(17) Shirvani, Hassan, Wilbratte, Barry. "Does Consumption Respond More Strongly to Stock Market Declines than to Increases?" International Economic Review, 2000, 14: 41-49.

The paper addresses the issue of a possible ratchet effect in the relation of wealth to consumption by attempting to provide empirical evidence supporting the view that the wealth effects of stock prices on consumer expenditure are unequal, as stock price declines are found to have a more powerful effect than price increases.

The paper tests the hypothesis employing a cointegration model that relates aggregate consumption to national income, money and stock price indexes in the U.S., Japan, and Germany. To capture the short run dynamics of the adjustment of consumption towards the long run equilibrium, an error correction model is estimated, where the positive and negative changes in the stock prices variable are separated to test for a ratchet effect. The results indicate that a model of consumption incorporating a stock market wealth effect proves robust across several major countries, and implies a negative ratchet effect for all countries in the sample which means that consumption responds more strongly to stock price declines than to increases, and that the unequal wealth effects are essentially a short run phenomena.

The rationale behind the hypothesis of unequal wealth effects relates to the assumption of diminishing marginal utility of wealth, where investor preferences are represented by convex utility functions, which reflect risk aversion such that consumers would value increases in wealth less highly than equivalent decreases, and therefore the reluctance to increase consumption would be greater than the willingness to decrease consumption. Furthermore, the asymmetric effects may be reinforced by features of capital gains taxation, where the sale of stock to finance increased consumption triggers a taxable event, and since there is no corresponding taxable event for a consumer wishing to curtail consumption as stock prices fall, expenditure increases would be expected to be smaller than decreases for a given change in stock values. Also, to the extent that capital gains taxation is progressive, a given increase in stock prices produces a smaller rise in net wealth than an equivalent decrease, and to the extent that capital losses are not deductible or are only partially deductible, a given increase in stock prices produces a smaller effect on net wealth than an equivalent decrease. A final factor contributing to this asymmetry is a liquidity constraint, whereas consumers can readily reduce consumption in response to stock price declines, some consumers may find it difficult to borrow to increase consumption.