# THE STICKINESS OF CASH INFLOW TIMING: HOW DO SOURCE OF INFLOW AND TIMING AFFECT SPENDING V. SAVING?

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#### Abstract

Earlier research findings show that the spending and savings choices surrounding a tax rebate are affected by whether that rebate amount is distributed as a lump sum or as a series of partial (e.g. monthly) rebates totaling the same amount. This study examines whether a lump-sum distribution or a regular, small distribution of the same total amount from several other types of hypothetical windfalls - bonus from work, game show winnings, lottery winnings or inheritance - would be spent or saved differently from a tax rebate, and whether timing matters for each source of windfall in the same way as earlier studies have predicted. Thus, this project could have practical implications for behavioral economic theory, compensation theory, and financial planning practitioners.

Although economic theory would say that money is money and the source of the money is irrelevant, this study finds that the source of the money had an influence on the amount that was spent or saved. A greater percentage of game show winnings was spent than any of the other sources (lottery, bonus, tax refund, or inheritance). Except for game show winnings, a greater percentage of an inheritance receipt was spent than saved than a receipt from a bonus or tax refund.

The order of presentation of the question mattered. When smaller, but monthly payments for a year were presented, more was saved than when a one- time payment of the same total value was presented first.

Respondents' general status as a spender or saver is highly significant. As suggested by Spencer and Chambers (2012), the consumer's spending or savings default is very important both monthly and lump sum distributions. Those indicating that they would generally spend a windfall, did.

This paper will add to the body of literature by responding to the call in Epley and Gneezy (2007), "future experiments with a broader sample of participants, varying amounts of payment, and alternative frames will undoubtedly identify important and interesting moderators of windfall framing effects." The methodology of this research addresses many of these suggestions.

Key words: income, income source, decision making, consumer behavior, mental accounting **INTRODUCTION** 

The difference that exists between what taxpayers do with tax rebates that are paid out monthly versus tax rebates of a similar amount that are paid out in a lump-sum is now well-documented (Chambers and Spencer, 2008; Sahm, et al., 2012). But is this difference related to the source of the payment, specifically tax rebates, or does this effect extend to other sources of transitory payment, e.g. lottery winnings, when the timing of a fixed amount is altered? That is, do people's mental accounts (Thaler, 1999) depend not only on timing and use of money, but also on source? To answer this question, this study tested whether people spend distributions from hypothetical tax rebates as they would if the distribution came from any of these other sources: bonus from work, game show winnings, inheritance or lottery winnings.

How might the recipient consider some of these sources as similar and others as different? Lottery winnings are similar to tax rebates in the United States, in that both lottery systems and tax systems are run by a government or its appointed agency. Both types of payment amounts are largely outside the respondent's control. To what extent the money is "earned" is debatable in both cases, but bonuses and game show winnings - and sometimes inheritances - require some personal effort. Tax rebates sometimes differ from the other four sources of

payment because the tax rebate is a refund or return of withholdings the taxpayer has previously paid in. That is, outside of refundable credits tied to specific performance, respondents generally cannot materially profit from a tax rebate because it is a refund of money already paid in, but can profit from a lottery, game show or bonus. Inheritance is not a profit, per se, but is generally not a return of one's own capital. Inheritances might be property or money that carries with it memories of the likely decedent, and those emotions might carry over to how the respondent intends to use the inheritance. Further, some political rhetoric frames taxes as money belonging fundamentally to taxpayers, not the government, whereas lottery winnings come with no similar sense of entitlement. Bonuses are likely to be closely tied to an individual's performance, however. Game show winnings might be as well, if the winner attributes success to higher skill level than one's fellow contestants.

If significant differences were found, such results would imply that money is not as fungible as commonly thought, and people's mental accounts are not just a function of use and timing, but also of source, representing a contribution to literature

#### LITERATURE REVIEW

#### Overview

According to mental accounting theory, people create different mental accounts (e.g. long-term savings), and correspondingly, have different marginal propensities to consume from each account. Numerous studies support mental accounting from a regular income flow or from an irregular, lump-sum windfall (Fogel, 2009; Souleles, 2002; and Johnson, et al., 2006). Informally, people periodically reconcile their mental accounts for income and expense (Read, et al., 1999; Camerer et al., 1997; Rizzo and Zeckhauser, 1998; and Heath and Soll, 1996).

Karlsson, et al. (1999) reported that cash spending on a durable good depended on compatible reasons for saving. Abeler and Marklein (2008) found that high school math grades seemed to matter in mental budgeting, and Benjamin, et al. (2006) found a relationship between low high school test scores and non-rational behavior in general. Cheema and Soman (2006) and Wertenbroch (2001) concluded that mental budgeting is a matter of self-control. Frederick (2005) reported a negative relationship between non-rational behavior and cognitive reflection. Source Literature

Some evidence suggests that the source of one's income does affect the use of those funds. In 1992, Henderson and Peterson reported that an individual would be more likely to spend \$2,000 on a vacation if the funds were a gift, rather than a work bonus. Dobbelsteen and Kooreman found in 1997 that individuals were more sensitive to changes in a child's allowance than to other income sources for the decision to spend on their child's clothing. Winkelmann, et al. (2010) used evidence from German lottery winners and a theoretical model to show that different sources of income spent do confer different marginal utilities. Thus the purchase of an item with one source of funds provides a different marginal utility than another, and that it takes about two years before lottery winners feel that they 'deserve' their good fortune. Bradford (2008) found that individuals allocate gifted and inherited assets in support of relational goals.

Still, the framing of payments seems to matter: Baker, Nagel and Wurgler (2007) found that more money was spent from likely recurring income (dividends) than less regular capital gain income from the sale of underlying transactions. Epley, et al. (2006) found that people spent more of a "bonus" increase than they did of a "rebate" of the same amount and timing. Similarly, Shefrin and Thaler (1988) found that more of a lump sum bonus is saved than if the same amount increases regular income, even when the bonus is fully anticipated.

The amount of effort required may affect responses. Boylan (2010) found that taxpayer compliance is influenced by whether taxable income is earned or endowed. Epley and Gneezy (2007) reviewed recent empirical findings and reported that the source of the surplus or windfall may change the use of the money with recipients of a bequest spending the gain differently than proceeds from a casino. Zagorsky (2013), using a cohort of baby boomers, studied consumption of inherited money and found that over 40% of those who inherited less than one thousand dollars spent their bequest. Only 18.7% of those receiving \$100,000 or more spent it all. In all, this research indicates that only about one half of inherited money is retained, the remainder is reduced by capital losses or is spent.

# Frequency of Distribution

Neo-classical economics assumes that the decision to spend, and how to spend, one's income would not depend on the way in which it is distributed. Yet the difference in spending patterns between tax rebates received from a limited number of monthly payments and a lump-sum tax rebate of the same amount is well-documented. Rucker (1984) studied the retroactive payment of a raise approved by a university, reversed by the Federal Pay Board but reinstated by the US Supreme Court. The size of the windfall was found to be the most important factor discriminating how the funds were spent; smaller checks being more likely to be consumed. In addition, the length of time that the recipient had to anticipate the receipt of the funds also influenced the use of the money. The less time the receipt of the money was anticipated, the more likely that the money was consumed.

Shapiro and Slemrod (1995) found that almost half the respondents surveyed would spend the 1992 decreased tax withholding refunded to them, even though the total yearly tax

liability remained unchanged, resulting in a lower end-of year tax refund. However, when in 2001 a tax cut took the form of either a \$300 or \$600 lump-sum rebate, only about one-fourth of those surveyed expected to spend the payment (Shapiro and Slemrod, 2003). Slemrod and Bakija (2004) attributed the change in behavior of taxpayers between the differently distributed rebates to changes in economic conditions, however applying Thaler's (1999) mental accounting theory, Chambers and Spencer (2008) found that the timing of payments (whether paid as a lump-sum, or spread out in equal monthly installments for a year) matters. This was confirmed by Sahm, et al. (2012).

#### Permanence of Distribution

Neoclassical economics tells us that neither the marginal cost nor the marginal benefit of a purchase is dependent on the source of the income spent. The permanence of payments may also be a factor in how much people choose to save. Blinder (1981) posited that a permanent tax decrease would elicit more spending than a temporary tax rebate, which he surmised would be treated as half normal income tax change and half windfall. Parker (1999) studied tax cuts, finding that a temporary, end-of-year reduction in social security tax for high-income wage earners was spent as received, not averaged evenly over the fiscal year. However, in this study, with the number of payments being of limited duration, the effect stems from the timing of the receipt, which is in contrast to Friedman's (1957) permanent income hypothesis, because both the limited series of monthly payments and the lump-sum are of limited duration. Karlsson (1999) noted that individuals considered the future consequences of spending in their mental budgeting, which may indicate a contemplation of permanent income.

Studies of unique, one time payments are rare. However, Bodkin (1959) estimated the marginal propensity to consume to be between 0.72 and 0.97 from a one-time dividend paid in

1950 to World War II veterans by the National Service Life Insurance. The payments averaged \$175, roughly \$1698.56 in 2014 dollars (BLS.gov). Similarly, Kreinin (1961) analyzed the spending of a sample of Israeli citizens receiving restitution payments from Germany in 1957 and 1958 and estimated on page 389 that 35% was spent while 65% of the restitution payment was saved, with 45% saved in liquid assets and 20% in real estate.

#### Materiality of Amount

Chambers, et al. (2009) studied responses to small hypothetical tax rebates, of the size distributed in 2008, \$300 and \$600, as well as larger amounts, \$1,500 and \$3,000. They found that at some amount over \$600, materiality mattered greatly in how the money would be used. Under the \$600 amount, individuals were likely to spend a rebate if that was the government's intent for distributing it, but at or above \$600, the government's wishes were ignored (Chambers, et al., 2009).

Research on large, regular bonuses includes Hsieh (2003) who studied consumption associated with receipt of the Alaska Permanent Fund. The annual receipt is fully anticipated and no spike in consumption is found. However, consumption by the same households was very responsive to income tax refunds. Hsieh writes, "This evidence suggests that households will take anticipated income changes into account in their consumption decisions when the income changes are large, regular and easy to predict, but will not do so when they are small and irregular" (Hsieh, 2003, 397). Another situation with large, regular and predictable bonuses was documented by Browning and Collado (2001). They studied Spanish panel data to measure the effect of the bonus payments customary in that market. Workers in this bonus paying scheme usually receive payments of 1/14<sup>th</sup> of their annual wage per month for ten months. However, in two months, usually December and June or July, they receive 2/14<sup>th</sup>s of their salary. They "do

not find any effect of anticipated changes in income on expenditure patterns over the year for those who receive the bonus payments are indistinguishable from the patterns of those who do not receive a bonus," (Browning and Collado, 2001, 682).

### **Research Questions**

In light of this literature, does a different source of payments, for example, from a tax rebate or work bonus to lottery winnings or other windfall source, change a consumer's amount saved, controlling for the distribution frequency? Or is the timing of the payments a phenomenon that is more general and stubbornly entrenched enough to resist a change in source? Stated as research questions in Table 1 below, for the possible combinations of bonus from a tax rebate, work, game show winnings, lottery winnings or inheritance:

**Table 1. Research Questions** 

RQ1	Do people intend to save the same amount of a hypothetical lump sum (monthly) bonus payment as they would a hypothetical lump sum (monthly) game show winning?
RQ2	Do people intend to save the same amount of a hypothetical lump sum (monthly) bonus payment as they would a hypothetical lump sum (monthly) inheritance?
RQ3	Do people intend to save the same amount of a hypothetical lump sum (monthly) bonus payment as they would a hypothetical lump sum (monthly) lottery winning?
RQ4	Do people intend to save the same amount of a hypothetical lump sum (monthly) bonus payment as they would a hypothetical lump sum (monthly) tax rebate?
RQ5	Do people intend to save the same amount of a hypothetical lump sum (monthly) from game show winnings as they would a hypothetical lump sum (monthly) inheritance?
RQ6	Do people intend to save the same amount of hypothetical lump sum (monthly) game show winnings as they would a hypothetical lump sum (monthly) lottery winning?
RQ7	Do people intend to save the same amount of hypothetical lump sum (monthly) game show winnings as they would a hypothetical lump sum (monthly) tax rebate?

RQ8	Do people intend to save the same amount of a hypothetical lump sum (monthly) inheritance as they would a hypothetical lump sum (monthly) lottery winning?
RQ9	Do people intend to save the same amount of a hypothetical lump sum (monthly) inheritance as they would a hypothetical lump sum (monthly) tax rebate?
RQ10	Do people intend to save the same amount of a hypothetical lump sum (monthly) lottery winning as they would a hypothetical lump sum (monthly) tax rebate?
RQ 11	Does the order of presentation matter? (Does the savings change if the annual or monthly amount was given first?)

#### METHODOLOGY

Sheppard et al.'s (1988) meta-analysis of 86 theory-of-reasoned-action studies found a 0.53 correlation between intention and behavior, indicating that intent is a good predictor of action. For this study, 80 different instruments were developed to test the intended spending/saving patterns of respondents. Participants were asked in each of these 80 instruments how they would use the funds, both if they were to receive a lump-sum and if they were to receive the same amount spread out over 12 equal monthly payments, from two of these five sources: bonus, game show winnings, inheritances, lottery winnings and tax rebates. Each instrument hypothesized one of these four different amounts: \$300, \$600, \$1,500, \$3,000. Some instruments presented the periodic amounts first and some presented the lump-sum amounts first, to test for the order effect.

The instruments asked how much of a lump sum refund would be used for: (1) investing, (2) paying off credit card debt, (3) paying off notes, (4) regular monthly expenses, (5) buying a durable asset, (6) saving for an infrequent yearly expense, and/or (7) used for fun. The instrument also asked how much of a monthly payment (equal to 1/12 of the lump sum amount) would be used for each of these seven purposes, consistent with Chambers and Spencer (2008). Similarly, the flip side of each instrument asked these same questions, changing only the source of the payment from one source to another – such as a tax rebate to a lottery, bonus, inheritance

or game show payment. To control for order effects, the sources of hypothetical inflows varied. Experimental questionnaires were distributed to university students at these universities: Coastal Carolina University, Francis Marion University, Longwood University, Metropolitan State University of Denver, Texas A & M University - Corpus Christi, University of Alabama – Birmingham, and University of Houston-Clear Lake. Students were considered provisionally acceptable respondents per Walters-York and Curatola (1998). (See also Ashton and Kramer, 1980.)

All research questions were analyzed with descriptive statistics, converted to percentages, and then then analyzed using four sets of OLS regressions, where choices (1) through (3) and (6) are savings, and choices (4), (5) and (7) are spending. Two of the sets of regressions used short term savings (one monthly, the other annual) and the other two sets used total savings (annual and monthly) as the dependent variables. The percent invested monthly and yearly were regressed to control for income, gender, age, importance to the budget, business experience level and education level.

The regression models were of the form:

Savings = F(income, zero income, amount, education, gender, age, importance, seatbelt use, smoker, default for spender, experience level, the source of the payment (Lottery, tax refund, inheritance, game show, or bonus), and a dummy for the order of presentation (monthly payment first, or annual payment first)).

Income is the log of the respondent's income. Age is the participants' age in years. Importance was defined to be the payment divided by the income of the survey participant. Dummy variables were created for the other variables. For the variable "spend1" the participants were asked "When you get 'extra money,' do you spend it or save it?" The dummy was set to 1 for those that answered "spend". As there were four values for the amount, dummy variables were created

for each amount rather than treat this variable as continuous. Females, smokers, and seatbelt wearers were all coded as one.

**Table 2. Descriptive Statistics for Sample Participants** 

Variable	N	Mean	25th Pctl	Median	75th Pctl	Maximum	Std Dev
Income	1350	47627.84	6000.00	20000.00	55000.00	3000000.00	122264.64
zeroincome	1844	0.1035792	0	0	0	1.0000000	0.3047965
level300	1844	0.2559653	0	0	1.0000000	1.0000000	0.4365208
level600	1844	0.2478308	0	0	0	1.0000000	0.4318702
level1500	1844	0.2180043	0	0	0	1.0000000	0.4130024
level3000	1844	0.2781996	0	0	1.0000000	1.0000000	0.4482338
monthlypmt	1844	0.4826464	0	0	1.0000000	1.0000000	0.4998343
HSED1	1791	0.3417085	0	0	1.0000000	1.0000000	0.4744149
ASED2	1791	0.1072027	0	0	0	1.0000000	0.3094572
BAED3	1791	0.4684534	0	0	1.0000000	1.0000000	0.4991432
GradED4	1791	0.0826354	0	0	0	1.0000000	0.2754072
Gender	1812	0.5413907	0	1.0000000	1.0000000	2.0000000	0.4995280
Age	1447	23.0352453	20.0000000	21.0000000	24.0000000	80.0000000	6.6002851
agesq	1447	574.1561852	400.0000000	441.0000000	576.0000000	6400.00	468.1131076
importance	1350	200.1580834	0.0149999	0.0499983	0.2998501	3000.00	633.8898301
Smoke	1798	0.1173526	0	0	0	1.0000000	0.3219295
Seatbelt	1782	0.9595960	1.0000000	1.0000000	1.0000000	1.0000000	0.1969602
Spend1	1713	0.3607706	0	0	1.0000000	1.0000000	0.4803643
ExpL1	1794	0.0562988	0	0	0	1.0000000	0.2305620
ExpL2	1794	0.1984392	0	0	0	1.0000000	0.3989359
ExpL3	1794	0.4665552	0	0	1.0000000	1.0000000	0.4990193
ExpL4	1794	0.1755853	0	0	0	1.0000000	0.3805730
ExpL5	1794	0.0490524	0	0	0	1.0000000	0.2160377
footerb	1844	0.1827549	0	0	0	1.0000000	0.3865703
footerl	1844	0.2152928	0	0	0	1.0000000	0.4111368
footert	1844	0.1881779	0	0	0	1.0000000	0.3909602
footeri	1844	0.1979393	0	0	0	1.0000000	0.3985542
footerg	1844	0.2158351	0	0	0	1.0000000	0.4115120
stsavm	1774	0.4127889	0	0.4000000	0.6600000	1.0000000	0.3670234
stsavy	1766	0.4701184	0.2000000	0.5000000	0.6666667	1.0000000	0.3286521
Itsavm	1774	0.5575938	0.2800000	0.6000000	1.0000000	1.0000000	0.3616980
Itsavy	1766	0.6414166	0.5000000	0.6666667	0.9100000	1.0000000	0.2943912

# Where:

Income is the log of the respondent's reported income (plus 1). ZeroIncome is a dummy variable = 1 for those reporting zero income. Level(X) are dummy varibles representing the lump sum for the different amounts used in the survey.

Monthlypmt is a dummy variable equal to one if the survey began with the monthly payment or zero if the annual payment was presented first.

HSED1, ASED2 BAED3 and GradED4 are dummy variables representing the respondents answer to their education level.

Gender is equal to one for female respondents.

Age is the participant's age in years, while Agesq is the square of the age reported.

Importance is the monthly payment given in the survey divided by the participants income.

Smoke and seatbelt are dummy variables equal to one if the response was 'yes' to the questions about smoking and seatbelt use.

Spend1 is a dummy set to one for those that answered "spend" to the question, "When you get 'extra money,' do you spend it or save it?"

EXPL is a dummy variable for the answer to the respondents' evaluation of their business experience. The values range from 1 (low) to 5 (high).

Footer is one of the variables of interest. It is a dummy variable representing the source of the payment b=bonus, i= inheritance, l=lottery, g=game show, t=tax refund.

Stsavm is the percent of the sum that is saved in short term instruments when there is a monthly payment for one year.

Stsavy is the percent of the sum that is saved in short term instruments when the payment is a single lump sum.

Ltsavm is the percent of the sum that is saved when the payment is monthly for one year. Ltsavy is the percent of the sum that is saved when the payment is a single lump sum.

#### RESULTS

The data were gathered in 2013. There were 1844 responses, of which 984 had complete data for regression analysis. Table Two presents the descriptive statistics for the variables collected. The average income was \$47,628, which compares to an average \$57,706 for 2010 from the IRS Statistics of Income (IRS 2012). Respondents averaged 5.15 years of work experience and had some college education (which is to be expected as the sample was collected primarily from college students); 54% of the respondents were women. These respondents perceived themselves to have moderate business experience, as indicated by a 2.80 average score out of a possible 5.0.

To answer the first set of ten research questions presented in Table 1 (does the source of the payment matter), four sets of regressions were run. In the first set, the dependent variable (stsavy) short term savings for the annual payment were regressed. Short term savings was

created from the answers to the questions about the amount a. invested in stocks, bonds, savings accounts, etc. b. used to pay off credit card debt, and c. used to pay off notes such as mortgages, car notes, etc. The results are presented in Table 3.

The percentage saved, short term, when given a single lump sum was found to be positively related to (the log of) income (p=.018). Respondents who reported a zero income also saved more than those that reported earning an income. The parameter estimate indicates that those reporting zero income, saved roughly 23% more than those reporting an income. Though the variable Importance is significant only at the ten percent level, as the size of the payment relative to the respondent's income increased less was saved (p=.096). In other words, if the payment was significantly larger than the income, savings decreased.

The level of the payment was also positively related to savings. Those that received a higher payment saved more than those that received the smallest payment. Those receiving \$600 saved 7.5% more of the payment than those receiving \$300 (p=.012), while those receiving \$3000 (ten times more), saved about 7.4% more of that payment than those receiving the \$300 payment (p=.018). Those receiving the \$1500 payment saved about 5.7% more of the payment than those receiving the \$300 payment, but that result is only significant at the 10 percent level (p=.077).

Respondents were asked to report their "Highest education level: High School \_\_\_\_\_

Associate Degree \_\_\_\_ Undergraduate \_\_\_\_ Graduate or above \_\_\_\_." Dummy variables

were created to determine if education level influenced the level of savings. Those that answered

"undergraduate" saved 6.4% more than those that reported "high school" (p=.01). Those that

reported "Associate Degree" or "Graduate or above" also saved more, 7.2% and 7.7%

respectively, but those amounts are significant only at the ten percent level (p=.051 and p=.096)

respectively). In any event, higher levels of education were associated with higher levels of savings.

Gender did not enter the regression as a significant variable. Older respondents, however, did save more of the payment. The coefficient for the variable Age was .015, indicating that for each year older the respondent was, the savings was higher by 1.5% (p=.043), though this was tempered by the variable Age Squared (agesq) which was reduced the savings by .019% (p=.061)

Self-reported experience levels did not significantly influence the percentage of the lump sum payment saved. The measures of risk employed, smoking and seatbelt use, were also insignificant. On the other hand, the variable Spend1, a dummy variable =1 if the respondent answered "spend" to the question, "When you normally get "extra money," do you spend it or save it?" was economically and statistically significant. Those that answered "Spend" saved almost 10% less than those that answered "Save" (p<.0001).

Table 3 Short term savings- annual payment is the dependent variable

Number of Observations Read	1844
Number of Observations Used	984
Number of Observations with Missing Values	860

Analysis of Variance								
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F			
Model	24	9.12929	0.38039	3.52	<.0001			
Error	959	103.75996	0.10820					
<b>Corrected Total</b>	983	112.88925						

Root MSE	0.32893	R-Square	0.0809
Dependent Mean	0.46931	Adj R-Sq	0.0579
Coeff Var	70.08904		

Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t		
Intercept	1	-0.09641	0.15288	-0.63	0.5284		
Lnincome	1	0.02008	0.00846	2.37	0.0177		
zeroincome	1	0.22799	0.09807	2.32	0.0203		
level600	1	0.07490	0.02971	2.52	0.0119		
level1500	1	0.05671	0.03206	1.77	0.0773		
level3000	1	0.07354	0.03114	2.36	0.0184		
ASED2	1	0.07236	0.03711	1.95	0.0515		
BAED3	1	0.06408	0.02481	2.58	0.0100		
GradED4	1	0.07688	0.04608	1.67	0.0955		
Gender	1	0.00605	0.02148	0.28	0.7784		
Age	1	0.01532	0.00754	2.03	0.0425		
agesq	1	-0.00018961	0.00010129	-1.87	0.0615		
importance	1	-0.00004912	0.00002956	-1.66	0.0969		

Smoke	1	-0.02330	0.03302	-0.71	0.4805
Seatbelt	1	0.01461	0.05494	0.27	0.7903
Spend1	1	-0.09609	0.02232	-4.30	<.0001
ExpL2	1	0.03645	0.04179	0.87	0.3833
ExpL3	1	0.03498	0.03861	0.91	0.3651
ExpL4	1	0.04871	0.04442	1.10	0.2731
ExpL5	1	0.08916	0.06310	1.41	0.1580
monthlypmt	1	-0.00477	0.02138	-0.22	0.8233

**Table 3A Omitted Variable Bonus (Are lottery, tax, inheritance or game show = bonus?)** 

footerl	1	0.02365	0.03455	0.68	0.4939
footert	1	0.06604	0.03450	1.91	0.0559
footeri	1	0.02145	0.03341	0.64	0.5211
footerg	1	-0.04372	0.03343	-1.31	0.1912

The results indicate that Bonus payments and tax refunds are different only at a 10% significance level.

**Table 3B Omitted Variable Lottery (Are gameshow, tax, inheritance or bonus = lottery?)** 

footerg	1	-0.06737	0.03380	-1.99	0.0466
footert	1	0.04240	0.03487	1.22	0.2244
footeri	1	-0.00220	0.03367	-0.07	0.9479
footerb	1	-0.02365	0.03455	-0.68	0.4939

The results indicate that Lottery payments are different from Game Show payments at the 5% significance level.

**Table 3C Omitted Variable Taxes (Are lottery, gameshow, inheritance or bonus = tax?)** 

footerl	1	-0.04240	0.03487	-1.22	0.2244
footerg	1	-0.10977	0.03360	-3.27	0.0011
footeri	1	-0.04460	0.03374	-1.32	0.1866
footerb	1	-0.06604	0.03450	-1.91	0.0559

The results indicate that tax refund payments are different from Game Show payments at the 1% significance level, and from bonus payments at the 10% significance level.

Table 3D Omitted Variable Inheritance (Are lottery, taxes, gameshow, or bonus = Inheritance?)

footerl	1	0.00220	0.03367	0.07	0.9479
footert	1	0.04460	0.03374	1.32	0.1866
footerg	1	-0.06517	0.03253	-2.00	0.0454
footerb	1	-0.02145	0.03341	-0.64	0.5211

The results indicate that inheritance payments are different from Game Show payments at the 5% significance level.

Table Four provides the results for the regression when (Itsavy) Total Savings, annual payment is used as the dependent variable. This variable is composed of the short term amount plus the amount saved for infrequent expenses such as vacations, bigger holiday gifts, or something you've been wanting, thus representing the total amount devoted to savings.

Comparing the results to Table 3, the variables Income, zero income, education at the associate's degree level, importance to the budget, and Spend1 are also significant at least at the 5% level. Age is significant, but at the ten percent level (p=.070).

No longer significant are the dummy variables from the different amounts of the payments. The percentage saved in total is not statistically different for those receiving \$300 than those getting the higher amounts. Those reporting an undergraduate or graduate or higher level of education did not save a statistically significant amount more than those reporting a high school level of education when presented a single lump sum.

**Table Four Total Savings- annual payment is the dependent variable** 

Number of Observations Read	1844
Number of Observations Used	984
Number of Observations with Missing Values	860

Analysis of Variance						
Source Sum of Square F Value Pr > F						
Model	24	7.28237	0.30343	3.43	<.0001	
Error	959	84.78328	0.08841			
<b>Corrected Total</b>	983	92.06565				

Root MSE	0.29733	R-Square	0.0791
Dependent Mean	0.63737	Adj R-Sq	0.0561
Coeff Var	46.65046		

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t	
Intercept	1	0.21583	0.13820	1.56	0.1187	
Lnincome	1	0.02259	0.00764	2.96	0.0032	
zeroincome	1	0.28155	0.08865	3.18	0.0015	
level600	1	0.03380	0.02686	1.26	0.2085	
level1500	1	0.03510	0.02898	1.21	0.2262	
level3000	1	0.03614	0.02815	1.28	0.1995	
ASED2	1	0.07724	0.03355	2.30	0.0215	
BAED3	1	0.02865	0.02243	1.28	0.2017	
GradED4	1	0.04061	0.04165	0.98	0.3297	
Gender	1	-0.00160	0.01942	-0.08	0.9345	
Age	1	0.01235	0.00682	1.81	0.0704	
agesq	1	-0.00013817	0.00009156	-1.51	0.1316	
importance	1	-0.00005784	0.00002672	-2.16	0.0306	
Smoke	1	0.00532	0.02984	0.18	0.8584	
Seatbelt	1	0.00123	0.04966	0.02	0.9802	
Spend1	1	-0.11056	0.02018	-5.48	<.0001	
ExpL2	1	0.01408	0.03777	0.37	0.7095	
ExpL3	1	-0.01328	0.03490	-0.38	0.7036	

ExpL4	1	-0.01597	0.04015	-0.40	0.6910
ExpL5	1	0.01334	0.05704	0.23	0.8151
monthlypmt	1	-0.02493	0.01933	-1.29	0.1974

**Table 4A Omitted Variable Bonus (Are lottery, tax, inheritance or game show = bonus?)** 

footerl	1	-0.01456	0.03123	-0.47	0.6412
footert	1	0.01842	0.03119	0.59	0.5549
footeri	1	0.00418	0.03020	0.14	0.8899
footerg	1	-0.03807	0.03022	-1.26	0.2080

For total savings, with a one-time payment, none of the sources is different from bonus payment.

**Table 4B Omitted Variable Lottery (Are gameshow, tax, inheritance or bonus = lottery?)** 

footerg	1	-0.02351	0.03056	-0.77	0.4418
footert	1	0.03298	0.03152	1.05	0.2957
footeri	1	0.01874	0.03043	0.62	0.5381
footerb	1	0.01456	0.03123	0.47	0.6412

For total savings, with a one- time payment, none of the sources is different from a lottery payment

**Table 4C Omitted Variable Taxes (Are lottery, gameshow, inheritance or bonus = tax?)** 

footerl	1	-0.03298	0.03152	-1.05	0.2957
footerg	1	-0.05649	0.03037	-1.86	0.0632
footeri	1	-0.01424	0.03050	-0.47	0.6408
footerb	1	-0.01842	0.03119	-0.59	0.5549

For total savings, with a one- time payment game show winnings are treated differently than a tax refund, but only at the ten percent significance level.

Table 4D Omitted Variable Inheritance (Are lottery, taxes, gameshow, or bonus = Inheritance?)

footerl	1	-0.01874	0.03043	-0.62	0.5381
footert	1	0.01424	0.03050	0.47	0.6408
footerg	1	-0.04225	0.02940	-1.44	0.1510
footerb	1	-0.00418	0.03020	-0.14	0.8899

For total savings, with a one-time payment, none of the sources is different from an inheritance.

Tables five and six below are similar to tables three and four. For this part of the analysis, the respondents were given a recurring monthly payment for one year. In the prior regressions, the results from a one time, lump sum payment were used. The total of the monthly payments equaled the annual payment. For instance, if the annual amount was a one-time payment of \$600, the monthly payment was \$50 for one year.

In Table Five (short term savings with a monthly payment) the variable for income is still positive and significant at the five percent level. As more income is earned, more of the amount received is saved. However, the dummy variable for those reporting a zero income is no longer significant, and neither is the variable for importance. As the monthly amount is only 1/12 of the amount received in the annual question (Table 3), though, this is not surprising. For the smallest amount, \$300, the monthly payment amounts to only \$25. In other words, even for those reporting zero income, a greater percentage of the smaller receipt would be spent rather than saved.

Consistent with the findings in Tables 3 (Short-term savings, annual payment), more is saved as the payment gets larger. Those receiving a payment of \$600 (\$50 a month) save 9.7% more of the payment than those that received \$300 (\$25 a month) (p=.004). Those receiving \$3000 per year (\$250 per month) saved 8.2% more of the payment than those receiving \$25 a month (p=.017). Similar to the results in Table 3, those that received \$1500 (\$125 a month) saved 6.1% more than those receiving \$25 a month, but this is significant only at the ten percent significance level (p=.086).

Contrary to the results in Table 3, none of the education variables were significant at even the ten percent level. The age variables are also insignificant in Table 5, though they were

significant in Table 3. Again, the primary difference between tables 3 and five are the amounts in Table Five are 1/12<sup>th</sup> the size as Table 3 as the total is the same, but spread over the 12 months.

The variable representing the respondents prerogative for additional money (whether to spend it, or save it), continues to be significant. The results indicate that if a respondent indicates that they generally spend additional money, they do. When the respondent indicates that they are a spender, they save 8.3% less (p<.001) than one who is a saver.

A new finding is exposed in Tables Five and Six. The order of presentation now matters. On the survey, half of the forms had the question for annual payment first, and the other half had the monthly payment first. When the annual values were used (Tables 3 and 4), this variable was insignificant. When the smaller, but recurring, values are used in Tables Five and Six, those getting the monthly payment saved (both economically and statistically) more. For short term savings, with monthly payments (Table Five) when the monthly question was provided first, respondents saved 6.1% more (p=.01) more than when the annual question was first. (In Table Six, representing Total Savings, 13.4% more was saved (p<.001) than when the lump sum, annual amount was presented first.)

Table Five Short term savings- monthly payments is the dependent variable

Number of Observations Read	1844
Number of Observations Used	989
Number of Observations with Missing Values	855

Analysis of Variance

Source	DF	Sum of Squares		F Value	Pr > F
Model	24	9.88387	0.41183	3.06	<.0001
Error	964	129.57707	0.13442		
<b>Corrected Total</b>	988	139.46094			

Root MSE	0.36663	R-Square	0.0709
Dependent Mean	0.40857	Adj R-Sq	0.0477
Coeff Var	89.73351		

Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t	
Intercept	1	0.00882	0.16955	0.05	0.9585	
Lnincome	1	0.01995	0.00932	2.14	0.0325	
zeroincome	1	0.15578	0.10912	1.43	0.1537	
level600	1	0.09672	0.03315	2.92	0.0036	
level1500	1	0.06139	0.03567	1.72	0.0856	
level3000	1	0.08242	0.03433	2.40	0.0165	
ASED2	1	0.05553	0.04140	1.34	0.1802	
BAED3	1	0.00846	0.02761	0.31	0.7592	
GradED4	1	-0.00517	0.05092	-0.10	0.9191	
Gender	1	0.00096587	0.02388	0.04	0.9678	
Age	1	0.00616	0.00840	0.73	0.4635	
agesq	1	-0.00003666	0.00011279	-0.33	0.7452	
importance	1	0.00001676	0.00003371	0.50	0.6192	
Smoke	1	0.00007571	0.03640	0.00	0.9983	
Seatbelt	1	0.03489	0.06120	0.57	0.5688	
Spend1	1	-0.08324	0.02490	-3.34	0.0009	
ExpL2	1	-0.05260	0.04633	-1.14	0.2566	
ExpL3	1	-0.02605	0.04290	-0.61	0.5438	
ExpL4	1	0.03081	0.04937	0.62	0.5328	
ExpL5	1	0.07210	0.07095	1.02	0.3098	

<b>monthlypmt</b> 1 0.06055	0.02377 2.55 0.0110
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**Table 5A Omitted Variable Bonus (Are lottery, tax, inheritance or game show = bonus?)** 

footerl	1	0.01081	0.03847	0.28	0.7787
footert	1	0.03750	0.03832	0.98	0.3280
footeri	1	-0.03183	0.03725	-0.85	0.3930
footerg	1	-0.06830	0.03692	-1.85	0.0646

For short term savings, with monthly payments, game show winnings are treated differently than a bonus, but only at the ten percent significance level.

**Table 5B Omitted Variable Lottery (Are gameshow, tax, inheritance or bonus = lottery?)** 

footerg	1	-0.07912	0.03758	-2.11	0.0355
footert	1	0.02668	0.03895	0.69	0.4934
footeri	1	-0.04265	0.03768	-1.13	0.2580
footerb	1	-0.01081	0.03847	-0.28	0.7787

For short term savings, with monthly payments, game show winnings are treated differently than a lottery payment at the five percent significance level.

**Table 5C Omitted Variable Taxes (Are lottery, gameshow, inheritance or bonus = tax?)** 

footerl	1	-0.02668	0.03895	-0.69	0.4934
footerg	1	-0.10580	0.03729	-2.84	0.0046
footeri	1	-0.06933	0.03773	-1.84	0.0664
footerb	1	-0.03750	0.03832	-0.98	0.3280

For short term savings, with monthly payments, game show winnings are treated differently than a tax refund at the one percent significance level, and from an inheritance at the ten percent significance level.

Table 5D Omitted Variable Inheritance (Are lottery, taxes, gameshow, or bonus = Inheritance?)

footerl	1	0.04265	0.03768	1.13	0.2580
footert	1	0.06933	0.03773	1.84	0.0664
footerg	1	-0.03647	0.03609	-1.01	0.3125
footerb	1	0.03183	0.03725	0.85	0.3930

For short term savings, with monthly payments, a tax refund is treated differently than an inheritance at the ten percent significance level

The results shown in Table Six are similar to those above in many respects. Income is still significant (p=.004) and positive. The coefficient for those reporting a zero income is positive as in all of the other regressions, but significant only at the 10% level (p=.095). (It was insignificant in Table 5, but significant at the 5% level in Tables 3 and 4). Like Table 5 (and contrary to Tables 3 and 4), the variable for Importance (the monthly payment/income) is insignificant at any conventional level.

Compared to the \$300 payment (\$25 per month), as a greater monthly payment is received, the greater the percentage of the payment is saved. Those receiving \$50 a month (\$600 a year) save 10.2% more of the payment than those receiving \$25 a month (\$300 a year) (p=.001). Those receiving \$125 a month (\$1500 a year) save 7.9% more of the payment than those receiving \$25 a month, while those receiving \$250 a month (\$3000 per year) saved 8.1% more of the payment (p=.015).

The education variables are insignificant. Survey participants reporting more than a high school level of education did not save any more or less than those reporting that their highest level of education was High School. This result is similar to Table 5, but contrary to Tables 3 and 4 where a lump sum payment was analyzed.

Like the results in Table Five, the age variables are now insignificant. The self-reported "spenders" (those who answered "spend" to the question about what they would typically do with additional money), spend (save) 9.9% more (less) than the "savers" (p<.001).

As described above, the order variable is statistically and economically significant.

When the questionnaire ordered the monthly payment first and the annual question second,

participants total savings increased 13.4% more than those that got the larger, annual, but one-time payment first (p<.001).

Table Six Total Savings- monthly payment is the dependent variable

Number of Observations Read	1844
Number of Observations Used	989
Number of Observations with Missing Values	855

Analysis of Variance							
Source Sum of Mean Square F Value Pr > F							
Model	24	15.56019	0.64834	5.24	<.0001		
Error	964	119.30184	0.12376				
<b>Corrected Total</b>	988	134.86203					

Root MSE	0.35179	R-Square	0.1154
Dependent Mean	0.55978	Adj R-Sq	0.0934
Coeff Var	62.84473		

	Parameter Estimates						
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t		
Intercept	1	0.00213	0.16269	0.01	0.9895		
Lnincome	1	0.02589	0.00894	2.90	0.0039		
zeroincome	1	0.17478	0.10470	1.67	0.0954		
level600	1	0.10244	0.03181	3.22	0.0013		
level1500	1	0.07867	0.03423	2.30	0.0218		
level3000	1	0.08060	0.03294	2.45	0.0146		
ASED2	1	0.03374	0.03973	0.85	0.3959		
BAED3	1	-0.00779	0.02649	-0.29	0.7688		
GradED4	1	0.00869	0.04886	0.18	0.8589		
Gender	1	-0.00497	0.02292	-0.22	0.8284		
Age	1	0.01265	0.00806	1.57	0.1167		

agesq	1	-0.00012034	0.00010823	-1.11	0.2664
importance	1	0.00001335	0.00003235	0.41	0.6800
Smoke	1	-0.01812	0.03493	-0.52	0.6041
Seatbelt	1	0.03999	0.05872	0.68	0.4960
Spend1	1	-0.09852	0.02389	-4.12	<.0001
ExpL2	1	-0.01538	0.04446	-0.35	0.7294
ExpL3	1	-0.01040	0.04116	-0.25	0.8006
ExpL4	1	-0.00574	0.04737	-0.12	0.9035
ExpL5	1	0.09579	0.06808	1.41	0.1598
monthlypmt	1	0.13449	0.02281	5.90	<.0001

**Table 6A Omitted Variable Bonus (Are lottery, tax, inheritance or game show = bonus?)** 

footerl	1	-0.01143	0.03691	-0.31	0.7569
footert	1	-0.03130	0.03677	-0.85	0.3947
footeri	1	-0.07653	0.03575	-2.14	0.0325
footerg	1	-0.10777	0.03543	-3.04	0.0024

For total savings, with a monthly payment for one year, game show winnings are treated differently than a bonus at the one percent significance level, and an inheritance is different from a bonus at the five percent significance level.

**Table 6B Omitted Variable Lottery (Are gameshow, tax, inheritance or bonus = lottery?)** 

footerg	1	-0.09634	0.03606	-2.67	0.0077
footert	1	-0.01987	0.03737	-0.53	0.5950
footeri	1	-0.06510	0.03615	-1.80	0.0721
footerb	1	0.01143	0.03691	0.31	0.7569

For total savings, with a monthly payment for one year, game show winnings are treated differently than a lottery payment at the one percent significance level, and an inheritance is different from a lottery payment, but only at the ten percent significance level

**Table 6C Omitted Variable Taxes (Are lottery, gameshow, inheritance or bonus = tax?)** 

footerl	1	0.01987	0.03737	0.53	0.5950
footerg	1	-0.07647	0.03578	-2.14	0.0329
footeri	1	-0.04523	0.03620	-1.25	0.2118

For total savings, with a monthly payment for one year, game show winnings are treated differently than a tax refund at the five percent significance level

# Table 6D Omitted Variable Inheritance (Are lottery, taxes, gameshow, or bonus = Inheritance?)

footerl	1	0.06510	0.03615	1.80	0.0721
footert	1	0.04523	0.03620	1.25	0.2118
footerg	1	-0.03123	0.03463	-0.90	0.3673
footerb	1	0.07653	0.03575	2.14	0.0325

For total savings, with a monthly payment for one year, a bonus is treated differently than an inheritance at the five percent significance level, and an inheritance is differently than a lottery payment, but only at the ten percent significance level.

## **Table Seven Significance of the Source of Payment**

A. Short term Savings – Annual Payment

Sources	Beta	P-value	<b>Research Question</b>		
	At the 1 % si	gnificance level			
Game Show V Taxes	110	.001	7		
	At the 5% sig	gnificance Level			
Game Show V Lottery	067	.047	6		
Game Show V Inheritance	065	.045	5		
At the 10% Significance Level					
Bonus V Tax Refund	066	.056	4		

An economically and statistically significant lower amount was saved from game show winnings than from Less game show winnings are saved than lottery, inheritance and tax payments

Less of a bonus was saved than a tax refund, but this is significant at slightly more than the 5% level.

# **B.** Total Savings – Annual Payment

Sources	Beta	P-value	Research Question
	At the 10 % s	ignificance level	
Game Show V Taxes	056	.063	7

Weak support indicating that 5.65 less is saved from game show winnings than from tax refunds.

# C. Short term Savings – Monthly Payment

Sources	Beta	P-value	Research Question
Game Show V Taxes	1058	.005	7

At the 5% significance Level				
Game Show V Lottery	079	.036	6	
At the 10% Significance Level				
Game Show V Bonus	068	.065	1	
Inheritance V Tax Refund	069	.066	9	

Strong economic and statistically significant results showing that savings from game show winnings are less than lottery and tax payments.

Weak statistical support indicating savings from game show winnings being lower than bonus payments and for savings from inheritance funds being lower than tax refunds.

**D.** Total Savings – Monthly Payment

Sources	Beta	P-value	Research Question				
	At the 1 % significance level						
Game Show V Lottery	096	.008	6				
Game Show V Bonus	108	.002	1				
	At the 5% sig	gnificance Level					
Game Show V Taxes	076	.033	7				
Inheritance V Bonus	077	.033	2				
At the 10% Significance Level							
Inheritance V lottery	065	.072	8				

Strong economic and statistically significant results showing that savings from game show winnings are less than a lottery, bonus or tax payment. In addition, less of an inheritance is saved than a bonus payment.

Weak evidence suggests that less of an in inheritance is saved than from a one year long, monthly lottery payment.

The results summarized in Table Seven show the results of the tests for Research Questions 1-10 in Table One. In at least one set of regressions, the results indicate that savings from game show winnings are significantly lower than a bonus payment, inheritance, lottery winning and tax rebate.

There can be little doubt that Game Show Winnings are different from Tax Refunds (Research Question 7). Regressions with all four dependent variables show that less of a game show winning is saved than is a tax refund, though when total savings with the annual payment was the dependent variable, the significance is only at the 10 percent level.

Savings from game show winnings was statistically (and economically) lower than lottery payments in three of the four sets of regressions (Research Question 6). Only the regression results for the dependent variable Long Term Savings, annual payment were insignificant.

Some support for several of the other research questions is provided. Research Question

One was significant at least at the ten percent level in two regressions. When the monthly

payments for short term and total savings were the dependent variables, savings from game show

winnings were significantly lower than savings from bonus payments. Alternatively, more of a

game show winning is spent than is spent from a bonus payment.

When short term savings from an annual payment was analyzed, savings from a game show payment were lower than the savings from a one-time inheritance payment. The answer to Research Question 5, then, at least for this dependent variable, is 'no', less (more) of a game show winning is saved (spent) than from an inheritance windfall.

When monthly payments are analyzed, the results suggest that short term or total savings from inheritance payments are lower than savings from bonus payments, tax refunds and lottery payments (though the last two are significant at only the ten percent level). Research questions two, eight and nine are supported to some degree. (Research Question Five was addressed above when game show winnings were discussed). Except for savings from game show winnings (which were lower than savings from inheritances), the results indicate that less (more) of an inheritance payment is saved (spent) than payments from a bonus, tax refund or lottery (though the last two are significant only at the 10 percent level).

Weak support, only at the ten percent level, can be found in one set of regression results for Research Questions four comparing tax refunds and bonus payments. When short term savings with a single annual payment are analyzed, more (less) of a tax refund (bonus) is saved.

The results for Research Question 11, does the order of presentation matter, are mixed. When the respondents evaluated the single lump sum payment (presented in Tables Three and Four), the order was not significant. However, when the monthly regressions were analyzed, (Tables Five and Six), the results are significant both economically and statistically.

When short term savings, and a monthly payment is the dependent variable (Table 5), the coefficient for "monthlypmt," the variable indicating that the monthly payment was presented first and the annual payment second is .061 (p=.011) indicating that when the monthly payment was presented first, respondents saved 6.1 percent more than those that were given the annual payment first. Similarly, when total savings and a monthly payment is the dependent variable (Table 6), the coefficient for the order variable "monthlypmt" is .134 (p<.001). When the monthly payment is presented first, the respondent saved 13.4% more in total savings than when the annual payment is presented first. (When the annual payment is presented first, respondents spent more money when answering the monthly question).

#### **CONCLUSIONS AND IMPLICATIONS**

Overall, the evidence presented indicates that the source of the payment does indeed matter. Strong evidence exists that game show winnings are spent differently than payments from inheritances, bonuses, tax refunds or the lottery. As game show winnings are a once in a lifetime opportunity, this may explain the difference. Tax refunds are common and are likely to be within the control of the taxpayer. A bonus could and hopefully would be repeated, and the

recipient's incentives are toward that goal. Inheritances are likely not within the control of the recipient, but they are not necessarily one time occurrences. Similarly, though multiple winnings of the lottery are rare, winning a lottery does not preclude someone from playing again, and the events are independent. As a game show winning is not repeatable, one could argue that the level of permanent income from such a winning is much lower than with the other forms of payments. As such, a greater amount of the money would likely be spent than saved. Further, the name 'game show' essentially has "fun" in the title and may subconsciously shift the payment toward consumption.

Except for game show winnings, a greater percentage of money from an inheritance was spent than was money from a bonus, tax refund or lottery winning. As the amounts used in this study ranged from \$300 to \$3000, these results are consistent with the findings of Zagorsky (2013), who found that over 40% of those who inherited less than one thousand dollars spent their bequest.

Order of presentation mattered. When the annual payment was viewed first, spending was higher for the monthly sum. This finding may have the greatest practical implication for those in the financial planning arena. Presenting clients with annual values (for retirement income, for example) may entice the client to increase their spending compared to providing estimates for monthly income.

#### LIMITATIONS AND FURTHER RESEARCH

This study was conducted during a time when the economy was recovering from a shock that was severe enough to disrupt people's normal spending/savings habits. In more stable economic times, results may differ. The recession of 2007-08 was the worst since the Great

Depression, and researchers found that spending and saving behavior changed dramatically, perhaps permanently (Spencer and Chambers, 2012). Further study over many years is needed to measure the long term effects. The different sources of the funds yielded some significant differences, raising more questions for further study.

The order difference should also be investigated. When the lump sum annual payment was provided first (second), respondents spent (saved) a greater portion of the smaller, monthly recurring sum. Though the total amounts were the same, the monthly sum was 1/12 as large as the lump sum. In this research, the receipt was framed to be a one-time receipt. However, some of the sources could certainly recur over time. If the payment were more permanent, the results may be different, but future research would need to be conducted to determine the implications.

Future researchers may also want to investigate if source and timing matter. That is, considering the source of the payment, is income received as a lump sum amount is spent differently from that same amount of income if received in monthly installments.

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# **Appendix: Sample Survey Instrument**

**"What would you do if . . .?"** (**Fill in the amounts**): By participating in a game show, you won a prize that would result in *you* receiving \$600.00 for 2012.

	<b>I</b> f i	received, how much of these winnings would you plan to:	
	1.	Invest (in stocks, bonds, savings account, etc.)?	\$
	2.	Use to pay off credit card debt?	\$
	3.	Use to pay off notes (such as mortgage, car note, etc.)?	\$
	4.	Use up about evenly every month for expenses?/mo. x 12 mo.=	\$
	5.	Use to buy a durable asset (such as car, boat, washing machine, furniture)?	\$
	6.	Use to save for an infrequent expense (such as a vacation, bigger holiday gifts, or something you've been wanting)?	\$
	7.	Spend right away on something fun?	\$
		Amount must total \$600.00	
	0.00	ad, by participating in a game show, you won a prize that would result in month for the next 12 months.	you receiving
	-	eceived, how much of this monthly increase would you plan to:	4
	8.	Invest (in stocks, bonds, savings account, etc.)?	\$
	9.	Use to pay off credit card debt?	\$
	10.	Use to pay off notes (such as mortgage, car note, etc.)?	\$
	11.	Use up for regular monthly expenses?	\$
	12.	Use to buy a durable asset (such as car, boat, washing machine, furniture)?	\$
	13.	Use to save for an infrequent yearly expense (such as a vacation, bigger holiday gifts, and/or something you've been wanting)?	\$
	14.	Spend right away on something fun?	\$
		Amount must total \$50.00	
 Plea	ase lis	st your: Zip Code Years of work experience	
Hia	hest (	education level: High School Associate Degree Undergraduate Gradu	uate or above

Occupation:	Gender: Female Male	Age	Race/ethnicity	
# of College-level Accounting classes of	completed <u>College I</u>	major (if applicab	le)	
Industry where you work				
Approx. yearly <u><b>Household</b></u> income (fro	om all wage and salary ear	ners and other so	urces of income)	
Credit Card Debt: \$	Other Debt: \$			
Do you smoke? Do you normally wea	r your seatbelt? Yes	Vo		
When you normally get "extra money	," do you spend it or save	it? Spend Sav	ve	
I rate my level of business experience	as:			
High Fairly High	Moderate F	airly Low	Low	None
	Complete other sid	e, please.		
тн	ANK YOU FOR YOUR PA	ARTICIPATION!!	!	
"What would you do if?" in <i>you</i> receiving \$600.00 which your employer.	,	•		
If enacted, how much of th	nis monthly increase v	vould you plan	to:	
15. Invest (in stocks, bonds, s	avings account, etc.)?		\$	
16. Use to pay off credit card	debt?		\$	
17. Use to pay off notes (such	n as mortgage, car note,	etc.)?	\$	
18. Use up about evenly ever	ry month for expenses?	/mo. x 1	2 mo.= \$	
19. Use to buy a durable asse	et (such as car, boat, wa	shing machine,	furniture)? \$	
20. Use to save for an infreque gifts, or something you've		vacation, bigge	holiday \$	
21. Spend right away on som	•.		\$	
	Amount mu	st total \$600.00	)→	

Another work bonus would result in *you* receiving \$50.00/month after taxes; that is, your paychecks would go up \$50.00/month.

# If received, how much of this monthly increase would you plan to:

22. Invest (in stocks, bonds, savings account, etc.)?	\$
23. Use to pay off credit card debt?	\$
24. Use to pay off notes (such as mortgage, car note, etc.)?	\$
25. Use up for regular monthly expenses?	\$
26. Use to buy a durable asset (such as car, boat, washing machine, furniture)?	\$
27. Use to save for an infrequent yearly expense (such as a vacation, bigger holiday gifts, and/or something you've been wanting)?	\$
28. Spend right away on something fun?	\$
Amount must total \$50.00	

Complete other side, please.

THANK YOU FOR YOUR PARTICIPATION!!!