Counterfeit Inferences from Price Levels and Country of Origin: The Case of High Risk Products

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Counterfeit Goods Defined

- The unauthorized copying of trademarked or copyrighted goods (Bamossy and Scammon 1985; Grossman and Shapiro 1988)
- Piracy refers to copyright violations which are a form of counterfeiting
- Counterfeits goods can be "non-deceptive" and "deceptive" (Grossman and Shapiro 1988)
  - Non-Deceptive: consumers can often ascertain the product is counterfeit (e.g. watches, purses)
  - Deceptive: consumers are largely unaware that the product is counterfeit (e.g. medicines, car parts)

Magnitude of the Economic Impact of Counterfeit Goods

- The global counterfeiting market is worth over $200 billion annually (OECD 2007)
- Intangibles such as the harm to people and loss of brand equity magnify the impact
- 1% to 10% of total medicines sold globally are counterfeit (WHO 2007)

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Counterfeit Products

- Have different levels of risk, i.e. medicines vs. DVDs
- Based on data of seizures within the European Union (2007)

Product Category	Number of Units Per Product Category
Foods and Beverages	1,924,896
Cosmetics	6,103,171
Clothing	17,783,130
Electrical Equipment	3,648,348
CD, DVDs, Cassettes	3,298,813
Jewellery, watches	1,787,016
Medicines	4,081,056

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Counterfeit Goods and Country of Origin

- Not just your usual suspects
  - Switzerland leads the way in production of counterfeit medicines
  - Italy is second in the production of counterfeit computer equipment

- Informed by previous work which has looked at product recalls of high risk products (Beamish and Bapuji 2008), we are primarily interested in the impact that high risk products can have

Do Consumers Recognize Counterfeits?

- Consumers can infer quality based on price; lower prices are a cue that goods may be counterfeit (Chakraborty and Allred 1996)

- Country of Origin (COO) is also a cue as to whether a product is counterfeit or not (Chakraborty and Allred 1996)

Country of Origin Image

- Country of Origin Image (COI) can enhance perceptions of products from certain countries or reduce perceptions of products from certain countries (Haubl 1996)

- COI provides a cue as to the quality of products (Johansson and Nebenzahl 1986)

- COI is variable and can be lowered (Heslop, Lu, and Cray 2008)

Interesting Questions

- Price is used to infer authenticity

- COI is also used to infer authenticity

- With counterfeit goods, when consumers are faced with higher priced products from certain countries which do they use to infer authenticity?

Propositions

- ***P1:*** Lower priced products will be more likely to be viewed as counterfeit

- ***P2:*** Consumers will be more likely to expect counterfeit goods to originate from countries that have a poor image

- ***P3:*** When consumers learn of counterfeit goods from a country it will impact their image of that country

- ***P4:*** When faced with two prices for a product, the probability of either of the two goods being counterfeit will depend on where the product came from

- ***P5:*** When faced with a low price for a product that may be counterfeit, consumers' willingness to purchase is dependent upon where the product came from

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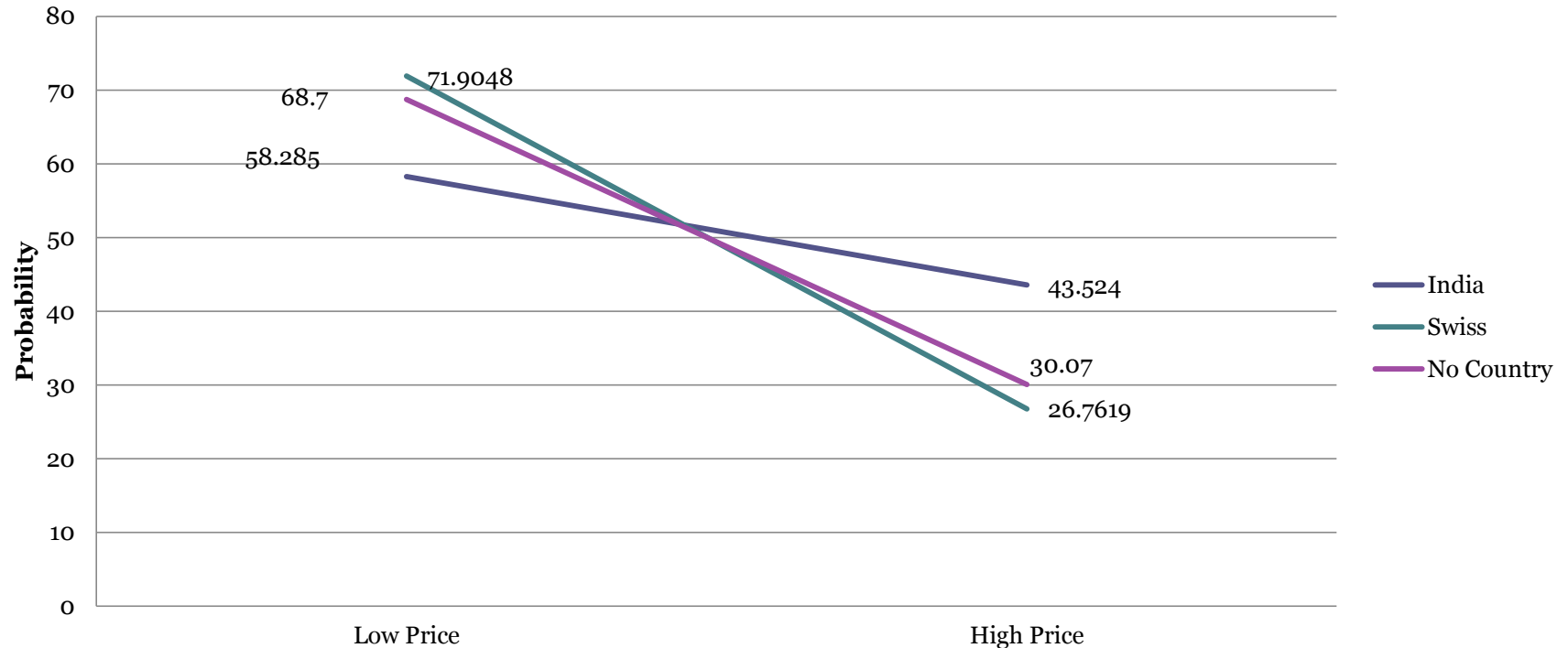
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Methodology

- We employed an experimental methodology

- 226 undergraduate students from a large Southeastern University participated in exchange for extra credit

- Two countries were used that had different levels of COI: Switzerland (5.6521) and India (4.583)

- Risk was manipulated by product category: DVDs vs. Pharmaceuticals

- Treatments employed modified news stories (BBC News) and press releases (Department of Justice)

Findings

- For both DVDs and Medicines, participants found that the lower priced products were more likely to be counterfeit ($p < 0.001$)

- Participants found that counterfeit products such as: shoes, computers, pharmaceuticals, DVDs, and watches were more likely to originate from India, all differences significant at $p < 0.07$

- Medicines had a greater impact on COI for Switzerland than for India
  - Pre Swiss = 5.652 vs. Post Swiss = 4.697, $F(1, 43) = 22.90$, $p < 0.001$)
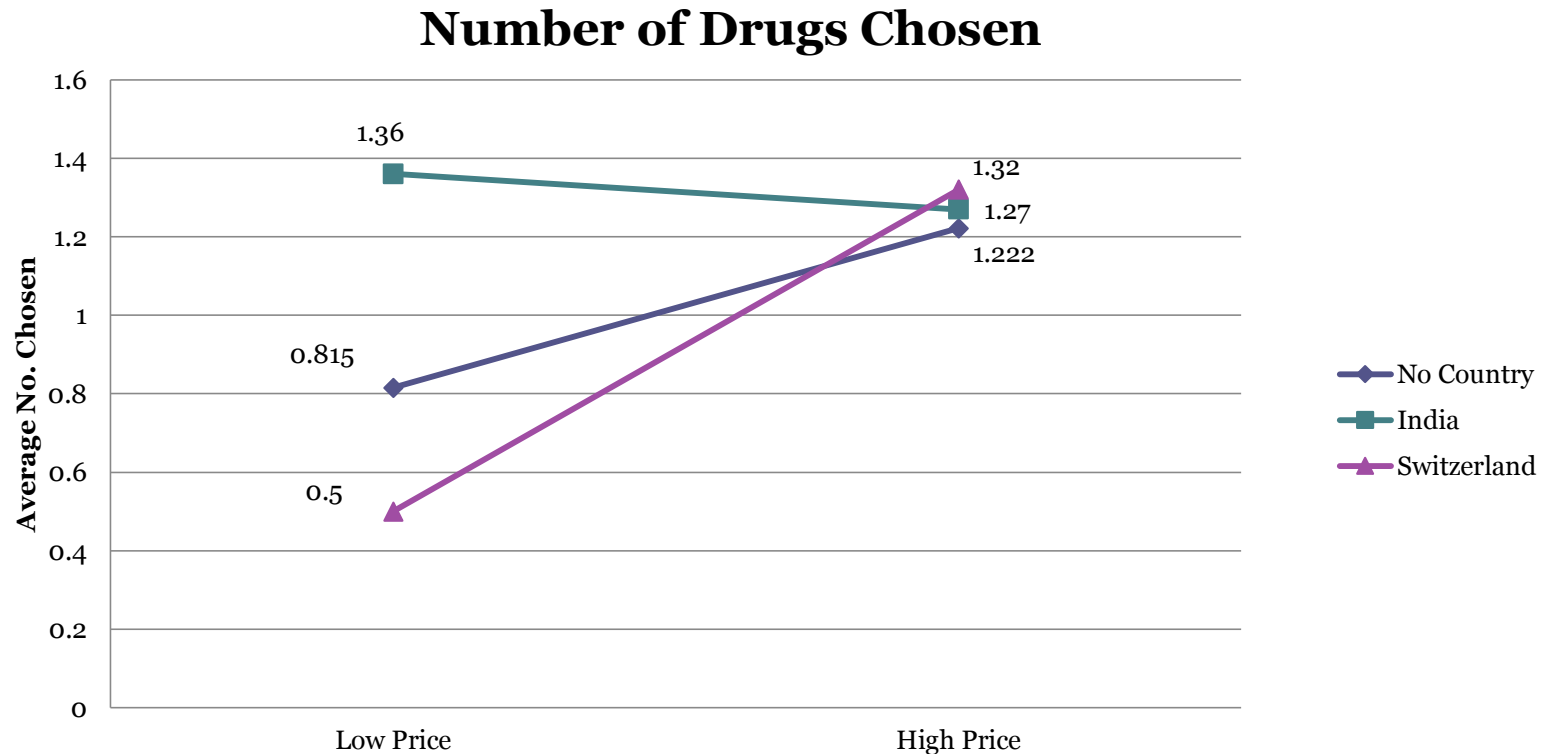 - DVDs had no effect

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Findings - Continued

Probability of Countefeits

For Switzerland the price effect was largest, but for India the effect was not as pronounced, overall an interaction was revealed, $F_{(3, 82)} = 13.60$, $p < 0.001$

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Findings - Continued

Number of Drugs Chosen

For Switzerland participants overwhelmingly chose the higher priced drug but in India this pattern was reversed, $F_{(3, 84)} = 4.45$, $p < 0.05$

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Discussion

- For high risk products there is a significant interaction effect between price and COI; both cues are used but the price effect is more pronounced for positively viewed countries

- For low risk products the COI effect did not interact with the price effect

- Price effect on India was weak while for Switzerland the price effect is strong, meaning the COI effect dominates the price effect in negatively viewed countries

Discussion Cont'd

- Consumers expect counterfeit goods from countries with low COI and this can harm legitimate products from these countries

- The protection of intellectual property rights can create an advantage for countries should the threat of purchasing counterfeit goods be present

Questions/ Comments?

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