Discussion of “Advertising as Noisy Information about Product Quality,” by Hendrik Hakenes and Martin Peitz

Pablo Casas-Arce

UPF and SP-SP Center at IESE

IESE — June 11, 2010
The authors explore the consequences of assuming that the amount of advertising is not observable in a monopolistic setting.

- they consider informative advertising, aimed at making consumers aware of the existence of the product.
- they show that such advertising can also signal the quality of the product.
Overview of the results

- Quality $q \in \{q_H, q_L\}$ offers value $v \in \{v_H, v_L\}$ to the consumer.
- Monopolist charges $p = E[v \mid \text{customer's information}]$.
- $A(\phi)$ is the amount of advertising necessary to reach $\phi$ consumers.
Overview of the results

Scenario 1 \( q \) is observable

- monopolist maximizes \( \pi = (v - c) \phi - A(\phi) \)
- \( H \)-type sets \( A'(\phi_H) = v_H - c \)
- \( L \)-type does not advertise
Overview of the results

**Scenario 2**  
$q$ is not observable, but $A$ is

- $H$-type overinvests in advertising to separate from $L$-types:  
  $$\delta (v_H - c) \phi_H - A (\phi_H) \leq 0$$
- $L$-type does not advertise

**Scenario 3**  
$q$ and $A$ are not observable

- $H$-type underinvests in advertising:  
  $$A' (\phi_H) = \delta (\rho v_H + (1 - \rho) v_L - c) + (1 - \rho) (v_H - c)$$
- $L$-type overinvests in advertising:  
  $$A' (\phi_L) = \delta (\rho v_H + (1 - \rho) v_L - c)$$
Scenario 2  \( q \) is not observable, but \( A \) is
- \( H \)-type overinvests in advertising to separate from \( L \)-types: \( \delta (v_H - c) \phi_H - A(\phi_H) \leq 0 \)
- \( L \)-type does not advertise

Scenario 3  \( q \) and \( A \) are not observable
- \( H \)-type underinvests in advertising: \( A'(\phi_H) = \delta (\rho v_H + (1 - \rho) v_L - c) + (1 - \rho) (v_H - c) \)
- \( L \)-type overinvests in advertising: \( A'(\phi_L) = \delta (\rho v_H + (1 - \rho) v_L - c) \)
What do I like about the paper...

- Assuming $A$ is not observable seems more realistic
- It leads to a unique equilibrium
- Firms do not leave money on the table
What do I like about the paper...

- Assuming \( A \) is not observable seems more realistic
- It leads to a unique equilibrium
- Firms do not leave money on the table
What do I like about the paper...

- Assuming $A$ is not observable seems more realistic
- It leads to a unique equilibrium
- Firms do not leave money on the table
What do I like about the paper...

- Assuming $A$ is not observable seems more realistic
- It leads to a unique equilibrium
- Firms do not leave money on the table
Things to look forward to...

- Motivation with empirical applications?
- You could consider several extensions:
  - downward sloping demand curve
  - $\nu_L > c$ (do not emphasize that $L$-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising
Things to look forward to...

- Motivation with empirical applications?
- You could consider several extensions:
  - downward sloping demand curve
  - $v_L > c$ (do not emphasize that L-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising
Things to look forward to...

- Motivation with empirical applications?
- You could consider several extensions:
  - downward sloping demand curve
  - \( \nu_L > c \) (do not emphasize that \( L \)-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising
Things to look forward to...

- Motivation with empirical applications?
- You could consider several extensions:
  - downward sloping demand curve
  - $v_L > c$ (do not emphasize that $L$-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising
Comments

Things to look forward to...

- **Motivation with empirical applications?**
- **You could consider several extensions:**
  - downward sloping demand curve
  - $\nu_L > c$ (do not emphasize that $L$-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising
Things to look forward to...

- Motivation with empirical applications?
- You could consider several extensions:
  - downward sloping demand curve
  - $\nu_L > c$ (do not emphasize that $L$-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising

Discussion of “Advertising as Noisy Information about Product Quality,” by Hendrik Hakenes and Martin Peitz
Things to look forward to...

- Motivation with empirical applications?
- You could consider several extensions:
  - downward sloping demand curve
  - \( \nu_L > c \) (do not emphasize that \( L \)-type may not invest in advertising)
  - different marginal costs for high and low quality producers
  - choice of degree of observability of advertising