



The Effects of Wealth Bubbles on Consumption

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Over the past two decades, “boom and bust” episodes have rocked equity and real estate values. These bubble-like phenomena, in turn, caused large gyrations in household wealth. This essay investigates the possible implications of such swings for aggregate consumption.

The permanent income hypothesis links changes in consumption to changes in household wealth. According to this theory, households desire a smooth consumption pattern. Hence, consumption should be weakly related to current income but strongly related to the discounted present value of the income that households expect to earn. These future flows, in turn, depend on households’ stocks of human capital, physical capital, and financial wealth (itself a claim on the future earnings of physical capital). The permanent income hypothesis suggests that the emergence and bursting of unanticipated asset price bubbles will cause movements in consumption through these channels. Asset price bubbles often are driven more by expectations of future capital gains than by defensible predictions of higher future earnings. A bubble’s burst, in turn, often reflects a reversal of such overly optimistic expectations.

Carroll, Otsuka, and Slacalek (2011) use statistical techniques to derive estimates of the effects of fluctuations in the aggregate value of households’ housing stock and in the holdings of corporate equities through 2007:Q4. Applying their results to current data helps us to determine the impact of wealth on consumption. A one-dollar deviation from trend in housing wealth, according to the authors, should translate into an 8.7-

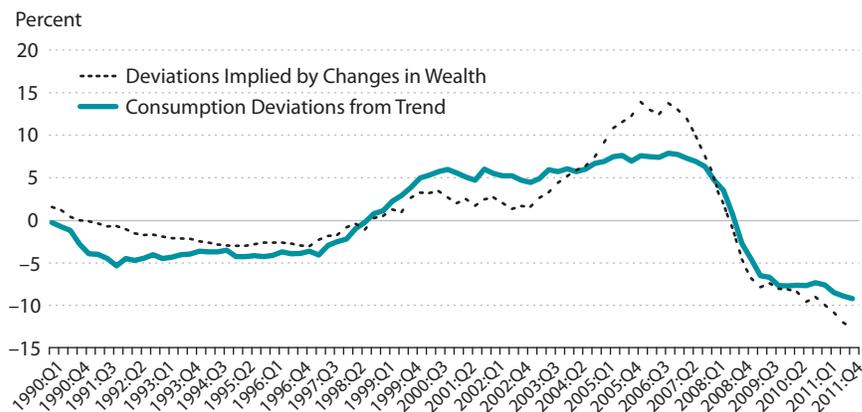
cent deviation in consumption, while a one-dollar deviation from trend in financial wealth should translate into a 4.1-cent deviation in consumption.

The first chart plots deviations from trend (measured as actual data minus the exponential function that best fits the 1955-2011 data) for equities and real estate as ratios to consumption during 1990. Equities boomed from 1990 to 1998, doubling in value. The stock market crash of 2000-02

Changes in Household Wealth (as percentage of 1990 consumption)



Consumption Fluctuations: Data versus Predicted Values



Changes in wealth, according to our simple calculations, can account for almost all of the observed consumption fluctuations of the past two decades.

pushed values back to their trend. Equities have been fluctuating with no discernible trend ever since. The stock market boom coincided with a gradual decline in real estate values, which reached a 50 percent lower-than-trend level by 1996. The stock market crash, in turn, coincided with a 150 percent boom in home values by 2006. The real estate crash that started around 2007 has pushed real estate values substantially below trend.

Our key results are summarized in the second chart. The level of consumption in 1990 is normalized to zero since this variable was roughly on trend at that time. Changes in wealth, according to our simple calculations, can account for almost all of the observed consumption fluctuations of the past two decades. This finding suggests bubbles deserve further investigation as possible drivers of consumption. Furthermore, if current wealth levels are perceived to be more in line with fundamentals, then the current (lower) levels of consumption may also be closer to what is suggested by fundamentals. ■

Reference

Carroll, Christopher D.; Otsuka, Misuzu and Slacalek, Jiri. "How Large Are Housing and Financial Wealth Effects? A New Approach." *Journal of Money, Credit, and Banking*, February 2011, 43(1), pp. 55-79.