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Economic Research Note

US: the incredible shrinking wealth effect

- **Evidence points to a diminishing of wealth effects in recent years**
- **Increased concentration of wealth, reduced credit availability, may be factors limiting wealth effects**
- **Economic optimism usually boosts both asset prices and income expectations**
- **So far that dynamic has been absent in this cycle, though that may be changing for the better**

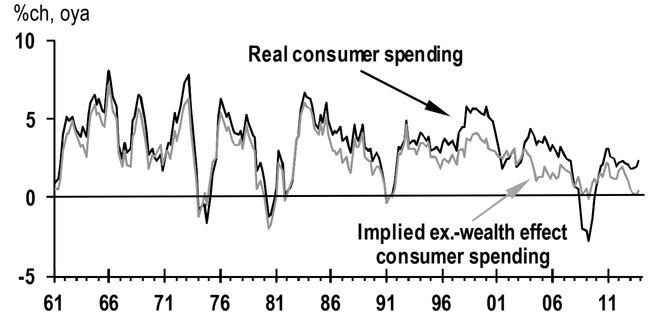
Since bottoming in early 2009, household wealth has increased by over $25 trillion. If standard wealth effects were operative, this should have boosted the level of consumer spending by about $1 trillion. Taken at face value, this means that excluding wealth effects, consumer spending has been exceptionally weak over the past few years. This could be a source of concern: growth in household wealth appears to be moderating, and thus without the support of large wealth effects consumer spending could revert to what is a very weak underlying trend.

Of course, wealth effects are unobservable, and another possibility is that for a number of reasons wealth effects may be smaller in this cycle. In fact, the evidence is consistent with reduced wealth effects in recent years. Our estimates, described below, indicate wealth effects are about half as large as they were prior to the recession. A variety of explanations have been put forth as to why this may be so, including greater concentration in the distribution of wealth gains, and reduced homeowner mortgage equity extraction. We find these stories unconvincing in certain respects. Note however that rising asset prices usually coincide with rising income expectations. That has not been the case in this cycle, so far. Recently that appears to be changing, as households are increasingly expecting at least some gain in labor income. This should provide a more enduring support to consumer spending growth, even with only moderate gains in household wealth.

What could have been

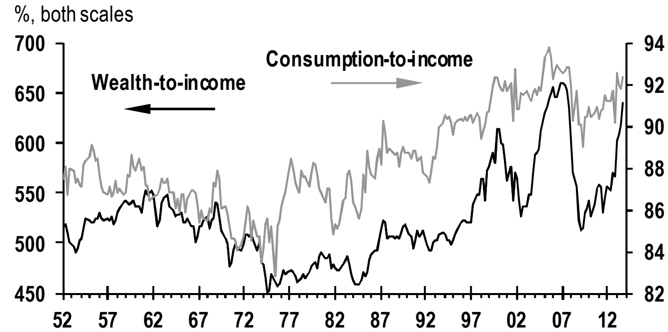
Over the past three years real consumer spending has grown at an average annual pace of 2.1%. A simple regression of consumption on income growth and several lags of wealth growth, run through the end of the recession, indicates that wealth effects should have accounted for an average of 1.2%-points of that growth. This would mean that excluding wealth effects, the underlying trend in consumer spending over the past three years was only 0.9%. Assuming there have been no structural shifts in wealth effects, then the trend in consumer spending has been quite weak. This calculation includes lagged effects, and while it's possible the lags are especially long right now, wealth has been growing vigorously for over four years, and yet consumer spending growth has remained modest, even through 1Q14.

Consumer spending growth and wealth effects



Source:BEA, JPM. Ex-wealth effect spending derived from regression of real consumption on lagged consumption, two lags of income, and four lags of household wealth, from 1952 to 2008.

Wealth and consumption



Source:BEA, FRB

Of course, the structure of the economy is constantly changing and it is reasonable to question whether the same isn't true of wealth effects. A common way to estimate wealth effects is to regress the consumption-to-income ratio on the wealth-to-income ratio. When one runs this regression on US data from when the series began in 1952 to the end of the last recession, the implied wealth effect is 0.038, or 3.8 cents of extra spending for every dollar increase in wealth (with Newey-West corrected two standard error bands of 3.2 cents to 4.3 cents). This estimate is essentially the same as the 3.75 cent effect Fed Governor Mishkin cited in his 2007 study on this topic. In the period since the recession, the estimated wealth effect has fallen in half, to 1.7 cents on the dollar (with two standard error bands of 1.3 to 2.1 cents). A Chow test easily rejects the hypothesis that wealth effects are constant before and after the recession.

A wealth of explanations

Over any five year period there is bound to be instability in estimates of wealth effects, but the estimated attenuation of wealth effects fits better with the data and with common sense. The perception that wealth effects are weaker in this cycle has spawned several explanations as to why that may have occurred:

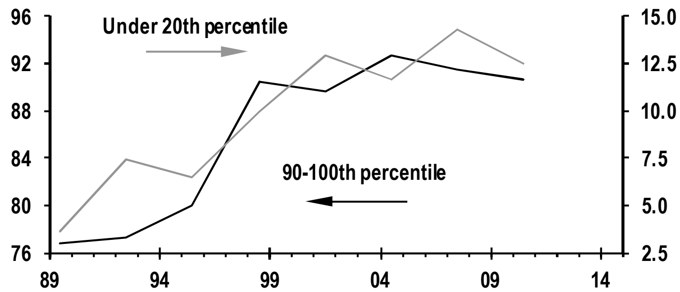
Inequality. Most of the increase in household wealth in recent years has been due to rising equity prices, and equity ownership, like financial wealth more generally, is highly concentrated among the most well-to-do. There is some evidence that wealthier households have a lower marginal propensity to consume out of their wealth. This would imply that the concentration of wealth gains may have had led to a smaller realized wealth effect. A problem with this explanation is that equity ownership has always been highly concentrated among the rich. While income inequality has increased in recent years, evidence from the Fed's Survey of Consumer Finances is more ambiguous as to whether stockholdings have become more concentrated in recent years. Given the relative constancy with which equity ownership is concentrated, it is not apparent what has changed in this respect to lower wealth effects.

Home equity extraction. By most measures, mortgage equity withdrawal has been negative for at least five years (meaning growth in mortgage debt has been less than estimated debt needed to fund new home sales). Freddie Mac's refinancing survey indicates only $32 billion in cash-out refinancing last year, down from $320 billion in 2006. As mentioned above, increased wealth can ease liquidity constraints, but if lenders are reluctant to extend credit than this channel of the wealth effect may not be operative. Evidence on the degree to which equity extraction affects consumer spending is mixed. Our own analysis finds only a limited role for equity extraction, thus we are not convinced that tightening in credit standards is the most important reason why wealth effects have become smaller in recent years.

Expectations: the key link

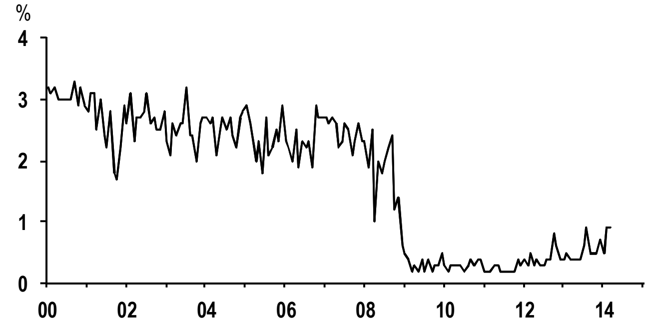
Recent research into wealth effects has focused on the degree to which consumption and wealth are driven by a third, common, cause. In normal cycles, general economic optimism or pessimism drives both consumption and asset prices up or down. In this sense wealth is not a cause of higher consumer spending, but rather reflects changing economic expectations which should also drive consumer spending. For example, a recent Brookings Institute study found that in recent decades stockholders and non-stockholders did not exhibit a material difference in their spending response to an increase in stock prices, consistent with the idea that stock prices are important for the signal they send about overall future income growth.

Percentage of families who own stock by income percentile
%, both scales



Source: Survey of Consumer Finances

Median expected income increase, next 12 months
%



Source: University of Michigan

In this view of wealth effects, it is easy to see how the 1990s bull market coincided with a strong run for consumer spending. That bull market was driven by rising economic optimism that also boosted expectations for income growth, expectations that were validated by strong real wage growth. The current bull market is supported by several factors (i) rising profits from overseas operations (ii) rising profit margins and a corresponding decline in the labor share of income (iii) lower long-term interest rates. None of these factors has anything to do with improved labor income prospects, and in fact some of them point to just the opposite.

That may now be changing. In the past we have argued that survey measures of income expectations (in particular the University of Michigan measure) are very good predictors of consumer spending growth, even better than stock market performance ("Recession and repression are only in our minds," GDW, Sep 20, 2011). A similar finding was subsequently reported by researchers from the Chicago Fed. The reason should be clear. Income expectations surveys directly measure what stock prices only indirectly proxy for—expected compensation growth. The good news is that income expectations have recently been making a modest move higher. Although financial market gains haven't done much to bolster the consumer, expectations for increased wage and salary income should support better spending outcomes.

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