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Chronicles of Choice: Survey Insights into Intertemporal Preferences

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Abstract
This study uses data from the 2020 Survey on Household Income and Wealth (SHIW) conducted by the Bank of Italy to investigate the determinants of individuals' time-discounting behaviour, which plays a crucial role in economic decision-making. We explore the idea that financial literacy could mitigate higher discount rates, which usually lead to irrational behaviour. Our findings confirm this hypothesis, showing that individuals with a better grasp of compounded interest reduce their discount rates significantly. However, other aspects of financial literacy, such as inflation and risk diversification, do not affect discount rate preferences. We also consider the impact of the COVID-19 pandemic, finding that support measures may increase discount rates, possibly due to the heightened financial stress experienced by recipients.

JEL Classification: D15, D91, G53

Keywords
intertemporal preferences — financial literacy — COVID-19

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Introduction

Intertemporal choices involve individuals balancing their preferences and opportunities over time, including how to allocate consumption and savings between the present and the future. Such choices are influenced by external factors (such as general economic conditions) and internal factors (like personal preferences).

Daily decisions often result in consequences that materialise later, reflecting the complexities of weighing costs and benefits across different periods. Individuals' time preferences play a significant role in shaping numerous economic decisions, particularly those that entail choosing between options with outcomes unfolding over time. Choices such as savings (Choi & Han, 2018), educational attainment (Golsteyn *et al.*, 2014), and choices regarding investments in real estate (Donkers & Van Soest, 1999) are directly impacted by these preferences.

Intertemporal preferences are closely linked to the discount rate, which represents the rate at which future monetary rewards are discounted to their present value, reflecting individuals' preferences for immediate rewards over future ones. Intertemporal preferences influence how individuals discount future utility or benefits, directly affecting their discount rate. A higher discount rate indicates a greater impatience towards the future, implying a greater preference for present consumption or benefits, while a lower discount rate suggests a higher valuation of future utility. Thus, understanding intertemporal preferences is essential for determining appropriate discount rates in economic decision-making contexts, such as investment appraisal, policy evaluation, and intergenerational welfare analysis, as they greatly impact an individual's overall well-being.

Previous studies (Green *et al.*, 1994, 1996; Laibson, 1997; Cohen *et al.*, 2020) have shown that individuals exhibiting lower discount rates are more inclined towards positive behaviour such as long-term savings or achieving higher degrees of education.[1] Conversely, individuals with higher discount rates tend to exhibit greater impatience and are more inclined to engage in irrational behaviour (O'Donoghue & Rabin, 1998, 1999). For example, impatience has been associated with increased credit card debt (Meier & Sprenger, 2010) or with addictive behaviour such as drug use, drinking, smoking and gambling (Kirby *et al.*, 1999; García-Rodríguez *et al.*, 2013; Ohmura *et al.*, 2016).[2]

A key aspect of this work is that, when it comes to intertemporal decisions, we expect financial literacy to exert a

[1] For a comprehensive literature review about intertemporal choices, time preferences and time discounting we refer the reader to the work of Frederick *et al.* (2002).

[2] See Johnson *et al.* (2020) for a meta-analysis on delay discounting and risky choices.

mitigating effect by making individuals less impatient and impulsive. By enhancing individuals' understanding of financial concepts, such as interest rates, compounding, and investment strategies, financial literacy empowers individuals to make more informed decisions regarding saving and investment. Consequently, individuals with higher levels of financial literacy could alleviate impatience, as they are better positioned to evaluate the long-term implications of their financial choices, reducing the inclination towards impulsive consumption behaviour and leading to more balanced decision-making that improves long-term financial well-being. Therefore, we expect individuals with higher financial literacy to exhibit lower discount rates.

Our research is based on the 2020 Survey on Household Income and Wealth (SHIW) conducted by the Bank of Italy. In addition to collecting comprehensive data on sociodemographic variables, the survey offers detailed insights into various financial aspects of Italian households, including income, wealth, savings, short-term borrowing, liquidity, and other economic and financial decisions.

This study aims to explore individuals' behaviour regarding time discounting, as we specifically focus on a survey question that directly asks respondents about their preferred discount rate. We acknowledge that 2020 may be a particular year due to COVID-19. The impact of the pandemic extends far beyond financial realms, influencing things such as daily routines, interpersonal relationships, work dynamics, and even the nature of work itself. Emotions triggered by this crisis mirror those experienced in the aftermath of significant tragedies such as terrorist attacks or natural disasters, evoking feelings of inevitability and helplessness in the face of an uncontrollable force. Therefore, our analysis includes a series of control variables to account for the potential effects of COVID-19 on individuals' time preferences.

The contribution of our paper is threefold. Firstly, we use a comprehensive survey representative of the Italian population to analyse individuals' intertemporal preferences. Secondly, we incorporate financial literacy as a relevant variable, acknowledging its significance in studying time preferences for monetary outcomes, as highlighted by recent literature on the topic (Conte *et al.*, 2024b). Lastly, we incorporate controls for the COVID-19 pandemic, enabling us to identify the factors that undeniably impact individuals' time preferences.

Data set description

We use data from the Italian Survey of Household Income and Wealth (SHIW), which the Bank of Italy has administered since the 1960s. Starting with the 2020 survey, interviews have been conducted primarily using the Computer-Assisted Personal Interviewing (CAPI) method with the aid of a tablet. This approach automatically collects various metadata, such as geolocation information and the duration of the interview and its subsections. The survey is conducted every two years and occasionally every three years, and incorporates a rotating panel feature: approximately half of the participants are interviewed again in the subsequent wave. It gathers comprehensive data on the sociodemographic characteristics of households, as well as their income, savings, wealth, and other economic and financial decisions.

We focus our analysis on the 2020 wave of the survey, as the main variable of interest for our study, coded as "SCONTO", has only recently become available for this year. While it was also collected in the 2004, 2008, 2010, and 2012 waves, the question was either framed differently or only collected from a random subset of respondents. Originally, the survey was intended to inquire about household (HH, henceforth) income and wealth in 2019, with interviews scheduled for early 2020. However, due to the COVID-19 pandemic, these interviews were postponed until 2021.

Compared to the previous 2016 edition, relevant methodological changes were made. Specifically, the selection of the sample HHs for the interview was based not only on traditional demographic variables but also on information regarding income and indebtedness conditions, which were previously unavailable. This allowed capturing segments of the population, such as the wealthier or more heavily indebted, who often go unnoticed due to their limited representation. These changes have strengthened the survey's capacity to analyse population cohorts that possess significant portions of the key characteristics of interest.[3]

Our sample consists of 15,198 individuals. However, as the variable of interest in this analysis pertains to personal attributes and is only queried to the representative individual, we focus solely on the 6,239 HH respondents.

The variable of interest is described in the next section. Summary statistics and description of the other variables used in the analysis can be found in Table A.1 in the Appendix.

Data analysis

The survey question analysed in this work reads:

> *Suppose you find yourself in this situation: you learn that you have won the lottery for an amount equal to your household's net annual income. The winnings will be transferred to you in one year. However, if you give up part of the winnings, you can receive the residual amount immediately.*
>
> 1. *Would you give up **20 per cent** of the amount to claim the winnings immediately?*
>   - *Yes* [$\Longrightarrow$ End of Section]
>   - *No* [$\Longrightarrow$ Question **b.**]
> 2. ***10 per cent?***
>   - *Yes* [$\Longrightarrow$ End of Section]
>   - *No* [$\Longrightarrow$ Question **c.**]

[3] For further details: https://www.bancaditalia.it/pubblicazioni/indagine-famiglie/bil-fam2020/

3. ***5 per cent?***
   - *Yes* [$\Longrightarrow$ End of Section]
   - *No* [$\Longrightarrow$ Question **d.**]
4. ***2 per cent?***
   - *Yes*
   - *No*

The answer to this question implies an interval of the intertemporal discount rate, where the suffix $i, i \in \{1,...,N\}$, indicates the HH respondent,

$$d_i^* = \begin{cases} [0,2), & \text{if unwilling to give up } \mathbf{2\%} \text{ of the amount to claim the winnings immediately} \\ [2,5), & \text{if unwilling to give up } \mathbf{5\%} \text{ but willing to give up } \mathbf{2\%} \text{ of the amount} \\ [5,10), & \text{if unwilling to give up } \mathbf{10\%} \text{ but willing to give up } \mathbf{5\%} \text{ of the amount} \\ [10,20), & \text{if unwilling to give up } \mathbf{20\%} \text{ but willing to give up } \mathbf{10\%} \text{ of the amount} \\ [20,+\infty), & \text{if willing to give up } \mathbf{20\%} \text{ of the amount} \end{cases} \tag{1}$$

Here, d_i^* is the latent intertemporal discount rate that we cannot directly observe but that we can allocate to one of the defined intervals via the answer to the question "SCONTO".

The distribution of the recoded response is shown in Figure 1, where we can easily observe that the most popular choices fall within the two extreme intervals.

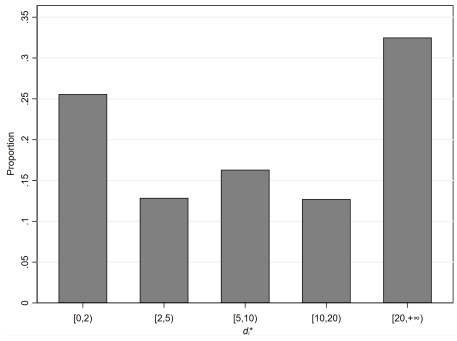

Figure 1. Distribution of the intertemporal discount rate
Note: The graph shows how the distribution of the proportion of responses of the recoded answers, as displayed in Eq. (1). Sampling weights were used to produce the graph.

We model the logarithm of d_i^* a function of a set of explanatory variables, x_i, which contains an intercept. These are linked to $\log(d_i^*)$ via the vector of parameters β:

$$\log(d_i^*) = x_i'\beta + \varepsilon_i, \qquad \varepsilon_i \sim N(0,\sigma^2) \tag{2}$$

Here, ε_i is an error term following a normal distribution with mean 0 and variance σ^2.

The probability of d_i^* falling in a particular interval is

$$Pr(\log(\underline{b}) \leq d_i^* < \log(\bar{b})) = \begin{cases} \Phi\left(\frac{\bar{b}-x_i'\beta}{\varepsilon}\right), & \text{if } \underline{b} = 0 \\ \Phi\left(\frac{\bar{b}-x_i'\beta}{\varepsilon}\right) - \Phi\left(\frac{\underline{b}-x_i'\beta}{\varepsilon}\right), & \text{if } \underline{b} \neq 0 \text{ and } \bar{b} \neq +\infty \\ \Phi\left(\frac{x_i'\beta-\underline{b}}{\varepsilon}\right), & \text{if } \bar{b} = +\infty \end{cases} \tag{3}$$

where $\bar{b}$ and $\underline{b}$ are the upper and lower bars of the intervals in Eq. (1), respectively, and $\Phi(.)$ the cumulative distribution function of the standard normal distribution.

Estimating this model via the Maximum Likelihood technique entails maximising the sum over all the individuals in the sample of the individual likelihood contributions defined in Eq. (3). The model corresponds to an interval regression and is estimated in STATA using sampling weights.

Estimation results

Table 1 displays the estimation results of the interval regression model from the intertemporal discount rate data described above. The explanatory variables are described in Table A.1 in the Appendix. Sampling weights are used, and robust standard errors are reported. The literature indicates that cultural and societal differences may influence discount rates (Gong *et al.*, 2014). As in Guiso & Zaccaria (2023), following the idea that social norms are transmitted across generations of individuals living nearby, we define five cohorts based on the year of birth of the household head as follows: 1st cohort $<$ 1944, 2nd cohort 1945–1953, 3rd cohort 1954–1961, 4th cohort 1962–1970, 5th cohort $>$ 1970. Each cohort includes approximately 20% of sample households. We then consider the three geographical areas (North, Centre and South of Italy) and create fifteen cohort- and area-specific dummies that identify relevant social group levels. The estimated coefficients on these dummies are omitted from Table 1.

We note that in interpreting the coefficient estimates, a decrease in the discount rate implies a move towards rationality, or in other words, being more patient, while an increase implies the opposite. Moreover, since the estimated behavioural equation (2) is expressed in log-linear form, a unit increase in the, say, k-th variable $x_{i,k}$ results in a change in the discount rate d_i^* by $(100\times\hat{\beta}_k)\%$, where $\hat{\beta}_k$ represents the estimated coefficient on that variable.

The table reveals that being female does not have a significant effect, whereas age demonstrates statistical significance, with each additional year increasing the discount rate by 2%. This result contradicts some psychology literature that suggests a positive association between patience and age (Green & Myerson, 2004; Green *et al.*, 1996; Scheres *et al.*, 2006). Nevertheless, this result could be explained by considering that the answers were collected during the pandemic when

older people were inundated with messages urging them to be cautious about their lives. In fact, using the same survey data, Conte *et al.* (2024b) find that the heightened sense of vulnerability among elderly people results in a higher aversion to financial risk.

The respondent's level of education appears not to influence the discount rate, whereas those whose mothers were well-educated–taken as a proxy for being raised in a wealthy family–have a discount rate reduced by 30%.

The effect of financial literacy is evident in the knowledge of the answer to the question about compound interest only, reducing the discount rate by 30%. This is an interesting result, as rational intertemporal decision-makers should compare their discount rate to the interest rate when deciding whether to anticipate or postpone consumption. We also observe that the financial literacy question concerning compound interest is the most challenging, typically yielding the lowest success rate. Surprisingly, knowledge about inflation does not appear to be statistically relevant, despite its potential significance for intertemporal consumption. However, considering that the question about the discount rate is limited to a one-year timeframe, individuals may be more inclined to focus on efficient methods of storing a large windfall rather than considering how it should be spent within such a restricted period. In relation to this, we must note that during the COVID-19 pandemic, Italy experienced a 0.2% increase of headline inflation on a monthly basis and a decrease by 0.2% on an annual basis, with an average annual rate of change of consumer prices of -0.2%.[4] Having knowledge of risk diversification, which objectively has little to do with intertemporal preferences, does not appear to have any effect on discount rates.[5]

Marital status, whether single, separated, or divorced, does not show a statistically significant impact on our variable of interest compared to married individuals. However, widows and widowers appear to be more inclined to accelerate consumption, possibly due to an increased awareness of mortality resulting from their loss, which may be exacerbated by the mournful times of the pandemic.

Rather surprisingly, the employment status does not appear to accelerate or delay the need for consumption. However, if the household income was insufficient to cover expenses until the end of the month, or if the household had fallen considerably behind (90 days or more) in paying utility bills during the year under consideration, the discount rate increases by roughly 35%.

Receiving a form of income support unrelated to COVID-19 has no effect on the dependent variable. Instead, COVID-19 support measures, either for individuals and HHs, appear to increase discount rates and impatience. These support measures were introduced in the "Cura Italia" decree by the Italian government in March 2020.[6] This result aligns with the notion that individuals and families receiving such support have likely experienced or are still experiencing distressing financial situations, which may make them more inclined toward immediate rewards.

Financial resilience does not seem to have any effect on discount rates, given that the coefficient on the variable "Borrow in an emergency" that captures the ability to borrow money from friends or relatives in an emergency is not statistically significant. The opposite holds for the coefficient on the variable "Happiness", which measures the overall life satisfaction of the respondents, being highly statistically significant. Moving one step upwards in the scale of happiness (running from 1 to 10), the discount rate decreases by 26%. This result is in line with Isen (2008), Ifcher & Zarghamee (2011), Lerner *et al.* (2013) and the literature that studies the connections between discount rates and emotions.

The respondents' saving philosophies serve as proxies for their long-term perspectives in our analysis. These are represented by a set of mutually-exclusive dummies, with the base case being major purchases such as residences, vehicles, and furniture, as well as investments and paying off debts. We find that only the coefficients on saving for unexpected events, old age, and education and legacy for children and grandchildren are statistically significant, reducing the discount rate of the subjects compared to the base case, while those on saving for vacations and for other reasons are not. This result aligns with our expectations, as we have observed that lower discount rates are associated with forward-looking behaviour in both saving and investment choices. For instance, investments in education are prioritised over expenditures like purchasing a house or a vehicle. Finally, we introduced the HH income and wealth quintiles among the regressors. The coefficient estimates indicate a consistent decrease in the discount rate with increasing income quintiles compared to the I quintile (the base case). However, only the coefficients on the IV and V quintiles are statistically significant, with p-values less than 10% and 5%, respectively. Particularly noteworthy is the substantial 44% reduction in the discount rate associated with the highest quintile. This trend aligns with the notion that higher income levels tend to foster greater patience among individuals, predisposing them to defer gratification in exchange for future rewards.

This pattern becomes even more pronounced when examining wealth quintiles. All coefficients are statistically significant compared to the I quintile (the base case), but they are not statistically different from each other (with the effect of reducing the discount rate by roughly 45%). This suggests

[4] On average, in 2020, Harmonized Index of Consumer Prices (HICP) reversed the trend for households with less purchasing power (-0.4%, from +0.6% in 2019) and slowed down for those with greater purchasing power (+0.1°%, from +0.7%) (Istat, 2021).

[5] In Appendix B, Table B.1, we also report the estimation results using an aggregate version of the financial literacy indicators. Following Conte *et al.* (2024a), the new indicator records a correct response if the participant answers all three questions correctly or at least two. It notes "don't know" if the participant selects this option for all three or at least two questions. Otherwise, an incorrect response is logged if at least two answers are provided, with one or more being incorrect.

[6] The decree introduced several economic support measures for individuals and families, including the "Reddito di Emergenza" (Emergency Income) and various allowances for different categories.

Table 1. Interval regression estimation results of discount rate

	Coefficient	std. err.	*p-value*
Female	0.123	0.100	0.219
Age	0.020	0.010	0.043
Education			
Upper secondary school diploma	-0.126	0.112	0.262
University degree and higher	-0.149	0.136	0.274
Mother's education	-0.298	0.125	0.018
Financial literacy			
Compound interest	-0.309	0.093	0.001
Inflation	0.083	0.098	0.400
Risk diversification	-0.008	0.100	0.932
Civil status (base case = married/in civil partnership)			
Single	-0.083	0.136	0.540
Separated/divorced	-0.056	0.158	0.721
Widow/er	-0.122	0.060	0.042
Employment status			
Unemployed	-0.072	0.070	0.307
Employed	0.229	0.151	0.129
HH income assessment			
Insufficient HH income	0.310	0.105	0.003
Behind in paying utility bills	0.374	0.180	0.038
Income support measures			
Non-COVID-19-related financial assistance	-0.033	0.164	0.840
COVID-19 personal income support measures	0.257	0.151	0.089
COVID-19 HH income support measures	0.246	0.121	0.042
Financial resilience and life satisfaction			
Borrow in an emergency	-0.002	0.094	0.986
Happiness	-0.264	0.090	0.003
Reasons for saving (base case = major purchases (residences, vehicles, furniture, etc.), investments, paying off debts)			
Provision for unexpected events	-0.433	0.146	0.003
Old-age provision	-0.695	0.156	0.000
Education/economic support/legacy to children, grandchildren	-0.448	0.156	0.004
Travel, vacations	-0.229	0.305	0.453
Other	-0.283	0.307	0.356
HH income quintile (base case = I)			
II	0.091	0.155	0.559
III	-0.067	0.167	0.686
IV	-0.321	0.184	0.080
V	-0.444	0.200	0.026
HH wealth quintile (base case = I)			
II	-0.478	0.150	0.001
III	-0.376	0.146	0.010
IV	-0.506	0.149	0.001
V	-0.542	0.163	0.001
Intercept	1.839	0.839	0.028
σ	1.890	0.049	0.000
# Observations	6,239		
Left-censored obs.	1,785		
Right-censored obs.	1,711		
Log-likelihood	-9212.8673		

that any level of wealth instils greater patience, resulting in lower discount rates than the least wealthy, regardless of its magnitude. While this conclusion mirrors the observations made regarding income quintiles, it holds greater significance due to the distinct nature of wealth (a stock variable) compared to income (a flow variable), as the former provides a more stable measure of economic well-being.

Conclusions

Using data from the 2020 Survey on Household Income and Wealth (SHIW), a comprehensive survey representative of the Italian population conducted by the Bank of Italy, our study has offered insights into the determinants of individuals' behaviour regarding time discounting. Intertemporal preferences play a crucial role in shaping numerous economic decisions, particularly those involving choices between options with outcomes evolving over time.

The idea explored is that financial literacy might serve as a mitigating factor for higher discount rates, generally regarded as problematic for leading to irrational behaviour. Our findings have supported our expectations since individuals with a greater understanding of compound interest reduce their discount rate by 30%. This result aligns with the expectation that rational intertemporal decision-makers should be able to compare their discount rate to the interest rate when determining whether to advance or delay consumption. Conversely, the other two questions on financial literacy, concerning inflation and risk diversification, do not affect discount rates. However, this result can be explained by the fact that the question about respondents' discount rate is restricted to a one-year timeframe, and knowledge about risk diversification is not directly related to intertemporal preferences.

Financial resilience does not seem to have any impact on discount rates. Instead, age, widowhood, income difficulties, arrears in bill payments, and overall life satisfaction show a significant influence.

Since the data collection took place in 2020, we have recognised that the emotions evoked by the pandemic might have influenced individual time preferences. To address this possibility, we have included control variables to account for the potential effects of COVID-19. Our findings indicate that COVID-19 support measures, whether for individuals or households alike, appear to increase discount rates and impatience. This outcome aligns with the notion that individuals and families receiving such support may have encountered, and likely continue to face, distressing financial circumstances, making them more inclined towards immediate rewards.

Data availability

Data is publicly available at: https://www.bancaditalia.it/statistiche/tematiche/indagini-famiglie-imprese/bilanci-famiglie/index.html?com.dotmarketing.htmlpage.language=102&com.dotmarketing.htmlpage.languag%20e=1&dotcache=refresh

Conflict of interest

The authors have no competing interests to declare that are relevant to the content of this article.

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Appendix

A Summary statistics
B Alternative specifications of the financial literacy indicator

Table A1. Summary statistics

Data code	Variable	Definition	Mean	std.err.
SEX	Female	=1 if female; 0 otherwise	0.424	0.010
ETA	Age	Year of birth	59.368	0.339
STUDIO	*Education*	Categorical: education levels		
	Upper secondary school diploma		0.267	0.009
	University degree and higher	0.162	0.006	
STUMCF	Mother's education	=1 if upper secondary school diploma and higher	0.1206	0.006
	Financial literacy			
QTASSO	Compound interest	=1 if correct answer; 0 otherwise	.518	0.010
QINT	Inflation	=1 if correct answer; 0 otherwise	0.613	0.010
QRISK1	Risk diversification	=1 if correct answer; 0 otherwise	0.575	0.010
STACIV	*Civil status*	Categorical: status category		
	Married/in civil partnership		0.528	0.010
	Single		0.201	0.010
	Separated/divorced		0.094	0.006
	Widow/er		0.177	0.008
	Employment status			
APQUAL2	Unemployed	=1 if unemployed; 0 otherwise	0.129	0.007
Q	Employed	=1 if employed (employee and self-employed)	0.480	0.010
	HH income assessment			
CONDGEN	Insufficient HH income	=1 if insufficient income through the end of the month; 0 otherwise	0.547	0.010
RITBOL	Behind in paying utility bills	=1 if late with payment; 0 otherwise	0.068	0.005
	Income support measures			
B25	Non-COVID-19-related financial assistance	=1 if received financial assistance; 0 otherwise	0.097	0.006
MISCOVID	COVID-19 personal income support measures	=1 if received income support; 0 otherwise	0.090	0.006
IMPCOVID	COVID-19 HH income support measures	=1 if HH received income support; 0 otherwise	0.167	0.008
	Financial resilience and life satisfaction			
EMERG	Borrow in an emergency	=1 if able to borrow; 0 otherwise	0.562	0.010
HAPPY	Happiness	=1 if happy; 0 otherwise	0.535	0.010
RISMOTBIS	*Reasons for saving*	Categorical: saving reasons		
	Major purchases		0.097	0.006
	Provision for unexpected events		0.393	0.010
	Old-age provision		0.282	0.009
	Education/economic support/legacy to children, grandchildren		0.186	0.008
	Travel, vacations		0.016	0.002
	Other		0.027	0.003
CLY2	*HH income quintile*	Categorical: income quintiles		
	I		0.200	0.009
	II		0.200	0.008
	III		0.200	0.008
	IV		0.200	0.008
	V		0.200	0.008
CLW2	*HH wealth quintile*	Categorical: wealth quintiles		
	I		0.200	0.008
	II		0.200	0.009
	III		0.200	0.008
	IV		0.200	0.008
	V		0.200	0.007

Table B1. Interval regression with alternative specification of the financial literacy indicator

	Coefficient	**std.err.**	**p-value**
Female	0.135	0.100	0.176
Age	0.020	0.010	0.041
Education			
Upper secondary school diploma	-0.134	0.112	0.233
University degree and higher	-0.165	0.137	0.229
Mother's education	-0.301	0.126	0.017
Financial Literacy	-0.122	0.101	0.224
Civil status (base case = married/in civil partnership)			
Single	-0.088	0.137	0.520
Separated/divorced	-0.065	0.158	0.678
Widow/er	0.207	0.151	0.170
Employment status			
Unemployed	0.007	0.184	0.971
Employed	0.202	0.167	0.227
HH income assessment			
Insufficient HH income	0.312	0.105	0.003
Behind in paying utility bills	0.386	0.180	0.032
Income support measures			
Non-COVID-19-related financial assistance	-0.054	0.165	0.745
COVID-19 personal income support measures	0.244	0.151	0.107
COVID-19 HH income support measures	0.236	0.121	0.051
Financial resilience and life satisfaction			
Borrow in an emergency	-0.001	0.094	0.994
Happiness	-0.257	0.091	0.005
Reasons for saving (base case = major purchases (residences, vehicles, furniture, etc.), investments, paying off debts)			
Provision for unexpected events	-0.435	0.145	0.003
Old-age provision	-0.692	0.155	0.000
Education/economic support/legacy to children, grandchildren	-0.437	0.156	0.005
Travel, vacations	-0.207	0.308	0.501
Other	-0.295	0.308	0.338
HH income quintile (base case = I)			
II	0.101	0.156	0.516
III	-0.066	0.167	0.693
IV	-0.334	0.184	0.069
V	-0.467	0.200	0.020
HH wealth quintile (base case = I)			
II	-0.473	0.151	0.002
III	-0.377	0.146	0.010
IV	-0.513	0.149	0.001
V	-0.557	0.1630	0.001
Intercept	1.788	0.844	0.034
σ	1.896	0.049	0.000
# Observations		6,239	
Left-censored obs.		1,785	
Right-censored obs.		1,711	
Log-likelihood		-9224.8044	