

Financial Knowledge, Health Factors, and Social Support: Determinants of Household Savings Behaviour in the U.S.

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This study examines how financial knowledge, health factors, and social support influence household savings behaviour using data from the 2022 Survey of Consumer Finances. We employ binary logistic regression and interaction analysis to analyse two savings measures: general savings behaviour and precautionary savings motives. Our findings reveal that subjective financial knowledge significantly increases saving likelihood, while health factors such as smoking and long COVID negatively impact savings behaviour. A key contribution is demonstrating that social support significantly moderates the negative effects of health factors on savings behaviour, providing a crucial buffer during health-related financial challenges. The analysis also reveals significant demographic disparities, with Hispanic households and single female-headed households exhibiting lower savings rates. Notably, health challenges simultaneously constrain general saving capacity while heightening precautionary savings awareness, suggesting different pathways for savings behaviour. These findings extend the Life Cycle Hypothesis by integrating behavioural dimensions into household savings decisions and highlight the need for targeted interventions that address health inequalities while strengthening social support networks.

Keywords: household savings, financial knowledge, health factors, social support, life cycle hypothesis

1. Introduction

A central question in household finance research is how individuals allocate income between current consumption and savings for future needs (Browning & Lusardi, 1996). Despite its crucial role in financial security and retirement preparedness, many U.S. households continue to struggle with saving. Nearly half of those nearing retirement report insufficient savings (U.S. Federal Reserve, 2023), and recent data from the 2025 National Financial Capability Survey (NFCS) show that nearly 40% of middle-income households are financially fragile, unable to cover basic expenses or weather

unexpected shocks (FINRA, 2025). This erosion of financial stability underscores the need to better understand the behavioural and structural factors that shape household savings behaviour.

The Life Cycle Hypothesis (LCH) offers a foundational framework, positing that individuals smooth consumption over time based on expected lifetime income and longevity (Ando & Modigliani, 1963). However, actual household savings behaviour often diverges from this model's predictions. Subjective life expectancy and health perceptions—rather than actuarial longevity alone—appear to drive saving decisions (Bloom et al., 2006; Post & Hanewald, 2012). Poor health can also reduce future orientation and increase present bias, especially under uncertainty (Smith, 1999; Cronqvist & Siegel, 2013).

A growing literature suggests that financial knowledge plays a dual role: it enhances financial capability and indirectly shapes health behaviours. Financially literate individuals tend to exhibit lower time preference, stronger planning skills, and greater self-control—traits linked to both saving and healthy lifestyle choices (Meier & Sprenger, 2010; Lusardi & Mitchell, 2014; Lal et al., 2022). For example, higher financial knowledge is associated with a lower probability of smoking (Khan et al., 2021), more engagement in preventive care (Xu et al., 2020), and better long-term financial outcomes. These traits contribute to longer life expectancy, a link supported by growing longitudinal evidence. For instance, lower financial knowledge has been shown to directly and independently predict mortality risk in older adults, independent of socioeconomic status and health (Gladstone & Hundtofte, 2023; Stewart et al., 2020). Furthermore, the accumulation of wealth—a key outcome of financial capability—is one of the strongest socioeconomic predictors of survival, underscoring the importance of the wealth-based channel (Chetty et al., 2016; Gleit et al., 2022). These cognitive and behavioural traits not only promote healthier decisions but also contribute to long-term wealth accumulation—a known determinant of longevity through better access to healthcare, safer environments, and resilience to shocks (Chetty et al., 2016).

Social support networks buffer negative financial effects of poor health (Chen et al., 2024; Gertler & Gruber, 2002) by providing informal insurance—reducing perceived saving needs by 24% (Dhakhwa & Barbiarz, 2019), providing emotional support (Bhatia et al., 2023; Czaja et al., 2021) and partially smoothing consumption in health crises (Gertler & Gruber, 2002). While these findings confirm the mitigating role of social support, its effectiveness may vary depending on the severity of health conditions and the reliability of support networks (Chen et al., 2024; Dhakhwa & Barbiarz, 2019; Bhatia et al., 2023; Gertler & Gruber, 2002).

While the LCH provides a valuable foundation for understanding saving decisions, its original formulation does not account for individual-level cognitive and behavioural factors such as financial knowledge, subjective health assessments, or health-related

decision-making. Instead, it focuses on income, age, and actuarial life expectancy as objective drivers of consumption smoothing (Modigliani & Brumberg, 1954; Ando & Modigliani, 1963). As such, key variables that shape modern household saving—especially those involving health shocks, health perceptions, and financial capability—remain theoretically peripheral or absent in standard LCH models.

This study extends the LCH by incorporating behavioural and cognitive dimensions—specifically financial knowledge, subjective and objective health, and informal social support—to better reflect the complexity of household savings behaviour. Using data from the 2022 Survey of Consumer Finances (SCF), we investigate three research questions:

1. How do subjective and objective health factors affect savings behaviour?
2. Does financial knowledge moderate the relationship between health status and saving?
3. To what extent does social support moderate the relationship between health factors and household savings behaviour?

Our findings contribute to a more holistic understanding of household savings behaviour by highlighting the interactive roles of financial knowledge, health resilience, and social context.

2. Data and Methods

2.1. Data

The study used a dataset from the 2022 Survey of Consumer Finances (SCF), a triennial survey conducted by the Board of Governors of the Federal Reserve System. The SCF provides detailed and nationally representative data on the financial characteristics of U.S. households, including assets, liabilities, income and financial decision-making (Bhutta et al., 2020). While the SCF is conducted every three years, the 2022 wave was selected specifically because it contains unique post-pandemic variables—such as long COVID, health disruptions, and pandemic-era saving motivations—that are essential to the present study’s examination of the relationship between health factors, financial knowledge, and household savings behaviour. These features allow us to evaluate financial resilience in the context of systemic health uncertainty and capture behavioural responses not observable in pre-pandemic waves such as 2019 and earlier waves.

To measure household savings behaviour, we employed two complementary indicators: a general saving flow measure and a precautionary saving motive measure. First, following Kennickell (1995), we used the SCF question asking whether household spending was “less than,” “equal to,” or “more than” income in the previous year. Respondents who reported spending less than income were classified as savers,

capturing a behavioural proxy for net positive saving flow. This simple indicator, though not a measure of accumulated assets or net worth, has been widely used and validated in past studies as a robust estimate of household savings behaviour across income groups and demographic categories (Hogarth & Anguelov, 2003; Rha et al., 2006; Hanna & Lindamood, 2010; Yuh & Hanna, 2010).

Second, to better align with our theoretical interest in health-driven household savings behaviour, we constructed a precautionary savings variable. This binary measure captures whether households reported saving for emergencies, unemployment, or medical expenses—motivations that became especially salient during the COVID-19 pandemic. Following the approach of Fisher and Anong (2012), households were coded as having a precautionary savings motive if any of the SCF’s saving reason codes included unemployment reserves, illness/medical expenses, or emergencies. This secondary measure enables us to distinguish risk-buffering savings motives from other saving goals such as wealth preservation or lifestyle maintenance or future aspirations.

The SCF uses a complex dual-frame sampling system, combining an area-probability sample with a list sample that oversamples high-wealth households, thereby capturing the full distribution of U.S. household finances (Bhutta et al., 2023). To address missing data, the SCF provides five imputates generated through multiple imputation, allowing for population-level estimation and variance adjustment (Aizcorbe et al., 2003). The 2022 SCF dataset includes 4,595 households, when appropriately weighted, is representative of 133.6 million U.S. households.

2.2. Variable Definitions

Dependent Variable. Two dependent variables were used to capture different aspects of household savings behaviour. First, a binary indicator of net savings behaviour was created based on responses to whether household spending was less than income (1 = saver, 0 = non-saver). This flow-based indicator captures behavioural intent to consume less than earned income over the past year. Second, precautionary saving was operationalised as a binary variable indicating whether the household cited emergency, health, or unemployment-related motives for saving—allowing us to assess targeted financial preparation in response to health risk and uncertainty.

Independent Variables. Table 1 provides detailed definitions, measurement specifications, and SCF variable codes for all variables used in our analysis.

Table 1: Variable Definitions and Measurement

Variable	Definition	Measurement	SCF Variable Code
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Dependent Variables

Saver	Whether household spent less than income in the past year	Binary (1=Yes, 0=No)	X7510
Precautionary Saving Motive	Whether household reported saving for emergencies, unemployment, or medical expenses as primary motivations	Binary (1=Has precautionary motive, 0=No precautionary motive). Coded as 1 if any of the six saving motive variables contained codes 23 (unemployment reserves), 24 (illness/medical expenses), or 25 (emergencies/rainy days/security)	X3006, X3007, X7513, X7514, X7515, X6848

Independent Variables

Expected longevity	Respondent's self-reported expected age at death	Continuous (years)	X7381
Objective financial knowledge	"Big Three" financial knowledge questions	Composite score (0-3)	X7558, X7559, X7560
Subjective financial knowledge	Self-assessment of financial knowledge	Categorical based on 0-10 scale: Low (0-3), Medium (4-6), High (7-10)	X7556
Health status	Self-reported health condition	Categorical (Excellent/Good/Fair/Poor)	X6030
Smoker	Current smoking status	Binary (1=Yes, 0=No)	X7380
Health insurance	Whether household has health insurance coverage	Binary (1=Yes, 0=No)	X6341
Parental mortality	Whether respondent's parent(s) are still alive	Binary (1=Yes, 0=No)	X6026, X6028
COVID diagnosis	Whether respondent was diagnosed with COVID-19	Binary (1=Yes, 0=No)	X19046
Long COVID	Whether respondent experienced long COVID symptoms	Binary (1=Yes, 0=No)	X19048
Social support	Whether household could get \$3,000 from friends/family in emergency	Binary (1=Yes, 0=No)	X6443
Sociodemographic Variables			
Gender/Marital status	Household structure	Categorical (Married/Partner/Single Female/Single Male)	X8021, X8023

Race	Racial/ethnic background	Categorical (White/Black/Hispanic/Asian Other)	X6809
Education	Highest level of education completed	Categorical (No HS/HS/Some College/College/Graduate)	X5931
Age	Respondent's age in years	Continuous	X14
Income	Annual household income	Continuous (log-transformed)	X5729
IHS net worth	Inverse hyperbolic sine transformation of household net worth	Continuous (IHS transformed)	Networth
Home ownership	Whether household owns primary residence	Binary (1=Yes, 0=No)	X508
Number of children	Number of children in household	Categorical (0/1-3/4+)	X6903
Employment status	Current employment situation	Categorical (Employed/Retired/Unemployed/Disabled)	X4511
Income expectations	Expected change in income relative to inflation	Categorical (Higher/Same/Lower)	X7364

Source: 2022 Survey of Consumer Finances

2.3. Descriptive Statistics

Table 2 presents descriptive statistics for the sample. As shown, 62% of households (weighted) reported saving (spending less than income) vs. 38% of non-savers, while 40% had precautionary savings motives vs 60% without. Married households comprised 46% of respondents, with single females representing 26% and single males 18%. Race distribution showed White respondents made up 68% of the sample, Black respondents 15%, Hispanic respondents 12%, and Asian/Other respondents 5%. Educational attainment varied, with 22% having a bachelor's degree and 17% having graduate degrees. Notably, 65% of respondents were homeowners, and 17% were smokers. Regarding subjective financial knowledge, 74% reported high knowledge levels, 21% medium, and 5% low levels.

Table 2: Sample Characteristics (N=4,595)

Variable	Weighted %
Saver	
Yes	62
No	38
Precautionary Saver	
Yes	40
No	60

Yes	40
No	60
Gender/Marital Status	
Married	46
With partner	10
Single Female	26
Single Male	18
Race	
White	68
Black	15
Hispanic	12
Asian/Other	5
Employment	
Employed	65
Unemployed	23
Retired	5
Disabled	7
Education	
Less than High school	9
High School	22
Some College	30
Bachelor's	22
Graduate	17
Home Ownership	65
Number of Kids	
0	61
1-3	36
4 or more	3
Health Factors	
Respondent is a smoker	17
Have Health Insurance coverage	86
Respondent's parent(s) still alive	62
COVID diagnosed	42
Long COVID	15
Respondent's health status	
Excellent	24
Good	50
Fair	22
Poor	4
Subjective Financial Knowledge	
Low	5
Medium	21
High	74
Emergency Social Support	66

Source: 2022 Survey of Consumer Finances

Table 3 shows the distribution of continuous variables in the sample. The mean age of respondents was 51.3 years (weighted). The mean expected longevity was 85.1 years. Mean household income was \$106,251, and mean net worth was \$746,821.

Table 3: Descriptive Statistics for Continuous Variables (N=4,595)

Variable	Mean	Median	SD
Respondent's Age	51.3	51	17.4
Expected longevity	85.1	85	11.32
Income	\$106,251	\$59,050	\$58,986
Net worth	\$746,821	\$121,760	\$612,721
Objective financial knowledge (0-3)	2.1	2	0.8

Source: 2022 Survey of Consumer Finances

2.4. Conceptual and Empirical Framework

Conceptual Framework. Figure 1 presents a behavioural extension of the Life Cycle Hypothesis (LCH), integrating financial knowledge, health factors, and social support into saving models traditionally centred on income, age, and actuarial life expectancy (Modigliani & Brumberg, 1954). These behavioural inputs help explain systematic deviations from rational saving predicted by standard models.

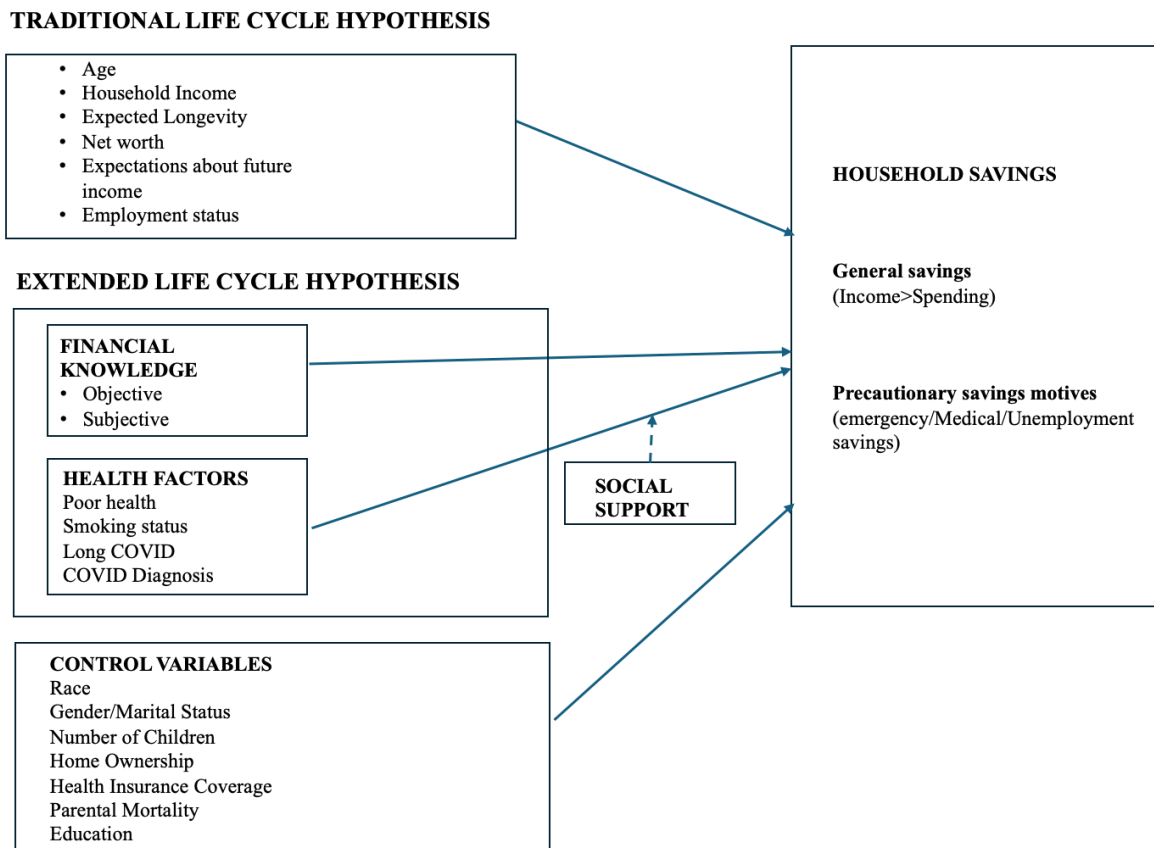
Health perceptions and vulnerability shape savings decisions more than objective measures alone (Hamermesh, 1985; Hurd & McGarry, 1995). Financial knowledge contributes to these perceptions and their behavioural consequences through improved self-regulation, long-term planning, and future-oriented behaviours (Meier & Sprenger, 2010; Lusardi & Mitchell, 2014). Empirical studies confirm that higher financial knowledge is linked to lower smoking prevalence (Khan et al., 2021), greater engagement in preventive health actions (Xu et al., 2020), and improved executive function (Baumeister & Heatherton, 1996). These cognitive traits—especially self-control and delayed discounting—bridge financial and health domains. Smokers tend to exhibit higher discount rates and lower cognitive performance (Bickel et al., 1999; Adams et al., 2014), traits inversely associated with financial knowledge. These behaviours cumulatively influence wealth accumulation and health trajectories, affecting both perceived and actual life expectancy (Chetty et al., 2016).

Social support provides a crucial but underexplored buffer against health-related financial challenges. Social networks serve as informal safety nets, providing resources during crises and reducing financial stress (Cox & Fafchamps, 2008). They buffer the adverse effects of poor health on household savings behaviour by alleviating emotional and economic burdens (Mani et al., 2013). Our framework posits that social support moderates the relationship between health factors and household savings behaviour,

representing a key theoretical contribution.

By jointly examining these behavioural mechanisms, this study offers a more complete account of household savings behaviour than classical LCH formulations allow.

Figure 1: Conceptual Framework of the Extended Model



Empirical Specifications. A binary logistic regression model was employed to analyse the probability of a household savings (spending less than income) versus not saving (spending equal to or more than income). The model can be expressed as:

$$\log[P(Y=1)/P(Y=0)] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \epsilon$$

Where:

- $P(Y=1)$ is the probability of saving (spending less than income)
- $P(Y=0)$ is the probability of not saving (spending equal to or more than income)
- β_0 is the intercept
- $\beta_1 \dots \beta_k$ are the regression coefficients
- $X_1 \dots X_k$ are the independent variables

- ϵ is the error term

The odds ratio (OR) for each independent variable was calculated as: $OR = \exp(\beta)$

Where a value greater than 1 indicates that the variable increases the odds of saving, and a value less than 1 indicates that the variable decreases the odds of saving.

2.5. Measurement of Key Variables

Financial Knowledge Measurement. Financial knowledge was assessed using both objective and subjective indicators drawn from the SCF. Objective financial knowledge was measured using the Big Three financial knowledge questions, which assess understanding of (1) compound interest, (2) inflation and real returns, and (3) risk diversification. These questions were first developed for the 2004 Health and Retirement Study (HRS) and have since become widely adopted in large-scale surveys such as the National Financial Capability Study (NFCS), the Survey of Household Economics and Decision making (SHED), and the Survey of Consumer Finances (SCF). Specifically, respondents were asked:

1. *Interest rate:* “Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?”
2. *Inflation question:* “Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?”
3. *Risk diversification:* “Do you think that the following statement is true or false?”
‘Buying a single company stock usually provides a safer return than a stock mutual fund.’

Each response was coded as correct or incorrect and summed, resulting in a composite score ranging from 0 to 3. This three-item scale has been used in numerous peer-reviewed studies to capture essential financial decision-making competencies (Hastings et al., 2013; Lusardi & Mitchell, 2014). However, its brevity may constrain its construct validity as noted by Gignac and Ooi (2022) due to the number of questions. This limitation reflects the constraints of the SCF instrument rather than study design. Nonetheless, the Big Three are considered a validated minimal benchmark for international financial knowledge assessment and remain suitable for national comparisons (Anderson et al., 2017; Behrman et al., 2012; Goyal & Kumar, 2021; Hastings et al., 2013; Lusardi & Mitchell, 2011; 2014).

Subjective financial knowledge was measured using a self-assessment question where respondents rated their overall financial knowledge on a scale from 0 (not at all

knowledgeable) to 10 (very knowledgeable). Following previous research (Allgood & Walstad, 2016), we categorised these responses into three levels: Low (0-3), Medium (4-6), and High (7-10). This categorical approach captures meaningful differences in financial confidence levels, with 77% of respondents reporting high knowledge levels in our sample.

Health and Social Support Measures. Health was measured using multiple indicators:

- Self-reported health status (Excellent/Good/Fair/Poor)
- Smoking status (Yes/No)
- COVID-19 diagnosis (Yes/No)
- Long COVID symptoms (Yes/No)

Following the study by Ouyang et al. (2025), social support was measured using the question about whether the respondent could obtain \$3,000 from friends or family in an emergency (Yes/No). This measure captures the availability of informal financial safety nets that can serve as a temporary financial buffer that might influence saving decisions, particularly during health-related financial emergencies.

2.6. Interaction Models and Data Analysis

Interaction Models. To examine the joint effects of financial knowledge, health factors, and social support on household savings behaviour, we estimated several interaction models. Our primary interaction model can be expressed as:

$$\log[P(Y=1)/P(Y=0)] = \beta_0 + \beta_1(\text{Health}) + \beta_2(\text{FinKnowledge}) + \beta_3(\text{SocialSupport}) + \beta_4(\text{Health} \times \text{FinKnowledge}) + \beta_5(\text{Health} \times \text{SocialSupport}) + \beta_k X_k + \epsilon$$

Where Health represents various health factors (self-reported health status, smoking, etc.), Fin Knowledge represents our measures of financial knowledge (both objective and subjective), and Social Support represents our measure of emergency support availability. These interaction terms allow us to test whether:

1. The effect of health factors on household savings behaviour varies by financial knowledge level
2. Social support moderates the relationship between health factors and household savings behaviour

Data Analysis Plan. We assessed multicollinearity using Pearson's correlation and Variance Inflation Factors (VIF). Cross-tabulation for two saving measures ($\chi^2 = 2.49$, $p = 0.115$) confirms they capture distinct but related dimensions, with 39.8% of non-savers reporting precautionary motives and 38.9% of savers lacking precautionary motivations,

validating our dual-measure approach.

Given the SCF's complex sampling design and multiple imputation, we applied 'repeated-imputation inference' (RII) techniques with replicate weights to bootstrap the standard errors, following established practices for nonlinear models with multiple imputed survey (Lindamood et al., 2007; Montalto & Yuh, 1998; Nielsen & Seay, 2014; Shin & Hanna, 2017). All analyses used Stata MP18 with appropriate survey weights.

3. Results and Discussion

3.1. Multicollinearity Assessment

Our multicollinearity diagnostics indicated no severe multicollinearity issues among the predictors in our logistic regression model. The mean VIF was 2.40, well below the conventional threshold of concern of 10. Pearson's correlation analysis showed expected associations between related variables. The highest correlations occurred between age and household expected remaining life ($r=-0.80$), which is expected given their conceptual relationship. The moderate correlation between income and wealth ($r=0.41$) is also consistent with financial theory. Table 4 presents key correlation coefficients among selected variables.

	Log Income	Net Worth	Age	Poor Health	Fin Know (Obj)	Subj Fin Know (High)	Smoker	Soc Sup	Black	Hispa nic	Expect Longev	COVID Diagnos d	Long COVID
Log Income	1.000												
Net Worth	0.366*	1.000											
Age	0.172*	0.175*	1.000										
Poor Health	-0.121*	-0.036*	0.084*	1.000									
Fin Knowledge (Obj)	0.278*	0.088*	0.093*	-0.087*	1.000								
Subj Fin Knowledge (High)	0.265*	0.118*	0.243*	-0.046*	0.184*	1.000							
Smoker	-0.178*	-0.057*	-0.108*	0.080*	-0.149*	-0.116*	1.000						
Social Support	0.263*	0.099*	0.073*	-0.081*	0.206*	0.123*	-0.147*	1.000					
Black	-0.216*	-0.075*	-0.102*	0.041*	-0.197*	-0.101*	0.117*	-0.240*	1.000				
Hispanic	-0.150*	-0.072*	-0.175*	0.012	-0.150*	-0.134*	-0.007	-0.157*	-0.188*	1.000			
Expected Longevity	-0.050*	-0.102*	-0.802*	-0.160*	-0.015	-0.121*	-0.003	-0.018	0.120*	0.119*	1.000		
COVID Diagnosed	0.147*	0.062*	-0.163*	-0.014	0.083*	0.018	-0.086*	0.080*	-0.101*	0.059*	0.168*	1.000	
Long COVID	-0.085*	-0.023	-0.132*	0.052*	-0.055*	-0.078*	0.029	-0.090*	0.019	0.126*	0.075*	0.395*	1.000

Note: * indicates significance at $p < 0.05$ level. Highest correlation between age and expected longevity ($r = -0.802$) reflects conceptual relationship.

The binary logistic regression model examining factors associated with household savings behaviour demonstrated adequate fit with a McFadden pseudo- R^2 of .16 and a c-statistic of .77, indicating good discriminatory power. Table 5 summarises the results of the logistic regression model predicting the likelihood of being a saver.

3.2. Logistic Regression Results

The binary logistic regression model examining factors associated with household savings behaviour demonstrated adequate fit with a McFadden pseudo- R^2 of .16 and a c-statistic of .77, indicating good discriminatory power. Table 5 summarises the results of the logistic regression model predicting the likelihood of being a saver.

Table 5: Logistic Regression Results Predicting Household Savings Behaviour

Variable	Coeff	SE	OR	95% CI	p
Socioeconomic factors					
Log income	0.231	0.084	1.260	[1.069, 1.484]	.006**
IHS net worth	0.033	0.008	1.034	[1.018, 1.050]	<.001***
Demographic characteristics					
Age	-0.001	0.006	0.999	[0.988, 1.011]	.898
Black	-0.012	0.132	0.988	[0.762, 1.281]	.930
Hispanic	-0.346	0.127	0.708	[0.552, 0.908]	.006**
Other race	-0.131	0.177	0.877	[0.620, 1.241]	.460
Household structure					
Single male head	-0.104	0.119	0.901	[0.714, 1.137]	.381
Single female head	-0.419	0.127	0.658	[0.513, 0.844]	.001***
Children in household	-0.245	0.115	0.783	[0.624, 0.981]	.033*
Education level					
High school graduate	0.353	0.171	1.423	[1.018, 1.989]	.039*
Some college	0.244	0.174	1.276	[0.908, 1.793]	.160
College graduate or higher	0.356	0.183	1.427	[0.998, 2.041]	.052
Employment level					
Employed	0.474	0.22	1.61	[1.042, 2.475]	.032*
Retired	0.266	0.251	1.31	[0.798, 2.136]	.288
Disabled	0.059	0.276	1.06	[0.618, 1.820]	.832
Health factors					
Expected longevity	0.005	0.005	1.005	[0.996, 1.014]	.239
Good health	-0.132	0.114	0.876	[0.702, 1.095]	.246
Fair health	-0.206	0.140	0.814	[0.619, 1.070]	.140
Poor health	-0.441	0.230	0.643	[0.410, 1.009]	.055
Smoker	-0.362	0.127	0.696	[0.543, 0.893]	.004**

Has health insurance	0.078	0.183	1.081	[0.754, 1.548]	.672
Parents living	0.063	0.125	1.065	[0.833, 1.362]	.614
COVID diagnosed	-0.142	0.101	0.868	[0.712, 1.057]	.159
Long COVID	-0.309	0.131	0.734	[0.567, 0.950]	.019*
Financial knowledge & social support					
Objective financial knowledge	0.183	0.113	1.201	[0.962, 1.499]	.106
Subjective fin. knowledge (Medium)	0.201	0.204	1.222	[0.820, 1.823]	.325
Subjective fin. knowledge (High)	0.534	0.205	1.706	[1.141, 2.551]	.009**
Emergency social support	0.275	0.096	1.316	[1.090, 1.589]	.004**
Expected income (up)	0.170	0.130	1.186	[0.920, 1.529]	.189
Expected income (down)	-0.084	0.097	0.920	[0.760, 1.112]	.388
Constant	-3.690	1.043	0.025	[0.003, 0.193]	<.001***

Note: CI = confidence interval; OR = odds ratio. Reference categories: White (race/ethnicity), Married/partnered (household structure), Less than high school (education), Self-reported health excellent/very good (health status), Low (subjective financial knowledge), No social support. * $p < .05$, ** $p < .01$, *** $p < .001$.

3.3. Key Findings

Socioeconomic factors strongly predicted household savings behaviour. Higher income ($OR = 1.260$, $p = .006$) and net worth ($OR = 1.034$, $p < .001$) increased saving likelihood. Significant demographic disparities emerged: Hispanic households had 0.71 times the odds of saving compared to White households ($OR = 0.708$, $p = .006$), and single female-headed households had 0.66 times the odds compared to married/partnered households ($OR = 0.658$, $p = .001$).

Health factors showed significant negative associations with saving. Smokers had 0.70 times the odds of saving compared to non-smokers ($OR = 0.696$, $p = .004$), while households affected by long COVID had 0.73 times the odds compared to unaffected households ($OR = 0.734$, $p = .019$). Poor health showed marginally significant effects ($OR = 0.643$, $p = .055$). Contrary to theoretical expectations, expected longevity did not predict household savings behaviour ($OR = 1.005$, $p = .239$).

Financial knowledge effects varied by measurement type. While objective knowledge was non-significant ($OR = 1.201$, $p = .106$), households with high subjective financial knowledge had 1.71 times the odds of saving compared to those with low subjective financial knowledge ($OR = 1.706$, $p = .009$). Households with emergency social support had 1.32 times the odds of saving compared to those without such support ($OR = 1.316$, $p = .004$).

3.4 Interaction Analysis and Robustness Checks

Interaction Effects. To address our third research question about social support moderation, we tested interactions between health factors and emergency social support. Table 6 presents these results.

Table 6: Interaction Effects on Household Savings Behaviour

Health Factor	Interaction with Social Support		
	Coefficient	OR	p-value
Poor health × Social support	0.687	1.988	.015*
Smoker × Social support	0.319	1.376	.064
Long COVID × Social support	0.446	1.562	.023*

Note: Each interaction term tested in separate models including all main effects and controls from Table 5, *p < .05.

Social support significantly moderates the negative health effects on household savings behaviour. The significant interaction between poor health and social support ($OR = 1.988$, $p = .015$) indicates that emergency social support substantially reduces the negative impact of poor health on saving probability. Similarly, social support buffered the negative effects of long COVID ($OR = 1.562$, $p = .023$). In contrast, financial knowledge did not significantly moderate health-savings relationships, suggesting that social capital—rather than individual knowledge—provides the primary buffer against health-related financial challenges.

Robustness checks using probit specifications and continuous savings measures confirmed these patterns. Most importantly, analysis using precautionary saving motives as our second dependent variable revealed theoretically meaningful mechanistic differences. Table 7 compares key findings across both saving measures.

Table 7: Comparison of Key Findings across Saving Measures

Variable	General Saving		Precautionary Motives	
	OR	p	OR	p
Health factors				
Smoker	0.696	.004**	0.893	.344
Long COVID	0.734	.019*	1.433	.003**
Demographics				
Black households	0.988	.930	1.575	<.001***
Hispanic households	0.708	.006**	1.186	.166
Single female head	0.658	.001***	0.883	.266
Financial Knowledge				
High subjective fin. knowledge	1.706	.009**	1.057	.765

Variable	General Saving		Precautionary Motives	
Social Support				
Social support	1.316	.004**	0.915	.335

These contrasting patterns reveal different saving pathways: health challenges reduce general saving capacity while increasing emergency awareness, demographic vulnerabilities manifest differently across saving types, and financial confidence affects general saving more than precautionary concerns. This validates our dual-measure approach to capturing household savings behaviour. Most notably, long COVID demonstrates opposite effects across measures—reducing general saving capacity while increasing emergency-focused intentions—suggesting health challenges simultaneously constrain ability while heightening financial vulnerability awareness.

3.5. Visual Analysis of Key Relationships

To illustrate our main findings about social support moderation and demographic vulnerabilities, we present visual representations of predicted probabilities from our regression models.

Figure 2: Household Structure, Social Support, and Household Savings Behaviour

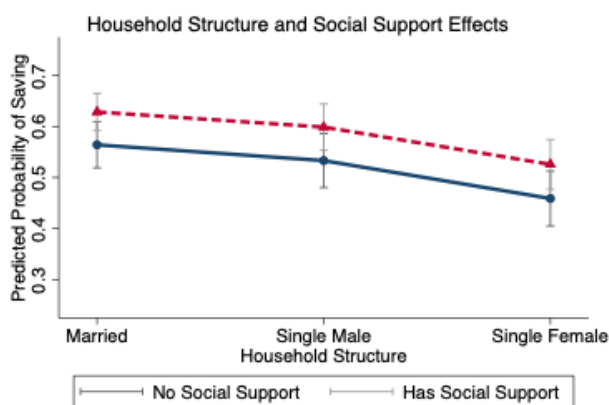


Figure 2 reveals a clear vulnerability gradient across household types. Social support consistently enhances saving probabilities across all groups, yet structural disadvantages persist. Single female households remain most financially vulnerable, with saving probabilities approximately 7 percentage points lower than married households even when emergency social support is available (0.55 vs. 0.62).

Figure 3: Social Support Moderation of Health Effects

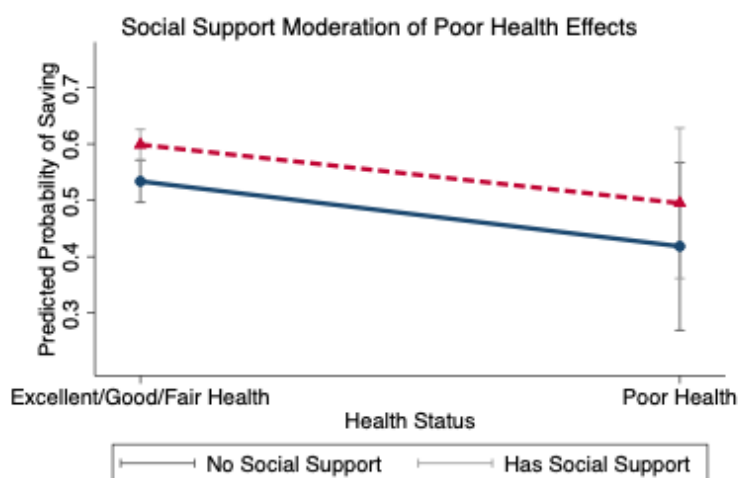


Figure 3 demonstrates our key theoretical contribution: social support substantially buffers negative health effects on household savings behaviour. Without emergency support, poor health reduces saving probability by 12 percentage points (from 0.54 to 0.42). In contrast, households with social support experience only an 8 percentage point decline (from 0.60 to 0.52). This buffering effect validates our theoretical framework about social capital as a protective factor against health-related financial challenges, directly addressing our third research question about social support moderation.

4. Discussion

This study advances the Life Cycle Hypothesis by integrating dimensions of expected longevity, financial knowledge, health factors, and social support to explain household savings behaviour. Our findings largely confirm the importance of financial knowledge while revealing new pathways through which health and social factors shape financial outcomes.

Subjective financial knowledge emerged as a stronger predictor of saving than objective knowledge, suggesting that financial confidence may be as important as factual knowledge in guiding decisions (Morris et al., 2022). This finding has important implications for financial education programs, which should emphasise confidence-building alongside knowledge acquisition.

Contrary to theoretical expectations, expected longevity did not predict household savings behaviour. Instead, direct health factors—smoking, long COVID, and poor health—emerged as significant barriers. These results suggest that immediate health limitations influence saving more than abstract life expectancy projections, consistent with bounded rationality theories (De Nardi et al., 2010).

A key contribution is identifying social support as a significant moderator of health-

savings relationships. While poor health typically reduced saving likelihood, this effect was substantially attenuated for households with emergency social support. This provides empirical support for the buffering hypothesis (Cohen & Wills, 1985) and highlights the protective role of informal safety nets during health adversity.

Significant demographic disparities emerged, with single female households and Hispanic households showing persistently lower saving rates despite controlling for income and education. These gaps suggest structural barriers—including caregiving burdens and systemic discrimination—that inhibit saving among vulnerable groups.

5. Conclusion

This study examined how financial knowledge, health factors, and social support interact to influence household savings behaviour using data from the 2022 Survey of Consumer Finances. Our findings extend the Life Cycle Hypothesis by incorporating behavioural dimensions that better reflect modern saving challenges. Subjective financial knowledge significantly increases saving likelihood, while health factors such as smoking and long COVID negatively impact savings behaviour. A key contribution is demonstrating that social support significantly moderates the negative effects of health factors on savings behaviour, providing crucial buffer effects during health-related financial challenges.

Our findings suggest several policy implications. Financial education initiatives should emphasise confidence-building and target vulnerable populations facing structural barriers. The interplay between health and financial well-being suggests opportunities for cross-sector collaboration, with health practitioners incorporating financial counselling and financial advisors assessing client health. Strengthening social support networks—both formal and informal—can provide protective effects against financial deterioration during health crises.

Limitations and Future Research

Several limitations should be acknowledged. The cross-sectional nature of the SCF data limits causal inference; future research should leverage longitudinal designs to examine how health and financial knowledge changes influence saving trajectories. Our reliance on brief financial knowledge measures may not capture multidimensional knowledge complexity (Gignac & Ooi, 2022). Additionally, this U.S.-focused study may limit generalizability across different cultural and policy contexts.

Despite these limitations, this study advances understanding by demonstrating how financial knowledge and social resources can mitigate adverse health effects on household savings behaviour. The findings underscore the need for interdisciplinary interventions that address not only knowledge gaps but also health inequalities and social capital deficiencies to enhance household financial resilience.

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