

Product Counterfeiting: Evidence-Based Lessons for the State of Michigan

A-CAPPP

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preface

Product counterfeiting represents a range of criminal activities associated with intellectual property rights infringement and focuses on material goods. Nearly any product, from pharmaceuticals and food to auto parts and electronics, can be counterfeited. Although the precise extent of product counterfeiting is not known, by most accounts the problem is substantially large and growing. What makes product counterfeiting particularly troublesome is its detrimental effects on public health and safety, jobs and tax bases, and corporate innovation and profitability. To date there has been no empirical examination of the risk Michigan faces from product counterfeiting.

To help policymakers better understand and respond to this problem, this paper introduces the topic of product counterfeiting and develops lessons based on a systematic examination of Michigan-based product counterfeit incidents as evident in open sources. This evidence-based assessment is meant to generate discussion about this crime in Michigan and potential steps for addressing it. Part of an internally reviewed series sponsored by the Michigan State University (MSU) Anti-Counterfeiting and Product Protection Program, this paper has not undergone formal peer review. For more information about this report, please contact Justin Heinonen at heinone4@msu.edu.

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About A-CAPPP

The Anti-Counterfeiting and Product Protection Program (A-CAPPP) at Michigan State University is the first and preeminent academic body focusing upon the complex global issues of anti-counterfeiting and product protection of all products, across all industries, in all markets. The A-CAPPP serves as a substantive and interdisciplinary research, training, education, and outreach program engaged as a trusted partner and organizational home for intersectoral collaborations with industry, government, and other stakeholders concerned with anti-counterfeiting and product protection strategies. The A-CAPPP provides scholarly, analytical, conceptual, and scientific leadership in combating these crimes that damage public health and safety, businesses and economies, the environment, and national security. The A-CAPPP portfolio of high-impact research projects defines the dialogue in academic, corporate, and policy circles in areas such as risk, standards, and governance; scale and externalities; consumers; perpetrators; prevention and enforcement; and processes of anti-counterfeiting and product protection. The A-CAPPP provides training and technical assistance, learning opportunities, and consultations, and facilitates public/private organizational and collaborative interdisciplinary programs. The A-CAPPP focuses on consumer packaged products in a variety of industries and sectors including, but not limited to, pharmaceutical, healthcare, food, beverage, automobile, and consumer electronics. For more information and to discuss possible opportunities for collaboration, please contact Jeremy Wilson, Director of the A-CAPPP, at 517,432,2204 or jwilson@msu.edu, or visit www.a-cappp.msu.edu.

PRODUCT COUNTERFEITING

Product counterfeiting encompasses a range of illicit activities linked to the intellectual-property (IP) rights infringement of "material goods,"¹ and thus involves "fake goods."² The variety of counterfeited products is diverse and expanding. Though consumers perceive "luxury goods" (e.g., jewelry, apparel, handbags) as a common target, it is estimated that these account for no more than five to ten percent of counterfeited products.³ In reality, counterfeiters produce numerous products, including pharmaceuticals, food and beverages, electronics, chemical goods, household products, children's toys, weapons, and tobacco products.⁴ Some analysts claim, "virtually no product line" is safe from counterfeiters⁵ nor too cheap to counterfeit.⁶

It is difficult, if not impossible, to estimate the costs of product counterfeiting. The origins and methods of frequently cited estimates are unclear or unreliable.⁷ Nevertheless, estimates over time point to a large and growing problem. In the early 1980s, estimates ranged from \$5 billion to \$30 billion,⁸ grew to \$60 billion by the late 1980s,⁹ were \$200 billion by the end of the 1990s,¹⁰ and now range from \$200 billion to \$600 billion.¹¹ Counterfeit goods, by some estimates, comprise five to seven percent of world trade.¹² Increases in related seizures and arrests also show the mounting scale of product counterfeiting.¹³



The impact of product counterfeiting is broad and far-reaching. First, product counterfeiting affects consumers. It results in the public having less diversity in product choice by decreasing incentives for industry innovation. More important, it poses considerable health and safety risks. One estimate suggests that about 700,000 deaths are linked to counterfeit anti-malaria and anti-tuberculosis drugs.¹⁴ Seemingly innocuous counterfeit goods pose similar dangers, including, for instance, counterfeit extension cords or batteries that catch fire.¹⁵

Second, product counterfeiting harms industry. Some obvious examples are lost revenue, market share and profits. The Motor and Equipment Manufacturers Association (MEMA) cited estimates suggesting that "counterfeiting costs the global motor vehicle parts industry \$12 billion a year and \$3 billion in the United States alone."¹⁶ Counterfeit pharmaceuticals are estimated to cost U.S. drug manufacturers \$39 billion annually.¹⁷ Companies also incur intangible costs, such as damages to brand value or reputation resulting from poor-quality counterfeits. The costs of product counterfeiting can also reduce incentives to innovate or develop new products.



Third, product counterfeiting strains government resources. Governments lose considerable tax revenue from the sale of counterfeit products. Some estimates suggest that New York City loses \$1 billion in taxes annually¹⁸ and Los Angeles more than \$450 million.¹⁹ Jobs lost from product counterfeiting could also impact governments by posing a detrimental effect on the economy.²⁰ At the same time, governments must allocate resources to combat product counterfeiting. In 2009, the U.S. Bureau of Justice Assistance awarded 10 grants

totaling more than \$2 million to support intellectual-property rights enforcement.²¹ The aftermath of anti-counterfeiting activities is also costly. Between 2007 and 2009, U.S. Customs and Border Protection spent nearly \$42 million to destroy counterfeit goods it had seized.²²

Emerging evidence that international organized criminals produce, distribute and sell counterfeit products is increasing concern about this problem.²³ The FBI and Interpol have publicly acknowledged this connection and Congress has included trademark counterfeiting under federal racketeering laws.²⁴

The U.S. Department of Justice identifies the smuggling of counterfeit goods as one the most pressing strategic threats posed by international organized criminals.²⁵ The European Commission²⁶ claims, "There are now few doubts regarding the implication of international criminal organisations in the worldwide trafficking of counterfeit and pirate goods." Related, increasing evidence also suggests that terrorist groups are increasingly involved in intellectual-property crime²⁷ and that they have used revenue from product counterfeiting to fund their operations.²⁸

In sum, product counterfeiting is a serious and expanding problem that harms consumers, industry, and governments. Its scope suggests the need to understand and respond to it at the national and international levels. Nevertheless, many of its aspects are identified at the local level. Therefore, state policymakers must also address product counterfeiting more locally by understanding the specific nature of the problem—the *risk*—in their state. To date, no research has examined the problem of product counterfeiting specific to the State of Michigan. To directly address this gap, we systematically identify and describe product counterfeiting incidents related to Michigan.

CONCEPTUAL FRAMEWORK

Our examination of product counterfeiting in Michigan is guided by the tenets of problem-solving,²⁹ the crime analysis triangle, and situational crime prevention. The problem-solving approach suggests that policymakers can address particular crime events if the characteristics and processes underlying them are understood. The crime analysis triangle identifies the elements that should be analyzed to increase this understanding. These elements include offenders, victims, crime places as well as the "controllers" who interact with and influence them (e.g., individuals who may encourage or discourage criminal or risky behavior, or those responsible for security of specific locations). Figure 1 illustrates how obtaining information about these elements can "fuel" the four steps of the problem-solving process. This may reveal intervention points for developing specific anti-counterfeiting strategy rooted in situational crime prevention. Such strategies could increase the risk and effort, reduce the rewards and provocations, and remove excuses (e.g., contending that the crime is victimless) associated with product counterfeiting. In sum, we attempted to collect data on product counterfeiting in Michigan as they relate to the crime analysis triangle.





Note: Image of problem-analysis triangle taken from www.popcenter.org

METHODOLOGICAL APPROACH

We obtained our data from open-source information on product counterfeiting incidents related to Michigan. In this research, we leverage a systematic process that we have already developed to create a national product-counterfeiting incident database, including all U.S.-related incidents between 2000 and 2008. We extracted from this database incidents of product counterfeiting related to Michigan but also modified our process to identify additional Michigan-related incidents. We describe below each stage of our process.

Identifying incidents

To create our national database, we first searched websites from various agencies (e.g., FBI, U.S. Customs and Border Protection, U.S. Food and Drug Administration, U.S. Immigration and Customs Enforcement, the U.S. Trade Representative) and industry organizations (e.g., the International Chamber of Commerce and Business Action to Stop Counterfeiting and Piracy, the Coalition Against Counterfeiting and Piracy, Business Software Alliance, the Pharmaceutical Security Institute) that monitor product counterfeiting. We scanned all reports, case studies, press releases, speeches, and any other documents related to product counterfeiting available at these websites. When possible, we also conducted keyword searches (e.g., "counterfeit" or "counterfeiting") at these websites. Finally, we conducted keyword searches on online databases (e.g., LexisNexis) to identify journal articles, books and court cases.

Using this process, we initially found and reviewed more than 3,100 sources from which we identified more than 800 product counterfeiting incidents from various states involving many types of products. From these, we identified 16 incidents that were related specifically to Michigan, including incidents in which

- Michigan residents participated in product counterfeiting activities in- or out-of-state
- Michigan-based residents or companies were victimized by product counterfeiting
- Illicit Michigan retail businesses (i.e., knowingly selling counterfeits) were raided
- Counterfeit products were discovered at legitimate retail businesses in Michigan
- Seizures occurred at non-retail Michigan locations (e.g., airports or border crossings)

To capture additional incidents related to Michigan, we conducted Michigan-specific keyword searches (e.g., "counterfeit Michigan" or "counterfeit Detroit") at various Internet search engines (e.g., Yahoo, Google, News Library, Bing). These searches yielded another 31 incidents, giving us altogether 47 incidents for this study. Unlike our national database, Michigan-related incidents included here could have occurred before 2000 or after 2008.

Searching Open-Sources



Next, we used two web-based meta-search engines we created to capture as much open-source information as possible for incidents we identified. We also used these engines to conduct Michigan-specific keyword searches mentioned above. We trained criminal-justice graduate students to conduct systematic open-source searches and record information relevant to each incident. Specifically, students identified keywords and phrases from the original description of each specific incident (e.g., offender and business names) and searched these simultaneously across seven "primary" web-engines grouped together and another 13 "secondary" web-engines grouped together. These searches uncovered various published open-source material,

including media accounts, government documents, court records, videos, blogs and online forums, books, watch-group reports, and scholarly accounts. Our students reviewed these materials and recorded all relevant information for each incident into a standard search file.

Coding Open-Source Information

Our final step was coding the open-source information found in each search file. We created multiple databases based on the crime analysis triangle: an incident database (which included information on controllers), an actor database (i.e., a database on known individuals or businesses involved), and a victim database. We also created a source database to tally the number and type of sources included in each search file. Initially, the incident database had 49 substantive variables, the actor database had 32, the source database had 9, and the victim database had 8.¹ Graduate students involved in prior steps received training for coding each database, and we instituted a series of quality checks to ensure the integrity of the coding process. We coded each database into Access and then converted the data into SPSS for analysis.

The open-source literature varied in how it discussed product counterfeiting incidents. In some cases, the illicit operation underlying a raid or seizure was covered in-depth and specific information was available for actors, victims and locations. For others, there was less, or less detailed, information available, with data for some variables missing (e.g., seizure size and location were known but there was no information about actors). Consequently, for some variables we report only known frequencies rather than percentages or proportions in which interpretation is based on a whole.

Data Sources

Like the information itself, the actual sources of information available for each incident varied considerably. "Zero" additional open-source documents were found for six incidents, meaning that no additional information was found beyond the original description from the incident identification step. More than one-third of incidents had four or fewer open-source documents. However, more information was available for other incidents: seven incidents had ten or more open-source documents, and one had 30. Overall, the average number of documents per incident was just under five. Table 1 shows the total number of documents found by type.²

Table 1. Total documents found by type across incidents (N=47)	
News/magazine articles	118
Online commentaries	31
Government reports	28
Other	24
Court documents	18
Scholarly documents	4
Books/book reviews	3
Total	226

INCIDENT CONTEXT

Several notable incidents of product counterfeiting are related to Michigan. Below we describe characteristic patterns for two common themes in counterfeiting, terrorism and organized crime, as well as of incidence in an industry of vital interest to Michigan, the automotive industry.³

¹ Additional variables were subsequently created using the original variables.

 $^{^2}$ In some cases, we identified two different incidents in a single search file. We coded these incidents separately in the event, suspect and victims databases. However, we counted the number and type of open-source documents just once because they sometimes had overlapping information.

³ Several sources were used to summarize these incidents, all of which are referenced in each incident's search file. To save space, we do not cite the references in-text here. We can provide full references upon request.

Product Counterfeiting and Terrorism

A federal indictment unsealed in 2006 charged a group of individuals based primarily in suburban Detroit for their role in a large-scale multi-million dollar criminal enterprise. This enterprise trafficked contraband cigarettes, counterfeit cigarette rolling papers, and counterfeit Viagra; produced counterfeit cigarette tax stamps; transported stolen property (e.g., infant formula and toilet paper); and undertook money laundering. One source reported that the organization was responsible for importing counterfeit cigarette rolling papers that alone had an estimated value of \$16 million. The Detroit Joint Terrorism Task Force (DJTTF) arrested several of the group members, which included at least eight Michigan residents. The operation, which spanned numerous states and countries (e.g., Canada, China, Brazil and Paraguay), was active for several years and generated millions of dollars in revenue. It allegedly gave portions of its revenues to Hezbollah, an Islamic terrorist organization based in Lebanon, specifically to support the families of suicide bombers, a cause identified as an "orphans of martyrs" program. In fact, two co-conspirators not charged in the 2006 indictment were already serving prison sentences for racketeering and providing material support to Hezbollah, among other charges. Other group members indicted in 2006 were convicted of or pled guilty to racketeering charges and were sentenced to prison (and will be deported after serving time) and ordered to pay restitution.



Product Counterfeiting and International Organized Crime

From 2001 to mid-2004, members of the "JAH Organization," a ring of West African merchants, engaged in a multi-million dollar conspiracy to launder proceeds generated from the sale of counterfeit goods (e.g., handbags and accessories) and pirated media. The counterfeit merchandise was sold directly to consumers at a New York City store operated by the network. The operation was discovered during a two-year investigation by the U.S. Postal Inspection Service. The investigation culminated in the arrest of 10 members of the JAH Organization, including one in Detroit. During the investigation, an informant successfully purchased counterfeit handbags from the store, and postal workers in Tennessee frequently delivered packages from the store (through which

CDs/DVDs were sometimes visible) to an address in Memphis. Hundreds of thousands of dollars generated from counterfeit sales in New York City were mailed to and laundered by coconspirators in Ohio and Michigan and then wired to electronics and clothing manufacturers in China, India, and Vietnam. In addition to the counterfeiting and piracy operation, Jacob Jah (the group's alleged ringleader) and his associates ran illicit money-transferring businesses from which they illegally wired tens of millions of dollars for "countless others around the country." Reports indicate that the organization also produced forged identification documents for illegal immigrants. Altogether, seven group members, including Jacob Jah, pleaded guilty to conspiracy to conduct an unlicensed money-transmitting business. Jah also pleaded guilty to trafficking false identification documents. The three other arrestees each pleaded guilty to or were found guilty of different charges (e.g., money laundering, conspiracy to traffic counterfeit goods and conspiracy to criminally infringe copyrights).

Product Counterfeiting and the Automotive Industry



The automobile industry is important to Michigan residents and the State economy. Several recent incidents demonstrate how product counterfeiters have targeted this industry. A wholesale auto-parts dealer from New York was arrested twice in one year for selling counterfeit Ford Motor Company parts. The products were all packaged, labeled and distributed as authentic manufacturer-quality replacement parts and supplied to taxi and limousine The estimated value of these parts was about fleets. \$700,000 in the first seizure and more than \$1 million in the second. Both the owner of the business and several accomplices were arrested and charged with trademark counterfeiting in varying degrees (punishable by up to 15 vears in prison). Following his earlier arrest, the owner moved his business to a new location around the corner from the original location. The operation was discovered when undercover investigators purchased branded tail lights from the new store which were later examined by Ford investigators and determined to be counterfeit. Subsequently, the District Attorney's NYPD detective squad executed a search warrant at the business and

recovered more than \$200,000 in cash and four truckloads of various counterfeit Ford parts (e.g., intake manifolds, sway bars, brake pads/rotors, fuel pumps, water pumps, and mirrors). Another incident of product counterfeiting that involved a Michigan-based auto maker occurred in 2001 when General Motors (GM) raided a facility producing counterfeit glass windshields. The windshields were exported throughout the world but did not contain shatterproof safety elements. Finally, GM also took legal action for trademark counterfeiting against a South Carolina company that it claimed sold counterfeit vehicle foot pedals. The courts determined that the company had violated GM's trademark rights and ordered it to cease using GM's marks and pay GM 75 percent of its gross sales of the infringing products.

In addition to these detailed accounts, below we briefly describe several other notable incidents which provide additional context for product counterfeiting related to Michigan.

- In February 2005 when Detroit hosted Super Bowl XL, U.S. Immigration and Customs Enforcement (ICE), in partnership with the National Intellectual Rights Coordination Center, the National Football League, and federal, state and local law enforcement agencies, seized nearly 43,000 pieces of counterfeit merchandise with an estimated value of \$530,000.
- Following an investigation by U.S. ICE, a retired airlines employee pleaded guilty to smuggling counterfeit goods into the United States. In 2006, the Chelsea, Michigan resident returned to Detroit on a flight originating in China and was found to possess 140 pirated DVDs and 230 different counterfeit products (e.g., watches, purses, pens, jewelry, and golf equipment).
- In 2003, a Michigan resident received a prescription refill for Lipitor by mail and, after examining the tablets, discovered that they would not "crack" in half as they should. Subsequently, the tablets were returned to the original manufacturer (Pfizer) for testing and were determined to be counterfeit.
- In 2007, counterfeit Trojan Magnum condoms were discovered in New York City, Baltimore and Detroit. The counterfeits had packaging almost identical to that for the authentic product but were slightly smaller in size and had a "fruity" scent.

- In 2007, U.S. Customs and Border Protection port officers in Detroit seized more than 9,000 counterfeit purses. The purses were shipped from China to a local Detroit business through the Port of Detroit. An unidentified suspect was fined nearly \$3 million.
- In 2007, a Lansing man was charged with felony counterfeiting/imitating trademarks for selling counterfeit clothing at a University of Illinois sorority. He was accused of selling 500 to 2,000 items. Authorities seized clothing worth more than \$133,000 and more than \$13,000 in cash.



- In 2004, a Dallas-based company warned its consumers and dealers about counterfeit liquefied petroleum gas (LPG) tanks being sold in Ohio and southern Michigan. According to the company, an individual was applying counterfeit nameplates to "scrapped" tanks and reselling them to unknowing customers.
- In the late 1980s, the Nuclear Regulatory Commission discovered 65 counterfeit steam valve parts at Consumer Power Company's nuclear power plant near Kalamazoo.
- In 2010, agents with the North Carolina Secretary of State's Office and Durham County Alcoholic Beverage Control Law Enforcement seized millions of dollars worth of counterfeit goods at a liquidation sale in Durham. Among those arrested was a Michigan resident in possession of nearly 1,200 bottles of counterfeit perfume with a retail value of almost \$90,000. He was charged with criminal use of a counterfeit trademark and conspiracy to sell and deliver counterfeit goods.

THE NATURE OF INCIDENTS

Of the 47 Michigan-related incidents, 28 were related in some way to another state (or states) as well. On average, incidents involved just one category of counterfeit products. One incident involved four categories, including worn goods/apparel, jewelry, pirated DVDs and "other" products (e.g., pens and umbrellas).⁴ Table 2 shows that worn goods were involved in the greatest number of incidents, followed



by "other" goods (e.g., petroleum gas tanks, toys, tools, shoe polish, CD sleeves) and pharmaceutical medicines/hygiene products. 5

Table 2.	Number	of	incidents	per	category	of	counterfeit
product							

Worn goods/apparel	17
Other	12
Pharmaceuticals/hygiene	9
Auto parts	5
Software/DVDs/CDs	5
Electronics	4
Tobacco	4
Jewelry	3
Food/beverage	2

⁴ The broader categories contain a variety of specific items. For example, an incident could involve counterfeit hats, shirts, sunglasses and belts but these are counted together as just "worn goods/apparel."

⁵ As our focus is on counterfeit products, there are no incidents in which the only item involved is pirated software/DVDs/CDs. Incidents needed to include at least one of the other types of counterfeited products to be included in our database.

A known actor (an individual or business involved in the incident) was mentioned in 40 incidents. Over half of these incidents had just one known actor. The mean number of known actors per incident was about three.

For 10 incidents, it was known that an arrest(s) occurred in Michigan. We found evidence of at least one conviction in 11 incidents. At least one individual was sentenced to prison in six incidents. Monetary penalties (e.g., fines, restitution, damages) were handed out in eleven incidents. Civil action was pursued in seven incidents.

There was a known seizure value for 16 incidents, with a minimum of \$3,200 and a maximum of roughly \$3.4 million. The average seizure value was almost \$739,000 (the median was \$241,000).



Investigation length was known (or could be discerned approximately) for eight incidents, with a minimum of two weeks and a maximum of 30 months. The mean investigation length was almost 13 months. State and/or local authorities (e.g., a law enforcement agency or court) participated in some aspect of 21 incidents (e.g., arrest, seizure, investigation, prosecution). Federal authorities were involved in 29 incidents. There was a joint effort among state and/or local and federal authorities in about a quarter of incidents (12). It was reported that *just* state and/or local authorities were involved in nine incidents and *just* federal authorities in 17 incidents. Altogether, 15 incidents involved an authority located in Michigan (some involved three authorities). There was evidence that undercover operations were conducted in 11 incidents.

Two incidents, including the one discussed above, were allegedly linked to terrorism. Twelve incidents were international in scope.

THE NATURE OF ACTORS: INDIVIDUALS AND BUSINESSES

There were a total of 126 known actors across all 47 incidents. In all, 107 were individuals (11 unidentified by name) and 19 were businesses (2 unidentified by name). Of the individuals for which age was known at the time of the incident (N=51), the average was almost 39 years of age (the range was 18 to 85 years old). Of the individuals for whom sex was known, there were 84 males and nine females. Of the individuals for whom residence was known (N=67), almost half (31) were residents of Michigan. Of the 16 businesses involved for which location was known, 11 were in Michigan.

Of the 91 actors for which charge type was known, 54 were charged only with non-intellectual property (IP) crimes, 22 were charged with just IP crimes and 15 were charged with both IP and non-IP crimes.⁶ Of the 18 actors for which conviction type was known, 11 were convicted of only non-IP charges, four were convicted of just IP charges and three were convicted of both IP and non-IP charges.

Twenty-five actors reportedly received some form of monetary penalty and the amount was known for 24 of them. These penalties ranged from \$150 to almost \$3 million and averaged almost \$290,000. For the 11 suspects for whom incarceration length was reported, prison sentences ranged from 6 to 60 months and averaged about 25 months. Three suspects were sentenced to community service.

⁶ We counted racketeering charges (e.g., RICO—Racketeer Influenced and Corrupt Organizations Act) as non-IP charges, which can encompass product counterfeiting activities.

THE NATURE OF VICTIMS

Open-source information for victims is rare. We had specific information for only one victim. The victim was a 50-year old Michigan man who discovered he had purchased counterfeit prescription medicine (Lipitor).

POLICY IMPLICATIONS

Our assessment focused on identifying and describing incidents of product counterfeiting related to Michigan. While it does not capture information on all incidents—many go undetected and are not discussed in the open-source literature—it helps establish a baseline of known facts. While limitations in available data prevent us from drawing extensive conclusions, the data do allow us to develop several key policy lessons.

Throughout the course of our analysis, we identified only 47 incidents of product counterfeiting related to Michigan. Relative to other forms of crime, such as property and violent crime, this number is obviously small. Policymakers must therefore assess their response to this crime relative to others. Marginal investments in one priority necessarily limit that which can be made elsewhere. That said, there are still several reasons to consider policy responses to the problem of product counterfeiting. First, our identification of incidents is a minimum baseline number. It is likely that the actual prevalence is higher. Second, each incident can have multiple victims and actors and involve substantial amounts of counterfeits not identified specifically in the open-source literature (and thus not analyzed here). Third, the negative effects of product counterfeiting are multi-dimensional and can harm consumers, industry, government resources, jobs and the economy.

Our analysis suggests several inter-related State-level policy lessons:

Review Existing State-Level Intellectual Property Rights Legislation



Where such data were available, our analysis revealed that almost 60 percent of actors were *not* charged with an intellectual property offense (and less than 40 percent of known convictions were for an intellectual property offense). We do not know whether this is due to the unfamiliarity of law enforcement and prosecutors with intellectual-property legislation, the inability of existing legislation to effectively "fit the crime," perceptions or experience of how to best form cases with such circumstances, or some other reason. Further

examination of how these incidents are processed (and why they are processed in that manner) should be coupled with a review of the appropriateness of existing legislation to identify if and how legislation could better address this crime. Our initial examination suggests the review should not just consider the role of individuals but also that of businesses in product counterfeiting. Nearly one in five known actors in our cases was a business and the majority of those businesses were located in Michigan.

Focus Training on Counterfeit Product Identification and Investigation

Policymakers can further examine the incident identification and investigation experiences to identify ways to make these processes more efficient. Our data showed that state and/or local authorities are involved in incidents nearly as frequently as federal authorities. Likewise, the average investigation took over a year, suggesting considerable resources are invested in each case. This in part may be due to the complexity of cases: nearly two-thirds required efforts by Federal authorities and the typical incident involved three actors and a seizure value well over \$700,000. The assessment of law enforcement records, which policymakers could facilitate, may result in concrete, trainable evidence-based strategies for improving the ability of law enforcement to identify product counterfeit incidents and to effectively investigate and establish cases for them at the least cost. As agencies struggle with resources and staffing, it is particularly important to discover through case examination opportunities how to prioritize information and streamline processes.

Facilitate Interagency Coordination

Over half of the incidents we discovered were in some way connected to another State. About one in four was international in scope and a dozen involved joint efforts among state and/or local and

federal authorities. This suggests an effective response to this crime must involve the coordination of authorities beyond the State of Michigan. While obviously more complicated, the nature of crime today in many ways requires that such collaboration be more routine. Policymakers can consider ways to best promote coordination, be it through resources, training, promulgation of promising practices, or some other mechanism. In fact, it may be possible to leverage existing task forces, intelligence fusion centers, inter-agency agreements, and other resources already in place address terrorism, human trafficking, to organized crime, and other complex crimes.



Assess Awareness and Needs of Local and State Police

Our research revealed the existence and complexity of product counterfeiting incidents related to Michigan, but it did not directly evaluate the extent to which Michigan law enforcement agencies are aware of the crime or what they need to better combat it. (Our anecdotal experience suggests that many agencies are unfamiliar with and do not prioritize product counterfeiting.) Like with other crimes (e.g., human trafficking), improved awareness about what constitutes product counterfeiting and its negative effects may increase the identification of incidents. In formulating a response to product counterfeiting, policymakers would benefit from better understanding the extent to which Michigan law enforcement is aware of the problem and what additional resources, if any, law-enforcement personnel may need to bolster their response to the crime.

references

Abbott, G.W. and Sporn, L.S. (2002), Trademark Counterfeiting. New York: Aspen Publishers.

- Albanese, J.S. (2011), *Transnational Crime and the 21st Century: Criminal Enterprises, Corruption, and Opportunity.* New York: Oxford University Press.
- Amendolara, L.D. (2005), 'Knocking Out Knock-Offs: Effectuating the Criminalization of Trafficking in Counterfeit Goods,' Fordham Intellectual Property, Media and Entertainment Law Journal, 15: 789-836.
- Bate, R. (2008), *Making a Killing: The Deadly Implications of the Counterfeit Drug Trade*. Washington, D.C.: AEI.
- Bjelopera, J.P. and Finklea, K.M. (2010), 'Organized Crime: An Evolving Challenge for U.S. Law Enforcement,' Washington, D.C.: Congressional Research Service.
- Chaudry, P. and Zimmerman, A. (2009), *The Economics of Counterfeit Trade: Governments, Pirates and Intellectual Property Rights.* Heidelberg: Springer-Verlag.
- Chow, D.C.K. (2003), 'Organized Crime, Local Protectionism, and the Trade in Counterfeit Goods in China,' *China Economic Review*, 14: 473–484.
- Clarke, R.V., and Eck, J.E. (2005). *Crime analysis for problem solvers in 60 small steps.* Center for Problem Oriented Policing.
- deKieffer, D. (2006), 'Trojan Drugs: Counterfeit and Mislabeled Pharmaceuticals in the Legitimate Market,' *American Journal of Law and Medicine*, 32: 325-349.
- deKieffer, D. (2007), 'Trade Diversion as a Fund Raising and Money Laundering Technique of Terrorist Organizations,' in T.J. Biersteker and S.E. Eckert, eds., *Countering the Financing of Terrorism*, 150–173. New York: Routledge.
- European Commission (2011), 'A Serious Problem for Everyone,' European Commission Taxation and Customs Union, available at: http://ec.europa.eu/taxation_customs/customs/customs_controls/ counterfeit_piracy/combating/index_en.htm.
- Freeman, G., Sidhu, N.D. and Montoya, M. (2007), 'A False Bargain: The Los Angeles County Economic Consequences of Counterfeit Products,' Los Angeles, CA: Los Angeles County Economic Development Corporation, available at: http://www.oit.umd.edu/PlayFair/materials/2007_piracy-study_LA.pdf.
- Harper, J. and Gellie, B. (2006), *Counterfeit Medicines: Survey Report*. Strasbourg: Council of Europe Publications.
- Harris, J., Stevens, P. and Morris, J. (2009), *Keeping it Real: Combating the Spread of Fake Drugs in Poor Countries.* London: International Policy Network.
- Hsu, S.S. (2009), 'Hezbollah Official Indicted on Weapons Charge,' *The Washington Post*, 25 November, available at: http://www.washingtonpost.com/wp-dyn/content/article/2009/11/24/AR2009112403448.html.

- IACC (2005), 'The Negative Consequences of International Intellectual Property Theft: Economic Harm, Threats to the Public Health and Safety, and Links to Organized Crime and Terrorist Organisations,' Washington, D.C.: International Anti Counterfeiting Coalition, available at: http://counterfeiting.unicri.it/docs/International%20AntiCounterfeiting%20Coalition.White%2 OPaper.pdf.
- ICC Counterfeiting Intelligence Bureau (1997), 'Countering Counterfeiting: A Guide to Protecting and Enforcing Intellectual Property Rights,' UK: International Chamber of Commerce (ICC).
- Interpol (2007). Intellectual Property Crimes: Trademark Counterfeiting & Copyright Piracy. Lyon, France: INTERPOL Intellectual Property Crimes Action Group.
- ISO (2010), 'Fraud Countermeasures and Controls,' International Organization for Standardization (Technical Committee 247), available at: http://www.iso.org/iso/standards_development/technical_committees/other_bodies/iso_technical_committee.htm?commid=580925.
- Kelly, R. (2005), 'Illicit Trafficking: A Reference Handbook,' Santa Barbara, CA: ABC-CLIO.
- Liang, B.A. (2006), 'Fade to Black: Importation and Counterfeit Drugs,' American Journal of Law & Medicine, 32: 279-323.
- MEMA (2009), 'Understanding the Flow of Counterfeit and Gray Market Goods Through the U.S. Automotive and Commercial Vehicle Parts Marketplace,' The Brand Protection Council of the Motor & Equipment Manufacturers Association, available at: http://www.iccwbo.org/ uploadedFiles/BASCAP/Pages/Understanding%20the%20Flow%20of%20Counterfeit%20and%2 OGray%20Market%20Goods%20though%20the%20U.S.%20Automotive%20and%20Commercia l%20Vehicle%20Parts%20Marketplace.pdf.
- Naim, M. (2005), *Illicit: How Smugglers, Traffickers, and Copycats are Hijacking the Global Economy.* Doubleday: New York.
- Nasheri, H. (2005), 'Addressing the Global Scope of Intellectual Property Crimes and Policy Initiatives,' *Trends in Organized Crime*, 8: 79–108.
- Newall, M. (2010), 'Road to Terrorism Arrests Began at Deptford Mall,' *The_Philadelphia Inquirer*, 25 January, available at: http://articles.philly.com/2010-01-25/news/25210171_1_hezbollah-fbi-informant-indictment.
- OECD (2007), 'The Economic Impact of Counterfeiting and Piracy,' Organisation for Economic Co-Operation and Development.
- Office of the Comptroller (2004), 'Bootleg Billions: The Impact of the Counterfeit GoodsTrade on New York City,' New York: City of New York, Office of the Comptroller, available at: http://www.comptroller.nyc.gov/bureaus/bud/04reports/Bootleg-Billions.pdf.
- Phillips, T. (2005), Knockoff: The Deadly Trade in Counterfeit Goods: The True Story of the World's Fastest Growing Crime Wave. London: Kogan Page.
- PSI (2011), 'Arrest data,' The Pharmaceutical Security Institute, available at: http://www.psi-inc.org/ arrestData.cfm.
- Spink, J.W., and Fejes, Z. (2011), 'Counterfeiting and Piracy: Measurement Issues of Economic Impact Estimates,' presented at the 2011 National Intellectual Property Rights Center Symposium, Washington, D.C., available at: http://www.iprcenter.gov/reports/papers-on-intellectualproperty-theft/Counerfeiting%20and%20Piracy.pdf/view.
- Stern, P. (1985), 'Foreign Product Counterfeiting,' Vital Speeches of the Day, 51: 674-677.

- USCBP (2002). U.S. Customs Announces International Counterfeit Case Involving Caterpillar Heavy Equipment, available at http://www.cbp.gov/xp/cgov/newsroom/news_releases/archives/legacy/2002/52002/05292002.xml.
- USCPSC (2006), 'Pride Products Recalls Counterfeit Extension Cords Due to Fire Hazard,' Washington, D.C.: U.S. Consumer Product Safety Commission.
- USCPSC (2007), 'Sportsman's Warehouse Recalls Flashlights; Counterfeit Batteries can Overheat, Posing a Fire Fazard,' Washington, D.C.: U.S. Consumer Product Safety Commission.
- USDOC (2011), 'Intellectual Property, What is it?,' U.S. Department of Commerce, cited November 2, 2011, available at: http://www.stopfakes.gov/sf_what.asp.
- USDOJ (2008), 'Defendant Sentenced to 48 Months in Prison for Trafficking in More than \$400,000 Worth of Counterfeit Pharmaceuticals,' Washington, D.C.: U.S. Department of Justice, available at: http://www.justice.gov/criminal/cybercrime/dogmoshSent.pdf.
- USGAO (2010), 'Intellectual Property: Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods,' Washington, D.C.: U.S. General Accountability Office.
- USGAO (2010b), 'Intellectual Property: Agencies Progress in Implementing Recent Legislation, but Enhancements Could Improve Future Plans,' Washington, D.C.: U.S. General Accountability Office.
- U.S. House of Representatives (1997), 'The Threat from International Organized Crime and Global Terrorism,' Hearing Before the Committee of International Relations, House of Representatives, One Hundred Fifth Congress, First Session, 1 October.
- USICE (2009), 'Indictment Charges 4 with Conspiracy to Support Hezbollah—6 Others Charged with Related Crimes,' Philadelphia: U.S. Immigration and Customs Enforcement, available at: http://www.ice.gov/news/releases/0911/091124philadelphia.htm.
- USITC (1984), 'The Effects of Foreign Product Counterfeiting on US Industry,' USITC pub. 1479, out of print, Washington, D.C.: U.S. International Trade Commission.
- USITC (1988), 'Foreign Protection of Intellectual Property Rights and the Effect on US Industry and Trade,' USITC pub. 2065, Washington, D.C.: U.S. International Trade Commission.

endnotes

1 OECD, 2007; ISO, 2011 ² USDOC, 2011 ³ Phillips, 2005 ⁴ Nasheri, 2005; Albanese, 2011 ⁵ Nasheri, 2005, p. 88 ⁶ Naim, 2005; deKieffer, 2006 ⁷ USGAO, 2010; Spink and Fejes, 2011 ⁸ See Abbott and Sporn, 2002; Stern, 1985 ⁹ USITC, 1984; 1988 ¹⁰ IACC, 2005 ¹¹ See Chaudry and Zimmerman, 2009; OECD, 2007; USGAO, 2010 ¹² ICC Counterfeiting Intelligence Bureau, 1997 ¹³ See Amendolara, 2005; Bjelopera and Finklea, 2010; PSI, 2011 14 Harris et al. 2009 15 USCPSC, 2006; 2007 ¹⁶ See MEMA, 2009, p. 3 ¹⁷ Bate, 2008 ¹⁸ Office of the Comptroller, 2004 ¹⁹ Freeman *et al.* 2007 ²⁰ See USCBP. 2002 ²¹ USGAO, 2010b ²² USGAO, 2010 ²³ Liang, 2006; Chow, 2003; Kelly, 2005; Williams, 2002; Phillips, 2005; Albanese, 2011 ²⁴ See IACC, 2005; Interpol, 2007 ²⁵ USDOJ, 2008 ²⁶ European Commission, 2011 ²⁷ OECD. 2007 ²⁸ Harper and Gellie, 2006; U.S. House of Representatives, 1997; Naim, 2005; Hsu, 2009; Newall, 2010; deKieffer, 2007; USICE, 2009; European Commission, 2011

²⁹ For a full review of this approach see Clarke and Eck, 2005.