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Savings Decisions of American Households: The Roles of Financial Literacy and Financial Practice

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Abstract

This paper finds that financial literacy, along with financial practice, play a role in the financial decision making process of households. Building upon earlier works, this paper examines whether basic financial literacy, in the absence of sufficient household financial management practice, is associated with suboptimal savings behavior. Using a nationally representative dataset, we find new evidence that households, with below average financial practice skills but with higher than average financial literacy scores, were less likely to have sufficient precautionary savings.

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1 Introduction

It is widely acknowledged that financially literate individuals are more likely to make informed financial decisions. For instance, previous studies linked financial literacy to greater saving (Babiarz & Robb, 2014; de Bassa Scheresberg, 2013; Jappelli & Padula, 2013; Lusardi, 2008), planning for retirement (Lusardi & Mitchell, 2007; 2009), and seeking for less costly borrowing alternatives (Lusardi & de Bassa Scheresberg, 2013; Disney & Gathergood, 2013; Chatterjee, 2013), which are generally regarded as "good" financial practices.

Despite the abundance of evidence that attributes informed choices to financial literacy, the mechanism through which financial knowledge leads to such financial practices remains unclear. One notable exception is Hung, Parker, and Yoong (2009). By constructing a conceptual model of financial literacy, the authors argued that the relationship between financial knowledge and financial behavior is essentially multi-faceted, depending on how financial skills, financial capability, experience, and perceived knowledge are taken into account. Summarized briefly, their framework gives two sharp predictions. First, financial knowledge could promote desirable financial behaviors via its impact on financial skills and perceived knowledge. That is, knowing how much they know and having appropriate skills to apply such knowledge are essential components to use that knowledge appropriately. Second, there could be a mismatch between financial skills/perceived knowledge and actual financial knowledge. Some people might have enough understanding of financial issues but lack the skills, or have too much confidence without knowing how much they know.

Interestingly, empirical evidence also shows a marked heterogeneity between financial literacy and actual behavior. For example, according to the 2012 National Financial Capability Study (NFCS), approximately 54 percent of respondents correctly answered at least four out of five financial literacy questions while still engaging in fee-inducing credit card practices such as overdrawing, carrying over balance, paying late fees, or using the card for cash advances. A significant number of financially literate individuals were also found overdrawing on their checking accounts, or borrowing from the alternative lending institutions.

In fact, this lack of correspondence between intellectual ability and behavior is not new but has drawn renewed interest from behavioral science literature. Kruger and Dunning (1999), for instance, found that unskilled individuals tend to have unsupported beliefs about their skills and experiences, which exceed their actual ability. Langer (1975) also found that some individuals who acquired information or knowledge are likely to develop an *illusion of control* - a tendency to overestimate their influence over uncertain future outcomes. Building upon psychological evidence, Willis (2008) argued that the effect of financial knowledge might be different between the individuals who know how to address financial matters and others without such financial capability. She further added that the efficacy of financial education hinges heavily on whether financial education program indeed increase financial knowledge or only makes participants overly-confident.

This study adds to a growing literature by exploring the extent to which a lack of correspondence between financial knowledge and financial practice associate with savings outcomes. We hypothesize that, for those with no appropriate (day-to-day) financial management skills, having more financial knowledge is an unwanted cognitive load (Simons, 2013) which creates an *illusion of control* to cope with uncertain financial outcomes. When it comes

to making a decision to set aside emergency savings, individuals may have to go through an internal assessment of the likelihoods of experiencing unexpected income shock. The unjustified perception of control, in this case, may cause people to overestimate their ability to deal with such unexpected financial shocks, which further decrease the incentives to hold precautionary funds. By considering two different types of saving decisions - holding precautionary savings and setting up retirement accounts, we examine whether financial knowledge rather discourages short-term savings among the financially unskilled, and to what extent such association varies over longer-term savings decision.

2 Data Description and Methodology

The individual-level data for this study is drawn from the 2012 state-by-state survey of National Financial Capability Study (NFCS) established by Financial Regulatory Authority (FINRA) Investor Education Foundation. The NFCS is a cross-sectional, self-administered online survey with approximately 500 adult respondents in each state of the United States. In particular, the data provides a rich set of demographic information and detailed measures of financial capability and "Big Five" financial literacy questions. The final analytic sample of this study includes 16,321 respondents that span 50 states plus the District of Columbia surveyed from July to October 2012.

2.1 Financial Literacy

Respondent's financial knowledge is evaluated by asking fundamental principles of finance. The survey asked five different questions each representing compounding calculations, inflation, principles related to interest rates and bond prices, risk and portfolio diversification, and mortgage (Table 1).[1] In our sample, only 35 percent of respondents correctly answered the bond price question, whereas nearly 86 percent gave the correct answer for a mortgage question. It is worth noting that this study does not additively define financial literacy score since the relative difficulty significantly varies across the questions. Instead, following Lusardi and Mitchell (2009) and van Rooij, Lusardi, and Alessie (2011), we perform a factor analysis on this information using iterated principal factor method. This method generates factor loadings which capture the extent to which each variable contributes to the shared variation among the financial literacy measures.[2]

2.2 Financial Practice

The NFCS respondents self-reported their day-to-day financial management skills, such as dealing with checking accounts, credit and debit cards, and tracking expenses, on a scale of 1 to 7. In order to rule out any confounding effect due to measurement error and recall bias, we develop a comparable objective measure of short-term financial practice using

[1]The validity of this "Big Five" scale for financial literacy is discussed in Hastings, Madrian, and Skimmyhorn (2012).

[2]The Bartlett method is employed for calculating factor scores, which is regarded as a composite index of financial literacy.

information on checking account overdraft, credit card behavior, and access to alternative financial services.[3] Specifically, we reverse code eight questions on checking account overdraft, credit card practices, and alternative financial services usage into a set of dichotomous variables representing desirable short-term financial practices (Table 2). As discussed above, a composite index of financial practice is constructed by applying factor analysis and the Bartlett method.

2.3 Empirical Framework

The empirical analysis follows much of the literature that regresses savings outcomes on financial knowledge, conditioned upon individual-level covariates. Assuming i indexes a respondent, we specify the following form of linear model

$$y_i = \Omega + \gamma_1 K_i + \gamma_2 P_i + \gamma_3 (K_i * P_i) + \mathbf{X_i}\boldsymbol{\beta} + \upsilon_i \tag{1}$$

, where $y_{i,t}$ is a binary measure of having emergency funds or having retirement accounts; K_i and P_i is financial knowledge index and practice score; $K_i * P_i$ is a corresponding interaction term; $\mathbf{X_i}$ is a covariate matrix that includes demographic characteristics, socio-economic status, confounding covariates, and region fixed effects; and υ_i is an $i.i.d.$ normal error term. Financial knowledge index is normalized on a scale of 0 to 100 for more intuitive interpretations. The demographic characteristics include age, gender, ethnicity, marital status, the number of children, and education background of respondents. To account for respondents' socio-economic status, the model accounts for employment/retirement status and 8-category household income. The region fixed effects account for the variation in savings due to the unobserved regional sentiments towards savings or difference in state-level policies. We further control for self-assessed financial knowledge and self-assessed short-term financial management skills to ensure that γ_1, γ_2, and γ_3 do not capture the effect of confounding covariates. These self-assessed measures come from the survey questions that ask *"How strongly do you agree or disagree with the following statements? - I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses* and *On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?"*.

Equation (1) is estimated by a logistic regression which models the likelihood of saving as a function of financial knowledge, financial practice, and individual characteristics.

$$Pr(y_i = 1|K, P, \mathbf{X}) = \Lambda(\Omega + \gamma_1 K_i + \gamma_2 P_i + \gamma_3 (K_i * P_i) + \mathbf{X_i}\boldsymbol{\beta}) \tag{2}$$

To test the hypothesis, we examine whether and to what extent the associations between financial knowledge and savings outcomes vary across the distribution of financial practice. Throughout the study, the upper tercile of financial practice score is omitted as a reference

[3]See, for example, Huston (2010), Lusardi and Tufano (2009), Robb and Woodyard (2011), and Santos and Abreu (2013), for more information on individuals' financial practice. Our definition of financial practice follows Agarwal, Driscoll, Gabaix, and Laibson (2007) where financial mistake is defined on credit card and (high-cost) borrowing behaviors.

group, and the binary indicators of lower and middle tercile are interacted with financial knowledge index. We test the linear restrictions on the interaction terms and report the corresponding odds ratio for interpretation purposes.

3 Results

3.1 Factor Analysis

Table 2 shows that some desirable financial behaviors, such as "paid credit cards in full", "no carry over balance", and "no minimum payment only", are not easily attainable among the respondents.[4] This may indicate that some domains of money management skills are relatively more important in achieving a better financial practice, and more weights should be placed on these domains to create a composite index. Table 3 supports our conjecture. The first financial practice score, which is the primary score of interest based on the full set of measures, is more heavily influenced by "paid credit cards in full", "no late fee charged", "no carry over balance", and "no minimum payment only". Bank account overdraft and high-cost borrowing have relatively minor impact on the latent score, indicating that financial practice index indeed captures respondent's financial management skills, not their liquidity constraints.

To check the robustness and validity of the latent score, we create three additional measures defined on narrower dimensionality. Financial practice score 2 and 3 in Table 3 excludes "no carry over balance" and "no minimum payment only" respectively, which shows the highest correlations with the latent score. Financial practice score 4 excludes both measures and observe the changes in the correlations. Overall, we find no significant difference depending on which measures are included/excluded. Across three alternative practice scores, "no late fee charged" is most indicative of one's financial management skill, while "no cash advance" and "no high-cost borrowing" are less correlated with the latent scores. Cronbach's α remains around 0.7, indicating the reliability of financial practice score. In a later section, we use these alternative measures to check the robustness of regression estimates.

3.2 Regression Results

Table 4 shows the estimates from logistic regression. Three results stand out the most. First, the association of financial knowledge with precautionary saving is negative among the least skilled group, and positive among relatively more skilled groups. A 10 percentage points increase in financial knowledge is associated with about 6-7% less emergency funds ownership in the lowest tercile of practice score, and 5-6% greater emergency funds ownership in the second tercile. These relationships remain robust, regardless of whether the models account for the confounding factors.

Second, the negative association between financial knowledge and precautionary saving in the lowest tercile is more pronounced among the overconfident individuals. In the overconfident sample, about 10.4% decrease in emergency funds ownership is attributable to a

[4]It is important to note that not all of these measures necessarily represent "bad" financial practices. Some people may use these alternatives to meet their immediate consumption needs.

10 percentage points increase in financial knowledge, while such association is not significant among the non-overconfident respondents. This is in support for our hypothesis that overconfidence is a possible mechanism through which financial knowledge crowds out short-term saving among the unskilled.

Third, the same pattern is not observed in the models for retirement accounts ownership. Financial knowledge is positively associated with retirement accounts ownership in the second and upper tercile of financial practice distribution, which is in line with Lusardi and Mitchell (2009). Such association is not significant in the lowest tercile, indicating no effect of financial knowledge on the long-term savings decision. In the subsample analysis, the association is positive and significant only in the non-overconfident sample.

3.3 Robustness Checks

Table 5 shows the estimates from logistic regression with alternative measures of financial practice. Using three alternative measures presented in Table 3, we get the threshold values for each tercile of financial practice distribution, and then re-fit the logit model. The first three columns re-fit the full sample model for emergency funds ownership, and the next three columns estimate the models for retirement accounts ownership.

Not surprisingly, the regression results remain nearly unchanged. Across the first three columns in Table 5, we find that financial knowledge and precautionary saving is negatively associated in the lowest tercile, with the odds ratios remain around 6-7%. Throughout the models for retirement accounts ownership, financial knowledge is not significantly associated with the response in the lowest tercile, irrespective of how financial practice is defined.

4 Conclusion

Assuming illusion of control and overconfidence hypothesis, this paper seeks to answer whether the mismatch between financial knowledge and practice is associated with myopic savings decision. The results indicate that emergency funds ownership, which has a particular importance for maintaining financial stability, is significantly lower among the knowledgeable but unskilled individuals. Such mismatch has no impact on retirement accounts ownership, indicating that our findings are relevant only to short-term savings decision. This paradoxical result, at first glance, seems to follow a previous study that claimed financial education would make skill-deficient individuals feel overconfident, and thus leads to welfare-reducing decisions (Willis, 2008). The unskilled individuals then may overestimate their perceived control over uncertain financial outcomes over which they, in fact, have no influence. For instance, those who believe they can control the future outcome would make more risky investments because the perceived odds are over-estimated. Although one might argue that reduced emergency saving might result in more efficient investment in other assets, the literature shows that when it comes to the asset building strategy of low-income households, having emergency funds have a particular importance as a financial cushion to soften income shocks (Gourinchas & Parker, 2001). Also, it is improbable to expect that those with limited financial abilities achieve above-average gain from the security market. Consistent with Gray (1999), we confirm that only short-term decision-making is affected by the biased decisions.

The negative association between short-term savings and a disparity between knowledge and skill does not necessarily mean that the benefit from financial literacy education is less likely to accrue on those with no experience or skills. The particular emphasis should be placed on the fact that practical financial skills such as tracking daily expenses and knowing how to avoid small transaction fees are also essential to induce more desirable financial decisions. As the Task Force on Financial Literacy (2010) emphasizes, three dimensions of financial literacy encompassing knowledge, skills, and confidence should be well-balanced to draw the maximum benefit out of education programs. Our research, in turn, suggests that we need to build a more nuanced understanding of the direct and indirect pathway through which financial knowledge turns into informed financial choices.

While this study contributes to the literature in several ways, the following limitations should be emphasized alongside these findings. First, the empirical models do not exploit the exogenous variation in financial knowledge, and thus it remains unclear how causality runs. Although our findings are limited due to a lack of appropriate data, it is important to note that the causal impact of financial knowledge has been repetitively demonstrated in the previous studies (Lusardi & Mitchell, 2014). Second, the regression estimates from retirement planning models could be, in part, affected by a recent blossom of automatic contribution arrangements. If individual's financial practice is somehow correlated with opting in auto-enrollment, the regression estimates could be inconsistent even with a large sample.

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Table 1: Wording of Financial Knowledge Questions

	Question wording	Correct (%)
Compounding	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?: (a) more than $102*; (b) Exactly $102; (c) less than $102; (d) dont know; (e) prefer not to say.	83.5
Inflation	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?: (a) more than today; (b) exactly the same; (c) less than today*; (d) dont know; (e) prefer not to say.	72.8
Bond price	If interest rates rise, what will typically happen to bond prices?: (a) they will rise; (b) they will fall*; (c) they will remain the same; (d) there is no relationship between bond prices and the interest rate; (e) dont know; (f) prefer not to say.	35.2
Mortgage	A 15-year mortgage typically requires higher monthly payments than a 30-year mortgage, but the total interest paid over the life of the loan will be less: (a) true*; (b) false; (c) dont know; (d) prefer not to say.	86.0
Mutual fund	Buying a single company's stock usually provides a safer return than a stock mutual fund: (a) true; (b) false*; (c) dont know; (d) prefer not to say.	60.6

Note: * represents the correct answer and Correct (%) shows the proportion of correct responses.

Table 2: Wording of Financial Practice Questions

	Question wording	Correct (%)
No overdraft	Do you [or your spouse/partner] overdraw your checking account occasionally?: (a) Yes; (b) No*; (c) dont know; (e) prefer not to say.	82.0
Paid credit cards in full	In the past 12 months, which of the following describes your experience with credit cards? - I always paid my credit cards in full: (a) Yes*; (b) No; (c) Don't know; (d) Prefer not to say	50.7
No carry over balance	In the past 12 months, which of the following describes your experience with credit cards? - In some months, I carried over a balance and was charged interest: (a) Yes; (b) No*; (c) dont know; (e) prefer not to say.	50.2
No minimum payment only	In the past 12 months, which of the following describes your experience with credit cards? - In some months, I paid the minimum payment only: (a) Yes; (b) No*; (c) dont know; (e) prefer not to say.	67.1
No late fee charged	In the past 12 months, which of the following describes your experience with credit cards? - In some months, I was charged a late fee for late payment: (a) Yes; (b) No*; (c) dont know; (e) prefer not to say.	84.7
No over the limit fee charged	In the past 12 months, which of the following describes your experience with credit cards? - In some months, I was charged an over the limit fee for exceeding my credit line: (a) Yes; (b) No*; (c) dont know; (e) prefer not to say.	92.9
No cash advance	In the past 12 months, which of the following describes your experience with credit cards? - In some months, I used the cards for a cash advance: (a) Yes; (b) No*; (c) dont know; (e) prefer not to say.	90.4
No high-cost borrowing	In the past 5 years, how many times have you - used auto title loan, short term 'payday' loan, refund anticipation check, pawn shop, or rent-to-own store?: (a) Never*; (b) 1 time;(c) 2 times;(d) 3 times;(e) 4 or more times; (f) Don't know;(g) Prefer not to say.	80.4

Note: The responses are reverse-coded so that the financial practice score indicates short-term financial management skills.

Table 3: Factor Analysis

Factor loadings	F.K. Score			
Financial knowledge questions				
Compounding	0.598			
Inflation	0.704			
Bond price	0.489			
Mortgage	0.579			
Mutual fund	0.683			
Cronbach's α	0.580			
	F.P. Score 1 (Primary measure of F.P.)	F.P. Score 2	F.P. Score 3	F.P. Score 4 (Alternative measures of F.P.)
Financial practice questions				
No overdraft	0.590	0.640	0.625	0.675
Paid credit cards in full	0.686	0.547	0.641	0.445
No late fee charged	0.686	0.729	0.704	0.741
No over the limit fee charged	0.605	0.673	0.651	0.726
No cash advance	0.483	0.536	0.520	0.579
No high-cost borrowing	0.497	0.555	0.523	0.585
No minimum payment only	0.751	0.725		
No carry over balance	0.699		0.676	
Cronbach's α	0.777	0.735	0.725	0.663

Notes: F.P. and F.K represent financial practice and financial knowledge, respectively. Each column shows the correlation between the observed variables and the latent score, followed by a corresponding Cronbach's α. For checking the robustness, each factor scores are based on different sets of observed variables.

Table 4: Effects of Financial Knowledge and Practice on Savings Outcomes

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Have emergency funds				Have retirement accounts			
	Logit				Logit			
	Full sample		Overcon-fident	Not over-confident	Full sample		Overcon-fident	Not over-confident
β_1: F.K. index (/10)	-0.009	-0.028*	-0.047**	-0.012	0.074***	0.070***	0.042*	0.105***
	(0.014)	(0.014)	(0.019)	(0.023)	(0.019)	(0.019)	(0.024)	(0.030)
β_2: 1st. tercile of prac. score	-0.031	-0.005	0.150	-0.317	0.531***	0.533***	0.547**	0.321
	(0.129)	(0.131)	(0.171)	(0.218)	(0.172)	(0.172)	(0.220)	(0.288)
β_3: 2nd. tercile of prac. score	0.779***	0.778***	0.768***	0.792***	0.299	0.294	-0.146	0.843***
	(0.141)	(0.143)	(0.191)	(0.222)	(0.186)	(0.187)	(0.248)	(0.291)
β_4: F.K. index*1st. tercile of prac. score	-0.055***	-0.051***	-0.063***	-0.018	-0.073***	-0.071***	-0.067**	-0.053
	(0.018)	(0.018)	(0.023)	(0.030)	(0.023)	(0.023)	(0.029)	(0.038)
β_5: F.K. index*2nd. tercile of prac. score	0.075***	0.073***	0.082***	0.061**	0.044*	0.043*	0.094***	-0.021
	(0.019)	(0.019)	(0.025)	(0.030)	(0.024)	(0.024)	(0.031)	(0.038)
Self-assessed financial knowledge		0.250***	0.338***	0.214***		0.085***	0.135**	0.075*
		(0.020)	(0.051)	(0.040)		(0.022)	(0.058)	(0.043)
Self-assessed financial mgmt. skills		0.115***	0.103***	0.127***		0.016	0.043*	-0.01
		(0.015)	(0.021)	(0.021)		(0.017)	(0.025)	(0.024)
Income shock		-0.349***	-0.432***	-0.276***				
		(0.047)	(0.066)	(0.065)				
Plan for retirement						0.819***	0.960***	0.686***
						(0.044)	(0.064)	(0.062)
Health insurance	0.374***	0.372***	0.310***	0.415***	0.456***	0.457***	0.590***	0.319***
	(0.066)	(0.067)	(0.097)	(0.093)	(0.076)	(0.076)	(0.110)	(0.105)
Risk tolerance	0.141***	0.115***	0.123***	0.105***	0.155***	0.147***	0.154***	0.134***
	(0.008)	(0.008)	(0.012)	(0.012)	(0.009)	(0.009)	(0.013)	(0.014)
Work full-time	-0.039	-0.042	0.117	-0.166**	0.050	0.053	0.081	0.013
	(0.054)	(0.055)	(0.083)	(0.074)	(0.060)	(0.060)	(0.089)	(0.082)
Self-employed	0.257***	0.206**	0.310***	0.135	0.533***	0.519***	0.535***	0.492***
	(0.083)	(0.085)	(0.120)	(0.121)	(0.090)	(0.090)	(0.128)	(0.129)
Retired	0.605***	0.546***	0.696***	0.410***	0.284***	0.266***	0.289**	0.244**
	(0.070)	(0.071)	(0.101)	(0.101)	(0.086)	(0.086)	(0.121)	(0.122)
Pseudo R^2	0.225	0.240	0.239	0.206	0.225	0.226	0.239	0.199
Observations	16,321	16,321	8,359	7,962	13,111	13,111	6,393	6,718
Linear restrictions								
H_0: $\beta_1+\beta_4=0$	-0.064***	-0.079***	-0.110***	-0.029	0.0008	-0.001	-0.025	0.053**
(Odds ratio on $\beta_1+\beta_4$)	0.938	0.924	0.896	0.971	1.0008	0.999	0.975	1.054
H_0: $\beta_1+\beta_5=0$	0.065***	0.045***	0.035**	0.050**	0.118***	0.113***	0.136***	0.084***
(Odds ratio on $\beta_1+\beta_5$)	1.067	1.046	1.036	1.051	1.125	1.120	1.145	1.088

Notes: Financial literacy index and practice score are defined on a scale of 0 to 100. Financial literacy index is re-scaled on a scale of 0 to 10, and financial practice score is categorized into three categories. The top tercile is omitted as a reference group. Each regression model includes demographic characteristics, household income, and region fixed effects. The models for retirement accounts ownerships exclude the respondent older than 65 to limit the sample to working-age individuals. Robust standard errors are reported in parentheses. Significance levels are indicated by *, **, and *** for 10, 5, and 1 percent significance level, respectively.

Table 5: Robustness Checks

Dependent variable:	(1)	(2)	(3)	(4)	(5)	(6)
	Have emergency funds			Have retirement accounts		
	Logit			Logit		
	2nd. practice score	3rd. practice score	4th. practice score	2nd. practice score	3rd. practice score	4th. practice score
β_1: F.K. index (/10)	-0.038**	-0.029**	0.044***	0.071***	0.069***	0.107***
	(0.015)	(0.014)	(0.014)	(0.020)	(0.019)	(0.015)
β_2: 1st. tercile of prac. score	0.021	-0.018	-1.124***	0.576***	0.547***	0.149
	(0.137)	(0.133)	(0.133)	(0.179)	(0.173)	(0.153)
β_3: 2nd. tercile of prac. score	0.673***	0.758***	-0.908***	0.373**	0.243	-0.468***
	(0.142)	(0.142)	(0.142)	(0.190)	(0.187)	(0.181)
β_4: F.K. index*1st. tercile of prac. score	-0.031*	-0.043**	-0.121***	-0.070***	-0.064***	-0.114***
	(0.019)	(0.018)	(0.018)	(0.024)	(0.023)	(0.020)
β_5: F.K. index*2nd. tercile of prac. score	0.079***	0.070***	-0.075***	0.034	0.044*	-0.025
	(0.019)	(0.019)	(0.019)	(0.024)	(0.024)	(0.023)
Pseudo R^2	0.230	0.235	0.259	0.225	0.224	0.228
Observations	16,321	16,321	16,321	13,111	13,111	13,111
Linear restrictions						
H_0: $\beta_1+\beta_4=0$	-0.069***	-0.072***	-0.077***	0.002	0.004	-0.007
(Odds ratio on $\beta_1+\beta_4$)	0.934	0.930	0.926	1.002	1.004	0.993
H_0: $\beta_1+\beta_5=0$	0.042***	0.040***	-0.031**	0.105***	0.113***	0.082***
(Odds ratio on $\beta_1+\beta_5$)	1.043	1.041	0.969	1.111	1.119	1.085

Notes: The second and third financial practice score are alternative scores that exclude "carry over balance" and "minimum payment only", respectively. The fourth financial practice score excludes both "carry over balance" and "minimum payment only" from the primary score. These alternative scores are used to get the upper and lower tercile threshold for each regression models. The top tercile is omitted as a reference group. Each regression model includes all RHS variables in Table 2. Robust standard errors are reported in parentheses. Significance levels are indicated by *, **, and *** for 10, 5, and 1 percent significance level, respectively.