Competition and Price Volatility when Consumers are Loss Averse  
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Abstract:  
We introduce consumer loss aversion into the Salop (1979) model of price competition with differentiated products. Firms face uncertain costs of production, and after observing their own cost realizations simultaneously set prices. A consumer derives “gain-loss utility” from comparing the purchase price and her satisfaction with the acquired product to her recent expectations regarding the same variables, and dislikes losses more than she likes same-sized gains. Consumers’ sensitivity to losses in money increases the price sensitivity of demand—and hence the intensity of competition—at higher relative to lower market prices, reducing or eliminating price variation in a number of senses consistent with observed pricing regularities. For any joint cost distribution, an equilibrium in which all firms always charge the same, “focal,” price exists if and only if no two possible cost realizations differ by more than a given constant. If firms’ (possibly differently distributed) idiosyncratic cost shocks have overlapping supports and sufficiently dense distributions, any equilibrium is focal. When firms face common stochastic costs, in any symmetric equilibrium the markup is strictly decreasing in cost, and the price may be constant over parts or all of the range of possible costs. Because a change in the price responsiveness of demand affects competition more when margins are high, the above tendencies are stronger in less competitive industries. Finally, because the loss in product satisfaction she would suffer makes a consumer difficult to attract from a competitor, loss aversion decreases competition and increases prices.