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Consumption Smoothing During the Financial Crisis: The Effect of Unemployment on Household Spending

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The Great Recession officially ended in June 2009, but the economic situation of many households did not improve right away. The labor market, for example, hardly improved for more than two years. In previous work, we have estimated that 75 percent of households responded to the recession by reducing consumption (spending). The size of such reductions has not been well understood, however. But it is of great interest because it might indicate the extent to which households are able to smooth their spending and maintain their economic well-being when experiencing economic shocks. An inability to smooth consumption leading to a marked reduction in consumption following unemployment could contribute to further contractions in the overall economy due to falling demand by the household sector.

The details of household response to shocks can be important. For example, the ability of households to adjust their consumption is likely to vary by expenditure category. The household would have difficulty saving money by cutting back on, say, transportation expenditures, because it may have already sunk those costs through purchase of a car. Thus, observed patterns of change in one category cannot be generalized to others. In particular, households are likely to adjust spending on durables more rapidly than on nondurables simply by prolonging the work life of their existing durables.

The question of consumption smoothing in response to economic shocks is challenging to investigate empirically. It is difficult to identify households that are undergoing sizeable, unanticipated changes in their economic circumstances. Also, there are very few U.S. data sources that track total household spending and labor activity at sufficiently frequent intervals. In the current study, we were able to exploit monthly data on household spending, income, and labor force participation to estimate the effects of a specific economic shock — unemployment — on household consumption.

Data

The data for this study are from the RAND American Life Panel, a standing survey sample that is representative of the U.S. adult population. The panel's 3,500 members are queried over the Internet (panel administrators

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assist with access where that is a problem). This arrangement makes the ALP ideal for surveys relating to the evolution and aftermath of phenomena such as the Great Recession. We could compare month-to-month changes in spending and income between households affected by the shock and those that were not. We repeated our calculations following re-employment to determine the degree to which, and the speed with which, income and spending were resumed. Data on detailed categories of spending allowed us to identify the categories in which households might adjust spending most rapidly.

Results

We found that once a household member became unemployed, total spending declined rapidly from the $3,560 it averaged during employment to $2,980, then hovered in that vicinity until week 30, when it fell more to about $2,500, or around 70 percent of initial spending. Spending on big-ticket items and other nonessential purchases often decreased more rapidly than high-frequency expenditures, such as those on food. This difference is in line with the thought that spending on durables can be adjusted rapidly by extending the life time of existing durables.

On unemployment, income dropped much more rapidly than spending, to about 37 percent of pre-unemployment income in the first two months of unemployment. Because spending declined more slowly than income, some of the spending must have been financed out of savings or possibly by support from the extended family. With an increase in the duration of unemployment, spending dropped further even as income was relatively constant. Such a further reduction in spending to an income shock is consistent with a depletion of assets or with reduced economic circumstances of the extended family. The reduction, however, could result from damped expectations of re-employment with the passing months of unemployment.

On re-employment, income increased rapidly. In the first, partial month of employment, it was 77 percent above its unemployment level, prior to re-employment. By the third month, it was three times its (low) level when unemployed.

Spending increased much less rapidly after re-employment: As of the third month, high-frequency spending was just 10 percent above its prior value and continued to increase until it was about 30 percent higher. Low-frequency spending increased more rapidly, probably to compensate for the patterns seen during unemployment.

Concluding Observations

Using monthly spending data, we found that among households where unemployment is limited to a few months, spending was reduced moderately following unemployment. But as unemployment lasts, decreases in spending mount up. An implication is that households are fairly well insured against short-term unemployment through savings, borrowing, family support, or unemployment compensation. But they are not well insured against long-term unemployment. Spending may have been lower among the long-term unemployed because they may have reduced their expectations of re-employment, or of continued employment, once re-employed. There may be need for better insurance against long-term unemployment. Determining whether this is so will require further study of the asset positions of households while they are unemployed.

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