The Economics of Convenience. The Economics of Corporate Social Responsibility. Two Important Topics for Food Retail Analysis.

George C. Davis
Virginia Tech

georgedavis@vt.edu

VIRGINIA TECH

The Map

I. Presentation Approach: Catching > Eating

II. Getting on the Same Page: What is Economics?

III. Convenience and Its Market Implications

IV. Corporate Social Responsibility: Why the Tension?

V. Q&A

Economics – The study of optimal decisions when there are constraints.

Economics is

- foremost a framework or toolset for analyzing objectives, constraints, and choices.

Key Concepts

General Framework

- Objectives
- Constraints
- Incentives
- Choices
- Optimization

Application Assessment

- Information
- Benefits
- Costs
- Tradeoffs
- Opportunity Cost
- Substitution
- Complementarity

Convenience

The real price of everything, what everything really cost to the man who wants to acquire it, is the toil and trouble of acquiring it.

Adam Smith, Wealth of Nations

In the United States, the opportunity cost of time may be more important than the direct price of a good.

Gary Becker, Nobel Prize Winner

Some starter thought provoking questions

- *Is store location more important than store prices in choosing a store?*
- *How do transaction assisted devices affect markets?*
- *What is the common link between online, offline grocery markets, meal kits, and grocerants?*
- *Why do single headed households demand more convenience and eat out more than dual headed households?*

Defining Convenience

Convenience – the act of saving time and/or effort associated with some activity.

Demand (Consumers) Side

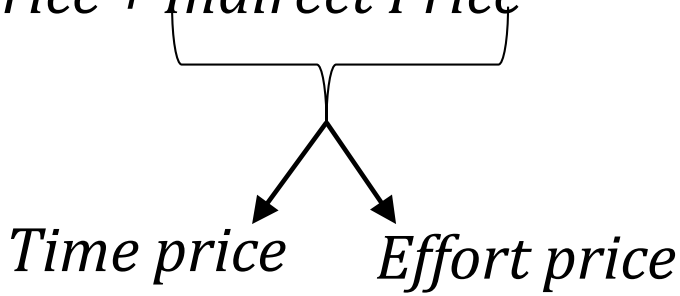
Key Concept: ***The Full Price Principle***

*The same or lower **full price** does not mean the same or lower **market price**.*

*The same or lower **market price** does not mean the same or lower **full price**.*

Let's go to the pad!!!

Full Price = *Direct Price + Indirect Price*



Key mathematical fact. Two different goods (delivery pizza vs home made pizza) could have the same or different full price for different reasons.

Delivery Pizza – high direct price, low indirect price

Home Made – low direct price, high indirect price

More generally, fast food, processed food is full price cheap, though direct price expensive, because it saves time and effort…Duh ☺

A little more formally in order to connect to supply side

The two key parts of the *full price* for a good (e.g. a meal)

$$(8)\quad \Pi_{ijk} = P_{jk} + b_{ijk} W_i + c_{ijk} R_i$$

Direct price is the $ amount paid for the market good per unit of good.

Indirect price is the $ value of time and effort allocated to a unit of the good.

Components of prices

- Let $\boldsymbol{P_{jk}}$ be direct price paid per unit for the market good (e.g., what you pay for the restaurant item)
- $\boldsymbol{W_i}$ the individual's dollar value per hour associated with this good (e.g., meal)
- $\boldsymbol{R_i}$ the individual's dollar value on their effort, physical and mental, associated with this good (e.g., meal). Connects to neuroeconomics literature. See article.
- $\boldsymbol{b_{ijk}}$ number of hours to consume one unit of good.
- $\boldsymbol{c_{ijk}}$ units of effort to consume on unit of good.
- *k* indexes to good (e.g., pizza, meal kit)
- *j* indexes the location (e.g., block away, mile away)
- *i* indexes the individual (e.g., you, spouse)

Examples of full price principle are ubiqituous in the market:

- House cleaning services
- Lawn services
- Tax Preparers
- Driving further to get a better deal on a car
- Pre-prepared food vs basic ingredients

……

Some analyses of this last example

Yang, Yanliang, George C. Davis, and Mary K. Muth. "Beyond the sticker price: including and excluding time in comparing food prices." *The American Journal of Clinical Nutrition* 102, no. 1 (2015): 165-171.

Tharrey, Marion, Sophie Drogue, Lisa Privet, Marlène Perignon, Christophe Dubois, and Nicole Darmon. "Industrially processed v. home-prepared dishes: what economic benefit for the consumer?." *Public Health Nutrition* (2020): 1-9.

Supply (Producers) Side

Three key features of the supply side of convenience:

1. ***Economies of scale*** – when cost per unit (average cost) decreases as the operation is 'scaled up' or output increases. Provides incentive for larger output.

2. ***Economies of Scope*** – when the average cost of producing two or more goods together in one place is less than the cost of producing them at separate locations. Provides incentives for selling a wider variety of goods.

   Economies of scale and scope will reduce cost and increase supply!!!!!

3. ***Cost Shifting*** – When firms take on some of the cost the household/individual normally incurs in producing a commodity. So

$$\Pi_{ijk} = P_{jk} + b_{ijk} W_i + c_{ijk} R_i : \quad Full\ Price$$

by designing/selling products that save time and effort b and c decrease, so the consumer's full price decreases and thus demand for that product increases!

Tension in the Food Environment

- "*There are two sides to every story and the truth usually lies somewhere in the middle*."
- Producer Sovereignty or Consumer Sovereignty?
- Profits and Corporate Social Responsibility

Producer Sovereignty - Firms' choices completely determine consumers' choices.

Consumer Sovereignty - Consumers' choices completely determine firms' choices.

Market outcomes are determined by the interaction of *both* consumers and producers.

- Profit = Revenue – Cost

  - Revenue = price x quantity sold (aka “sales”)
  - Cost = all costs associated with producing and/or selling product
  - Revenue is much more uncertain than cost.
  - Firms have much more control over cost than revenue.

- Profit = Revenue – Cost

- Most Important (Math) Fact!!!

  - Knowing something about revenue alone tells you nothing about profit (e.g., willing to pay for healthy food).

  - Knowing something about cost alone tells you nothing about profit (e.g., healthy food cost more)

Corporate Social Responsibility (CSR)

Actions that appear to further some social good, beyond the interests of the firm and that which is required by law. (McWilliams and Siegel 2001)

Putting these together on the pad!

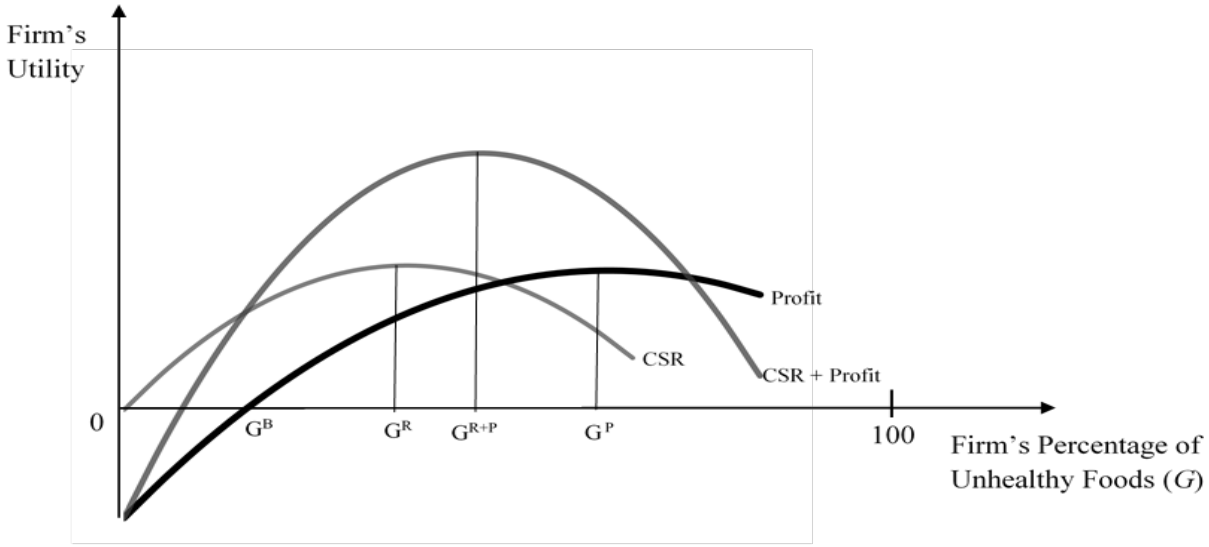


Figure 13.5. Firm's Utility from Corporate Social Responsibility and Profit with Percentage of Unhealthy Foods Placed on Market.

IAPS: The firm's percentage of unhealthy foods will be determined by weighing the utility from corporate social responsibility versus profit.

From chapter 13 in book.

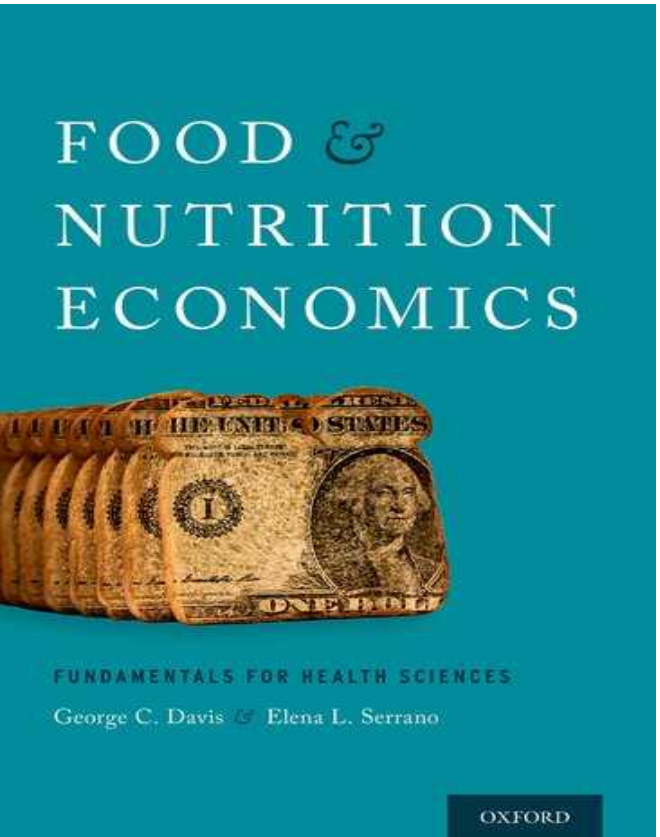
The percentage of unhealthy food sold G^{R+P} will be higher than desirable from a purely CSR perspective (G^R) but less than a purely profit perspective (G^P).

Tension occurs because after (G^R) CSR is decreasing but profits are still increasing.

See book chapter 13 for more discussion and detail.

Convenience from consumer and producer respective is discussed here

Davis, George. "Convenient Economics: The Incorporation and Implications of Convenience in Market Equilibrium Analysis." *Applied Economics Teaching Resources (AETR)* 2, no. 2226-2020-1209 (2020). ***Article Link***



There are convenience, from consumer perspective, and CSR sections in the book.

Food & Nutrition Economics: Fundamentals for Health Sciences 2016.

Oxford University Press.

George Davis & Elena Serrano

Amazon Link

Q&A ?

Feel free to email me with any questions

georgedavis@vt.edu