

(36) Levin, Laurence. "Are Assets Fungible? Testing the Behavioral Theory of Life Cycle Savings." *Journal of Economic Behavior*, 1998, 36:59-83.

The paper empirically compares the predictions of the conventional life cycle model to that of the behavioral life cycle model, whereas in the former consumption depend only on the present value of total wealth, while the latter predicts that assets are not fungible, implying that an individual's consumption decisions will be affected not only by total wealth but by asset as well.

The author derives four testable differences between the behavioral and conventional life cycle models using data from the Longitudinal Retirement History Survey. The analysis used 8 categories for consumption: groceries, foodout, charity, dues, entertainment, gifts, transportation and vacations, and estimated an equation for each category, where the independent variables comprised of: current income, liquid assets (stocks included), value of home, future assets and property. Using the results of these regressions, the author undertakes four tests of comparison between the behavioral and the conventional life cycle theories.

The first tests whether spending should be more sensitive to income but much less sensitive to wealth according to the behavioral life cycle theory. The results show that the ratio of the MPC out of permanent income to that out of liquid wealth appears to be large to be consistent with the conventional theory.

The second test compares the MPCs of different assets, where according to the conventional theory, assets should be perfect substitutes. Comparing liquid wealth to the other wealth variables demonstrates that individuals are much more willing to spend out of liquid assets than they are out of other forms of wealth. The effect of property on aggregate consumption is almost one third of that of liquid wealth. The coefficient on housing wealth is negative for six of the eight consumption categories and is never statistically different from zero, which implies that changes in housing wealth have no discernable effect on consumption. The difference between the effect of liquid and future wealth, which is the discounted value of social security and pension, is smaller. These results are consistent with the behavioral life cycle which asserts that households do not treat different types of assets as being fungible.

The third test compares the MPC of different asset types for constrained and unconstrained individuals. The idea is that in the conventional theory liquidity constraints are externally imposed by market imperfections, whereas in the behavioral theory liquidity constraints may also be internally imposed by the consumer. Therefore, if the constraint is external, the values of an illiquid asset will affect consumption as long as other more liquid assets are being held but will cease to affect consumption when those more liquid assets are depleted, since then liquidity constraint will be binding. The opposite result holds when the liquidity constraint is internally imposed. The author divided the sample into liquidity constrained and unconstrained subsamples, and the results from the two samples show that illiquid forms of wealth and property affect consumption

less for the unconstrained subsample than they do for the constrained sample. The unconstrained group's MPC out of housing is generally negative and has an aggregate value of -0.59 cents, while the constrained group's MPC out of housing wealth is 5.42 cents out of every dollar. Thus the unconstrained MPC out of illiquid forms of wealth is significantly lower than the constrained sample, which is in line with prediction of the behavioral life cycle, as individuals do not appear to finance consumption out of illiquid assets unless their more liquid assets are exhausted, thus liquidity constraints seem to be internally imposed.

The fourth tests for framing in consumption, as if people engage in framing then asset composition is expected to affect both the composition and size of spending, where for a behavioral life cycle individual, the relationship between an expenditure on a certain good and the value of an asset will depend on both the good's and asset's characteristics. In this case, the propensity to consume a particular good out of a particular asset should depend on the attributes of both the good and the asset. As the results for the unconstrained group were different than the constrained, the author concluded that as constrained consumers' spending is more sensitive to changes in assets than is the spending of unconstrained consumers, then this group provides a better test of whether or not the composition of assets that individuals own affects not only the level but also the composition of their spending, then the result strongly confirms that and thus provides a strong evidence for framing.