

Title: “*AJAE* appendix for ‘Credit Constraints: Their Existence, Determinants, and Implications for U.S. Farm and Non-Farm Sole Proprietorships’”

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## Identification of the Credit Access and Use Classes

Similar to Jappelli (1990), we identify the five credit access and uses classes from the following credit use questions from the 2004 Survey of Consumer Finance Survey:

**Q407** In the past five years, has a particular lender or creditor turned down any request you or your (husband/wife/partner) made for credit, or not given you as much credit as you applied for?

1. \*Yes, turned down
3. \*Yes, not as much credit
5. \*No
0. Inap. (no credit application in previous 5 years)

**Q408** Were you later able to obtain the full amount you or your (husband/wife/partner) requested by reapplying to the same institution or by applying elsewhere?

1. \*Yes
3. \*Did Not Reapply
5. \*No
0. Inap. (no credit application in previous 5 years and not turned down: Q407=5)

**Q409** Was there any time in the past five years that you or your (husband/wife/partner) thought of applying for credit at a particular place, but changed your mind because you thought you might be turned down?

1. \*Yes
5. \*No

To identify the five credit access and uses classes, we follow a hierarchal format.

The ‘not credit constrained’ group (category 1) answered “No” to question Q407. The ‘did not apply for credit’ (category 2) answered “Inap.” to questions Q407 and Q408 as well as reported no debt. The ‘received credit after multiple attempts’ category (category 3) must meet the following criteria. First, they answered “Yes, turned down” or “Yes, not as much credit” to question Q407. Second, they answered “Yes” to question Q408. The ‘did not apply for fear of denial’ category or ‘discouraged’ borrowers (category 4) must meet two criteria. They answered “Yes” to question Q409 and were not identified as

being ‘denied credit.’ The ‘turned down for credit’ category or category 5 must meet two criteria. First, they answered “Yes, turned down” or “Yes, not as much” credit to question Q407. Second, they answered “No” to question Q408.

We identify the five credit access and uses classes from the following credit use questions from the 2005 Agricultural Resource Management Survey:

**26. Within the past 5 years, have you encountered any of the following with regard to your credit or applications to lenders or creditors? [Enter code 1 for all that apply.]**

		CODE
a.	Request for credit or loan application was turned down or you were not given as much credit as you applied for? . . . . .	1120
	YES = 1	
b.	Initial request for credit or loan application was turned down but later granted by reapplying to the same institution or elsewhere. . . . .	1121
	YES = 1	
c.	Thought of applying for credit at a particular place but changed your mind because you thought you might be turned down? . . . . .	1122
	YES = 1	

The credit access and uses classes are based on the ARMS question above as well as other information provided in ARMS. To construct similar credit access and uses classes in the ARMS as explained above in the SCF, some assumptions must be made. Once again, a hierarchy of answers to the questions is imposed to ensure that comparable groups are identified between SCF and ARMS. Those that exclusively answered “Yes” to question 26 part (a) are labeled as ‘turned down for credit’ (category 5). Those that exclusively answered “Yes” to question 26 part (c) are labeled as ‘did not apply for fear of denial’ (category 4). If the answer to question 26 part (b) is “Yes,” that observation is identified as ‘received credit after multiple attempts’ (category 3). This leaves two remaining possible combinations of answers. The first is “Yes” to part (a), “No” to part (b), and “Yes” to part (c). These answers are labeled as ‘turned down for credit’ (category 5) given more importance is placed on part (a) relative to part (c).

The final combination of possible answers is “No” to parts (a) – (c). These observations could either be ‘not credit constrained’ or ‘did not apply for credit.’ As discussed above, SCF respondents either stated they did not apply or reported no debt. Therefore, ARMS respondents that reported no debt are classified as ‘did not apply for credit’ with the remaining respondents being labeled ‘not credit constrained.’ Given the descriptive statistics and the impact of being credit constrained on the value of production for the SCF and ARMS are similar, these groups are as similarly defined as possible.