Emergency Fund Adequacy Among U.S. Households in 1977 and 1989

The purpose of this study was to compare the level of emergency funds held by households in 1977 and 1989. About one-third of all households were adequately prepared in both years. As age and education increased, households were more likely to meet the rule of thumb of holding liquid assets equal to 3 months of income.

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Background and Purpose

Family economists and financial advisors vary on the level of savings needed by families for an emergency fund. The recommendation usually compares liquid assets to fixed and variable expenses. Because income is more readily known than expenses, a rule of thumb is to allow for an emergency fund between three and six months of income (DeVaney, 1994). This time period is often compared to the average time that a household might be unemployed. Since 1948, the two highest averages for number of weeks of unemployment occurred in 1983 and 1992, with 20.0 and 17.9 weeks, respectively. These rates suggest that allowing for an emergency fund of three to six months of income is rational. However, households may expect to cope with emergencies through the use of other measures such as unemployment compensation, increased use of credit cards and home equity lines of credit, and informal loans.

Johnson and Widdows (1985) compared emergency fund levels for households using Survey of Consumer Finance data from 1977 and 1983. Johnson and Widdows found that the majority of families in 1983 had insufficient funds to cover income during the average time that a household could be out of work. Hanna, Chang, Fan and Bae (1993) constructed a comparable variable for emergency funds from the 1990 Consumer Expenditure Survey. They showed that only 19% of the families had sufficient liquid assets to cover six months of pretax income and thus replicated an important finding from Johnson and Widdows' study. But, further analysis by Hanna et al. (1993) suggested that only those households who are certain that income will drop by at least 50% should hold as much as six months of liquid assets in reserve. Holding liquid assets equal to three months of income or expenses as a reserve for emergencies is more feasible than a six months reserve.

This study compares adequacy of emergency funds for households in the late 1970s and 1980s. The late 1960s and the 1970s were marked by a period of high, variable inflation and rising unemployment. The 1981-82 recession slowed growth in the early 1980s, but a vigorous recovery resulted in strong economic growth in the 1980s. Civilian unemployment was 5.3% in 1989, down from 10.8% in 1981. Personal tax reform meant lower marginal tax rates and lower capital gains tax rates (Economic Report of the President, 1989, pp. 41, 75, 390).

Data and Method

Data from the Survey of Consumer Finances for 1977 and 1989 were used for the study. In 1977, financial data was collected in discrete intervals. For this study, the 1977 data were converted into continuous variables by using the midpoint of each category. In 1989, an over-sampling of wealthy households from data tax files was used to ensure a large and unbiased sample of upper income households. A weight procedure was used to allow for the high income households. Multiple imputations were used to account for nonresponse and other missing information. Thus, five complete data sets were created for the 1989 SCF. This study reports on analysis of the first data set.

A comprehensive measure of emergency funds was used (Johnson & Widdows, 1985). It consisted of the following assets: checking and savings accounts, money market funds, certificates of deposit, mutual funds, stocks, and bonds. Logistic regression was used to estimate the likelihood of having liquid assets sufficient to cover three months of pretax income. Independent variables included age, education, race, income, and net home equity. Household size was available in 1989 but not in 1977. Findings are shown in Tables 1-3.

Table 1
Characteristics of the Sample

Variable	1977	1989
n	2,225	3,134
Age		
Mean	47	48
Median	47	50
Liquid Assets		
Mean	$26,930	$38,168
Median	3,898	11,000
Income		
Mean	33,293	33,105
Median	3,600	28,587

Table 2
Logit: Liquid Assets => 3 Months Income in 1977

Variable	Coef.	Sig.
Intercept	-3.1307	0.0001
Age	0.0362	0.0001
Income	8.23E-6	0.0006
Race nonwhite	-0.8541	0.0001
Education (compared to < 12 years)		
12 years	0.3871	0.0046
13-15 years	0.5822	0.0002
16+ years	1.0526	0.0001
Net home equity	7.24E-6	0.0007
Pseudo R^2 = 0.1839		

Summary

The proportion of households holding liquid assets to cover three months of pretax income was 34% in 1977 and 35% in 1989. In both years there was a significant positive relationship between emergency fund adequacy and age, education, and net home equity. Nonwhite households were less likely to hold adequate emergency funds. The effect of meeting the rule of thumb in 1977 increased with income.

The empirical model does not allow for affective measures, e.g., risk tolerance, attitude toward the use of credit, preference for investing in housing relative to cash and cash equivalent assets or the propensity for use of government programs. Future research should include other variables to measure how households cope with emergencies.

Table 3
Logit: Liquid Assets => 3 Months Income in 1989

Variable	Coef.	Sig.
Intercept	-4.3711	0.0001
Age	0.0466	0.0001
Income	4.16E-7	0.5981
$Income^3$	-9E-21	0.2060
Race nonwhite	-1.0554	0.0001
Education (compared to < 12 years)		
12 years	0.6395	0.0001
13-15 years	1.0112	0.0001
16+ years	1.5950	0.0001
Net home equity	4.99E-6	0.0001
Household size (compared to > 5)		
Size = 1	0.6349	0.0224
Size = 2	0.9514	0.0005
Size = 3	0.4199	0.2813
Size = 4	0.5655	0.0427
Size = 5	0.5929	0.0522
Pseudo R^2 = 0.3185		

References

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Endnotes

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