Mitigating Personal Financial Distress: The Role of Religiosity and Financial Literacy

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ABSTRACT. Millennials tend to face personal financial distress due to sandwich generation problem. Personal financial distress is one of issues in personal financial management. It can bring many problems to another aspect in personal life. Therefore, it's important for people to mitigate that issue and reach personal financial goals. Personal financial distress is condition when individual is unable to fulfill a financial needs. This condition can be influenced by religiosity and financial literacy. Religiosity and financial literacy could explain a spending behaviour and how to use money. This study aims to test the influence of religiosity and financial literacy on personal financial distress. Using online survey targeting millennial generation in Indonesia, this study find that religiosit have negative significant impact on personal financial distress and financial literacy play a role as moderating variable that weaken relationship between religiosity and financial distress. In conclusion, mitigating personal financial distress could be implemented in several ways. Personal financial distress could be avoided by higher religiosity and financial literacy.

Keywords: Financial Distress, Financial Literacy, Millennial Generation, Personal Finance, Religiosity.

1. INTRODUCTION

Millennials in Indonesia tend to have financial insecurity. Based on Alvara Research Center [1], 60.6% of millennial generation in Indonesia have no financial plan. The IDN Research Institute [2] also showed that millennial generation in Indonesia were consumptive and used 51.1% of their income for both basic needs or to fulfill their lifestyle. The level of savings from millennial generation is also relatively low, only 10.7% of their income. In addition IDN Research Institute [2] showed that 80.2% of generations millennial in Indonesia still used conventional savings. In reality, savings products are less profitable because the interest on savings is lower than the inflation rate. In order to avoid the loss of inflation, millennial generation should prefer to invest. However, millennial generation in Indonesia has a low level of investment. Millennials in Indonesia only allocated 2% of its income to investment. Consequently, investment products owned by millennials in Indonesia are still limited and dominated by gold and property products.

Financial distress of millennial generation begin in sandwich generation problem. Sandwich generation is individuals who have a responsible to meet the needs of both basic needs or to fulfill their lifestyle. The level of savings from millennial generation is also relatively low, only 10.7% of their income. In addition IDN Research Institute [2] showed that 80.2% of generations millennial in Indonesia still used conventional savings. In reality, savings products are less profitable because the interest on savings is lower than the inflation rate. In order to avoid the loss of inflation, millennial generation should prefer to invest. However, millennial generation in Indonesia has a low level of investment. Millennials in Indonesia only allocated 2% of its income to investment. Consequently, investment products owned by millennials in Indonesia are still limited and dominated by gold and property products.

Financial distress of millennial generation begin in sandwich generation problem. Sandwich generation is individuals who have a responsible to meet the needs of their parents and their own children. Based on data from the Central Bureau of Statistic [3], 48.2% of the productive age population (15-64 years) have responsible to bear the unproductive age population both generations above (parents and older family members aged 65 years and above) and below (younger children and family members aged 0-14 years). In consequence, millennial generation not only face personal financial problems, but also have to face family financial problems.

King and Williamson [4] stated that religiosity, also known as religion, was the strength of one's connection or belief in his life. According to Bergan and McConatha [5], religiosity emphasizes dimensions related to beliefs and role of the religion in human life. James [6] stated that...
Religion could be used to solve a basic human problems. Religion has a significant impact on a person's attitudes, values, and behaviour on individual level or at the community level [7]. In line with Lajuni et al. [8] showed a significant relationship of religiosity and financial distress. Financial literacy is a knowledge possessed by individuals regarding personal financial, measured by the level of individual knowledge related to the concept of personal finance [9]. Based on Joo [10], employees with low level of financial literacy tend to have financial difficulties. Furthermore, Hung et al. [11] stated that people with high level of financial literacy had better understanding of financial difficulties in their financial behaviour. Financial knowledge is related to financial behaviour [8]. Hilgert et al. [12] showed that people with a high level of knowledge could make good financial decision to improve their financial security and well-being.

Previous research from Lajuni, et al. [8] and Xu, et al. [13] showed that the factors that influence personal financial difficulties of a person were different of each individual. The differences came from religiosity, financial knowledge, financial behaviour, and personality [13]. This study also underlined that millennial generation, also in adolescence, would face the possibility of financial difficulties. Therefore, it's better for millennial generation to mitigate the possibility of personal financial distress, prepare their finances and make the right financial decisions. In this study, the authors will examine the effect of a combination of individual variations mentioned in the two studies, such as religiosity and financial literacy on financial distress experienced by millennial generation.

2. BACKGROUND

2.1. Religiosity

Based on McDaniel and Burnett [14] Religiosity was defined as belief, presence of God, and obedience of the rules that was required. Gallagher and Tierney stated that obedience of the rules of religion was one of example devotion and respect from individual to religious dimension. This study used all of religious dimension which showed the person believes in the existence of God and do everything based on his religious regulations.

2.2. Financial Literacy

Tang and Baker [15]; Forte and Ramalho [16]; and Riitsalu and Murakas [17] stated that financial literacy was not just an understanding related to financial concepts (also called objective financial knowledge) but also related to an individual’s belief in financial knowledge (subjective financial knowledge). Objective financial knowledge and subjective financial knowledge simultaneously play a role in determining financial decisions because each individual needs to know financial concepts clearly and have a good self-perception to improve positive financial behaviour [15].

2.3. Financial Behaviour

Financial behaviour is related to income and expenses managerial and financial situation that orientated with daily financial problem. Financial behaviour is also defined as a personal ability to manage their financial aspect in order to reach personal financial goals. Financial behaviour can be influenced by other factor, for example, financial literacy and religiosity. Personal financial management refers to financial planning for both short and long term goals and how to deal with the possibility of a financial crisis. Personal financial management is also related to prepare budgets for expenditure, saving for the short and long term and emergency funds [18].

2.4. Personal Financial Distress

Personal financial distress is defined as a pressure to solve a personal financial problem, for example unable to pay bill, credit card, house rent, or another basic needs [19]. Personal financial distress is also defined as a personal condition that unable to fulfill their basic needs and categorized as a people who received the government support.

2.5. Millennial Generation

Kaifi et al. [20] stated that there were three generations that currently dominate the world: baby boomer generation, generation X, and millennial generation. The grouping of generations is based on two factors: demographic factors and sociological factors. Millennial generation is defined as individual who was born in new era that easy to adapt with digital. Based on Central Statistical Bureau in Indonesia, millennial generation is individual who was born in 1980s’ until 2000s’

3. METHOD

This study used quantitative conclusive-descriptive approach as the main method for data analysis, which is completed by a survey with an online-based questionnaire. The survey was conducted among millennial in Indonesia, from November to December 2019. The questionnaires were distributed to them using email, social media, and instant messenger. 400 respondents was the number of requirement sample based on Slovin’s formula.
The questionnaires were developed in Indonesian language, and divided into three sections: (1) demographics, (2) questions related to religiosity and financial literacy (3) questions related to financial behaviour and personal financial distress. All of questionnaire were assessed on a five-point Likert scale of strongly disagree (1) to strongly agree (5). Data analysis involves three processes. First, descriptive analysis was used to understand the demographics of the sample. Second, validity and reliability test were assessed to evaluate the measurement. Finally, the relationship between proposed variables were tested using PLS SEM.

Based on Lajuni, et al [8] and Xu, et al [13], this study modified the research model illustrated in Figure 1

![Diagram](image)

**Figure 1 The Research Model**

The demographic characteristics of respondents was showed in Table 1. As shown in Table 1, more than half respondents were female (68%), 18-22 years old (62.25%), stay in Java (81.25%), single (92.75%), and student (60.76%). Table 2 showed the validity and reliability test. The convergent validity was tested by average variance extracted (AVE) and the construct reliability was tested by composite reliability (CR) and Cronbach’s alpha. As shown in Table 2, all AVEs were above 0.5 indicates an acceptable model and all alphas values and composite reliability values exceed 0.7, which indicated that the reliability of each construct was acceptable. Table 3 showed the goodness of fit for the model.

The structural equation modeling (SEM) analysis were conducted to examine the relationship between proposed variables. Figure 2 presented the result of the hypothesis testing. As shown in Figure 2, Religiosity has direct negative effect on financial distress ($\beta = -0.61, p< 0.01$). In addition religiosity has negative effect on financial distress mediated partiallyby financial behaviour ($\beta = - 0.71, p< 0.01; VAF = 37.77\%$). This findings indicate individual that have higher religiosity level tend to have no financial problem. Bradshaw and Ellison [21] stated that a high level of religiosity can make individuals avoid negative financial behaviour in order to prevent financial distress. Sipon et al, [22] also found that individuals with a high level of religiosity tended to avoid debt to fulfill their needs. In addition Rashidi [23] stated that religiosity has a significant effect on financial behaviour. Individuals whose higher religiosity would make religion as a guide for their life. They will prioritize and make decision based on religious principle.

4. RESULT AND DISCUSSION
### Table 1.
**Demographic Characteristics of Respondent**

| Demographic characteristics | Categories | Frequency | Percentage (%) |
|-----------------------------|------------|-----------|----------------|
| Gender                      | Male       | 128       | 32             |
|                             | Female     | 272       | 68             |
| Age                         | 18 – 22    | 249       | 62.25          |
|                             | 23 – 27    | 116       | 29             |
|                             | 28 – 32    | 17        | 4.25           |
|                             | 33 – 37    | 12        | 3              |
| Location                    | Indonesia  | 325       | 81.25          |
|                             | Sumatra    | 25        | 6.25           |
|                             | Bali       | 10        | 2.5            |
|                             | Nusa Tenggara Barat | 7 | 1.75 |
|                             | Kalimantan | 11        | 2.75           |
|                             | Sulawesi   | 14        | 3.5            |
| Marital Status              | Single     | 371       | 92.75          |
|                             | Married    | 26        | 6.5            |
|                             | Divorced   | 3         | 0.75           |
| Occupation                  | Employee   | 117       | 29.25          |
|                             | Entrepreneur | 9  | 2.25 |
| Educational                 | Student    | 243       | 60.76          |
|                             | Below high | 3         | 0.75           |
| Background                  | School     | 93        | 20.75          |
|                             | High       | 30         | 7.25           |
|                             | Bachelor   | 297       | 74.25          |
|                             | Master/Doctoral | 17 | 4.25 |
|                             | Islam      | 340       | 85             |
|                             | Protestant | 33        | 8.25           |
|                             | Catholic   | 10        | 2.5            |
|                             | Buddhist   | 15        | 3.75           |
|                             | Confucius  | 3         | 0.75           |

### Table 2.
**Convergent Validity Assessment: Hypothesis Testing**

| Latent variable | No of items | AVE | CR  | Cronbach’s Alpha |
|-----------------|-------------|-----|-----|------------------|
| Religious       | 5           | 0.578 | 0.871 | 0.741            |
| Financial       | 4           | 0.564 | 0.829 | 0.75             |
| Behavior        | 3           | 0.77  | 0.721 | 0.71             |
| Financial       | 4           | 0.547 | 0.826 | 0.81             |

### Table 3.
**Goodness of Fit**

|                        | Estimate | SE     | 95% CI  |
|------------------------|----------|--------|---------|
| Average path coefficient (APC) | 0.109*** | Significant |
| Average R-squared (ARS) | 0.117*** | Significant |
| Average Block Variance Inflation Factor (AVIF) | 1.653  | Acceptable |
| Average full collinearity VIF (AVFV) | 1.620  | Acceptable |
| Tolerance GoF (TGoF) | 0.265  | Medium |
| Composite path ratio (SPR) | 1.000  | Ideal |
| R-squared contribution ratio (RSCR) | 1.000  | Ideal |
| Statistical regression ratio (SSR) | 0.675  | Acceptable |
| Non-linear bivariate causality direction ratio (NLBCDR) | 0.675  | Acceptable |

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The result also showed that financial literacy could weaken the impact of religiosity and financial behaviour on financial distress (\(b = -0.13, \ p < 0.05; b = -0.21, \ p < 0.05\)). It indicates financial literacy had a role to prevent financial distress. Based on Yao and Xu [24], successful individuals were individuals who are able to formulate financial plans efficiently. Individuals with higher financial literacy tend to use their abilities to avoid the possibility of experiencing financial distress by making better financial decisions. Tang and Baker [15] presented that financial literacy can control financial behaviour. Millennials with a higher level of financial literacy manage their financial activity well such as paying bills on time, saving and investing, using credit cards wisely, and have emergency savings [25]. Therefore, the development of financial literacy is very important especially in developing countries such as in Indonesia.

This study has several implication. First, religiosity has significant impact on financial behaviour and financial distress. Therefore, financial literation can be delivered effectively through religious activity. Religious leaders can choose personal financial management as a topic when they give a speech, seminar, workshop, or another religious activity. Religious activity could be the solution to encourage people to have better financial behaviour. Second, financial literation must be delivered both directly or indirectly. Financial literation have to discuss more detail about personal financial problem and also how to avoid the solution to solve it especially for millenial, hence educational institution can add personal financial management in the curriculum to increase financial literacy. Third, government, Indonesia financial services authority, financial advisor, and another related parties can improve their role to increase financial literacy and instill better financial behaviour via interactive discussion, social media, or interesting event. This research contribute to the development of literature in financial literature, especially in the topic of personal financial distress and the factors that can influence these problems. The factors that had been examined in this study are religiosity, financial knowledge, and financial behaviour. This study has several limitation, first this study only focus on the impact of religiosity on financial behaviour. So, the future study can test another factor that influence financial behaviour such as personality or educational background. Second, this study used questionnaire to calculate the variables, so the answered might be subjective. For the future study can use another measurement to calculate the variables more objectively.

5. CONCLUSION

Mitigating personal financial distress is important especially for millenial due to sandwich generation problem. Mitigating personal financial distress can be implemented in various way. This study focus on the role of religiosity and financial literacy and its impact on financial behaviour and financial distress. The empirical evidence showed that religiosity have negative influence on personal financial distress. The result also showed that religiosity has negative effect on financial distress mediated partially by financial behaviour. In addition, the empirical evidence showed that financial literation could weaken the impact of religiosity and financial behaviour on financial distress. In conclusion, to mitigate personal financial distress, individuals should have good financial behaviour and financial literacy in order to manage their personal finance.

Figure 2 Hypothesis Testing

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REFERENCES

[1] Alvara Research Center. (2017). The Urban Middle-Class Millennials Indonesia: Financial and Online Behavior. Jakarta: PT Alvara Strategi Indonesia.

[2] IDN Research Institute. (2019). Indonesia Millenial Report 2019. Jakarta: IDN Media.

[3] [BPS] Badan Pusat Statistik. (2018). Proyeksi Penduduk Indonesia 2015-2045. Jakarta: Badan Pusat Statistik.
[4] King, J., dan Williamson, O. (2005). Workplace religious expression, religiosity, and job satisfaction: clarifying a relationship. Journal of Management, Spirituality, and Religion, 2, 173-198. doi:10.1080/14766080509518579

[5] Bergan, A., dan McConatha, J. (2000). Religiosity and life satisfaction. Activities, Adaptation & Aging, 24(3), 23-34. doi:10.1300/J016v24n03_02

[6] James, W. (1902). The varieties of religious experience: A study in human nature. Edinburgh: Dover Publications.

[7] Shweder, R. A. (1991). Thinking through cultures: Expeditions in cultural psychology. Cambridge: Harvard University Press.

[8] Lajuni, N., Bujang, I., Karia, A., dan Yacob, Y. (2018). Religiosity, financial knowledge, and financial behaviour influence on personal financial distress among millennial generation. Jurnal Manajemen dan Kewirausahaan, 20(2), 92-98. doi:https://doi.org/10.9744/jmk.20.2.92-98

[9] Marsh, B. (2006). Examining Finance Attitudes, Behaviours, and Knowledge Levels of First- Year and Senior Students at Baptist Universities in the State of Texas. Ohio: Bowling Green StateUniversity.

[10] Joo, S. (1998). Personal financial wellness and worker job productivity. Blacksburg: Virginia Polytechnic Institute and State University.

[11] Hung, A., Parker, A., dan Yoong, J. (2009). Defining and Measuring Financial Literacy. Santa Monica: RAND Corporation Publications Department. doi:10.2139/ssrn.1498674

[12] Hilgert, M., Hogarth, J., dan Beverly, S. (2003). Household financial management: the connection between knowledge and behaviour. Federal Reserve Bulletin, 309-322.

[13] Xu, Y., Beller, A., Roberts, B., dan Brown, J. (2015). Personality and young adult financial distress. Journal of Economic Psychology, 51, 90-100. doi:10.1016/j.joep.2015.08.010

[14] McDaniel, S., dan Burnett, J. (1990). Consumer Religiosity and Retail Store Evaluative Criteria. Journal of the Academy of Marketing Science, 18, 101-112. doi:10.1007/BF02726426

[15] Tang, N., dan Baker, A. (2016). Self-esteem, financial knowledge and financial behaviour. Journal of Economic Psychology, 54, 164-176. doi:10.1016/j.joep.2016.04.005

[16] Forte, D., dan Ramalho, T. (2018). Financial Literacy in Brazil – Do Knowledge and Self-Confidence Relate with Behaviour? RAUSP Management Journal, 54(1). doi:10.1108/rausp-04-2018-0008

[17] Riitsalu, L., dan Murakas, R. (2019). Subjective financial knowledge, prudent behaviour and income: The predictors of financial well-being in Estonia. International Journal of Bank Marketing, 37(1). doi:10.1108/IJBM-03-2018-0071

[18] Robb, C., dan Woodyard, A. (2011). Financial Knowledge and Best Practice Behaviour. Journal of Financial Counseling and Planning, 22(1), 36-46.

[19] McCarthy, Y. (2011). Behavioural Characteristics and Financial Distress. ECB, Working paper, 1303.

[20] Kaifi, B., Nafei, W., Nile, M., dan Kaifi, M. (2012). A Multi-Generational Workforce: Managing and Understanding Millennials. International Journal of Business and Management, 7(24), 88-93. doi:10.5539/ijbm.v7n24p88

[21] Bradshaw, M., dan Ellison, C. (2010). Financial hardship and psychological distress: exploring the buffering effects of religion. Social Science & Medicine, 71(1), 196-204. doi:10.1016/j.socscimed.2010.03.015

[22] Sipon, S., Othman, K., Ghani, Z. A., dan Radzi, H. M. (2014). The Impact of Religiosity on Financial Debt and Debt Stress. Procedia - Social and Behavioural Sciences, 140, 300-306. doi:10.1016/j.sbspro.2014.04.424

[23] Rashidi, A. (2016). The Relationship between Religious Beliefs and Financial Literacy among the Graduate Students of Islamic Azad University Buin Zahra. Journal of Applied Environmental and Biological Sciences, 6(6),140-149.

[24] Yao, R., dan Xu, Y. (2015). Chinese urban households’ security market participation: Does investment knowledge and having a long-term plan help?. Journal of Family and Economic Issues, 36(3), 328-339.

[25] Landerrette, O. M., dan Martinez, C. (2013). Voluntary savings, financial behaviour, and pension finance literacy: evidence from Chile. Journal of Pension Economics and Finance, 12(3), 251-297.