

## Fragile Families' Challenges for Emergency Fund Preparedness

Zheyang Yao, University of Missouri<sup>1</sup>  
Abed Rabbani, University of Missouri<sup>2</sup>

### Objective

Financial emergency preparedness is an important issue in managing household finance. An emergency fund is a source when the income of a family accidentally declines or even loses and it is a key index to show a households' financial wellness (Gjertson, 2016). However, the Federal Reserve Board's report on the Economic Well-Being of U.S. Households in 2015 showed that many individuals lack preparations for financial emergencies. Only 47% of the respondents had an emergency fund set aside to cover three months of expenses.

Sometimes emergency fund preparedness is measured as how many months that the person can live off their savings if they lose the income resources today (Joo & Grable, 2006). Some scholars argue that two months gross household income is reasonable as a guideline for adequacy of emergency fund holdings (Johnson & Widdows, 1985). Having savings covering three months of typical expenses is also adequate (Babiarz & Robb, 2014). The three-month savings guideline seems to be more commonly used nowadays.

### Significance

A lack of financial emergency preparedness is more severe for unmarried parents and their children as they are at greater risk of breaking up and living in poverty than more traditional families. In literature, these families are known as "Fragile Families." Fragile families have lower emergency savings than other groups. West (2015) reported that more than three-quarters of single mothers and 60% of single father do not have savings which can cover 3-month expenses. Even 78% of single mothers and 77% of single fathers do not have emergency savings which are equal to two months' income. More seriously, 66% of single mothers and 41% of single fathers are uncertain or even unable pull together \$2,000 in one month. Therefore, it is important to investigate emergency fund preparedness of fragile families. This paper explores the challenges for fragile families to save for emergency fund.

### Methodology

The present study used the fifth wave data from the Fragile Families and Child Wellbeing Study, which was conducted from August 2007 through April 2010. The study used probability weights to make the fifth wave representative of the original sampling frame. It also used replicate weights and jackknife method to estimate standard errors to improve standard errors estimation. The missing values in the dataset were handled using multiple imputation methods with ten iterations. The final sample size was 2661.

The final dataset was analyzed using logistic regression models. In this study, having emergency funds is a dependent variable. It represents whether the family has the ability to cover emergent expense needed in short time period as well, in other words, the ability to suffer from financial disruption, such as savings equal to 2 months total income. The study used debt, saving, income groups (lower, middle, and upper), money control (who in the household controls the finance), financial reliance (whether the family has financial support when they are in trouble), job status, and homeownership. More debt may weaken the ability to have emergency funds, and more saving brings opportunity having emergency funds. According to previous papers, income and homeowner seem to have some significant and positive influence on the emergency fund preparedness. Higher income is likely to increase the likelihood of having an emergency fund. Homeownership shows financial stability, so homeowners are more likely to have emergency fund

<sup>1</sup> Graduate Student, Department of Personal Financial Planning, 239 Stanley Hall, University of Missouri, Columbia, MO, 65211, USA. Phone: 573-818-5479. Email: [zyc42@mail.missouri.edu](mailto:zyc42@mail.missouri.edu).

<sup>2</sup> Assistant Professor, Department of Personal Financial Planning, 239 Stanley Hall, University of Missouri, Columbia, MO, 65211, USA. Phone: 573-882-9187. Email: [rabbani@missouri.edu](mailto:rabbani@missouri.edu).

than renters. The study is also interested in looking at if emergency fund holding is more common in the households where finance is controlled by a female. Job status brings household income and consequently increases the probability of having emergency saving, so being employed is included in the analysis. If a household can obtain financial support from other family members (parents, siblings, friends, etc.) when they are in a need, then they are less likely to have an emergency fund. In summary, the study addressed the following specific hypotheses:

Hypothesis 1: Debt is negatively associated with having an emergency fund.

Hypothesis 2: Saving is positively associated with having an emergency fund.

Hypothesis 3: Income is positively associated with having emergency funds.

Hypothesis 4: Household, where finance is controlled by a female, is more likely to have emergency funds.

Hypothesis 5: Financial reliance is negatively associated with emergency funds.

Hypothesis 6: Employment is positively associated with emergency funds.

Hypothesis 7: Homeownership is positively associated with emergency funds.

### Results

The logistic regression model 1 (Table 1) results show that debt is significantly and negatively associated with having emergency funds, meanwhile saving and homeowner are significantly and positively associated with having emergency funds. These findings are consistent with the hypotheses 1, 2, and 7. In the meantime, other associations except for the association between income and emergency saving, all are consistent with hypothesis 4, 5, and 6, but all are not statistically significant. Contrary to the hypothesis 3, income is positively associated with emergency fund but the relationship is not significant. Is that possible that the income effect on emergency saving is not direct and is mediated by debt? To explore this, we introduced a debt-income interaction term model in the Model 2.

In general, households with higher income should have a larger probability of having emergency fund than households with less income. However, the initial findings from the Model 1 showed that there is no significant relationship between income and emergency fund holding. In model 2, the model with a debt-income interaction term, a noteworthy association was revealed. The higher income group seems to be more likely to have emergency funds. However, the higher income with debt is less likely to have emergency funds, and this negative association is significant. This finding showed that debt mediates the positive association between income and emergency fund. Thus, income seems to have an indirect association with an emergency fund, in other words, the influence of income and debt on emergency fund seems to interact with each other (Figure 1).

### Conclusion

To sum up, this paper tries to determine the factors that are associated with holding emergency funds for fragile families through logistic models and concludes that debt is significantly and negatively associated with having emergency funds, and both saving and home ownership is significantly and positively associated with it. At the same time, having debt undermines the positive influence of growing income on emergency saving.

In a word, a debt-free homeowner with higher income and saving behaviors are more likely to have an emergency fund. Thus, a program that supports fragile households to become homeowners and pay the debt in time or assist them financially will encourage them to develop an emergency saving behavior, eventually, protect them from financial hardship.

### References

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Table 1

<i>Odds Ratios of Each Variable in Logistic Regression Model 2</i>				
	<i>Model 1</i>		<i>Model 2</i>	
	<i>Odds Ratio</i>	<i>P&gt;t</i>	<i>Odds Ratio</i>	<i>P&gt;t</i>
<b>Emergency Fund</b>				
Saving	3.08	0	2.97	0
Debt	0.44	0.01	0.38	0.07
<b>Income</b>				
Middle Income	1.5	0.29	1.28	0.61
Higher Income	2.13	0.28	115.25	0
<b>Interaction Term of Debt and Income</b>				
Debt and the Middle Income			1.44	0.58
Debt and the Higher Income			0.01	0
<b>Money Control</b>				
Father Controls the Money	0.93	0.88	0.94	0.89
Equally Control	1.23	0.54	1.22	0.55
<b>Financial Reliance</b>				
Job	1.38	0.52	1.39	0.52
Homeownership	1.94	0.13	1.92	0.13
Cons	3.22	0	3.22	0
Cons	0.21	0.02	0.22	0.02

Notes: Model 1:  $F(9, 359.90)=6.94, Prob>F=0.00$

Model 2:  $F(11, 420.40)=6.51, Prob>F=0.00$

Figure 1: Relationship among Debt, Income, and Emergency Fund

