Consumer Finance and the Financial and Economic Crises: Implications from Household Surveys in Michigan

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To fill this gap, this research analyzes 2009 and 2010 Michigan household survey data to understand changes in consumer behavior. The findings suggest that households are employing both consumption- and income-smoothing mechanisms to respond to shocks. On the consumption side, 67 percent report having spending plans, although few update them regularly or frequently. On the income side, 26 percent used their retirement savings for expenses other than retirement, e.g., food and health, and 81 percent adjusted their retirement investment portfolios.

The evidence suggests that household spending plans are not adjusted in a timely fashion in response to negative shocks relative to positive ones. We also find significant differences by income, employment status, home-ownership status, educational attainment, and race.

This suggests a role for consumer education in promoting behavior that is more informed and responsive. The research offers four ways in which consumer education may respond to the evidence presented. Most importantly, comprehensive financial and economic education should be mandatory for high school students, and training related to appropriate consumer responses to shocks related to spending and income is warranted.

I. A Review of Recent Macroeconomic Conditions in Michigan

Economic activity has slowed considerably in Michigan in the last decade. On average, the Coincident Economic Activity index for Michigan declined 3.7 percent per year since 2001.¹ Correspondingly, unemployment rates doubled at the beginning of the decade and again between 2008 and 2010. The unemployment rate peaked at 14.5 percent in December 2009 in Michigan and at 10.1 percent in October 2009 in the U.S.² Not surprisingly, economic contraction was reflected in a broad range of indicators. Median personal income in Michigan, exceeded the national average by eight percent in 2001 but lagged it by eight percent by 2009. The share of Michigan residents in poverty was one percentage point greater than the national average in 2006, and, by 2009, 14 percent were living below the poverty line.³

 ¹ Federal Reserve Bank of St. Louis (2010a).
 ² Bureau of Labor Statistics (2010).

³ U.S. Census Bureau (2010b).

Similarly, credit conditions have deteriorated significantly. Marked increases in foreclosure activity began earlier in Michigan relative to the rest of the country, and since mid-2000, the share of consumers with new foreclosures by state has been above the national average. For nonprime mortgages originated between 2000 and 2007 in Michigan, 27 percent were the subject of a completed foreclosure process, 4.7 percent were delinquent, 4.8 percent were in default, and 1.8 percent were in foreclosure by June 30, 2009. For the same period for the U.S., 14.4 percent were the subject of a completed foreclosure process, 4.3 percent were delinquent, 4.5 percent were in default, and 4.0 percent were in foreclosure.⁴ While the fraction of mortgage debt that is delinquent fell and has stayed below the national average beginning in late 2007, it has risen sharply for much of the period since 2008.⁵ In addition, home prices in Michigan continued to decline over the last year, as they have been since 2005. The Corporation for Enterprise Development Assets and Opportunity Scorecard 2009-2010 reports that in 2008 Michigan borrowers had a slightly higher level of revolving debt, i.e., debt from credit cards, private label cards, and lines of credit, \$2,984, than the national average, \$2,900.6 As a share of U.S. bankruptcies, between 2004 and 2008, nonbusiness bankruptcies rose by more than one third, and the share of consumers with new bankruptcies has been consistently above the national average since mid-2002.⁷

II. The Surveys

Methods of measuring incremental changes in consumer finance have historically been inadequate. Before 2008, the best data on consumer finance were obtained through the Federal Reserve's Survey of Consumer Finances, which was conducted every three years. Now more than ever, it is

⁴ Government Accountability Office (2009), pp. 29-30.

⁵ Federal Reserve Bank of New York (2010b).

⁶ Corporation for Enterprise Development (2009).

⁷ Federal Reserve Bank of New York (2010a).

important to collect, analyze, and disseminate timely information on small changes in consumer financial behavior that could lead to large local, state, and national, if not international, crises. To gather more timely information on households in Michigan, I have collaborated on two surveys of Michigan households.

A web-based survey with 62 questions was developed using the Snap Survey platform. This survey was operational from June 2009 to April 2010 to collect data on the financial situation of households in Michigan and to provide timely information to respondents to address their financial concerns.⁸ Respondents were asked about household activity in the last two to 12 months, e.g., sources of and changes in income and job loss, and expected activity in the next one to three months, e.g., beginning foreclosure or bankruptcy proceedings. The sample size is 325.

The web-based survey offers rich detail on household financial conditions but is limited in a few respects. Most importantly, its respondents are not representative of the Michigan population, and inference from the analysis would be difficult. To address this, we take advantage of a pre-existing survey instrument, the State of the State Survey (SOSS), to obtain a larger and more representative sample and as a check on our web-based sampling methods.

State of the State Survey

SOSS interviews are conducted by telephone and take approximately 20 minutes. Survey participants are randomly selected from adults age 18 and older living in Michigan. Interviewers ask basic questions on background information, e.g. demographic, education, and employment

⁸Data continue to be collected on a new survey platform, which provides an interactive assessment of respondents' financial situation. A sample of the survey is available at www.mimoneyhealth.org.

information and residents' satisfaction with economic and political conditions.⁹ Further, additional questions from researchers are incorporated in each round of SOSS.¹⁰

The 55th round of SOSS was conducted from February to April 2010. It included interviews with 972 Michigan adults. In order to obtain an adequate sample for statistical analysis, the survey oversamples from some regions, e.g. the Upper Peninsula, and racial groups, e.g., African Americans. In our analysis, we use the weight variable for statewide estimates when the oversample of African Americans is not included. Five key questions from the pilot web survey were included on the SOSS. These ask for information about past, current, and future financial conditions of households.

III. Results

Table 1 summarizes data from survey respondents in the SOSS and provides a comparison with recent surveys of Michigan residents, i.e., the aforementioned web survey, the Detroit Area Household Financial Services study, and the U.S. Census American Community Survey (ACS) for Michigan. The data are briefly discussed below.

SOSS

One third of the sample has at least a college degree, which is significantly higher than the Census estimate for the state of Michigan. Slightly more than half, 53 percent, are women. Of the sample,

⁹ A detailed description of the SOSS is available at <u>http://www.ippsr.msu.edu/soss/DEFAULT.ASP</u>.

¹⁰ In the 55th round of SOSS, respondents are interviewed in detail about issues related to current economic conditions, retirement funding, and unemployment, among other things. Questions contributed may vary across survey rounds.

64 percent are married or members of unmarried couples living together. Three-quarters of respondents have children. By construction, the racial composition of the SOSS and Census samples are very similar with approximately 81 percent white and 14 percent African American. Thirty-eight percent work full time, 16 percent work part time, and six percent report being unemployed. The majority of SOSS respondents reported household income of \$40,000 or more.

Web Survey

In this sample, education levels are much higher than in the state, the U.S., and in the SOSS – 33 percent with college degrees and 29 percent with advanced degrees as the highest level of education attained. Seventy-seven percent of respondents are women.

The median annual household income before tax in the sample is \$59,311. Forty percent of households had someone in it who had lost his or her job or taken a pay cut in the last 6 months. Twenty-one percent expect someone in the household to lose his or her job, and 25 percent are uncertain whether someone will lose his or her job. Of the 42 responding to the question, the median amount received in unemployment benefits last month was \$1,000.

Eighty-five percent of households have credit cards. They have four cards on average with two carrying balances, one of which is paid off every month. The median amount of debt owed is \$388 on credit cards; \$8,125 in car or appliance loans; \$19,600 in student loans; \$15,001 in loans from banks, insurers, or stock brokers; and \$584 on payday loans (nine respondents). More than a quarter had reached the borrowing limit on their credit cards. Fourteen percent of households had at least one loan sent to a collection agency in the last three months. A small fraction filed for bankruptcy in the last three years, 3.0 percent, which is comparable to the percentage who had filed for

bankruptcy in the last year in the Detroit study, 3.9 percent. Four percent had been involved in foreclosure proceedings in the last two years. More than half, 57 percent, checked their credit score in the last year.

Respondents in the two surveys are comparable in a number of respects. They are roughly the same age, 46 (SOSS) and 44 (web), on average. The largest share of respondents is from Southeast Michigan in both surveys, which reflects the state's population distribution. The majority of respondents are homeowners. A high percentage, 89 percent (SOSS) and 91 percent (web) report having health insurance. These coverage rates are higher than in the ACS and Detroit samples.

While most reported no income change, among those reported a change the average change in income in the last three months is -4 percent (SOSS) and -5 percent (web). In the next three months, the median household expects no change, but among those anticipating a change, SOSS households expect an increase of 1.2 percent, and web households expect a decline of 8.9 percent. Among both sets of respondents, a low percentage, one or two percent, plan to file for bankruptcy in the next three months. Eighty-three percent have not been late with either mortgage or rent payments in the last year.

While the web-based survey responses provide detailed information on household financial conditions, the data obtained from SOSS are more representative and, results reported below will largely be obtained from analysis of this data set.

How Do Michigan Households Fare In and Interpret Their Financial Condition?

Most questions related to precise magnitude of income had poor response rates, which is a common feature of surveys. Therefore, in addition to using income to capture poverty, we use questions related to the respondent's ability to pay for necessities, i.e., food and monthly payments. Thirty percent cannot afford food the family should have at least once in a while, and 60 percent find it at least slightly difficult to make monthly payments on their family's bills.

Sixty-five percent of respondents say that their family income is unchanged in the last three months, 12 percent say that it is higher, and 23 percent say that it is lower. For those reporting recent declines in income, two-thirds report a decline of 20 percent or more. Seventy-three percent of respondents anticipate no change in their incomes in the next three months, 17 percent anticipate an increase, and 10 percent anticipate a decline. If evaluating their overall household financial situations more broadly, 75 percent in the sample believe that their household's current financial situation is "just fair" or good, and 21 percent believe that it is "not so good" or poor (see Table 2). Slightly more than half of respondents estimate that they are worse off than they were a year ago, and slightly less than half anticipate being better off in a year (Table 2). Two percent anticipate filing for bankruptcy in the next three months, and seven percent report being 30 days late or more making a rent or mortgage payment.

Half of those interviewed invest in a 401K, 403B, or IRA, and 27 percent invest in securities or mutual funds outside of a formal retirement account. Twenty-nine percent anticipate using mainly Social Security to fund their retirement, while 49 percent will rely on the value of their homes to fund it.

Are Michigan Households Responding to Shocks?

Consistent with evidence from financial institutions, 59 percent of those in the sample are making regular deposits into their savings accounts for emergencies. Market Rates Insight, a market research firm for banks and credit unions, reports that in the first half of 2010 depositors exchanged \$200 billion in less liquid CD deposits primarily for more liquid deposits in money market accounts (\$138 billion).¹¹

The focal point of the analysis in this paper will be household changes in consumption – adjustments to budgets or spending plans – and in income patterns – adjustments to sources of income. Most households are poised to make adjustments to their planned expenses. Two-thirds of respondents have a household budget that at least accounts for expenditure.¹² On the income side, responses related to retirement plans, savings, and investment portfolios will be evaluated.

How Are Michigan Households Responding to Shocks?

Of those with a budget, 35 percent never change it or update it only once a year, 46 percent change it occasionally, and 19 percent change it every month. More than half of those eligible, 56 percent, postponed retiring in the last two years, and 21 percent retired earlier than expected. Eighty-one percent of those reflecting on their retirement plans changed their portfolios in the past two years. More than a quarter of those with retirement savings used them to pay for expenses unrelated to retirement in the last two years.

¹¹ MRI (2010a, 2010b). The liquidity preference is particularly notable, as CD rates are twice as high as money markets rates, on average. MRI also reports that 15 percent of funds from maturing CDs were used to pay down credit card debt.

¹² The question on the survey is, "Do you have a monthly household budget where you allocate how much to spend on your living expenses, such as housing, food, and transportation?" Therefore, "budget" and "spending plan" will be used interchangeably in this paper. Only 53 percent of respondents to the web survey report having a household budget.

These results are fairly general. There is no information on exactly when budgets were adopted nor their precise contents. Nonetheless, we have information on specific shocks to income and to current employment. Shocks to income can be positive or negative and occur in the past or in the future.

In the face of changes to respondent household income, results are asymmetric. As can be seen in Tables 3 and 4, if there is an increase in income, spending plans adjust, and the behavior of those whose incomes are increasing is significantly different from those whose incomes are not.¹³ If there is a *decline* in income, consumption responses by those who have experienced a decline in income are not statistically different from those who have not. It appears that their spending plans are not as sensitive to negative income shocks as they are to positive income shocks. On the income side, a larger share of households with positive income shocks has retirement plans and adjusts their investment portfolios. Regardless of the type of income shock, those experiencing a shock are similarly likely to have adjusted their retirement portfolios and used their savings set aside for retirement in the last two years. In sum, spending plans appear sticky going down (income decline) and elastic going up (income increase), and changes to income through investment adjustment are elastic going up or down.

Responses Vary by Income, Poverty, and Home Ownership Status

¹³ To analyze differences between groups, we calculated the ratio of positive responses for each question by group and tested the difference between them using Pearson's χ^2 statistic. For example, for the question related to having a monthly budget, 66.2 percent of male respondents and 67 percent of female respondents have a monthly budget. From Pearson's χ^2 , there is no difference by gender in terms of having a monthly budget. In contrast, for the question related to retirement plans, 55 percent of male respondents and 47.8 percent of female respondents have retirement plans. From Pearson's χ^2 , there is a statistical difference by gender (see Table 19).

Table 5 gives consumption and income activity by household income group. The most frequent users of budgets are not the most active budget-adjusters. Roughly 80 percent of respondents with income less than \$10,000, between \$40,000 and \$50,000, and between \$100,000 and \$150,000 report having budgets. Those with incomes less than \$10,000 change their budgets the least, which is not surprising if there is little flexibility in spending plans. Lower consumption- and income-smoothing activity in this income group relative to other groups will be consistent across consumption and income-smoothing mechanisms. Ninety percent or more of those with incomes above \$50,000 change their budgets at least occasionally, and only those with incomes between \$60,000 and \$90,000 change them frequently. More than 70 percent of respondents in all but two income groups report changing their retirement portfolios in the last year.

Table 6 describes consumption- and income-smoothing activity by household poverty status, i.e., ability to pay for basic necessities. Those who are poorer make greater use of budgets, but there is no statistical difference between them and other groups with respect to adjusting their budgets and portfolios.

In Table 7 we see that renters adjust their budgets more often than homeowners. This is not surprising, since the largest monthly expense homeowners have is their mortgage payment, and, as a long-term contract, this is predictable. Renters, however, do not change their asset mixes more than homeowners, and fewer renters report having retirement plans.

Responses Vary by Employment Status, Race, and Education

Table 8 gives data on responsiveness by employment status. Twenty-four to 28 percent of nonstudents used their retirement savings for expenses unrelated to retirement. Changing retirement portfolio and using retirement savings notwithstanding, whether respondents have or use the means to adjust spending and saving patterns depends on their employment status. Full-time workers and homemakers use budgets more than others, but part-time and unemployed workers change them more often than others. This would be expected, if the source, magnitude, or timing of income or earnings were variable.

Table 9 shows that, while African Americans adjust their budgets from time to time at a higher rate than other groups, they adjust monthly budgets at a lower rate than other racial groups. While there is no measurable difference in the presence of retirement plans, there are significant racial differences in using retirement savings for expenses other than retirement. Whites most likely smoothed income in this way, and other ethnic or racial groups were less likely to smooth income in this way.

Respondents at all educational levels changed their retirement portfolios in the last year, but this is the only feature they have in common with respect to consumption- or income-smoothing behavior. The data in Table 10 demonstrate that bachelor's-degree recipients are the most active users and adjusters of spending plans and retirement savings.

IV. Implications for Consumer Education

Given its decade-long recession, Michigan provides an interesting laboratory for examining consumer behavior. Analysis of recent survey data show that Michigan households' responses to changes in income depend on the type of shock and on household characteristics. Households experiencing adverse income shocks are not statistically more responsive, with respect to recent changes in spending, than those who do not. Responses also depend on income or poverty status, employment status, home-ownership status, and race.

This research suggests at least four implications for financial education. First, given adverse and volatile macroeconomic events in the state and nationally, it appears that a lower than anticipated number of households are in a position to respond flexibly to shocks, i.e., without a spending plan. That is, a higher proportion of households should be in a position to adjust their spending plans and to adjust them regularly, if not frequently. Consumer-education specialists should likely focus on consumers adopting budgets as a discipline and planning tool. The earlier this habit is adopted, the better, according the American Institute of Certified Public Accountants and consumer advocacy groups. Further, economic and financial education should become a mandatory feature of high school education. The research presented here shows that adoption of budget plans increases with education. This is likely not due to specific budgeting courses taken after high school but is an externality of more years of schooling. As jobs for which less-than-high-school education is required become more scarce and due to their sensitivity to the business cycle, consumer education would become all the more important among people in this group.

Second, monitoring and adjusting budgets regularly is desirable whether in a volatile or fragile economy or not. Instructing consumers to create budgets and to update them regularly and in response to all income and expenditure shocks should be emphasized in consumer education programs.

Third, saving goals and strategies should not only reflect anticipated life events, such as college education, car or home purchase, birth of a child, or retirement, they should also reflect the business

cycle. Forty percent of American households and households in this study have members who have lost their jobs or taken a pay cut. Many households have absorbed children, parents, and other relatives who have become unemployed or who have been unemployed long term. Restructuring and mass layoffs in certain industries, e.g., in the automobile industry, should precipitate more aggressive savings goals and behavior among consumers. For example, saving behavior should be augmented for professional development expenses in case a significant career shift or job relocation is needed. Given the recent historic declines in home prices between 2008 and 2010, homes should no longer be viewed as foundations for retirement as they were during the housing boom of the 1990's and early 2000's.

Finally, financial education should convert shocks into anticipated events by taking account of new financial realities of the American workplace, especially related to retirement. In recent years, employers in the public and private sectors have become less generous with respect to retirement plans and other benefits, and employee behavior has not changed significantly in response.¹⁴ Further, lifetime employment at one firm is increasingly rare, and employee pensions with maturity benchmarks are more difficult to achieve as a result of short tenure in a given job. Consequently, consumers should be instructed to save more aggressively throughout their lives. Consumer education might target portfolio choice and take advantage of the latest economic research related to saving and retirement, especially arising from behavioral economics.

¹⁴ See, for example, the 2010 ING Institute for Retirement Research study that shows that state- and localgovernment employees, those who typically have greatest access to traditional, defined-benefit pension plans, are underprepared for retirement.

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a)			b)		
Region	Percent		Job Status	Percent	
Upper Peninsula	3.4		Full time	38.0	
Northern	5.7		Part time	15.6	
West Central	14.2		Work+School	4.2	
East Central	8.7		School Full Time	3.4	
Southwest	13.8		Armed Forces	0.3	
Southeast	45.6		Retired	16.1	
Detroit	8.7		Homemaker	13.9	
			Unemployed	6.0	
			Disabled	1.9	
			Other	0.7	
c)			d)		
Highest Level of Education	Percent		Race	Percent	
11th grade or lower	6.9		White	80.9	
High school graduate, GED	27.7		African American	14.1	
Some college	24.5		Native American	2.2	
Technical/junior college graduate	7.9		Hispanic	1.1	
College graduate (4 years)	19.8		Asian	0.2	
Some post graduate	2.0		Hawaiian, Pacific Islander	0.2	
Graduate degree	11.2		Other	2.7	
e)					
Comparison to Other Surveys					
	Median	College		Un-	African
	Household	Graduate	Filed Bankruptcy	Insured	American
Survey	Income (\$)	(%)	(%)	(%)	(%)
SOSS	over 40,000	33.0	na	11.1	14.1
MSUE Consumer Finance Web survey	59,311	62.0	3.0	9.0	na
Detroit Area Household Financial	24,146	47.4	3.9	21.0	69.1
Services study	,				
U.S. Census, Michigan	45.255	24.6	na	12.2	13.9
	(358)	(0.3)		(0.2)	(0.1)
Source: SOSS, April 2010; MSUE Cons	umer Finance	e Web surv	vey (2009-2010); Detroit Area	a Househol	d
Financial Services study cited in Blank a	nd Barr (2009	9); U.S. Ce	ensus, American Community	Survey 200	9
Note: SOSS: N=972; see text for desc	ription of surv	vev; sums o	of percentages may not sum t	to 100	
due to rounding error: respondents repor	ted data range	es for inco	me		
MSUE: N=325: see text for description	of survey: da	ta were co	llected from April 2009 to At	pril 2010	
Detroit study: N=938: college graduate	data are for "	beyond high	h school diploma"		
Census: N=9.79 million (household population	lation): data a	are estimat	ed; standard errors are in par	entheses:	
data are for 2009: median income is in 20	009 inflation-a	adjusted do	llars: race data are for those	reporting o	ne
race.					
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Indicators	Better off	same	Worse off		
Current financial situation relative to a year ago	22.0	25.0	53.0		
Anticipated future financial situation realtive to					
current situation	46.6	20.2	33.3		
			Stay about		
	Go up	Go down	the same		
Expected change in inflation rate in next year,					
US	52.8	7.5	39.7		
			About the		
	Better	Worse	same		
Expected change in unemployment rate in next					
year, US	32.4	25.8	41.8		
			Neither		
			good or		
	Good time	Bad time	bad		
Business conditions in community in next 12					
months	32.2	60.0	7.7		
				Not so	
	Excellent	Good	Just fair	good	Poor
Current financial situation	4.9	36.7	37.8	14.2	6.3
Source: SOSS, April 2010; Author's calculation					
Note: U.S. inflation rate (CPI): April 0.1% dec	crease from I	March and 2	.2 % from pa	ast 12 month	s;
August 0.3% increase from July and 1.2% from	n past 12 mo	nths.			
Midwest, inflation rate (CPI): April 0.2% increa	se from Mar	ch and 2.7%	from past 1	2 months;	
August 0.2 % increase from July and 1.7 % from	om past 12 m	onths.			
U.S. and Michigan unemployment rates: April 9	9.9% and 149	%; August	9.6% and 1	3.1%.	

Table 2: Perceived Personal, Macroeconomic, and Business Environment

	Income			
	Decline or	Income	Pearson's	
Questions	No Change	Increase	χ^2	N
Have monthly budget	0.684	0.650	0.535	928
Change budget	0.785	0.952	10.417*	618
Update budget monthly	0.162	0.354	14.924*	631
Have retirement plans (401K, 403B, IRA)	0.493	0.641	9.033*	917
Changed portfolio	0.735	1.000	10.499*	113
Used retirement savings in past 2 years	0.269	0.340	1.868	730
Retirement: completely rely on social security	0.183	0.077	8.002*	913
Retirement: completely rely on value of home	0.079	0.033	2.773	881
More than 50% reliance on own resources	0.686	0.813	7.168*	851
Confidence in money to buy food	0.678	0.840	12.655*	940
Confidence in money to make monthly payments	0.396	0.471	2.355	930
Expect inflation rate to rise	0.507	0.581	2.194	903

 Table 3: Financial Behavior and Expectations: By Income Change (Increase)

Source: SOSS, April 2010; Author's calculation.

Note: Coefficients marked with an asterisk mean that each group is statistically different at the 5 percent level of significance. *N* is weighted number of observations. The survey question related to change in income is, "In the past three months has your total family income from all sources increased, decreased, or stayed about the same?"

	Income			
	Increase or	Income	Pearson's	
Questions	No change	Decline	χ^2	N
Have monthly budget	0.689	0.650	1.171	928
Change budget	0.804	0.805	0.0003	618
Update budget monthly	0.174	0.222	1.513	631
Have retirement plans (401K, 403B, IRA)	0.557	0.349	27.956*	917
Changed portfolio	0.893	0.590	13.816*	113
Used retirement savings in past 2 years	0.275	0.288	0.096	730
Retirement: completely rely on social security	0.169	0.173	0.0119	913
Retirement: completely rely on value of home	0.064	0.107	4.217*	881
More than 50% reliance on own resources	0.736	0.577	18.037*	851
Confidence in money to buy food	0.785	0.406	114.700*	940
Confidence in money to make monthly payments	0.454	0.239	32.208*	930
Expect inflation rate to rise	0.527	0.474	1.693	903

Table 4: Financial Behavior and Expectations: By Income Change (Decline)

Table 5: Financial Behavior and Expectations: By Income Level

		10,000-	20,000-	30,000-	40,000-	50,000-	60,000-	70,000-	90,000-	100,000-		Pearson's	
Questions	< 10,000	20,000	30,000	40,000	50,000	60,000	70,000	90,000	100,000	150,000	>150,000	χ^2	N
Have monthly budget	0.811	0.699	0.727	0.653	0.779	0.702	0.551	0.630	0.600	0.797	0.741	26.423*	831
Change budget	0.433	0.503	0.743	0.721	0.823	0.934	0.943	0.885	0.888	0.895	0.934	73.489*	564
Update budget monthly	0.089	0.160	0.138	0.151	0.116	0.218	0.252	0.366	0.104	0.182	0.000	25.387*	573
Have retirement plans (401K, 403B, IRA)	0.026	0.140	0.175	0.535	0.407	0.528	0.488	0.796	0.905	0.592	0.920	179.824*	831
Changed portfolio	0.000	0.883	0.845	0.717	0.821	0.781	1.000	0.846	0.196	0.942	0.917	27.690*	107
Used retirement savings in past 2 years	0.375	0.348	0.213	0.471	0.189	0.441	0.199	0.445	0.042	0.242	0.057	51.382*	668
Retirement: completely rely on social security	0.421	0.358	0.219	0.209	0.449	0.062	0.058	0.013	0.018	0.093	0.108	132.075*	825
Retirement: completely rely on value of home	0.084	0.062	0.159	0.052	0.129	0.104	0.032	0.038	0.010	0.009	0.137	29.710*	798
More than 50% reliance on own resources	0.341	0.627	0.748	0.742	0.748	0.796	0.641	0.830	0.574	0.710	0.612	36.295*	784
Confidence in money to buy food	0.263	0.450	0.444	0.656	0.740	0.583	0.682	0.826	1.000	0.951	0.944	139.766*	834
Confidence in money to make monthly payments	0.146	0.328	0.236	0.280	0.528	0.341	0.329	0.372	0.632	0.487	0.897	80.529*	829
Expect inflation rate to rise	0.461	0.391	0.439	0.607	0.415	0.711	0.437	0.486	0.518	0.515	0.541	32.633*	797
Ν	30	66	77	70	89	119	122	95	34	100	34		836

Source: SOSS, April 2010; Author's calculation.

Note: Coefficients marked with an asterisk mean that each group is statistically different at the 5 percent level of significance. *N* is weighted number of observations. The survey question related to change in income is, "In the past three months has your total family income from all sources increased, decreased, or stayed about the same?"

	Unable to		Pearson's	
Questions	Pay	Able to Pay	χ^2	N
Have monthly budget	0.724	0.640	6.179*	952
Change budget	0.799	0.808	0.067	619
Update budget monthly	0.168	0.199	0.764	632
Have retirement plans (401K, 403B, IRA)	0.310	0.598	65.103*	940
Changed portfolio	0.798	0.807	0.009	112
Used retirement savings in past 2 years	0.384	0.221	18.348*	752
Confidence in money to make monthly payments	0.132	0.519	124.102*	954
Expect inflation rate to rise	0.564	0.512	2.038	926

Table 6: Financial Behavior and Expectations: By Ability to Pay forNecessities

Source: SOSS, April 2010; Author's calculation.

Note: Coefficients marked with an asterisk mean that each group is statistically different at the 5 percent level of significance. *N* is weighted number of observations. For Table 11, "Unable to pay" includes once in a while, fairly often and very often that respondents do not have enough money to pay for food.

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		Rent House		Pearson's	
Questions	Own Home	or Apartment	Other	χ^2	N
Have monthly budget	0.681	0.671	0.589	5.158	948
Change budget	0.802	0.791	0.821	0.250	616
Update budget monthly	0.148	0.244	0.251	8.465*	629
Have retirement plans (401K, 403B, IRA)	0.663	0.295	0.070	212.136*	945
Changed portfolio	0.803	0.830	0.950	0.330	113
Used retirement savings in past 2 years	0.262	0.352	0.223	4.658	756
Expect inflation rate to rise	0.537	0.523	0.463	2.574	923

	Full	Part					Pearson's	
Questions	Time	Time	Unemployed	Retired	Student	Homemaker	χ^2	N
Have monthly budget	0.738	0.582	0.635	0.581	0.440	0.738	29.136*	931
Change budget	0.919	0.834	0.748	0.728	0.597	0.623	45.585*	604
Update budget monthly	0.148	0.276	0.250	0.151	0.000	0.238	13.494*	617
Have retirement plans (401K, 403B, IRA)	0.655	0.300	0.170	0.749	0.192	0.446	135.570*	918
Changed portfolio	0.836	0.871	0.943	0.898	1.000	0.639	7.141	110
Used retirement savings in past 2 years	0.282	0.284	0.242	n.a.	0.076	0.275	5.645	731
Expect inflation rate to rise	0.580	0.473	0.300	0.567	0.635	0.485	20.916*	903

Table 8: Financial Behavior and Expectations: By Employment Status

Source: SOSS, April 2010; Author's calculation.

Note: Coefficients marked with an asterisk mean that each group is statistically different at the 5 percent level of significance. *N* is weighted number of observations. Home owners include those paying a mortgage. Part time includes "work part time" and "work and go to school".

Table 9: Financial Behavior and Expectations: By Race

		African		Pearson's	
Questions	White	American	Other	χ^2	N
Have monthly budget	0.670	0.598	0.604	2.830	924
Change budget	0.810	0.822	0.486	8.042*	600
Update budget monthly	0.203	0.054	0.164	9.198*	609
Have retirement plans (401K, 403B, IRA)	0.520	0.467	0.464	1.427	915
Changed portfolio	0.789	0.894	n.a.	0.355	104
Used retirement savings in past 2 years	0.288	0.149	0.038	8.908*	732
Expect inflation rate to rise	0.548	0.353	0.650	19.146*	901

Source: SOSS, April 2010; Author's calculation.

Note: Coefficients marked with an asterisk mean that each group is statistically different at the 5 percent level of significance. N is weighted number of observations.

			Some				
			college/			Pearson's	
Questions	<hs< td=""><td>HS</td><td>Technical</td><td>BA</td><td>Post Grad</td><td>χ^2</td><td>N</td></hs<>	HS	Technical	BA	Post Grad	χ^2	N
Have monthly budget	0.514	0.641	0.684	0.719	0.667	10.359*	954
Change budget	0.798	0.787	0.759	0.949	0.728	22.260*	621
Update budget monthly	0.067	0.222	0.130	0.335	0.067	34.218*	635
Have retirement plans (401K, 403B, IRA)	0.217	0.449	0.467	0.616	0.753	66.864*	943
Changed portfolio	1.000	0.854	0.746	0.789	0.960	3.538	113
Used retirement savings in past 2 years	0.122	0.372	0.223	0.320	0.185	21.883*	755
Expect inflation rate to rise	0.669	0.545	0.419	0.642	0.532	28.286*	929

Table 10: Financial Behavior and Expectations: By Education Level

Source: SOSS, April 2010; Author's calculation.

Note: Coefficients marked with an asterisk mean that each group is statistically different at the 5 percent level of significance. *N* is weighted number of observations.