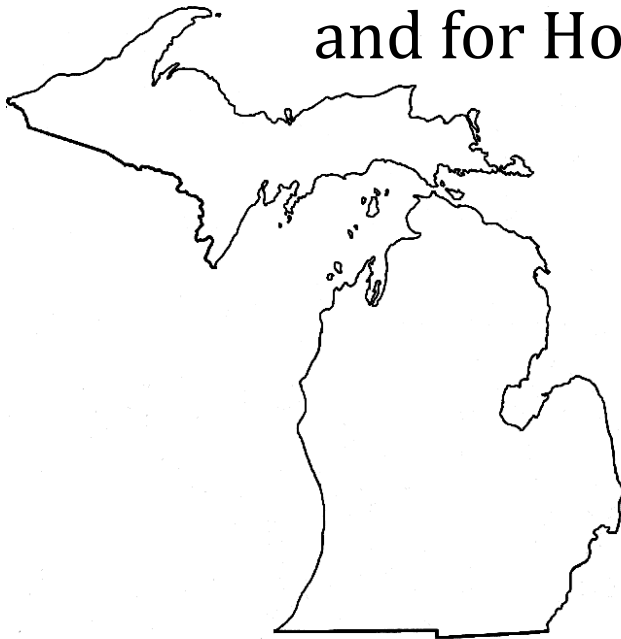


Informing the Debate

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Financial Crises

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The Financial and Economic Crises:
Implications for Consumer Finance and for Households in Michigan

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Abstract

Michigan is an epicenter of the recent economic and financial crises. Median personal income was 8 percent above the national average at the beginning of the decade and was 8 percent below the national average by the end of it. Between 2008 and 2009, personal income fell for the first time since 1958. Rates of unemployment and foreclosure activity remain high and above the national average. Indeed, the Michigan economy is changing in dramatic and important ways, but there is little information on household responses to this changing environment. How are Michigan households responding to economic and financial shocks? Are they smoothing income, consumption, or both? What mechanisms are they using to achieve these outcomes? On which factors does the degree of adjustment depend? Using data collected from recent household surveys, I address these questions. Michigan residents are adjusting both spending plans, i.e., household budgets, and income sources, e.g., savings intended for retirement. Degree of responsiveness and type of response depend on a number of factors, including whether an income shock is positive or negative, perception of future macroeconomic trends, income or poverty status, location, educational level, and race.

Michigan is an epicenter of the current financial and economic crises. As the state with one of the highest percentages of nonprime foreclosures in 2007, the highest number of foreclosure filings in 2009, and the average highest unemployment rate in the U.S. for much of the decade, the financial situation of Michigan households is changing rapidly and in important ways. Prior to the crises, aggregate indicators, such as national and regional indices of economic activity, often underemphasized household financial conditions and decisions, which have been central to the current crises, particularly in Michigan. There is still a lot that is unknown about household responses to financial and economic shocks. Do they smooth consumption, e.g., adopt and change spending plans, as anticipated? Do they smooth income, e.g., relax their budget constraints by using savings intended for retirement or increasing their use of credit? Economists may want to know how indicators are changing to better analyze changes in living standards and to predict the magnitude and direction of imminent changes. Policymakers and service providers would also be interested in such analysis and appropriate responses of interventions, as well as their timing.

To fill this gap, this research analyzes 2009 and 2010 household survey data to understand changes in financial and economic activity in Michigan. Largely consistent with data from credit agencies, seven percent have been late with a rent or mortgage payment in the past three months, 14 percent were sent to a collection agency in the past three months, and two percent plan to file for bankruptcy in the next three months. Further, 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 it 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 *idiosyncratic* shocks relative to positive ones. In contrast, we find that household spending plans respond to future negative *macroeconomic* shocks, but household investment portfolios do not. We also find significant differences by income, location, employment status, educational attainment, race, and other factors.

This suggests a role for policymakers and for service providers in increasing behavior that is more informed and responsive. Most immediately, greater attention must be given to the growing mortgage-delinquency and foreclosure rates. More generally, state and local agencies may be able to collect, analyze, and disseminate data relevant for financial decision-making in a timely fashion on a state-wide basis. Further, financial and economic education should be mandatory for high school students. For non-profit and other service providers, more services and resources to support financial and economic literacy, including appropriate consumer household responses to shocks related to spending and income, are warranted.

In essence, if we can better understand and predict microeconomic events with potentially large macroeconomic consequences in Michigan, given its pro-cyclical manufacturing base and given the significant linkage between the auto industry and other industries in the U.S., this could be a Pareto improvement for local communities, for the state, and for the nation.

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

(Figure 1). Correspondingly, unemployment rates doubled at the beginning of the decade and again between 2008 and 2010, as can be seen in Figure 2. 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. Not surprisingly, economic contraction was reflected in a broad range of indicators, reported in Figures 3 to 10 and Tables 1 to 4. Median personal income in Michigan, which is given in Table 1, exceeded the national average by 8 percent in 2001 but lagged it by 8 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 (Table 1). Increases in food-stamp participation have also surpassed the national average. Between 2006 and 2009, U.S. participation increased by 56 percent, while in Michigan it increased by 65 percent (Table 2).

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 (Figure 3). 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 percent were in foreclosure.¹ By July of 2010, Michigan ranked sixth in the country with a total of 18,833 properties in some state of foreclosure. One in every 241 Michigan housing units received a foreclosure filing during this month.² Figure 4 shows that mortgage delinquencies continue to rise throughout Michigan, although there is significant heterogeneity across the state.

¹ Government Accountability Office (2009), pp. 29-30.

² Realty Trac (2010.)

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. In addition, Figure 5 also shows that home prices continued to decline over the last year. Figures 6 and 7 show that delinquencies for auto loans and bank cards, although they continue to rise, have begun to fall relative to the second quarter of 2009 in most counties and relative to the rest of the country. 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 at \$2,984 from credit cards, private label cards, and lines of credit. The national average was \$2,900.³ However, if considering total stock of debt per capita and the share that is delinquent over a longer period, 1999 to 2010, the average for Michigan is lower than the U.S. average and is comparable to that of Ohio, Pennsylvania, and Texas (see Figures 8 and 9). Between 2006 and 2009, business bankruptcies nearly tripled, and non-business bankruptcies more than doubled, as can be seen in Table 3. As a share of U.S. bankruptcies, between 2004 and 2008, business bankruptcies doubled, and non-business bankruptcies rose by more than one third. Shares of both types of bankruptcy peaked in 2007. The data in Figure 10 indicate that the share of consumers with new bankruptcies has been consistently above the national average since mid-2002. The data in Table 4 describe bank failures in Michigan. Eight banks have failed since 2008.

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

³ Corporation for Enterprise Development (2009).

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 with two groups at Michigan State University: the Office of Survey Research in the Institute on Public Policy and Social Research and MSU Extension (MSUE) on two surveys of Michigan households.

Web Survey

In collaboration with MSUE, 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.⁴ 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.

⁴Data 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.

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 information and residents' satisfaction with economic and political conditions.⁵ Further, additional questions from MSU researchers are incorporated in each round of SOSS.⁶

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 useful 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

Who is in the Surveys?

Table 5 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

⁵ A detailed description of the SOSS is available at <http://www.ippsr.msu.edu/soass/DEFAULT.ASP>.

⁶ 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.

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, 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 that they are 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 within them someone who had lost his or her job or who had taken a pay cut in the last six months. Twenty-one percent expected someone in the household to lose his or her job, and 25 percent were uncertain as to whether someone in the household would 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, had 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 who reported a change, the average change in income in the last three months is -4 percent (SOSS) and -5 percent (web). Within the next three months, the median household expected no change, but among those anticipating a change, SOSS households expected 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 the Economic Environment?

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 described their family income is unchanged in the last three months, 12 percent said that it is higher, and 23 percent said that it was lower. For those reporting recent declines in income, two-thirds reported a decline of 20 percent or more. Seventy-three percent of respondents anticipated no change in their incomes in the next three months, 17 percent anticipated an increase, and 10 percent anticipated a decline. When? If evaluating their overall household financial situations more broadly, 75 percent in the sample believed that their household's current financial situation was "just fair" or good, and 21 percent believed that it was "not so good" or poor (see Table 6). Slightly more than half of respondents estimated that they are worse off than they were a year ago, and slightly less than half anticipate being better off in a year

(Table 6). Two percent anticipate filing for bankruptcy in the next three months, and seven percent report being 30 days or more late in making a rent or mortgage payment.

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

With respect to perceptions of future macroeconomic conditions in the U.S., Michigan residents are slightly pessimistic (Table 6). More than half estimate that the inflation rate will increase in the next year. This finding is consistent with that of professional forecasters surveyed by the Federal Reserve Bank of Philadelphia and with the RSQE forecast for Michigan.⁷ Forty percent think it will not change. Less than a third believe that the unemployment rate will fall. Michigan households' beliefs are also similar to those of CEOs. Among those surveyed by the Business Roundtable in the third quarter of 2010, 31 percent say that employment will rise; 23 percent, fall; and 46 percent, stay the same. Forecasters at JP Morgan Chase and RSQE predict very slight increases in employment growth in 2011 and 2012.⁸ Industry, academic, and survey estimates are broadly in line when considering the share of respondents who believe the employment situation will stay the same or will get better, 74 percent. In their local communities, 60 percent of Michigan residents believe that the business conditions in their local environment will be bad in the next year. When asked to reveal which problem is the most important in their communities, 62% said jobs and unemployment.

⁷ Federal Reserve Bank of Philadelphia (2010) and RSQE (2010). The rate of inflation increased 1.9% between February and April 2010, when the SOSS was administered, in the Detroit-Ann Arbor-Flint area, according to the Bureau of Labor Statistics (2010).

⁸ JP Morgan Chase (2010) and RSQE (2010). The unemployment rate (seasonally adjusted) in April 2010, when the SOSS was administered, was 14% in Michigan (State of Michigan (2010)).

Apart from “other,” four of the top five specific problems identified relate to economic issues (Table 7).

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).⁹

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.¹⁰ 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,

⁹ 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.

¹⁰ 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.

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.

These results are fairly general. There is no information on exactly when budgets were adopted nor on 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. Further, data were collected on respondents' expectations of macroeconomic shocks, i.e., to the inflation rate. Data on shocks will be compared to actual consumption- and income-smoothing behavior to analyze responses of Michigan households to economic and financial change.

In the face of changes to respondent household income, results are asymmetric. As can be seen in Tables 8 and 9, 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.¹¹ 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

¹¹ 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% 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).

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

Table 10 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.

Interestingly, while more than 59 percent of respondents with incomes of \$30,000 or more feel confident about being able to afford basic necessities (food), less than half in most income groups feel confident about making monthly payments, a finding which does not vary with income. Households with incomes between \$60,000 and \$70,000 are most pessimistic about rising prices.

Table 11 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.

Table 12 reports activity by ability to make monthly payments. By this measure of relative poverty, those unable to pay and able to pay differ significantly in their budget- and portfolio-adjustment behavior. Whether using ability to pay for food or ability to make monthly payments as a measure of poverty, a higher proportion of those unable to pay have used their retirement savings for non-retirement expenses in the last two years. Poorer households by this measure respond more than less poor households.¹²

In Table 13 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

Table 14 gives data on responsiveness by employment status. Twenty-four to 28 percent of non-students 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

¹² In the SOSS, there are only historical assessments of respondents' financial situations up to a year prior but more commonly three months prior. Therefore, it is difficult to know if these responses are from those who are chronically poor or if they come from the new poor, i.e., those who have been made poor recently by the financial and economic crises.

more often than others. This would be expected, if the source, magnitude, or timing of income or earnings were variable.

Beliefs about future increases in the rate of inflation are somewhat surprising. Unemployed workers are the most optimistic, and students, who likely have the least work experience of those in the sample, are the most pessimistic.

Responses Vary by Anticipated Macroeconomic Changes and Expectations for Retirement

As would be predicted, respondents anticipating an increase in the rate of inflation adjust their budgets more than those who do not (see Table 15). Nonetheless, there is no statistical difference for other adjustments, including asset mix.

Table 16 shows that the presence of stocks in the retirement portfolio mix is associated with greater changes in spending plans and in retirement portfolios. This would be predictable, given greater volatility in stock movements than in other securities or than in bundles of stocks together, e.g., mutual funds found in 401(k) plans.

Responses Vary by Family Status but Not by Gender

While married respondents are not more likely to have a spending plan than single respondents, they are more likely to change their budgets at least occasionally and to have retirement plans (see Table 17). They are also more likely to believe that prices will increase in the next year. In Table 18, households without children report updating their budgets more often but are less likely than

households with children to have retirement plans? less frequently having retirement plans than those with children.

There are no statistical differences between men and women respondents, with the exception that a higher fraction of men report having retirement plans. Relatively more men say that they expect prices to rise in the next year (Table 19).

Responses Vary by Race, Location, and Education

Table 20 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. Other ethnic or racial groups were less likely to smooth income in this way. There are also noticeable racial differences related to inflationary expectations.

Residents of rural areas were more likely to have and to frequently change spending plans relative to those in other areas. A larger share of rural residents believes that the U.S. macroeconomic situation will deteriorate next year (Table 21). While there is significant heterogeneity across regions within Michigan with respect to adopting spending and retirement plans, there are fewer differences related to changing them. Inflationary expectations differ appreciably by region (Table 22).

Respondents at all educational levels had 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 23 demonstrate that bachelor's-degree recipients are the most active users and adjusters of spending plans and retirement savings. Beliefs about future macroeconomic events vary greatly by level of education, but not systematically.

IV. Implications for Policy

In an environment of higher than average unemployment and foreclosure rates and significant income decline, I find that credit conditions among Michigan households largely follow national trends. However, mortgage defaults and delinquencies are increasing more rapidly than in most other states. Nonetheless, relatively few households in Michigan anticipate filing for bankruptcy or defaulting on a mortgage in the near future. Household 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, race, and location, among other factors.

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 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.

Social scientists, policymakers, and practitioners will need to understand the status of households during the crisis and period of slow recovery, to measure their responses and to craft appropriate responses. The recent crises have shown that household or microeconomic decisions can have large, negative macroeconomic consequences. Policymakers in states like Michigan whose

economies are inextricably intertwined with the national economy should make more salient data available in a timely fashion so that households can make better financial and economic decisions. Data based on surveys, such as the ones used in this paper, should be collected and made publicly available on a monthly basis for Michigan to improve decisions made by Michigan households and by legislators on their behalf. Since questions on the web and SOSS surveys are forward-looking, survey responses can be compared to contemporaneous and future data on economic activity in Michigan to gauge the effect certain events, policies, and practices are having or will have on Michigan households. Further, the findings of this paper and the economic and financial events of 2007 to 2009, if not during the longer-run structural adjustment of the Michigan economy, suggest that economic and financial education should become a mandatory feature of high school education.

Service providers, such as non-profit credit and financial counselors, may be helpful in demonstrating optimal decision-making techniques, given the best available information, and in determining the most salient information to execute these calculations. The evidence is suggestive that many, including the poorest in the economy, whether chronically or newly poor, can benefit from more consumption-smoothing – budgeting – activity.

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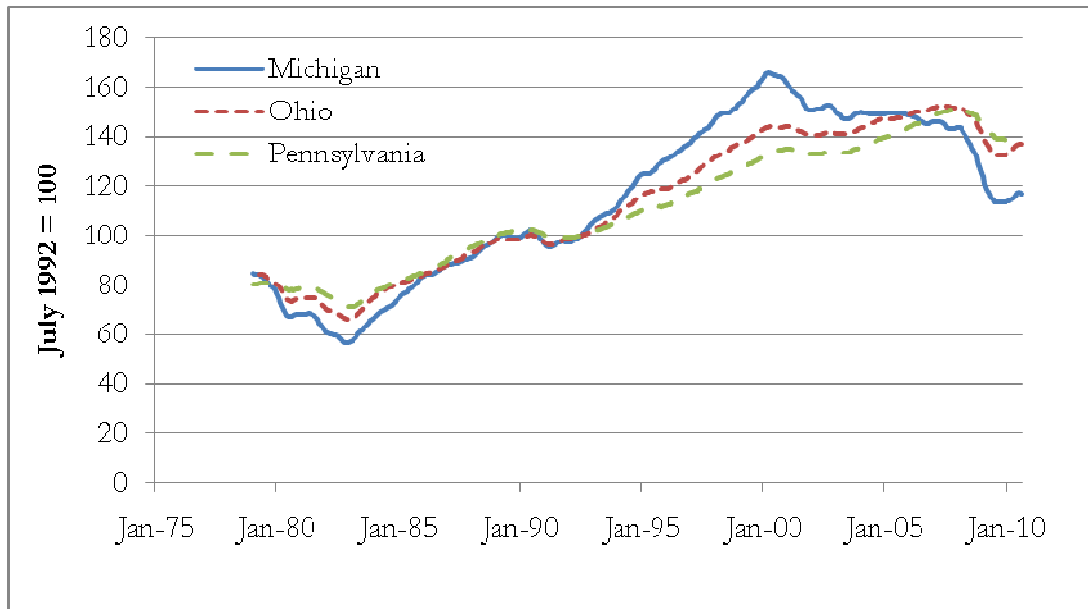
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_____, U.S. Census Bureau, *Current Population Survey*, 2001-2010, Annual Social and Economic Supplement, <http://www.census.gov/hhes/www/poverty/> and <http://www.census.gov/hhes/www/income/>, last accessed September 2010b.

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U.S. Government Accountability Office, "Nonprime Mortgages," GAO-10-146R, December 16, 2009.

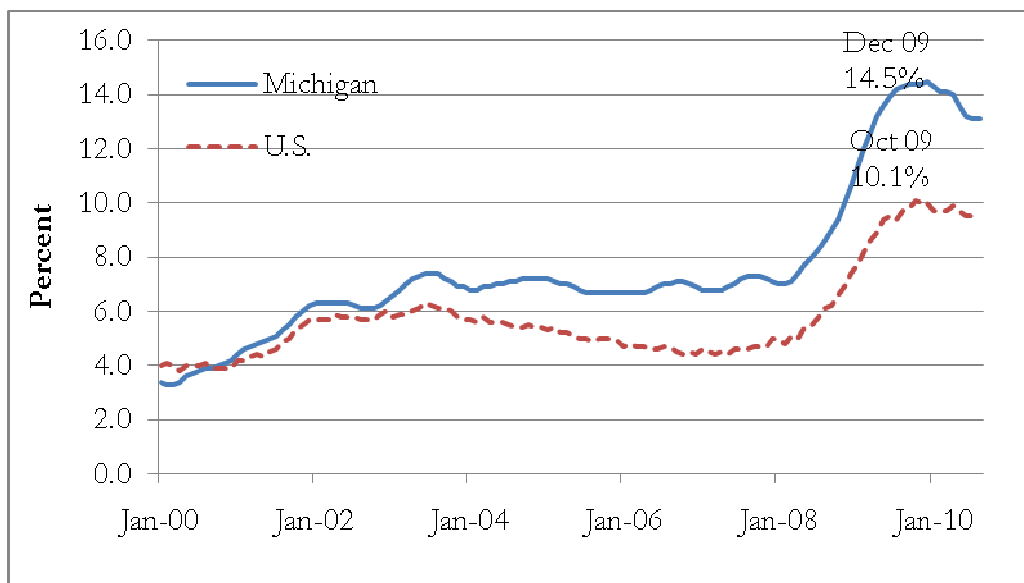
Figure 1: Coincident Economic Activity Index, Selected States, 1975-2010



Source: Federal Reserve Bank of St. Louis (2010a).

Note: The Coincident Economic Activity Index includes four indicators: nonfarm payroll employment, the unemployment rate, average hours worked in manufacturing, and wages and salaries. The trend for each state's index is set to match the trend for gross state product.

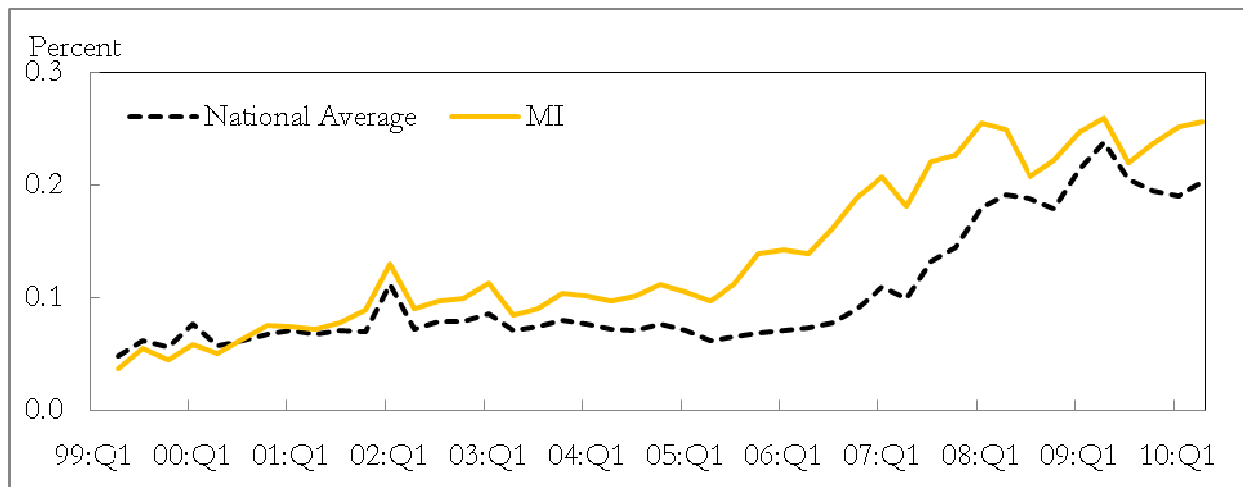
Figure 2: Unemployment Rate, Michigan and U.S., 2000-2010



Source: Bureau of Labor Statistics (2010)

Note: Data are seasonally adjusted.

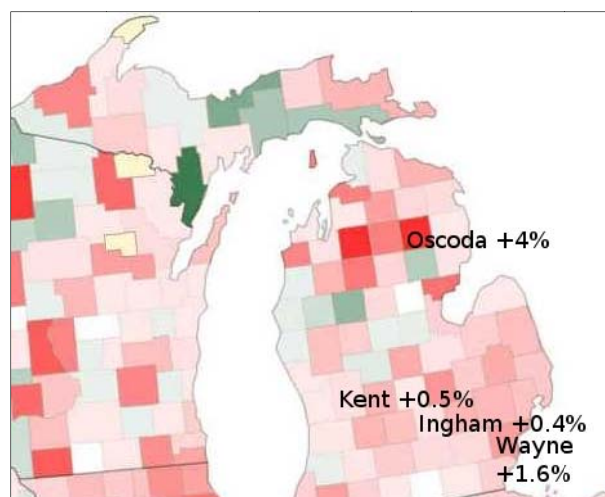
Figure 3: Consumers with New Foreclosures, Michigan and U.S., 1999 to 2010
Percent



Source: Federal Reserve Bank of New York (2010a), Figure 25.

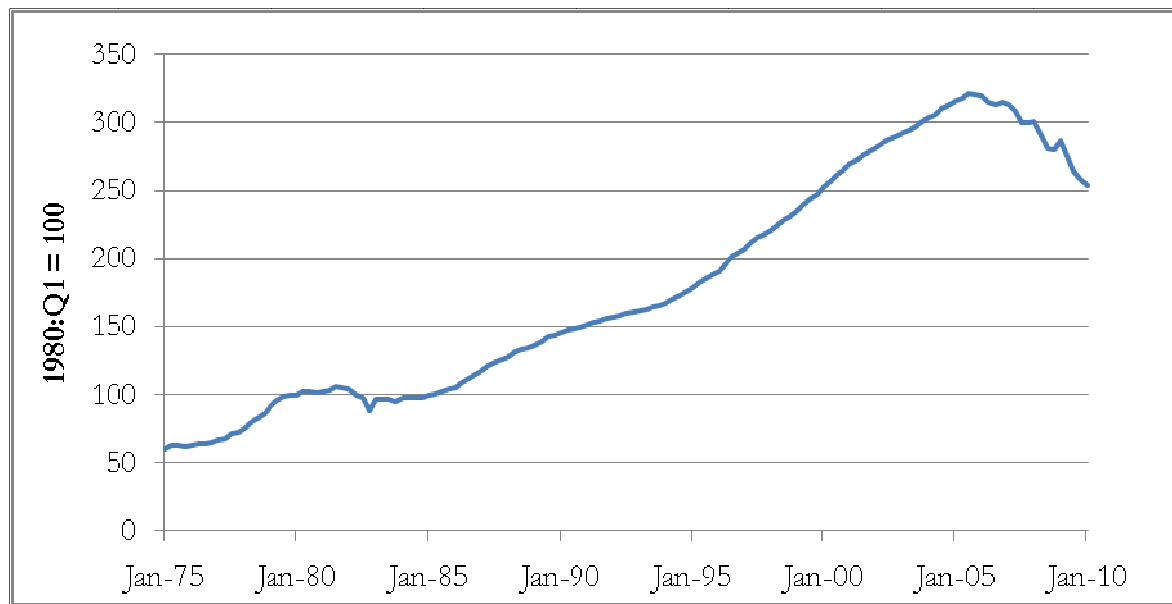
Note: FRBNY Consumer Credit Panel consists of detailed Equifax credit-report data of individuals and households from 1999 to 2010. The panel is a nationally representative 5 percent random sample of all individuals with a social security number and a credit report. Percent of consumers is based on the population with a credit report. New foreclosures are number of individuals with foreclosures first appearing on their credit report during the past three months.

Figure 4: Mortgage Delinquency Rate 90+ Days, 2nd Quarter of 2010, Year-over-Year



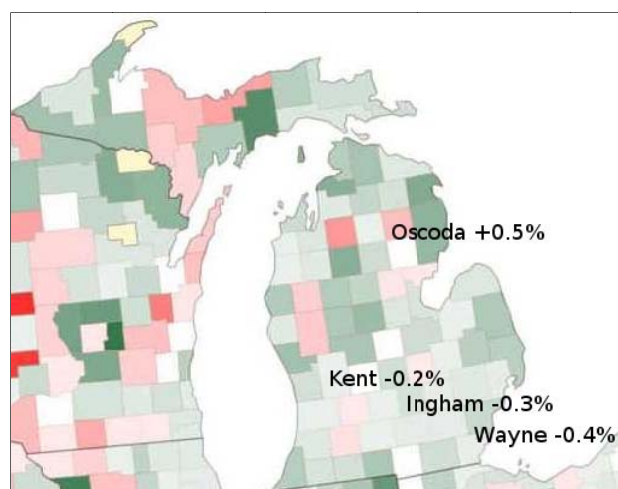
Source: Federal Reserve Bank of New York (2010b).

Figure 5: Home Price Index, Michigan, 1975-2010



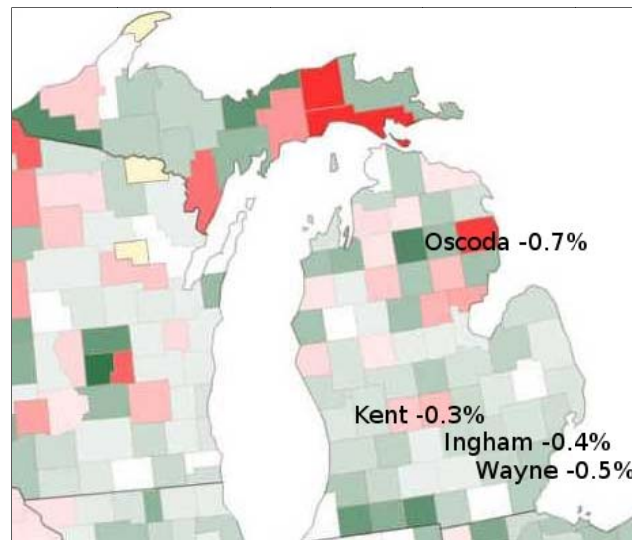
Source: Federal Reserve Bank of St. Louis (2010b).

Figure 6: Auto Loan Delinquency Rate 60+ Days, 2nd Quarter of 2010, Year-over-Year



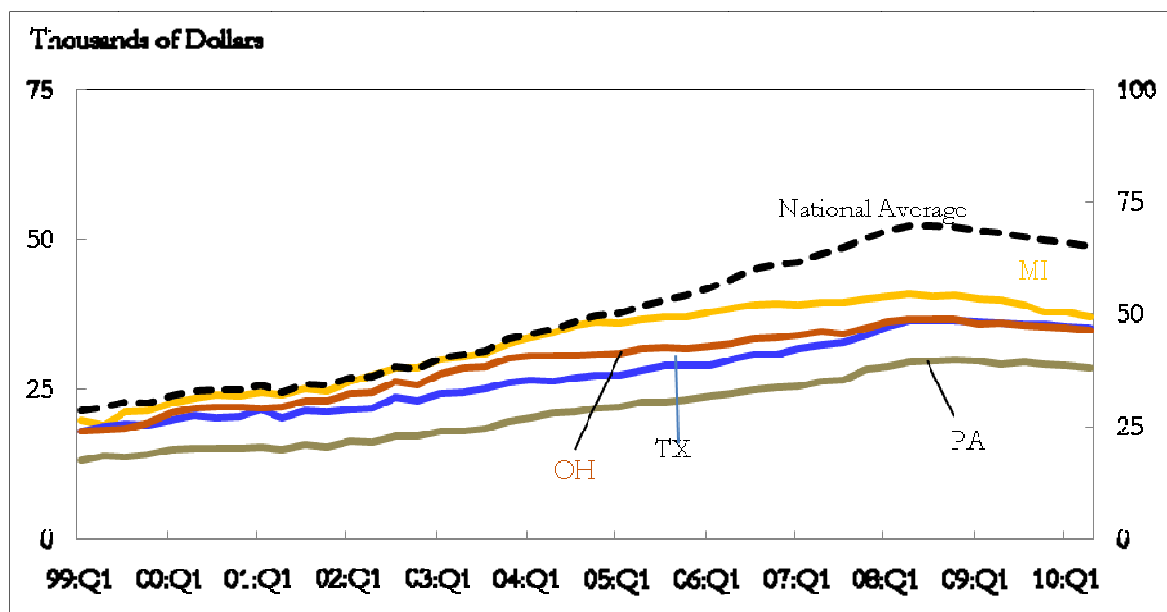
Source: Federal Reserve Bank of New York (2010b).

Figure 7: Bank Card Delinquency Rate 60+ Days, 2nd Quarter of 2010, Year-over-Year



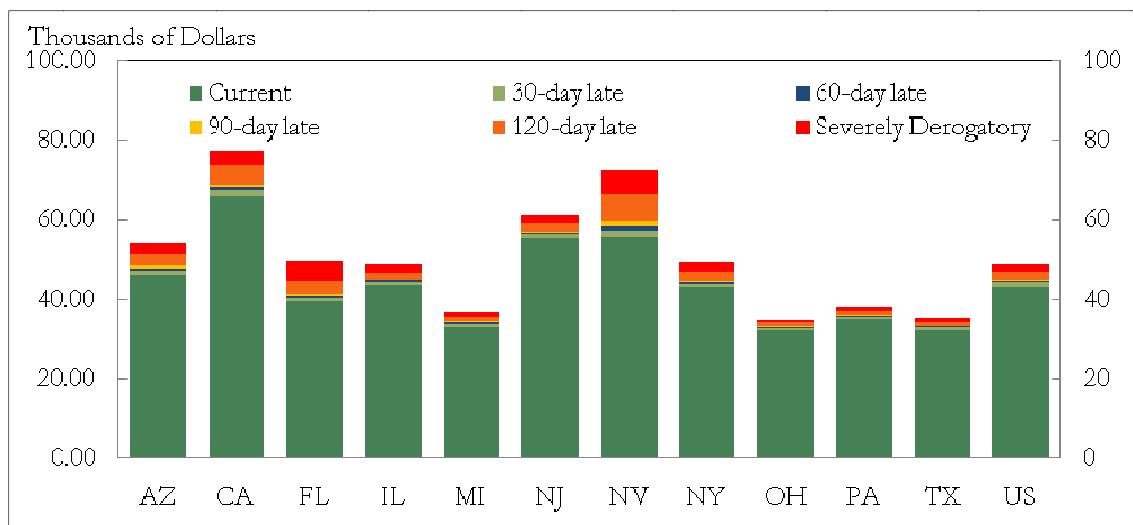
Source: Federal Reserve Bank of New York (2010b).

Figure 8: Total Debt Balance per Capita, Selected States, 1999-2010



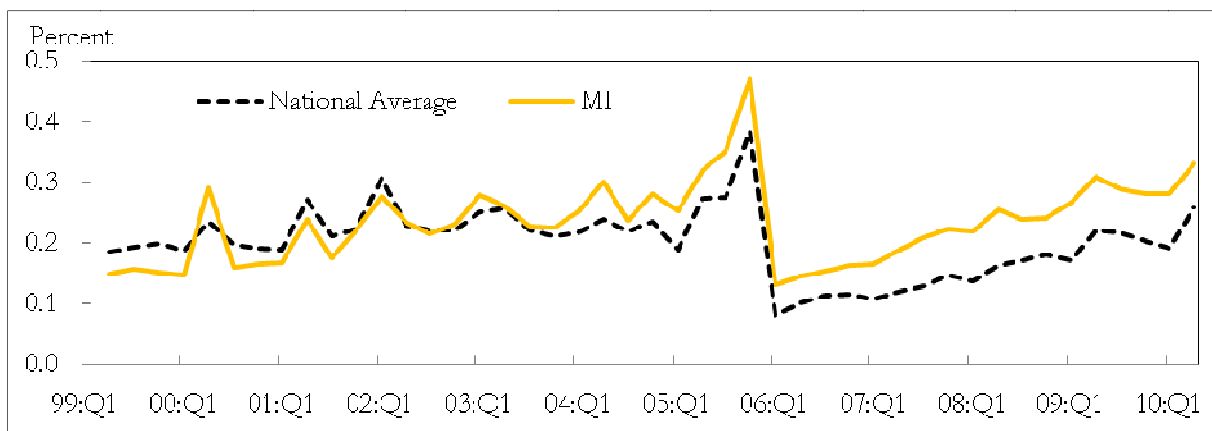
Source: Federal Reserve Bank of New York (2010a), Figure 18.

Figure 9: Delinquency Status of Debt Balance per Capita, Selected States, 2nd Quarter of 2010



Source: Federal Reserve Bank of New York (2010a), Figure 20.

Figure 10: Consumers with New Bankruptcies, Michigan and U.S., 1999 to 2010, Percent



Source: Federal Reserve Bank of New York (2010a), Figure 26.

Note: The FRBNY Consumer Credit Panel consists of detailed Equifax credit-report data of individuals and households from 1999 to 2010. The panel is a nationally representative 5 percent random sample of all individuals with a social security number and a credit report. Percent of consumers is based on the population with a credit report. New bankruptcies are bankruptcies first reported during the past 3 months.

Table 1: Poverty Levels in Michigan and U.S., 1995-2009

Year	All ages				Children under age of 18				Median income	
	Michigan		U.S.		Michigan		U.S.		Michigan	U.S.
	Thousands	Percent	Thousands	Percent	Thousands	Percent	Thousands	Percent	Dollars	Dollars
2009	1,376	14.0	43,569	14.3	447	19.5	14,774	20.1	45,994	49,777
2008	1,273	13.0	39,829	13.2	435	18.6	13,507	18.5	49,788	50,303
2007	1,076	10.8	37,276	12.5	368	15.5	12,802	17.6	49,370	50,233
2006	1,323	13.3	36,460	12.3	433	18.2	12,299	16.9	48,647	48,201
2005	1,196	12.0	36,950	12.6	402	16.0	12,335	17.1	45,933	46,326
2004	1,318	13.3	37,040	12.7	483	19.2	13,041	17.8	42,256	44,334
2003	1,125	11.4	35,861	12.5	364	14.6	12,866	17.6	45,022	43,318
2002	1,152	11.6	34,570	12.1	349	14.1	11,646	16.3	42,715	42,409
2001	927	9.4	32,907	11.7	295	12.4	11,175	15.8	45,047	42,228
2000	993	10.0	31,054	11.3	329	12.7	11,018	15.6	45,512	41,990
1995	1,068	11.2	27,501	12.3	n.a.	n.a.	13,999	20.2	36,426	34,076

Source: U.S. Census Bureau (2010b).

**Table 2: Supplemental Nutrition Assistance Program, 2006-2010,
Number of Participants (Households)**

State	FY 2006	FY 2007	FY 2008	FY 2009	Feb-09	Feb-10	Percent Change Feb-10 vs 2006
California	799,469	827,258	914,161	1,122,949	1,081,909	1,360,840	70%
Georgia	386,192	387,254	417,427	534,944	509,986	666,887	73%
Illinois	556,293	569,073	595,832	677,147	663,016	756,341	36%
Massachusetts	227,263	239,802	266,430	336,050	324,452	402,247	77%
Michigan	515,030	555,744	590,930	694,341	668,308	848,429	65%
Ohio	480,582	492,811	526,800	624,989	601,377	736,638	53%
Texas	1,017,313	947,235	994,786	1,183,153	1,150,198	1,373,771	35%
Wyoming	10,134	9,499	9,564	11,185	10,628	14,637	44%
U.S.	11,734,491	11,789,594	12,728,981	15,232,105	14,677,726	18,273,141	56%

Source: Food and Nutrition Service (2010).

Note: FY 2006 to 2009 data are average monthly participants.

**Table 3: Business and Non-Business Bankruptcy Cases Commenced,
Michigan, 2004-2010**

Year/ Quarter	Business		Non-Business	
	Number, Michigan	Michigan/ U.S.	Number, Michigan	Michigan/ U.S.
2004	681	0.02	63,531	0.041
2005	1,071	0.027	88,402	0.043
2006	753	0.038	32,746	0.055
2007	1,194	0.042	44,996	0.055
2008	1,684	0.039	53,656	0.05
2009	2,081	0.034	67,265	0.048
2007: Q1	288	0.046	10,852	0.058
2007: Q2	280	0.042	10,811	0.053
2007: Q3	288	0.04	11,587	0.055
2007: Q4	331	0.041	11,755	0.054
2008: Q1	374	0.043	13,084	0.055
2008: Q2	401	0.041	13,477	0.051
2008: Q3	434	0.038	13,454	0.048
2008: Q4	445	0.034	13,641	0.047
2009: Q1	495	0.035	17,026	0.054
2009: Q2	589	0.037	17,690	0.048
2009: Q3	480	0.032	16,638	0.045
2009: Q4	515	0.034	15,906	0.045
2010: Q1	467	0.032	18,617	0.05

Source: United States Courts (2010).

Table 4: FDIC Bank Failures and Assistance Transactions, Michigan, 2008-2010 (\$, '000s)

Institution Name	Location	Effective date	Ins. Fund	Failure/ Assistance	Total Deposit	Total Assets	Estimated Loss
NEW LIBERTY BANK	PLYMOUTH, MI	5/14/2010	DIF	FAILURE	101,884	111,239	N/A
CF BANCORP	PORT HURON, MI	4/30/2010	DIF	FAILURE	1,418,445	1,599,122	N/A
LAKESIDE COMMUNITY BANK	STERLING HEIGHTS, MI	4/16/2010	DIF	FAILURE	52,290	53,021	N/A
CITIZENS STATE BANK	NEW BALTIMORE, MI	12/18/2009	DIF	FAILURE	157,149	168,551	33,980
HOME FEDERAL SAVINGS BANK	DETROIT, MI	11/6/2009	DIF	FAILURE	12,730	12,994	7,902
WARREN BANK	WARREN, MI	10/2/2009	DIF	FAILURE	467,767	504,816	243,314
MICHIGAN HERITAGE BANK	FARMINGTON HILLS, MI	4/24/2009	DIF	FAILURE	149,065	167,710	58,377
MAIN STREET BANK	NORTHVILLE, MI	10/10/2008	DIF	FAILURE	98,934	112,368	54,431
		Total Failures		8	2,458,264	2,729,821	398,004
		Total Assistance Transactions		0	0	0	N/A
		Total Institutions		8	2,458,264	2,729,821	398,004

Source: Federal Deposit Insurance Corporation (2010).

Note: DIF is the Deposit Insurance Fund, which is the insurance fund into which financial institutions pay premiums based on specific factors, such as size of insured deposits and risk an institution poses to the insurance fund.

Table 5: Characteristics of SOSS Respondents, Selected

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 Consumer Finance Web survey (2009-2010); Detroit Area Household Financial Services study cited in Blank and Barr (2009); U.S. Census, American Community Survey 2009					
Note: SOSS: N=972; see text for description of survey; sums of percentages may not sum to 100					
due to rounding error; respondents reported data ranges for income					
MSUE: N=325; see text for description of survey; data were collected from April 2009 to April 2010					
Detroit study: N=938; college graduate data are for "beyond high school diploma"					
Census: N=9.79 million (household population); data are estimated; standard errors are in parentheses;					
data are for 2009; median income is in 2009 inflation-adjusted dollars; race data are for those reporting one					
race.					

Table 6: Perceived Personal, Macroeconomic, and Business Environment

Indicators	Better off	About the same	Worse off		
Current financial situation relative to a year ago	22.0	25.0	53.0		
Anticipated future financial situation relative to current situation	46.6	20.2	33.3		
	Go up	Go down	Stay about the same		
Expected change in inflation rate in next year, US	52.8	7.5	39.7		
	Better	Worse	About the same		
Expected change in unemployment rate in next year, US	32.4	25.8	41.8		
	Good time	Bad time	Neither good or bad		
Business conditions in community in next 12 months	32.2	60.0	7.7		
	Excellent	Good	Just fair	Not so 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% decrease from March and 2.2 % from past 12 months;					
August -- 0.3% increase from July and 1.2% from past 12 months.					
Midwest, inflation rate (CPI): April -- 0.2% increase from March and 2.7% from past 12 months;					
August -- 0.2 % increase from July and 1.7 % from past 12 months.					
U.S. and Michigan unemployment rates: April -- 9.9% and 14%; August -- 9.6% and 13.1%.					

Table 7: The Most Important Problems Facing Communities, 2010

Most Important Problems	Percent				
Jobs/creating jobs/unemployment	61.7				
Other	14.6				
Economy/economic growth/stimulating economy	11.5				
School finance/education funding	5.9				
Crime	3.2				
Foreclosures/housing crisis/property values	3.1				
Source: SOSS, April 2010; Author's calculation					
Note: Sample size is 972. See text for description of survey. Sums of percentages may not sum to 100 due to rounding error.					
The survey question for the most important problem is "What would you say is the most important problem facing your community today?".					

Table 8: Financial Behavior and Expectations: By Income Change (Increase)

Questions	Income Decline or No Change	Income Increase	Pearson's 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

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?"

Table 9: Financial Behavior and Expectations: By Income Change (Decline)

Questions	Income Increase or No change	Income Decline	Pearson's 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 10: Financial Behavior and Expectations: By Income Level

Questions	< 10,000	10,000-20,000	20,000-30,000	30,000-40,000	40,000-50,000	50,000-60,000	60,000-70,000	70,000-90,000	90,000-100,000	100,000-150,000	>150,000	Pearson's 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
N	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?"

**Table 11: Financial Behavior and Expectations:
By Ability to Pay for Necessities**

Questions	Unable to Pay	Able to Pay	Pearson's 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 12: Financial Behavior and Expectations:
By Ability to Make Monthly Payments**

Questions	Unable to Pay	Able to Pay	Pearson's χ^2	N
Have monthly budget	0.685	0.648	1.400	943
Change budget	0.837	0.756	5.743*	621
Update budget monthly	0.255	0.089	25.334*	632
Have retirement plans (401K, 403B, IRA)	0.430	0.639	39.477*	934
Changed portfolio	0.862	0.702	4.303*	111
Used retirement savings in past 2 years	0.368	0.084	60.319*	747
Confidence in money to buy food	0.568	0.903	124.192*	954
Expect inflation rate to rise	0.530	0.530	0.000	916

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. For Table 12, "Unable to Pay" includes extremely difficult, very difficult, somewhat difficult and slightly difficult to meet monthly payment.

Table 13: Financial Behavior and Expectations: By Home Ownership

Questions	Own Home	Rent House or Apartment	Other	Pearson's 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

Table 14: Financial Behavior and Expectations: By Employment Status

Questions	Full Time	Part Time	Unemployed	Retired	Student	Homemaker	Pearson's 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 15: Financial Behavior and Expectations:
By Expect Inflation Rate Increase**

Questions	Expect Inflation Rate Decline or No Change	Expect Inflation Increase	Pearson's χ^2	N
Have monthly budget	0.705	0.647	3.510	917
Change budget	0.814	0.824	0.091	607
Update budget monthly	0.155	0.229	5.092*	618
Have retirement plans (401K, 403B, IRA)	0.494	0.561	4.084*	906
Changed portfolio	0.791	0.847	0.572	112
Used retirement savings in past 2 years	0.260	0.279	0.273	729

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 16: Financial Behavior and Expectations:
By Retirement Investment Type**

Questions	Retirement Plan Only	Savings Only	Stocks Only	Retirement Plan + Savings	Retirement Plan + Stocks	Savings + Stocks	Retirement Plan + Savings + Stocks	Pearson's χ^2	N
Have monthly budget	0.618	0.646	0.317	0.793	0.591	0.440	0.628	27.061*	704
Change budget	0.823	0.805	0.754	0.776	0.862	0.906	0.861	3.908	449
Update budget monthly	0.316	0.155	0.374	0.118	0.382	0.000	0.094	26.629*	460
Changed portfolio	0.907	0.547	1.000	0.500	0.904	0.558	0.968	27.231*	103
Used retirement savings in past 2 years	0.476	0.314	0.129	0.144	0.189	0.358	0.205	30.172*	554
Retirement: completely rely on social security	0.149	0.069	0.045	0.097	0.029	0.075	0.144	10.179	691
Retirement: completely rely on value of home	0.081	0.081	0.000	0.037	0.046	0.142	0.108	8.769	666
More than 50% reliance on own resources	0.757	0.782	0.605	0.636	0.819	0.682	0.765	12.544	648
Confidence in money to buy food	0.757	0.705	0.879	0.784	0.927	0.833	0.883	22.143*	705
Confidence in money to make monthly payments	0.317	0.311	0.699	0.540	0.645	0.568	0.543	40.798*	695
Expect inflation rate to rise	0.539	0.458	0.599	0.537	0.631	0.792	0.591	18.497*	696

Table 17: Financial Behavior and Expectations: By Marital Status

Questions	Single	Married	Pearson's χ^2	N
Have monthly budget	0.645	0.678	1.024	957
Change budget	0.752	0.835	5.792*	624
Update budget monthly	0.202	0.180	0.411	638
Have retirement plans (401K, 403B, IRA)	0.284	0.639	110.404*	946
Changed portfolio	0.689	0.824	1.408	113
Used retirement savings in past 2 years	0.289	0.259	0.683	756
Expect inflation rate to rise	0.483	0.551	3.878*	932

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. Retirement plan includes 401(k), 403B, and IRA. Stocks include stocks, bonds, and mutual funds.

Table 18: Financial Behavior and Expectations: By Child Status

Questions	Without Children	With Children	Pearson's χ^2	N
Have monthly budget	0.683	0.661	0.399	956
Change budget	0.835	0.796	1.106	623
Update budget monthly	0.268	0.160	8.540*	637
Have retirement plans (401K, 403B, IRA)	0.292	0.587	62.282*	945
Changed portfolio	0.852	0.800	0.273	113
Used retirement savings in past 2 years	0.303	0.257	1.263	0.756
Expect inflation rate to rise	0.534	0.526	0.051	931

Table 19: Financial Behavior and Expectations: By Gender

Questions	Male	Female	Pearson's χ^2	N
Have monthly budget	0.662	0.670	0.079	957
Change budget	0.838	0.779	3.161	624
Update budget monthly	0.206	0.172	1.152	637
Have retirement plans (401K, 403B, IRA)	0.551	0.478	5.076*	946
Changed portfolio	0.858	0.770	1.411	113
Used retirement savings in past 2 years	0.248	0.287	1.279	756
Expect inflation rate to rise	0.601	0.461	18.601*	932

Table 20: Financial Behavior and Expectations: By Race

Questions	White	African American	Other	Pearson's 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.

Table 21: Financial Behavior and Expectations: By Type of Community

Questions	Rural	Small Town	Suburb	Urban	Pearson's χ^2	N
Have monthly budget	0.721	0.606	0.697	0.629	9.931*	941
Change budget	0.742	0.826	0.833	0.838	5.935	614
Update budget monthly	0.271	0.082	0.218	0.147	21.116*	628
Have retirement plans (401K, 403B, IRA)	0.543	0.481	0.544	0.481	3.632	934
Changed portfolio	0.869	0.899	0.720	0.775	4.667	113
Used retirement savings in past 2 years	0.301	0.261	0.276	0.165	5.334	747
Expect inflation rate to rise	0.663	0.529	0.479	0.406	28.917*	916

Table 22: Financial Behavior and Expectations: By Region

Questions	Upper peninsula	Northern	Central	Southwest	Southeast - excluding Detroit	Detroit	Pearson's χ^2	N
Have monthly budget	0.500	0.570	0.670	0.628	0.728	0.516	23.812*	957
Change budget	0.778	0.814	0.739	0.811	0.818	0.820	2.481	624
Update budget monthly	0.189	0.158	0.115	0.239	0.197	0.108	6.459	638
Have retirement plans (401K, 403B, IRA)	0.701	0.310	0.526	0.473	0.551	0.435	20.148*	946
Changed portfolio	0.660	0.798	0.867	0.835	0.798	0.812	0.668	113
Used retirement savings in past 2 years	0.141	0.346	0.375	0.283	0.245	0.216	9.023	756
Expect inflation rate to rise	0.521	0.695	0.618	0.611	0.466	0.470	23.405*	932

Table 23: Financial Behavior and Expectations: By Education Level

Questions	<HS	HS	Some college/ Technical	BA	Post Grad	Pearson's 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

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.

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