REPLY TO STEARNS AND BORNA: ARE THE PARTIALLY UPWARD SLOPING DEMAND MODELS PLAUSIBLE?

James E. McClure

Stearns and Borna (2005) argue that Kumcu's and McClure's (2003) model of prestige pricing (that maintains the law of downward sloping demand) may give educators the impression that there are no other validated cases of partially upward sloping demand curves. They recommend that marketing textbook authors list the following as validated examples of partially upward sloping demand: Giffen goods, network externalities, social externalities, and Veblen products. This reply reflects on the merits of these cases and concludes that each is implausible at best.

Stearns and Borna (2005) credit Kumcu¹ and McClure (2003) for explaining prestige pricing via promotions instead of backward bending (partially upward sloping) demand. They also highlight our model's application beyond prestige goods, to any good that is marketed by an imperfectly competitive firm using individual product promotions (e.g., demonstrations, trials use periods, warranties).

Still, Stearns and Borna are concerned that our article may be creating the impression that no other validated exceptions to the law of demand remain. They propose a taxonomy table (their Table 1) indicating that, "Yes," demands are at least partially upward sloping for Giffen goods, network externalities, social externalities, and Veblen products. This reply argues for revising each "Yes" in their table with "Implausible." These revisions, supported by what follows, would provide marketing educators with a more accurate and potentially useful taxonomy.

Giffen Goods

Our article states:

... according to Browning and Zupan (1999; p. 93) there is little agreement among economists that there has *ever* been a real world example of a Giffen Good. (Kumcu and McClure, 2003, p. 56; emphasis original)

Stearns and Borna misinterpret this passage as saying "there is little confusion or controversy" about Giffen goods being a plain case where at least partially upward sloping demand occurs. Nevertheless, the passage is clear: Giffen goods make an implausible case.

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Network Externalities

Oz Shy's (1995, p. 258)² textbook illustration is Stearns's and Borna's evidence that network externalities cause demand to slope upward. They believe that Shy's approach applies to telecommunications equipment in general, and fax machines in particular. But Shy: 1) ignores internal networks and information costs, and 2) assumes that each consumer buys exactly one unit. A Katz and Shapiro (1994, p. 97) discussion makes it clear that Shy's assumptions are inapplicable; internal networks often arise from the multi-unit purchases of individuals:

In fact, early fax machines were purchased by multilocation organizations that communicated with themselves, and thus could unilaterally break out of a 'zero-output' trap. Often, large users who can internalize network effects take a lead in adopting a new technology subject to network effects.

Liebowitz and Margolis (1994, p. 149) discuss the plausibility of the theoretical and empirical cases for network externalities:

... we need to acknowledge that the *a priori* case for network externalities is treacherous and the empirical case is yet to be presented. Most constructs in economics find their way only very slowly into either public policy or established theory. The construct of network externalities should be one of them.

Liebowitz and Margolis (1994, 1995) suggest in neither article that network externalities are a validated exception to the law of demand.³

Social Externalities

Stearns and Born base the claim that social externalities lead to upward sloping demands on Gary Becker's (1991) restaurant pricing note. Becker's premise is sound: "Suppose that the pleasure from a good is greater when many people want to consume it" (p. 1110). But Becker

Marketing Education Review, Volume 15, Number 3 (Fall 2005).

breaches soundness by "formally" assuming "the demand for a good by a person depends positively on the aggregate quantity demanded of the good"⁴ (pp. 1110-1111). This formalization allows no distinction between, say, the degree of socialization between 10 people each eating 10 items, versus 50 people each eating 2 items.⁵ Such inconsistency between model and premise eviscerates Becker's formalization's plausibility.

Veblen Products

Since 1899, Veblen's book (The Theory of the Leisure Class) has generated controversy, owing no doubt to the "cleverness" that John Cummings (1899) discerns in it: "The terminology of moral philosophy cannot fail to carry moral connotations of ethical judgment, and the use of obviously ethical terms without any declared ethical significance suggests a sophistry which amounts almost to duplicity" (p. 454). Stearns and Borna reference only this book (which makes no mention of the shapes of demand curves), despite subsequent scholarship about how "snob appeal" and/or "conspicuous consumption" impact demand curves. For example, Harvey Leibenstein (1950) seminally shows that loci resulting from shifting downward sloping demands (shifting as inter-consumer information adjustments occur) are: 1) downward sloping for "snob effect" goods; and 2) partially upward sloping "conspicuous consumption" goods. 6 The former contradicts Stearns's and Borna's suggestion snob goods "might have a positively sloped function, at least over some range." Nor is the latter a clear exception to the law of demand because consumer information (and perceptions) varies along Leibenstein's loci ("equilibrium demand curves").

Final Remarks

The law of demand (that, *ceteris paribus*, the quantity of a good demanded is negatively related to its price) is one of the most robust predictive tools in social science. Still, Stearns and Borna are correct that educators should be aware of validated exceptions to the law, although they present none. Nevertheless, as suggested at the outset, a version of Stearns's and Borna's taxonomy that replaces "Yes" with "Implausible" might be of service to educators who want to explain a spectrum of alleged exceptions to this axiom.

References

Bagwell, L. S. and B. Douglas Bernheim (1996), "Veblen Effects in a Theory of Conspicuous Consumptions," *American Economic Review*, 86, 349-73.

- Basmann, R. L., D. J. Molina, and D. J. Slottje (1988), "A Note on Measuring Veblen's Theory of Conspicuous Consumption," Review of Economics and Statistics, 70, 531-35.
- Becker, Gary S. (1974), "A Theory of Social Interaction," *Journal of Political Economy*, 82 (6), 1063-1093.
- Browning, Edgar K. and Mark A. Zupan (1999), Microeconomic Theory and Applications, 6th ed., Reading, MA: Addison-Wesley.
- Coelho, Philip and James E. McClure (1993), "Toward and Economic Theory of Fashion," *Economic Inquiry* XXXI, 595-608.
- , Daniel Klein, and James E. McClure (2005), "Fashion Cycles in Economics: A Comment on 'Design Innovations and Fashion Cycles," *Econ Journal Watch*, 1(3), 437-454.
- Creedy, J. and D. J. Slottje (1991), "Conspicuous consumption in Australia," Research Paper No. 307, University of Melborne.
- Cummings, John (1899), "The Theory of the Leisure Class," Journal of Political Economy, 7 (4), 425-455.
- Friedman, Milton (1968), "The Methodology of Positive Economics," in *Readings in Microeconomics*, William Breit and Harold Hochman, eds., New York: Holt, Rinehart and Winston.
- Katz, Michael L. and Carl Shapiro (1985), "Network Externalities, Competition, and Compatibility," American Economic Review, 75, 424-40.
- and (1994), "Systems Competition and Network Effects," *Journal of Economic Perspectives*, 8 (2), 93-115.
- Koford, K. and A.E. Tschoegl (1998), "The Market Value of Rarity," Journal of Economic Behavior and Organization, 34, 445-57.
- Kumcu, Erdogan and James E. McClure (2003), "Explaining Prestige Pricing: An Alternative to Back-Bending Demand," Marketing Education Review, 13, 49-57.
- Liebowitz, S. J. and Stephen E. Margolis (1994), "Network Externality: An Uncommon Tragedy," *Journal of Economic Perspectives* 8 (2), 133-50.
- Liebowitz, S. J. and Stephen E. Margolis (1995), "Path Dependence, Lock-In, and History," Journal of Law, Economics and Organization, 11, 205-226.
- Leibenstein, Harvey (1950), "Bandwagon, Snob, and Veblen Effects in the Theory of Consumers' Demand," *Quarterly Journal of Economics*, 64 (2), 183-207.
- McClure, James and Erdogan Kumcu (forthcoming), "Promotions and Product Pricing: Parsimony versus *Veblenesque* Demand," *Journal of Economic Behavior and Organization*.
- Pesendorfer, W. (1995), "Design Innovations and Fashion Cycles," American Economic Review, 85, 771-92.
- Shy, Oz (1995), Industrial Organization, Cambridge, MA: The MIT
- Stearns, James and Shaheen Borna (2005), "Beyond Prestige Pricing: Coverage of Counter-Intuitive Demand in Marketing Education," Marketing Education Review, 15(3), 65-71.
- Veblen, Thorstein (1899, 1967 ed.), Theory of Leisure Class, New York: Viking Press.

Endnotes

- ¹ Erdogan Kumcu died April 7, 2004, so I am writing this reply solo. His dedication to family, career, friends and community was undaunted by circumstance. He will be missed.
- Stearns's and Borna's Figure 2 inadvertently reproduces Shy's profit function from page 259, rather than Shy's demand function from page 258.
- As fax machines and telecommunications equipment are generally demonstrated and warranted, Kumcu's and McClure's analysis applies to them. This is indiscernible from Stearns's and Borna's taxonomy table.

- ⁴ Although Stearns and Borna attribute this assumption to Becker (1974, 1991), it is only in Becker (1991).
- On this point, I am indebted to Giray Okten's and Gary Santoni's contributions.
- On snob effects, also see: Coelho and McClure (1993), and Koford and Tschoegl (1998). On conspicuous consumption, see: Bagwell and Berheim (1996); Pesendorfer (1995); Basmann, Molina, and Slottje (1988); and Creedy and Slottje (1991). McClure and Kumcu (forthcoming) provide an extensive review of both marketing and economics literatures
- on *veblenesque* demand; they also provide a generalized optimization model about individual promotions that also considers fixed costs. Coelho, Klein, and McClure (2005) critique Pesendorfer's article.
- ⁷ Stearns and Borna provide no citations to empirical tests of the validity of the exceptions they allege to the law of demand. But Milton Friedman (1968; p. 27) insists that "the only relevant test of the *validity* of a hypothesis is comparison of its predictions with experience." (his emphasis)

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