

**(1) Davis, Morris A., Palumbo, Michael G. "A Primer on the Economics and Time Series Econometrics of Wealth Effects." Federal Reserve Board, Washington D.C., 2001:**

The authors investigate whether there is a direct relationship between the decline in personal saving rate during the last half of the 1990s, and the concomitant increase in the ratio of net worth to after tax personal income.

They first discuss the wealth accumulation identity which illustrates that wealth increases can be decomposed into purposeful actions undertaken by households through saving, or appreciation in asset prices. Evaluating the identity with macroeconomic data, they find that the exceptional increase in wealth has been in large part due to the large appreciation on existing stock market wealth, and that the apparent rarity of such persistent growth in asset prices makes it very unlikely for the full magnitude of the event to have been fully anticipated by most households.

They confirm this conclusion by discussing how the life cycle model predicts that people adjust their saving and wealth over time to keep their planned spending levels steady in the face of uneven income streams, and thus consumption does not vary at all with predictable changes in wealth, while household spending should respond to unexpected changes in wealth. This implies that the increase in household net worth over the second half of the 1990s was largely driven by unexpected increases in asset prices rather than increased personal saving.

They further address the task of estimating the marginal propensity to consume out of wealth, by estimating the long run relationship between consumption, income and wealth, and conclude a wealth effect of around 3.3-3.9 cents to a one dollar increase in wealth, and that the increase in household net worth relative to its long run average pace can explain essentially all drops in the personal saving rate observed over the years under study. They also attempt to describe the dynamics of consumption adjustment to changes in wealth, and thus explain short run movements of consumption using an error correction model, and find that periods when the level of consumption lies below the target level are followed by significant upward movements in the ratio of consumption to income.

Finally, they find that the estimates of long and short run wealth effects are sensitive to various specifications of the models used, as well as differences in the data used.