

Ethics, Welfare, and Markets: An Economic Analysis

Sergio H. Lence and Dermot J. Hayes

What is Wrong with these Labels?

- “This Tuna is Caught in Nets that Kill Dolphin”
- “Made with Child Labor”
- “Wood from Rainforest Timber”
- “Meat from Cloned Animals”
- “Bread made with 100% GM Wheat”
- “Certified Conflict Diamond”

Overview

- The literature analyzes labeling of goods with higher quality than the commodity or generic product
- The symmetric alternative are goods with low quality, these are ignored because these firms never advertise
- The unregulated market equilibrium will always result in certification costs being added to the production costs under the desirable technology, so that a niche market in the “high-quality” good will evolve as needed
- Should the producers of low quality goods be asked to label and or segregate? Should the low quality good be banned?
- Answer: it depends

Assumptions

- Two goods that are identical in every way except for one feature of the production system
- One good is produced with the ethical method and the other with a less expensive method that some find distasteful
- Heterogeneous consumers response and a heterogeneous producer benefit
- The producers of the high quality good can always label or certify but they must pay costs associated with segregation when they do this
- When should the producers of the low quality good be required to label or segregate
- Does it ever make sense to ban the low quality good?

Intuitive example

- Suppose that a great majority of households in the US are willing to pay a premium to avoid consumption of cloned animals
- Suppose also that a small number of farmers in the US find it profitable to produce these meats and that it is legal for them to do so
- Once this meat is harvested, it will be co-mingled with commodity meat and consumers will have to assume that all commodity meat is cloned
- If these consumers wish to purchase non-cloned meat they will need to pay the costs associated with a new meat handling and transporting system
- If the total additional costs associated with the new system exceed the savings made by those producers who produce cloned meats, then societal welfare will fall
- In these circumstances, it may make sense to ban production and imports of cloned meats, or to require segregation cloned meat so that the bulk handling system can be utilized for non-cloned meat.

Consumers

- The economy is assumed to be inhabited by an infinite number of consumers, whose only difference is the value of a parameter δ representing their relative distaste for goods produced in a way that some consumers consider unethical or undesirable
- The high-quality good x_H yields one unit of characteristic z_G , and the low-quality good x_L yields one unit of both characteristic z_G and the bad characteristic z_B (disutility of δ)

Producers

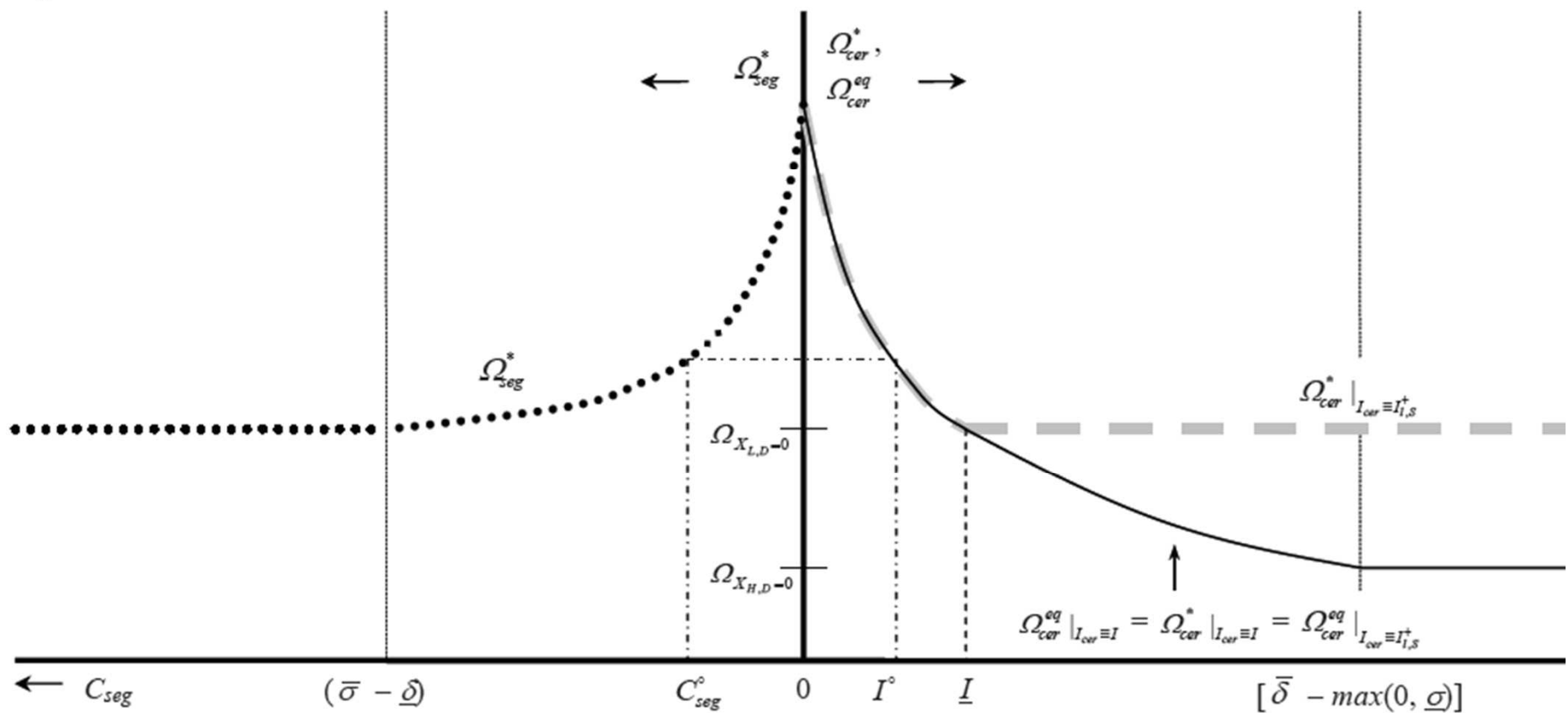
- Costs depend only on the total amount of output, except in that production under the desirable technology for firms with $\sigma > 0$ increases costs by σ per unit for σ -type firms
- Additional certification cost of I_{cer} per unit to sell the desirable technology output as high-quality good
- Certification may be expensive because the product needs to be identity preserved and this may require a new handling system

- Figure 1. Social welfare functions when the undesirable technology is very distasteful to consumers and does not provide significant cost reductions to adopting producers
- The lowest consumer distaste is greater than the highest producer benefit

$X_{H,D}^{seg} > 0$	$X_{H,D}^{cer} > 0$	$X_{H,D}^{cer} > 0$	$X_{H,D}^{cer} = 0$
$X_{h,S}^{seg} > 0$	$X_{h,S}^{cer} > 0$	$X_{h,S}^{cer} > 0$	$X_{h,S}^{cer} = 0$
$X_{L,D}^{seg} = 0$	$X_{L,D}^{cer} = 0$	$X_{L,D}^{cer} > 0$	$X_{L,D}^{cer} > 0$
$X_{l,S}^{seg} = 0$	$X_{l,S}^{cer} = 0$	$X_{l,S}^{cer} > 0$	$X_{l,S}^{cer} > 0$
$X_{h,S}^{seg} = 0$	$X_{h,S}^{cer} = 0$	$X_{h,S}^{cer} = 0$	$X_{h,S}^{cer} > (=) 0$ if $\underline{\sigma} < 0$

- Figure 2. Social welfare functions when the undesirable technology is distasteful to a portion of consumers and reduces costs to all adopting producers
- The greatest producer benefit is greater than the smallest consumer distaste, but the greatest consumer distaste is larger than the smallest producer benefit

Figure 2



$$X_{H,D}^{seg} > 0$$

$$X_{h,S}^{seg} > 0$$

$$X_{L,D}^{seg} = 0$$

$$X_{l,S}^{seg} = 0$$

$$X_{h,S}^{seg} = 0$$

$$X_{H,D}^{seg} > 0$$

$$X_{h,S}^{seg} > 0$$

$$X_{L,D}^{seg} > 0$$

$$X_{l,S}^{seg} > 0$$

$$X_{h,S}^{seg} = 0$$

$$X_{H,D}^{cer} > 0$$

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$$X_{L,D}^{cer} > 0$$

$$X_{l,S}^{cer} > 0$$

$$X_{h,S}^{cer} = 0$$

$$X_{H,D}^{cer} = 0$$

$$X_{h,S}^{cer} = 0$$

$$X_{L,D}^{cer} > 0$$

$$X_{l,S}^{cer} > 0$$

$$X_{h,S}^{cer} > (=) \\ \text{if } \sigma < (>)$$

- Figure 3. Social welfare functions when the undesirable technology is modestly distasteful for consumers and significantly reduces costs to all adopting producers
- The smallest producer benefit is greater than the largest consumer distaste

Figure 3

