, Working Paper 14538. Hastings, J. S., & Mitchell, O. S. (2011). How Financial Literacy and Impatience Shape Retirement Wealth and Investment Behaviors, National Bureau of Economic Research Working Paper Series, 16740, 1-26 Honig, M. (1996).

Retirement Expectations: Differences by Race, Ethnicity, and Gender. The Gerontologist, 36(3), 373–382. doi:10.1093/geront/36.3.373 PMID:8682335 Jagadeesh, D. (2015). The Impact of Savings in Economic Growth: An Empirical Study Based on Botswana. International Journal of Research in Business Studies and Management, 2, 10–21. 200 Ethnicity and Household Savings in Indonesia Lusardi, A., & Mitchell, O. S. (2007). Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth. Journal of Monetary Economics, 54(1), 205–224. doi:10.1016/j.jmoneco.2006.12.001 Mishkin, F. S. (2010). The Economics of Money, Banking, and Financial Markets. New York: The Addison-Wesley.

O'Connor, T, (2017, April 18).

Retrieved February 9, 2018, from *Int heBlack*: <https://www.intheblack.com/articles/2017/04/18/religion-and-ethnicity-drive-savings-habits> Popovici, G. (2012). Understanding the Factors Affecting Savings of Dutch Households, Groningen: University of Groningen and "Alexandru Ioan Cuza" University of Iasi. Scott, A. C. (2014). Ethnic Differences in Reliance On Family Versus Personal Savings in the Face of a Financial Shock, Unpublished Master's Thesis of University of Colorado. Seater, J. J. (1993).

Ricardian Equivalence, *Journal of Economic Literature*, 31, 142-190 Shapiro, T. M. (2004). The Hidden Cost of Being African American: How Wealth Perpetuates Inequality. *Regional Science and Urban Economics*, 30, 238. Vibranti, D. (2014). The Effect of Socio-Demographic Variables on Household Saving: The Analysis of the 2007 IFLs Data. *Developing Country Studies*, 4(1), 73-84. Vieneris, Y. P. (1977). *Macroeconomics Model and Policy*. New York: Wiley & Sons. Williams, R. (2016). Understanding and Interpreting Generalized Ordered Logit Models. *The Journal of Mathematical Sociology*, 40(1), 7-20. Wollasa, L. K. (2011). Investment Efficiency, Savings and Economic Growth in Sub-Saharan Africa.

Retrieved July 18, 2017, from <http://www.politicalarticles.net/blog/2011/09/05/investment-efficiency-savings-and-economic-growth-in-sub-saharan-africa/> World Bank. (2017). World Bank Open Data, Retrieved March 10, 2017, from <http://data.worldbank.org/> Yang, P. Q. (2000). *Ethnic Studies: Issues and Approaches*. New York: State University of New York Press. 201 Ethnicity and Household Savings in Indonesia ADDITIONAL READING Choudhury, S. (2002). Racial and Ethnic Differences in Wealth and Asset Choices. Retrieved November 17, 2018, from <https://www.ssa.gov/policy/docs/ssb/v64n4/v64n4p1.html> Dal Borgo, M. (2018). Ethnic and Racial Disparities in Saving Behavior. Banco de Mexico Working Papers No 2018-02 (January 2018). Retrieved November 17, 2018, from <https://www.banxico.org.mx/publications-and-press/banco-de-mexico-working-papers/%7BC6DA7FDC-C774-D061-0894-CAA06CCC2E31%7D.pdf> KEY TERMS AND DEFINITIONS Ethnicity: the factor or state of belonging to a social group that has a common national or cultural tradition.

Logistic Regression: the appropriate regression analysis to conduct when the dependent variable is dichotomous (binary). Saving: the money one has saved, especially through a bank or official scheme. About the Contributors Patricia Ordonez de Pablos is a professor in the Department of Business Administration in the Faculty of Business and Economics at The University of Oviedo (Spain). She completed her



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