

Counterfeiting and Piracy. Measurement Issues of Economic Impact Estimates

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BACKGROUND

Product counterfeiting is a mounting concern affecting a growing number of industries. The term counterfeiting is used to describe a range of illicit activities associated with intellectual property right (IPR) infringement, and it can be defined as the copying of a product and/or package to deceive others into believing that the product and/or package are/is genuine—also called a knock off or fake. Recent alarming estimates about the pervasiveness and size of counterfeit trade as well as emerging links with international organized crime and terrorist organizations have made the issue a priority for governments. The US Food and Drug Administration (FDA), US Department of Homeland Security (DHS), and the US Government Accountability Office of the US Congress (GAO) have all recently focused on intellectual property rights and economically motivated adulteration, sparking a renewed discussion about quantifying the economic and public health impact of counterfeiting. As a result of this interest in quantifying product counterfeiting various agencies and scholars have attempted to measure magnitude of counterfeit trade and the damages caused by counterfeit products. The resulting estimates show a great deal of variation, but tend to center around figures proposed by three major reports.

PURPOSE AND HYPOTHESIS

We have hypothesized that most of the estimates are based on numbers reported in one of the three following documents: the Counterfeiting Intelligence Bureau (CIB) report in 1997 and again in 2007, the Organization for Economic Co-Operation and Development (OECD) report in 2007, or the Federal Bureau of Investigation (FBI) document in 2002. We have also hypothesized that the underlying estimates used as a reference in most research are based on approximations that either have very limited discussion of their derivation or even no stated methodological foundation.

In order to test our hypotheses we have reviewed the attempts to measure the economic impact of counterfeit trade and examined the methodologies of the underlying estimates used as a reference. This study will support future research on applicable risk assessment models from elsewhere as well as the development of a model for counterfeit products.

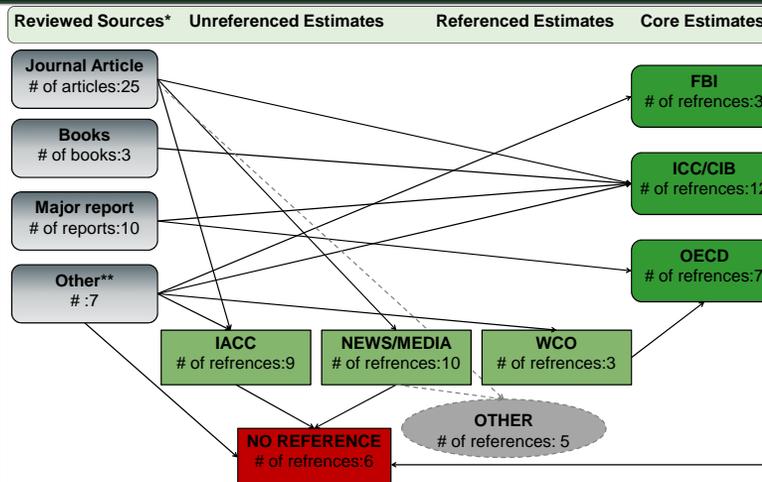


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METHODS

Product counterfeiting has recently emerged as a vital issue and, despite the interest from various fields, no single discipline has “claimed ownership” of an all-encompassing, holistic, strategic approach. Product counterfeiting is not a clearly delineated academic discipline, but rather an interdisciplinary research field. Accordingly, theory and research on product counterfeiting is fairly limited, with researchers from a wide variety of fields contributing to a body of knowledge dispersed across different disciplines. Consequently the largest portion of information regarding product counterfeiting originates not in scientific journals but largely in the press and government or industry reports. Nevertheless, as newspaper and journal reports tend to report on seizures and less substantial analysis of the phenomena we have focused our analysis on scientific journals. Correspondingly, we have structured our analysis to focus (primarily, but not exclusively) on journals in the fields of criminology, economics, management and law (fields that albeit have different perspectives on the phenomena have examined the scope of the problem), books and government reports. The first step of this research identified peer-review journal articles and other types of publications that have product counterfeiting at the center of their attention. This search was expanded by examining the references of these publications in order to identify additional sources. The search was performed using a modified version of the “Meta Search Engine” developed for the Anti-Counterfeiting and Product Protection Program at the School of Criminal Justice at Michigan State University. It searches simultaneously in multiple journal databases as well as in the most prevalent internet search engines, allowing the comparison and tracking of search results. The second step of the analysis consisted in the selection of those studies that address the issue of product counterfeiting and make use of at least one of the “core estimates” regarding the magnitude of counterfeit trade that are the focus of this paper. The final step consisted of a content analysis to establish whether those authors used the estimates to scope the overall issue or as a basis for their research or hypothesis and the tracking of the estimates referenced back to their original sources (where possible).

SOURCES OF COUNTERFEITING ESTIMATES



*N=45; **denotes websites, conference presentations & other types of reports

RESULTS

This research reviewed and evaluated the methodologies used to measure the economic impact of the product counterfeit trade. The study is based on the review and analysis of 45 sources: scholarly publications from various fields, governmental, nongovernmental and research organization reports and publications. The majority (56%) of the scholarly articles have been published in law reviews and business journals, which is not surprising given the fact that the field of criminology and criminal justice has only recently started focusing on the problem of product counterfeiting. In the course of the investigation, three core references have been identified and most estimates reviewed in this study can be traced back to one of these three core references: CIB 1997, OECD 2007 and FBI 2002 – the fourth category is unreferenced statements. These three core references have achieved mythological stature due to the fact that their direct statements regarding the magnitude of counterfeit trade have been regularly used in all the publications selected for this analysis, regardless of the rigor of their derivation:

- 5-7% of world trade consists of counterfeit goods (CIB 1997; 2007)
- Up to USD 200 billion of international trade could have been in counterfeit or pirated products in 2005 (OECD 2007)
- Counterfeiting and piracy cost the U.S. economy between \$200 billion and \$250 billion per year (FBI, 2002).

 We have found the estimates to be based on anecdotal evidence, expert opinion, except for the OECD report which is based on the best methods possible, albeit repeatedly defined as “educated guesses” by the OECD itself. The research also determined that in the reviewed scholarly publications the estimate of the impact of counterfeiting was used as a framing, or scale reference and not used in any core modeling or assumptions for their overall research. Thus, the approximations of the estimates of the economic impact did not reduce the validity of those articles.

CONCLUSIONS

This research is a starting point and not a definitive review of every mention of an estimate of the impact of counterfeiting and piracy. It has determined that the estimates regarding the economic impact of counterfeiting and piracy are traced back mainly to three core references: Counterfeiting Intelligence Bureau (1997), OECD (2007), and the FBI (2002). The perpetual reiterating of the estimates has elevated them to mythological stature and the perception of these estimates as “common knowledge”. As a result, scholars employ these estimates as a yardstick in conducting their research, and often evaluate their measurements based on them. These are important findings which form the resource justification for a future research project to develop a rigorous, mathematically sound method to quantify the economic impact of counterfeiting and piracy. A caveat needs to be added for anyone attempting to develop a methodologically sound estimate. Any new method of estimating the economic impact of product counterfeiting and piracy faces the same challenges as the previous developers. One of the major challenges will be gaining acceptance of a rigorous methodology especially if the estimates vary greatly from the “common knowledge” estimates.