# RESEARCH Brief 300

## EXPECTATIONS AND HOUSEHOLD Spending

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#### Introduction

Economic shocks can affect consumption in several ways. Individuals suffering a shock such as that of unemployment may seek to reduce their consumption in response to such shocks and the accompanying loss of income. If individuals are able to anticipate such shocks, they may seek to reduce their consumption prior to any actual unemployment to build buffer savings beforehand so as to smooth consumption over time.

Discerning how individuals may respond to anticipated shocks can be difficult. Possible anticipated shocks such as unemployment may vary with income: individuals with lower levels of income are more likely to expect unemployment, and levels of income can themselves have their own effect on levels of consumption. Furthermore, in a stable environment where expectations of unemployment vary across individuals, the variation of consumption across those individuals may be minor because they will have undertaken actions in the past to compensate for the variation in expectations. For example, individuals with persistent elevated expectations of unemployment may have accumulated buffer-stock savings in the past such that their current spending is only marginally below that of someone with lower expectations of unemployment. Thus, estimating how an expectation of unemployment in a short period of time. The Great Recession of 2008 and 2009 is such an event: from late 2008, when the crisis started, to late 2009, the unemployment rate increased from 6 to 10 percent, and remained above 9 percent for the following two years. The increases in the unemployment rate varied across geographical areas and across industries. For example, unemployment in the construction sector skyrocketed, particularly in areas that experienced a large boom and bust in the housing market.

### Data and Methodology

Estimating how an anticipated shock like unemployment may affect consumption requires data on spending and expectations for a period of time covering such a shock or a volatile economic environment where people change their beliefs about the chances of losing their job. The RAND American Life Panel (ALP) offers such data. From 2009 through 2013, we fielded the Financial Crisis Surveys to a sub-sample of ALP respondents, following the same households over time. The survey asked questions every month about the most common categories of spending and quarterly questions on less common categories. For a subsample the survey asked all categories of spending every month for a period of up to 19 months. Total spending in the ALP closely matches spending measures based on the Consumer Expenditure Survey.

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The longitudinal nature of the data, with up to 42 observations per household, allows us to control for individual differences across households in our empirical modeling strategy. We estimate fixed-effects models regressing total monthly household spending or categories of spending on monthly observations of unemployment expectations, controlling for household income, marital status, household size and month of year to account for seasonality.

We investigated both the effect of unemployment expectations on total household spending and on subcategories of spending. Our prior work concerning the effects of actual unemployment on household spending showed that some categories of spending are highly responsive, like dining out and clothing, and some categories are not at all responsive such as car payments or utilities. Therefore we also selected for our analysis a subset of total spending which a priori reasoning and our previous results suggested might be responsive.

#### Findings

For total spending we found that an increase in the expected probability of unemployment from zero to 1.0 reduced total spending only by an insignificant amount. When we estimated the effect of unemployment expectations on the subset of spending categories that households can adjust more easily in the short-term, we estimated a statistically significant reduction in spending on these categories of 19 percent in response to an increase in the expected probability of unemployment from zero to 1.0.

This subset of categories amounted to 42% of total household spending and included spending on housekeeping, yard and gardening, home repairs, personal care, health care, entertainment, hobbies and sports, clothing, food consumed at home, dining out, gasoline and other transportation, big ticket items and home furnishings, trips and vacations, child-related expenses, and vehicle maintenance.

Narrowing in further, we studied the effect of unemployment expectations on individual categories of spending. Among these categories, we found expected unemployment had the strongest negative effect on spending for dining out, personal care products and services, clothing and apparel, and entertainment. These are all categories of spending which, unlike that for housing, might be quickly changed, as well as categories of spending in which consumers might choose to substitute goods of lesser quality. We found expected unemployment increased spending on other transportation, including public transportation. We surmise there is substitution here as well, with respondents choosing to increase their use of public transportation in response to expected unemployment.

In summary, we found some empirical support for the theoretical prediction that an increase in the subjective probability of unemployment leads to a decrease in spending, at least for some categories of spending. This is an important finding because prior research has not been able to show an effect of expectations on household spending in micro data. It is important to recognize in the analysis that there are many spending categories that are difficult for households to adjust in the short term which may mask the effect in analyses of total spending. Even though the effects we estimate seem small in that they are not detectable in total spending, this is an important first step in understanding the dynamics of consumer expectations, their influence on household spending and how it impacts the business cycle of the economy.

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