

The Impact of Counterfeit Goods on Preferences for Higher Priced Goods

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Counterfeit Goods Defined

- The unauthorized copying of trademarked or copyrighted goods (Bamossey and Scammon 1985; Grossman and Shapiro 1988)
- Pirated products are a subset of counterfeit products involving mostly copyright infringement (Brauneis and Shecter 2010)

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)

Previous Research on Counterfeit Goods

- Counterfeit goods by their very nature are always inferior to their legitimate counterparts because counterfeit goods offer no guarantee of quality (Bamossey and Scammon 1985; Grossman and Shapiro 1988)
- Counterfeit goods can be viewed as low cost alternatives to legitimate goods if consumers are willing to accept the risk (Wilcox et al. 2009)

Theoretical Framework

- Information asymmetry (Akerlof 1970)
 - When consumers are unsure which product is counterfeit and which is legitimate they risk paying a higher price for a product that is actually counterfeit
 - Unless manufacturers can signal authenticity of their product they may have to offer a price reduction to account for the increased risk that consumers incur from counterfeit goods
- Price signals quality
 - Consumers use price to infer quality and authenticity in terms of counterfeit goods (Chakraborty et al. 1997)

Research Questions

- In what situations do counterfeit goods cause people to purchase less of an expensive item?
 - E.g. expensive brands (Nia and Zaichkowsky 2000)
- In what situations do counterfeit goods cause people to purchase more of an expensive item?
 - E.g. pharmaceuticals (Grossman and Shapiro 1988)

Propositions

- When consumers are unable to differentiate between counterfeit and legitimate goods they will be more likely to choose the lower priced good when the risk is low
- When consumers are unable to differentiate between counterfeit and legitimate goods they will be more likely to choose the higher priced good when the risk is high
- Inability to differentiate counterfeit from legitimate goods will drive up consumption of the lower priced goods

Methodology

- Three studies using an experimental design with hypothetical scenarios
 - Traveling in So. Asia
 - Products sold by fictitious FSR, Inc.
- Manipulations:
 - Perceived Risk (High:Drugs vs. Low: DVDs)
 - Price (High: \$15 vs. Low: \$6)
 - Counterfeits in market vs. Not
- Student sample -previous research has found that those 25 and younger have more exposure to counterfeit goods (Tom et al. 1999)

Methodology Cont'd

- Measure of perceived risk based on the work of: Bettman (1973) as well as Kaplan (1974), four items intended to measure: economic risk, physical risk, social risk, and legal risk (alpha = 0.805)
- Pre-test:

Perceived Risk, $F(1, 43) = 33.943$

Drugs	DVDs
$M = 4.09, SD = 1.34$	$M = 1.98, SD = 1.05$

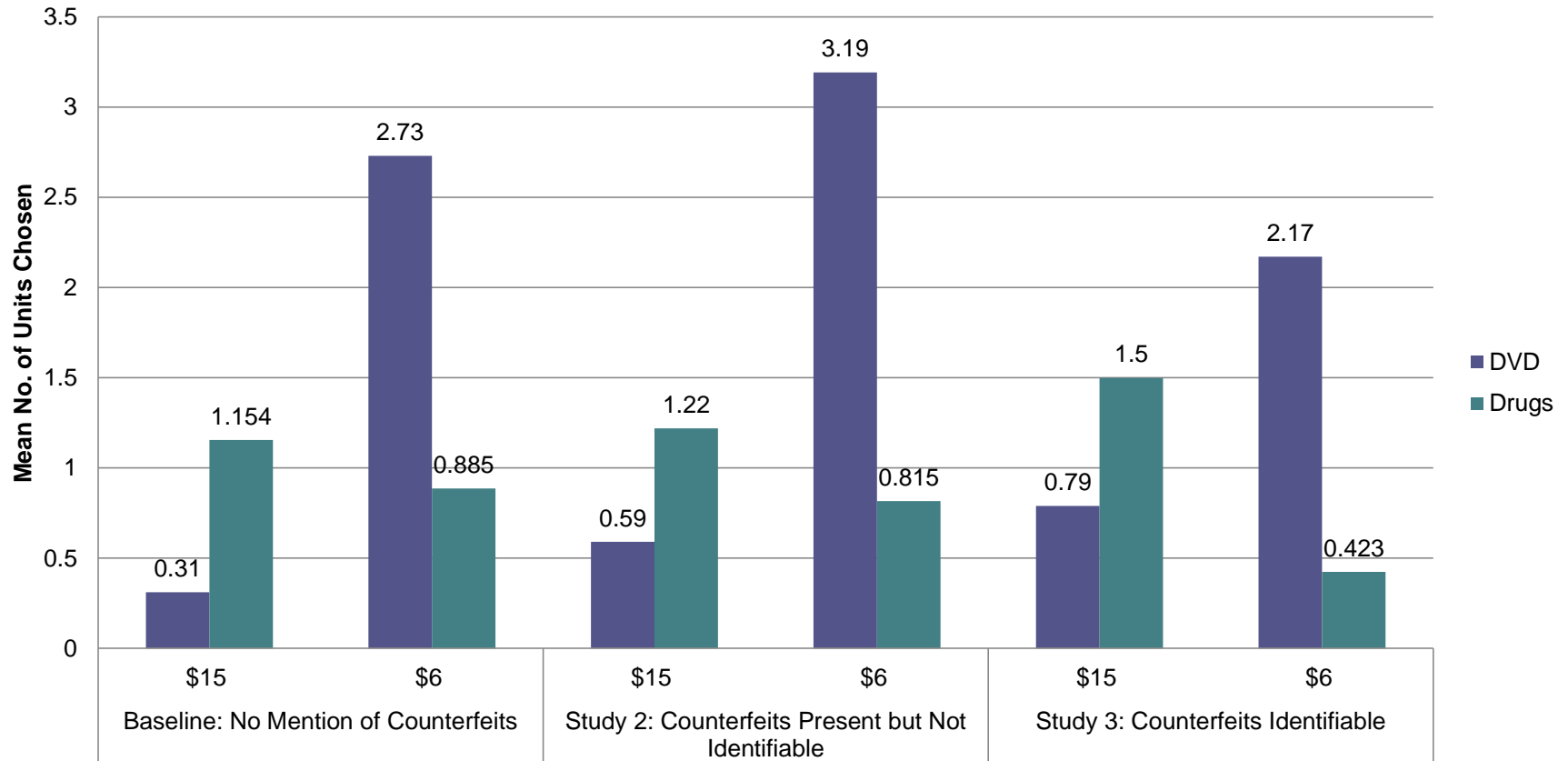
Three Studies

Baseline: 2 (Type of Good: Drug vs. DVD) x 2 (Price of Good: \$6 vs. \$15) ANOVA, no mention of counterfeits, 51 subjects

Study 1: 2 (Type of Good: Drug vs. DVD) x 2 (Price of Good: \$6 vs. \$15), counterfeits in the marketplace but not identifiable, 60 subjects

Study 2: 2 (Type of Good: Drug vs. DVD) x 2 (Price of Good: \$6 vs. \$15), counterfeits identifiable in the marketplace, 54 subjects

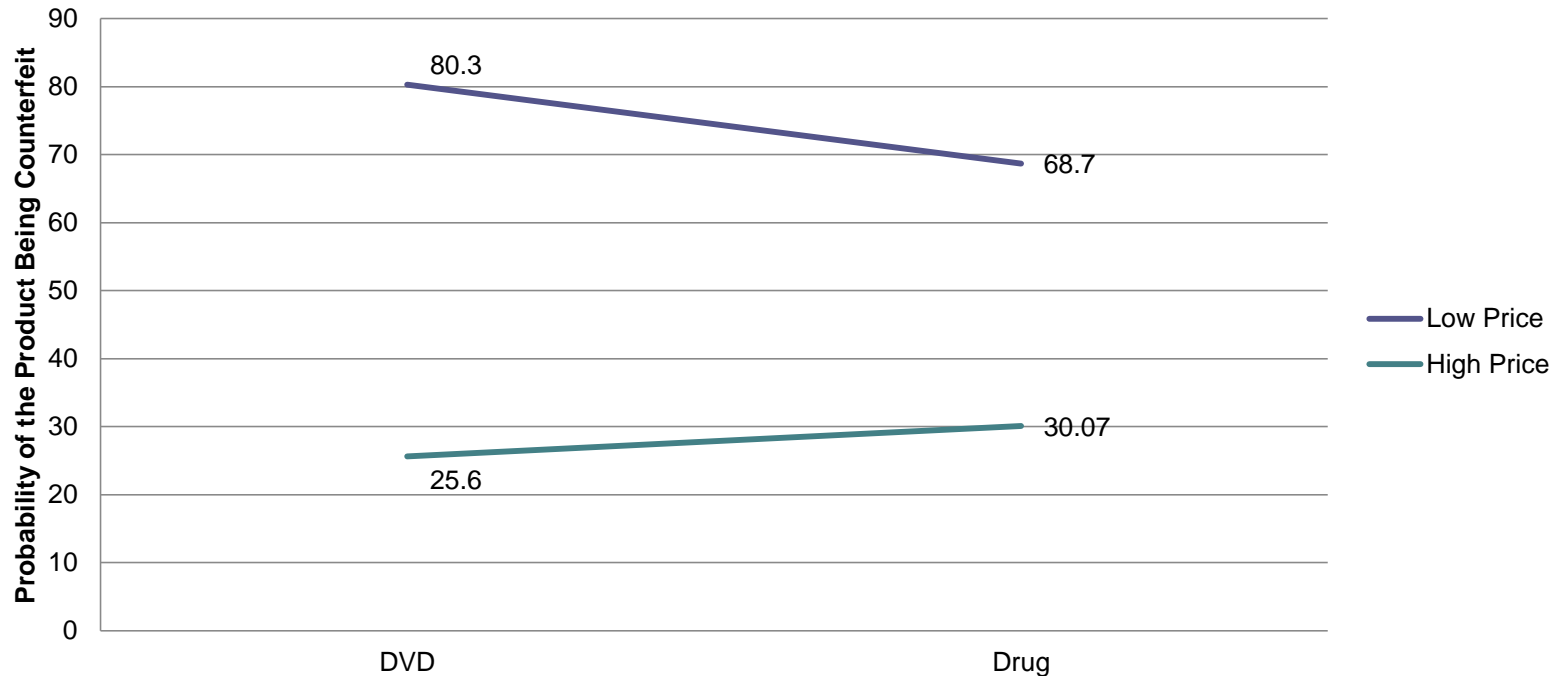
Full Results



*All interactions within studies significant at $p < 0.001$

Perceived Probabilities

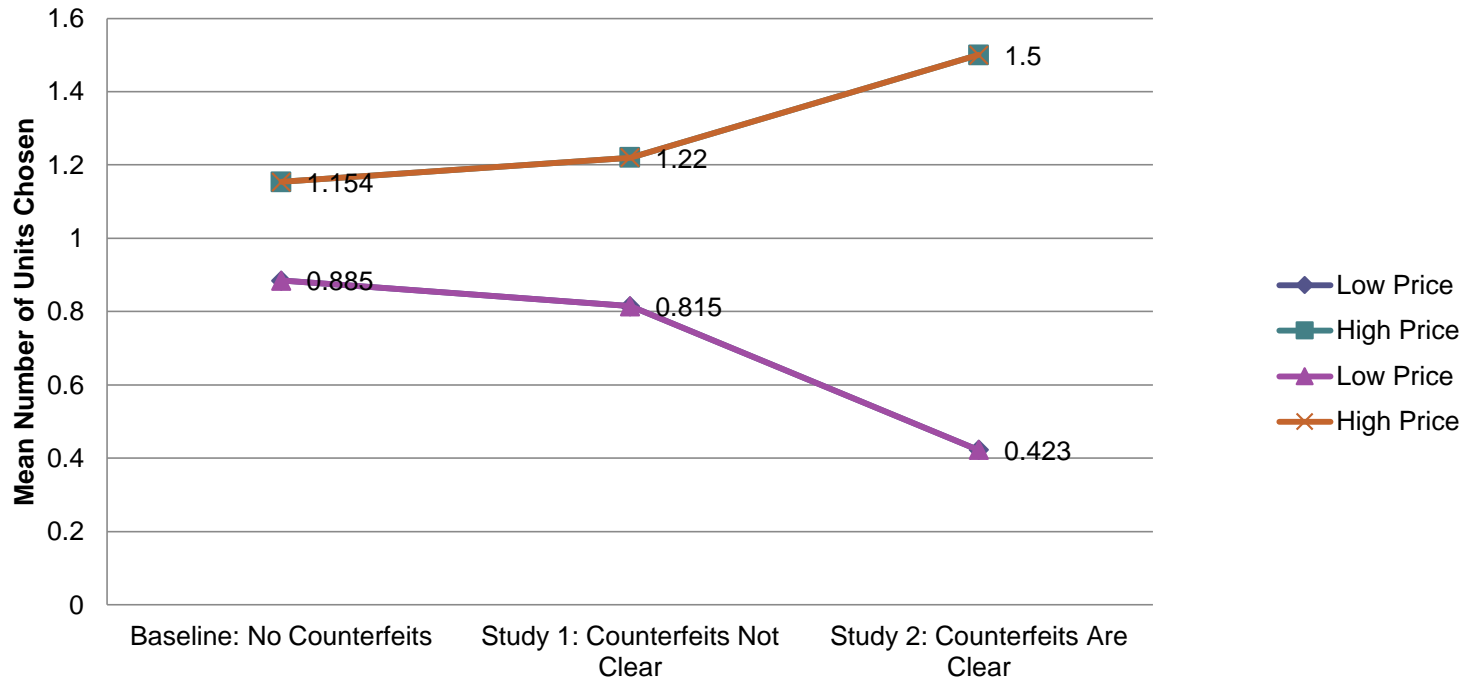
Perceived Probabilities



We measured the perceived probability of each product being counterfeit. The results unsurprisingly revealed a main effect for price ($F(1, 118) = 111.57, p < 0.001$). Surprisingly the findings revealed a two way interaction effect ($F(1, 118) = 4.17, p < 0.05$).

Drug Results

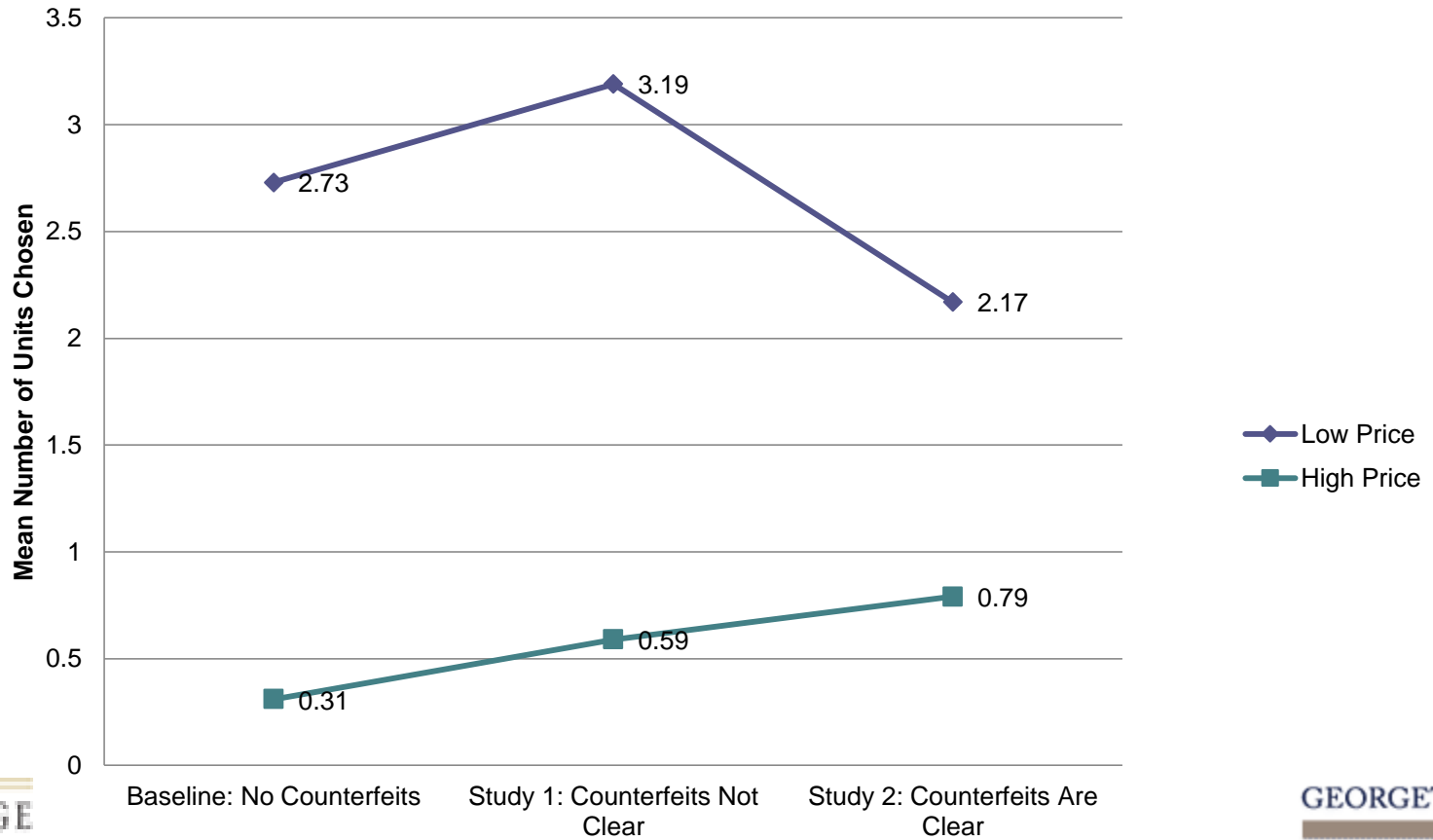
Average Number of Units of Drugs Chosen Per Study



*Significant interaction between the Baseline Study and Study 2 ($F(1, 109) = 3.824, p < 0.06$)

DVD Results

Average Number of DVDs Chosen Per Study



*Significant interaction between Study 1 and Study 2,
($F(1, 109) = 4.32, p < 0.05$)

Key findings

- When counterfeits can be clearly identified in the marketplace consumers are more likely to purchase the higher priced (and often legitimate) product
- When counterfeits are ambiguous in the market, consumers are more likely to purchase the lower priced product in favor of the higher priced product (both high and low risk goods)

Implications

- When consumers are unable to differentiate between counterfeit goods and legitimate goods they are less likely to take on the risk of paying more for a legitimate good (regardless of risk), it is in the manufacturer's best interest to differentiate their products.



Thank You

Questions/ Comments?

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