

MODELLING FINANCIAL WELL-BEING: A MULTINOMIAL LOGISTIC MODEL TO UNCOVER POLICY IMPLICATIONS AND EFFECTIVE COMMUNICATION FOR ENHANCING FINANCIAL LITERACY

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Abstract

Financial well-being (FWB) is generally described as a state of financial stability that enables individuals to feel secure and free from financial stress. A strong financial foundation allows people to meet their financial obligations while making decisions that enhance their quality of life. This study explores the impact of financial literacy and investment choices on FWB. By categorizing financial literacy into different levels of complexity, we found that basic financial knowledge does not significantly affect FWB, while moderate and advanced literacy levels help reduce financial insecurity. The data shows a clear pattern: as financial literacy improves, so does financial well-being. Additionally, most financial assets contribute positively to FWB, particularly savings deposits and cash savings. These findings suggest that financial education programs should be structured progressively, with a focus on achieving at least an intermediate level of literacy. Policy design and communication strategies for financial education should be tailored to specific behavioral traits and delivered through a progressively challenging curriculum.

Key words: data science models; investments; financial literacy; multinomial Logit

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1. Introduction

Following the Great Recession, the importance of financial well-being (FWB) surged as it became clear that households with higher financial literacy are more adept at making informed decisions, thereby enhancing their financial stability and achieving long-term economic prosperity. FWB is commonly defined as a state of financial health that allows individuals to feel content and free from financial anxiety (Joo & Grable, 2004). Achieving a solid financial standing means being able to satisfy financial obligations while making economic choices that support a fulfilling lifestyle (CFPB, 2015). Nevertheless, the sense of financial satisfaction is largely influenced by individuals' subjective assessments of their financial situation (Sorgente & Lanz, 2017). These personal evaluations can vary widely based on individual characteristics, leading to different levels of FWB even among those with similar income levels (Brüggen et al., 2017). Additionally, various models for evaluating FWB incorporate a mixture of components: objective metrics (such as income, debt-to-income ratio, retirement planning, and participation in the stock market), financial behaviors and attitudes (like managing debt), and subjective aspects (including perceptions of financial knowledge and future outlook).

The complex nature of financial well-being (FWB) arises from its various components, making it difficult to establish clear causal relationships between its determining factors. The growing body of research on FWB has focused on identifying its key determinants, with financial literacy emerging as a significant predictor (Lusardi & Mitchell, 2011; Behrman et al., 2012; Philippas & Avdoulas, 2019). Studies have consistently shown that individuals with lower financial literacy are more likely to make suboptimal economic decisions, particularly in areas such as equity investments, debt management, credit utilization, and retirement planning (Disney & Gathergood, 2013; Mottola, 2013; Lusardi & Mitchell, 2007). These poor decisions can lead to unfavorable financial outcomes and a decline in overall well-being.

Financial well-being (FWB) has not yet been explicitly connected to investment behaviors, such as asset preferences and individual traits. However, it is well-established that financial literacy influences investment choices: the level of financial knowledge shapes and influences certain investment preferences and behavioral tendencies. Research indicates that individuals with low financial literacy are less likely to engage in stock market participation (Kimball & Shumway, 2006; Van Rooij et al., 2011; Yoong, 2011). Another key factor linked to well-being is financial inclusion, which helps individuals better manage consumption during economic downturns by providing resilience against financial shocks (Ahmad et al., 2020; Jack & Suri, 2014).

Given the mixed evidence from developing economies, this study takes an individuallevel approach by focusing on Romania, which may serve as a relevant empirical case for other countries in Central and Eastern Europe with similar cultural and historical backgrounds. Responding to Sorgente et al.'s (2021) call for localized definitions of financial wellbeing (FWB), we aim to address the following research questions: (i) How does the level of financial literacy, based on varying degrees of difficulty, impact FWB?; and (ii) To what extent do different types of savings instruments affect FWB?

The rest of the paper is structured as follows. Section 2 presents the literature. Section 3 presents the data and the empirical strategy. Section 4 presents the results, while section 5 concludes.



2. Literature review

Households with a high degree of financial literacy tend to adopt behaviors and attitudes that contribute to financial well-being (FWB). Financial literacy influences both satisfaction and well-being through saving, investment, and consumption pathways. Pioneering studies by Lusardi and Mitchell (2007, 2011) demonstrated a positive relationship between financial literacy and retirement wealth accumulation, showing that higher financial literacy is strongly linked to FWB, even when accounting for other sociodemographic factors. Behrman et al. (2012) further found that financial literacy has a greater impact on wealth accumulation than formal schooling and education. Their findings suggest that education alone is insufficient to explain wealth accumulation. Instead, they argue that financial literacy significantly improves household net wealth over the long term by increasing the likelihood of contributing to pension systems.

While numerous studies have examined the link between financial literacy and retirement wealth, generally concluding that greater financial knowledge leads to higher income and well-being at a macroeconomic level, other research has shifted to a microeconomic perspective, focusing on both objective (factual) and subjective (perceived) financial literacy. For example, Xiao et al. (2013) explored the relationship between financial capability and financial satisfaction in the U.S., finding that subjective financial literacy significantly enhances FWB, while the impact of objective financial knowledge is less pronounced. Similarly, Chu et al. (2017) discovered that households with overconfidence in their financial literacy are more likely to hold only stocks in their portfolios, suggesting that overly optimistic perceptions of one's financial literacy may inflate perceived FWB.

In this context, psychological factors such as confidence may influence wealth accumulation through individual behaviors, but financial literacy still independently affects how people manage their finances, including spending, saving, and investing. Therefore, in our model, we consider subjective financial literacy—incorporating elements like overconfidence or optimism—as part of individual behavioral characteristics, which we assess in the following section. Our focus is on measuring objective literacy levels. Based on the complexity of financial products, we posit that FWB is linked to how effectively households utilize their financial knowledge. Specifically, varying levels of financial literacy (low, medium, and high) play a role in shaping well-being outcomes. Accordingly, we propose the following hypothesis:

H1: Increased financial literacy is positively correlated with higher levels of financial well-being (FWB).

To achieve better financial outcomes and enhance welfare, financial inclusion is essential for households. Both financial well-being (FWB) and inclusion are influenced by financial institutions, with the quality of financial products provided to consumers playing a key role. Vlaev and Elliott (2014) demonstrate how the design of financial products and processes can improve inclusion by giving consumers greater control over their finances. Furthermore, evidence suggests that financial inclusion helps households build resilience against negative economic shocks. Financially included individuals are more likely to receive support from their social networks or families during tough times (Jack & Suri, 2014). As a result, their household consumption tends to decline less during such periods (Ahmad et al., 2020; Jack & Suri, 2014). Based on this, we propose the following hypothesis:



H2: Financial exclusion is positively correlated with higher levels of financial insecurity.

Although prior research has connected the saving-investment channel to FWB, its direct link to household choices regarding different types of assets remains unexplored. Instead, asset preferences have often been examined in the context of financial literacy, which shapes specific asset preferences and decision-making criteria. For example, individuals with lower financial literacy tend to participate less in the stock market (Kimball & Shumway, 2006; Van Rooij et al., 2011; Yoong, 2011) and are more inclined to invest in mutual funds (Chu et al., 2017). While the relationship between financial literacy and asset choices is wellresearched, studies focusing on FWB and asset-related determinants are limited. Depending on the risk level of assets, individual portfolio choices may affect FWB differently. However, asset ownership generally contributes to financial stability; those who save or invest are likely to experience greater financial security due to higher income and are better positioned to withstand economic shocks. Based on this, we propose the following hypotheses:

H3: Holding financial assets is positively associated with higher levels of financial well-being (FWB).

3. Data description and empirical strategy

This study draws on original data from a national survey designed to investigate financial well-being (FWB) in relation to its key components: financial literacy and preferences for financial assets. The survey was carried out in Romania between October and November 2021, involving a sample of 1,391 adults aged 16 and older. A multistage stratified random sampling method was used to ensure the sample was representative of the Romanian population in terms of age, gender, and region. All interviews were conducted using the computer-assisted personal interview (CAPI) method.

Our objective is to assess financial well-being (FWB) by considering both objective and subjective determinants. To do this, we adapted ten survey items from the literature that capture these two dimensions. As discussed in the literature review, perceived FWB can depend on a range of factors, from material resources to emotional responses. Therefore, we constructed an index incorporating both objective and subjective elements of FWB. Five items focus on the respondent's objective financial situation (such as the ability to absorb a financial shock, income level, control over personal finances, and income security), while the other five items assess the respondent's subjective perception (including perceptions of income value, comfort and enjoyment, financial worries, and control over finances). These items were adapted from CFPB (2017). To derive the FWB index, we applied the Item Response Theory, following the methodology outlined by Nichols (2017). Additional details on variable definitions and measurements can be found in Appendix B, and Table 1 provides summary statistics for all variables.

The individual FWB index ranges from 16 to 91. We categorize this index into three levels of financial security: financial insecurity (index scores between 16 and 50), financial stability (index scores between 51 and 60), and financial security (index scores between 61 and 91), following the classification proposed by CFPB (2017). In Romania, the median FWB score is 51. The distribution of scores shows that approximately 50% of the population has a FWB index below 50, indicating significant financial insecurity and difficulty in meeting basic

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needs (see Figure 1). For 35% of the population, the financial situation is generally stable. At the top of the distribution, 15% of individuals experience a secure financial situation.



Figure 1. FWB Index in Romania: Distribution by Financial Security Levels

As previously noted, the inherent complexity of financial well-being (FWB) makes it difficult to establish direct causal relationships between its components. However, our methodological approach and choice of dependent variables enable us to identify specific individual correlations. Our first focus is on understanding how financial literacy influences FWB. We assess financial literacy by using eight items that measure numeracy skills as well as both basic and advanced financial literacy concepts. Building on Lee et al.'s (2020) findings that financial knowledge alone is insufficient for FWB, we enhance our analysis by calculating three distinct financial literacy indices: a basic financial literacy index, a 'Big Three' financial literacy index, and an advanced financial literacy index.

The basic index is based on five items covering fundamental numeracy skills and basic financial concepts such as interest rates, inflation, the value of money, and mortgage loans. The second index, the 'Big Three,' represents an intermediate level of financial literacy, using questions recognized internationally as a standard for measuring financial literacy (Lusardi & Mitchell, 2011). The advanced index includes three items that assess higher-level financial knowledge, focusing on risk diversification, investment performance, and financial instrument volatility. The basic and advanced literacy items were adapted from Lusardi and Mitchell (2017). To illustrate the relevance of these indices, data in Table 1 reveals that 12.7% of Romanians correctly answered all basic financial literacy questions, while only 6.2% were able to correctly answer all the advanced financial literacy questions.

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Table 1. Descriptive Statistics

	Mean	Std. Dev.	Min	Max
<u>FWB index</u>	66.45	12.95	20.80	118.30
Financial insecurity	0.65	0.65	0.00	1.30
Financial stability	0.45	0.62	0.00	1.30
Financial security	0.20	0.47	0.00	1.30
Independent variables				
Financial inclusion				
No current account	0.33	0.56	0.00	1.30
Number of investment in-	0.50	0.88	0.00	3.90
struments				
Financial literacy				
Basic financial literacy	2.70	1.60	0.00	6.50
index				
Low financial literacy	0.68	0.65	0.00	1.30
Medium financial literacy	0.31	0.56	0.00	1.30
High financial literacy	0.17	0.43	0.00	1.30
Medium financial literacy (B	ig 3 items – intei	mational sta	andard)	
Low financial literacy	0.51	0.63	0.00	1.30
Medium financial literacy	0.36	0.58	0.00	1.30
High financial literacy	0.11	0.36	0.00	1.30
Advanced financial literacy i	ndex			
Low financial literacy	0.41	0.60	0.00	1.30
Medium financial literacy	0.32	0.56	0.00	1.30
High financial literacy	0.08	0.31	0.00	1.30
Asset preferences				
Savings deposit	0.23	0.50	0.00	1.30
Stocks	0.04	0.21	0.00	1.30
Bonds	0.01	0.12	0.00	1.30
Real estate	0.07	0.30	0.00	1.30
Investment funds	0.04	0.22	0.00	1.30
Life insurance	0.08	0.32	0.00	1.30
Cryptocurrency	0.02	0.16	0.00	1.30
I saved and kept money at	0.34	0.57	0.00	1.30
home				

In addition to financial literacy indicators, we incorporate two variables to assess financial inclusion: one measuring the sophistication of saving behavior (the number of investment instruments each individual holds) and another capturing financial exclusion (whether individuals lack a current account). The first variable reflects the level of diversification and complexity in investment behavior (Beckmann, 2013), while the second serves as a useful indicator of financial vulnerability. According to the data, around 25% of respondents reported not having a current account (Table 1).

Next, we examine two aspects of investment behavior, focusing on asset preferences. The first set of variables captures individuals' preferred financial instruments for investments, such as savings deposits, stocks, bonds, investment funds, life insurance, and cryptocurrency. The data shows that 18% of respondents favor investing in savings deposits. Preferences for other financial instruments are relatively low, with life insurance chosen by 6.4%, real estate by 5.5%, investment funds by 3.1%, and stocks by 2.8%. Additionally, we include a variable that measures individuals' preference for holding savings in cash, revealing that 26% of respondents prefer to keep their savings in cash.



4. Empirical strategy

To illustrate the impact of financial literacy and investment behavior on financial well-being (FWB), we apply a multinomial logit model. The dependent variables are divided into three categories based on the index developed to assess varying levels of FWB: (1) financial insecurity, (2) financial stability, and (3) financial security. The dependent variable representing FWB for respondent *i* is structured as follows:

$$FWB_{i} = \begin{cases} 1 & financial insecurity \\ 2 & financial stability \\ 3 & financial security \end{cases}$$
(1)

It is important to note that each respondent can only be classified into one category, and these categories are unordered. The probability of falling into one of the three categories is modeled using a multinomial logistic function, which is a function X of individuals' sociodemographic characteristics, financial literacy, and investment behavior:

$$P(T_i \in \{1,2,3\}) = X(SD_iFI_iFL_iIB_iBT_i)$$
⁽²⁾

The probability P_i for category j = 2, 3 that an individual is member of T_i is:

$$P_j = P(T = j|X) = \exp(X'\beta_j) / \left[1 + \sum_{k=1}^j \exp(X'\beta_k) \right]$$
(3)

where β_j is a vector of coefficients related to category *j*. To set-up the model, the coefficients for the reference category β_1 are equal to zero. Therefore, the form of the equation is:

$$P_1 = P(T = 1|X) = 1/[1 + \sum_{k=1}^{j} \exp(X'\beta_k)]$$
(4)

Finally, the relative probability of being in category j relative to the reference group

is:

$$\ln[P_j / P_1] = X'\beta_j \tag{5}$$

In our specifications, we choose to define category 1 ("financial insecurity") as the reference category. However, to ease the interpretation of the results, we compute and report average marginal effects for our multinominal logit models. We also check our results by using alternate reference categories.

5. Results

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/ol. 18 10. 1-4 2023 This sub-section presents the results obtained through the multinominal logit model using three different sets of variables. The three models offer a good overview of how financial literacy levels affect well-being. An overview over Table 2 indicates that different levels



of financial literacy are significantly associated with FWB: higher levels of financial literacy increase the levels of financial security or decrease the levels of financial insecurity.

First, we notice that basic financial literacy does not have any significant effects on FWB, but only a medium level of financial literacy is efficient in reducing financial insecurity (Model 1). Moreover, as the level of financial literacy increases so does its positive effects on well-being. For instance, model 2 estimates show that only a medium level of financial literacy, measured through the international standard, reduces financial insecurity ($\beta_2 = -0.123$) or increases financial security ($\beta_2 = 0.079$). The magnitude of the coefficients also indicates a positive trend: the higher the level of literacy, the higher the effects on FWB. Second, the estimates for model 3 show that advanced financial literacy predominantly has positive effects on individuals who have a financially secure situation, for both medium and high levels ($\beta_2 = 0.067$ and $\beta_3 = 0.082$). Medium financial knowledge also reduces the financial insecurity ($\beta_2 = -0.116$). Surprisingly, the effect of high financial on financial insecurity is not significant. We explain this effect by relating advanced financial literacy to other individual characteristics, e.g., education, income, in order to be significant for FWB.

As we measure only objective financial literacy levels, our results suggest that financial literacy contributes to wealth accumulation and FWB through different mechanisms including pension systems, education, income (Behrman et al., 2012). Overall, the evidence supports targeted policy interventions in the design and implementation of financial literacy programs. It suggests that financial education programs should be constructed gradually, but to be efficient potential results need to be focused on achieving at least a medium level of financial literacy. Additionally, it is clear that how we measure financial literacy has an impact on how FWB is perceived or assessed. No consensus has been reached on how to measure financial literacy, but the evidence suggests the existence of a threshold: only above a certain level of financial knowledge, education programs could be effective in improving well-being. Depending on the educational program design and the measurements of literacy, curricula for individuals could be adapted to achieve the desired objectives.

Regarding financial exclusion, it is clear across all models that not having a bank account is positively associated with financial insecurity. This result indicates that financial exclusion hinders the ability of households to resist to negative shocks or to efficiently save and event resources. It suggests that consumption falls more for financially excluded households impacting the level of FWB (Ahmad et al., 2020; Jack and Suri, 2014). Furthermore, the degree of financial sophistication, measured through the number of investment instruments an individual has, is positively associated with financial security and stability and negatively associated with financial insecurity. Mixed with high level of financial literacy, the number of saving instruments greatly contribute to FWB, increasing stability and reducing insecurity: individuals who save and invest more tend to show higher levels of well-being. Next, we turn to discuss the effects of holding different financial assets for FWB as the degree of risk can be associated with financial stress and decreased well-being (Brzozowski & Spotton Visano, 2020).

Table 3 presents the effects of asset preferences and behavioral characteristics on FWB. We notice that not all financial assets have similar effects on FWB. Furthermore, in terms of their magnitude, various assets have different contributions to FWB.

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Variable	[/	level of FWB	<u> </u>
	Financial insocurity	Ecocial stability	Einancial socurity
	(1)	(2)	/2)
Model 1. Proisfingueigh literage	(1)	(2)	(3)
Model 1: Basic financial liferacy	0.07.4		
Low financial liferacy (β_1)	0.014	0.019	-0.034
	(0.041)	(0.047)	(0.036)
Medium financial literacy (β_2)	-0.049	0.056	-0.007
	(0.046)	(0.051)	(0.038)
High financial literacy (β_3)	-0.049	0.078	-0.029
	(0.053)	(0.057)	(0.041)
No current account (eta_4)	0.052*	-0.035	-0.017
	(0.030)	(0.035)	(0.028)
Number of investment instruments (β_5)	-0.108***	0.050**	0.058***
	(0.021)	(0.020)	(0.012)
Sociodemographic control variables	Yes	Yes	Yes
Log-L	-1,183	-1,183	-1,183
Pseudo R ²	0.152	0.152	0.152
N	1.391	1.391	1.391
Model 2: Medium financial literacy	.,	.,	.,
(Big 3 items – international stand-			
ard)			
Low financial literacy (β_{i})	-0 088***	0.052	0.036
Eow interference (p_1)	(0.031)	(0.035)	(0.029)
Medium financial literacy (β)	_0 123***	0.044	0.027
Mealon mancha meracy (p_2)	-0.123	(0.037)	(0.020)
High financial literacy (R)	0.033	0.007	0.027
Fight inductor merocy (p_3)	-0.210	(0.052)	(0.024)
No current account (R)	0.050**	0.033	0.017
No corrent account (p_4)	(0.037	-0.042	-0.017
Number of emission instruments (0)	(0.030)	(0.035)	(0.020)
Number of saving instruments (p_5)	-0.104	0.051	0.053
c :	(0.021)	(0.020)	(0.012)
Sociodemographic control variables	res	res	res
Log-L	-1,1/1	-1,1/1	-1,1/1
	0.161	0.161	0.161
<u>N</u>	1,391	1,391	1,391
Model 3: Advanced financial litera-			
су			
Low tinancial literacy (eta_1)	-0.032	0.024	0.008
	(0.029)	(0.032)	(0.025)
Medium financial literacy (eta_2)	-0.116***	0.048	0.067***
	(0.032)	(0.034)	(0.024)
High financial literacy (eta_3)	-0.075	-0.007	0.082**
	(0.058)	(0.058)	(0.033)
No current account (eta_4)	0.061**	-0.042	-0.019
	(0.030)	(0.035)	(0.028)
Number of saving instruments (β_5)	-0.107***	0.053***	0.054***
- • • • • • • • • • • • • • • • • • • •	(0.021)	(0.020)	(0.013)
Sociodemographic control variables	Yes	Yes	Yes
Log-L	-1,176	-1,176	-1,176
Pseudo R ²	0.157	0.157	0.157
Ν	1,391	1,391	1,391

Table 2. The effects of financial literacy and financial inclusion on financial well-being

Notes: Average marginal effects from multinomial logit regression with three FWB categories: (1) financial insecurity; (2) financial stability; and (3) financial security. Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01

Saving deposits, real estate investments, investment funds as well as cash savings follow a similar path in relation to FWB: these instruments decrease financial insecurity and increase the level of financial security. Concerning the reduction of financial insecurity, savings deposits seem to be the most effective instruments ($\beta_1 = -0.175$) followed by cash sav-

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ings ($\beta_8 = -0.162$). The high coefficient for cash savings can be explained if we have in mind that countries in Central and Eastern Europe have a certain preference for saving in cash due to negative banking experiences and weak tax enforcement (Stix, 2013). An interesting finding is related to the effects of cryptocurrencies on FWB: cryptocurrency investments have a statistically significant effect only on those who have universal financial security. The positive effect can be explained by other individual characteristics, e.g., financial literacy, income, which are more specific to people with financial security, but also by the cryptocurrency high returns in a period of low interest rates. Surprisingly, we do not find any statistical significance for the relationship between stocks, bonds, and life insurance on FWB (β_2 , β_3 , and β_6 coefficients). The result can be explained by the limited number of individuals who invested in these instruments¹ or/ and by individuals' reluctance to invest in such instruments.

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Variable	Level of FWB			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Financial insecurity	Financial stability	Financial security	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(1)	(2)	(3)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Savings deposit (β_1)	-0.175***	0.083**	0.091***	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.033)	(0.033)	(0.019)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Stocks (β_2)	0.017	-0.011	-0.006	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.080)	(0.078)	(0.046)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Bonds (β_3)	0.009	-0.088	0.079	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.167)	(0.165)	(0.075)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Real estate (β_4)	-0.156***	0.089	0.067**	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		(0.059)	(0.056)	(0.030)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Investment funds (β_5)	-0.156**	0.181***	-0.025	
$\begin{array}{c ccccc} \text{Life insurance } (\beta_6) & -0.017 & -0.001 & 0.017 \\ (0.053) & (0.052) & (0.030) \\ \text{Cryptocurrency } (\beta_7) & -0.217 & -0.001 & 0.217^{***} \\ (0.156) & (0.145) & (0.053) \\ \text{Cash savings } (\beta_8) & -0.162^{***} & 0.115^{***} & 0.047^{**} \\ (0.026) & (0.027) & (0.019) \\ \text{Sociodemographic control varia-} & \text{Yes} & \text{Yes} \\ \end{array}$		(0.075)	(0.070)	(0.047)	
$\begin{array}{cccc} (0.053) & (0.052) & (0.030) \\ \mbox{Cryptocurrency} (\beta_7) & -0.217 & -0.001 & 0.217^{***} \\ (0.156) & (0.145) & (0.053) \\ \mbox{Cash savings} (\beta_8) & -0.162^{***} & 0.115^{***} & 0.047^{**} \\ (0.026) & (0.027) & (0.019) \\ \mbox{Sociodemographic control varia-} & Yes & Yes \\ \mbox{Ves} & Yes & Yes \end{array}$	Life insurance (β_6)	-0.017	-0.001	0.017	
$\begin{array}{ccc} \text{Cryptocurrency} \ (\beta_7) & -0.217 & -0.001 & 0.217^{***} \\ (0.156) & (0.145) & (0.053) \\ \text{Cash savings} \ (\beta_8) & -0.162^{***} & 0.115^{***} & 0.047^{**} \\ (0.026) & (0.027) & (0.019) \\ \text{Sociodemographic control varia-} & \text{Yes} & \text{Yes} & \text{Yes} \end{array}$		(0.053)	(0.052)	(0.030)	
$\begin{array}{cccc} (0.156) & (0.145) & (0.053) \\ \text{Cash savings } (\beta_8) & -0.162^{***} & 0.115^{***} & 0.047^{**} \\ (0.026) & (0.027) & (0.019) \\ \text{Sociodemographic control varia-} & \text{Yes} & \text{Yes} & \text{Yes} \\ \end{array}$	Cryptocurrency (β_7)	-0.217	-0.001	0.217***	
Cash savings (β ₈) -0.162*** 0.115*** 0.047** (0.026) (0.027) (0.019) Sociodemographic control varia- Yes Yes Yes		(0.156)	(0.145)	(0.053)	
(0.026) (0.027) (0.019) Sociodemographic control varia- blos	Cash savings (β_8)	-0.162***	0.115***	0.047**	
Sociodemographic control varia- Yes Yes Yes Yes		(0.026)	(0.027)	(0.019)	
blos	Sociodemographic control varia-	Yes	Yes	Yes	
	bles				
Log-L -1,156 -1,156 -1,156	Log-L	-1,156	-1,156	-1,156	
Pseudo R ² 0.171 0.171 0.171	Pseudo R ²	0.171	0.171	0.171	
N 1,391 1,391 1,391	N	1,391	1,391	1,391	

	Table 3.	Asset	preferences	and	FWB
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Notes: Average marginal effects from multinomial logit regression with three FWB categories: (1) financial insecurity; (2) financial stability; and (3) financial security. Standard errors in parentheses. * *p* < 0.10, ** *p* < 0.05, *** *p* < 0.01

5. Conclusions

The literature on financial well-being (FWB) initially assumed that higher income directly leads to greater financial satisfaction, thereby improving overall well-being. However, recent research has revealed that the concept of FWB is more complex than previously thought. Building on these recent findings, our study provides empirical evidence on how various factors impact FWB. Rather than identifying the determinants of FWB, our methodological approach focuses on exploring the key factors shaping its conceptualization.

Our research reveals a strong connection between financial literacy and financial well-being (FWB), though notable variations arise when higher financial literacy levels influence FWB. Specifically, we observe that while basic financial literacy does not significantly

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improve FWB, moderate levels are sufficient to enhance financial stability and reduce insecurity. We aimed to explore how FWB evolves with varying degrees of financial literacy. The findings indicate that financial education programs should be tailored to different proficiency levels and structured progressively. Additionally, given that countries face distinct financial challenges, financial literacy initiatives and assessments must be customized to fit local contexts.

We examined how asset preferences impact financial well-being (FWB) and concluded that various forms of savings or investments, including cash savings, contribute to FWB. Limited research has explored the relationship between portfolio choice and FWB, primarily due to a scarcity of detailed microdata. Our findings indicate that not all financial assets have a significant effect on FWB, and the magnitude of their impact varies. Specifically, savings deposits, real estate investments, investment funds, and cash savings help reduce financial insecurity and enhance financial security, with the most pronounced effects seen in savings deposits and cash savings.

Although the conceptualization of financial well-being (FWB) has certain limitations, research consistently shows that financial literacy and understanding the risks associated with financial transactions are key contributors to overall well-being. As a result, developing economies have directed public and private investments into financial literacy programs. However, these efforts often overlook important country-specific characteristics and behavioral factors. Studies applying localized frameworks highlight the need for future policies to be tailored to specific contexts, focusing on enhancing well-being rather than merely increasing income levels.

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¹ For details see descriptive evidence.

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