# Regular Prices and Sales* 

Paul Heidhues<br>University of Bonn and CEPR

Botond Kőszegi<br>University of California, Berkeley

February 21, 2010


#### Abstract

We incorporate consumer loss aversion into a classical monopolist pricing problem using the model of Kőszegi and Rabin (2006), and show that the optimal price distribution explains in one framework several recently documented facts regarding retailer pricing. In our model, a riskneutral profit-maximizing monopolist publicly commits to a price distribution for a product. Upon observing the price, consumers decide whether to purchase a single item of the product, evaluating their consumption utility in the product and money dimensions relative to their recent rational expectations regarding the same variables. In the optimal price distribution, the firm chooses low and variable "sale" prices with some probability and a high and sticky "regular" price with some probability. The sale prices make a strategy of never buying non-credible for the consumer. Realizing that she will buy with some probability, a consumer is willing to pay a lot to reduce the uncertainty in whether she will get the product, so that she also buys at the regular price. The marginal consumer who buys the product would be better off following a strategy of never buying. In addition to the documented regularities explained by our model, we hope to (but do not yet) establish an additional fact consistent with it: that there is a gap between the regular price and sales prices in which there are very few price observations.


Keywords: Reference-dependent utility, gain-loss utility, loss aversion, sticky prices, sales.

[^0]
[^0]:    *Heidhues gratefully acknowledges financial support from the Deutsche Forschungsgemeinschaft through SFB/TR15. Kőszegi thanks the National Science Foundation for financial support under Award \#0648659.

