(29) Ploner, Matteo. "The Financial Markets and Wealth Effects on Consumption." Universita Degli Di Trento Discussion Paper 6, 2003.

The paper investigates the effects exerted by the ownership of quoted equities on intertemporal wealth allocation using an experiment conducted with human subjects, in order to observe consumption and saving decisions in a controlled environment, and to compare the outcomes of the laboratory experiment against the theoretical findings.

The experiment is comprised of three sessions, where the subjects are given an amount of wealth which had to be changed into consumption within a given and known time horizon. At the end of this time interval, the subject was rewarded with an amount of real money proportional to the consumption, to act as an incentive ensuring that subjects obey the principle of monotonicity, and thus prefer a larger reward to a smaller one. The initial amount of resources consisted of a deterministic component and a variable equity component that varies due to the random nature of the value of stocks, and the subject's task was to define the quantity of consumption good that they wanted in each phase with the resources at their disposal in that phase, considering a minimum level of consumption subsistence.

Analyzing the outcomes of the experiment, the author finds that behavior was in line with the hypothesis of nonfungibility of wealth, as subjects tended to develop mental accounts in which they ideally store their wealth, and every account has its own weight in the decision process. In addition, the author envisaged the existence of a narrow framework to the subject's decisions, as one group failed to consider the total length of the experiment and sold a large amount of equities in the first stages and thus prematurely consuming all their resources, while another group were too cautious concentrating their sales in the last phase.

The author concludes that behavior observed in this experiment was in general more complex than that predicted by standard theories, as the subjects tended to ignore the random walk nature of equity values and to figure out possible future paths of evolution of the prices for themselves, and that the subjects had the tendency to consider each phase in isolation rather than developing a global framework. Also, when high values are observed, marked peaks of consumption are recorded as well, and the behavior at phases with high quotations accounts for most of the volatility in consumption. Moreover, the downward change in selling seems proportionally less strong that the upward one which resembles the empirical finding that when sharp falls in the stock values are observed, consumption shrinks to a lesser extent than one would expect from traditional theories.