## Available Online at www.e-iph.co.uk Indexed in Clarivate Analytics WoS, and ScienceOPEN https://www.amerabra.org



## ABRIC2023Langkawi

e-IPH
e-International
Publishing House Ltd.,
United Kingdom

https://fbm.uitm.edu.my/abric/index.php

## The 5th Advances in Business Research Conference 2023

Langkawi Island, Malaysia, 27 Sep 2023

Organised by: Faculty of Business and Management, UiTM Puncak Alam, Selangor, Malaysia

# Muslims' Financial Management Behavior during Covid-19 Pandemic in Indonesia and Malaysia

Moch. Khoirul Anwar<sup>1</sup>, Clarashinta Canggih<sup>1\*</sup>, Zaimy Johana Johan<sup>2,3</sup>, Nor Farradila Abdul Aziz<sup>4</sup>
\*Corresponding Author

<sup>1</sup> Islamic Economics Program, Faculty of Economics and Business Universitas Negeri Surabaya, Surabaya, Indonesia
 <sup>2</sup> Malaysia Institute of Transport (MITRANS), Universiti Teknologi MARA, Selangor, Malaysia
 <sup>3</sup> Technology and Supply Chain Management Studies, Faculty of Business and Management, Universiti Teknologi MARA, Malaysia
 <sup>4</sup> Faculty of Business and Management, Universiti Teknologi MARA Selangor, Malaysia

khoirulanwar@unesa.ac.id, clarashintacanggih@unesa.ac.id, zaimy@uitm.edu.my, norfa503@uitm.edu.my Tel: +628123109502

## Abstract

The COVID-19 pandemic has negatively impacted the order of life worldwide, including Indonesia and Malaysia. This study aims to capture the financial management behaviour of Muslims in Indonesia and Malaysia during the pandemic and the relation between demographic profile and financial management behaviour. This research is quantitative research utilising the chi-square test. 427 data were collected using a closed questionnaire distributed to respondents who fit the research criteria. The result concludes that both countries exhibit similar financial management behaviour. Moreover, financial management behaviour is related to monthly income in both countries.

Keywords: Financial Management Behavior; Pandemic; Muslims; Indonesia; Malaysia;

eISSN: 2398-4287 © 2024. The Authors. Published for AMER and cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers and cE-Bs (Centre for Environment-Behaviour Studies), College of Built Environment, Universiti Teknologi MARA, Malaysia.

DOI: https://doi.org/10.21834/e-bpj.v9iSI%2019.5764

### 1.0 Introduction

The COVID-19 pandemic, which began in December 2019, harmed lives worldwide, including Indonesia and Malaysia. In January 2020, the World Health Organization declared the COVID-19 pandemic an International Health emergency (WHO, 2020). In Indonesia, COVID-19 cases began to appear in March 2020, while in Malaysia, the first cases were detected on January 25, 2020, and increased tremendously from late February to early March.

UNDP (2020) states that the pandemic has changed people's lives worldwide. This pandemic has reversed the achievements of the Sustainable Development Goals indicators in various countries and forced the government to formulate new policies and find appropriate solutions. Based on data as of October 2020, it is estimated that 88-115 million people are in danger of being in deplorable conditions due to the economic shocks caused by COVID-19 (Lakner et al., 2020). Further, the ILO (2020) reported that nearly 1.6 billion informal workers had lost 60% of their income with almost no savings and without access to social protection. FSIN (2020) also states that

eISSN: 2398-4287 © 2024. The Authors. Published for AMER and cE-Bs by e-International Publishing House, Ltd., UK. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer–review under responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers), and cE-Bs (Centre for Environment-Behaviour Studies), College of Built Environment, Universiti Teknologi MARA, Malaysia.

DOI: https://doi.org/10.21834/e-bpj.v9iSI%2019.5764

COVID-19 has doubled the number of people experiencing a food crisis, where around 24 million will experience a food crisis due to the economic slowdown.

The economic problems arising from the pandemic can be seen from a supply and demand perspective. On the demand side, consumption, travel and transportation activities, and trade will decrease as the pandemic progresses. Meanwhile, labour productivity, investment, and funding activities decreased on the supply side, and the global supply chain was disrupted (Wuryandani, 2020). In Indonesia and Malaysia, some of the socio-economic impacts of COVID-19 can be seen in various sectors. The pandemic puts Malaysians - especially vulnerable and impoverished due to the pandemic - in a challenging position (Simler, 2020).

A pandemic outbreak can cause significant disruptions to production, investment, and consumer spending (Jung et al., 2016). The deteriorating socio-economic conditions also impact individual conditions and the behaviour shown by individuals in dealing with these conditions. In the face of the COVID-19 pandemic, consumers tend to have similar behaviours as when facing other crisis conditions, where the size of the crisis does not affect consumer shopping behaviour. However, fear and anxiety will change consumer shopping behaviour (Kaur et al., 2020; Loxton et al., 2020; Satish et al., 2021).

In Indonesia, there has been a shift in people's behaviour during COVID-19. An increased preference for vitamin and supplement consumption, increased consumption of home foods that increase online food delivery, a tendency to stay at home even for entertainment, accelerated e-commerce use, and a decreasing tendency for people to shop at the traditional market (Widjaja & Sim, 2020). Meanwhile, during the COVID-19 outbreak in Malaysia, there were several behavioural changes, including the tendency to panic-buying and a slowdown in credit (Data, 2020; Yau et al., 2020).

So far, research on behaviour during a pandemic has focused on consumer spending and consumption. There has not been any comprehensive research that portrays individual financial behaviour amid a pandemic and analyses the relationship between socio-demographic profile and financial management behaviour. Thus, this research investigates Muslims' financial management behaviour in Indonesia and Malaysia and the relationship of demographic characteristics with financial management behaviour since most of the population in both countries are Muslim (WorldPopulationReview.com, 2023). The present study seeks to illustrate Muslim financial behaviour in Muslim-majority countries. Moreover, it also establishes the relationship between demographic profile ( age, gender, marital status, job, and monthly income) and financial management behavior. Thus, it can suggest what kind of financial education is needed to improve the financial behaviour of Muslims with various backgrounds.

## 2.0 Literature Review

Financial management behaviour is related to financial responsibility in personal financial management, broader than savings and spending, which includes planning, budgeting, controlling, searching, and storing financial funds that arise from a person's desire to meet the needs of life according to income level (Kapoor et al., 2022; Sam et al., 2022; She et al., 2022). Positive financial management behaviour will lead to greater financial well-being (Dare et al., 2022)

Dew & Xiao (2011) set up a financial management behavioural scale (FMBS) that includes personal financial management concerning cash flow, credit, savings, and investment management, and it is believed that measuring all the different domains is essential because each domain has a vital role to play in explaining one's financial management behaviour

Socio-demographic profiles were found to be related to personal financial management behaviour. Education, income, ethnicity, and marital status affect credit behavior (Hamid & Loke, 2021). Furthermore, gender, age, and education level affect investor decision-making (Menyeh, 2021; Saleem et al., 2021). Moreover, gender, marital status, age, and income brought various financial behaviours among the group (Rahman et al., 2020). Additionally, income categories were associated with individual saving behaviour, whereas the high-income group had positive saving behaviour (Amari et al., 2020).

## 3.0 Methodology

This quantitative research uses a descriptive approach to determine financial management behaviour in Muslim communities in Indonesia and Malaysia. The population of this study are Muslims who live in Indonesia and Malaysia with the following criteria:

- a. 18-55 years old
- b. Have income either from salary/wage/business profit.
- c. Stay in Surabaya Raya (Indonesia) or Klang Valley (Malaysia)

Klang Valley and Surabaya were chosen due to the high COVID-19 cases in both areas. Based on the data available, the number of cases in Klang Valley was around 40% of the total cases in Malaysia(Malaysia, 2022). Meanwhile, in Surabaya Raya, the number of cases was around 30% of total cases in Indonesia (COVID-19, 2022). The sample selection is made using a non-probability sampling technique, e.g., convenience sampling, which can use anyone in the population group if the person is suitable as a data source. The number of minimum samples is determined using G\*power (Faul et al., 2007) with 5% standard of error parameters.

The data was collected by distributing closed questionnaires containing research questions according to the indicators specified to respondents who meet the criteria. The research focuses on Muslim Financial Management Behavior. The subject is the people of Indonesia and Malaysia, more specifically, Muslims. The data analysis technique is descriptive analysis to obtain an overview of the financial management behaviour and a chi-square test to find the relation between demographic criteria and financial management behaviour. Financial Management Behavior is measured by the characteristics compiled by Dew & Xiao (2011), Perry & Morris (2005), elaborated by Herzenstein & Posavac (2019), and Wiepking & Bekkers (2010).

### 4.0 Findings

### 4.1 Demographic Profile

Table 1 Demographic profile of the respondents

MYR		Frequency	Percentage (%)	IDN		Frequency	Percentage (%)
Gender	Male	68	37	Gender	Male	91	37.4
	Female	116	63		Female	152	62.6
Age	18 years old – 27 years old	63	34.2	Age	18 years old – 27 years old	112	46.1
	28 years old – 37 years old	64	34.8		28 years old – 37 years old	39	16.0
	38 years old – 47 years old	42	22.8		38 years old – 47 years old	46	18.9
	48 years old – 57 years old	11	6.0		48 years old – 57 years old	37	15.2
	58 years old and above	4	2.2	1	58 years old and above	9	3.7
Marital	Single	98	53.3	Marital status	Single	102	42
status	Married	84	44.2		Married	135	55.6
	Divorced	1	0.5	1	Divorced	2	0.8
	Widow	1	0.5	1	Widow	3	1.2
	Widower	-	-	1	Widower	1	0.4
Monthly	Less than RM2,500	72	39.1	Monthly Income	< Rp. 1.000.000, -	61	25.1
Income	RM2,500-RM4,500	55	29.9	1	Rp. 1.000.001, - Rp. 2.000.000, -	88	36.2
	RM4,501-RM6,500	22	12.0		Rp. 2.000.001, - Rp. 3.000.000, -	29	11.9
	RM6,501-RM8,500	12	6.5		Rp. 3.000.001, - Rp. 4.000.000, -	21	8.6
	RM8,501-RM10,500	12	6.5		> Rp. 4.000.001	44	18.1
	More than RM 10,500	11	6.0				

There were 427 respondents, with the following breakdown: 184 from Malaysia and 243 from Indonesia. Based on Table 1, most survey participants were female in Malaysia (63%) and Indonesia (62.6%). Malaysia has the highest proportion of survey participants aged 28 to 37 (34.8%), while Indonesia has the highest proportion of respondents aged 38 to 47 (18.9%). Single respondents have the highest marital status in Malaysia, with 53.3%. Meanwhile, married participants from Indonesia contributed the most to the survey (55.6%). Among Malaysian survey participants, 39.1% have a monthly income of less than RM2500. Meanwhile, 29.9% have a monthly income of RM2,500 to RM4,500. Respondents from Indonesia have a monthly income of Rp. 1.000.001 to Rp. 2.000.000 have the highest percentage (36.2%), followed by those with a monthly income less than Rp. 1.000.001 (25.1%).

## 4.2 Descriptive Statistics

Table 2. Descriptive Statistics

. 42.0 2.1 2 000.1 0 0.144.0 0.00							
	N		Mean		Std Deviation		
	MYR	IDN	MYR	IDN	MYR	IDN	
Financial Management Behaviour	184	243	3.40	3.23	0.58	0.52	

Table 2 shows 427 respondents from Indonesia (243) and Malaysia (184). The descriptive statistical results for both countries show that the mean value is greater than the standard deviation, indicating that the data distribution is well represented. The questionnaires used a Likert Scale of 1-5, with one being "Never" and five being "Always". It can be seen that Malaysia has higher mean values than Indonesia in terms of financial management behaviour, with a difference of only 0.2. It is possible to conclude that both countries exhibit similar financial management behaviour.

#### 4.3 Financial Management Behaviour

The following are portraits of the financial management behaviour of Indonesian and Malaysian Muslims during the pandemic following the FMBS domains.

## 4.3.1 Loan with Financial Services

The respondents were asked whether they had a loan from any financial institution. The response is as in Figure. 1

According to Figure 1, 120 out of 243 Indonesian respondents (49.45) stated that they have no loans with any financial institution, which is higher than Malaysian respondents, who account for only 31 out of 184 respondents (16.8%). Meanwhile, Malaysian respondents have 47.8%, or 88 out of 184, multiple outstanding loans with any financial institution, while Indonesian respondents only have 9.5% or 23 respondents. It shows different behaviours on loans between Indonesians and Malaysians.

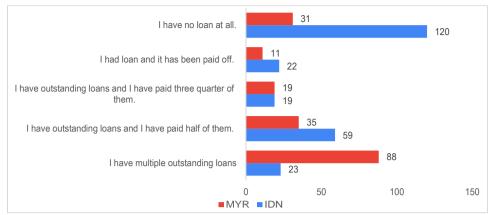


Fig 1. The Loan with Financial Institution

### 4.3.2 Credit Card Usage

Related to credit card usage, the respondents were asked about the frequency of credit card usage. The response is as in Figure. 2.

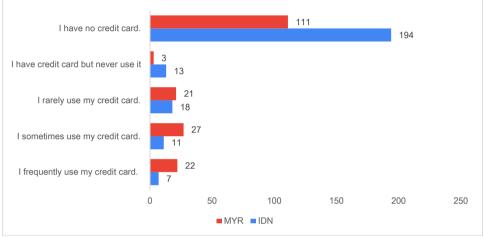


Fig 2. Credit Card Usage

According to Figure 2, both countries show that most respondents do not have a credit card, with 60.3% for Malaysian respondents and 79.8% for Indonesian respondents. Respondents from both countries mostly have no credit card. Thus, they pay for their purchase using other modes of payment.

## 4.3.3 Shopping Behavior

Related to shopping behaviour, the respondent was asked about their behaviour while shopping. The response is as in Figure. 3.

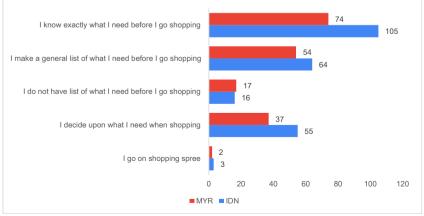


Fig 3. Shopping Behavior

According to Figure 3, most Malaysian and Indonesian respondents know what they need before shopping, with the highest percentages of 40.2% (74 respondents out of 184) and 43.2% (105 respondents out of 243), respectively. This result shows that most of the respondents are not the impulsive type of buyers.

#### 4.3.4 Cash Flow Control

Regarding cash flow, the respondent was asked about their easiness or difficulties in supporting themselves until the end of the month with their current household monthly income. The response is as in Figure. 4.

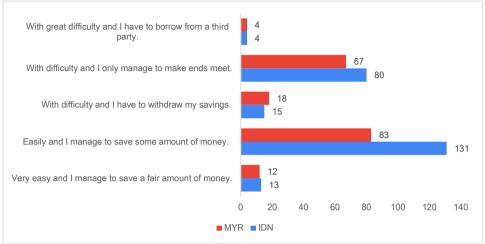


Fig 4. Cash Flow Control

According to Figure 4, most of the respondents from Indonesia and Malaysia show that they easily save some amount of money with their current household monthly income. It is clear from the percentages for both countries, 45.1% for Malaysia (83 respondents) and 53.9% for Indonesia (131 respondents), with the highest percentages among the other categories. It shows that amidst the pandemic, people still manage to save money.

## 4.3.5 Chi-Square Test for Indonesia and Malaysia

The Chi-square test determines whether or not a variable is associated. The null hypothesis is rejected if the p-value is less than 0.05, indicating sufficient evidence to suggest an association between variables.

Table 3. Chi-Square Test								
Age	Gender	Marital Status	Job	Monthly Income				
0.307	0.327	0.665	0.410	0.016**				
0.148	0.179	0.386	0.362	0.033**				
	Age 0.307	Age Gender 0.307 0.327	Age         Gender         Marital Status           0.307         0.327         0.665	Age         Gender         Marital Status         Job           0.307         0.327         0.665         0.410				

<sup>\*</sup>significant at 5%

Table 3 shows that among socio-demographic criteria (age, gender, marital status, job, and monthly income) in Indonesia and Malaysia, only monthly income was significant. Thus, there is sufficient evidence that financial management behaviour is related to respondents' monthly Income in Indonesia and Malaysia. On the other hand, insufficient evidence suggests an association between financial management behaviour and other socio-demographic characteristics (age, gender, marital status, job).

## 5.0 Discussion

Indonesia and Malaysia are neighbouring countries that share cultural roots. During the Covid-19 pandemic, both countries suffered in every aspect of life. The result indicated that Muslims in Indonesia and Malaysia are relatively similar in financial behaviour, particularly during the pandemic. It is in line with the findings of the Organisation for Economic Co-operation and Development (OECD) (2020) that the rating of Indonesian and Malaysian financial behaviour was about the same. However, it opposes the findings of (Khalisharani et al., 2022), who found a significant difference in financial behaviour between Indonesian and Malaysian students.

Regarding credit and loans, the respondents mostly have no credit cards. In Indonesia, most respondents are in the 18-27 age group and have no loans. The youth generations are either in the final year of university or the first stage of a job. Meanwhile, although most respondents have no credit card in Malaysia, most have multiple outstanding loans, with a significant group of respondents 28-37 years old. Regarding consumption, Indonesians and Malaysians know what they buy before shopping, can easily support their life, and even save money with their current monthly income. It shows that the respondents can manage their shopping habits and save money. It is against the life cycle hypothesis whereby young individuals have low savings due to low income and maintain consumption.

However, the result of the chi-square does not support the argument. The chi-square test cannot provide solid evidence to support the association of age and financial management behaviour, particularly loan behaviour. It also denied the association between gender,

marital status, and job. It opposes the findings of (Gerrans et al., 2014; Meyll & Pauls, 2019; Rahman et al., 2020). It means that the pandemic negated the impact of gender, marital status, and job on financial behaviour. The COVID-19 pandemic ignites significant job insecurity for many employees, regardless of gender and marital status, in private and government sectors, which led to financial concerns(Basyouni & El Keshky, 2021)

The chi-square test showed that monthly income was associated with personal financial management behaviour. The behaviour of an individual is closely related to their income level. It supports the findings of (Ahmad et al., 2014; Amari et al., 2020; Johan et al., 2021; Rahman et al., 2020). The Indonesian respondents are primarily middle-low, with less than IDR 2.600.000 monthly income. Meanwhile, the respondents from Malaysia, mainly in the B40 group, had less than MYR 4,500 monthly income. Indonesians and Malaysians can support themselves easily, but some have difficulties. Thus, Indonesian and Malaysian respondents to the research act according to their income, particularly during the pandemic.

#### 6.0 Conclusion & Recommendations

During the pandemic, the financial management behaviours of Muslims in Indonesia and Malaysia are relatively similar, particularly in shopping behaviour, credit card usage, and cash flow. The majority of Muslims act following their income, planning before shopping, and prefer to have no loan during the pandemic. However, some meet difficulties and still can not manage their finances effectively; thus, financial education is necessary to make a priority scale based on financial capabilities. Moreover, the chi-square test result shows that the socio-demographic profile of the respondents generally has no association with financial management behaviour except for monthly income. Different groups of income will have different behaviours in financial management. The limitations of the study offer insight for further research. The study has focused only on Muslims, the majority population in Indonesia and Malaysia, who are relatively similar in culture. Future research should acquire more individual profiles across the globe with various cultures to make the result broader and more compelling.

### References

Ahmad, Z., Simun, M., & Masuod, M. S. (2014). Determinants of Financial Behaviours among Malaysians. *Indonesian Capital Market Review*, 2(2), 121–132. https://doi.org/10.21002/icmr.v2i2.3663

Amari, M., Salhi, B., & Jarboui, A. (2020). Evaluating the effects of sociodemographic characteristics and financial education on saving behavior. *International Journal of Sociology and Social Policy*, 40(11–12), 1423–1438. https://doi.org/10.1108/IJSSP-03-2020-0048

Basyouni, S. S., & El Keshky, M. E. S. (2021). Job Insecurity, Work-Related Flow, and Financial Anxiety in the Midst of COVID-19 Pandemic and Economic Downturn. In Frontiers in Psychology (Vol. 12). https://www.frontiersin.org/articles/10.3389/fpsyg.2021.632265

COVID-19, S. T. P. (2022). Situasi COVID-19 Berdasarkan Kabupaten/ Kota. SITUASI COVID-19 NASIONAL. https://covid19.go.id/id/situasi

Dare, S. E., van Dijk, W. W., van Dijk, E., van Dillen, L. F., Gallucci, M., & Simonse, O. (2022). How Executive Functioning and Financial Self-efficacy Predict Subjective Financial Well-Being via Positive Financial Behaviors. *Journal of Family and Economic Issues*, 44(2), 232–248. https://doi.org/10.1007/s10834-022-09845-0

Data, G. (2020). Consumer lending in Malaysia to slow down due to COVID-19 pandemic, says GlobalData. Banking. https://www.globaldata.com/consumer-lending-in-malaysia-to-slow-down-due-to-covid-19-pandemic-says-globaldata/

Dew, J., & Xiao, J. J. (2011). The Financial Management Behavior Scale: Development and Validation. *Journal of Financial Counseling and Planning*, 22(1), 43–59. http://ssm.com/abstract=2061265

Faul, F., Erdfelder, E., Lang, A.-G., & Buncher, A. (2007). G \* Power 3 : A flexible statistical power analysis program for the social , behavioral , and biomedical sciences. Behavior Research Methods, 39(2), 175–191.

FSIN. (2020). Global Report on Food Crises 2020. https://www.wfp.org/publications/2020-global-report-food-crises

Gerrans, P., Speelman, C., & Campitelli, G. (2014). The relationship between personal financial wellness and financial wellbeing: A structural equation modelling approach. *Journal of Family and Economic Issues*, 35, 145–160.

Hamid, F. S., & Loke, Y. J. (2021). Financial literacy, money management skill and credit card repayments. International Journal of Consumer Studies, 45(2), 235–247.

ILO. (2020). ILO: As job losses escalate, nearly half of global workforce at risk of losing livelihoods. Press Release. https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\_743036/lang--en/index.htm

Johan, I., Rowlingson, K., & Appleyard, L. (2021). The Effect of Personal Finance Education on The Financial Knowledge, Attitudes and Behaviour of University Students in Indonesia. *Journal of Family and Economic Issues*, 42(2), 351–367. https://doi.org/10.1007/s10834-020-09721-9

Jung, H., Park, M., Hong, K., & Hyun, E. (2016). The Impact of an epidemic outbreak on consumer expenditures: An empirical assessment for MERS Korea. Sustainability (Switzerland), 8(5). https://doi.org/10.3390/su8050454

Kapoor, J., Dlabay, L., Hughes, R. J., & Hart, M. (2022). Personal Finance (14th Editi). McGraw-Hill.

Kaur, K., Kunasegaran, M., Singh, J., Salome, S., & Sandhu, sukjeet K. (2020). Impact of the First Phase of Movement Control Order during the COVID-19 pandemic in Malaysia on purchasing behavior of Malaysian Consumers. Research Journal of Humanities and Social Sciences, 2(S), 131–144.

http://www.indianjournals.com/ijor.aspx?target=ijor:rjhss&volume=9&issue=4&article=018

Khalisharani, H., Johan, I. R., & Sabri, M. F. (2022). The Influence of Financial Literacy and Attitude towards Financial Behaviour Amongst Undergraduate Students: A Cross-Country Evidence. *Pertanika Journal of Social Sciences and Humanities*, 30(2), 449–474. https://doi.org/10.47836/pjssh.30.2.03

Lakner, C., Yonzan, N., Gerszon Mahler, D., Castaneda Aguilar, R. A., Wu, H., & Fleury, M. (2020). *Updated estimates of the impact of COVID-19 on global poverty: The effect of new data.* World Bank Data Blog. https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-effect-new-data

Loxton, M., Truskett, R., Scarf, B., Sindone, L., Baldry, G., & Zhao, Y. (2020). Consumer Behaviour during Crises: Preliminary Research on How Coronavirus Has Manifested Consumer Panic Buying, Herd Mentality, Changing Discretionary Spending and the Role of the Media in Influencing Behaviour. *Journal of Risk and Financial Management*, 13(8), 166. https://doi.org/10.3390/jrfm13080166

Malaysia, M. of H. (2022). Confirmed COVID-19 Cases. COVIDNOW. https://covidnow.moh.gov.my/kvy

Menyeh, B. O. (2021). Financing electricity access in Africa: A choice experiment study of household investor preferences for renewable energy investments in Ghana. Renewable and Sustainable Energy Reviews, 146, 111132.

Meyll, T., & Pauls, T. (2019). The gender gap in over-indebtedness. Finance Research Letters, 31(November), 398–404. https://doi.org/10.1016/j.frl.2018.12.007 OECD. (2020). OECD/INFE 2020 International Survey of Adult Financial Literacy. In OECD/INFE 2020 International Survey of Adult Financial Literacy. www.oecd.org/financial/education/launchoftheoecdinfeqlobalfinancialliteracysurveyreport.htm

Perry, V. G., & Morris, M. D. (2005). Who is in control? the role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 299–313. https://doi.org/10.1111/j.1745-6606.2005.00016.x

Rahman, M., Azma, N., Masud, M. A., & Ismail, Y. (2020). Determinants of Indebtedness: Influence of Behavioral and Demographic Factors. In *International Journal of Financial Studies* (Vol. 8, Issue 1). https://doi.org/10.3390/ijfs8010008

Saleem, A., Setiawan, B., Bárczi, J., & Sági, J. (2021). Achieving sustainable economic growth: Analysis of islamic debt and the islamic equity market. Sustainability (Switzerland), 13(15). https://doi.org/10.3390/su13158319

Sam, P. A., Frimpong, S., & Kendie, S. (2022). Personal finance behaviour: a reasoned action approach. *International Journal of Social Economics*, 49(8), 1119–1131. https://doi.org/10.1108/IJSE-02-2021-0097

Satish, K., Venkatesh, A., & Manivannan, A. S. R. (2021). Covid-19 is driving fear and greed in consumer behaviour and purchase pattern. South Asian Journal of Marketing, 2(2), 113–129. https://doi.org/10.1108/sajm-03-2021-0028

She, L., Rasiah, R., Turner, J. J., Guptan, V., & Sharif Nia, H. (2022). Psychological beliefs and financial well-being among working adults: the mediating role of financial behaviour. *International Journal of Social Economics*, 49(2), 190–209. https://doi.org/10.1108/IJSE-07-2021-0389

Simler, K. (2020). From vulnerable to pandemic poor. East Asia & Pacific on the Rise, World Bank Blogs. https://blogs.worldbank.org/eastasiapacific/vulnerable-pandemic-poor

UNDP. (2020). Putting the UN Framework for Socio-Economic Response to COVID-19 into Action: Insights. In *Brief #2* (Issue June). https://www.undp.org/content/undp/en/home/coronavirus/socio-economic-impact-of-covid-19.html

Widjaja, C. C., & Sim, A. (2020). COVID-19's Impact on Indonesian Consumers Accelerating shifts in consumer behaviour. In DBS Asian Insights: Sector Briefing 91 (Issue September).

WorldPopulationReview.com. (2023). *Muslim Majority Countries*. Coutry Rangkings. https://worldpopulationreview.com/country-rankings/muslim-majority-countries Wuryandani, D. (2020). Dampak Pandemi COVID-19 Terhadap Pertumbuhan Ekonomi Indonesia 2020 dan Solusinya. *Info Singkat*, 12(15), 19–24.

Yau, E. K. B., Ping, N. P. T., Shoesmith, W. D., James, S., Hadi, N. M. N., & Lin, L. J. (2020). The behaviour changes in response to COVID-19 pandemic within Malaysia. *Malaysian Journal of Medical Sciences*, 27(2), 45–50. https://doi.org/10.21315/mjms2020.27.2.5