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Savings Versus Debt: The Effects of Survey Question Order on Consumers' Reported Financial Priorities

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Abstract

Survey after survey indicates that building savings and reducing debt are among the top financial goals for many Americans. However, because of limited resources and inherent trade-offs, achieving these two goals can be challenging and often requires prioritizing one goal over the other. We conduct two survey experiments with national samples of U.S. adults to understand how individuals balance saving and paying off debt, while taking into account survey context and question effects that might influence self-reports of behaviors. Both studies find a significant question order effect, in which respondents provide different answers about their preferred financial choice depending on the placement of questions within the survey. Specifically, when asked how to allocate their discretionary income between savings and debt payments, respondents generally indicate a greater preference for savings; however, when asked about their personal financial values *before* the allocation question, they are more willing to allocate a larger portion toward debt payments. These findings highlight the importance of considering survey context and question content when interpreting survey responses about personal finances.

Keywords: personal finance, financial decision-making, savings and debt, survey experiments, survey methodology, question order effects, wording effects

JEL Codes: D14, C83

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1. Introduction

Should you prioritize saving for the future or paying off debt first? This is a common financial dilemma for many Americans who want a savings cushion but carry some debt at the same time. Many find it challenging to balance saving and paying off debt, as it involves a trade-off. Depending on their circumstances and personal financial values, some may choose to prioritize one goal over the other.

Surveys are a valuable tool for understanding how individuals manage their finances. Some administrative data sets exist, such as anonymized credit bureau data used by consumer finance researchers. However, these data have limitations. First, they contain data on typical liabilities owed by consumers but not their assets or liquid balances. Second, these data do not contain much demographic or other information about consumers.¹ Therefore, researchers and policy analysts often rely on self-reported survey data to understand the financial situations and behaviors of American consumers. Surveys such as the Federal Reserve's <u>Survey of Consumer Finances</u> (SCF), <u>Survey of Household Economics and Decisionmaking</u> (SHED), <u>Survey of Consumer Expectations</u> (SCE), and <u>Labor</u>, <u>Income</u>, <u>Finances</u>, and <u>Expectations</u> (LIFE) <u>Survey</u>, and the Consumer Financial Protection Bureau's <u>Making Ends Meet Survey</u> routinely collect data on various aspects of personal finances, including levels of income, savings, and debt, and individuals' perceptions of their financial situations. Many of these surveys ask respondents how they manage their resources and adjust their financial habits to cope with changing economic conditions, unexpected expenses, or income shocks.

¹ The personal information contained in the anonymized credit bureau data most researchers use is typically limited to a consumer's age and approximate geographic location.

While survey data on personal finances are invaluable, there are nevertheless concerns about the potential for bias, noise, or errors in how people respond to survey questions, which could lead to inaccurate or misleading results. For example, responses are often influenced by factors such as the order in which questions are asked in a questionnaire ("order effects") or how the questions are worded ("wording effects"). Depending on the way questions are presented to the respondents, they may interpret them differently or respond based on different considerations or motivations, making interpretation of the results complicated.

Understanding these survey effects is particularly important for surveys on personal finances, since these questions are inherently subjective and personal, and often grouped together with other items on a similar topic. Identifying issues associated with question order, placement, and wording is crucial for drawing accurate conclusions from survey responses, understanding variations in results between surveys, and developing future survey instruments that can minimize response bias.

In this paper, we conduct two survey experiments with national samples of U.S. adults to explore how individuals balance saving and paying off debt, while testing for question effects that may influence survey self-reports. We find that the way questions are asked and presented in a survey can substantially influence responses regarding financial values and choices. Specifically, the order of questions affected respondents' savings vs. paying debt choices: When respondents were asked how they would allocate their discretionary income between savings and debt payments, they were, on average, more inclined to allocate a larger portion toward savings. However, when asked about their financial values *before* making the allocation, they were more inclined or apt to allocate a larger portion toward debt payments. Additionally, respondents tended to provide varying answers about their financial values depending on the wording of the

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question. These results underscore the importance of considering survey context and instrument design when developing surveys on financial behavior and drawing conclusions from the obtained responses.

2. Saving or Paying Off Debt

Many Americans juggle savings and debt simultaneously and want to live debt-free with a good savings cushion. Among multiple financial goals, building savings and paying off debts are generally considered the two most important steps toward financial stability. Accordingly, those two goals almost always rank as the public's top financial goals when surveyed (e.g., Consumer Reports 2021; Jones and Tepper 2024; O'Brien 2022). Despite this apparent importance, the aggregate and average debt owed by American consumers has increased over time, with the total household debt reaching \$17.8 trillion as of the second quarter of 2024.² The minimum debt payments households are required to make amount to about 10 percent of their total disposable income.³ At the same time, the personal saving rate has steadily declined: Americans are currently saving an average of less than 4 percent of their disposable income, which is below the average of 8.3 percent from 1980 to 2000 and 5.8 percent from 2001 until 2020.⁴

² Mortgage debt constitutes the largest proportion of total household debt, amounting to \$12.5 trillion. This is followed by auto loan balances at \$1.63 trillion, student loan debt at \$1.59 trillion, credit card balances at \$1.14 trillion, and other outstanding balances at \$0.92 trillion. For details, see the Federal Reserve Bank of New York's <u>Household Debt and Credit Report</u>.

³ See the Federal Reserve's <u>Household Debt Service Ratio</u> (DSR).

⁴ The personal saving rate, calculated as the share of disposable <u>personal income</u> that is saved rather than spent on consumption and other expenses, was 3.4 percent in June 2024. Economists have identified several measurement issues with this metric (e.g., Nakamura and Stark 2007), but it remains the most commonly cited measure of personal saving. Available at <u>FRED</u>.

Paying off debt reduces the available money to put toward savings, and few find it easy to navigate the trade-off between these goals. Many people are concerned about their debt and the ability to make all payments, while at the same time feeling stressed over not having enough savings (Baldassare et al. 2023; Lewis 2023). This means that saving or paying off debt is a common financial dilemma, which often requires prioritizing one goal over the other. Ultimately, the decision depends on one's current financial needs and circumstances. For example, people with irregular incomes, those with more financial responsibilities, those undergoing or anticipating major life events and transitions may give debt repayment less priority than other financial matters (see e.g., Dearden et al. 2010; Lea, Webley, and Levine 1993; McCloud and Dwyer 2011).

Another factor that influences the saving vs. paying debt decision is attitudes toward debt and personal values in money management. Some people are more comfortable with debt than others and are naturally more likely to carry debt themselves, controlling for socioeconomic characteristics (Almenberg et al. 2021; Chien and Devaney 2001). Whether shaped by dispositional or situational factors, people hold different attitudes and beliefs regarding spending, saving, and borrowing, which can guide their actual financial choices (see Lea 2021 for a review; also Cronqvist and Siegel 2015; Hayhoe, Leach, and Turner 1999; Stone and Maury 2006). Based on their personal financial values, some people may feel more strongly about prioritizing paying off debts and others may have different priorities.

3. Survey Effects: Question Order and Wording Effects

Much of the research on how individuals manage their finances relies on survey data. While surveys serve as a valuable tool for that purpose, survey-based instruments are often subject to context effects, that is, how the context in which questions are presented to respondents affects the ways they respond to the questions. Most commonly, question order effects occur when the sequence of questions influences responses, with earlier items conditioning the responses to later ones on a related topic (Schuman and Presser 1981).

Order effects have been extensively studied in the fields of public opinion and policy attitudes, as well as in health and marketing domains (for a review of the existing literature, see Lee, Krishnamurty, and Van Horn 2023). Research has identified various types of order effects, including respondents' tendency to closely align responses between questions (i.e., consistency/assimilation effects), the tendency to respond with greater divergence from earlier responses based on question proximity (i.e., contrast effects), and the tendency to respond based on what has been brought to the forefront of their minds by the prior question (i.e., saliency/priming effects) (see e.g., Bradburn and Mason 1964; Moore 2002; Paccagnella and Guidolin 2023; Schuman, Presser, and Ludwig 1981; Sudman, Bradburn, and Schwarz 1996; Tourangeau, Rips, and Rasinski 2000; Wilson 2010). Studies have often yielded mixed results regarding the prevalence and underlying mechanisms of each type, but the general consensus is that question order effects exist. An earlier question can serve as a frame of reference or basis for comparison, shaping how respondents approach subsequent questions (Sudman, Bradburn, and Schwarz 1996).

Furthermore, the wording of survey questions may also influence responses. For instance, respondents may show different levels of agreement with a statement when it is presented alone vs. alongside an alternative viewpoint (Hedges 1979; Schuman and Presser 1981; but cf. see Shaeffer et al. 2005). Moreover, respondents may express varying attitudes for the same issue depending on the specific verbs used or the direction asked in the question (Holleman 1999;

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Krosnick 1989). Even subtle changes in wording, such as changes in labels, may lead to a sizable difference in responses (Rasinski 1989).

To sum up, the way questions are asked and placed in a questionnaire can influence how people think and respond. In this study, we extend the literature by investigating question effects on survey responses about personal finances. In what follows, we present two population-based survey experiments designed to examine individuals' financial priorities and decision-making, while experimentally manipulating the design of survey questions. For question effects, we focus on order effects in Study 1 and both order and wording effects in Study 2 (see Table 1).

	Study 1	Study 2
Sample	5,158 U.S. adults	2,406 U.S. adults
Dates Fielded	July 5–14, 2023	January 26–30, 2024
Experiment	Employed a 2 (Question Order) x 2 (Temporal Reference Order) between-subjects factorial design	Employed a 2 (Question Order) x 2 (Question Wording) between-subjects factorial design

	Table 1	1. S	ummary	of Study	/ Design
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4. Study 1

We conducted our first survey experiment in July 2023 with a national sample of 5,158 U.S. adults recruited from a large online research panel. Our sample resembles the national population in terms of gender, age, race, education, and region (see Table A1 in the Appendix). The experiment was embedded in the Consumer Finance Institute Labor, Income, Finances, and Expectations (LIFE) Survey, a quarterly survey conducted by the Federal Reserve Bank of Philadelphia on various aspects of the financial lives of American consumers.

For this paper, we focused on two main survey questions, one asking about the saving vs. paying debt choices individuals would make (*allocation*) and the other about personal financial

values (*value*). Specifically, the *allocation* question asked respondents how they would use \$400 left after covering all their monthly financial needs. They were given five choices: (a) deposit all of it into their bank account, (b) deposit most and use the rest toward a debt payment, (c) split it evenly between savings and debt, (d) use most toward debt and save the rest, or (e) allocate all toward debt.⁵ In contrast, the *value* question was used to measure which of the two goals respondents see as generally more important: focusing on building savings first or paying off debt first. They were asked to rate their agreement, on a five-point scale, with the importance of prioritizing savings. Descriptive statistics are reported in Table A2.

To explore potential question order effects, we presented these two questions in a random order to each respondent (*Value–Allocation Question Order Manipulation*). While we assess the order effect on both variables, our primary interest is in how varying the question order affects responses to the allocation question, specifically whether the allocation decision on savings vs. paying debt changes when it is asked before or after the question on personal financial values.

The second experimental manipulation involved varying the order of temporal references mentioned in these questions. In their assigned sequence of the allocation and value questions, respondents were asked how they would answer today (*present*) and how they would have answered 12 months ago (*past*) in a random order (*Temporal Reference Order Manipulation*). As individuals' preferences and circumstances may change over time, reflecting on their current perspective or past mindset first may affect their responses. However, since what people report

⁵ In this paper, we use the term "allocation" to refer to respondents' stated intentions regarding how they would allocate funds between savings and debt payments. As is common in most surveys, we do not directly observe their actual behavior. While stated intentions may not always align with individuals' real-life actions (Ajzen 1991), some evidence suggests that survey responses often strongly correlate with actual financial choices (e.g., Armantier et al. 2015).

about the past tends to be prone to memory biases and errors, we focus primarily on responses to the *present* items and whether they were influenced by the ordering of referenced time points.

Combining the question order and temporal reference order manipulations, we randomly assigned respondents to one of four groups. To facilitate analysis, we recoded the allocation variable into three categories based on which of the two financial goals the respondent prioritized in their allocation decision: (1) saving (i.e., saving all or most of the money), (2) paying debts (i.e., using all or most of it toward debt repayment), or (3) even splits (i.e., dividing equally between savings and debt). We then used multinomial logistic regression, with *saving* as the baseline category.⁶ Compared with this baseline, the other two categories — paying debts and even splits — are more instrumental in reducing debt. This model, therefore, estimates how the likelihood of choosing more debt-reducing options over the least such option changes as a function of the value–allocation question order and the present–past temporal reference order. With respect to the *value* variable, we rescaled the original five-point Likert scale to range between 0 and 1 and analyzed the data using linear regression. The regression results are presented in Tables A3–A4 in the Appendix. These tables also present the analysis that includes respondent age, gender, race, and income as covariates to increase model efficiency. The qualitative results are the same with or without the inclusion of covariates. The main text presents the results without covariates.

⁶ Treating *saving, paying debts*, and *even splits* as nominal categories is appropriate, since there is no intrinsic quantitative order or ranking among these three options.

4.1 Study 1 Results

Question Effects on Allocation. Responses on how to allocate the \$400 discretionary income toward savings and debt were influenced by the ordering of the allocation and value questions. As shown in Figure 1, respondents were more likely to indicate that they would save the money when the allocation question was asked first (the left-hand side of the figure), but this preference decreased when it was asked after the value question (the right-hand side): The reduced allocation for savings was replaced by an increase in allocations toward debt. In contrast, varying the order of the present and past temporal references did not appear to meaningfully change responses on allocation.



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The results of multinomial logistic regression confirm that the coefficients of the value– allocation question order are statistically significant in both the *paying debts* and *even splits* equations (both p < .001), indicating that the question order significantly affects the likelihood of choosing these two options over *saving* (see Table A3). Additionally, the overall test for the joint significance of these coefficients on question order is also significant (F(2, 5156) = 11.93, p <.001). However, for the present–past temporal reference order effect, the coefficients were significant in only one equation (*even splits*), and the joint significance test across all equations did not achieve statistical significance (F(2, 5156) = 2.94, p = .053).

To facilitate interpretation of the results, we computed the predicted probabilities for the three allocation categories and plotted the marginal effects of each order manipulation. Figure 2 illustrates how the predicted probabilities of choosing *saving, even splits, and paying debts* change with variations in question order and temporal reference order, each adjusted for the influence of the other. As shown in the left panel, responding to the value question before the allocation question decreases the average probabilities of choosing *even splits* by 6.3 percentage points (from 53% to 47%), while increasing the probabilities of choosing *even splits* by 4.7 percentage points (from 19% to 24%) and *paying debts* by 1.7 percentage points (from 27% to 29%). On the other hand, the right panel shows that asking about the present before the past decreases the probability of *saving* today by 3.3 percentage points and increases the probabilities of *even splits* and *paying debts* by 2.0 and 1.3 percentage points, respectively.



Figure 2. Study 1. Average Marginal Effects of Question Order and Temporal Reference Order on Allocation

Note. The y-axis represents the change in predicted probabilities for the three categories of the allocation variable — saving, paying debts, and even splits — as the question order changes from allocation–value to value–allocation (left panel) and the temporal reference order changes from past–present to present–past (right panel). Error bars represent 95% confidence intervals. Based on the multinomial logistic regression results shown in Table A3, Model 1.

Question Effects on Financial Values. Unlike the allocation item, we did not observe a significant question order effect for the financial value item, as confirmed by the results of OLS regression (see Table A4). Responses to the value question were largely unaffected by whether it was asked before or after the allocation question (p = .18). They were significantly affected by the ordering of temporal references (p < .01), albeit of a moderate size. When respondents were asked about the present first, they were more likely to agree with the importance of saving today, compared with when they were first asked about the past.

4.2 Study 1 Discussion

The most significant finding of Study 1 is that respondents' allocation preferences differed when they made the decision before vs. after answering a question about personal financial values. In contrast, their responses on financial values remained consistent regardless of the question order, suggesting that values are generally more stable and resistant to contextual influences than behavioral choices. On the other hand, thinking about the present vs. the past appears to affect these responses to some extent, but it is difficult to make meaningful inferences from the results given their conflicting directions: The present–first treatment decreased savings in allocation but increased the reported personal importance of the saving goal.

To discuss these results, it is worth considering the timing of this experiment. It was a unique financial period in 2023, in that many consumers were drawing from the excess savings they had accumulated during the pandemic. At the same time, the national average credit card debt, which had dropped during the pandemic, was starting to rise to near or above pre-pandemic levels (Stavins 2023). Random assignment of respondents ensures that external events or trends do not confound the results of an experiment, provided there are no interactions between the treatment and the environment (Shadish, Cook, and Campbell 2002). For our study, there is little reason to believe that current financial trends would *differentially* affect the responses of those assigned to different experimental groups.

Nevertheless, external events can often prime respondents in a certain way that shapes how they respond in an experiment, making the observed effects potentially bound to particular times or contexts. Finding similar results across different time settings and with different samples

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would support the external validity of the results, making them generalizable beyond the specific time, environment, and sample. For this purpose, we turn to Study 2.

5. Study 2

Study 2 was conducted at the end of January 2024 with a new national U.S. sample of 2,406 respondents. Its primary objective was to replicate and expand on the findings of Study 1 with respect to question order effects, particularly focusing on how asking the financial value question first influences respondents' allocation choices. As in Study 1, we randomized the order in which the allocation and value questions were presented to each respondent (*Value–Allocation Question Order Manipulation*). Given the overall weak effects observed with the temporal reference order, we removed that factor and retained only questions focused on the present. Due to differences in study timing,⁷ the change in experimental factors (detailed below), and several minor wording changes to the questionnaire,⁸ we expect some variability in the results compared with those from Study 1. However, if we again observe a significant order effect, it will enhance both the reliability and the external validity of the finding.

To introduce a new experimental factor, we varied the wording of the question about personal financial values (*Value Question Wording Manipulation*). Respondents were randomly assigned to receive one of two versions: The first version, the same as used in Study 1, asked

⁷ By the time Study 2 was conducted, households had nearly depleted their excess savings and were returning to pre-pandemic saving habits (Wheat, Deadman, and Sullivan 2024).

⁸ We refined the original questionnaire to enhance clarity, such as replacing the phrase "putting into a bank account" with the more general term "saving" to encompass a wider range of activities in addition to bank deposits. Additionally, we clarified that saving means setting aside money for general future use, not solely for emergencies, and that the \$400 discretionary income refers to what is left after covering all monthly expenses, including basic needs.

how much they agree or disagree with a statement emphasizing the importance of building savings first (*save statement*), and the second version asked them about the personal importance of becoming debt-free first (*debt statement*). This manipulation allows us to assess whether different wording of the value question affects respondents' reports of their financial values, as well as whether this influences their allocation choices differently.

For the analysis, we followed the same procedure as Study 1 by trichotomizing the allocation variable into categories, *saving, paying debts*, and *even splits*. To estimate the effects of question order and question wording, we used multinomial logistic regression on the allocation variable and OLS regression on the value variable. Tables A7–A8 in the Appendix present the regression results with and without demographic covariates, and the results are qualitatively the same. In the main text, we report the results of the model without covariates. Sample characteristics and descriptive statistics are shown in Tables A5–A6.

5.1 Study 2 Results

Question Effects on Allocation. Consistent with the results of Study 1, question order influenced respondents' allocation preferences. Figure 3 illustrates that, without a preceding question on financial values (the right-hand side of the figure), respondents were more likely to say they would allocate more money toward saving. However, when the value question was asked first (the left-hand side of the figure), more respondents were willing to allocate all or most of the money, or at least half toward debt payments. In contrast, a comparison of the groups that received different versions of the value question (the *save* or *debt* statement, as mentioned above) suggests that the wording of the question did not have much effect on allocation patterns.

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The results of multinomial logistic regression confirm that the order of value–allocation questions significantly affects the likelihood of choosing *paying debts* and *even splits* over *saving* (both p < .001; see Table A7). A joint significance test indicates that this question order has a significant overall effect across all allocation categories (F(2, 2404) = 12.35, p < .001). Substantively speaking, as shown in the left panel in Figure 4, answering the value question before the allocation question decreases the average probability of respondents allocating toward *saving* by 10.5 percentage points (from 43% to 32%), while it increases the probabilities of *even splits* by 6.5 percentage points (from 27% to 34%) and *paying debts* by 4.0 percentage points (from 30% to 34%). By contrast, the wording of the value question had no significant effect on allocation, either when examining its coefficients for each allocation category individually (see Table 7) or jointly across all categories (F(2, 2404) = 0.23, p = .79).



Figure 4. Study 2. Average Marginal Effects of Question Order and Question Wording on Allocation

Note. The y-axis represents the change in predicted probabilities for the three categories of the allocation variable — saving, paying debts, and even splits — as the question order changes from allocation–value to value–allocation (left panel) and the wording of the value question changes from debt statement to save statement (right panel). Error bars represent 95% confidence intervals. Based on the multinomial logistic regression results shown in Table A7, Model 1.

Question Effects on Financial Values. The order of the value-allocation questions had little effect on responses to the value question, in line with Study 1 (see Table A8). However, value responses were significantly affected by the wording of the value question, leading respondents to express different views on the personal importance of saving vs. debt reduction goals (p <

.001). Specifically, respondents who received the *debt* statement were more likely to place a higher priority on living debt-free rather than maximizing savings, while those who received the *save* statement were more neutral about the importance of both (see Figure 5). Despite these two versions of the question essentially asking about the same information (i.e., which is more important, reducing debt or maximizing savings), their different wording influenced the reported preferences for financial values.⁹ Yet, as examined above, this difference in wording did not affect respondents' allocation choices.



Figure 5. Study 2. Comparing Responses to the Value Question by Question Wording *Note.* Shows mean responses by condition, with 95% confidence intervals.

⁹ It is unlikely that this difference is merely due to acquiescence or agreement bias, because if it were, the share of respondents agreeing with the *save* statement should mirror those agreeing with the *debt* statement, as these statements were constructed to be exact opposites of each other. However, that was not the case.

5.2 Study 2 Discussion

Study 2 replicated the order effects observed in Study 1: When the value question preceded the allocation question, respondents were more willing to increase their allocations toward repaying debt compared with when the value question was not asked first. A natural question that arises is why answering the value question first influences allocation choices differently. Although our current data do not allow for a direct, unbiased test of the mechanisms behind this order effect, we further explored the data to gain insights into what aspects of the value question encourage more debt-conscious choices in allocation.

Specifically, we examined whether respondents' current debt status (i.e., whether they currently carry debt), debt-related personal attitudes (i.e., whether they consider living debt-free more important than maximizing savings), and perceived social norms regarding debt management (i.e., whether they believe it is more socially acceptable to prioritize repaying debt than to build savings) were relevant to the way they reacted to the value–allocation question order treatment. If the content of the value question makes these debt-related factors more salient in respondents' minds, it could influence their subsequent allocation choices to be more focused on debt, compared with when such priming is absent.

The details and results of this exploratory analysis are presented in Appendix B.4. The results do not seem to provide much support for this speculation. While, descriptively speaking, the main order effects observed above in Figure 4 are mirrored by those who place a high value on living debt-free and those who perceive social norms against indebtedness, there are no statistically significant differences in how respondents reacted to the question order in their allocations based on their debt-related financials, values, and perceptions. A more rigorous and

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unbiased test of these hypotheses, as well as an examination of the mechanisms, requires additional data collection, which we leave for future work.

6. Conclusion

Building savings and managing debts are two of the most important financial goals for many people. Our studies demonstrate that survey responses regarding saving vs. debt choices, as well as financial priorities, can be influenced by how questions are asked and presented to respondents (see Table 2 for a summary of our findings). We find that respondents' answers about their personal financial values varied depending on the precise wording of the question. Moreover, preferences for allocating money between savings and paying debt differed based on whether they were asked to make decisions before or after being asked about their financial values. The significant effect of question order on allocation was consistently observed across our two studies, which were conducted on different samples, at different times, and with varying study designs, adding to the robustness of the findings.

	Question Effects on Responses to:		
	Savings vs. Debt Allocation Question	Personal Financial Value Question	
Study 1			
Value-Allocation Question Order	Sig.	n.s.	
Present-Past Temporal Reference Order	poral Reference Order n.s. Sig		
Study 2			
Value-Allocation Question Order	Sig.	n.s.	
Value Question Wording	n.s.	Sig.	

Table 2. Summary of Experimental Results

It is important to note that these results should not be construed as suggesting that surveybased responses are unreliable or fail to reflect people's true preferences and behavioral choices. Instead, responses are shaped by the context and content of the questions posed to them. This underscores the importance of identifying the contextual factors that influence individuals' responses, especially when drawing inferences about the larger population.

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Appendix for "Experiments on Question Effects on Financial Goal Priorities: Savings vs. Debt Reduction"

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Appendix A: Study 1

A.1 Sample Characteristics

Table A1	. Study 1	Sample	(N = 5158))
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	Study 1 Sa	Current Population	
	Unweighted	Weighted	Benchmark (%)
Age 18–34	26.9	29.7	29.8
Age 35–54	32.7	32.3	32.3
Age 55+	40.4	38.0	37.8
Male	46.8	48.7	48.7
Female	53.2	51.3	51.3
White	65.3	62.8	60.0
Black	12.4	12.1	12.4
Hispanic	13.5	16.4	18.4
Other Race	8.8	8.7	9.2
High School or Less	36.5	39.0	38.9
Some College	30.9	30.4	27.8
College Graduate	32.6	30.6	33.3

A.2. Descriptive Statistics

	М	SD	Min	Max	K N
Allocation					
Use All or Most of the \$400 to Repay Debt	0.28	0.45	0	1	5158
Split Evenly Between Savings and a Debt Payment	0.22	0.41	0	1	5158
Save All or Most of the \$400	0.50	0.50	0	1	5158
<u>Financial Values</u>					
Prefer Building Savings Despite Carrying Debt	3.07	1.33	1	5	5158
Note. Data are weighted by sampling weights.					

Table A2. Study 1. Descriptive Statistics of Key Variables

A.3 Regression Results

	Paying Debts (vs. Saving)		Even Splits (vs. Saving)	
	(1)	(2)	(1)	(2)
Value–Allocation Question Order	0.185***	0.183***	0.344***	0.351***
(<i>Value</i> First $= 1$)	(0.066)	(0.067)	(0.073)	(0.073)
Present–Past Temporal Reference	0.114	0.107	0.159*	0.153*
Order (<i>Present</i> First $= 1$)	(0.066)	(0.067)	(0.073)	(0.073)
Constant	-0.708***	-1.214***	-1.086***	-1.139***
	(0.057)	(0.109)	(0.066)	(0.117)
Demographic Covariates		Х		X

Table A3. Study 1. Effects of Question Order and Temporal Reference Order on Allocation

Note. N = 5158. Results from multinomial logistic regression, with *saving* as the base outcome. The allocation variable was recoded into three categories, *saving*, *paying debts*, and *even splits*. Standard errors in parentheses. Covariates include respondent gender (Male, Female), age (18– 34, 35–54, 55+), race (White, Black, Other), and income (Under \$40K, \$40–\$80K, Over \$80K, Don't Know/Refused). Data are weighted by sampling weights . *p < .05, **p < .01, ***p < .001

	Personal Financial Values		
	(1)	(2)	
Value–Allocation Question Order	-0.013	-0.012	
(Value First $= 1$)	(0.009)	(0.009)	
Present-Past Temporal Reference Order	0.028**	0.027**	
(Present First = 1)	(0.009)	(0.009)	
Constant	0.510***	0.582***	
	(0.008)	(0.015)	
Demographic Covariates		Х	

Table A4. Study 1. Effects of Question Order and Temporal Reference Order on Financial Values

Note. N = 5158. Results from OLS regression. The financial value variable was rescaled to 0-1, with higher values indicating a higher priority placed on a savings goal rather than a debt-free goal. Standard errors in parentheses. Covariates include respondent gender (Male, Female), age (18–34, 35–54, 55+), race (White, Black, Other), and income (Under \$40K, \$40–\$80K, Over \$80K, Don't Know/Refused). Data are weighted by sampling weights. *p < .05, **p < .01, ***p < .001

A.4 Questionnaire

Consider the following situation: At the end of the month, after paying all of your bills and covering your basic financial needs, you have \$400 left over. You can choose to put all of that money into a bank account, use it to pay down a debt (for instance, paying extra to a credit card or personal loan balance), or a combination of those.

[Allocation Today] What would you most likely do with an extra \$400 this month?

- 1. Put all \$400 into a bank account
- 2. Put most in the bank and a smaller amount toward a debt payment
- 3. Split the amount evenly between a bank account and a debt payment
- 4. Put most toward a debt payment and a smaller amount in the bank
- 5. Put all \$400 toward a debt balance

[Allocation Past] What would have most likely done with an extra \$400 12 months ago?

- 1. Put all \$400 into a bank account
- 2. Put most in the bank and a smaller amount toward a debt payment
- 3. Split the amount evenly between a bank account and a debt payment
- 4. Put most toward a debt payment and a smaller amount in the bank
- 5. Put all \$400 toward a debt balance

[*Financial Value Today*] How much do you agree or disagree with the following statement today: I prefer to keep as much money as I can in a bank account for emergencies, even if that means I must carry some credit card debt.

- 1. Strongly agree
- 2. Somewhat agree
- 3. Neither agree nor disagree
- 4. Somewhat disagree
- 5. Strongly disagree

[*Financial Value Past*] To the best of your recollection, how much would you have agreed or disagreed with the following statement 12 months ago (e.g., in July 2022): I prefer to keep as much money as I can in a bank account for emergencies, even if that means I must carry some credit card debt.

- 1. Strongly agree
- 2. Somewhat agree
- 3. Neither agree nor disagree
- 4. Somewhat disagree
- 5. Strongly disagree

Appendix B: Study 2

B.1 Sample Characteristics

Table A5.	Study 2	Sample ((N = 2406)
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	Study 2 Sa	Current Population Survey (CPS)	
	Unweighted	Weighted	Benchmark (%)
Age 18–34	25.8	29.5	29.8
Age 35–54	30.6	29.5	32.3
Age 55+	43.6	41.0	37.8
Male	44.5	48.7	48.7
Female	55.5	51.3	51.3
White	66.6	62.8	60.0
Black	13.0	12.0	12.4
Hispanic	10.6	15.6	18.4
Other Race	9.8	9.6	9.2
High School or Less	35.5	40.3	38.9
Some College	33.4	31.0	27.8
College Graduate	31.1	28.7	33.3

B.2 Descriptive Statistics

Table A6. Stud	y 2. Descri	ptive Statistics	of Key	Variables
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	М	SD	Min	Max	N
Allocation					
Use All or Most of the \$400 to Pay Debt	0.32	0.47	0	1	2406
Split Evenly Between Savings and a Debt Payment	0.30	0.46	0	1	2406
Save All or Most of the \$400	0.38	0.48	0	1	2406
<u>Financial Values</u>					
Prefer Building Saving More Despite Carrying Debt	3.00	1.24	1	5	1203
Prefer Being Debt-Free Despite Insufficient Savings	4.10	1.03	1	5	1203
Perceived Social Norm					
Think Others Will Say Prioritize Savings First	0.35	0.48	0	1	2406
Think Others Will Say Prioritize Debt Reduction First	0.65	0.48	0	1	2406
Current Financials					
Currently Have Debt	0.69	0.46	0	1	2406
Currently Have No Savings	0.35	0.48	0	1	2406

B.3 Regression Results

	Paying Debts (vs. Saving)		Even Splits (vs. Saving)	
	(1)	(2)	(1)	(2)
Value–Allocation Question Order	0.407***	0.446***	0.496***	0.519***
(Value First=1)	(0.106)	(0.108)	(0.108)	(0.109)
Value Question Wording	0.053	0.060	0.069	0.070
(Save Statement=1)	(0.106)	(0.107)	(0.108)	(0.108)
Constant	-0.381***	-0.807***	-0.484***	-0.687***
	(0.089)	(0.175)	(0.093)	(0.172)
Demographic Covariates		Х		X

Table A7. Study 2. Effects of Question Order and Question Wording on Allocation

Note. N = 2406. Results from multinomial logistic regression, with *saving* as the base outcome. The allocation variable was recoded into three categories, *saving*, *paying debts*, and *even splits*. Standard errors in parentheses. Covariates include respondent gender (Male, Female), age (18– 34, 35–54, 55+), race (White, Black, Other), and income (Under \$40K, \$40–\$80K, Over \$80K, Don't Know/Refused). Data are weighted by sampling weights . *p < .05, **p < .01, ***p < .001

	Personal Financial Values		
	(1)	(2)	
Value–Allocation Question Order	0.001	-0.002	
(Value First=1)	(0.013)	(0.012)	
Value Question Wording	0.274***	0.273***	
(Save Statement=1)	(0.013)	(0.012)	
Constant	0.225***	0.265***	
	(0.010)	(0.020)	
Demographic Covariates		Х	

Table A8. Study 2. Effects of Question Order and Question Wording on Financial Values

Note. N = 2406. Results from OLS regression. The financial value variable was rescaled to 0-1, with higher values indicating a higher priority placed on a savings goal rather than a debt-free goal. Standard errors in parentheses. Covariates include respondent gender (Male, Female), age (18–34, 35–54, 55+), race (White, Black, Other), and income (Under \$40K, \$40–\$80K, Over \$80K, Don't Know/Refused). Data are weighted by sampling weights. *p < .05, **p < .01, ***p < .001

B.4 Additional Analysis: Question Order Effect

We conducted additional analysis on the Study 2 data to gain a deeper understanding of the observed order effects. Specifically, we examined whether the effects of the value–allocation question order on increasing allocations toward debt were primarily driven by respondents who currently carry debt, those who value living debt-free more than maximizing savings, and those who perceive negative social norms about carrying debt. The rationale was that answering the value question first might have heighted the *salience* of one's current debt status, personal values related to debt, and perceived social norms regarding debt management, thus influencing their subsequent allocation choices toward a more debt-focused direction.

To elaborate, choices do not always align with personal values, but when these values are made salient, they can shape decision-making. In fact, when examining responses to the value question, a majority of respondents indicated a higher personal priority for being debt-free. However, as noted in the main text, many still did not choose to prioritize debt reduction in their allocations unless the value question was asked beforehand. This made us wonder whether the effect of the value question is, in part, driven by bringing the goal of being debt-free to the forefront, leading respondents to make allocation choices that better align with this goal compared with when such priming is absent.

The value question may also have activated perceived social norms regarding debt. When asked in a separate question about what they see as socially acceptable between prioritizing saving or paying off debt, 65 percent of respondents believed that most people would say focusing on debt repayment is the "right thing to do." If the value question activates these social norms against debt, it could lead to increased allocations toward debt payments, especially among those who recognize such norms. Additionally, 69 percent of respondents reported currently carrying some form of debt, whether it is a mortgage, credit card debt, an auto loan, or other. If answering the value question makes their debt status mores salient, it could lead debt-carrying respondents to allocate more toward reducing debt than when the value question was not asked first.

Figures A1–A3 illustrate the marginal effects of question order on allocation, *conditional on* respondents' debt status, financial values, and perceived social norms regarding debt. The y-axis represents the change in predicted probabilities for the three allocation categories, resulting from being asked the value question before (as opposed to after) the allocation question, with error bars indicating 95% confidence intervals. In these figures, respondents are classified into different groups based on their debt status (Figure A1), whether they attach a higher personal priority to living debt-free or maximizing savings (Figure A2), and whether they perceive negative social norms about indebtedness (Figure A3), as shown on the x-axis.

In brief, we do *not* find evidence that the order effects on increased debt allocations were significantly more pronounced among respondents who might be more sensitive to debt — namely, those who carry debt, value living debt-free more than saving money, and see debt as socially negative — compared with their respective counterparts. The question order effects did not significantly vary by these variables (p = 0.13 for the order x debt status interaction; p = 0.72 for the order x personal value interaction; p = 0.11 for the order x perceived norm interaction). In the main text, we discuss these results and the need for additional data collection to better understand the underlying processes and boundary conditions of the order effects.



Figure A1. Study 2. Effects of Question Order on Allocation: By Personal Debt Status



Conditional Marginal Effects of Question Order By Personal Financial Values

Figure A2. Study 2. Effects of Question Order on Allocation: By Personal Financial Values



Conditional Marginal Effects of Question Order By Perceived Social Norm

Perceive Negative Social Norm Against Indebtedness

Figure A3. Study 2. Effects of Question Order on Allocation: By Perceived Norms About Debt

B.5 Questionnaire

[*Allocation*] Consider the following situation: At the end of this month, after paying all your monthly expenses, you have \$400 left over. You can choose to save all that money to use later, use it now to pay down a debt (for instance, paying extra to a credit card or loan balance), or a combination of those.

What would you most likely do with an extra \$400 this month?

- 1. Save all \$400
- 2. Save most and use a smaller amount as a debt payment
- 3. Split the amount evenly between savings and a debt payment
- 4. Use most as a debt payment and save a smaller amount
- 5. Use all \$400 as a debt payment

[*Financial Value: Save Statement*] How much do you agree or disagree with the following statement today: I prefer to keep as much money in savings as I can, even if that means I must carry some debt right now.

- 1. Strongly agree
- 2. Somewhat agree
- 3. Neither agree nor disagree
- 4. Somewhat disagree
- 5. Strongly disagree

[*Financial Value: Debt Statement*] How much do you agree or disagree with the following statement today: I prefer to pay down my debt balances as soon as I can, even if that means I don't have as much savings right now.

- 1. Strongly agree
- 2. Somewhat agree
- 3. Neither agree nor disagree
- 4. Somewhat disagree
- 5. Strongly disagree

[Current Debt] Do you currently have any of the following types of debt?

- 1. Credit card
- 2. Mortgage
- 3. Personal Loan
- 4. Auto Loan
- 5. Other
- 6. I don't have any debt.

[Current Saving] Do you currently have savings that you can use in the future as needed?

- 1. Yes
- 2. No

[Norm] What do you think other people would say is the right thing to do?

- 1. Keep as much money in savings as you can, even if you have to carry some debt right now
- 2. Pay down your debt as soon as you can, even if you don't have as much in savings right now