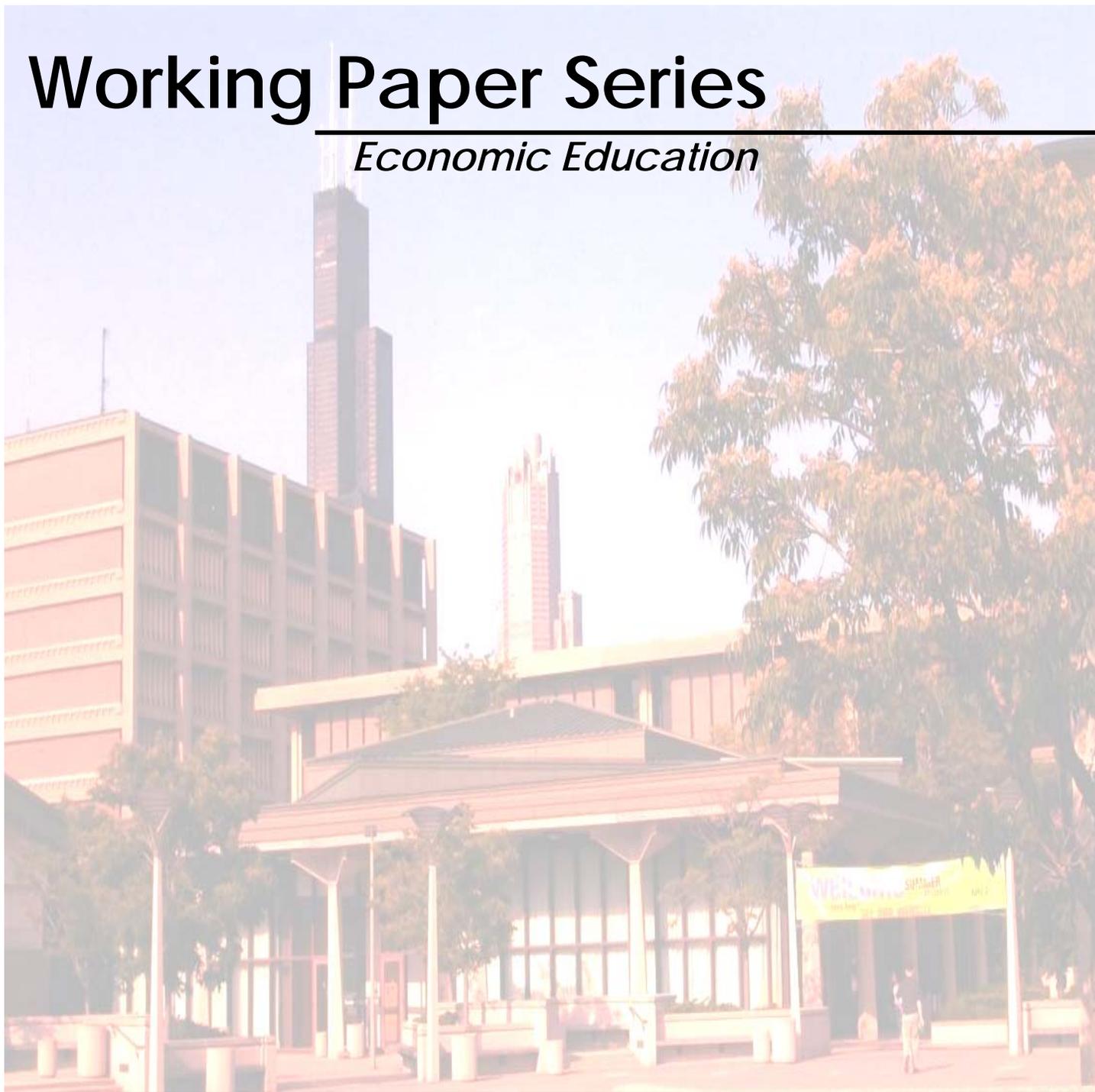


# Working Paper Series

*Economic Education*

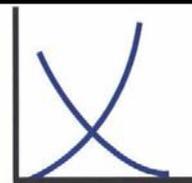


No. 020

*Brand Name Quiz and Incentive Behind  
Product Differentiation*

Dr. Xin Fang  
Visiting Lecturer, Dept. of Economics  
University of Illinois at Chicago

Copyright 2010



**Center for  
Economic  
Education**

Department of Economics (m/c144)  
University of Illinois at Chicago  
601 South Morgan Street  
Chicago, Illinois 60607  
Tel 312-413-3599  
Fax 312-996-3344  
<http://cee.econ.uic.edu>

# **Brand Name Quiz and Incentive Behind Product Differentiation**

Xin Fang  
Department of Economics  
University of Illinois at Chicago  
601 S. Morgan Street (MC 144)  
Chicago, IL 60607  
fangxinzj@gmail.com

## **1. Introduction**

The concept of product differentiation was introduced first in Microeconomics courses in the section of monopolistic competition. It is generally discussed with plenty of real world examples. However, the incentives of product differentiation are seldom mentioned, especially for product differentiations inside one firm.

In the teaching of product differentiation, I adopt the brand name quiz designed by Charles A Stull (2001) to call the attention of students to the existence of product differentiation inside a firm and engage students into the discussion about the incentives of firms to carry different brands for the same type of product, or product differentiation.

Then a simplified version of Hotelling's location model will be introduced to explain the incentives of product differentiation among competitors. Examples will be given after the model to enhance students' impression.

In the end, two controversial business strategies of product differentiation are introduced. The students' discussion will focus on the effectiveness of the business strategies and the welfare effects of product differentiation

## **2. Brand name quiz and product differentiation inside a firm**

The brand name quiz has 10 questions, asking the students to identify the brands made by each company. The brand name quiz is designed in the way that all the brands listed in each question for the same type of product belong to the same company. Products in the quiz come from the food, clothing and electronic industries and are all products close to students' everyday life. However, in most cases, students might know some of the brands for a company, but they won't recognize all the brands from their personal shopping experience unless they intentionally did research. For example, one question is designed as:

1. Margarine. Unilever makes:

- a. Flora
- b. Blue Band
- c. Country Crock
- d. Dorian
- e. Rama

Brand names are updated from each company's website each time before it is used because the brands carried by the companies change fast.

The whole quiz procedure will take about 10 to 15 minutes. Students are allowed to discuss with their neighbors and that would help them to answer more questions. According to the outcome of my classes, very few students checked all the options for each question. Although it is a quiz that will not be graded, students' interests will be raised and they will initiate the question why a firm will carry several brands for the same type of product and the class discussion will be led to the next stage.

Then the discussion about what makes products differentiated will be led, which is a common topic in product differentiation. After clarifying horizontal and vertical product

differentiation with examples, the incentives of product differentiation inside a firm will be discussed. Students are encouraged to put forward their opinion first, and then three incentives will be listed as a summary: first, by product differentiation, firms can make their products appeal to more consumers. Tastes among consumers are different and identical products can only attract to a small group of consumers. This point can be easily proved by the case of Ford (T model) versus GM, the example of “Any Color, so long as it is black” (Krugman and Wells, 2009). An example closer to life would be different tastes of ice cream offered by a company. The second incentive introduced is price discrimination to gain more profits by vertical product differentiation such as the different classes of airline seats. Companies will rip off the consumers with preferences for high quality products. The third incentive mentioned is that product differentiation can work as a strategy of brand proliferation to crowd out the competitors of the shelf in the same supermarket, such as the cereals. The shelf space for each supermarket is limited. Once the brands of one company occupies the shelves, there will be no room for its competitors. These incentives will help solve the doubt brought up by the brand name quiz and lead students to think about the incentives of product differentiation behind competitions. It will also be beneficial for to offer students exercise after the discussion asking them to identify several examples for each type of incentive.

### **3. Hotelling’s location model and product differentiation among competitors**

Solving a Hotelling’s Location Model with math is the task of a graduate microeconomic course. However, this model can help students to easily understand product differentiation

among competitors. Therefore, I will revise this model and introduce a simplified version implemented with more intuitions instead of equations.

First, the model will be introduced as a long narrow city with only one street. Two stores sell identical gallon milk. Consumers spread out evenly and each of them intends to buy 1 gallon milk. Two scenarios are set up. First, when the price of gallon milk is fixed while the stores can relocate costless. Second, when moving is very expensive and price of milk is flexible. Students will be offered the opportunity to decide if they are the owners of the stores, which location they will pick. In the first scenario, the two stores will stay together to steal business from each other and end up at the center of market. This result can be derived by the students by offering them hints of moving to the side with more consumers but stay next to the other store. This is consistent with markets without price competition, such as the airline industry before the deregulation where airlines will choose city combos. In the second scenario, with the power of setting prices, two stores would choose to stay apart to soften the price competition and get more market Niche. Students will deriving this result by thinking about staying apart to keep some consumers even if the price is higher than the other store. As long as the price exceeds average cost, firms will gain profits instead of breaking even by staying next to each other. A case in point is the innovation of products by L'Oréal, which keeps innovating to differentiate its products from other skin care products. Other examples of product differentiated are also discussed to explain the incentives to stay apart from competitors, such as, Nike cooperates with IPOD and designers to differentiate its products from others. Camera producers aimed at different demands and differentiate their products by Mega Pixels. McDonald tries to differentiate its service and food by extending open hours.

Incentives about the extent of differentiation are discussed afterwards. Firms try to get maximum differentiation to gain market power and soften price competition. While firms will still stay close not only because all of them choose to stay where the demand is, but they can utilize the positive externalities of being together, such as common installations.

#### **4. Marketing differentiating strategies.**

Two controversial strategies of product differentiation are introduced: brand name and advertising. First, the impression of how much difference a brand name can make is shown by listing the values of brands, as exemplified by the example of generic drugs and national brand drugs. Then the magnetic advertising of Absolut Vodka will be given as an example of advertising. Students generally do not think that all Vodkas taste the same. The Absolut Vodka successfully differentiates itself in North American market by its fancy magnets for refrigerators. However, in its hometown, Sweden, where advertising is prohibited for alcohol, it is not more popular than other brands of vodka and cannot charge a higher price (Krugman and Wells, 2009). These examples can be used to bring up the discussion about whether brand name and advertising do make a difference to consumers' preferences and to firms' sales. In the class, examples and counter examples will be both discussed and student will evaluate the welfare effect of the two strategies. Arguments that advertising and brand names are wastes of resources will be introduced. Articles about utility increase brought by brand name and advertising will be shown too so students will be exposed to both sides of opinions and make their own judgments.

In the end, welfare of product differentiation will be discussed from consumer's side. From the real world examples, it can be concluded that consumers vote by feet and prefer variety to price.

## **5. Conclusion**

This paper tries to find a way to explain the incentives of product differentiation, instead of confining the class to the concept product differentiation and examples only.

The design of the class starts from a brand name quiz to stimulate students' interest in this topic and then follow the order to investigate the incentives of product differentiation inside a firm and among competitors. Examples served in the class and function more than just explain how the products are differentiated, but they are reorganized to explain why they are differentiated.

Brand name and advertising are two controversial strategies for product differentiation. Pros and cons of these two strategies are both discussed with examples. In the end, the fact that consumers prefer variety is indicated.

This course was initially designed as a senior seminar course for students with economics or business background. However, with some modification, such as implementing with more real world examples, it can serve well as part of course for intermediate or principles of microeconomics.

### **Reference:**

Stull, Charles A., (2001) Classroom Activities, Demonstrations, and Games, Manual to Accompany Principles of Economics by Mankiw, Harcourt College Publishers, New York.

Mankiw, Gregory N. (2004) Principles of Economics, South-Western College Publisher, Mason, Ohio.

Krugman, Paul and Wells, Robin (2009) Economics, Worth Publishers, New York.

## Appendix

### Brand Name Quiz

1. Margarine. Unilever makes:

- a. Flora
- b. Blue Band
- c. Country Crock
- d. Doriana
- e. Rama

2. Pet Food. Nestlé makes

- a. Beneful
- b. T-Bone
- c. Purina
- d. Veterinary Diets
- e. Alpo
- f. Cat Chow, Dog Chow, Puppy Chow, Kitten Chow, etc.

3. Breakfast Cereal. Quaker makes

- a. Life
- b. Simply Harvest
- c. Oat Bran Cold
- d. Natural Granola

4. Soap. Proctor and Gamble makes

- a. Camay
- b. Ivory

- c. Noxzema
- d. Olay
- e. Safeguard
- f. Zest
- g. Old Spice

5. Jeans. V.F. Corporation makes

- a. Wrangler
- b. Lee
- c. Rider
- d. Riggs Wrkwear
- e. Aura
- f. Rustler
- g. 20X
- h. Maverick

6. Pasta. New World Pasta makes

- a. Prince
- b. Ronzoni
- c. Creamette
- d. San Giorgio
- e. Skinner
- f. American Beauty

7. Coffee. Kraft Foods Inc. makes

- a. Gevalia
- b. Maxwell House
- c. Sanka
- d. Yuban

8. Consumer Electronics. Koninklijke Philips Electronics makes

- a. Avent
- b. Sonicare
- c. Norelco
- d. Senseo
- e. Hospitality

9. Alcoholic Beverages. Diageo PLC makes

- a. Smirnoff
- b. Baileys
- c. Guinness
- d. J&B
- e. Captain Morgan
- f. Gordon
- g. Tanqueray

10. Fast Food. Yum! Brands makes

- a. KFC
- b. Long John Silver's
- c. Pizza Hut
- d. Taco Bell