Attitudes towards credit after the great recession

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Abstract: The US Survey of Consumer Finances provides a rich but underutilized source of data measuring attitudes towards credit. Using this data, this paper finds there a great degree of heterogeneity in attitudes; however, the distribution of these attitudes has shifted only moderately after the financial crisis, with households on average only becoming a bit more conservative. There is evidence that age, race and gender affect attitudes towards credit, most noticeably when attitudes are broken down by specific credit use rather than credit in general.

Keywords: Credit; Debt; Attitudes; Households

JEL: D12, D14

1. Introduction

The recent financial crisis was built on a dramatic increase in consumer debt driven by an increasing availability of credit in an environment of greater *acceptance* of borrowing by consumers. Whether these attitudes have changed post-crisis is important for understanding the future path of financial markets. This paper connects two literatures. The study of household finance has increasingly emphasized behavior factors such as a person's attitude towards credit products (e.g. Pattarin and Cosma, 2012) or their financial knowledge (e.g. Gathergood, 2012). There is also some evidence that the recent recession influenced financial behavior by making individuals more focused on financial planning (O'Neill and Xiao, 2012) and by making millennials more conservative in their investment decisions (Kilroy 2015).

The paper uses the last five waves of the Survey of Consumer Finances (SCF), covering the period 2001 to 2013, to evaluate whether attitudes have changed towards consumer credit in the aftermath of the 2007 financial crisis. The SCF is a triennial survey of families in the United States by the Federal Reserve with the National Opinion Research Center focusing on wealth, income and financial attitudes and activities. The survey oversamples high-wealth households and Black and Hispanic households. Distributions reported on Tables 1 and 2 are weighted using the sample weights provided in the SCF so that they reflect the proportions in the United States rather than the proportions in the sample. To handle missing responses, the survey uses a multiple implication procedure resulting in five implicates for each observation. Standard errors, p-values and number of observations reported in tables 3 and 4 have been corrected for this.

2. Did attitudes towards credit shift after the great recession?

The primary question on credit attitudes is whether the respondent thinks borrowing is a good or bad idea in general. The question asked in the Survey is:

Now I would like to ask you some questions about how you feel about credit. In general, do you think it is a good idea or a bad idea for people to buy things by borrowing or on credit?

The respondent was given a choice of three answers: bad idea, good in some ways, bad in others, and good idea (in the survey and dataset the answers are ordered good = 1, good and bad = 3 and bad = 5 but for the purposes of the empirical work in this paper, the answers are reordered so that bad = 1, good and bad = 2 and good idea = 3). Table 1 reports the results for the last five surveys. 2007 was the year of the financial panic and so the surveys on either side of that year provide some indication of how attitudes have changed in response. There is substantial heterogeneity of expectations in each year with a significant portion of the survey group saying that buying on credit is a good idea and a significant portion believing it to be a bad idea. There is some shift in a conservative direction after the financial crisis, with credit being a good idea for 31% in the credit boom year of 2004 to 22% in 2010 in the wake of the recession. However, over the longer run, the shift was from 29% in 2001 to 24% in 2013, a clear decline (a chi-squared test comparing 2001 with 2013 rejects independence at the 1% level, χ^2 =30.8). but not so strong to suggest that the financial crisis has fundamentally altered how people think about credit.

Since survey respondents might believe that borrowing is good for some purposes and bad for others, the survey follows up by asking about borrowing for specific types of spending.

People have many different reasons for borrowing money which they pay back over a period of time. For each of the reasons I read, please tell me whether you feel it is all right for someone like yourself to borrow money...

The respondent would reply either yes or no to the following categories of expenses in this order:

to cover the expenses of a vacation trip?

to cover living expenses when income is cut?

to finance the purchase of a fur coat or jewelry?

to finance the purchase of a car?

to finance educational expenses?

Table 2 shows the responses, reordered to go from the most approved use of credit to the least approved. The ordering is not a surprise. Economic theory implies that borrowing should be used for investment activities (given an appropriate expected return), purchases of durable goods and consumption smoothing. Education is classic consumer use of debt for investing (in human capital). Cars are an important consumer durable requiring a large payment. The acceptability of borrowing for living expenses is a bit surprising, although the qualifier "when income is cut" could argue for a consumption smoothing interpretation if the cut is seen as temporary. On the other hand, consumer credit that can be used to support living expenses is often very-high-interest credit and typically discouraged by financial planners

Interestingly, the answers seem quite stable over time. While the acceptability of using credit has edged down slightly after the financial crisis (a chi-squared test comparing 2001 with 2013 rejects independence at the 5% level for "fur", "car" and "living expenses"), the change is not dramatic, at most a few percentage points. The exception to this is a slight increase in the acceptability of using borrowing to fund living expenses, perhaps reflecting that people actually did increase their use of credit to fund living expenses during that time.

3. Which socioeconomic factors affect credit attitudes?

To evaluate how socioeconomic factors affect attitudes towards credit, regressions were run for each survey wave with a selection of independent variables, including the age of the respondent and whether the respondent was married, female, black or Hispanic (taking the value of 1 if true, 0 otherwise). Financial literacy may affect credit decisions (e.g. Disney and Gathergood, 2013) and was measured in

two ways. First, by years of education of respondent (education) and second by the self-reported willingness to shop around when borrowing (shop), which is on a 1 to 5 scale, 5 being most willing to shop around. A common assumption is that financially unsophisticated individuals are prey to overuse of credit because they do not correctly evaluate the costs and benefits. On the other hand, financial sophistication may make an individual more comfortable with financial transactions and may give them a better awareness of what credit options may be available. Self-reported health status (health) is included in the regression as poor health may be an additional risk factor that would make borrowing inadvisable and health shocks can related to credit issues such as bankruptcy. In addition, health status has been found to affect financial decisions (e.g. Rosen and Wu, 2004). Health status is reported on a 1 to 4 scale, with 1 being "excellent" and 4 being "poor". Income and wealth may both affect the ability of an individual to take on credit and may also be another measure of financial sophistication. Wealth included savings and marketable securities, but not house wealth or house debt, to represent readily available funds. A dummy variable was added for financial wealth in excess of \$10,000, which was found to outperform log wealth. This supports the notion that financial sophistication – having some experience with marketable securities – is responsible for the connection. Income was measured as log income.

Table 3 reports the results of individual regressions for the survey years 2001, 2004, 2007, 2010, 2013. The data were kept separate rather than pooled to assess the consistence of the relationship across years. The results are for an ordered probit with the dependent variable being the attitude towards borrowing.

For the most part, the significant heterogeneity is not substantially explained by these socioeconomic factors. The three variables that show a consistent pattern across time are sex, which is negative in all regressions and statistically significant (at least the 10% level) in three, black which is positive in all regressions and statistically significant in four and Hispanic which is positive in all regressions and statistically significant in three. Interestingly education does not have a significant effect on attitudes towards credit. Z-tests (at the 5% level) cannot reject that the coefficients have not changed between the 2001 and 2013 regressions except for wealth and income.

However, when attitudes towards credit is broken down by type of credit, other patterns emerge. The credit regressions were repeated for each of the category questions for each year with the consistently significant explanatory variables reported on Table 4. Most strikingly, age is a negative predictor of the approval of credit use in all categories. While age was not generally significant when asking about the use of credit in general, focusing the question on particular types of credit use sharpened opinions. Black showed up as significant in three of the four categories, with a positive attitude towards borrowing for an education and living expenses but a negative attitude towards borrowing for a car. Other variables were significant within category but did not show a consistent attitude towards credit across categories.

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Table 1. Is borrowing a good idea?

	2001	2004	2007	2010	2013
%					
Good idea	28.5	31.3	28.3	22.0	24.3
Good and bad	41.2	37.0	37.2	41.8	41.1
Bad idea	30.4	31.7	34.5	36.2	34.6

Table 2. Should borrowing be used to fund...

	2001	2004	2007	2010	2013
%					
Education					
Yes	78.9	82.7	82.7	81.0	79.1
No	21.1	17.3	17.3	19.0	20.9
Car					
Yes	78.9	80.7	79.8	76.9	76.7
No	21.1	19.3	20.2	23.1	23.3
Living Expense	es				
Yes	47.6	47.2	51.6	50.6	51.3
No	52.4	52.8	48.4	49.4	48.7
Vacation					
Yes	14.9	14.4	13.6	13.9	14.1
No	85.1	85.6	86.4	86.1	86.9
Fur					
Yes	6.3	5.6	4.9	4.7	4.5
No	93.7	94.4	95.1	95.3	95.5

Table 3. Factors Affecting Attitudes Towards Borrowing

	2001	2004	2007	2010	2013
Age	-0.004 ***	-0.002	-0.002	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female	-0.082 ** (0.035)	-0.022 (0.036)	-0.025 (0.037)	-0.131 *** (0.030)	-0.148 *** (0.031)
Married	-0.000	0.050	0.047	0.034	-0.040
	(0.040)	(0.040)	(0.041)	(0.032)	(0.034)
Black	0.198 ***	0.073	0.198 ***	0.192 ***	0.178 ***
	(0.059)	(0.058)	(0.062)	(0.045)	(0.047)
Hispanic	0.141 * (0.074)	0.140 (0.069)	0.052 (0.071)	0.115 ** (0.051)	0.159 *** (0.054)
Health	-0.026	-0.012	0.029	-0.031	-0.074 ***
	(0.023)	(0.023)	(0.024)	(0.019)	(0.020)
Education	-0.004	-0.000	-0.010	0.005	-0.005
	(0.008)	(0.008)	(0.008)	(0.006)	(0.007)
Wealth	-0.115 **	-0.023	0.009	0.097 ***	0.113 ***
	(0.047)	(0.047)	(0.049)	(0.037)	(0.038)
Income	0.011	-0.032 **	-0.008	0.036 ***	0.060 ***
	(0.014)	(0.014)	(0.013)	(0.013)	(0.013)
Shop	0.013 (0.012)	-0.023 * (0.012)	0.019 (0.012)	0.035 *** (0.010)	0.027 ** (0.010)
n	4422	4495	4385	6394	5971
F	5.94***	2.97***	2.72***	12.71***	16.19***

Regression coefficients are listed on the table. Standard errors are in parentheses. Significance is indicated at 1% (***), 5% (**) and 10% (*)

Table 4. Factors affect attitudes towards specific credit types

Dependent Variable	Consistently significant independent variables ^a
Education Car Living Expenses Vacation Fur	Age (-), Black (+), Education (+), Shop (+) Age (-), Black (-), Married (+), Hispanic (-), Shop(+) Age (-), Black (+), Sex (+), Wealth (-) Age (-), Education (+) Age (-)

^aIndependent variable was statistically significant (at the 10% level) in at least four of the five annual regressions with the same sign.