

THE DEFAULT IN ISLAMIC PEER TO PEER LENDING: AN APPLICATION OF THE GENERAL STRAIN THEORY

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ABSTRACT

While the Islamic peer to peer (P2P) lending is useful especially during the present Covid-19 Pandemic, its default risk remains high. In this study, we apply the extended general strain theory to investigate borrowers' default intention on the Islamic P2P lending during the pandemic period. Using the SEM-PLS method to analyse data gathered from a survey, we find economic pressure and socialization difficulty to be significant in increasing negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling) and hence indirectly affecting the willingness to repay. Further, we find that socialization difficulty does not seem to have direct influences on default intention. Finally, moral norms appear to be a significant moderating factor in the framework. These should contribute to a better scoring system of the Islamic P2P lending.

Keywords: Islamic P2P lending, Default behavior, Psychological factors, COVID-19 pandemic.

JEL classification: D01; G21; G32; G40.

Article history:

Received : November 23, 2021

Revised : January 19, 2022

Accepted : March 9, 2022

Available online : May 31, 2022

<https://doi.org/10.21098/jimf.v8i2.1432>

I. INTRODUCTION

The COVID-19 health crisis, which started in Wuhan in late 2019 and declared as pandemic by the World Health Organization (WHO) in March 2020, has stimulated much discussion into its impacts on Financial Technology (FinTech). In particular, the role of peer-to-peer (P2P) lending has been brought back into the spotlight. According to Ministry of Finance Republic of Indonesia (2021), the P2P lending facilitates small and medium enterprises (SME) for access to funding. The P2P lending also plays an important role in providing financial access to unbanked people.

Although the number of P2P lending companies decreased from 164 in 2019 to 103 in 2021, the number of transactions grew significantly during COVID-19 from 18.5 million to 71.8 million. Approximately 69.5 percent of them are unbanked people (Rahardyan, 2021; Bareksa, 2020). The data provided by Indonesia Financial Services Authority (2021) show that the amount of accumulated loan disbursement also increased significantly from 81 billion in 2019 to 262 billion in 2021.

With the rapid development of the P2P lending, the issue of credit risk cannot be ignored. As the P2P lending issues unsecured credit loans via lending platforms without financial intermediaries, it is important to identify the P2P default risk. According to the Indonesia Financial Services Authority (2020), the amount of outstanding loan grew 16.43% from Rp13.14 trillion in 2019 to Rp15.21 trillion in 2020. De Castro Vieira et al. (2019) mention that 90 days success rate and 90 days level of default are used as an indicator to measure the performance of fintech companies in managing their credit risk. The data show that 90 days success rate was at 97.38% and 90 days default rate of P2P lending was at 2.62% at the beginning of pandemic in April 2019. Then, the 90 days success rate decreased to 92.42% while 90 days default rate increased to 7.18% in 2020.

Loan default is also a concern for Islamic peer-to-peer lending. The data from Indonesia Financial Services Authority (2021) show that, perhaps due in part to loan default, the number of Islamic P2P lending companies declines significantly from 18 pre-Covid-19 pandemics 2018 to only 7 in 2021. There are several reasons accounting for this decline and for increasing default risk. *First*, according to Rahardyan (2020), some sectors have been severely affected during the pandemic. For examples, heightened uncertainty stalled productive financing and capital financing to the informal sector travel restrictions completely stopped umrah financing. In addition, approximately 72,983 workers were laid-off, 47% of employees had salary cut, and 30 millions of SMEs went bankrupt in 2021 (Putra, 2021; Hasibuan, 2021). Thus, the repayment difficulty due to unstable income likely increased the default risk over the period.

Second, while Islamic P2P lending acts as an intermediary between investors and borrowers (Muhammad & Nissa, 2020), it needs to reserve funds to finance their operational activities. Therefore, liquidity risk becomes important. *Third*, the P2P system does not have a reliable credit score system. In addition, the majority of borrowers in the Islamic P2P lending are unbankable and hence their credit history is absence. In response to the issue of high borrower's default during the pandemic, the Indonesia Financial Services Authority acknowledges the importance of a reliable scoring system. The Indonesia Financial Services Authority also has called several fintech companies to discuss action plans to improve borrowers' loan repayment strategy (Ardianto, 2020).

Theoretically, there are three views related to credit characteristic of fintech peer to peer lending. *First*, the process of loan in peer-to-peer lending is different from the traditional banking due to information asymmetry (Lin, Li, & Zheng, 2017; de Castro & Kammler, 2016). Fintech lending credit data are currently not listed in the financial information service system (SLIK) by the Indonesia Financial Services Authority, so there is a difficulty to gauge borrower's creditworthiness from the information provided in the online platform (Idris, 2021). Thus, it will be individual investors who bear the credit risk instead of financial institutions (Serrano-Cinca et al., 2015). *Second*, the default risk in peer-to-peer lending is higher in nature compared to traditional loans. This is due to the fact that lenders have little knowledge about credit risk management and screening process. Consequently, the P2P lending has a higher risk with higher default probability as compared to traditional loans (Guo et al., 2016). *Third*, according to Wang et al. (2020) and Agnew (1992), default is essentially a deviant behavior, which may characterizes the P2P lending. Thus, it is important to examine the borrower's psychological perspectives during crisis and how they affect loan default.

Empirically, several papers have emerged to analyze borrower's default. They predominantly focus on loan characteristics, such as interest rate, loan period, loan size (Croux et al., 2020; Everett, 2015), and borrowers characteristics, such as gender, annual or monthly income, current housing situation, past loan experience (Serrano-cinca et al., 2015; Iyer et al., 2015; Lin et al., 2017). Some studies analyze the default from the screening process, such as social media activities (Khilfah & Faturohman, 2020), while others look at the macroeconomic perspective (Croux et al., 2020). However, very few studies relate default behavior with psychological factors, especially in the context of Islamic peer to peer lending. Tokunaga (1993) conducts a study to analyze consumer credit characteristics, which include borrower's perception toward money, borrower's self-efficacy, and sensation-seeking. Another study conducted by Lea et al. (1995) mentions that the level of social status also has a positive relationship with the use of credit. Wang et al. (2020) adopt the general strain theory to analyze the psychological factors of default borrowers in microloan in China. The study shows that economic pressure and socialization difficulty have positive effects on borrowers' life dissatisfaction, perceived unfairness, inferiority feeling, and loneliness. Strains and negative affect are found to have positive effect on default intention, while moral norm exerts a negative effect on default behavior through strains and negative affect.

Along this line of research, this study investigates the borrower's default intention on Islamic peer to peer lending during the Covide-19. It contributes to the literature in several aspects. *First*, given very limited studies, there remains a gap in our understanding of the borrowers' default behavior in Islamic P2P lending from their psychological factors. It also remains uncertain whether the psychological factors would affect their default behavior during COVID-19 pandemic. Extensive researches have focused on non-psychological factors, such as borrowers and loan characteristics (Wimboh et al., 2020) and social media activities (Khilfah & Faturohman, 2020). We complement these studies by focusing on psychological factors.

Second, we contribute to the literature on default behavior in Islamic peer to peer lending. Although there is only one study related to Islamic peer to peer

lending in Indonesia (Wimboh et al., 2020), majority of previous research focus on Microfinance Institutions (Ssekiziyivu et al., 2017; Worokinasih & Potipiroon, 2019), agricultural credit corporations (Ewuola & Williams, 1995); conventional peer to peer lending companies (Croux et al., 2020; Chen et al., 2019; Lin & Viswanathan, 2015), and Islamic banking and conventional banking (Bekele et al., 2016).

Third, this study takes Indonesia as a case study. Bholat & Atz (2016) state that geographical differences bring new perspective. The result will be varied due to its differences in access to finance, government regulation, environment, and social factors. Indonesia as the country with highest Muslim population and unique geography will bring novelty to the literature in the field of Islamic fintech. Indonesia has is very large number of MSMEs. The data suggest that the MSMEs in Indonesia are dominated by micro businesses, amounting to 98.68% with a workforce absorption capacity of around 89%. The contribution of micro enterprises to GDP is roughly 37.8%. Although the capital access remains an issue for the MSMEs during the Covid-19 pandemic, the presence of Islamic fintech has increased their financial inclusion and it serves an alternative funding for them (Hasan et al., 2020). As the number of customers are unbankable with low information about their credit history, Indonesia provides a good setting for assessing the roles of psychological factors in loan default. And *fourth*, to the best of author's knowledge, there is no current study that use COVID-19 crisis as a context that represents the economic pressure. Majority of studies leverage on the issue of financial disruption and comparison between Islamic and conventional fintech (Bekele et al., 2016).

The rest of the paper is organized as follows. Section 2 reviews the literature on Islamic peer-to-peer lending and credit behavior; section 3 explains the data and methodology; section 4 discusses the empirical results; section 5 concludes the paper.

II. LITERATURE REVIEW

2.1. Background

2.1.1. The Concept of Islamic P2P Lending

Peer to peer (P2P) lending is a business model that integrates finance and technology to collect funds from lenders or investors and distribute them to borrowers. The transaction is via an online platform in which the borrowers request for the loan from the lenders (Gomber et al., 2017; Liu, Brass, Lu & Chen, 2015). Unlike crowdfunding, P2P lending focuses on an individual borrower and lender, while crowdfunding pool the fund from many investors to finance the project (Ban & Lee, 2020; Hasnan, 2019).

As we can see in figure 1, the investment process starts with 1) Investors receive a funding request through platform, 2) the platform requests authorization from the investors to channel funds to borrowers, 3) the investors approve the granting of power to the platform, 4) the platform requests for power of borrowers to disburse the funding, 5) the borrowers approve the granting power, and 6) the funds are given to the borrowers.

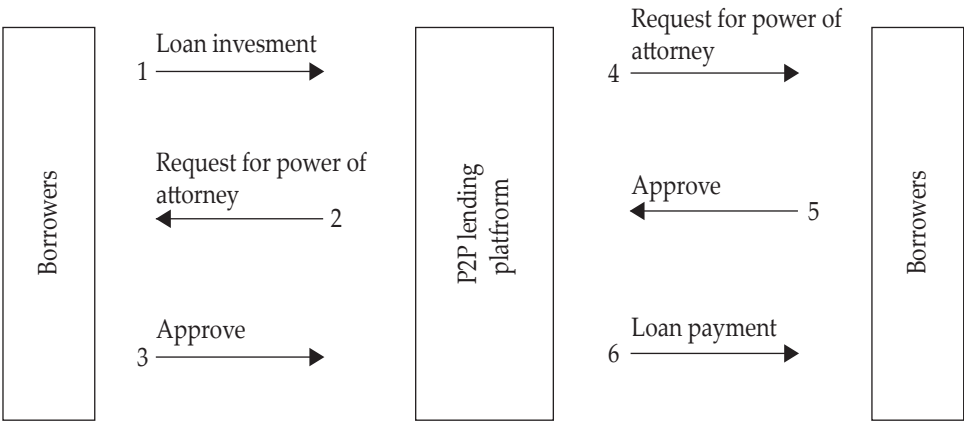


Figure 1.
Mechanism of P2P Lending (Pişkin and Kuş, 2019)

The Islamic P2P lending a technology-based business that offers financial services based on Islamic principles (Wiryanto, 2018). These principles include prohibition of interest (*riba*), prohibition of speculation or gambling (*maysir*), avoidance of uncertainty (*gharar*) and absence of products and services prohibited by Islam, such as money game, haram products, beer, and others (Todorof, 2018; Ascarya, 2017). Majority of Islamic P2P lending use mudharabah, wakalah, al-Qard, and murabahah as the contract agreements.

2.1.2. Islamic P2P Lending Practices in Indonesia

During the Covid-19 pandemic, Bella (2020) mention that the main challenge for roughly 70% of MSMEs is access to capital. As the MSMEs are mostly unbanked, he existence of P2P lending provides them access to an alternative source of funding. According to the Indonesia Financial Services Authority (2020), the borrowing through P2P lending increased from Rp 4.4 million in 2018 to Rp 43 million in 2020, in which Rp 37 million is in Java Islands. The amount of accumulated funding also increased from Rp 21.6 trillion in 2018 to Rp155.9 trillion in 2020.

Currently, there are 7 (seven) Islamic P2P lending companies that have been registered and licensed by the Indonesia Financial Services Authority (2021). The number declined from 18 in 2018 to 12 in 2019 and then dropped further to 7 in 2021 due to high competition, losses, high capital issues, and inability to do underwriting process during Covid-19 pandemic (Nurfadilah & Samidi, 2021).

Table 1.
List of Islamic Peer to Peer Lending Companies

No	Name of company	Types of products
1	Ammana	Invoice financing for SMEs, Hajj fund, paylater, personal financing
2	Alami	Invoice financing
3	Dana Syariah	Property and construction fund
4	Duha Syariah	Invoice, business, and personal financing
5	Qazwa	Funding for small and medium enterprises (SMEs)
6	Papitupi Syariah	Business and personal financing
7	Ethis Fintek Indonesia	Business financing

The MUI National Sharia Board (DSN) issued DSN-MUI fatwa No.117 of 2018 concerning Information Technology-Based Financing Services Based on Sharia Principles as guidelines for the implementation of Sharia P2P Lending. The contracts used by a financial services company based on information technology should be in line with the characteristics of the financing services, including *mudharabah*, *musyarakah*, *wakalah bi al ujah*, and *qardh* contracts (Hikmah et al., 2020).

2.1.3. General Strain Theory

General strain theory was first introduced by Agnew (1992) to examine deviant behavior. Essentially, deviant behavior can be looked at from two perspectives, namely normative and situational. In the normative perspective, deviant is based on how human behavior violates existing and generally accepted social norms (Goode, 2019). Othman et al. (2014) mention that when an employee does corruption, theft, verbal abuse, and physical assault, that person behavior is considered as normative at workplace. Shahid & Ahmad (2016) agree that those are intentional actions by members of organization that violate the core organizational and/or societal norms. On the other hand, in the situational perspective, an act being seen as deviant depends on the context or location in which it takes place. For example, playing loud music on public transport is considered as deviant, but not at music festival.

In order to understand the psychological mechanism of deviant behavior, there is a two-stage process as follows: 1) The effect of strains on negative effects. Strains mean a pressure from one or more conditions that could trigger people to be deviant (Agnew, 2010; Zhang & Lester, 2008). Some people with low ability to cope with the pressure, they tend to engage more in deviant behavior (Agnew, 1992). 2) There are other external factors which could constraint the adoption of such behavior. People with less constraints are normally less aware of the consequences of their deviant behavior. This theory has been used extensively to explain deviant behavior by previous researchers in the context of school bullying, self-harm, and workplace violence.

In the context of loan, default is defined as the condition when borrowers could not fulfil their repayment obligation (Xu & Chau, 2018; Nowak et al., 2018). This study considers default as deviant behavior because it contradicts with contractual

agreements between borrowers and lenders. In addition, it also causes several negative impacts to investors and even to community. The general strain theory has been applied by Wang et al. (2020) to analyze default behavior on microloan in China. The study uses economic pressure and socialization difficulty as the strains; life dissatisfaction, perceived unfairness, loneliness, and inferiority feeling as the negative affects; moral norm and perceived deterrence as the moderating variables; and default behavior as the deviant behavior.

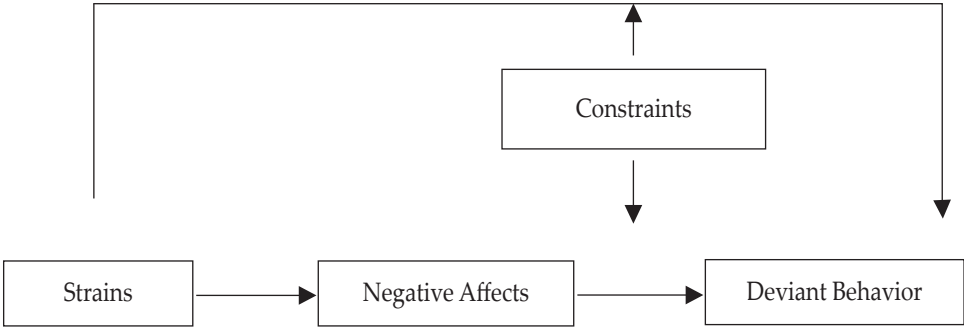


Figure 2.
General Strain Theory (Agnew, 1992; Wang et al., 2020)

2.2. Previous Studies

There has been extensive research on default behavior, assessing such factors as loan characteristics and borrowers’ characteristics as its determinants. The study by Dorfleitner et al. (2016) takes the development of Kiva, microfinance institutions, as a case study. It analyses soft factors in loan applications in two European P2P lending platforms and find that loan characteristics (loan size, loan term) have a positive relationship with repayment behavior. Serrano-Cinca et al. (2015) analyse whether the default in P2P lending can be explained by interest rate and risk of default, loan characteristics (loan purpose and loan amount), borrower characteristics (home ownership, annual income, and employment), credit history, and personal indebtedness. They find that loan purpose, annual income, credit history, and indebtedness are positively correlated with default. They also mention that the bigger the loan size is, the higher the probability of default would be. Wimboh et al. (2020) conduct a study about the default on Islamic peer to peer lending from three platforms in Indonesia. The result shows that high loan interest rate has a significant relationship with loan default. Further, loan maturity has a positive relationship with the default for two platforms that mainly focus on invoice financing, online seller financing, and employee financing, while on the other hand, a negative relationship for another platform that focuses on micro businesses. Other studies look at borrower’s characteristics, which include gender, income level, educational level, and others (Emekter et al., 2015; Iyer et al., 2015; Lin et al., 2017). They note that borrowers with low credit score is more likely to default. A study conducted by Iyer et al., (2015) mentions that there is a positive relationship between borrower’s social network and default behavior. When the borrower has more borrowers-friend with bad debt, the risk of default increases.

There is a good number of studies examines default from the psychological factors. Huang & Fang (2021) analyzes the relationship between income inequality and subjective well-being measured at individual and community level in China. He finds that income inequality has negative relationship with subjective well-being. Ganbat et al. (2021) use six psychological factors, namely, self-control, financial decision making, neuroticism, selflessness and charitable attitude, conscientiousness, and attitude toward money, that correlate them with default in mortgage loan for the case of Mongolia. They show that borrowers' self-control, financial decision-making, selflessness, and attitude toward money affect their willingness to repay. Lu et al. (2016) apply the general strain theory to analyze the default intention on online P2P lending in China. The model covers strains (economic capacity, sense of loneliness, sense of fairness, sociability), negative affects (life satisfaction, self-esteem, and moral norm), control variables (demographic respondents' profile), and delinquency intention as variables. The study finds that higher psychosocial status leads to higher pleasant feeling. Feelings of satisfaction and self-esteem, as well as high moral norm are positively correlated with default intention.

In similar study, Wang et al. (2020) expand the general strain theory to investigate the default behavior in online microloans in China to include non-psychological factors, namely borrower's characteristics and loan characteristics together with psychological factors, namely strains (economic pressure and socialization difficulty), negative affects (life dissatisfaction, perceived unfairness, inferiority feeling, loneliness), moral norm, and perceived deterrence, and default intention. They find that economic pressure and socialization difficulty have a significant relationship with negative affect, such as life dissatisfaction, perceived unfairness, inferiority feeling and loneliness, while moral norm and perceived deterrence play an important role as mediator toward default intention. Morse (2015) expands the economic strain theory to identify whether financial stress, economic pressure and lower income can be used to predict default. It is found that the borrower's perception toward financial distress and economic pressure have relationship with their debt-laden. Azzimonti et al. (2014) document that unequal income distribution leads to borrowers' perception toward social inequality which triggers their default intention. When the peer-to-peer lending companies give penalty charge for delinquency, it is more likely to affect their debt repayment.

Even though an increasing amount of literature is devoted to identify the impact of loan and borrower's characteristics on default in peer-to-peer lending, studies that focus on psychological factors, especially for default in Islamic P2P lending, are still limited. This study enriches this limited literature by applying the general strain theory to investigate the borrower's default intention on Islamic peer to peer lending during COVID-19. The finding of this study is expected to bring new insights in the Islamic fintech literature that can be used as a reference for policy makers and practitioners.

III. METHODOLOGY

3.1. Data

The study uses convenience sampling technique, which is a non-probabilistic or non-random sampling, where respondents are selected based on certain practical criteria such as easy access, geographical proximity, availability at a given time or willingness to participate for the purpose of the study (Etikan et al., 2016). Convenience sampling method is cost and time effective and it is easy to implement. It has been adopted by studies concerning mobile banking (Safira & Baridwan, 2018); smart work (Reddy, Ranga & Attada, 2020); online shopping (Tham, Dastane, Johari, & Ismail, 2019), and Islamic fintech (Nurfadilah & Samidi, 2020; Purwantini & Anisa, 2021).

The primary data are collected using an online survey of the borrowers of Islamic P2P lending¹ at Java Island², who represent around 80% of total borrowers in Indonesia (Otoritas Jasa Keuangan, 2020). The majority of fintech companies are located in this region. At the beginning of the questionnaire, all respondents were screened with several questions “Have you applied for funding from Islamic P2P lending platform? Do you have an intention to apply for funding to Islamic P2P lending platform?”. The respondents were only included in the survey if they have used the services from the platform and have an intention to use the services. Then, the respondents have to filled up the remaining questions.

As many as 18 (eighteen) items of questions are constructed in the format of a 1 to 5 Likert scales (see table 2). Follow the rule of thumbs rule by Hair et al. (2013), the minimum sample size in this study is 180. We received completed questionnaires from 465 respondents, but we removed 79 due to incomplete data. Finally, our final sample size is 386.

3.2. Model Development

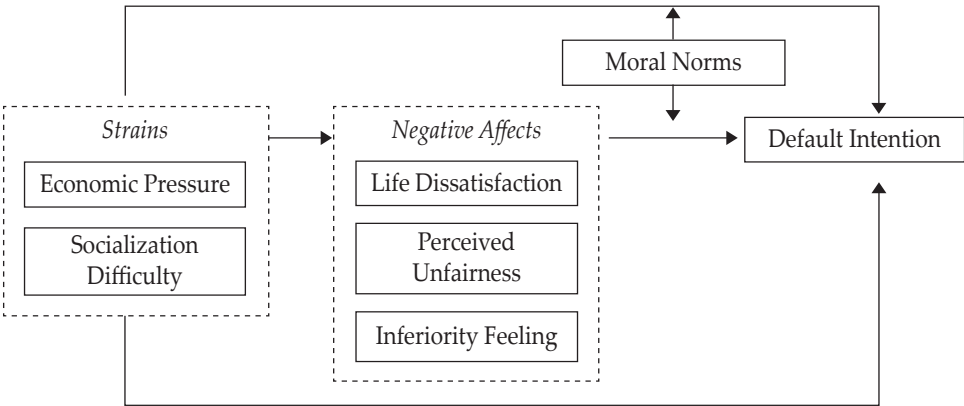


Figure 3.
Research Model Adopted from Wang et al. (2020) and Wimboh et al. (2020)

1 Platfrom Alami, Amana, Ammana, Alami, Dana Syariah, Qazwa, Duha Syariah, Papitupi Syariah, and Ethis
2 Java Island in this study refers to DKI Jakarta, West Java, East Java, Central Java, Banten, and Yogyakarta

This study adopts the general strain theory used Wang et al. (2020) and Lu et al. (2016) to analyze the borrowers' default intention in Islamic P2P lending. First, it employs economic pressure and socialization difficulty as the key psychological strains in Islamic P2P lending. During the early phase of the Covid-19 pandemic, the issuance of government regulation 'large-scale social restrictions' seemed to be the best solution to limit the transmission of the virus, but it also caused several problems in social relationships, such as lack of friendship and social support (Ro, 2021). Besides, the economic pressure caused by the Covid-19 crisis exerted huge impact to the society. The decline in economic activity also had a significant impact and resulted in economic hardship for a majority of households in Indonesia. A common measure of economic hardship is the inability to meet the basic needs. Another challenge is the lack of financial resources. Based on the data provided by the Ministry of Finance Republic of Indonesia (2021), 90% of small and medium enterprises (SMEs) experienced a significant decline in their profitability, and 75.2% of SMEs experienced bankruptcy and difficulty getting capital access. The unemployment rate reached 4.99% of the total workforce of 137.91 million people. The government projects the increase in the unemployment rate due to the pandemic to reach 5.23 million people. This condition led to the high ratio of non-performing financing (NPF). In Q2 2020, the gross NPF has reached 5.12% and is consistently above the banking sector (Thomas & Jannah, 2020).

This study uses life dissatisfaction, perceived unfairness, and inferiority feeling as negative affects during the Covid-19 pandemic. De Pedraza et al. (2020) mention that prolonged lockdowns, the rising number of Covid-19 cases and deaths, income reduction, job loss, divorce, and bankruptcy lead to more anxiety and high level of dissatisfaction. Therefore, the hypothesis is as follows:

H1: There is a positive and significant effect of economic pressure on negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling) during COVID-19 pandemic.

Based on the general strain theory, default is considered as deviant behavior (Agnew et al., 2010; Rufrancos et al., 2013, Wang et al., 2020). Leiber et al. (2009) conducts a study on the relationship between family process, economic factors and delinquency based on different family structures and ethnicity/races. The study finds that economic factors have a positive effect on delinquency. The Covid-19 pandemic has increased the case of default in FinTech sectors (Najaf et al., 2022; Anh et al., 2021) and banking sectors (Umar et al., 2021; Aldasoro et al., 2022). Wang et al. (2020) support that economic pressure has a significant relationship with default intention on microloan. Therefore, the hypothesis is as follows:

H2: There is a positive and significant effect of economic pressure on default intention during COVID-19 pandemic

During the pandemic, lockdown has affected people and replace their face-to-face communication with digital communication. Anh et al. (2021) add that the basic need for human is socialization. Madinga et al. (2022) mention that lockdown has raised the levels of stress, anxiety, and depression. Liu et al. (2020) add that

discrimination and mental distress during the pandemic lead people to perceive that life is becoming more unfair. They may perceive themselves as powerless, defective, and feel shameful as a result of social rejection by other family members or friends (Bursztyn et al., 2019; Cavalera, 2020). They may also use social rejection to question their ability and skills leading to a sense of inferiority (Jamal et al., 2015). Empirically, socialization difficulty is another subjective strain related to default on microloan. Wang et al. (2020) mention that socialization difficulty has strong relation with life dissatisfaction, perceived unfairness, and inferiority feeling. Therefore, the hypothesis is as follows:

H3: There is a positive and significant effect of socialization difficulty on negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling) during COVID-19 pandemic

Haase et al. (2021) state that social support is critical during the Covid-19 pandemic. In the context of credit behavior, Jamal et al. (2015) mention that social influence and financial literacy have positive relationship. Chen et al. (2016) add that borrower's credit behavior can be investigated from their social activity, such as group membership, group trust, and group inclusiveness. When people have a strong support from their peers, they are more likely to feel a sense of belongings and purpose, which have significant impact on their behavioral choices. Wang et al. (2020) find that socialization difficulty has direct relationship with default intention. Therefore, the hypothesis is as follows:

H4: There is a positive and significant effect of socialization difficulty on default intention during COVID-19 pandemic

Rebellon et al. (2015) state that there are five life-domains that may affect the deviant behavior, namely the self (personality and self-control), family (parenting and sibling support), educational achievement (low and limited access to education), peer network (delinquent peers), and work environment (high unemployment, job loss, reduction salary). When people get an unfair treatment and insecure with their ability and skills, they will be more likely to engage in deviant behavior. Azzimonti et al. (2014) state that unemployment has an effect on default. This is supported by International Labour Organization (2020) that job loss and salary reduction have affected the default rate during the Covid-19 pandemic. Wang et al. (2020) add that negative affects have a positive impact on default. Therefore, the hypothesis is as follows:

H5. There is a positive and significant effect of negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling) on default intention during COVID-19 pandemic

Moral norm is defined as standard rules of conduct about what is right and wrong (Du & Pan, 2021). Lu et al. (2016) mention that an individual with high financial pressure does not necessarily engage in deviant behaviour. Moral norm helps people to be more aware with any consequences behind their action.

H6. There is a negative and significant effect of strains on moral norm during COVID-19

People with low moral norm are less likely to concern about others and adopt criminal behavior, while people with high moral norm are more likely to concern about others and abstain from criminal activities (Guiso et al., 2016; Zhou et al., 2019). Agnew et al. (2010) agree that people with low moral norm tend to commit a crime. In the context of loan default, Wang et al. (2020) add that people with more moral norm tend to have no default intention. Therefore, the hypothesis is as follows:

H7. There is a negative and significant effect of moral norm on default intention during COVID-19 pandemic

Deviant behaviour is driven by negative affects. However, people with high moral norm is more likely to control their negative affects to not be deviant (Agnew et al., 2010). Other study conducted by Bursztyn et al. (2019) agrees that moral norm can mitigate loan default. Wang et al. (2020) add that moral norm is less likely to be a moderator between negative affects and default intention. The hypothesis is as follows:

Hypothesis 8: There is a negative and significant effect of negative affects on default intention during COVID-19

3.3. Measurement

Based on table 2, each latent variable consists of several measures. The research framework is adopted from Wang et al. (2020). The questionnaire consists of three sections where the first section asks several screening questions, second section is about respondent's profile, and the last section concerns the constructs/variables used in the study.

Table 2.
The Items of Questionnaires

Variables	Code	Measurement	Sources
Economic Pressure (EP)	EP1	The average of your expenditure-to-income ratio per month is	Liao & Chang (2010); Wang et al. (2020)
	EP2	The perceived price level where you live is	Bursztyn & Jensen. (2017); Wang et al. (2020)
Socialization Difficulty (SD)	SD1	The average of time spent on social media per day is	Yang (2019); Wang et al. (2020); Lu et al. (2016)
	SD2	The total number of friends on messaging tools like WhatsApp is	Niu et al. (2019); Wang et al. (2020)
	SD3	The level communication with colleagues, friends, and family every day is	Niu et al. (2019); Wang et al. (2020)

Table 2.
The Items of Questionnaires (Continued)

Variables	Code	Measurement	Sources
Life Dissatisfaction (LD)	LD1	I think my life goals is still difficult to achieve	Huang et al. (2021); Lu et al. (2016)
	LD2	I feel not satisfied with my current life	
	LD3	I am easily get insecure in my life	
Perceived Unfairness (PUF)	PUF1	I think my work receive an equal reward or incentive	Azzimonti et al. (2014); Wang et al. (2020)
	PUF2	I think other people who put similar effort receive higher reward than me	
	PUF3	I think the environment where I live is not fair and partial	
Inferiority Feeling (IF)	IF1	I believe that I am successful	Stone & Maury (2006); Lu et al. (2016)
	IF2	I cannot achieve many target-like others	
	IF3	I think I don't have a value	
	IF4	I do not always get respect from others in my community	
Moral Norm (MN)	MN1	I think it is essential to keep integrity in any situations	Burszytn et al. (2019); Lu et al. (2016)
	MN2	I think it is a must to follow the rules and law	
	MN3	I think that being honest would bring loss for me, and we should not be too honest in the society	

3.4. Method

The variables in this study consist of economic pressure, socialization difficulty, life dissatisfaction, perceived unfairness, inferiority feeling, moral norms, and default intention. To analyze the borrower's default intention on Islamic P2P lending in Indonesia, partial least squares structural equation modelling (PLS-SEM) is used. It is well understood that PLS-SEM enables researcher to estimate complex models with many constructs, indicator variables and structural paths without imposing distributional assumptions on the data (Sarstedt et al., 2020). More importantly, PLS-SEM is a causal approach that emphasizes prediction in the estimation of statistical models, the structure of which is designed to provide causal explanations (Sarstedt et al., 2017). This statistical software has been used by previous researchers in the field of business, management, marketing (Hair et al., 2013), and even in the context of psychological factors of default in microloan (Wang et al., 2020).

The analysis consists of several stages. First, the data are analysed for goodness fit of model, validity and reliability, and collinearity. According to Ursachi, Horodnic & Zait (2015), the value of composite reliability at 0.7 and the value of Cronbach's alpha at 0.7 are considered very good. Hair et al. (2010) also state that VIF should be less than 4. Ascarya & Rahmawati (2018) mention that the value of loading factor should be above 0.5 for each indicator. Then, confirmatory factor analysis is used to measure the convergent validity, which should be above 0.5 (McKenzie et al., 2012). Second, this study employs a bootstrapping technique for testing the hypothesis based on path modelling (Hair et al., 2013). Once all the data are analyzed, next stage is description and explanation of results.

IV. RESULTS AND ANALYSIS

4.1. Results

4.1.1. Respondent Profiles

According to the table 3, the majority of the respondents are male (58.81%) and the rest are female (41.19%). The majority of respondents are in the age range 19 – 34 (59.84%) and followed by age range 35 – 54 (38.86%), while the least are older than 54 years old (0.78%) and younger than 19 years old (0.52%). In terms of educational levels, respondents are dominated by undergraduate (40.41%) and followed by senior high school (27.72%) and junior high school (23.83%), while the least respondents are postgraduate (6.99%) and elementary school (1.04%).

In terms of monthly income, the respondents are mostly having income in the range Rp3.000.000 – Rp6.000.000 (32.90%), followed by Rp9.000.000 – Rp12.000.000 (25.65%) and Rp6.000.000 – Rp9.000.000 (16,58%), while the rest have monthly income below Rp3.000.000 (10.88%) and above Rp12.000.000 (13.99%). Majority of them do not have their own home (75.13%), while some of them have their own (24.87%). In terms of working experience, most of them have less than 3 years working experience (51.55%) and married (77.20%). Finally, most of them have used the services from Islamic peer to peer lending once (44.04%).

Table 3.
Respondent Profiles

Demographic Variables		Frequency	Percent
Gender	Male	227	58.81
	Female	159	41.19
Age	<19	2	0.52
	19-34	231	59.84
	35-54	150	38.86
	>54	3	0.78
Education	ElementaryySchool	4	1.04
	Junior HighhSchool	92	23.83
	SeniorrHigh School	107	27.72
	Undergraduatee	156	40.41
	Postgraduatee	27	6.99
Monthly Income	Below Rp3.000.000	42	10.88
	Rp3.000.000 – Rp6.000.000	127	32.90
	Rp6.000.000 – Rp9.000.000	64	16.58
	Rp9.000.000 – Rp12.000.000	99	25.65
	Above Rp12.000.000	54	13.99
Home Owner	Not Self-Own	290	75.13
	Self-Own	96	24.87
Years of Working	Never	75	19.43
	Less than 3 years	199	51.55
	3-6 years	60	15.54
	More than 6 years	52	13.47
Marital Status	Married	298	77.20
	Single	88	22.80

Table 3.
Respondent Profiles (Continued)

Demographic Variables		Frequency	Percent
Islamic P2P Lending Experience	Heard but haven't tried	114	29.53
	Tried it once	170	44.04
	Tried 2 – 3 times	65	16.84
	Tried 4 – 5 times	19	4.92
	Tried more than 5 times	18	4.66

4.1.2. Outer Loading

Based on the below figure, all measured variables (EP1 – EP2) significantly explain economic pressure. EP1 has a higher loading factor (0.862) as compared to EP2 (0.844). All measured variables (SD1 – SD3) significantly explain socialization difficulty. SD2 has the highest loading factor (0.867), followed by SD1 (0.865) and SD3 (0.772). All measured variables (IF1-IF4) significantly explain inferiority feeling. IF2 has the highest loading factor (0.883), followed by IF3 (0.825) and IF1 (0.702). All measured variables (PUF1-PUF3) significantly explain perceived usefulness. PUF1 has the highest loading factor (0.900), followed by PUF2 (0.886). All measured variables (LD1-LD3) significantly explain perceived trust. LD2 has the highest loading factor (0.830), followed by LD1 (0.773). All measured variables (MN1-MN3) significantly explain attitude behavior. MN3 has the highest loading factor (0.847), followed by MN2 (0.840) and MN1 (0.792).

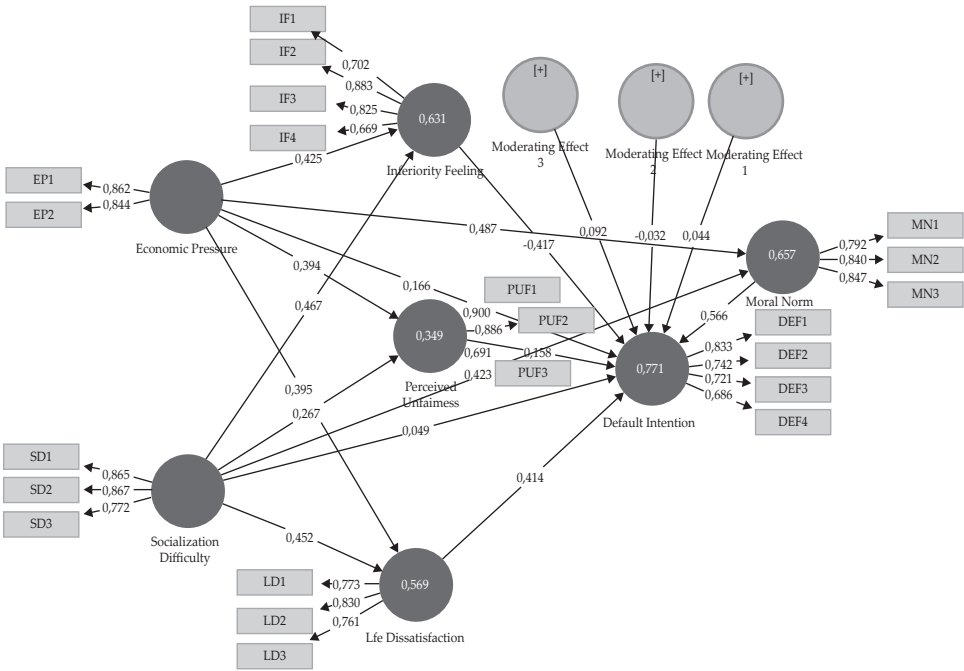


Figure 4.
Outer Loading

4.1.3. Reliability and Validity Test

Based on table 4, the result for Cronbach's alpha and composite reliability are considered good because the values are more than 0.7 (Hulland, 1999; Barclay, Higgins, & Thompson, 1995). In addition to that, the result for average variance extracted (AVE) is also considered good because it is above 0.5 (Fornell & Larcker, 1981).

Table 4.
Reliability and Validity

Construct	Item	Std. Loading	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Economic Pressure	EP1	0.862	0,860	0,864	0,915	0,782
	EP2	0.844				
Socialization Difficulty	SD1	0.865	0,782	0,785	0,874	0,699
	SD2	0.867				
	SD3	0.772				
Life Dissatisfaction	LD1	0.773	0,880	0,884	0,926	0,807
	LD2	0.830				
	LD3	0.761				
Perceived Unfairness	PUF1	0.900	0,828	0,846	0,898	0,748
	PUF2	0.886				
	PUF3	0.691				
Inferiority Feeling	IF1	0.702	0,801	0,828	0,883	0,715
	IF2	0.883				
	IF3	0.825				
	IF4	0.699				
Moral Norm	MN1	0.792	0,786	0,790	0,903	0,824
	MN2	0.840				
	MN3	0.847				
Default Intention	DEF1	0.833	0,847	0,849	0,908	0,769
	DEF2	0.742				
	DEF3	0.721				
	DEF4	0.686				

4.1.4. Discriminant Validity

According to Henseler et al. (2015), discriminant validity is used to measure whether the construct is highly related to each other or not. Hubley (2014) add the purpose of testing discriminant validity is to be able to discriminate between measures of dissimilar constructs. A high discriminant validity value gives an indication that a construct is unique and able to explain the phenomenon being measured.

Table 5.
Fornell-Larcker Criterion

	DEF	EP	IF	LD	Md1	Md2	Md3	MN	PUF	SD
DEF	0.748									
EP	0.718	0.853								
IF	0.729	0.698	0.755							
LD	0.710	0.659	0.964	0.788						
Md1	0.387	0.339	0.154	0.136	1.000					
Md2	0.349	0.303	0.167	0.159	0.789	1.000				
Md3	0.368	0.332	0.137	0.097	0.984	0.775	1.000			
MN	0.855	0.728	0.821	0.775	0.290	0.272	0.278	0.825		
PUF	0.653	0.549	0.705	0.654	0.159	0.266	0.152	0.680	0.831	
SD	0.625	0.582	0.716	0.684	0.178	0.197	0.148	0.699	0.495	0.836

A construct is said to be valid by comparing the root value of the AVE with the correlation value between latent variables. The AVE root value must be greater than the correlation between latent variables. According to Table 5, the result shows a good validity.

Table 6.
Heterotrait-Monotrait Ratio (HTMT)

	DEF	EP	IF	LD	Md1	Md2	Md3	MN	PUF	SD
DEF										
EP	0.874									
IF	0.774	0.794								
LD	0.687	0.776	0.315							
Md1	0.455	0.430	0.176	0.163						
Md2	0.413	0.385	0.195	0.196	0.789					
Md3	0.432	0.420	0.151	0.112	0.884	0.775				
MN	0.821	0.458	0.167	0.146	0.329	0.313	0.314			
PUF	0.877	0.793	0.814	0.888	0.182	0.302	0.173	0.887		
SD	0.828	0.832	0.806	0.895	0.207	0.174	0.174	0.810	0.641	

According to Henseler et al. (2015), the value of HTMT should be less than 0.9 to ensure the discriminant validity between two constructs. Based on the result from table 6, the value of HTMT < 0,9. Therefore, all constructs have fulfilled the discriminant validity.

4.1.5. Multicollinearity Test

Based on Table 7, this study passes the multicollinearity test because the value of VIF is below 5 (Kline, 1998) and also below 10 (Hair et al., 2010).

Table 7.
Collinearity Assessment (VIF)

	EP	SD	LD	PUF	IF	MN	PD	DEF
EP			1.553	1.553	1.553			
SC			1.553	1.553	1.553			
LD								3.324
PUF								2.097
IF								1.801
MN								3.195
DEF								

4.1.6. Structural Model

Based on table 8, the R-square value for default intention is 0.771 which is considered good. It means that the four latent variables (IF, LD, PUF, MN) moderately explain 77.1% of the variance in default intention in Islamic P2P lending. In addition to that, the conceptual model explains 63.1% of the variance in inferiority feeling, 56.9% of the variance in life dissatisfaction, 34.9% of the variance in perceived unfairness, and 65.7% of the variance in moral norm.

Table 8.
R-Square

Variable	R Square
Default Intention	0.771
Inferiority Feeling	0.631
Life Dissatisfaction	0.569
Moral Norm	0.657
Perceived Unfairness	0.349

Table 9.
Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Result
EP -> IF	0,425	0,425	0,045	9,533	0,000	Accepted
EP -> LD	0,395	0,393	0,048	8,234	0,000	Accepted
EP -> PUF	0,394	0,397	0,063	6,267	0,000	Accepted
EP -> DEF	0,166	0,163	0,052	3,166	0,002	Accepted
SD -> IF	0,467	0,468	0,044	10,676	0,000	Accepted
SD -> LD	0,452	0,455	0,047	9,696	0,000	Accepted
SD -> PUF	0,267	0,266	0,060	4,448	0,000	Accepted
SD -> DEF	0,049	0,048	0,047	1,060	0,290	Rejected
IF -> DEF	-0,417	-0,425	0,159	2,627	0,009	Accepted
LD -> DEF	0,414	0,425	0,134	3,099	0,002	Accepted
PUF -> DEF	0,158	0,160	0,048	3,284	0,001	Accepted
EP -> MN	0,487	0,487	0,038	12,793	0,000	Accepted
SD -> MN	0,423	0,423	0,040	10,644	0,000	Accepted

Table 9.
Hypothesis Testing (Continued)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/ STDEV)	P Values	Result
MN -> DEF	0,566	0,566	0,078	7,227	0,000	Accepted
MN x IF -> DEF	0,044	0,027	0,150	0,292	0,771	Rejected
MN x LD -> DEF	0,092	0,107	0,154	0,596	0,551	Rejected
MN x PUF-> DEF	-0,032	-0,031	0,036	0,894	0,372	Rejected

Hypothesis 1: There is a positive and significant effect of economic pressure on negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling) during COVID-19

Based on the table 9, the result shows that there is a positive and significant effect of economic pressure (EP) on negative affects (life dissatisfaction (LD), perceived unfairness (PUF), and inferiority feeling (IF)) whereby p-value is less than or equal to the alpha (α) or $0.000 \leq 0.05$. Therefore, H1 is supported.

Hypothesis 2: There is a positive and significant effect of economic pressure on default intention during COVID-19

The result shows that there is a positive and significant effect of economic pressure (EP) on default intention (DEF) whereby p-value is less than or equal to the alpha (α) or $0.000 \leq 0.05$. Hence, H2 is empirically supported.

Hypothesis 3: There is a positive and significant effect of socialization difficulty on negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling) during COVID-19

The result shows that there is a positive and significant effect of socialization difficulty (SD) on negative affects, which include life dissatisfaction (LD), perceived unfairness (PUF), and inferiority feeling (IF), whereby p-value is less than or equal to the alpha (α) or $0.000 \leq 0.05$. Our result thus provides support for H3.

Hypothesis 4. There is a positive and significant effect of socialization on difficulty default intention during COVID-19

The result shows that there is no significant effect of socialization difficulty (SD) on default intention (DEF) whereby p-value is higher than alpha (α) (> 0.05). Therefore, there is no empirical evidence supportive for H4.

Hypothesis 5: There is a positive and significant effect of negative affects on default intention during COVID-19

The result shows that there is a positive and significant effect of negative affects (life dissatisfaction (LD), perceived unfairness (PUF), and inferiority feeling (IF)) on default intention (DEF), whereby p-value is less than 0.05. Therefore, H5 is supported.

Hypothesis 6: There is a negative and significant effect of strains on moral norm during COVID-19

The result shows that there is negative and significant effect of strains (economic pressure (EP) and socialization difficulty (SD) on moral norm (MN) whereby p-value is lower than ≤ 0.05 . H6 is supported.

Hypothesis 7: There is a negative and significant effect of moral norm on default intention during COVID-19

The result shows that there is a negative and significant effect of moral norm (MN) on default intention (DEF) whereby p-value is lower than 0.05. Consequently, we provide evidence for H7.

Hypothesis 8: There is a negative and significant moderating effect between negative affects and default intention during COVID-19

The result shows that there is no significant relation between negative affects (LD, PUF, IF) and default intention (DEF) through the moderation of moral norm (MN) whereby p-value is higher > 0.05 . As a result, we fail to provide evidence for H8.

4.2. Analysis

P2P lending industry is an innovative new business model that brings together investors and borrowers through online platforms (Suryono et al., 2021). The industry has been a savior for micro, small and medium enterprises (MSMEs) in Indonesia. Rahardyan (2020) add that approximately 70% of the borrowers are from this sector. However, Suryono et al. (2021) state that the development of the industry also face several issues, among them are illegal fintech, data leak, personal data fraud, and credit risk.

In relation to the credit risk, the economic downturn during the Covid-19 pandemic has impacted significantly the sustainability of the Islamic P2P lending industry. Studies find that economic pressure significantly affects the borrowers' willingness to repay their loan, especially when they experienced financial hardships due to layoff, salary deductions, and bankruptcy. From the perspective of the general strain theory, Wang et al. (2020) add that borrowers on micro loan with high economic pressure are more likely to default. This finding is further reaffirmed by Kou et al. (2021). Further, SME payment information has a predictive power for credit risk (García et al., 2019; Alfaro et al., 2008).

High economic pressure during the Covid-19 crisis also affects life dissatisfaction, inferiority feeling, and perceived unfairness. Life dissatisfaction

has been correlated with unstable and negative emotions that affect people's well-beings. People experience more life dissatisfaction when they have low quality of life pertaining to financial status, health, and freedom (Punia et al., 2021). Thus, it is not surprising that the economic pressure over more than 2 years during the pandemic has greatly impacted financial health as well as mental health of many. McKinsey (2020) report that many are still in weak economic condition in their country. Wang et al. (2020) agree that the higher the economic pressure, the lower life satisfaction is. Another study conducted by Lund et al. (2021) add that frequent mental distress during COVID-19 pandemic affects their life dissatisfaction.

From the perspective of Erikson's psychosocial theory (Dunkel & Harbke, 2017), inferiority feeling has been correlated with an individual inability to accomplish goals and with the likelihood of depression, stress, and frustration (Akdoğan & Çimşir, 2019). Inferiority feeling may increase as a result of negative experience. In the context of Covid-19 pandemic, the inferiority feeling increases due to the impact of economic slowdown on business profitability and people's well-being. It makes people to be more insecure and to complain about their current conditions. Wang et al. (2020) agree that economic pressure affects the inferiority feeling of borrowers for the case of microloan in China.

On the other hand, perceived unfairness has been correlated with subjective evaluations of social status (Lee & Kawachi, 2019). When people face financial problem, they are more inclined to receive financial support from external parties, such as their organization, government, and financial institutions (Elshaer & Saad, 2021). In the case of Covid-19, government has collaborated with fintech companies to implement several recovery programs and prioritize certain segments of society including the MSMEs (Saptoyo, 2021; Sugandi, 2021). However, those who could not receive the financial aid might feel that they have been treated differently leading to higher perceived of unfairness. This finding is in-line with the study conducted by Wang et al. (2020). They note that economic pressure in microloan affects the borrower's perception of unfairness toward default.

This study finds that the higher the difficulty to socialize during the pandemic, the higher the level of life dissatisfaction, perceived unfairness, and inferiority feeling. This is because lockdown limits business and social activities. Life dissatisfaction, perceived unfairness, and inferiority increase drastically when there are failures in businesses and in life. The finding is in-line with Lu et al. (2016). Humans are inherently social and need support from others. Usually, extroverts are more sociable compared to introverts. So, when people feel insecure, they tend to withdraw themselves. This is supported by the study conducted by Gupta (2020) which states that social restrictions lead to serious psychological distress. In the context of microloan, Wang et al. (2022) also find that socialization difficulty has a positive relationship with life dissatisfaction, perceived unfairness, inferiority feeling, and loneliness. However, this study find that socialization difficulty has no effect on default. It is in-line with Fox et al. (2017) that socialization process might influence financial decisions, but there are other factors, such as family income, family support, family size, marital status that have larger influences on default.

Another finding suggests that moral norms play an important role in affecting borrowers' willingness to repay the loan. Strains (economic pressure and socialization difficulty) are found to have negative and significant effect on moral

norm, while moral norm is found to have negative and significant effect on default intention. People with high moral norm are more likely to refrain themselves from default (Telysheva et al., 2019). Bursztyn et al. (2017) conduct a study on default in Islamic banks. The finding supports that when people have an ability to repay, but they have an intention to default because of their personal reasons, it is considered as injustice. Lu et al. (2016) agree that default is considered as delinquent behavior. Therefore, an individual with high moral norm is less likely to be delinquent (Phillips & Cushman, 2017).

In addition, moral norm is found to have no moderating role in the relation between negative affects (life dissatisfaction, perceived unfairness, inferiority feeling) and default intention. This finding is supported by Pérez-Fuentes et al. (2020). Quarantine and self-isolation have proved to increase the negative affects, such as anger, sadness, anxiety, stress, and depression. The affects become worse when covid-19 affected individuals are treated unfairly. Therefore, negative affects have a direct effect on default intention.

V. CONCLUSION AND RECOMMENDATION

This study investigates borrowers' default intention in the Islamic peer to peer lending during COVID-19. It expands the general strain theory by including such variables as strain (economic pressure and socialization difficulty), negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling), moderating effect (moral norms), and default intention. The result is essential for increasing the quality of credit system scoring in the Islamic P2P lending. In addition, the study is also important for supporting financial inclusion (Senyo & Osabutey, 2020); entrepreneurial growth (Hau et al., 2018); and financial stability (Bazarbash, 2019).

The study finds that economic pressure and socialization difficulty during COVID-19 have positive effect on negative affects (life dissatisfaction, perceived unfairness, and inferiority feeling). However, socialization difficulty does not seem to have a direct effect on default intention. The study also documents a finding that moral norm moderates the relation between economic pressure and socialization difficulty on one hand and default intention on the other hand. However, life dissatisfaction, perceived unfairness, and inferiority feeling are found to have no significant effect.

The findings of this study can be used as a reference by practitioners to improve the screening process in order to create better credit risk management. As a nature, Islamic P2P lending has a different mechanism than traditional financing. The process for financing approval should be supported by credible mechanisms. With the knowledge provided on the website, investors should understand the risk from their investment, specifically when they choose for the target project or borrowers. This study contributes to better understanding of the psychology of borrowers in shaping their personal characteristics and behavior during a crisis.

There are two limitations to this study. First, the study only uses a sample of the Islamic peer-to-peer lending borrowers and non-borrowers in Java Island. Although that region has a larger representative compared to other regions, the higher level of default also comes from other provinces. Future research thus

may expand the sample size by adding respondents from outside Java. Second, the study focuses on economic pressure and socialization difficulty during COVID–19 together with life dissatisfaction, perceived unfairness, inferiority feeling, moral norms toward default intention. Future research can use the other strains and negative affects that could be relevant to Islamic peer-to-peer lending such as borrowers' beliefs and loneliness.

REFERENCES

- Agnew, R. (1992). Foundations for a general strain theory of crime and delinquency. *Criminology*, 30(1), 47-87.
- Agnew, R. (2010). General strain theory. In Krohn, M.D., Lizotte, A.J. and Hall, G.P. (Eds), *Handbook on crime and deviance*, pp. 169-185. New York, NY: Springer.
- Akdoğan, R., & Çimşir, E. (2019). Linking inferiority feelings to subjective happiness: Self-concealment and loneliness as serial mediators. *Personality and Individual Differences*, 149, 14-20.
- Aldasoro, I., Cho, C. H., & Park, K. (2022). Bank solvency risk and funding cost interactions: Evidence from Korea. *Journal of Banking & Finance*, 134, 106348.
- Alfaro, E., García, N., Gámez, M., & Elizondo, D. (2008). Bankruptcy forecasting: An empirical comparison of AdaBoost and neural networks. *Decision Support Systems*, 45(1), 110-122.
- Anh, N. T. T., Hanh, P. T. M., & Le Thu, V. T. (2021). Default in the US peer-to-peer market with covid-19 pandemic update: An empirical analysis from lending club platform. *International Journal of Entrepreneurship*, 25(7), 1-19.
- Ardianto, P. (2020). OJK: Pembiayaan bermasalah sejumlah fintech lending mulai membaik. Retrieved on June 12, 2021 from <https://investor.id/finance/224105/ojk-pembiayaan-bermasalah-sejumlah-fintech-lending-mulai-membaik>
- Ascarya, & Rahmawati, S. (2018). Analysis of the determinants of micro enterprises graduation. *Journal of Islamic Economics, Banking and Finance*, 14(1), 1-49.
- Ascarya, A. (2017). The Root causes of financial crisis in islamic economic perspective. *Ekonomi Islam*, 8(2), 136-149.
- Azzimonti, M., De Francisco, E., & Quadrini, V. (2014). Financial globalization, inequality, and the rising public debt. *American Economic Review*, 104(8), 2267-2302.
- Barclay, D., Higgins, C. & Thompson, R. (1995). The Partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, 2(2), 285-309.
- Bareksa. (2020). Aftech: Transaksi fintech melonjak semasa pandemic covid-19. Retrieved on July 12, 2021 from <https://www.bareksa.com/berita/berita-ekonomi-terkini/2020-08-24/aftech-transaksi-fintech-melonjak-semasa-pandemi-covid-19>
- Ban, J., & Lee, H. (2020). The role of empathy in crowdfunding channel platform. *Journal of Distribution Science*, 18(10), 15–23.
- Bazarbash, M. (2019). *Fintech in financial inclusion: machine learning applications in assessing credit risk*. International Monetary Fund.
- Bekele, G., Chowdhury, R. H., & Rao, A. (2016). Analysis of default behavior of borrowers under Islamic versus conventional banking. *Review of Behavioral Finance*, 8(2), 156-173.

- Bella, F. I. (2020). Optimization of Islamic peer-to-peer lending for micro and small enterprises (MSEs) after pandemic of covid-19. *Journal of Islamic Economic Laws*, 3(2), 108-123.
- Bholat, D., & Atz, U. (2016). Peer-to-peer lending and financial innovation in the United Kingdom (April 29, 2016). *Bank of England Working Paper No. 598*, Available at SSRN: <https://ssrn.com/abstract=2774297>.
- Bursztyn, L., & Jensen, R. (2017). Social image and economic behavior in the field: Identifying, understanding, and shaping social pressure. *Annual Review of Economics*, 9(1), 131-153.
- Bursztyn, L., Fiorin, S., Gottlieb, D., & Kanz, M. (2019). Moral incentives in credit card debt repayment: Evidence from a field experiment. *Journal of Political Economy*, 127(4), 1641-1683.
- Cavallera, C. (2020). Covid-19 psychological implications: The role of shame and guilt. *Frontiers in Psychology*, 11, 57182. <https://doi.org/10.3389/fpsyg.2020.571828>
- Chen, X., Huang, B., & Ye, D. (2019). Gender gap in peer-to-peer lending from China. *Journal of Banking & Finance*.
- Chen, X., Zhou, L., & Wan, D. (2016). Group social capital and lending outcomes in the financial credit market: An empirical study of online peer-to-peer lending. *Electronic Commerce Research and Applications*, 15, 1-13.
- Croux, C., Jagtiani, J., Korivi, T., & Vulcanovic, M. (2020). Important factors determining fintech loan default: Evidence from a lending club consumer platform. *Journal of Economic Behavior & Organization*, 173, 270-296
- Dorfleitner, G., Priberny, C., Schuster, S., Stoiber, J., Weber, M., de Castro, I., & Kammler, J. (2016). Description-text related soft information in peer-to-peer lending—Evidence from two leading European platforms. *Journal of Banking & Finance*, 64, 169-187.
- de Castro Vieira, J. R., Barboza, F., Sobreiro, V. A., & Kimura, H. (2019). Machine learning models for credit analysis improvements: Predicting low-income families' default. *Applied Soft Computing*, 83, 105640.
- de Castro, I., & Kammler, J. (2016). Description-text related soft information in peer-to-peer lending—Evidence from two leading European platforms. *Journal of Banking & Finance*, 64, 169-187.
- De Pedraza, P., Guzi, M., & Tijdens, K. (2020). Life Dissatisfaction and Anxiety in COVID-19 pandemic. *MUNI ECON Working Paper No. 2020-03*. Masaryk University, Faculty of Economics and Administration, Brno.
- Du, J., & Pan, W. (2021). Examining energy saving behaviors in student dormitories using an expanded theory of planned behavior. *Habitat International*, 107, 102308.
- Dunkel, C. S., & Harbke, C. (2017). A review of measures of Erikson's stages of psychosocial development: Evidence for a general factor. *Journal of Adult Development*, 24(1), 58-76.
- Emekter, R., Tu, Y., Jirasakuldech, B., & Lu, M. (2015). Evaluating credit risk and loan performance in online Peer-to-Peer (P2P) lending. *Applied Economics*, 47(1), 54-70.
- Elshaer, I. A., & Saad, S. K. (2021). Entrepreneurial resilience and business continuity in the tourism and hospitality industry: The role of adaptive

- performance and institutional orientation. *Tourism Review*, vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/TR-04-2021-0171>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4.
- Everett, C. R. (2015). Group membership, relationship banking and loan default risk: The case of online social lending. *Banking and Finance Review*, 7(2), 15–54.
- Ewuola, S. O., & Williams, S. K. T. (1995). Effects of institutional and borrower characteristics on loan recovery: A study of Ondo State agricultural credit corporation. *Agrosearch*, 1(2), 109–116
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, XVIII(February), 39–50.
- Fox, J. J., Suzanne, B. Letkiewicz, J. C., & Montalto, C. P. (2017). College student debt and anticipated payment difficulty. *Journal of Student Financial Aid*, 47(2), 111–135.
- García, V., Marqués, A. I., & Sánchez, J. S. (2019). Exploring the synergetic effects of sample types on the performance of ensembles for credit risk and corporate bankruptcy prediction. *Information Fusion*, 47, 88–101.
- Ganbat, M., Batbaatar, E., Bazarragchaa, G., Ider, T., Gantumur, E., Dashkhorol, L., Altantsatsralt, K., Nemekh, M., Dashdondog, E., & Namsrai, O-E. (2021). Effect of psychological factors on credit risk: A case study of the microlending service in Mongolia. *Behavioral Sciences*, 11(4), 47. <https://doi.org/10.3390/bs11040047>
- Guiso, L., Herrera, H., & Morelli, M. (2016). Cultural differences and institutional integration. *Journal of International Economics*, 99(Supplement 1), S97–S113.
- Guo, Y., Zhou, W. Luo, C. Liu, C., & Xiong, H. (2016). Instance-based credit risk assessment for investment decisions in P2P lending. *European Journal of Operational Research*, 249(2), 417–26. <https://doi.org/10.1016/j.ejor.2015.05.050>.
- Gomber, P., Koch, J. A., & Siering, M. (2017). Digital finance and fintech: Current research and future research directions. *Journal of Business Economics*, 87(5), 537–580.
- Goode, E. (2019). *Deviant behavior*. New York: Routledge.
- Gupta, S. (2020). Social distancing comes with psychological fallout. Retrieved on April 25, 2020, from ScienceNews: <https://www.sciencenews.org/article/coronavirus-covid-19-social-distancing-psychological-fallout>
- Haase, K. R., Cosco, T., Kervin, L., Riadi, I., & O'Connell, M. E. (2021). Older adults' experiences with using technology for socialization during the COVID-19 pandemic: Cross-sectional survey study. *JMIR aging*, 4(2), e28010.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous application, better result and higher acceptance. *Long Range Planning*, 46(1-2), 1–12.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis. Seventh Edition*. Upper Saddle River, New Jersey: Prentice Hall.
- Hasan, R., Hassan, M. K., & Aliyu, S. (2020). Fintech and Islamic finance: Literature review and research agenda. *International Journal of Islamic Economics and Finance (IJIEF)*, 3(1), 75–94.
- Hasibuan, L. (2021). Survei, banyak pekerja RI dipotong gaji selama pandemi. Retrieved on March 1, 2022, from <https://www.cnbcindonesia.com/>

- lifestyle/20210715140220-33-261143/survei-banyak-pekerja-ri-dipotong-gaji-selama-pandemi
- Hasnan, B. (2019). A framework for crowdfunding platforms to match services between funders and fundraisers. *Journal of Industrial Distribution and Business*, 10(4), 25–31. <https://doi.org/10.13106/ijidb.2019.vol10.no4.25>.
- Hau, H., Huang, Y., Shan, H., & Sheng, Z. (2018). Fintech credit, financial inclusion and entrepreneurial growth. *Unpublished working paper*.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hikmah, N., Malik, Z. A., & Irwansyah, S. (2020). Tinjauan Fatwa DSN No. 117/DSN-MUI/II/2018 tentang Layanan Fintech Berdasarkan Prinsip Syariah terhadap Layanan Pinjaman Online di PT Alami Fintek Sharia. *Prosiding Hukum Ekonomi Syariah*, 6(2), 660-663.
- Huang, J., & Fang, Y. (2021). Income inequality, neighbourhood social capital and subjective well-being in China: Exploration of a moderating effect. *International journal of environmental research and public health*, 18(13), 6799. <https://doi.org/10.3390/ijerph18136799>
- Hubley, A. M. (2014). Discriminant validity. In: Michalos A. C. (eds) Encyclopedia of quality of life and well-being research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_571
- Hulland, J. (1999). Use of partial least square (pls) in strategic management research: A review of four recent studies. *Strategic Management Journal*, 20(2), 195-204.
- Idris, M. (2021). Apa itu slik OJK? Ini prosedur cara mengeceknya [What is OJK slik? This is the procedure how to check it]. Retrieved on August 15, 2021 from <https://money.kompas.com/read/2021/03/02/123043926/apa-itu-slik-ojk-ini-prosedur-cara-mengeceknya?page=all>
- International Labour Organization. (2020). Covid-19 and the world of work: Impact and policy responses. Retrieved on January 25, 2022 from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_738753.pdf
- Iyer, R., Khwaja, A. I. Luttmer, E. F. P., & Shue, K. (2015). Screening peers softly: Inferring the quality of small borrowers. *Management Science*, 62(6), 1554–1577. <https://doi.org/10.1287/mnsc.2015.2181>.
- Jamal, A. A. A., Ramlan, W. K., Karim, M. A., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science*, 6(11), 110-119.
- Khilfah, H. N., & Faturhman, T. (2020). Social media data to determine loan default predicting method in an Islamic online P2P lending. *Journal of Islamic Monetary Economics and Finance*, 6(2), 243 - 274. <https://doi.org/10.21098/jimf.v6i2.1184>
- Kline, R. B. (1998). Software review: Software programs for structural equation modeling: Amos, EQS, and LISREL. *Journal of Psychoeducational Assessment*, 16(4), 343-364.
- Komite Nasional Ekonomi dan Keuangan Syariah. (2019). Langkah kolaborasi KNKS dalam mendorong ekosistem ekonomi syariah [KNKS collaboration

- steps in encouraging the sharia economic ecosystem]. Retrieved on November 19, 2021, from [https://knks.go.id/storage/upload/1557454250-Afdhal%20Aliasar%20\(KNKS\)%20-%20IIEFest.pdf](https://knks.go.id/storage/upload/1557454250-Afdhal%20Aliasar%20(KNKS)%20-%20IIEFest.pdf)
- Kou, G., Xu, Y., Peng, Y., Shen, F., Chen, Y., Chang, K., & Kou, S. (2021). Bankruptcy prediction for SMEs using transactional data and two-stage multiobjective feature selection. *Decision Support Systems*, 140, 113429.
- Lea, S. E., Webley, P., & Walker, C. M. (1995). Psychological factors in consumer debt: Money management, economic socialization, and credit use. *Journal of Economic Psychology*, 16(4), 681-701.
- Lee, M. A., & Kawachi, I. (2019). The keys to happiness: Associations between personal values regarding core life domains and happiness in South Korea. *PloS one*, 14(1), e0209821.
- Leiber, M. J., Mack, K. Y., & Featherstone, R. A. (2009). Family structure, family processes, economic factors, and delinquency: Similarities and differences by race and ethnicity. *Youth Violence and Juvenile Justice*, 7(2), 79-99.
- Liao, S. L., & Chang, J. J. (2010). Economic determinants of default risks and their impacts on credit derivative pricing. *Journal of Futures Markets*, 30(11), 1058-1081.
- Lin, X., Li, X., & Zheng, Z. (2017). Evaluating borrower's default risk in peer-to-peer lending: Evidence from a lending platform in China. *Applied Economics*, 49(35), 3538-45. <https://doi:10.1080/00036846.2016.1262526>.
- Lin, M., & Viswanathan, S. (2015). Home bias in online investments: An empirical study of an online crowdfunding market. *Management Science*, 62(5), 1393-1414.
- Liu, Y., Finch, B. K., Brenneke, S. G., Thomas, K., & Thao, P. (2020). Perceived discrimination and mental distress amid the Covid-19 pandemic: Evidence from the understanding America Study. *American Journal of Preventive Medicine*, 59(4), 481-492.
- Liu, D., Brass, D. J., Lu, Y., & Chen, D. (2015). Friendships in online peer-to-peer lending. *Mis Quarterly*, 39(3), 729-742.
- Lu, T., Jia, Z., Xu, Y., Huang, L., & Zhang, C. (2016). Psychosocial Factors Lead to Delinquency Itention on Online Peer-To-Peer Lending Platform: A Survey Evidence.
- Lund, J. J., Chen, T. T., LaBazzo, G. E., Hawes, S. E., & Mooney, S. J. (2021). The association between three key social determinants of health and life dissatisfaction: A 2017 behavioral risk factor surveillance system analysis. *Preventive medicine*, 153(December 2021), 106724.
- Madinga, N. W., Maziriri, E. T., Chuchu, T., & Magoda, Z. (2022). An investigation of the impact of financial literacy and financial socialization on financial satisfaction: Mediating role of financial risk attitude. *Global Journal of Emerging Market Economies*, 14(1), 60-75.
- McKenzie, K., Michie, A., Murray, A., & Hales, C. (2012). Screening for offenders with an intellectual disability: The validity of the learning disability screening questionnaire. *Research in Developmental Disabilities*, 33(3), 791-795.
- McKinsey. (2020). The coronavirus effect on global economic sentiment. Retrieved on February 24, 2022, from <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-coronavirus-effect-on-global-economic-sentiment>

- Ministry of Finance Republic of Indonesia. (2021). Ini kontribusi fintech Indonesia di masa pandemic [This is the contribution of Indonesian fintech during the pandemic]. Retrieved on January 21, 2022, from <https://www.kemenkeu.go.id/publikasi/berita/ini-kontribusi-fintech-indonesia-di-masa-pandemi/>
- Ministry of Finance Republic of Indonesia. (2021). Aktivitas pasar modal Indonesia di era pandemic [Indonesian capital market activities in the pandemic era]. Retrieved on January 22, 2022, from <https://www.djkn.kemenkeu.go.id/kpkn-kupang/baca-artikel/13817/Aktivitas-Pasar-Modal-Indonesia-Di-Era-Pandemi.html>
- Morse, A. (2015), Peer-to-peer crowdfunding: Information and the potential for disruption in consumer lending, *Annual Review of Financial Economics*, 7(12), 463-482.
- Muhammad, R., & Nissa, I. K. (2020). analisis resiko pembiayaan dan resolusi syariah pada peer-to-peer financing. *EQUILIBRIUM: Jurnal Ekonomi Syariah*, 8(1), 2355-0228.
- Najaf, K., Subramaniam, R. K., & Atayah, O. F. (2022). Understanding the implications of FinTech Peer-to-Peer (P2P) lending during the COVID-19 pandemic. *Journal of Sustainable Finance & Investment*, 12(1), 87-102.
- Nurfadilah, D., & Samidi, S. (2021). How the covid-19 crisis is affecting customers' intention to use Islamic fintech services: Evidence from Indonesia. *Journal of Islamic Monetary Economics and Finance*, 7, 83 - 114. <https://doi.org/10.21098/jimf.v7i0.1318>
- Niu, B., Ren, J., & Li, X. (2019). Credit scoring using machine learning by combing social network information: Evidence from peer-to-peer lending. *Information*, 10(12), 397.
- Nowak, A., Ross, A., & Yencha, C. (2018). Small business borrowing and peer-to-peer lending: Evidence from lending club. *Contemporary Economic Policy*, 36(2), 318-336.
- Othman, Z., Shafie, R., & Hamid, F. Z. A. (2014). Corruption-why do they do it?. *Procedia-Social and Behavioral Sciences*, 164, 248-257.
- Otoritas Jasa Keuangan. (2020). Statistik fintech lending periode Desember 2020 [Statistics of fintech lending for the period of December 2020]. Retrieved on June 10, 2021 from <https://www.ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/Pages/-Statistik-Fintech-Lending-Periode-Desember-2020.aspx>
- Pérez-Fuentes, M. D. C., Molero Jurado, M. D. M., Martos Martínez, Á., & Gázquez Linares, J. J. (2020). Threat of COVID-19 and emotional state during quarantine: Positive and negative affect as mediators in a cross-sectional study of the Spanish population. *PloS one*, 15(6), e0235305.
- Pişkin, M., & Kuş, M. C. (2019). Islamic online P2P lending platform. *Procedia Computer Science*, 158, 415-419.
- Phillips, J., & Cushman, F. (2017). Morality constrains the default representation of what is possible. *Proceedings of the National Academy of Sciences*, 114(18), 4649-4654.
- Punia, B. K., Punia, V., & Garg, N. (2021). Life dissatisfaction among students: Exploring the role of intrapersonal conflict, insufficient efforts and academic stress. *Rajagiri Management Journal*, 15(2), 113-128.

- Putra, D. A. (2021). Survei Kemnaker: 72.983 pekerja terkena PHK di 4.156 perusahaan imbas pandemic [Kemnaker survey: 72,983 workers have been laid off at 4,156 companies due to the pandemic]. Retrieved on March 1, 2022, from <https://www.merdeka.com/uang/survei-kemnaker-72983-pekerja-terkena-phk-di-4156-perusahaan-imbaspandemi.html>
- Purwantini, A. H., & Anisa, F. (2021). Fintech payment adoption among micro-enterprises: The role of perceived risk and trust. *Jurnal Aset (Akuntansi Riset)*, 13(2), 274-283
- Rahardyan, A. (2021). Rekening pengguna tembus 71,8 juta, fintech lending makin dipercaya [User accounts penetrate 71.8 million, fintech lending is increasingly trusted]. Retrieved on January 25, 2022, from <https://finansial.bisnis.com/read/20211209/563/1475716/rekening-pengguna-tembus-718-juta-fintech-lending-makin-dipercaya>
- Rahardyan, A. (2020). Kinerja Ammana fintek syariah: Umrah anjlok tertolong sektor produktif [Ammana's performance in Islamic fintech: Umrah plummeted, helped by the productive sector]. Retrieved on January 12, 2022, from <https://finansial.bisnis.com/read/20200804/563/1274659/kinerja-ammana-fintek-syariah-umrah-anjlok-tertolong-sektor-produktif>
- Rebellon, C. J., Barnes, J. C., & Agnew, R. (2015). A unified theory of crime and delinquency: Foundation for a biosocial criminology. In M. DeLisi & M. G. Vaughn (Eds.), *The Routledge international handbook of biosocial criminology* (pp. 1–21). Routledge/Taylor & Francis Group.
- Reddy, Rangga & Attada, T. A. (2020). An empirical study on the factors influencing the acceptance of smartwork. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 17(7), 19–41. <https://doi.org/10.29214/damis.2013.32.1.002>
- Ro, C. (2021). Why we may have to re-learn to socialise. Retrieved on February 1, 2022, from <https://www.bbc.com/worklife/article/20210218-why-we-may-have-to-re-learn-to-socialise>
- Rufrancos, H., Power, M., Pickett, K. E., & Wilkinson, R. (2013). Income inequality and crime: A review and explanation of the time-series evidence. *Sociology and Criminology*, 1(1), e103.
- Safira, J. E., & Baridwan, Z. (2018). The analysis of individual's behavioral intention in using mobile banking based on TAM and UTAUT 2. *Jurnal Ilmiah Mahasiswa FEB, Universitas Brawijaya*, 6(2).
- Saptoyo, R. (2021). 7 bantuan yang digelontarkan selama pandemic covid [7 aids distributed during the covid pandemic]. Retrieved on March 2, 2022, from <https://www.kompas.com/tren/read/2021/08/17/133000065/7-bantuan-yang-digelontorkan-selama-pandemi-covid-19?page=all>
- Sarstedt, M., Hair Jr, J. F., Nitzl, C., Ringle, C. M., & Howard, M. C. (2020). Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses! *International Journal of Market Research*, 62(3), 288-299.
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. In Homburg, C., Klarmann, M. and Vomberg, A. (Eds), *Handbook of market research*. Heidelberg: Springer.
- Senyo, P. K., & Osabutey, E. L. (2020). Unearthing antecedents to financial inclusion through FinTech innovations. *Technovation*, 98, 102155.

- Serrano-Cinca, C., Gutiérrez-Nieto, D., & López-Palacios, L. (2015). Determinants of default in P2P lending. *Plos One*, 10(10), 1–22. <https://doi.org/10.1371/journal.pone.0139427>.
- Shahid, B., & Ahmad, I. (2016). The impact of organizational learning on organizational corruption and the deviant workplace behavior: The case study of public sector organizations in Pakistan. *NUML International Journal of Business & Management*, 11(2), 50-67.
- Ssekiziyivu, B., Mwesigwa, R., Joseph, M., & Nabeta, I. N. (2017). Credit allocation, risk management and loan portfolio performance of MFIs-A case of Ugandan firms. *Cogent Business & Management*, 4(1), 1-13. <https://doi.org/10.1080/23311975.2017.1374921>
- Stone, B., & Maury, R. V. (2006). Indicators of personal financial debt using a multi-disciplinary behavioral model. *Journal of economic psychology*, 27(4), 543-556.
- Sugandi, E. A. (2021). The COVID-19 Pandemic and Indonesia's Fintech Markets. *ADB Working Paper 1281*. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/covid-19-pandemic-indonesia-fintech-markets>
- Suryono, R. R., Budi, I., & Purwandari, B. (2021). Detection of fintech P2P lending issues in Indonesia. *Heliyon*, 7(4), e06782.
- Telysheva, N. N., Erofeeva, M. A., Ulyanova, I. V., Pokrovskaya, S. V., Nikitskaya, E. A., Gorokhova, I. V., & Kochetkov, I. G. (2019). Socio-ecological determinants in the deviant behavior formation system. *Ekoloji*, 28(107), 5077-5081.
- Tham, K. W., Dastane, O., Johari, Z., & Ismal, N. B. (2019). Perceived risk factors affecting consumers' online shopping behaviour. *The Journal of Asian Finance, Economics and Business*, 6(4), 246–260. <https://doi.org/10.13106/jafeb.2019.vol6.no4.249>
- Thomas, V. F., & Jannah, S. M. (2020). Ekonomi sulit, kredit bermasalah di masa pandemic potensial melonjak [The economy is difficult, non-performing loans during a pandemic have the potential to soar]. Retrieved on January 29, 2022 from <https://tirto.id/ekonomi-sulit-kredit-bermasalah-di-masa-pandemi-potensial-melonjak-f52s>
- Todorof, M. (2018). Shariah-compliant FinTech in the banking industry. *ERA Forum*, 19(1), 1–17. doi:10.1007/s12027-018- 0505-8
- Tokunaga, H. (1993), The use and abuse of consumer credit: Application of psychological theory and research. *Journal of Economic Psychology*, 14(2), 285-316.
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance*, 20, 679-686.
- Umar, M., Ji, X., Mirza, N., & Rahat, B. (2021). The impact of resource curse on banking efficiency: Evidence from twelve oil producing countries. *Resources Policy*, 72, 102080.
- Wang, Y., Drabek, Z., & Wang, Z. (2022). The role of social and psychological related soft information in credit analysis: Evidence from a Fintech Company. *Journal of Behavioral and Experimental Economics*, 96, 101806.
- Wang, X., Xu, Y. C., Lu, T., & Zhang, C. (2020). Why do borrowers default on online loans? An inquiry of their psychology mechanism. *Internet Research*, 30(4), 1203 – 1228.

- Wimboh, S., Trinugroho, I., & Risfandy, T. (2020). What determine loan rate and default status in financial technology online direct lending? Evidence from Indonesia. *Emerging Markets Finance and Trade*, 56(2), 351-369.
- Wiryanto, W. (2018). The comparison of Unescap's characteristics of good governance and Islamic characteristics. *Hasanuddin Economics and Business Review*, 2(2), 123-141. doi: [http:// dx.doi.org/10.26487/hebr.v2i2.1545](http://dx.doi.org/10.26487/hebr.v2i2.1545)
- Worokinasih, S., & Potipiroon, W. (2019). Microfinance repayment performance of SMEs in Indonesia: Examining the roles of social capital and loan credit terms. *The Journal of Behavioral Sciences*, 14(1), 28-45.
- Xu, J. J., & Chau, M. (2018). Cheap talk? The impact of lender-borrower communication on peer-to-peer lending outcomes. *Journal of Management Information Systems*, 35(1), 53-85. doi:10.1080/07421222.2018.1440776.
- Yang, Y. (2019, August). Discussion on the factors affecting college students' campus loan default from the perspective of behavioral finance. In *1st International Symposium on Economic Development and Management Innovation (EDMI 2019)* (pp. 133-142). Atlantis Press.
- Zhang, J., & Lester, D. (2008). Psychological tensions found in suicide notes: A test for the strain theory of suicide. *Archives of Suicide Research*, 12(1), 67-73.
- Zhou, J., Li, W., Wang, J., Ding, S., & Xia, C. (2019). Default prediction in P2P lending from high-dimensional data based on machine learning. *Physica A: Statistical Mechanics and its Applications*, 534, 122370.

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