(21) Engelhardt, Gary V. "House Prices and Home Owner Saving Behavior." Regional Science and Urban Economics, 1996, 26:313-336.

The paper examines the empirical link between house price appreciation and the savings behavior of homeowners during the 1980s, which is a period of rapid real appreciation regionally and declining savings rate, in light of the suggestions of the life cycle models that households might offset their real gains in housing that they experienced through a reduction in nonhousing saving. For real house price appreciation to have possible effects on household saving behavior, several assumptions ought to be satisfies, such as: the real housing capital gains must be unanticipated and perceived to be permanent by homeowners, housing wealth must be fungible with other forms of wealth, households must be able to spend their real housing capital gains, and there must not be a bequest motive or altruism toward future generations.

The empirical analysis used two measures of saving: active saving which is the portion of income that is not consumed and used to purchase assets, and passive saving that reflects increases in real wealth due to real capital gains on existing assets in the household's portfolio that are not consumed. Both measures of saving are modeled as a function of real housing capital gains, income earned, a vector of demographic variables to control for possible household heterogeneity in saving behavior, and dummy variables for the employment status. Using active saving, mean regression results suggest that real household nonhousing saving is inversely related to real housing capital gains, where a 1$ increase in real housing capital gains result in a 14.2 cents reduction in real saving, and the effect is significant. Employing passive saving, the results suggest that for every 1$ of real housing capital gains there is a 1 cent increase in the level of real nonhousing wealth, which is not significant. This is to say that evidence of a negative offset exists only when a measure of active saving is used. Including a mover-stayer selection correction to the previous regressions indicate that any mover-stayer selection bias does not affect the estimated saving offset. To examine the effects of trimming outliers on the empirical estimates, the author trims off 2.5% of the observations from each tail of the sample distribution, and the results indicate that trimming greatly reduces the estimated negative offset to 3 cents, which is not significant. Introducing nonhousing capital gains, the results suggest that households do not offset real nonhousing capital gains by reducing saving, but rather, saving actually increases.

The author then addresses the question of whether homeowners' real active saving respond symmetrically to real gains and real losses. The results revealed that there is no significant inverse relationship between real active saving and real housing capital gains. Instead, the behavioral response exclusively comes from households that experienced real housing capital losses, where the estimated marginal propensities to save to offset real housing capital losses is about 0.35.

Using median regression results where real housing capital gains are split into unanticipated gains and losses, the results show that unanticipated gains indicate that real active saving displays a significant asymmetry in response to unanticipated gains and losses, where the real savings offset comes from households that experience real housing capital losses rather than gains. The existence of this asymmetric saving response to real gains and losses provides evidence against a strong inverse relationship between real house price appreciation and saving, and thus casts doubt on the power of changes in house prices to explain the time series path of saving in the United States.