Empowering Women through Financial Literacy and Financial Inclusion: Lesson Learned From Pandemic Impact

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ABSTRACT: This study examines the impact of financial literacy and financial inclusion on women's empowerment, since it is crucial for gender equality and sustainable development. This research method involves collecting primary data through questionnaires distributed to a sample of housewives who live in West Java. Secondary data is also used to support the analysis. Variables analyzed include women's financial literacy, planning, decision-making, crisis, financial inclusion, and women empowerment. Descriptive statistics and regression analysis were used to analyze the data. Findings will shed light on the role of financial literacy and inclusion in women's empowerment, aiding policy efforts to enhance access to financial services and increase women's economic participation.

KEYWORDS: financial literacy, financial planning, financial decision, financial crisis, financial inclusion, household finance, Women empowerment.

INTRODUCTION

Understanding family finances is crucial for adults as they navigate numerous personal financial responsibilities, including budgeting, credit card usage, savings, taxes, financial advice, and insurance. However, even highly educated individuals struggle to keep up with the evolving complexity of personal finance, leading to potential costly consequences when making financial decisions (Allgood & Walstad, 2016). Financial literacy plays a crucial role in enabling individuals to make wise financial decisions and achieve stability (Li, 2020; Margaretha & May Sari, 2015). According to Grohmann et al., (2018) and previous studies, financial literacy is crucial for achieving financial inclusion, as it influences savings behavior and usage of formal financial services (Adetunji & David-West, 2019; Morgan & Long, 2020). Higher levels of financial literacy are associated with increased participation in financial markets, formal borrowing, voluntary saving, financial diversification, and ownership of bank accounts and insurance policies (Klapper et al., 2013; Landerretche & Martinez, 2013; Morgan & Long, 2020). However, measuring financial literacy and determining financial inclusion present challenges due to varying definitions and assessment methods (Lusardi & Mitchell, 2014).

The focus on financial inclusion should extend beyond access to products, considering factors such as awareness, active product selection, and knowledge of formal financial services (OECD, 2016). Recognizing this, public policymakers and regulators have focused on promoting financial literacy to improve market efficiency and social welfare (Lusardi, 2019). Countries, including Indonesia, have implemented national financial literacy strategies as part of their efforts to enhance public financial literacy. The Financial Services Authority (OJK) in Indonesia is actively promoting financial literacy through outreach programs as outlined in the Indonesian National Financial Literacy and Inclusion Strategy (SNLKI) 2021-2025. The program was developed in response to the OECD's recommendations for national financial literacy programs, emphasizing collaboration, legislative support, program guidelines, goal prioritization, and evaluation. The SNLKI Roadmap 2021-2025 includes continuous financial strategy programs with annual and multiyear plans based on international best practices. The COVID-19 pandemic has accelerated digitalization in financial education, enabling more widespread and borderless implementation. Combining offline and online strategies, along with strengthening strategic partnerships, is a key approach to enhancing financial literacy and inclusion. These efforts have resulted in improved statistics for the National Survey of Financial Literacy and Inclusion concluded on 2022, with the financial literacy index at 49.68% and financial inclusion reaching 85.10% (Otoritas Jasa Keuangan (OJK) Indonesia, 2022).

The financial literacy and inclusion gap remains significant, with a limited understanding of financial services and products among many individuals. However, this development is still not evenly distributed among all province's considering Indonesia is an archipelago country. There are noticeable variations in financial literacy indices among provinces, with East Nusa Tenggara having...
the lowest level (27.82%) and DKI Jakarta the highest (59.16%) (Otoritas Jasa Keuangan (OJK) Indonesia, 2021). DKI Jakarta, as the capital city, should have the greatest level of financial literacy and inclusion, followed by the neighboring provinces on the island of Java, which identify this island as the business center of Indonesia. Nonetheless, the provinces within it also experience significant differences in terms of financial literacy and inclusion. In terms of financial literacy, West Java, the second biggest province on Java Island after East Java, has the lowest level of financial literacy (37.43%). This disparity is in the spotlight because in fact, West Java is directly adjacent to the city of DKI Jakarta which level of financial literacy is the highest in Indonesia. Alternatively, according to BPS data, West Java has a greater population than East Java but both regions have similar population figures exceeding 40 million people (Badan Pusat Statistik, 2021), shows that East Java has a higher level of financial literacy by 11.52% points than West Java (Otoritas Jasa Keuangan (OJK) Indonesia, 2021).

On the other hand, in terms of financial inclusion, West Java ranks second among the provinces on the island, indicating the availability of diverse financial services that cater to the needs of the West Javan community. Although financial inclusion may be high, inadequate financial literacy can lead to increased financial risks rather than serving as a solution for household financial management. Understanding income and its impact on savings is crucial, as household income influences the propensity to save. Additionally, assessing the Gross Regional Domestic Product (GRDP) growth provides insights into the economic well-being of a region, measuring the value created by economic units through the production of goods and services (Badan Pusat Statistik, 2021). The calculation of GRDP includes current prices GRDP and constant prices GRDP, with East Java having higher income levels than West Java in both measures. Income plays a vital role in determining consumption and savings, as individuals with higher income tend to save more. However, despite West Java having lower financial literacy compared to East Java, it exhibits higher financial inclusion levels. This disparity raises questions about the financial decisions made in West Java, considering its lower GRDP compared to East Java. Therefore, this research will take samples from residents of West Java.

Additionally, when examining financial literacy and inclusion by gender, men tend to have slightly higher levels of financial inclusion than women. In 2022, women (50.33%) in Indonesia surpassed men (49.05%) in terms of financial literacy, while men had higher levels of financial inclusion. The OJK has prioritized women, along with other target groups, for financial literacy and inclusion programs in 2023 (Otoritas Jasa Keuangan (OJK) Indonesia, 2022). However, gender disparities persist in various aspects, such as financial risk-taking, poverty rates, and workforce participation, highlighting the need for further efforts to achieve gender equality and empower women in economic and societal spheres. Empowering women is crucial for Indonesia's economic growth, with potential GDP gains of US$135 billion annually by 2025 if more women participate in economic activities. Nevertheless, it has been known that Indonesia has a strong patriarchal society and currently trying to close the gender gap.

The proportion of women in the official labor force is lower than the regional average, and there is a significant wage gap between men and women, particularly in the informal sector, indicating the need for policies and measures to promote gender equality in employment and address wage disparities (World Economic Forum, 2022). The current income tax provisions in Indonesia create hidden gender repercussions, with second earners, usually women, facing a disproportionately high tax burden. This discourages women from working and reinforces societal norms that view women as secondary income earners (The World Bank, 2019). Additionally, traditional gender roles and social norms prioritize women's responsibilities as wives, mothers, and caregivers, leading to lower participation in the workforce and vulnerability in times of financial crisis or natural disasters.

Due to this ingrained tradition, the majority of Indonesian women decide to take the easy route and devote themselves as a housewife. As a result, they are vulnerable because they only rely on their husband's income. In the worst-case scenario, when a natural disaster takes place that may cause a work termination and family financial crisis, women's abilities to manage family finances will be sorely tested. Natural disasters and shocks make it harder for people to invest in human capital and make a living (via health and education). Without sufficient social protections, people are compellled to use unsafe coping strategies that can hinder the quality of human capital and have negative long-term development effects, such as lowering nourishment, withdrawing children from school, child marriage, depleting savings and assets, and delaying medical requirements (World Bank & GFDRR, 2013). The fact that women invest less in the risky asset than do males makes it evident that they are more risk adverse financially. Owing to the fact that compared to men, women exhibit stronger loss aversion (Charness & Gneezy, 2012; Rau, 2014). This demonstrates how women earn less money, save less money, and live longer while still bearing some of the costs of living that men bear (CNBC, 2022).

The Covid-19 pandemic and other shocks have had a significant impact on women's economic empowerment, with women facing disruptions in healthcare, reduced access to reproductive health services, increased vulnerability in times of crisis, and challenges...
in accessing quality education. Women in Indonesia, like women worldwide, are more vulnerable to the negative impacts of shocks and natural disasters (Block et al., 2004). Past crises, such as the Asian Financial Crisis and earthquakes, have led to reduced household spending on health and education, affecting women's health and nutrition since they are more likely to put the needs of other family members before their own in the aftermath of shocks or disasters and when household income is tight. The Covid-19 pandemic has further disrupted crucial services for women, including reproductive health, leading to increased risks of unintended pregnancies and violence against women. Additionally, school closures during the pandemic have negatively impacted learning and skill development, especially among girls, exacerbating existing digital gender disparities in access to and use of technology (Organisation for Economic Co-operation and Development, 2022).

Women, particularly housewives, face various hindrances in developing their skills and financial autonomy. However, they play a crucial role within households and communities, as highlighted during the Covid-19 pandemic when they took on responsibilities as teachers and health officers. The pandemic has also brought attention to the importance of financial and digital literacy for women, especially housewives, who are often in charge of managing household budgets. Adequate financial literacy empowers women to make wise financial decisions, avoid economic difficulties, and create economic value. Investing in financial inclusion can further empower women to take control of their economic destinies and improve their overall well-being.

BUSINESS ISSUE

The research analysis of “Empowering Women Through Financial Literacy and Financial Inclusion” proposes to measure variables that may have influenced Women especially housewives on handling their financial decisions. Based on McKinsey.com, women's jobs are 1.8 times more vulnerable to the Covid-19 crisis than men's jobs worldwide. Global employment for Women is about 39% but 54% were accounted for overall job losses as of May 2020. The disproportionate representation of women in the industries that are anticipated to experience the greatest declines in 2020 as a result of COVID-19 is one of the reason (Krishnan et al., 2020). People's optimistic future expectations are likely to be reduced as a result of overall negative sentiment and the economic crisis caused by the pandemic (Chhatwani & Mishra, 2021). When researcher exaggerate financial fragility during the pandemic, only women express negative financial optimism (Chhatwani et al., 2022).

Empowering women through financial literacy and inclusion is crucial for achieving gender equality and promoting economic development. By addressing the limited access to financial education and services, government can tap into proper program according to the needs of each province, enhance women's financial independence, and contribute to their overall well-being. It also aligns with SNLKI 2021-2025 aims: social responsibility initiatives and supports sustainable and inclusive economic growth.

LITERATURE REVIEW

The process of giving women more power is known as women's empowerment. Education, awareness, literacy, and training help to elevate the status of women through empowerment. Women are empowered when they have the tools and freedom to draw an important decision about their lives (Barro, 1999). In the fields of development and economics, women's empowerment is a hotly debated issue. Women who are economically empowered can manage resources, assets, and incomes and reap the benefits. Additionally, it increases risk management skills and boosts wellbeing. They will have the capacity to make deliberate life decisions, which they previously did not have, is referenced. Women's empowerment has the potential to benefit the entire world, including nations, corporations, communities, and groups. The quantity and quality of human resources available for development are both increased (Mahbub, 2021).

Men have long been thought to be the ones in charge of financial planning and investing. Most women rely on their parents or husbands to manage their money. Despite the fact that the number of women who contribute to home finances has increased dramatically over the past decade, this is still the case. Moreover, women confront obstacles in terms of financial planning. It is necessary to resolve these obstacles so that they can live a financially independent life free of worry (Sharan, 2022). In order to have a family with a promising future, one has to have stable personal finances (Munohsamy, 2015). Poor financial decisionmaking can arise from low financial literacy (Jacob et al., 2000), which can hinder long-term goal achievement (Ergün, 2018). In addition, lacking financial literacy may result in unsecured personal loans (Wang et al., 2021), financial difficulty, and even bankruptcy (Bourova et al., 2018). The most popular financial services given by banks and other financial institutions are bank accounts, credit cards, ATM services, loans, and other types of credit. If the vast majority of people in a society have access to the various financial
products that are available, then that society can be considered financially inclusive. It assumed that increasing financial inclusion is important for achieving long-term economic growth (Fakher et al., 2021; Mani, 2016). Additionally, it is believed that responding to and overcoming global economic crises depend on financial inclusion (UNSGSA, 2021). Financial inclusion is thought to be important for reaching a number of social development goals, and it has benefits that go beyond the economy, like helping to reduce poverty (Inoue, 2019), women empowerment (Pal et al., 2022), financial stability (Ozili, 2018), human development (Sarma, 2008), and gender equality (Vong & Song, 2015). Considering these potential socioeconomic and environmental development ramifications, financial inclusion may play a crucial role in accomplishing the 2030 Sustainable Development Goals (SDG) agenda of the United Nations (UNSGSA, 2021). Women having access to loans is a mechanism that provides opportunities when starting businesses, which can enhance women's income, increase their quality of life, and promote the development of their families and communities. Furthermore, it promotes their empowerment, promotes their economic independence, boosts their self-esteem, and transforms them into agents of their own development (The World Bank, 2012).

**METHODOLOGY**

Commonly, two approaches are used for this research, quantitative approach, and qualitative approach to support the explanation. Quantitative methods generate numbers that can be classified, ranked, or predicted; quantitative analysis gathers information. Generally, quantitative statistics are derived by statistical analysis that makes it objective and rational (Denscombe, 2010). The quantitative approach was used to understand women’s knowledge towards financial literacy. The data were collected through survey questionnaire. Moreover, the questionnaires were conducted to determine the current condition of women awareness on financial literacy and inclusion. The questionnaire is divided into two main sections. The first portion gives information for the clustering method, which is used to categorize women according to their knowledge with financial literacy. In the meantime, the essential answers provided by the respondent in the second section of the survey are used as data for a prediction strategy to create a mathematical model using machine learning. The sampling is self-explanatory and a close-ended question. It entails the researcher selecting participants purely based on factors such as proximity to study sites, accessibility, the timing of survey administration, or willingness to participate. This research was conducted in the West Java, for almost three months (February to April) in 2023. Based on BPS, in 2023 there are 13,273,294 population of housewives in West Java Province, this research will be using Slovin calculation of 5% margin of error and 10% population proportion. The questionnaires that being distributed focused on this segmentation:

- Married Women and/or ever been married.
- Full time housewives and/or Entrepreneur.
- Based on and/or ID-Card was originated from West Java.

“Sample is a part of the number and characteristics of a particular population,” says Sugiyono (2009:81). Therefore, to determine the sample, this study uses the Slovin formula. The Slovin formula is the formula used to calculate the minimum sample size of a study that estimates proportions. Then Slovin formula notation is stated as follows:

\[ n = \frac{N}{1 + Ne^2} \]

Based on the formula, it can be drawn the number of samples that must be collected as much as:

\[ n = \frac{13,273,294}{1 + (13,273,294 \times 0.05^2)} \]

\[ n = 399.99 \]

Using the Slovin formula, the result for sample size came out as 399.99 samples. From overall questionnaires, the researcher will be using 400 samples in total who can represent 27 city and districts in West Java in 2023.

**FINDING AND ARGUMENTS**

This study's analysis method relies on multiple regression analysis approaches. Multiple regression analysis is used in this study because there are more than one independent variables. It looks at the factors that affect how the independent variables affect the dependent variable.
Because the variable is significantly influenced by the independent variable if the significance value is less than 0.05. On the contrary, if the significance value is greater than 0.05 then the dependent variable is not significantly influencing the independent variable (Ghozali, 2011:98).

As for financial crisis, it is evident that it has a negative impact on women empowerment based on the questions asked. This is because the level of significance that the financial literacy variable has is greater than 0.05. This result shows that the existence of a financial crisis has a bad impact on mental health and family finances also on women’s empowerment except for financial literacy (0.230), financial planning (0.277), financial decision (0.138), financial crisis (0.041), financial inclusion of awareness (0.083) and financial inclusion of preferences (0.226), because 0.277 > 0.230 > 0.226 > 0.138 > 0.083 and 0.041, financial planning is the variable that has the dominant influence on women empowerment. As for regression coefficient test (t test) measure how much the effect of one independent variable explains the effect of the dependent variable. The dependent variable is significantly influenced by the independent variable if the significance value is less than 0.05. On the contrary, if the significance value is greater than 0.05 then the dependent variable is not significantly influencing the dependent variable (Ghozali, 2011:98). Consider the following metric to gauge whether a hypothesis is accepted or rejected:

\[ H_0 : \text{If } t_{\text{count}} < t_{\text{table}}, \text{then there is no effect between independent variables on dependent variables partially.} \]

\[ H_a : \text{If } t_{\text{count}} > t_{\text{table}}, \text{then there is an intermediate effect between independent variables and dependent variables partially.} \]

Based on table 1, the t-test hypothesis can be obtained that all of the variables has the positive and significant impact towards financial literacy, financial decision, financial planning, financial crisis, financial inclusion, and financial literacy. The multiple linear regression equation can be obtained as follows:

\[ Y = -4.537 + 0.230X_1 + 0.277X_2 + 0.138X_3 + 0.041X_4 + 0.083X_5 + 0.226X_6 \]

Based on table 1, the multiple linear regression equation can be obtained as follows:

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<th>Table 1. Multiple Regression Test Results</th>
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The results showed the regression coefficient values of financial literacy (0.230), financial planning (0.277), financial decision (0.138), financial crisis (0.041), financial inclusion of awareness (0.083) and financial inclusion of preferences (0.226), because 0.277 > 0.230 > 0.226 > 0.138 > 0.083 and 0.041, financial planning is the variable that has the dominant influence on women empowerment. Women are more likely than men to spend their income on their children's food, education, and healthcare, which has powerful, advantageous, and quantifiable effects on society. Despite the crucial role that women play in facilitating development, women who live in developed countries are likely to suffer disproportionately during economic downturns. According to the UN Development Program, the majority of the world's poor are women. There is a critical need to assist developing countries in increasing economic opportunities for women because women are likely to suffer the most during the ongoing economic crisis (USAID, 2006).

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<th>Table 2. Regression Test Results – F test</th>
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a. Dependent Variable: Women.Empowerment

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Based on table 2 the results of the F statistical test show that the \( f_{\text{count}} \) value is 184.285 with a significance of 0.000. The regression model indicates that financial literacy and inclusion have an impact on women's empowerment because the significance threshold is less than 0.05. With the results described above, the variables of financial literacy, financial planning, financial decisions, financial crisis and financial inclusion have a simultaneous and significant effect on women's empowerment. This research shows that financial knowledge and financial inclusion have an important role in increasing women's empowerment.

Table 3. The results of the Coefficient of Determination R

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<th>Model</th>
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<th>R Square</th>
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<tr>
<td>1</td>
<td>.852</td>
<td>.727</td>
<td>2.507</td>
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b. Dependent Variable: Women.Empowerment

Based on table 3, the results of the summary model above this study have an Adjusted R Square value of 0.723 or 72.3%. This shows that the variable women empowerment can be explained by the variables of financial literacy, financial planning, financial decisions, financial crisis and financial inclusion at 72.3%. While the remaining 0.277 or 27.7% is influenced by other variables which is not examined in this study. Other variables outside the variables studied can be used as further research, for example financial access and financial training variables.

CONCLUSION

The study findings indicate that financial literacy alone does not have a significant impact on women's empowerment, possibly because housewives in West Java already possess sufficient basic knowledge of finance. In addition, financial literacy has an extra application dimension, particularly variables to support married women's financial literacy can also be measured by financial planning, financial decisions, financial crises, and financial inclusion. However, financial planning and financial choices positively affect women's empowerment. Financial planning plays a significant role in improving household financial well-being and future financial outcomes. Additionally, women's involvement in making financial decisions is increasing, although men still dominate long-term financial decisions. On the other hand, financial crises have a negative impact on women's empowerment, as they disproportionately affect women, particularly in terms of poverty and job loss. Financial inclusion, on the other hand, has a positive effect on women's empowerment, promoting economic growth, poverty reduction, and opportunities for women to start businesses and become economically independent. By increasing women's financial inclusion, they can actively participate in the economy and improve their lives and communities.

RECOMMENDATION

The findings of this study provide recommendations for different stakeholders. Academics should use this research as a reference for further studies on financial literacy and inclusion in women's empowerment, exploring additional variables and examining a wider scope. They can also play a role in encouraging financial literacy among rural housewives and assisting in financial management practices. The government needs to prioritize financial literacy and inclusion, especially in remote areas, by providing education, guidance, and regular training on financial products and services. Financial institutions should design products and services that cater to women's needs and preferences. NGOs and community-based organizations can collaborate to offer financial education programs and advocate for policies supporting women's economic empowerment. Bridging the digital divide and promoting digital literacy are essential, and collaboration among stakeholders is crucial for sustainable women's financial empowerment in West Java.

REFERENCES


