Does “Bait and Switch” Really Benefit Consumers? Advancing the Discussion . . .

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Abstract
We applaud the advances in this colloquy and the areas of convergence that are emerging. However, this reply points out that the purported benefits of “bait and switch” found in Hess and Gerstner (1998) are predicated upon (i) only a single component (availability) within the broader domain of bait and switch; (ii) the assumption that one of the parameters in the consumer utility function differs with the availability of advertised brands; and (iii) a further assumption that no other parameters in the model will change when the availability condition changes. After assessing these developments, we conclude that (i) the legal status of bait-and-switch schemes is fine as it stands; (ii) when understood in their true complexity, parameters in the consumer utility functions likely will not differ with regard to availability, thus obviating the finding of increased consumer welfare; and (iii) even if it is believed that utility functions would differ, effects on other model parameters clearly suggest that consumers will be worse off with bait and switch. Despite these differences, however, we are pleased with the developments the dialogue has produced.

1. Legal Status of Bait and Switch
The legal status of bait-and-switch practices provides the substantive grounding for this discussion. In this regard, it is essential that we stress two key points:

1. Fraudulent and deceptive forms of bait and switch are intrinsic concerns for law and public policy. This now appears to be an area for possible convergence, as the new HG discussion more sharply clarifies their view that intentionally fraudulent and deceptive forms of bait and switch can harm consumers. However, their discussion does not tie this point very closely to their summary conclusions on bait and switch (or their title), which could possibly mislead some casual readers and perhaps courts in the future.

2. “Unavailability” (intentional understocking) is by no means the only form of bait and switch. As shown in WMG (Figure 1), current law identifies an entire family of forms that bait-and-switch practices can take. We were (and are) fully aware of the challenges to modeling such complex phenomena, so we did not explicitly
raise these points as limitations in the GH model. We expected, however, that it would be clear that generalizations about public policies toward all bait-and-switch schemes are inappropriate given that only unavailability is modeled (in fact, none of the entries in WMG Figure 1, other than unavailability, are included in either GH or HG).

2. The HG 1998 extensions
Professors Hess and Gerstner are skilled modelers: we were pleased to reflect this view in our first paper, and repeat the compliment here. Thus our differences are not about errors, but instead deal with definitions, interpretations, and assumptions. In this regard, three basic points merit further clarification:

1. In our view, the issue for this discussion is whether “bait and switch” benefits consumers, not whether government restrictions on availability can be harmful. We can understand how our use of the term “limitation” (WMG, p. 279) may have caused this impression, and appreciate this chance to set the record straight. In brief, in contrast to the HG (p. 284) description of our logic, it has never been our intention to defend government restrictions on product stocking decisions—many readers may not be aware that the law does not presently include such restrictions, nor do we argue for them. However, a marketer should be responsible for the effects of product stocking and advertising decisions: the guides (note: these are not rules) shown in WMG represent practices that, in combination and with supporting evidence, could support findings of deceptive or misleading bait-and-switch actions that have worked to consumers’ detriment. Indeed, a “moot” (HG p. 287) guide is not a bad one; the law should step in when firms’ actions (even if irrational on the part of the firm) harm consumers and/or competitors.

2. WMG’s model followed Moorthy’s (1993) theoretical modeling approach. It should be understood that our effort in WMG was quite stylized. Using Moorthy’s (1993) approach, we i) adopted the confines of the GH model which included, among other things, (a) the existence of a possible surplus of $S - M$ and (b) pure competition; ii) obtained new insights by exploring new settings (disentangling the effects of upselling and unavailability) by using assumptions we believed to be consistent with GH’s; and iii) moved beyond those boundaries in our appendices. In short, we are entirely comfortable with our approach in WMG.

3. With respect to the HG model and its assumptions, there are some true differences to discuss. HG have now revisited two key GH assumptions in order to explore their implications. We are pleased to see this step. However, the ramifications of these changes in the HG model are more complex than they initially appear. Specifically, HG modify GH by i) enabling the retailer to upsell when the featured product is in stock and ii) suggesting that $\gamma$ changes when the featured brand becomes available (while simultaneously assuming no other model parameter varies when featured brand is available). We like the HG upselling extension, and are pleased to note that they verify our finding in WMG Appendix 2 (that, given $\gamma$ is the same across contexts, out of stocks will not occur if upselling is used and consumers will not be better off with bait and switch). However, we do not agree with their second assumption ($\gamma$ changes with availability). Herein lies the inherent problem in the argument of HG: they assume that the $\delta$, and therefore the expected surplus in the system, $\delta S-M$, differs with availability.

3. On Varying $\gamma$
A major point by HG involves the likelihood that availability will influence $\gamma$. We can appreciate that this has intuitive appeal, but definitional arguments and model considerations both convince us otherwise.

3.1. The Meaning of $\gamma$
Reasonable treatment of $\gamma$ depends on what this parameter represents, and a careful comparison of GH and HG indicates some possible shifting on this important issue: at times $\gamma$ is interpreted as the probability consumers will find value in the promoted brand, and at other times it is simply represented as a switching probability (as discussed below). Let us begin by
observing that, in the GH model, $\gamma$ is a consumer characteristic (we view it to be a consumer’s propensity to find value in a promoted brand’s features), and thus should not be affected by availability contexts:

“We also assume that in-store promotions . . . can be made customer- and brand-specific and can create permanent utility because they help consumers differentiate between brands and better fit colors, shapes, . . . to their tastes.” (GH, p. 115)

For example, consider a paint package option on a new car. The percentage $(1 - \gamma)$ of persons who do not like the color of the optional paint after they have seen it (been exposed to the promotion) should be similar whether or not the other (advertised) model is presently on hand (available).

The GH model assumptions regarding consumers also suggest that $\gamma$ should not vary across availability contexts. Note that, in the GH and HG models, consumers are assumed to know their expected utility before heading to the store (see GH Equation (2) and discussion). An important component of this expectation is $\gamma$. Thus, $\gamma$ is also known to the consumer before entering the store. For $\gamma$ to differ across contexts, a consumer must somehow expect a priori that the promoted brand’s features are less useful when the featured brand is in stock. This assuredly is unlikely.

3.2. The Effect of Different Prices on $\gamma$
At times, GH and HG alternatively refer to $\gamma$ as a switching probability. However, consumer switching behavior is obviously a function of price, a point that had previously been recognized in GH (footnote 4). As the price of the substitute brand increases to an arbitrarily high level, the probability of switching to it will be zero (regardless of $\gamma$), while as prices fall to zero, probability of switching moves toward 100%. In fact, the pricing rule employed by GH reflects this thinking:

“... the profit-maximizing store will set the price of the substitute high enough so consumers who self-select that brand are just indifferent between buying the substitute and taking a rain check for the featured brand.” (p. 118)

Thus, the greater incentive to switch in the unavailability condition (arising from the disutility, $D$, of having to use a rain check) is exactly offset by an equal disincentive to switch (arising from the increase in price, $D$, retailers charge for the promoted brand). As a result, the difference in the utilities between the featured and promoted alternatives, after adjusting for price, is zero regardless of availability, and the switching probabilities should be equal in each context (although HG may differ on this point). Therefore the interpretation of $\gamma$ as a switching probability is only possible at equilibrium and in that case, $\gamma$ is an antecedent of the switching probability, not the probability itself.

3.3. Exposure to Promotions
Although the pricing rule and construct validity considerations support equal $\gamma$ across availability conditions, it may still intuitively appear that $\gamma_A$ can be less than $\gamma$ because consumers are less likely to encounter or listen to an upselling promotion when they find the advertised feature in stock.

With respect to retailer behavior, sellers commonly structure promotions so that they must be encountered regardless of availability (because this is profitable). In fact, most bait-and-switch cases involve products or services that require extensive salesperson interactions in order for the customer to purchase anything at all—these include all in-home sales calls (for home improvements, swimming pools, siding, carpeting, etc.), most services (e.g., vocational schools, tree surgery, pest control, auto repair), and many or most products (used cars, mattresses, large household appliances). This aspect was well represented in the original GH paper: salesperson promotions were included in each of their three examples, whether or not the featured product was available.

Regarding consumers, one may posit that they are less likely to listen to a sales pitch when the brand is in stock, thereby lowering $\gamma_A$ as indicated above. Once again, however, the structure of the GH and HG models are relevant. First, there is no cost to listening in the model. Second, not listening would be suboptimal on the part of consumers, as they would know, with foresight, that such a strategy yields an expected loss of utility of $(\gamma - \gamma_A)S$ dollars in the in-stock condition. As a result, it is again difficult to understand why $\gamma$ will differ across contexts.

4. Accommodating Differences in $\gamma$
and Other Parameters
For all the reasons outlined above, we believe that our original assumption that $\gamma$ should be equal across
availability contexts in the GH model was the correct one to make. However, for sake of argument, if differences in \( \gamma \) by availability are to exist, they must be driven by some other factor that needs to be identified, such as a greater effort upon the part of the retailer to alert consumers to benefits in the promoted brand. If so, this additional effort, \( e \), would be reflected in the cost of promotion, \( M + e \), and might take the form of higher commissions, greater selling effort, better merchandising, or other factors. The retailer will increase such effort to a point at which it does not yield any “potential improvement” (HG p. 284) to the system (and hence profits or utility), that is, \( e = \gamma_S - \gamma_A S \). Under this condition, it can be shown that, in equilibrium, i) no out of stocks will occur and ii) the incremental utility from intentional understocking (vis-à-vis no understocking) will thus be 0.\(^2\)

Second, were disparagement (criticizing the featured brand) to be coupled with out of stocks, it can be shown that understocking leads to lower consumer utility. Disparagement is again consistent with FTC and court interpretations of bait and switch, and with the GH opening mattress example (p. 114). Here, the featured brand’s diminished value via disparagement is given by \( V_\delta = V - \delta \) where \( \delta \) is the level of disparagement. Under this condition it can be shown that no out of stocks will occur and the utility in the no-understocking, no-disparagement condition (no bait and switch) is greater than the utility in the understocking, disparagement condition (bait and switch). The differences in utilities are given by \( \delta \). As a result, consumers would always be better off with no bait and switch (combination of out of stocks and disparagement) even were \( \gamma \) to be higher in the out-of-stock condition.

5. Conclusions
With respect to generalizations about bait and switch, it is important to stress that WMG, GH and HG, while modeling unavailability, do not model the vast majority of bait-and-switch cases where consumers have been deceived and/or salespersons have no intention of selling the featured product. (Even in the form that is modeled, there are remaining issues about some consumers subsidizing others, similar to a lottery.) Nonetheless, the dialogue has produced some useful advances. HG have raised intriguing extensions to their earlier model. Similarly, while WMG’s use of Moorthy’s (1993) framework constrained us to retain the assumptions in GH, in this current effort we, too, have now been able to relax more assumptions. Overall, we have moved toward more accurately reflecting bait-and-switch practices.

Within the public policy sphere, we see convergence appearing between our positions on such issues as fraud, hard sells, reliance on retailer self-interest through competition, potentially deleterious effects in less than perfectly competitive settings, and possible impediments to efficiency arising from government restrictions (though we do not view current law to reflect such an impediment). Furthermore, we believe that our colloquy with Professors Hess and Gerstner has helped set the stage for future advances to extend understanding of retailer strategies and consumer responses, and we credit them for initiating this dialogue.\(^3\)

References

\(^2\)The foregoing analysis pertains to the HG case where \( M/S \leq \gamma_A < \gamma \). When \( \gamma_A < M/S \) it can be shown that promotions are not profitable in either context and thus out of stocks will not occur. When \( \gamma_A > \gamma \), HG show out of stocks will not occur because they detriment consumers. Thus, in all three cases, there will be no out of stocks. (Proofs are available from the authors.)

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