Frugal Behaviour Potential and Development for Community Financial Stability in Crisis Times

Mia Rahma Romadona
Suryadi
Sigit Setiawan
Asep Husni Yasin Rosadi
Fachrizal
All Researchers from the Research Center for Economics Industry,
Services, and Trade
National Research and Innovation Agency Jl. Gatot Soebroto Kav.10 Shouth Jakarta, Indonesia
romadona.mia@gmail.com

Abstract

During this pandemic, some nations have used frugal living to achieve economic stability, improve well-being, and protect the environment. This study examines how Indonesian frugal behavior might be used to stabilize the economy amid the crisis. This study will analyze frugal behavior surveys and interview respondents. This mixed-methods study found that frugal and pro-environmental behavior can be developed, but the public needs easy-to-access financial literacy knowledge. This study's fit model shows that frugal actors profit from pro-environmental action. Adherents of frugal conduct have inherent motives to adopt it after learning how to manage resources wisely and sparingly. The majority of people are still unfamiliar with the term "frugal behavior" and merely grasp the concept, which is less relevant to their needs. This is an opportunity to promote frugal and pro-environmental behavior based on the concept of frugal behavior. More knowledge and skills in financial management that are consistent with frugal behavior are needed.

Keywords
frugal behavior, economic stability, consumers, independence, well-being, pro-environment, and sustainable behavior.

1. Introduction

As part of a new development agreement, Indonesia has adopted the Sustainable Development Agenda, also known as the 2030 Agenda for Sustainable Development or SDGs. This agenda encourages shifts toward sustainable development that are founded on human rights and equity in order to promote social, economic, and environmental development. According to the Sustainable Development Goals, demographic bonuses will be an issue and a challenge for the people of Indonesia in 2024 in the context of the economy and community management. Developed nations have, over the course of the past several years, evolved a philosophy of life that places a higher premium on the ability to save money in order to accomplish objectives that are measured in terms of their economic value (Tirto. id 2020). This way of life is known as "frugal living," and it is an individual living concept that leads to changes in mindset that affect individual economic behavior in managing daily finances frugally by looking at various aspects of economic value in order to achieve goals that have been set in terms of economic value in a certain amount of time.

The concept of living frugally is a behavioral concept that should be adopted by savvy consumers since it has the potential to contribute positively to a sustainable economy. It is interesting to note that a number of well-known people in the world, like Mark Zuckerberg, Lady Gaga, Leonardo DiCaprio, and Keanu Reeves, have adopted a more modest way of living as a way to improve their financial situations. They do so since it has a beneficial effect not only on them but also on their family, the environment, and the community as a whole, in addition to bringing about mental and financial stability for them (Destiana, IDXchannel 2021). Every person, especially young people, has obstacles...
to their ability to survive in times of numerous crises, particularly in the elements of economic, environmental, social, and mental health crises. These issues will continue to exist both now and in the future.

The multifaceted crisis we are presently facing acts as an impetus for all levels of society to adapt by altering their mindsets and behaviours in order to be more robust in the face of crisis situations. This is a prerequisite for a prosperous existence. Especially in the current scenario during a pandemic as a multilateral crisis that challenges every individual to be able to intelligently adapt in order to survive, nations or every country in the world are also attempting to be able to adapt, especially economically, in order to survive during times of crisis. This is particularly true in the current scenario, which involves a pandemic as a multilateral catastrophe that requires every individual to adapt wisely in order to survive. The ability to withstand and quickly adapt to changes that can occur at any time is a crucial issue for both individuals and the nation as a whole. As a result of this condition, several changes have occurred, including the fact that the number of people who have lost their jobs has more than doubled to 2.1 million (Ministry of Labour 2020).

In addition, the worldwide problem of environmental sustainability, which plays a role in the fluctuation of the weather on a global scale, is a problem that is still being solved, particularly through the adoption of more environmentally friendly practices by individuals. As a direct consequence of the epidemic, many people are finding themselves in a state of mental anguish as a result of the stress brought on by the current predicament. According to the statistics provided by the WHO, it is explained that many of the nations that have been impacted by the pandemic have suffered an increase in the number of cases of stress and depression among the working population as a result of economic instability (WHO 2021). The Indonesian people have no choice but to rise to the occasion and conquer this obstacle if they do not want it to become a source of tension in the future and a drag on the economy of their nation. The problem that the government is trying to solve and one that is constantly on its mind is how to promote economic and psychological well-being through constructive social behavior and the impact that this behavior has on the long-term viability of the environment.

1.1 Objectives
This frugal conduct saves money and adds economic value, improving human and environmental sustainability. Gatersbelen et al. (2017) found that pro-environmental action had moral, wasteful, frugal, and thrifty incentives. Frugal and moral consumers are similar and predict pro-environmental behavior, but their methods differ. Consumer identities are constant for several reasons. Because people maintain many consumer identities, environmental policies that target various behavioral identities are more effective.

In their research on the causes of frugal behavior, Suarez et al. (2020) noted that sustainability and adaptation to climate change as a behavioral transition need to reduce consumption and maintain social frugality. The model explains 46% of frugal behavior, showing that resource use has repercussions and that CFCs have promoted moderate resource usage. Frugality and hoarding are rarely studied despite their widespread effects, according to Shoham, Gavish, and Akron (2017). Shoham et al. (2017) examined how personality and culture affect consumer frugal and hoarding behavior. Frugality and hoarding are negatively and positively related to impulsive and compulsive consumer behavior. Gil-Giménez, Rolo-González, Suárez, and Muinos (2021) state that saving and frugality are the best ways to cut consumption, illustrating the limitations of focusing solely on normative-moral consumption issues. Promoting personal frugal spending requires considering its economic benefits and cost savings. Environmental self-identity activation and frugal consumer identity activation may enhance frugal consumption promotion techniques. This study investigates the relationship between frugal and pro-environmental behavior and well-being among Indonesian individuals and communities, which has rarely been studied.

This study examines Indonesia's frugal living possibilities. Furthermore, frugal and pro-environmental conduct might lead to entrepreneurial behavior. From prior studies, frugal behavior and its effects have not been studied, especially in Indonesia. Based on theoretical and empirical investigations, SDG's themes of prosperity, welfare, mental health, and environment overlap. Research on frugal-smart consumer behavior is predicted to improve economic stability, psychological well-being, and environmental sustainability. It's also helpful to learn more about frugal behavior, a behavioral science consumer behavior that promotes mental wellness and environmental sustainability. This research quantifies the association between frugal behavior, well-being, and pro-environmental activity. The final benefit is policy implications for community financial literacy education to promote environmentally friendly and mentally resilient economic conduct. In this study, research provides an
empirical understanding of behavioral science, specifically economic behavior, and individual balancing behavior to protect the environment and mental health. Referring to strategic issues in dealing with crises and pandemics, as well as the results of research by previous researchers, this study formulates several questions as follows: What is the potential for the development of the concept of frugal living in Indonesian society during a crisis (Pandemic and economic crisis)? What is the relationship between frugal behavior in forming pro-environmental behavior and well-being? What are the motives that form the basis of society adopting frugal living behavior?

2. Literature Review
Lasticovik et al. (1999) defined frugal behaviour conduct as a unidimensional consumer lifestyle trait characterized by the extent to which consumers refrain from using resources as economic products and services to attain long-term goals. Wilk (1996) explains that people have always been frugal from a religious perspective. Mill (1848) proposed a fruitfulness-based capital theory based on the notion that satisfaction from present consumption is preferable to be postponed for greater satisfaction with the original capital reasons from a frugal perspective for looking ahead. Wilk (1996) proposes a lifelong economic model to explain future generations' gains.

Dacyczyn (1992) says frugal conduct leads to consumer commitment to a form of economic asceticism that promotes accomplishing individual long-term goals to limit overconsumption and optimize the return on owned resources. Profitable conduct is about financial management, allocating time, money, and resources to goals. Frugal people create goals, keep records, and budget (Dacyczyn 1997). It also promotes reuse creativity by reusing plastic bags, soap, detergent, and clean water. Psychologically, De Young (1986) describes frugal conduct as resource conservation and waste reduction. This habit might make ecocentrism comfortable by reusing resources (Dunlap and Van Liere, 1978). Modern frugality is ecocentrism, in qualitative research found first frugal conduct is self-disciplined spending and reducing impulsive purchases. Second, frugal people have various ways to reuse and recycle items to save money. Third, fruit buyers are more independent, making market trends harder to follow.

De Young (2000) and Muinos (2015) agree that frugal conduct is a positive autonomous habit for individuals since it empowers lifestyle and promotes materialist competition to attain maximum achievements. According to Hernández, Suárez, Corral-Verdugo, and Hess (2012), frugal behavior is a sustainable behavior related to ecological and altruistic behavior as a variable of ecocentrism behavior and the New Paradigm of Human Interdependence (Corral-Verdugo, Carrus, Bonnes, Moser, & Sinha, 2008), which can achieve long-term goals. Latiscovik et al. (1999) found that frugal conduct affects life satisfaction. Scitovsky (1976) states that happiness comes from acceptance in family life, marriage, children, leisure time, spirituality, friendship, and self-growth, not from how many items one buys at the shopping mall. Frugal conduct prioritizes debt reduction to buy additional commodities (stocking goods), give free time for family, children, friends, and yourself, and develop personally and spiritually. Based on all the definitions of frugal behavior from previous researchers, frugal conduct is a consumer behavior that is wise and sensible in managing finances about income and expenses based on solid financial reference abilities to budget, record, and achieve goals. Financial freedom and improve emotional, mental, social, family, and environmental well-being. The frugal behavior theory will explain Even perpetrators should avoid debt, minimize spending by utilizing resources, focus on personal and family pleasure, be calmer since they are not easily lured by social lives, and pay greater attention to environmental balance.

"Environmentally responsible behavior" (De Young, 2000), ecological behavior (Kasier 1998), conservation behavior (Gosling & Williams, 2010; Kaiser, Hubner, & Bogner, 2005; Monroe 2003), "environmentally supportive behaviors" (Huddart-Kennedy, Beckley, McFarlane, & Nadeau, 2009), and "environmentally sig" (Hud (Stern, 2000). Larson et al. (2015) define "pro-environmental behavior" as an activity that benefits the natural environment, enhances environmental quality, or reduces environmental damage Steg and Vlelk (2009).

Larson et al. (2015) proposed that pro-environmental behavior has four dimensions: conservation lifestyle, which is an individual's lifestyle related to protecting the environment, using and recycling products, energy-saving, using public transportation, organic food, etc.; social environmentalism, which is an individual's behavior in interacting and communicating with others about the importance of protecting the environment; and This behavior includes dealing with local environmental conservation groups, environmental citizenship, which is the behavior of citizens who are brave and willing to voice their opinions and take concrete actions in the policy
process regarding environmental issues and problems, and land stewardship, which is directly related to increasing local land with conservation activities and maintaining environmental quality. Based on pro-environmental behavior characteristics, caring for animals and plants naturally in their surroundings Pro-environmental behavior matters intellectually and psychologically (Stern, Dietz, Abel, Guagnano, & Kalof, 1999; Stern, 2000).

Well-being is a psychological term related to happiness, quality of life, personal comfort, and personal success (Nava et al. 2018). Ryff (1989), self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, and personal growth. Ryff (1989) defines well-being in six theoretical dimensions, including Autonomy, the ability to choose oneself and manage conduct, frees people from social and group laws. Environmental Mastery as the ability to pick and create an environment that matches one's psychological state; Personal growth as a factor that helps people build a loving, trusting relationship; Purpose in Life that everyone needs objectives and meaning. Self-acceptance is accepting oneself and one's past. Nava et al. (2018), Springer and Hauser (2006), and Muinos et al. (2015) agree that well-being has six connected psychological dimensions. Well-being means that a person has found meaning in life, is happy, and practices aware and sensible resource management and environmental stewardship.

3. Methods
According to Neuman (2006), the research in question is social research that makes use of mixed methodologies, which is an approach that can look at social phenomena in a comprehensive manner. According to Creswell (2014), a research strategy that makes use of the mixed method can assist researchers in getting a more accurate image of the phenomenon that is being examined. In this study, a mixed-approaches approach was employed, specifically, quantitative methods to measure frugal behavior based on a modified version of the questionnaire developed by Lastovicka (1999), Larson (2015), and Ryff (1989) the questionnaire was adapted from their respective authors. To dig further into the frugal behavior of frugal living, pro-environmental, and well-being actors, the qualitative technique makes use of a deep-interview approach using semi-structured interviews.

This study will be conducted over the course of one calendar year in 2022. The general public meets the requirements to be included in this study's population, which are as follows: Over the age of 18 and up to 70 years old, both males and women in general (actively studying and working, housewives). According to the findings of prior studies (Muinos et al., 2015; Goldsmith & Flynn 2015), the respondents of interest fall into the age range of more than 18 years. The research sample that meets the requirements for productive age all have occupations that have some degree of flexibility.

The data from the online questionnaire were utilized to make a random selection of interview subjects from among those individuals who indicated their willingness to be interviewed. This research also conducted field investigations in large cities across Indonesia, including student cities, tourism cities, and cities with high and low costs of living, thus the researchers chose Jakarta, Bandung, Yogyakarta, and Purworejo as the four cities to study in total. The primary sources of information include things like questionnaires, interview data, and direct observation of respondents.

The unit of analysis for this research is at the community level, which differs from the individual level as the responder. This is because secondary data come from supporting article data, supporting document data, and indirect observations connected to this topic. This research will distribute a questionnaire that was derived from earlier research done by Lastovicka et al. (1999). This particular questionnaire has been widely adopted by a number of other researchers, including Suarez et al. (2020), Muinos et al. (2015), and Goldsmith and Flynn (2015). There are ten questions on the questionnaire, and each one has a scale ranging from 1 to 6, with 1 being strongly disagreed and 6 strongly agree. An adaptation of Larson et al. (2015) and Gatersleben et al. (2014), the measurement of pro-environmental behavior is comprised of three dimensions and is described by ten statement items that are measured by a Likert scale with a scale of six, specifically 1–6 from strongly disagreeing to very agreeing. This scale was used to determine how individuals responded to the statements. This questionnaire, which was adapted from an earlier study conducted by Ryff (1989) and was subsequently adopted by Springer and Hauser (2004), contains 4 statement items that have been modified.

After that, respondents will be chosen at random to participate in in-depth interviews that make use of techniques from semi-structured interviews. Respondents were selected at random and were willing to serve as resource persons for
the purpose of assisting researchers in their investigation of the phenomenon of adopting frugal behavior in everyday
life and its relation to the perception and behavior of pro-environmental activities and well-being, as well as the
potential for behavior that arises from their efforts to create added value based on the economy. "green" in terms of
the environment. The data that was acquired from the questionnaires came from three different variables: well-being,
being thrifty and being environmentally conscious. The analysis that will be performed will make use of SEM
SmartPLS3 statistical analysis, descriptive statistical analysis to discover patterns in frugal behavior and its potential,
and data triangulation from the combined questionnaire data and in-depth interview information.

4. Results and Discussion

4.1 Demographic Results

There were 191 respondents of the respondents practiced frugal conduct. During the course of the study, data was
collected in person from a number of locations around Indonesia, including Bandung, Yogyakarta, Purworejo, and
Jakarta. According to these findings, it is clear that the region of Central Java contains the greatest number of
respondents who assert that they have adopted a frugal lifestyle, with a percentage of 30% (figure 1). This is followed
by the regions of West Java, DKI Jakarta, the Special Region of Yogyakarta, Banten, and East Java.

![Figure 1. Sebaran wilayah responden yang mengadopsi perilaku frugal](image)

The bulk of those who responded to the questionnaire and embraced frugal behaviors had previously worked as a civil
servant/Indonesian national army/Police (42%), followed by students (32%), private employees (13%), entrepreneurs
(4%), and people with other jobs (less than 3%). There is as many as 13 percent of respondents have an income that
is more than IDR 20,000,000; While other respondents averaged between IDR 8,000,000 – IDR 10,000,000; (11%)
and IDR 10,000,000 – IDR 15,000,000; (12%). In terms of the distribution of income, there is 26 percent of respondents have an income of less than Rp. 1,000,000; then vulnerable income per month between Rp. 2,500,000 - Rp. 5,000,000; as much as 13 percent. Besides that there the greatest amount spent in a single month is above IDR 20,000,000, and there is as many as 5 percent of respondents who fall into this category. On the other hand, the average amount spent in a single month by respondents is between IDR 1,000,000 to IDR 20,000,000. In addition, spending that is less than one million rupiahs; there is as many as 22 percent in line with the fact that many of the respondents are students.

![Figure 2. The kinds of Respondent Income](image)

Only 28 percent of respondents were working additional jobs on the side, while 72 percent of respondents were not working additional jobs (figure 2). Figure 2 explains that there is as many as 72 percent of respondents who adopt frugal behaviour have a single income so they rely on the main income from their main job. Meanwhile, there is 28 percent of respondents adhere to frugal behaviour and have double income so their income is not only from one door from their main job.

4.2 What is the potential for the concept of frugality to evolve in Indonesian society during times of crisis (pandemic and economic crises)?

The findings of the analysis of questionnaires and interviews revealed the potential for the development of frugal behaviour in Indonesian society. The findings showed that the respondents and informants in this study had not fully adopted frugal behaviour as a lifestyle in their economic behavior. This finding revealed the potential for the development of frugal behavior in Indonesian society. It turns out that the results of content analysis show that their level of knowledge of frugal behavior is still very limited, and some of them are new to the term frugal behavior during ongoing interviews, filling out questionnaires, and have known the term frugal behavior for less than two years. Although they claim to adopt frugal behaviour, it turns out that the results of content analysis show that their level of knowledge of frugal behavior is still very limited and actions that are friendly to the environment. Despite this, there are some responders who have been aware of the term "frugal behavior" for more than two years. They have also studied this behavior, and as a result, they have made attempts to incorporate it into their day-to-day actions. According to the findings of the field study, the vast majority of respondents who filled out online questionnaires and spoke with interviews revealed that they had never heard of the term "frugal behavior" and did not comprehend the distinction between frugal behaviour and frugal conduct.

The vast majority of people who assert that they have adopted frugal behavior are actually still in the thrifty behavior stage. This is because their comprehension and knowledge of conventional financial management are acquired from their parents' upbringing to behave frugally by attempting to set aside some of their income in order to be able to save, and not to act extravagantly by reducing their consumption of goods and services. This knowledge base and habituation has the potential to be extended and improved upon for productive behavior by searching for information that is broader in scope and more specific in nature regarding contemporary financial management. Every person
should educate themselves on the fundamentals of financial management, particularly the ideas of creating a budget, maintaining an accurate record of one's financial transactions, and establishing financial objectives.

4.3 What is the relationship between frugal behavior and shaping pro-environmental behavior and well-being?

With the help of SEM analysis techniques based on the output of SmartPLS 3, we are able to differentiate between frugal behaviors, pro-environment, and well-being behaviors based on the findings of the analysis of the data processing of the questionnaires. The data analysis for this study made use of a measurement known as the Structural Equation Model (SEM). This measurement combines factor analysis and structural models in order to see the link between constructs and it estimates both of those things at the same time. According to the findings, 191 persons who responded to the study, embraced a frugal way of living. An indicator is considered to be valid after being put through the validity test if it has a loading factor on the constructed value that is greater than 0.70. In the SmartPLS Output (Table 1), it is possible to see that the values of the outer loading indicators X1 (keeping the money), X2 (goal setting), and X3 (budgeting) are all above 0.7, which indicates that all these indicators are valid in explaining fruitful behavior variables. Additionally, it is possible to see that the values of the inner loading indicators X1 (keeping the money), X2 (goal setting), and X3 (budgeting) are below 0.7. It is possible to draw the conclusion that the Y1 indicator (conservation lifestyle) with a score of 0.827, the Y2 indicator (social environment) with a score of 0.840, and the Y3 indicator (environment citizenship) with a score of 0.859 are all valid in terms of their ability to explain the variables that favor the environment. The well-being variable, on the other hand, can only be explained by the Z3 (personal growth) indicator when it has a value of 1.000, which indicates that the indicator is legitimate.

Table 1. Outer Loading Value for Respondents Who Engage in Frugal Behavior

<table>
<thead>
<tr>
<th>Outer Loading</th>
<th>Frugal Behavior</th>
<th>Pro-Environment</th>
<th>Well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.871</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>0.842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3</td>
<td>0.820</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y1</td>
<td>0.827</td>
<td>0.840</td>
<td>0.859</td>
</tr>
<tr>
<td>Z3</td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

The average variance extracted (AVE), which can be found in Table 2, can also be used to evaluate the convergent validity of the data. It is necessary for the value of the AVE to be more than 0.5 in order for it to satisfy the standards of convergent validity and reliability. Its convergent and dependable validity can be explained by the fact that the AVE value for each frugal behavior variable is 0.731, the value for the pro-environment variable is 0.748, and the value for well-being is 1.000. In order to proceed with the reliability test, it is necessary to have a look at the composite reliability value that quantifies the build variable. If the results of the composite reliability test are more than 0.7, this indicates that the test was successful. The same thing was demonstrated by Cronbach's alpha and rho_A with values above 0.7 for each variable, a value of 0.816 and 0.820 for the Frugal Behavior variable, and Cronbach's alpha and rho_A values of 0.833 and 0.843 for the Pro-Environment variable; consequently, it is possible to draw the conclusion that the construct has high reliability or reliability as a measuring tool. After this, the construct validity and reliability of the measuring instrument for each frugal behavior variable, pro-environment behavior variable, and well-being variable will have satisfied the standards, and the data will be allowed to be utilized for additional analysis.

Table 2. Values for the constructs' reliabilities and validities

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frugal Behavior</td>
<td>0.816</td>
<td>0.820</td>
<td>0.891</td>
<td>0.731</td>
</tr>
<tr>
<td>Pro-Environment</td>
<td>0.833</td>
<td>0.843</td>
<td>0.899</td>
<td>0.748</td>
</tr>
<tr>
<td>Wellbeing</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>
It is possible to explain, based on figure 3, the influence of the frugal behavior variable on pro-environmental behavior, which is 0.537, as well as the effect of the frugal behavior variable on the wellbeing variable, which is 0.282. On the other hand, the model diagram explains that the pro-environment variable may be explained by the frugal behavior variable to the extent of 0.288, which is 28.8 percent of the total. The frugal behavior variable and the environmentally conscious variable together can account for 0.268, or 26.8 percent, of the variance in the welfare variable.

![Figure 3. Partial Least Square (PLS) Output Diagram for SEM Fit Models Adopting Frugal Behavior](image)

Using a significance level of $\alpha = 5\%$ and the following test criteria: $H_0$ is rejected if $|T\text{ statistics}| > 1.96$ or $p\text{-value} > 0.05$, the test for each path between latent variables can be observed in Figure X. This figure also includes the significance level of the test.

![Figure 4. The partial least square (PLS) statistical test](image)
There is a very significant correlation between the adoption of frugal behaviors and pro-environmental behaviors on the well-being of persons who embrace frugal behaviors. The fit model between the two behaviors can be thought of as a fit model. Figure X of the fit model explains that frugal behavior has an influence on an individual's behavior as a consumer to be aware of green consumption and willing to spend more effort to be aware of protecting the environment as part of maximizing the resources they have. This awareness and willingness to spend more effort come as a result of the influence of frugal behavior. This provides further evidence that empirically based on statistical calculations, there is a positive relationship between adherents of frugal behavior and adherents of pro-environmental behavior. As a result, it leads to conscious consumer behavior that includes being thrifty as well as being willing to make more efforts to preserve the environment.

According to Table 3, the above regression coefficients between the three variables that the independent variable is frugality, the mediator variable is pro-environmental behavior, and the dependent variable is happiness, the p-value between variables may be explained explicitly. It is known that there is a highly substantial (p-value of 0.0001) correlation between frugality and environmental consciousness. In addition, there is a large direct link between pro-environmental action and happiness. According to the results of the regression analysis, there is a very substantial direct association between frugal conduct and the well-being of persons who embrace frugal behavior, with a p-value between 0.003 and 0.01. Table 3. P-values for the variable PLS Frugal behavior, pro-environment, and well-being models According to the results of the model analysis, there is a very significant association between frugal behavior, pro-environmental, and well-being behavior with a p-value between 0.000 and 0.01. This indicates that persons who practice frugality influence their behavior to care for the environment, allowing them to have happiness in their life. The aforementioned model can solve this research question. There is statistical evidence of a direct and indirect association between frugal conduct and pro-environmental behavior and the well-being of frugal individuals. This approach highlights that individuals who have information and adopt frugality as a way of life will influence their behavior to be more environmentally conscious and will improve their own well-being.

4.4 What are the motives that become the basis for people to adopt frugal living behaviors?

In this study, the reasons why people took part as informants were very different depending on what they knew and where they came from. Based on what several informants said about how much they knew about frugal behavior and how they felt about people who said they were adopting it, it can be said that most of their behavior is still based on the idea of frugal behavior. Gatersleben et al. (2017, 2014) and Muinos et al. (2015) said that the reasons people do things can be very specific. The way people think about money management can be changed by giving them new information and principles that they think will meet their needs. How they see their income and spending changes how they feel about money and investments. People get the motivation to be frugal from the way they were raised and the habits they've formed over time. The results of this study showed that, in general, the people who said they were frugal also said that their frugal habits were strongly influenced by their upbringing and the fact that they saved money from a young age.

On the other hand, they don't have a lot of knowledge and skills when it comes to managing their own money, so they still use traditional methods like budgeting, keeping track of money, and saving money. They also focus on short-term goals, and some don't even have a clear goal of just saving. Gatersleben et al. (2017, 2014) said that interventions that touch on moral issues can have a big impact on getting people to act more environmentally friendly. This is because it will change their knowledge and awareness of how important it is to be sensitive to protecting the environment around them. So, there needs to be more information and two-way communication about how important it is for people to be aware of how important it is to protect the environment.
The results of this study are similar to those of Gaterslaben et al. (2017), who found that people do the same things but have different reasons for doing them based on how consistent their identities as consumers are. The results of this study show that people's reasons for being frugal are very different, depending on why they want to change and act in a way that is consistent with good money management.

It is known that most of the people who tell us they try to save money have tried to do things that are more helpful and keep the environment healthy. Even though it's still in their own internal environment, the fact that behavior makes them money makes them more aware of the environment and more likely to protect it. This is shown by the way they take care of and use the things they own, like the products they own, and try to use them as well as they can so they can get more economic benefits for themselves.

In fact, some of the people who gave information have made money by directly taking part in waste bank activities, either in person or through apps, by exchanging recyclable inorganic waste. They have gotten something out of it, and they see it as a chance for their business. When that trash is handled well, it still has a lot of economic value, and if you have the right skills, you can make money from it. Some of the people who gave information have learned that the way they handle trash can lead to business opportunities and storage spaces for trash that can be used to make money. But because of its limitations, it is still just an idea and hasn't gotten to the point where it can be used to run this business. At the same time, not everyone who says they are frugal can show business opportunities that come from being frugal. This is because most of them still only know how to be frugal, so their behavior is still changing as they learn new things and change how they think about and use things.

4.5. Additional Discussion

The "pro-environment" variable is affected in a positive and significant way by the "frugal behavior" variable. Evans (2011) says that frugal people tend to care about the environment and buy things that are good for the environment, so they are willing to pay higher prices. The definition of environmental awareness is "how much a person cares about taking care of the environment" (Lin and Chang, 2012). On the other hand, frugal consumers try to get the most out of their products by thinking about the environment. Previous research defined frugality as related consumption and found a positive link between frugality, buying used goods, buying in an environmentally friendly way, and recycling (Evans, 2011). Well-being is affected in a positive and significant way by behavior. Cost-effective consumption often leads to satisfaction and motivation that come from within.

As a sustainable way of life, frugality predicts a state of satisfaction that not only leads to psychological well-being (Brown and Kasser, 2005), but also to satisfaction and intrinsic motivation that makes it easier to keep up with consumption (Iwata, 2001). The effect of the pro-environment variable on the well-being variable is positive and significant. People who do things that are good for the environment often see themselves as happier and wealthier than those who don't (Bechtel & Corral-Verdugo 2010). Pro-environment and thrifty actions lead to personal happiness or satisfaction (Iwata, 2001). As de Groot and Steg (2009) found in their research on the intrinsic and extrinsic motivations of pro-environmental actors, there are differences between people who are more concerned with self-improvement motives (egoism and hedonism) and those who are more concerned with self-motivations that go beyond themselves (altruism and biosphere). Self-transcendent values are linked to moral norms, which are strong predictors of behavior that is good for the environment (Stern 2000).

The argument is that actions that are good for the environment are bad for the individual but good for the group, the environment, and future generations. So, it's unlikely that this kind of behavior is driven by egoistic or self-improvement goals. Instead, it's most likely driven by self-transcendent values like biosphere and altruism (de Groot & Steg, 2009). There is strong evidence that people with transcendent self-values care more about the environment and act in a more environmentally friendly way (de Groot & Steg, 2008; Nordlund & Garvill, 2002; Perlaviciute & Steg, 2015; Schultz, 2001), while self-improvement is linked to worry, less environmentally friendly behavior, and more materialism (Hurst, Dittmar, Bond, & Kasser, 2013). So, it is said that moral appeals (which support self-transcendent values) should be used to get people to act in ways that are good for the environment, not financial ones that support self-improvement values; (Crompton & Kasser, 2009). In fact, it has been shown that moral appeals work better than financial ones to get people to do some things that are good for the environment (Bolderdijk, Steg, Geller, Lehman, & Postmes, 2013).

5. Conclusion

In this study, it can be said that there is a very strong link between being frugal and pro-environment. This link makes people who are frugal feel better about themselves. The fit model test, which is said to be very important, shows that
this is true. It has been shown through research that people who are frugal are more likely to act in ways that are good for the environment and their own well-being. Behaving in a way that is good for the environment also helps people feel better about themselves. People still don't know much about saving money and being good to the environment. Because of this, not everyone is interested in or willing to get more information. This is because people don't know about the good things they can do to help themselves and the world around them. It also says that not many people in the community know how to manage money well or have the skills to do so.

The results of this study show that only a small number of people act in a frugal way, and those people do so because they want to, not because they have been taught to do so. This is different from other respondents who say they are frugal, but in reality, their understanding, knowledge, and behavior about how they spend their money are still typical of people who are frugal. Due to low financial literacy, it's safe to say that the community still doesn't have enough knowledge, understanding, and skills to handle money well. Even so, the community already has a basic foundation for frugal behavior. This needs to be improved and built upon with more information about how to manage money well so that it can become a chance for frugal behavior to develop. This could lead to more people being frugal, which could have an effect on people's behavior toward the environment and help them feel better, especially in hard times like an economic crisis. It is hoped that the community will be better prepared and able to make the most of its resources when dealing with hard times.

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Biographies

Mia Rahma Romadona is a young researcher in the Research Center for Economic Industry, Services, and Trade, the National Research and Innovation Agency (BRIN) of the Republic of Indonesia. She is a researcher in the field of technological innovation management and is interested in parts of social science and behavioral science due to her background as a master in industrial and organizational psychology. She has a record of study and publications pertinent to her area of expertise.

Suryadi is a researcher in the field of socio-economics and employment. Previously worked at the Indonesian Central Bureau of Statistics from 1994 - 2015. Then moved to the Ministry of Manpower from 2016 - 2021. In 2022 he worked at the National Research and Innovation Agency (BRIN). While working at the Central Bureau of Statistics, his job was to calculate the rate of national economic growth in the industrial and service sectors. In addition, he was involved in compiling the national input-output tables for 2000 and 2010. During his time at the Ministry of Manpower, he researched youth entrepreneurship, skills utilization of older workers, Pre-Employment Cards, migrant workers in the formal sector. Sector, the effect of remittances from Indonesian migrant workers on the economy, work productivity and others. While at the Research and Innovation Agency, he worked in the fields of industrial economics, services and trade. Currently he has completed his doctoral education at the Faculty of Economics, University of Pancasila.

Sigit Setiawan has been a researcher from the National Research and Innovation Agency (BRIN) since 1996. He has been working in the field of knowledge management since 2001. His research so far covers the fields of knowledge management, technology management, innovation and behavior. He graduated with a master's degree in Human Resources and Knowledge management at the University of Indonesia (UI).

Asep Husni Yasin Rosadi is a Researcher of Industrial Policy at the Research Center for Economics Industry, Services and Trade, the Agency for National Research and Innovation (BRIN), Indonesia, since 2021. Previously he was a researcher at the Agency for the Assessment and Application of Technology (BPPT). He obtained his doctorate degree at the Department of Agro-Industrial Technology, IPB University. He has conducted various research in the
fields of industrial policy, technology policy and management, competitiveness, and strategic management for the sugar, palm oil, food, pulp and paper, automotive, electricity, and renewable energy industries.

**Fachrizal** is researcher work on the Research Center for Economic Industry, Services, and Trade from the National Research and Innovation Agency (BRIN). Before that, he was a researcher at the National Agency for Public Administration from 2015 to 2021. He obtained his master's degree at the University of Indonesia, majoring in economics. He has been involved in various research areas such as public policy, public administration, the economic industry, and impact evaluation methods.