AN ECONOMIC ANALYSIS OF
THE COMMON CONTROL EXCEPTION
TO GRAY MARKET EXCLUSION

SHUBHA GHOSH*

1. INTRODUCTION

Normative legal systems have struggled to define international property rights. This struggle has been particularly intense in the area of intellectual property because the level of protection afforded to trademarked goods varies tremendously from nation to nation.\(^1\) Thus, international trade often leads to infringement of domestic property rights. The tension between the global mobility of goods and intellectual property rights creates significant economic and legal trade-offs. This Article will analyze these tensions in the context of gray market goods (i.e., parallel imports), utilizing U.S. intellectual property law as the framework for the analysis.

The gray market arises when goods bearing identical trademarks are sold at different prices in two different geographical regions.\(^2\) Because of the price difference, there are incentives for an arbitrageur to buy goods in the market with the lower price and resell those goods in other markets at higher prices (assuming transportation costs are not

\*B.A. (1984), Amherst College; M.A., Ph.D (Economics, 1988), University of Michigan; J.D. (1994), Stanford Law School. The author would like to thank John Barton, Paul Goldstein, A. Mitchell Polinsky, and participants in the Stanford Law and Economics "Free Lunch" Series and the George Mason Law School Faculty Seminar Series for helpful comments on previous drafts of this Article. Any errors of legal or economic substance are of course my own.


prohibitive). When faced with competition from gray marketeers, owners of the trademark and distributors of the product in the high-priced region have obvious economic incentives to prohibit the entry of gray market goods. Since trademark law protects the use of a trademark on a particular product in a specific geographic area, trademark owners argue that the use of the trademark on the gray market goods is unauthorized and therefore infringes their proprietary rights. Distributors of the product argue that the goods are sold through unauthorized distribution channels and that gray marketeers unjustly benefit from the advertising provided by authorized distributors and the goodwill developed by trademark owners and distributors. Finally, consumer advocates are divided on the issue; some argue that gray market goods are inferior because they are not sold with the same warranties and quality assurances as authorized goods. Conversely, other consumer advocates argue (with the support of gray marketeers) that consumers benefit from lower prices and that the market is improved by gray market competition.

This Article assesses each of these arguments from an economic perspective and concludes that the most efficient result is to permit gray market goods that have alternative labels. Such a result allows consumers to benefit from lower

---

3 Numerous authorities have presented this argument regarding the economic effects of gray markets on goodwill. See, e.g., Paul Lansing & Joseph Gabriella, Clarifying Gray Market Gray Areas, 31 AM. BUS. L.J. 313, 315-16 (1993) (discussing the effects of gray markets on goodwill).


6 See, e.g., Harry Rubin, Destined to Remain Grey: The Eternal Recurrence of Parallel Imports, 26 INT'L LAW. 597, 618-22 (1992) (arguing that consumers benefit from gray markets).

7 The recommendation of alternative labels has been made by several other authorities. See Lipner, supra note 2, at 178-79. This Article goes beyond advocating for alternative labels and presents an economic analysis that examines the potential gains from gray marketing and compares various policy responses. But see Higgins & Rubin, supra note 5, 211-30 (presenting an economic model of gray markets that focuses on the status
prices while protecting the value of the trademark and brand advertising, a major concern of trademark owners and distributors.

1.1. Introduction to Gray Markets

Current economic discussion of gray marketing has focused solely on the economic losses associated with parallel imports. For example, one recent study estimated that in 1987, lost sales from parallel imports amounted to $10 billion, or roughly 3% of total U.S. non-petroleum imports in 1987.\(^8\) Industry breakdowns show that estimated lost net sales in the photographic equipment industry were roughly $48 million in 1982 and $58 million in 1983.\(^9\) For cosmetics, the corresponding figures were $46 million and $67 million; for watches and clocks, $22 million and $32 million respectively.\(^10\) A similar study of the semiconductor industry reports that “the gray market makes up about $5 billion of the $85 billion worldwide semiconductor market.”\(^11\) There are, however, no estimates for gains to consumers from gray marketing and little information on how trademark returns are affected. Given current research, it is difficult to compare the benefits from gray marketing with the economic and litigation costs incurred in preventing gray marketing.\(^12\)

For example, consider Lansing and Gabriella’s illustration of the gray market phenomenon.\(^13\) They utilize the aspect of trademarks).


\(^10\) See id.


\(^13\) See Lansing & Gabriella, *supra* note 3, at 316.
Unauthorized sale of IBM personal computers ("PCs") as an illustration of goods which are often sold on the gray market, often by means of mail order or unauthorized retail distributors. These gray market PCs usually are sold without the warranties and quality assurances provided by authorized distributors. When customers complain about their gray market PC and demand that the product be repaired, IBM "refers such customers to shops that perform both in and out-of-warranty repairs" in order to maintain its goodwill. In this way, gray marketeers free ride on IBM's goodwill and service while customers benefit from lower PC prices.

Nevertheless, gray markets also can provide a needed arbitrage function and serve to integrate globally separated markets. In the semiconductor industry, for example, industry insiders report that "independents are taking on a far more respectable role. They are filling a need every bit as legitimate and necessary as the traders who work the pits on the Chicago Board of Trade." NECX, a semiconductor independent in Peabody, Massachusetts, provides illustration. By operating in the gray market, NECX is able to "do a better job balancing supply and demand than franchised distributors... The reason: It has the most current and complete information about who's paying what price for what component—gleaned from more than 4,000 incoming phone calls and faxes per day."

Assessing the impact of gray marketing requires understanding the causes of the gray market. The threshold question is: Why do prices differ by region? Advocates of the gray market argue that international price differences reflect monopoly power in certain markets and emphasize the role of gray marketeers in breaking down prohibitive and possibly illegal barriers to trade. Furthermore, even if the restrictions are not based on market power, advocates of gray marketing contend that gray marketeers provide an arbitrage

---

14 See id.

15 Id. (footnote omitted).

16 Scheier, supra note 11, at A1.

17 Id.

18 See, e.g., Kenneth W. Dam, Trademarks, Price Discrimination and the Bureau of Customs, 7 J.L. & ECON. 45, 53-60 (1964) (arguing that gray markets promote free trade).
function, ensuring global equalization of prices and harmonization of markets. Even if it does not arise in response to market power, they argue, gray marketing provides the economically beneficial function of ensuring that goods are distributed in an efficient manner to parties who are willing to pay the most for them.

Opponents of gray marketing interpret the same economic data in a different way. The international differences in prices reflect not an attempt to segment the market unnaturally, but rather they arise from differences in tastes, technologies, and government regulations. More importantly, to the extent that territorial division of the global market leads to pricing above marginal cost in each market, consumers benefit from better services and assurances of quality provided by firms investing in warranties and trademarks. The excess profits that arise from territorial division and restricted competition are not siphoned off as rents but are used to improve the quality of goods purchased by consumers. Gray marketing, however, reduces the size of such rents by providing price competition and consequently erodes the ability of manufacturers and distributors to provide better quality products.

Both proponents and opponents of gray marketing ignore the costs associated with permitting or combating such markets. Advocates of gray marketing also ignore the transportation costs associated with cross-hauling goods to another geographic market. While unprotected gray

---

19 LIPNER, supra note 2, at 8.
20 Peterman, supra note 12; Lansing & Gabriella, supra note 3.
21 Liebeler, supra note 4, at 755; LIPNER, supra note 2, at 2. See also Higgins and Rubin, supra note 5 (estab.
marketing will lead to lower prices in the high-price market, prices in the market from which gray market goods are purchased should rise. Therefore, consumers in the foreign source market have a competing interest to reduce gray marketing just as consumers in the receiving market have an incentive to promote it. Advocates of gray marketing generally fail to address the question of how to balance these two conflicting interests.

Similarly, opponents of gray marketing do not consider the litigation and administrative costs of curtailing the gray market. These require funding not only a customs service to implement border controls against offending goods, but also a court system to decide challenges brought against gray market prohibitions. The latter cost is particularly troublesome because it is often impossible to prosecute the gray marketeer herself. In most cases, the gray marketeer sells restricted goods to an unauthorized outlet such as K Mart or Sam's Wholesale Club. Authorized distributors and trademark owners are therefore forced to litigate against a party that is several steps removed from the original distribution and sale of the goods in an overseas market. The unanswered question for opponents of gray marketing is whether the added bureaucratic costs needed to prohibit gray market goods is offset by consumer gains in quality and services.

U.S. companies have sought to combat gray markets in three ways: (1) through administrative actions against the Customs Service; (2) through administrative actions before the International Trade Commission ("ITC"); or (3) through civil actions against unauthorized domestic retailers. For reasons to be discussed in greater detail below, actions before the ITC have been unsuccessful. Actions against the Customs Service have been based on the theory that the Service did not fulfill

---

24 Domestic trademark owners have brought contract claims against gray marketeers in only two reported cases: Railway Express Agency v. Super Scale Models, Ltd., 934 F.2d 135 (7th Cir. 1991); DEP Corp., v. Interstate Cigar Co., 622 F.2d 621 (2d Cir. 1980). In both cases, the theory was one of tortious interference with the contractual limitation of territorial division. In both cases, the plaintiff lost because of a failure to show contract damages, which was difficult because the domestic owner had extracted its rents through the licensing arrangement with the foreign distributor. See Rubin, supra note 6, at 610 (discussing Railway Express Agency and DEP Corp.).
its statutory obligations under § 526 of the Tariff Act to prohibit the entry of goods that bore a U.S. trademark. Actions against the Customs Service are currently judged according to the standards enunciated in *K Mart Corp., v. Cartier, Inc.*, a 1988 U.S. Supreme Court case that based the legality of gray marketing on the relationship between the domestic company claiming infringement and the foreign company from which the gray market goods were purchased. Specifically, the Court held that the Customs Service can allow gray market goods into the country if the companies involved are in a parent-subsidiary relationship. If the two companies are in a licensor-licensee relationship, however, the Customs Service must restrict the gray market goods from entering into the country. Therefore, the legality of gray marketing under § 526, according to this formulation, depends exclusively on the relationship between the U.S. trademark owner and the foreign entity from which the gray market goods are purchased.

The corporate relationship test applies only to legal claims brought against the Customs Service. Since the *K Mart* decision, U.S. companies that are parents or subsidiaries of foreign companies have attempted to expand other doctrines in order to obtain protection from gray marketeers. Their three principal sources of protection have been §§ 42 and 43 of the Lanham Act, which prohibit the importation of trademarked goods; § 602 of the Copyright Act, which prohibits the importation of copyrighted works; and state labelling laws of New York State and the State of California, both of which impose disclosure requirements on gray market goods. Although these statutes provide U.S. companies with causes of action against unauthorized retailers, such claims have met with mixed success. While this doctrine seems to protect companies from sales of gray market goods that are materially different from their domestic counterparts, its boundaries are nevertheless unclear.

Therefore, the most concrete legal protection against gray

---

marketeers currently hinges on the corporate form of the U.S. and foreign companies. According to *K Mart*, the greatest protection afforded to companies is in a licensor-licensee relationship (type one cases in which the U.S. firm licenses the mark from the foreign firm, and type three cases, in which the U.S. firm is the licensor). No protection, however, is provided to companies in parent-subsidiary relationships which must rely on trademark and copyright theories to enjoin unauthorized retailers and to obtain damages from them.

This focus on corporate relationships raises several important legal issues. The first is the relevance of a business relation between the foreign and U.S. companies in establishing the legality of gray marketing. Logically, this relationship should be irrelevant, since foreign distributors never actively engage in gray marketing. Instead, gray marketeers arise in the after-market, reselling goods originally distributed by foreign distributors. The Court's distinction reflects a concern that multinational enterprises could otherwise recover twice for the sale of the same goods: once when the foreign subsidiary or parent sells the goods and again when the U.S. parent or subsidiary enjoins the gray marketeer from reselling these products in the U.S. market.  

This is no less of an economic concern in the context of type three cases. In establishing a licensing fee for its trademark, a U.S. company includes the expected profit of the licensee in the foreign market. Allowing the U.S. company to subsequently enjoin gray marketeers also results in a double recovery for the sale of the same goods: first from the capture of foreign profits through the licensing fee and second through reduced competition in domestic markets. Contrast this scenario with the type one case in which the U.S. company licenses a mark from a foreign company. In this situation,

---

29 Although the U.S. Supreme Court never directly expressed this rationale, commentators have explained the decision in this way. *See*, e.g., Heon Hahm, *Gray Market Goods: Has a Resolution Been Found?*, 81 TRADEMARK REP. 58, 58 (1991). *See also* N. David Palmeater, *Gray Market Imports: No Black and White Answer*, J. WORLD TRADE, Oct. 1988, at 89 (discussing the *K Mart* decision).

30 Surprisingly, this point has not been made in any of the literature on gray marketing. *See* Hahm, *supra* note 29, at 58 (criticizing the distinction made by the *K Mart* court); Palmeater, *supra* note 29, at 89 (same).
gray marketing results in a double loss for the U.S. company. First, part of its profits in the sale of the goods are taken by the foreign company in the form of a license fee; second, another part of its profits are diverted by the gray marketeers. Arguably, in order to be consistent with the Court's fear of a double recovery, type one scenarios should be the only situation in which gray marketing should be disallowed.

This artificial distinction between a multinational enterprise on the one hand and a licensor-licensee relationship between foreign and U.S. companies on the other is reflected in the second legal issue raised by the analysis of gray markets: a misleading distinction between property and contract as protection against gray marketeers. In both type one and type three scenarios, the Court assumes that the U.S. entity has a protected property interest that cannot be infringed by gray marketeers. In type two cases, however, the Court seems to insist that the U.S. company protect its interests through contract. In type two cases, if gray markets do divert profits from the U.S. market, the U.S. subsidiary or parent can negotiate its share of profits with the foreign parent or subsidiary. In fact, the parent and subsidiary can always contract in order to preempt the gray market from occurring at all. Arguably, the same contract protection could be used in the type one and three scenarios to establish the license fee. Therefore, the Court's artificial distinction between multinational enterprises and licensor-licensee arrangements is reflected in another artificial distinction between property and contract protection.

Finally, the legal analysis is further complicated by the particular source of law for the Court's protection of property interests. Traditionally, protection against gray marketing has been found in trademark law. More recently, however, gray market plaintiffs have sought relief based on theories of

---

31 The Supreme Court does compare type one and type two scenarios in the *K Mart* case itself. See 486 U.S. at 286. Neither the Court nor any subsequent commentators have worked through the economic analysis.

32 This distinction between property and contract protection is a sub-text in many of the gray market cases, as will be apparent through the discussion of the various cases. Wendy J. Gordon, *Of Harms and Benefits: Torts, Restitution, and Intellectual Property*, 21 J. LEGAL STUD. 449, 449-52 (June 1992).
state unfair competition law, § 43 claims under the Lanham Act, and federal copyright laws. Each of the theories behind these claims reflects a particular conception of the property interest that is being protected. More importantly, many courts utilize the principles of intellectual property laws to further antitrust objectives, and more problematically, to extend the reach of the intellectual property laws to areas that would not be addressed by the antitrust laws. For example, in several of the cases discussed below, the Court has held that the gray marketeer does not infringe a domestic trademark because an injunction against the gray marketeer would lead to increased market power of the domestic trademark holder. Neither § 42 of the Lanham Act nor § 602 of the Copyright Act includes antitrust rationales as a factor in the grant of protection for intellectual property rights.

Given these conflicting rationales, the legal issue is one of reconciling the direction of the courts with the original legislative purpose behind the arguments for both the relevant intellectual property laws and the antitrust laws. This Article takes a unique approach to the gray market problem by providing a formal economic analysis of gray markets. The purpose of the analysis is to assess both the arguments for and against gray markets and the particular policy responses of courts and legislatures. This analysis is useful because it addresses the following questions that have arisen in almost all prior gray market research:

(1) What is a possible economic explanation for gray marketing?

(2) To what extent is gray marketing a result of differences in intellectual property protection for trademark?

(3) To what extent are consumers benefitted by gray marketing?

(4) Should gray marketing be addressed by property or

---

33 See Dam, supra note 18, at 57 (discussing the use of intellectual property laws as a means of attacking antitrust violations); Rubin, supra note 6, at 614 (same).
contract law?

(5) Are there less restrictive alternatives to those proposed by the two extremes of the gray market debate?

This Article presents an economic model that answers these questions. The model is built from first principles with an analysis of the role of trademarks. It explains how gray markets can arise from territorial divisions in the use of a trademark. Within the context of this model, some general conclusions of how gray marketing benefits consumers and how best to address the gray marketing problem can be established. This Article concludes by proposing that the most appropriate means of dealing with gray marketing is through disclosure laws and the use of secondary trademarks.

The ultimate test of this economic analysis is its ability to rationalize the principal gray market cases. The next Section of the Article, summarizes the current state of gray market jurisprudence and emphasizes the major decisions in this area. After presenting the economic analysis in the third Section, the Article concludes in the final Section by assessing this model in light of the case law.

2. LEGAL ANALYSIS OF GRAY MARKETING

2.1. Universality and Territoriality Theories of Trademark

The law on gray marketing in the United States has reflected a conflict among manufacturers seeking both protection for their trademark and distribution channels, free trade advocates, and consumer interests. The result is a body of law that offers limited and often conflicting protection from gray marketing. In contrast, the European Economic Union has adopted a very liberal approach to gray marketing through Articles 30, 36, 85 and 86 of the Treaty of Rome.\textsuperscript{34} Articles 30 and 36 generally prohibit “quantitative restrictions on imports and all measures having equivalent effects,” but allow some restrictions in order to protect “industrial and

\textsuperscript{34} TREATY ESTABLISHING THE EUROPEAN ECONOMIC COMMUNITY [EU TREATY] [hereinafter TREATY OF ROME], arts. 30, 36, 85 & 86 (as amended 1990).
commercial property." Restrictions for property protection, however, cannot be a mere shield for arbitrary discrimination against foreign goods. Articles 85 and 86 are the major antitrust provisions and have been utilized to prohibit private actions that limit parallel trade. One commentator has described the goals of these provisions as follows: "The underlying principle of this competition policy is to allow the consumer to buy at the cheapest possible cost, but the effect is to enable a trader to trade across frontiers outside authorized distribution channels."

What is missing from this calculus is protection for the creation of trademark and goodwill. This protection is accorded by other provisions that prevent counterfeit goods and attempt to confuse consumers through use of misleading and deceptive tactics. The EU permits gray market goods while restricting counterfeit goods. In the United States, however, the line between gray market and counterfeit goods is often blurred, as evidenced by the material difference test discussed below.

In the United States, the controversy over gray market goods stems from a conflict between two different theories of trademark rights: the universality theory and the territoriality theory. Under the universality theory, the purpose of a trademark is to mark the origins of goods and thereby to extend a trademark owner's rights globally. An important corollary to the global protection of property rights

---

35 Id. arts. 30 & 36.
38 The European Community Council of Ministers has adopted Directive 89/104, which seeks to harmonize trademark law among the member states. Council Directive 89/104, 1989 O.J. (L 40) 1. The European Court of Justice has addressed the issue of intellectual property right infringement through Article 36 of the Treaty of Rome.
39 See Hahm, supra note 29, at 58 (presenting an excellent survey of the history of gray market goods cases); Brian D. Coggio et al., The History and Present Status of Gray Goods, 75 TRADEMARK REP. 433 (1985) (same).
40 See LIPNER, supra note 2, at 141 (discussing the history of the universality theory).
is the idea of the exhaustion of rents. Once trademark owners sell goods in commerce, they lose all further rights in the trademark. Therefore, under a universality theory a trademark owner would not have any rights against a gray marketeer after the initial sale of the trademarked good.

The leading case illustrating the universality theory is Apollinaris Co., Ltd., v. Scherer. In Apollinaris, a U.S. company obtained the right to sell its mineral water under the name of a Hungarian company. A German importer subsequently imported into the United States the mineral water produced overseas by the Hungarian company, also bearing the name of that company. The court held that there was no infringement of the U.S. trademark licensee's rights because the goods were genuine. In other words, the German importer was not passing off counterfeit goods under the licensed trademark. Apollinaris illustrates not only the universality theory but also the tension in gray market cases between property rights in the mark and passing-off. One commentator stated that cases like Apollinaris are "premised largely upon the concept that the property interests in the trademark originate in the product itself—the quality and physical essence of the product—as opposed to the market share and the reputation it creates in the consumer's mind."

In contrast, the territoriality theory posits trademark rights in a particular region and in the goodwill created by the trademark owner in the regional sale of the product. A trademark could have separate legal existence in each country under the laws of that country. The principal case illustrating the territoriality theory is A. Bourjois & Co., Inc. v. Katzel, in which a U.S. company had licensed the right to use the name of a French face powder company to sell powder in the United States. As in Apollinaris, an importer subsequently imported the French product into the U.S. market. The lower court held for the importer and the Court of Appeals affirmed. The U.S. Supreme Court reversed the appeals court in Katzel and for the first time articulated a territorial principle of

---

41 27 F. 18 (C.C.S.D.N.Y. 1886).
42 Hahm, supra note 29, at 62-63.
43 See LIPNER, supra note 2, at 14 (discussing the history of the territoriality theory).
44 260 U.S. 689 (1923).
trademarks. The majority wrote:

It is said that the trade mark here is that of the French house and truly indicates the origin of the goods. But that is not accurate. It is the trade mark of the plaintiff only in the United States and indicates in law . . . that the goods come from the plaintiff although not made by it. It was sold and could only be sold with the good will of the business that the plaintiff bought.\textsuperscript{45}

Under this theory, trademark rights are ultimately grounded in associated goodwill and are not independent and global property rights.

At the same time as Katzel, and in response to cases in which the courts had espoused the universality theory, Congress passed § 526 of the Tariff Act, which became the principal legislation limiting gray market goods. The territoriality rationale is now the most widely accepted theory of trademark rights and constitutes the philosophy underlying § 526 of the Tariff Act. It should be noted, however, that the remnants of the universality theory still affect gray market jurisprudence as evidenced in the U.S. Supreme Court's recent decision in \textit{K Mart} and subsequent legislative and judicial responses to that case.

\subsection{2.2. Section 526 and the Customs Act}

The 1988 \textit{K Mart} decision brought to a close several decades of confusion surrounding the agency interpretation of § 526 of the Tariff Act. In 1922, Congress passed § 526 to prohibit the importing of any

merchandise of foreign manufacture if such merchandise . . . bears a trade-mark owned by a citizen of, or by a corporation or association created or organized within, the United States, and registered in the Patent Office by a person domiciled in the United States . . . unless written consent of the owner of such trade-mark is produced at the time of making entry.\textsuperscript{46}

This code section enabled the Customs Service to exclude

\begin{itemize}
\item \textsuperscript{45} \textit{Id.} at 692.
\item \textsuperscript{46} Tariff Act of 1922, ch. 356, § 526(a), 42 Stat. 858, 975 (amended 1945).
\end{itemize}
imports that bore a trademark registered in the Patent and Trademark Office ("PTO") by a U.S. citizen or corporation unless there was written consent for the import of such goods. In applying the statute, however, the U.S. Customs Service read two broad exceptions into the Tariff Act: the common control exception and the authorized use exception. Under the common control exception, imports bearing U.S. trademarks were permitted entry if they were produced by a foreign affiliate of a U.S. entity. The interpretation of "common control" was broad, encompassing not only the parent-subsidiary relationship but also foreign manufacturing units of U.S. companies. The second exception for authorized use was a broad reading of the "written consent" requirement. It permitted the entry of gray market goods if they originated from a foreign licensee of the U.S. trademark holder. Each of these broad exceptions was challenged in K Mart by a trade group seeking to protect trademark holders' rights by bringing a claim against discount stores such as K Mart and Sam's Wholesale Club. The U.S. Supreme Court's decision provided a mixed victory for the trademark owners by striking down the authorized use exception but upholding the common control exception.

The K Mart Court's decision rested on the statutory interpretation of § 526. Post-Chevron, the Court gave great deference to agency interpretation unless such interpretation was an unreasonable reading of the statute. Specifically, the court held that the "authorized use" exception was not a valid agency interpretation unless the authorization came within the written permission requirement of § 526. Furthermore, the Court expanded the reading of the "common control exception" to isolate three types of gray market situations.

First, a U.S. company which wishes to distribute the

---

49 See ALFRED C. AMAN, JR., ADMINISTRATIVE LAW IN A GLOBAL ERA (1992) (discussing the U.S. Supreme Court's decisions regarding administrative law in an international context).
50 See K Mart, 486 U.S. at 294.
51 See id. at 286-87.
product of a foreign company; it will typically license the trademark from the foreign company and manufacture and distribute the product bearing the foreign trademark. The U.S. company will typically register the foreign mark with the Patent and Trademark Office. In this type of case (type one cases), a gray market arises when foreign goods sell for less than their U.S. counterparts, and a gray marketeer purchases the goods overseas and sells them domestically. This is the classic case of gray marketing. It can be enjoined under U.S. laws by the U.S. company and is compensable by a demonstration of damages.

A second gray market scenario arises when the U.S. and foreign companies are in a parent-subsidiary relationship. In this case, the U.S. or foreign parent wishes to expand its geographic market by establishing a subsidiary in the other country. The subsidiary is given rights in the trademark and is usually restricted geographically in its sale of the final product. Once again a gray market arises because of price differences between the U.S. and the foreign market. Even though the situation is similar to type one cases, type two cases have not been found to be actionable under the rationale that the parent corporation and subsidiary are actually one corporate entity sharing ownership in the trademark, and that a trademark owner cannot infringe its own trademark.

Finally, a type three gray market may be created when an unrelated foreign company buys the right to use a U.S. trademark for the sale of a similar product. As in the previous case, prices difference between the U.S. and foreign markets leads a gray marketeer to purchase the goods overseas and resell them in the U.S. market. In this case, the sale of the gray market goods can be enjoined and the U.S. company can recover damages upon showing a loss of profit.

In type one cases, a U.S. firm buys rights in the use of a trademark from a foreign firm. According to the *K Mart* Court, this is the easiest instance in which to prohibit gray marketing because the foreign imports infringe on the domestic goodwill created by the use of the mark in the U.S. market. Similarly, type three situations, in which the U.S. company licenses its trademark to a foreign company, also offer an easy case for prohibiting gray markets; however, there are some recent conflicts over the first sale doctrine under
The most controversial gray market scenario is the type two case, in which the U.S. and foreign companies are related. In *K Mart*, the Court held that the Customs Service did not need to restrict gray marketing because of the common control exception to § 526. The Court's rationale for this ruling was that if the U.S. and foreign manufacturers are under common control through a parent-subsidiary or other affiliate relationship, they are in fact one entity. Any loss in profits to the U.S. company can be compensated within the multinational corporate entity through the transfer of income. Furthermore, the Court reasoned that to the extent that § 526 is intended to prevent trademark infringement, it is meaningless for one corporate entity to infringe its own trademark.

This distinction by corporate relationship seems to ignore the fact that gray marketing results from the actions of a third party unrelated to either of the corporate entities engaged in licensing or common ownership of the trademark. The problem is that it is often impossible to bring claims against these third parties because once they have brought the goods into the United States, they sell them to unauthorized dealers who then sell the goods in the U.S. market. If the U.S. and foreign companies are engaged in a licensing agreement, the Court reasons that it is not possible for the two companies to renegotiate the licensing fee once the gray marketeer has begun to compete with the U.S. firm. Furthermore, even if the licensing agreement contains territorial restrictions, the U.S. company will not have a cause of action for breach of contract against the foreign licensee or licensor because the gray market sales are transacted by third parties. Therefore, allowing causes of action when the relationship is based on a licensing agreement stems from the lack of contract remedies against the foreign company by the U.S. company. The Court reasoned, however, that companies in an affiliate relationship can transfer profits within the corporate entity in order to compensate the U.S. subsidiary or parent for any losses.

---

52 See infra section 2.4 (discussing recent conflicts over first sale doctrine).
53 See supra note 24 and accompanying discussion. See also Rubin, supra note 6, at 597-98.
resulting from gray marketing.

The distinction raised by the *K Mart* court raises three main issues. First, it seems to violate the territoriality principle of trademarks. If the U.S. company has territorial rights to the use of the trademark, its corporate relationship should be irrelevant to its trademark rights within its territorial boundaries. As one commentator has said about the *K Mart* opinion: "Since corporations in the United States are now barred from blocking parallel goods imported by affiliated companies, *K Mart* seems to indicate that the property interests in the American trademark are universally owned when held by a multinational corporation despite territorial boundaries." In other words, the Court seems to have ignored the implication of the territoriality theory that the U.S. parent and the foreign subsidiary may have independent rights in the trademark in their respective geographic markets.

The remnants of the universality theory that seem to cloud the decision in *K Mart* lead to further concerns, as the Court left unclear exactly how closely the foreign and U.S. companies have to be affiliated in order to fall under the common control exception. Evidence suggests that some corporations have licensed trademark rights to third parties, who in turn license the rights to the trademark holding corporations' subsidiaries with the intention of falling out of the common control exception. Nonetheless, it is still possible that the net of common control may be expanded. At issue in the recent Fifth Circuit case of *U.S. v. Eighty-Three Rolex Watches* was whether a corporation that owned common stock of a foreign company and that was licensed to use the corporation's trademark qualified for the common control exception. The Fifth Circuit held that mere ownership of stock did not qualify and the U.S. Supreme Court subsequently denied certiorari on the issue.

---

54 Hahn, *supra* note 29, at 78.
56 992 F.2d 508 (5th Cir. 1993).
The second issue raised by the common control exception is the rationale for the distinction between licensing and affiliate relationships. *NEC Electronics v. CAL Circuit Abco,*[58] a Ninth Circuit case decided a year before *K Mart,* illustrates this point. This case concerned the gray market sale of Japanese computer chips bearing a trademark owned by NEC-Japan and licensed to a U.S. company. The lower court decided that the gray market goods infringed the U.S. company's trademark under § 43 of the Lanham Act because certain purchasers thought that the gray market chips were protected by the same servicing and warranty as U.S. chips; the Ninth Circuit reversed, relying on a mix of antitrust and trademark law. The Court noted:

If NEC-Japan chooses to sell abroad at lower prices than those it could obtain for the identical product [in the United States], that is its business. In doing so, however, it cannot look to United States trademark law to insulate the American market or to vitiate the effects of international trade. This country's trade-mark law does not offer NEC-Japan a vehicle for establishing a worldwide discriminatory pricing scheme simply through the expedient of setting up an American subsidiary with nominal title to its mark.[59]

The logical question is whether this antitrust rationale is viable after *K Mart,* because of the strict protection § 526 is read to give to gray marketing in the licensing context. There are no valid reasons why antitrust concerns are more salient for the parent-subsidiary relationship than for the licensor-licensee relationship.[60] Neither the statutory language nor

---

[59] 810 F.2d at 1511.
[60] One possible basis for this distinction is that a parent and its subsidiaries are immune from antitrust liability under § 1 of the Sherman Act because of the *Copperweld* doctrine. *Copperweld Corp., v. Independence Tube Corp.,* 467 U.S. 752 (1984). This doctrine states that a parent and a wholly-owned subsidiary cannot be considered separate entities for the purposes of the antitrust laws. This rationale is unsatisfactory, however, because in many gray market contexts the subsidiary is not wholly-owned, and the *Copperweld* doctrine has not been extended to partially-owned subsidiaries. Furthermore, even if the type of monopolization envisioned by the Ninth Circuit is not a violation of the Sherman Act, §2 may still provide a basis for a claim.
the legislative history of § 526 suggest that it was intended to further antitrust goals.

Finally, the *K Mart* court left open the use of passing-off claims in order to restrict the entry of gray market goods. As the majority wrote, "[Respondents] also asserted that the Customs Service regulation was inconsistent with § 42 of the Lanham Trade-Mark Act, 15 U.S.C. § 1124, which prohibits the importation of goods bearing marks that 'copy or simulate' United States trademarks. That issue is not before us." This open question has since been addressed in *Lever Brothers Corp. v. United States.*

Because of the permissive attitude towards gray marketing in the context of parent-subsidiary relations, many companies have sought relief from other areas of the law where the principles of *K Mart* have not been applied. Four specific areas of the law to which companies have turned include: the Lanham Act, the Copyright Act, § 337 of the Tariff Act, and the state labelling laws of New York and California.

2.3. Sections 42 and 43 of the Lanham Act

The use of §§ 42 and 43 claims in the gray market context has had a lengthy history that has culminated in the recent D.C. Circuit case *Lever Brothers*, which addressed some questions left open by *K Mart*. Section 42 states:

[N]o article of imported merchandise which shall copy or simulate the name of . . . any domestic manufacture, or manufacturer, or trader, or of any manufacturer or trader located in any foreign country which, by treaty, convention, or law affords similar privileges to citizens of the United States . . . shall be admitted to . . . the United States.


---

61 486 U.S. at 290 n.3.


https://scholarship.law.upenn.edu/jil/vol15/iss3/2
In conjunction with § 42 claims, plaintiffs usually join claims based on § 43(b) which states that, "[a]ny goods marked or labeled in contravention of the provisions of this section shall not be imported into the United States or admitted to entry at any customhouse of the United States." Under § 43(b), the criterion is that the sale of the marked goods is likely to "cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person." The courts, however, have not been consistent or coherent in identifying when gray market use of a trademark is likely to cause confusion.

As an illustration of the confused application of the law under §§ 42 and 43, consider the examples of *Original Appalachian Artworks, Inc. v. Granada Electronics, Inc.*, *Ferrero U.S.A., Inc. v. Ozak Trading, Inc.*, and *Yamaha Corp. of Am. v. United States*. In *Granada*, the court found that Cabbage Patch dolls manufactured overseas and resold in the U.S. infringed the trademark owner's rights because the foreign-made dolls were materially different from the originals, thus violating §43 of the Lanham Act. The basis for the difference was that the dolls' adoption papers were in Spanish. In *Ferrero*, the court based its findings of a § 43 violation on the fact that foreign-manufactured TIC-TACs were materially different because of the caloric content and the chemical composition. In contrast, the court in *Yamaha* held that there was not an infringement even though the foreign-manufactured musical equipment did not have warranties when sold domestically. Arguably, the lack of a warranty is more detrimental to consumers than the seemingly trivial differences the court found for TIC-TACs and Cabbage Patch dolls. The court's determination of "material

---

66 816 F.2d 68 (2d Cir. 1987).
69 816 F.2d at 73.
70 753 F. Supp. at 1247.
"differences" is often confused, focusing on differences in taste rather than on differences in the quality and the assurances provided by a trademark.

In fact, the discussion of policy goals in gray market cases based on §§ 42 and 43 reflects some confusion as to the underlying purposes of the Lanham Act. For example, in Monte Carlo Shirt, Inc. v. Daewoo Int'l Corp., a case involving the unauthorized sale of foreign manufactured shirts in the United States by a Korean company, the Ninth Circuit found no infringement because there was no confusion as to source in the sale of the gray market goods. The court noted:

The possibility of confusion is one that exists between distinct products that are similar in appearance and are marked deceptively. Accordingly, the injury that is remedied by the trademark cause of action is public confusion as to source of the goods. No such confusion was possible in this case. The goods sold by Daewoo were not imitations of Monte Carlo shirts; they were the genuine product, planned and sponsored by Monte Carlo and produced for it on contract for future sale.

In Weil Ceramics and Glass, Inc. v. Dash, the Third Circuit reached a similar conclusion but with broader implications for the role of multinational enterprises and ownership of trademarks. That case held that the gray market sale of LLADRO ceramics was not an infringement; the court based its reasoning on the dual purposes of trademark law: protection against consumer deception and protection of the trademark holder's goodwill. The court maintained that neither of these goals were undermined by the sale of the gray market goods:

Consumers who purchase Jalyn imported LLARDRO porcelain [defendant's product] get precisely what they believed that they were purchasing. For that same reason, Weil's investment in and sponsorship of its trademark is not adversely affected because the

---

72 707 F.2d 1054 (9th Cir. 1983).
73 Id. at 1058 (citation omitted).
74 878 F.2d 659 (3d Cir. 1989).

https://scholarship.law.upenn.edu/jil/vol15/iss3/2
goodwill that stands behind its product is not diminished by an association with goods of a lesser quality.\textsuperscript{75}

The court's analysis also rested on the fact that Weil Ceramics was a multinational enterprise:

The only "injury" that we perceive Weil endures is the uncompensated for benefit that its advertisement and promotion of the trademark confers upon Jalyn. That loss to Weil is not inconsequential or insignificant. The remedy for it, however, is not properly found in the trademark law, particularly not in this case. Moreover, as we noted earlier, that "injury" is not completely uncompensated because Weil's parent corporation profits by the sale of Jalyn abroad.\textsuperscript{76}

As in the context of type two gray market goods under § 526 of the Tariff Act, gray marketing when the trademark owner is a subsidiary or parent of a foreign company can better be remedied by internal redistribution of profits within the corporate entity.

The Weil court's discussion of injury confuses goodwill with advertising expenditures. If the purpose of trademark law is, as the court admits, to protect the goodwill investment of investors, it \textit{a fortiori} protects the advertising expenditures, one of the main ways in which goodwill is created.\textsuperscript{77} Given the multinational enterprise in which Weil was involved, perhaps a better reading of the court's reasoning is that the multinational enterprise has already recouped its advertising investment when the goods were first sold by the parent corporation overseas. But this reasoning comes dangerously close to the universality theory that was arguably rejected in \textit{Katzel}.

Nonetheless, as in many of the §§ 42 and 43 gray market cases, courts often underplay the consumer confusion that results from the sale of gray market goods. In both \textit{Weil} and \textit{Monte Carlo}, the court assumes that consumers would not be confused by the gray market goods since the goods were

\textsuperscript{75} Id. at 672.

\textsuperscript{76} Id.

\textsuperscript{77} \textit{See Tirole, supra} note 22 (discussing advertising and goodwill).
genuine and bore a legitimate trademark. The court, however, does not address whether the goods were in fact genuine or whether the consumers were confused. In determining the issue of genuineness, the court will have to decide the appropriate baseline by which to determine whether the foreign and domestic goods are different. Cases like Granada, Ferrero, and Yamaha demonstrate that differences in consumer tastes supersede other material differences such as the use of warranties or assurances of product quality. This test for difference is underscored by Lever Brothers.

In Lever Brothers, a British company, affiliated with a U.S. soap manufacturer, imported soap products bearing the trademarks “SHIELD” and “SUNLIGHT” into the United States. These marks infringed the U.S. trademark rights. The court held that material differences reflecting varied consumer tastes can be the basis for §§ 42 and 43 claims and that the domestic trademark owner can proceed against either private parties or the Customs Service for alleged Lanham Act violations. Somewhat comically, the court based its finding of material difference on the factual determination that “U.S. Shield contains a higher concentration of coconut soap and fatty acids, and thus more readily generates lather.... The manufacturing choice evidently arises out of the British preference for baths, which permit time for lather to develop, as opposed to a U.S. preference for showers.” As the most recent appellate court opinion on §§ 42 and 43 and gray markets, Lever Brothers provides a test of material difference based in part upon differences in consumer tastes.

The inquiry under §§ 42 and 43 expands gray market protection under § 526 beyond the licensor-licensee relationship, so long as the trademark holder can show material difference between the domestically manufactured product and the gray market good. As the cases indicate, however, the courts’ finding of material difference is not consistent and is often founded on a limited factual basis. Differences in warranty and quality assurances are overlooked

78 The difference between quality and tastes is largely an artificial one. Quality of goods is a result of differences in tastes. See The Economics of Imperfect Information, supra note 22, at 23-26.

79 981 F.2d 1330 (D.C. Cir. 1993).

80 877 F.2d 101, 103 (D.C. Cir. 1989).
while differences in consumer tastes become determinative. This has led prospective plaintiffs to look to other theories that might find stronger and more predictable protection. One theory has been that of copyright law.

2.4. Sections 109 and 602 of the Copyright Act

Gray market plaintiffs have turned to copyright law for protection when the infringement is not of a registered trademark, but involves a design on the product label, an audio-visual work, or a literary piece. Use of copyright law in the gray market context may, at first glance, seem contrary to the policies discussed above. If gray marketeers are allegedly violating the goodwill of and investment in distinctive trademarks, then trademark law is arguably the more appropriate basis for the claim; copyright law is intended to protect creative efforts. This argument, however, is too formalistic. The process of creating distinctive marks is as much a creative effort as writing a novel or a painting picture. Therefore, extending copyright law to the gray market area is not as contrary to copyright policy as it would first appear.\(^81\)

The more troublesome problem is the possibility of copyright law enveloping the domain of trademark law. If copyright law can be used to protect distinctive marks of labels, then the limits of trademark law may be undercut.\(^82\) Specifically, trademark protection requires use in commerce while copyright law requires that the work be fixed in a tangible medium of expression. Arguably, if copyright law is now brought to apply to labels and product names, the commerce requirements of trademark law could be avoided by appealing to copyright law. Within the United States, most courts have not extended copyright protection to advertising jingles and labels.\(^83\) Perhaps this body of case law will

---


82 The main limitations are use in commerce within a specific geographic boundary. See United Drug Co. v. Theodore Rectanus Co., 248 U.S. 90 (6th Cir. 1918) (discussing these limits in the case law); Dawn Donut Co. v. Hart's Food Stores, Inc., 267 F.2d 358, 364-65 (2d Cir. 1959) (same).

83 See Alberto-Culver Co. v. Andrea Dumon, Inc., 466 F.2d 705 (7th Cir. 1972) (extending copyright protection to the design of a deodorant spray can); but see Higgins v. Keuffel, 140 U.S. 428, 431 (1891) (noting that
provide the limiting principle that defines the boundary between copyright and trademark law. The potential conflict between copyright and trademark is the sub-text of the cases discussed below and is an issue yet to be litigated.

Section 602 of the Copyright Act prohibits the "[i]mportation into the United States, without the authority of the owner of copyright under this title, of copies or phonorecords of a work that have been acquired outside the United States." The section creates exemptions for religious organizations, the U.S. government, and single copies not intended for distribution. Section 602 is thought by some to offer potential plaintiffs a weapon against the gray market. This theory rests on copyright protection of the label and name of the product, to which copyright protection applies because the label and name are fixed in a tangible medium of expression and are arguably a pictorial or graphic work for the purposes of § 102, which defines the subject matter of copyright. The main limitation on this theory is § 109, which limits copyright protection to the first sale. Since gray market goods are being distributed in the after-market (i.e., they are being resold rather than sold for the first time), gray marketeers and unauthorized distributors can argue that the copyright holders do not have rights extending to the after-market. Cases that discuss this issue have split evenly, with Columbia Broadcasting System Inc. v. Scorpio Music Distrib., Inc. and BMG Music v. Perez holding for the U.S. company and Sebastian Int'l, Inc. v. Consumer Contacts (PTY) Ltd. and Red Baron-Franklin Park, Inc. v. Taito Corp. holding for the unauthorized distributors.

In Scorpio, Columbia Broadcasting Systems ("CBS"), a New copyright will attach to labels if composition serves some function "other than as a mere advertisement.")

88 952 F.2d 318 (9th Cir. 1991).
89 847 F.2d 1093 (3d Cir. 1988).
York corporation, owned a number of sound recording copyrights. CBS-Sony, an affiliate of CBS, sold the right to distribute these recordings in the Philippines Islands to Vicor, a Philippines corporation. This arrangement allowed Vicor to use an agent, Rainbow Music, Inc. ("Rainbow") to carry on the actual distribution. Rainbow subsequently sold copies of these recordings to International Traders, a Nevada corporation, which in turn sold to Scorpio, a Pennsylvania corporation, which then sold the records in the United States. CBS brought suit against Scorpio under § 602 and Scorpio proffered a § 109 defense. The Third Circuit held for CBS, stating that § 109 "grants first sale protection to the third party buyer of copies which have been legally manufactured and sold within the United States and not to purchasers of imports such as are involved here. The protection afforded by the United States Code does not extend beyond the borders of this country . . . ." In other words, the first sale defense only applies to first sales within the United States. The court's decision rested on the language in § 109 which restricts application to copyrighted materials "lawfully made under this title." The court read "lawfully made" to mean made within the United States, and as a result concluded that the first sale doctrine did not extend to goods manufactured and sold overseas. CBS did not exhaust its rights when its affiliate CBS-Sony made the sale of records in the Philippines. In BMG Music, an almost identical factual scenario, the Ninth Circuit followed the holding of Scorpio, stating that the first sale protection to gray marketeers does not apply when the U.S. copyright holder's first sale was made overseas.

In contrast, the courts in Sebastian and Red Baron interpreted the first sale defense more broadly than either the Third or the Ninth Circuits. In Sebastian, a California corporation contracted with a South African corporation to sell hair care products bearing copyrighted labels bearing the marks WET and SHPRITZ FORTE in South Africa. The South African corporation experienced a change of heart unexplained in the opinion and shipped the unopened containers back to the United States. The Customs Service released the goods, which eventually were picked up by Fabric, a U.S. company.
The California corporation subsequently sued when Fabric attempted to sell the products in the U.S. market. Fabric then raised a first sale defense. This time, the Third Circuit held in favor of the gray marketeer, arguing that "the place of sale is not the critical factor in determining whether § 602(a) governs ... a first sale by the copyright owner extinguishes any right later to control importation of those copies." Despite the contradiction with Scorpio, the court did not overrule the earlier case nor did it distinguish it. The court did, however, express some uneasiness over the earlier interpretation of "lawfully made." The only factual difference between Scorpio and Sebastian is that in Scorpio, it was the corporate affiliate who had made the purported first sale, while in Sebastian it was the corporate copyright owner who had sold the product. Ironically, reconciling Sebastian and Scorpio leads to a result that is more protective of the parent-subsidiary relationship in the copyright context than in the trademark context. As discussed above, U.S. companies that are parents or subsidiaries of foreign companies from which the gray market goods originate are not protected from gray marketing because the trademark is viewed by the courts as property owned by the parent-subsidiary entity. For copyright purposes, however, the sale of copyrighted materials by a foreign subsidiary of a U.S. company does not exhaust the first sale rights of U.S. corporate copyright owners. Therefore, copyright law arguably provides the resolution to the lacuna created under § 526 of the Tariff Act and §§ 42 and 43 of the Lanham Act between parent-subsidiary corporate relationships and licensor-licensee relationships.

The District Court for the Eastern District of Virginia's recent decision in Red Baron undercuts the protection provided by Scorpio by extending the Sebastian rule to a parent-subsidiary context. The practice at issue in Red Baron was that of buying video game circuit boards in a foreign market (usually Japan or the United Kingdom) and reselling them in the United States. The gray marketeer, through this practice, was able to arbitrage the price difference between the U.S. video game boards and foreign game boards that arose from

847 F.2d at 1099.

See supra text accompanying note 28.
tie-in sales in the U.S. market. In the U.S. market, sales of
game boards were usually tied into the sale of the video game
cabinet; in the United Kingdom and Japan, however, no such
tie-in arrangements exist. As a result, U.S. video game
arcade owners were able to purchase gray market video game
boards and install them into their own cabinets. By
"unbundling" cabinets and boards, gray marketeers were able
to sell the boards at below the market price for the tied boards
and cabinets.

The actual litigation in Red Baron was brought by Taito
Corporation of Japan, which owned the copyright for the
boards in the United States and had licensed these rights to
its U.S. subsidiary, Taito America Corp. The defendant was
Red Baron, a U.S. company that purchased Taito boards which
operated the video game Double Dragon overseas and sold the
board in competition with the U.S. subsidiary. In defense
against Taito's claim of copyright infringement, Red Baron
raised a first use defense based on the Sebastian case. Taito
distinguished the Sebastian court's holding on the grounds
that Taito had manufactured and sold the boards in Japan, not
in the United States. The court held for Red Baron, reasoning
that the place of sale was irrelevant for the purposes of the
first sale doctrine. The court justified this decision on the
grounds that a contrary ruling would favor foreign companies
holding U.S. copyrights over U.S. companies. By making
place of sale irrelevant, the court was attempting to create a
level playing field for foreign and U.S. companies.

The court, however, rejected without comment Taito's
separate argument that the first sale doctrine applied only to
the distribution rights of the copyright holder, but not the
public display and performance rights. This argument has
support in two important Third Circuit cases. In deciding
Taito's appeal, the Fourth Circuit reversed the district court on
this issue, holding that the first sale doctrine does not extend
to public performance rights. Therefore, Red Baron's parallel

---

^4 For an analysis of the economic arrangement behind the sale of video
games, see Stern, supra note 55, at 121.

^5 See supra note 87, at 3.

^6 See Columbia Pictures Indus., Inc. v. Aveco, Inc., 800 F.2d 59 (3d Cir.
1986); Columbia Pictures Indus., Inc. v. Redd Horne, Inc., 749 F.2d 154 (3d
Cir. 1984).
importation of the video boards did infringe Taito's copyright. The U.S. Supreme Court denied certiorari on the subsequent appeal by Red Baron.

Judging from the appellate decision in *Red Baron*, the application of copyright law to the gray market problem has not been fully resolved. The contradictory opinions of *Scorpio* and *Sebastian*, both of which are still good law, suggest that each side in the gray market debate has precedent for its opinion. Furthermore, distinguishing *Scorpio* from *Sebastian* on the basis of the parent-subsidiary relationship present in *Scorpio* provides some protection for U.S. parent corporations and subsidiaries who are facing competition from gray markets that originate from foreign affiliates. This distinction provides an avenue of protection for parents and subsidiaries whose rights have been eroded by the development of § 526 and Lanham Act case law. More interestingly, the *Red Baron* case provides a window through which the consequences of *Sebastian* can be avoided for manufacturers and distributors of audio-visual works. Surprisingly, copyright law has provided the protection for U.S. companies once provided by trademark law despite the different policies underlying these two areas. Future litigation will undoubtedly test the elasticity of copyright law and its potential conflict with trademark law in the gray market context.

2.5. *Section 337 of the Tariff Act*

The Tariff Act offers additional protection against gray marketers in § 337, which regulates unfair practices in import trade. However, this statute provides an administrative remedy through the ITC and has only been tested in one case. The use of § 337, as the discussion below indicates, has been limited by political factors that stem from an underlying confusion over the proper posture towards gray market goods. Section 337 restricts: "unfair methods of competition and unfair acts in the importation of articles into the United States or in the sale of such articles . . . by the

---

owner, importer, or consignee . . . the threat or effect or tendency of which is to destroy or substantially injure an industry.”

This Section provides a procedural remedy through the International Trade Commission, which conducts an investigation of the alleged conduct and reports to the President for approval or disapproval of the ITC's recommended action. The ITC's determination is published in the Federal Register for notice and comment.

Since the creation of the ITC and the passage of the current version of § 337 in 1974, only one case, In the Matter of Certain Alkaline Batteries (hereinafter “Duracell case”) has utilized it as a cause of action. Brought by Duracell, Inc., the § 337 claim alleged that gray marketeers were buying batteries from a Belgian subsidiary of Duracell to which the trademark “Duracell” had been licensed. These batteries were subsequently sold to unauthorized distributors in the United States. Although Duracell named fourteen respondents in its complaint, it had settled with thirteen of them before the ITC investigation. The administrative law judge found that there was in fact a violation of § 337 based on trademark infringement, misappropriation of trade dress, false designation of origin, and violations of the Fair Packaging and Labeling Act. These violations together allegedly caused "injury to the industry," a showing required for the § 337 claim. The ITC reviewed the ALJ's claim and a majority affirmed it. The argument of the majority illustrates some of the major themes that have been discussed above.

One issue that the ITC majority directly addressed was the claim that Duracell and its Belgian subsidiary were one international enterprise and therefore Duracell, Inc. had reaped its fair share of profits from the sale of the batteries in Belgium. The majority's response is a terse restatement of the territoriality theory:

Duracell has extensively advertised its batteries in the United States and built up its reputation as a purveyor

---

100 Id. at 825.
of quality batteries. Because of this reputation, Duracell is able to sell its batteries at a premium. . . . Thus, the importers and retailers are appropriating the benefits of Duracell’s goodwill for themselves which they have not helped to create. This is the essence of unfair competition and the basis for our finding of trademark infringement. 101

Furthermore, the ITC majority held that there was consumer confusion as to source which further undermined the goodwill created by Duracell in the U.S. market:

The confusion of the U.S. consumers is not with regard to the “genuineness” of the batteries . . . but as to the efficacy of the goods to fulfill the U.S. consumer’s reasonable expectations, one of which surely is that the item being purchased has been given the same care in production and distribution as were the same trademarked goods previously purchased and used by the consumer with satisfaction. 102

As a remedy to gray marketing, the majority recommended a broad exclusion which entailed either destroying the goods or shipping the goods back to the country of origin.

The two dissenting ITC commissioners’ opinions agreed that the gray market goods copied the trademark owned by Duracell and harmed its goodwill, but disagreed on the extent of consumer confusion. 103 The dissent concluded that there was no confusion as to source since Duracell, Inc. was initially the source of both batteries and therefore had control over the quality of both authorized and unauthorized sales. 104 Because of the lack of harm to consumer perception, the dissent recommended that the gray market goods be permitted into the market but with proper labels indicating them to be gray market goods. The appropriate remedy would be “proper labelling which clearly indicates that the two products, while the same at the point of manufacture, are not similarly authorized and guaranteed in the United States. . . . [This

101 Id. at 831.
102 Id. at 834.
103 Id. at 849-50.
104 Id. at 852.
ensures that] the ultimate price of the foreign batteries ... would then properly reflect the true nature of the imported product." According to the dissent, the goods should be excluded only if the labelling remedy would prove inadequate (e.g., if the product were a shirt bearing a company logo).  

While the ITC ruling accorded broad protection against gray markets, the decision was ultimately made moot by President Reagan's disapproval of the ITC recommendation. The President's ground for disapproval was the potential conflict with the Custom Service's interpretation of § 526, which allowed gray market goods in the parent-subsidiary context under the common control exception. The President stated:

The Administration has advanced the [Customs Service's] interpretation in a number of pending court cases. Recent decisions of the U.S. District Court for the District of Columbia and the Court of International Trade explicitly uphold that interpretation. Allowing the Commission's determination in this case to stand could be viewed as an alteration of that interpretation.

After the ITC challenged the President's response in federal court, the United States Supreme Court upheld President Reagan's disapproval. The result is that § 337 currently affords no protection against gray marketeers. The reasoning of both the majority and the dissent provide fodder for future gray market debate and litigation.

2.6. State Labelling Laws

New York State and the State of California both passed legislation in the mid-1980s intended to prohibit the sale of goods through unauthorized channels. These statutes

105 Id. at 858.
106 Id.
107 See LIPNER, supra note 2, at 179; BARTON, supra note 97, at 32; cases cited supra note 83.
108 See LIPNER, supra note 2, at 95.
109 Id. (alterations in original).
110 Id. at 180.
111 See N.Y. GEN. BUS. LAW §§ 218-aa, 368-d (McKinney 1984);
provide criminal sanctions for unauthorized sales of goods in the gray market. No case law has developed interpreting either of these statutes because of the low enforcement rates. Nonetheless, the two statutory schemes provide a useful perspective for other policy responses to gray marketing.

Both the New York and California statutes apply to goods bearing a brand name or trademark and usually sold with a warranty. Both require the distributor to indicate that the goods are gray market goods and both statutes allow the attorney general of the state to enjoin the sale of gray market goods if the distributor does not properly disclose that the goods are gray market goods. In addition, the New York statute penalizes the distributor further by requiring a refund of all sales within twenty days of purchase if the act is violated.

The New York and California statutes differ in the type of information they require to be disclosed. The New York statute requires the distributor to disclose that the gray market products: (a) are not accompanied by a manufacturer's warranty which is valid in the United States; (b) are not accompanied by instructions in English; and (c) are not eligible for a rebate offered by the manufacturer. The California statute requires the disclosure of each of these three items and in addition information that the product: (a) is not compatible with United States electrical currents; (b) is not compatible with United States broadcast frequency; (c) contains parts which cannot be replaced through U.S. distributorship; (d) contains accessories not available through U.S. distributorship; and (e) has other incompatibilities with domestic standards.

The two state labelling statutes in effect adopt the remedy of the dissenting ITC Commissioners in the Duracell case. The issue of adequacy of labelling is addressed through the requirement that the information be disclosed either on the product through a tag or label or on a sign near the display for


112 N.Y. GEN. BUS. LAW §§ 218-aa, 368-d (McKinney 1984).

113 California Gray Market Consumer Disclosure Act, CAL. CIV. CODE §§ 1793.1, 1797.80-83 (West 1994).

114 See supra text accompanying notes 99-103.
the product. Unfortunately, the enforcement of this statute has been minimal because of the number of retail outlets, the small volume of product sales, and the relatively high to the costs of enforcement. The statutes do provide another alternative to the regulation of gray marketing in the United States.

2.7. Summary

As this overview indicates, the response to gray marketing in the United States has not been as liberal as in the European Union. The result is an overlap of statutory and case law that reflects conflicting attitudes towards gray marketing. Three principle themes emerge from the current state of the law, and these themes will be instrumental to the understanding of the economics of gray marketing.

First, corporate structure affects the legality of gray marketing. If the gray market goods originate from a parent or subsidiary of a U.S. company, a court is less likely to enjoin the gray marketing or to award damages. In part, this reflects a view that affiliated companies have more control over the quality of goods and therefore consumer confusion and harm is less likely. The conclusion also stems from a conflict between global markets and the territoriality principle of trademark law. Trademark recognition reflects the creation of goodwill and advertising on the national level. This goodwill is maintained through the creation of authorized distribution channels. Concluding that gray market goods originating from foreign, but related, companies do not create confusion as to source ignores the national differences in goodwill. While it may be true that the trademarks "IBM" or "Coke" are recognized globally, computers or soft drinks manufactured in different countries under different quality standards are not necessarily substitutes for each other.

The international differences in quality buttress the second theme of the U.S. law on gray marketing, the court's ability to discern material difference and consumer confusion over products. As the recent Lever Brothers case shows, the material difference requirement of §§ 42 and 43 provide further protection for U.S. companies against gray marketeers.

115 See LIPNER, supra note 2, at 168-69.
While § 526 rests on a showing of the authorized use of a trademark, the Lanham Act accords protection against the passing off of materially different products as genuine articles. The problem in applying the Lanham Act is one of determining what aspects of the product are relevant for determining difference. It is on this point that the courts have shown the greatest confusion. Differences in warranty protection have not been the basis for finding material differences, but differences in language or instruction have been. The only meaningful guidepost in the range of Lanham Act cases is that the courts will look to differences in tastes in order to find that gray market goods and U.S. manufactured goods are materially different. Therefore, selling dolls with foreign language adoption papers, soap that does not lather, and candies that differ in caloric content would all be bases for gray market claims, while selling products otherwise identical except for the provision of warranties would not be sanctionable.

Finally, the gray market law reflects a confusion as to what interest should be protected. On the one hand, courts want to protect a manufacturer's investment in goodwill; on the other hand, courts seek to protect consumers from confusion. The tension between these two goals can be seen in the source of law for the restrictions on gray marketing. While trademark law protects both the goodwill and consumer interests, copyright law protects the manufacturer's interest in creating advertising and creative expression. If copyright law becomes a more often used source for gray market protection, courts will have to reconsider the set of interests that gray market regulation is designed to protect. The debate between the majority and the dissent in the Duracell case illustrates the conflict over the appropriate weights to place on the consumer's and manufacturer's interests. The statutory solutions provided by New York and California provide one compromise; the lack of enforcement of these statutes (and consequent case law to test them) suggest that local and state regulatory bodies do not find it cost-effective to combat gray market goods. The confusion at the federal level does not provide the needed remedy at the state and local levels.

A helpful way to sort through the issues raised by the laws regulating gray markets is to pursue a more rigorous analysis of the gray market phenomenon. Given the terms of the
debate and the intimate connections with international trade and consumer welfare, economic tools provide the sharpest instruments with which to dissect the gray market problem.

3. ECONOMIC ANALYSIS OF GRAY MARKETS

In each of the gray market cases discussed in the previous Section, the court was forced to grapple with both the underlying economics that lead to gray marketing and the economic consequences of gray marketing. In each case, the court also failed to balance all of the various economic interests affected by gray marketing. Part of this failure resulted from judicial competence: a court can only decide based on the legal facts before it and does not have the power or ability to further broader social and economic values. Congress' inability to pass cogent gray market legislation, however, and the consequent reliance on federal intellectual property law illustrates that even the level of government which is able to take the broader perspective is stymied by the tensions within gray marketing. Part of the problem is that no systematic academic study has examined all of the economic elements of gray marketing. The purpose of this Section is to fill some of the gaps in the scholarship and to provide compelling arguments for future legislative action on the gray marketing issue.

Of course, the economic analysis presented below is framed by the biases of the model builder. But economic and

---

116 Congress' attempts to pass legislation to address the gray market problem have often been frustrated by competing political interests. In May 1987, both the House and Senate considered bills designed to de-regulate gray marketing by weakening the holding of K Mart. The bills did not make it out of committee. Similarly, for each term beginning in 1987, Senator Orrin Hatch (R-Utah) has proposed a bill that would extend the holding of K Mart to prohibit gray marketing even in the context of no common control. In 1991, this bill was referred to the Judiciary Committee but died "due to pressures from competing interest groups and constituencies." See Rubin, supra note 6, at 615.

117 The economic analysis discussed below is in the tradition of models of imperfect competition developed in Edward Chamberlain, The Theory of Monopolistic Competition (3d ed. 1933) and Joan Robinson, The Economics of Imperfect Competition (1933). For a discussion of the various approaches to modelling market structure, see the essays in New Developments in the Analysis of Market Structure (Joseph E. Stiglitz & G. Frank Mathewson eds., 1986); G.F. Mathewson & R.A. Winter, The
legal analysis creates its own dialectic, and it is hoped that the substantive model developed below will be extended and refined to incorporate other economic and political concerns. The intention in developing the specific economic model presented is to incorporate all of the issues that are raised by gray marketing: trademark and the creation of goodwill, licensing of trademark, corporate structure, and international trade. These particular economic issues can be further generalized into three groups of issues: (1) protection of intellectual property; (2) price discrimination and territorial market divisions; and (3) international trade.

3.1. Intellectual Property Rights

Trademark rights protect two economic interests: the producer’s investment in goodwill and product quality and the consumer’s interest in reducing search costs and being assured of product quality. United States trademark law protects these rights by allowing trademark owners to enjoin or collect damages from competitors who use their trademark on a similar product in a protected regional market. Copyright law, on the other hand, is designed to protect the creation of artistic and literary works. The consumer protection aspect of copyright law is minimal and is reflected in copyright defenses such as fair use and first sale, which carve out and protect certain market interests from the copyright owner’s property right. The overlap of copyright and trademark laws in the gray market area ignores the consumer protection aspect of gray market legislation. This Article ignores the legal doctrinal differences in the economic analysis of gray markets. For all practical purposes, what matters is whether gray market goods are restricted or permitted entry into the domestic market; the exact legal theory leading to the remedy is irrelevant to the economic analysis. The use of copyright and trademark doctrines in the gray market context can be reconciled if copyright law is viewed as providing protection for efforts that have resulted in the creation of distinctive marks and advertising, a point that was discussed in greater detail

Economics of Vertical Restraints in Distribution, in id. at 211. See also Landes & Posner supra note 5; Higgins & Rubin supra note 5 (providing alternative approaches).

https://scholarship.law.upenn.edu/jil/vol15/iss3/2
In the previous Section.

In this Article, the value of trademark creation is captured in two ways. First, on the consumer side, trademarks allow consumers to reduce search costs and to obtain assurances of quality; these benefits increase the value derived from the purchase of the trademarked good.\(^{118}\) Second, on the producer side, trademarks create localized monopolies in the production of certain goods through brand identification.\(^{119}\) This analysis will explicitly capture both of these types of value.

3.2. Price Discrimination and Territorial Divisions

Gray markets arise because similar goods bearing identical trademarks are sold in different geographical markets at different prices. The price difference provides the incentive for an arbitrageur to buy in the low price country and sell in the high price country.\(^{120}\) In each of the gray market cases discussed in the previous Section, the gray marketeer either absorbed the transportation costs or relied on the absorption of the costs by a third party. For example, in Sebastian, the foreign licensee of the trademark absorbed the costs by re-shipping the products back to the United States, allowing the gray marketeer to sell the products domestically without bearing any transportation costs. In other cases, such as Weil or Scorpio, the gray marketeer absorbed the transportation costs and passed them on to the ultimate purchaser. Transportation costs play an important role in determining when gray markets arise, and therefore must be explicitly included in any sensible model of gray markets.\(^{121}\)

The initial price difference between the domestic and foreign markets must also be explained. For the purpose of economic analysis, such differences could be taken as given,

---

\(^{118}\) See Landes & Posner, supra note 5, at 270.


\(^{120}\) Liquor distributors in the U.S. testified before a House Subcommittee that the price difference between identical cases of scotch sold in the United States and in Canada was as high as $56 in 1986. HEARING BEFORE THE SUBCOMM. ON INTERNATIONAL TRADE OF THE SENATE COMM. ON FINANCE, 99th Cong., July 29, 1986, 151-52.

\(^{121}\) See Brander & Krugman, supra note 23.
but this would not be a satisfactory strategy if the ultimate goal is to understand the appropriate legal response to gray markets. If price differences reflect differences in tastes and costs, the response to gray marketing would be different from the situation in which the price difference results from an attempt by businesses to price discriminate between two markets. In the former case, gray markets would almost certainly be viewed as salutary because they provide a means to integrate global markets. In the latter case, however, gray markets would undermine attempts to develop regional goodwill and expand markets to areas where the goods would not be sold but for the price discrimination. The problem, from the perspective of courts and legislatures, is that both these factors will be present in almost all cases of price differences.

As an illustration of the benefits of price discrimination, consider the following simple example. Suppose a manufacturer produces a drug which would be beneficial to consumers. It can sell in either or both of two markets: one relatively large with many substitutes for its product, the other small with few substitutes. In order for the product to be sold with profit in both markets, the price must be higher in the small market than in the large market. If, however, by law the producer was forced to sell the product at the same price in the two markets, the producer would simply refuse to sell in the smaller market. Therefore, given this all or nothing possibility, price discrimination actually helps consumers as a group, compared to the situation where the producer is forced to sell its goods at one price. Note that in this example the incentives for gray marketing exist if transportation costs are not too high: the gray marketeer would buy in the low price market and sell into the high price market. Gray marketing, however, would erode price in the smaller market, cutting into the producer’s profits and creating the same incentives for removing the product from the smaller market as a restriction of non-price discrimination would. Therefore, the producer of the drug must not only be allowed to price discriminate, but must also, according to this argument, be allowed to “keep out

---

122 The discussion of price discrimination and social welfare is based on analysis in ECONOMICS OF PRICE DISCRIMINATION, supra note 22. See HAL R. VARIAN, MICROECONOMIC ANALYSIS 248 (3d ed. 1993) (presenting a technical analysis).
the gray.”

The producer of the drug can protect his interests by either legislatively restricting the gray market or by controlling the gray market through contract. Specifically, this Article shows that the producer can preempt the gray market by setting the price in the two markets in such a way that gray marketeers would have no incentives, after taking into consideration the transportation costs, to enter the market. The cost of this “contractual preemption” is borne in part by the producer of the good and in part by the consumers of the final product. Arguably, this may be a cheaper alternative to legislative and administrative schemes that are intended to keep gray market goods from crossing the border, assuming a specific balance of price differences and transportation costs. One result of this economic analysis is a comparison of the costs and benefits of contractual preemption with bans on gray market goods and other judicial and legislative solutions to the gray market problem.

3.3. International Trade

The previous discussion of territorial divisions and price discrimination was presented in a way that applies equally to domestic or international markets. Gray markets, however, have been exclusively an international issue. The question of whether the analysis should be different in the context of international markets rather than domestic markets remains open. From an analytical perspective, the fact that gray marketing occurs in international markets rather than domestic markets is irrelevant from the point of view of territorial restrictions; the same economic concepts, transportation costs, consumer utility, and monopoly pricing are applicable to both international markets and domestic markets. Real world borders and nationalities are irrelevant to the economic analysis.

This viewpoint demonstrates a potential pitfall to the economic theory of gray markets. For actual gray markets, international differences in intellectual property protection and market structure are important for the policy responses and the politics of gray market restrictions. The economic analysis presented here will show that international differences in the law will have an important role in
explaining how gray markets arise and, consequently, how domestic legal institutions should respond to gray markets.

3.4. Trademark Goods, Generics, and Gray Marketing

The formal model of gray markets builds on three elements: (a) derivation of the demand curve for trademarked products in each country; (b) description of how trademark licensing occurs; and (c) description of international trade and gray marketing.

For the purposes of this Section each of the two countries will be assumed to have identical market structures, the focus will be on one of the two countries.

There are two sectors in the market: the trademarked sector and the generic sector. The generic sector is assumed to be perfectly competitive, with average cost equal to marginal cost of $c_g$. Therefore, the price of the generic good, $P_g$, is $c_g$. The price of the trademarked good, $P_t$, is determined in the trademark sector through the licensing arrangement and the demand for the trademarked good.

The demand curve for both the trademarked and the generic goods can be derived from the preferences of consumers, which are taken as given. The preferences are captured by each consumer's willingness to pay for the good. For the sake of simplicity, assume that there are several consumers, each of a different type, and index each type of consumer by $z$, where $z \in [0, h/b]$, where $h/b$ is defined below. Each type of consumer is identical in her taste for the generic good; each consumer is willing to pay up to one dollar for the generic good. The demand for the trademarked good is more complicated. Since the value of the trademark is derived from the exclusiveness and status of the mark and the reduction in search costs, the value of the trademark decreases as more consumers buy the trademarked good. To illustrate this

---


124 Even if there are no status effects, it is still the case that consumers benefit from reduced search costs because of the use of trademarks. However, if the trademark is overused in the market, the information value of a particular mark is reduced and the mark may die because of
economic fact, assume that each consumer $z$ buys exactly one unit of the trademarked good per period. If $z$ individuals buy the trademarked good, the willingness to pay of the marginal consumer is given by

\[ (1) \quad h - b \cdot z \]

where "$h$" represents the amount someone would be willing to pay for the trademarked good if no one else were to buy it and "$b$" represents how much the willingness to pay declines as each additional consumer buys the good.

Consumers will buy either generic or trademarked products, since the goods are identical except for their labels. An individual consumer will buy a trademarked product if the consumer surplus derived from the consumption of that trademarked good is greater than the surplus derived from the generic good. The marginal consumer, $z_1$, is one who just indifferent to the distinction between the trademark good and the generic good. For this consumer, it must be the case that

\[ (2) \quad h - b \cdot z_1 - P_t = l - c_g. \]

Rearranging equation (2) yields a relationship between the price of the trademarked good and the amount of the good consumed, (i.e, the demand curve for the product):

\[ (2') \quad (h - l + c_g) - b \cdot z_1 = P_t. \]

Calling the expression in parenthesis "$a$" and dropping the subscript on $z$, the demand curve for the trademarked good can be rewritten as follows:

\[ (3) \quad a - b \cdot z = P_t. \]

The owner of the trademark and the domestic and foreign licensee of the trademark take the demand curve in formula

"genericide." Therefore, it is reasonable to assume that the value of a trademark should be a function of how much it is used, which can be valued by the number of consumers who buy the trademarked product. For a discussion of genericide and information costs, see Landes & Posner, supra note 5.
as given in their profit maximization decisions. The demand curve can be used positively to describe behavior and normatively to assess the various policy responses to gray marketing.

3.4.1. Trademark Licensing

The standard economic model of licensing assumes that the trademark owner licenses the trademark to a distributor, who in turn sells the good to the public. In this model, the distributor faces a market described by the demand curve in formula (3). The licensor sets a licensing fee which consists of two parts: (a) a royalty fee that charges r dollars per each unit sold, and (b) a franchise fee F paid as a fixed cost to establish the franchise. The licensor profits by manufacturing the trademarked product at unit cost c, and then earning licensing revenues paid by the distributor. The distributor profits by buying the franchise contract and selling the goods in the product market. The respective economic problems faced by each agent can be presented as follows:

(4) Licensee:
choose z to max: (a-b·z)·z - r·z - F

Licensor:
choose r and F to max: (r·z+F) - c·z.

The standard solution to this problem is for the licensor to charge the licensee a royalty fee equal to the marginal cost of production, c, and to set the franchise fee equal to the amount of profits earned by the licensee. Substituting these relationships into (4) yields the franchise problem:

(5) choose z to max: (a-b·z)·z-c·z.

Working through the mathematics yields the result that the licensee will maximize profits by selling the trademarked good at a price equal to (a+c)/2. Therefore, without trade the prices of the trademarked and generic goods are as follows:

---

125 See TIROLE, supra note 22; Perry & Groff, supra note 119, at 189.
If the international economy were composed of independent islands which do not trade goods among themselves and on which goods were distributed through the franchise arrangement described above, the prices of the trademarked product and the generic product would be described fully by equation (6). International trade makes price determination more complicated.

### 3.4.2. International Trade

If prices in the international economy on each of the islands are defined completely by equation (6), then gray markets would never arise. Prices would be identical on all of the islands and there would be no room for arbitrage. Equation (6), however, illustrates how international price differences in the trademarked good arise. According to equation (6), the trademarked good will be priced differently because either the variable \( a \) or the variable \( c \) differs between countries. That is differences in tastes or in costs of production lead to a price difference. For the purpose of this discussion, assume that price differences arise from differences in the costs of production; none of the analysis changes if the price differential arises from differences in tastes. This assumption implies that the cost of producing generics goods is the same in the two countries, but the cost of producing the trademarked good is higher in one country than the other. The cost difference may be due to differences in regulatory regimes, the costs, or the technology used for the production of the product. Using "\( d \)" to subscript the domestic market and "\( f \)" to subscript the foreign market, the price of the trademarked good in the two countries can be represented as:

\[
(7) \quad P_{td} = (a+c_d)/2; \quad P_{tf} = (a+c_f)/2.
\]

A potential gray marketeer in this economic environment has a clear incentive to arbitrage away the price difference. If "\( t \)" represents per unit transportation costs, then the gray marketeer will make a profit if he can buy the good at the cheaper price, incur the transportation costs, and then sell the good at the higher price. For the sake of argument, assume
that the foreign market has the lower price. Then a profit opportunity arises if:

\[(8) \quad \frac{a+c_d}{2} > \frac{a+c_f}{2} + t.\]

Alternatively, this condition can be written as:

\[(8') \quad \frac{c_d-c_f}{2} > t.\]

The expression reported in (8') is a necessary condition for a gray market to arise.

Gray marketing can lead to different responses by the trademark licensee. One possibility is to stop all gray market goods at the border. If such exclusion is successful, the result will be the pricing in autarky as described by equation (7). Another response is to contractually preempt the gray market by setting the prices in the two markets so that no gray marketing can occur. A third possibility exists where legal institutions permit gray marketing, and the trademark licensor creates a separate and independent division in the foreign market. This situation corresponds to the type one and type three cases in *K Mart*, in which the Supreme Court held that gray market goods will be prohibited. A fourth and final possibility is that the trademark licensor maintains its affiliation with the foreign business entity, but due to transaction costs cannot contractually preempt gray marketing. What follows is an analysis of each of the potential responses to gray marketing under the headings: autarky, contractual preemption, gray marketing without common control, and gray marketing with common control.

### 3.4.3. Autarky

Autarky is analytically the simplest case and is described by equation (7) above. The autarky problem can be written as a simple maximization problem. The purpose of writing a formal maximization problem is for analytical convenience. The autarky problem can be written as the maximization of joint profits in the foreign and domestic markets, where \(\pi_f\) and \(\pi_d\) represent foreign and domestic profits respectively:

\[(9) \quad \max (\pi_f + \pi_d)\]
where the maximization problem is solved with respect to the foreign and domestic prices of the trademarked good. The economic intuition behind this result is that in each country the trademark licensor and licensee are solving the franchise problem described in (5). In equilibrium, the profits must be as large as possible in each country, and this requirement is equivalent to making the sum of profits as large as possible.

3.4.4. Contractual Preemption

Through contract, the trademark licensor can set the licensing arrangement, and consequently the price in the two markets, so that gray marketing will be preempted. Gray marketing will not occur if the gray marketeer cannot arbitrage away the price differences in the two markets after taking into account transportation costs. Specifically, gray marketing will not occur if:

\[ P_d \leq P_f + t. \]

The contract preemption problem can be written as:

\[ \max (\pi_f + \pi_d) \text{ such that } P_d \leq P_f + t. \]

In other words, the contract preemption problem is identical to the autarky problem, except for the fact that there is a mathematical restriction on the problem. Note that since there is a restriction on the contract preemption problem, the sum of profits in the contract preemption problem will be at most the sum of profits in the autarky problem. Such a limitation indicates that in terms of profits, the international economy would be made worse off by contract preemption as compared to the situation in autarky. However, the prices of the trademarked products will also be different with contract preemption than with autarky. Therefore, consumers in the two economies will be affected differently by contract preemption than by an autarky regime. Formal comparisons of these situations are made in the following Sub-section.
3.4.5. Gray Marketing Without Common Control

In this regime, gray marketing is permitted, and the foreign and domestic business entities cannot contractually preempt the market, because the domestic entity has no control over the pricing policy of the foreign entity. Therefore, each licensor-licensee entity in the two countries solves the franchise problem independently of the problem in the other country. The problem can be written as follows:

(12)  
\[
\text{domestic economy: max } \pi_d; \\
\text{foreign economy: max } \pi_f \text{ such that demand for gray marketing is internalized}
\]

Furthermore, gray marketing occurs to arbitrage the price difference between the two countries after transportation costs. Gray marketing has two effects qualitatively relative to autarky: (a) an increase in the price in the foreign market, since gray marketeers increase demand for the product and (b) a decrease in price in the domestic market as gray marketeers provide competition for the trademark licensee in the domestic market. These two forces together tend to equalize prices in the two markets net of transportation costs.

3.4.6. Gray Marketing With Common Control

In this regime, the foreign and domestic entities act in concert to maximize joint profits, while internalizing the gray market competition in the domestic economy. This regime takes into consideration the strategic interaction between the trademark licensor and the gray marketeer. Specifically, this strategic interaction arises because the licensee fee arrangement established in the foreign market will affect the pricing in the domestic market. The formal problem can be written as follows:

(13)  
\[
\text{max } (\pi_f + \pi_d), \text{ such that gray market is internalized}
\]

The difference between this problem and the one described in (12) is that in (13), the trademark licensor internalizes the effect of licensing in the foreign market into the price in the domestic market. The result is that worldwide profits should be higher in situations under common control than in
situations under lacking common control, because the externality has been internalized.

3.5. Analytical Comparison of Four Regimes

The four different economic models discussed in the previous Section correspond to the four different types of legal regimes within which gray markets operate. This correspondence can be described as follows:

(a) Autarky: this corresponds to the legal regime in which gray markets goods are prohibited from entering the domestic market. The result is that foreign and domestic vendors sell the product in their respective markets without the possibility of resale.

(b) Contractual Preemption: this corresponds to the legal regime in which the customs service and the courts are ineffective in prohibiting gray market goods from entering the domestic market. In response, the trademark owner sets the licensing fees in the two countries in order to make gray marketing impossible.

(c) Gray marketing without common control: this corresponds to the legal regime in which gray marketing is permitted when there is no common control of the domestic and foreign entities and the two entities cannot effectively contract to prevent gray marketing. Comparing the market under this regime and the outcome under autarky illustrates the differences between completely restricting gray marketing and allowing gray marketing when the foreign and domestic entity cannot contract with each other.

(d) Gray marketing with common control: this corresponds to the legal regime in which gray marketing is permitted and the foreign and domestic business entities are under common control. Fruitful comparisons can be made between this regime and the autarky regime, in which gray marketing is effectively prohibited. Another useful comparison is with the contractual preemption regime (b), in which gray marketing can be controlled through contracting.
The technical appendix establishes the formal model for each of these four regimes and discusses how analytical solutions were derived for the final market prices of the trademarked good in the four regimes. This information is summarized in table two. The notation is defined as follows:

- $P_{da}$ = domestic autarky price
- $P_{dc}$ = domestic contract price
- $P_{dk}$ = domestic common control price with gray marketing
- $P_{ds}$ = domestic price with gray marketing when entities are separate
- $P_{fa}$ = foreign autarky price
- $P_{fc}$ = foreign contract price
- $P_{fk}$ = foreign common control price with gray marketing
- $P_{fs}$ = foreign price with gray marketing when entities are separate

In the discussion below, the symbol $\pi$ will be used to denote profits, and subscript characters will have the meanings noted above. In addition, subscript "t" will be used to denote total or worldwide profits, which is the sum of foreign and domestic profits.

Comparisons of consumer welfare and firm profits can be made by considering the differences in prices between the different regimes. Two points raised by this model are worth considering. First, consumer surplus unambiguously increases when prices fall, which clearly demonstrated that consumers prefer lower prices to higher prices. Second, profits may rise or fall as prices change, indicating that the qualitative effect on profits depends on the elasticity of demand.

The comparison among the four various regimes can be summarized briefly. In the domestic market, prices under the various regimes can be ranked as follows:

(14) \[ P_{da} > P_{dc} > P_{dk} > P_{ds}. \]

Domestic consumers favor most regimes in which the entities are separate and gray marketing is allowed, and dislike most autarky regimes, in which gray marketing is completely prohibited. To illustrate this point, a set of prices for hypothetical values of the parameters may be calculated. These are presented in table two for both domestic and foreign
consumers. Notice that the ranking of regimes for foreign
consumers will be slightly different:

\[ \text{P}_f > \text{P}_k > \text{P}_t > \text{P}_s \]

Foreign consumers prefer autarky regimes to contract-based
regime and prefer most of all regimes with separate entities
and gray marketing. The examples presented in table 2(b)
reflect this ranking.

Since the demand curve is a straight line in this model, the
effect of a price decline on profits can be easily determined.
Therefore, the difference between profits when the price is \( \text{P}_1 \)
and when the price is \( \text{P}_0 \) can be expressed algebraically as
follows:

\[ \begin{align*}
A &= (x_1 - x_0) \cdot (\text{P}_1 - \text{c}) \\
B &= (\text{P}_0 - \text{P}_1) \cdot x_0 \\
\pi_1 - \pi_0 &= A - B
\end{align*} \]

Substituting for \( x_0 \) and \( x_1 \) and using the expression for the
demand curve yields the following expression for \((A-B)\):

\[ \frac{1}{b} \cdot (\text{P}_0 - \text{P}_1) \cdot (\text{P}_1 + \text{P}_0) - \text{a} - \text{c}). \]

Since \( \text{P}_0 > \text{P}_1 \), the sign of the difference in profits is the same
as the sign of \((\text{P}_1 + \text{P}_0 - \text{a} - \text{c})\). Expressed algebraically, this is:

\[ \text{sign} (\pi_1 - \pi_0) = \text{sign} [(\text{P}_1 + \text{P}_0) - (\text{a}+\text{c})]. \]

In this model, the effect of a price drop on profits can be
determined by examining the sign of the expression on the
right hand side of equation (18). With information on prices
from Table 2(a), foreign, domestic and worldwide profits may
be compared by using equation (18).

Without further information on the elasticity of demand
and the relative sizes of transportation costs and production
costs, it is not possible to analytically rank profits under the
four different regimes. Profits can, however, be partially
ranked as follows:

\[ \text{TOTAL PROFITS: } \pi_{ta} > \pi_{tc}; \quad \pi_{tk} > \pi_{ts}; \quad \pi_{ta} > \pi_{ts} \]
DOMESTIC PROFITS: $\pi_{da} > \pi_{dk} > \pi_{ds}; \pi_{da} > \pi_{dc}$

FOREIGN PROFITS: $\pi_{fs} > \pi_{fa}; \pi_{fs} > \pi_{fk}; \pi_{fc} > \pi_{fa}$

In assessing the effect on profits, the threshold question is whether the foreign and domestic firms are separate entities or are under common control. If the entities are under common control, it is not generally possible to show whether the common entity has higher profits under autarky or under a regime in which gray marketing is permitted. This difficulty is attributable to the fact that even though the domestic entity earns higher profits under autarky, the foreign entity earns higher profits under a regime of gray marketing when the entities are under common control. The reason for this ambiguity is that gray marketing actually increases demand in the foreign market, which in turn increases profits in that market. Therefore, if the entities are under common control, the domestic firm can expand its profits at the expense of profits earned by the foreign firm.

Under a regime of separate control, however, total worldwide profits will be unambiguously higher under autarky than under a regime where gray marketing is permitted. As under a regime of common control, there is a distributional difference between an autarky and a regime that allows gray marketing. Foreign firms will prefer regimes that permit gray marketing while domestic firms will autarky. Therefore, as when the entities are under common control, a domestic restriction of gray marketing will come at the expense of foreign firms. Similarly, contractual preemption regimes also demonstrate this ambiguity. While worldwide profits are higher under autarky than under contractual preemption regimes, domestic firms prefer autarky while foreign firms prefer contractual preemption regimes.\(^\text{128}\)

Finally, it is not possible to compare contractual

\(^{128}\) It should be noted that both parties could be made better off by moving to a regime of autarky if domestic firms could make side payments to foreign firms to compensate them for lost profits. In general, these side payments would be possible only if transaction costs were low, which would be true, for example, if the foreign and domestic firms were under common control. But as discussed in the previous paragraph, it is generally not possible to determine in common control regimes whether worldwide profits are greater under gray marketing or under autarky.
preemption regimes of gray marketing regimes either with or without common control. This inability to compare profits is not a problem, however, since the regimes are mutually exclusive. If the transaction costs of contracting are low enough, foreign and domestic firms can set prices to preempt the gray market altogether. On the other hand, if transaction costs are prohibitive, preemption will not be possible. Therefore, a comparison between contractual preemption regimes and gray marketing regimes would not be meaningful.

The previous comparisons have divided the regimes into those with common control and those without common control. Another distinction can be drawn between common control and separate ownership. If transaction costs prevent contractual preemption of the gray market, domestic and foreign firms can either create administrative and legal barriers to gray market goods that will lead to autarky, or they can operate in the shadow of gray marketing. If courts and legislatures do not provide protection against gray markets, the comparisons in equation (19) show that total profits are greater under common control than under separate control. The reason for this is that the gray market creates an externality in the setting of the licensing fee in the two markets. Since gray markets respond to price differences between two markets, the price of the licensing fee in the foreign market will affect the amount of gray market goods that enter the domestic market. Under common control, this externality can be internalized since the domestic and foreign entities will collude to set licensing fees in both markets by taking into consideration the size of the externality. As a result, worldwide profits will be higher under a regime of common control. Once again, domestic firms will benefit at the expense of foreign firms, since foreign profits are greater if the entities are separate while domestic profits are greater if the entities are under common control.

This discussion of profits raises several points about policy responses to gray marketing. First, the litigation against gray market goods is pursued by domestic firms under the autarky model because they have higher profits under a regime of autarky than under any of the other regimes. At least in the administrative area, however, the protection accorded to domestic firms hinges upon the corporate relationship between the domestic and foreign entities. If transaction costs are not prohibitive, the domestic and foreign entities can contractually
preempt the gray market. This rationale justifies the decision in *K Mart*, which denies protection to firms in a parent-subsidiary relationship. However, the presumption of low transaction costs is unrealistic. It is more likely that transaction costs will be high and that the foreign and domestic firms will operate in the shadow of gray markets. In a world where gray markets can neither be preempted nor legally banned, it is to the advantage of domestic firms to act in concert with foreign firms through a system of common ownership. This is the ultimate tension in the gray market problem: domestic firms are torn between an outright ban on gray market goods, and a regime in which gray markets are permitted but under which domestic and foreign firms act under common control to internalize the externalities created by gray markets. Ultimately, the gray market problem reflects a failure of coordination between domestic firms and foreign entities.

In light of this analysis, what alternative should policy makers select among the different responses to gray marketing? The following Section discusses what the preceding analytical results reveal about various policy options.

*Should the state, through the Customs Service and the courts, prohibit gray markets, or should control of gray markets be left to the contractual relationship between foreign and domestic businesses?*

This question involves a comparison of autarky regimes with contractual preemption regimes. Domestic consumers prefer contractual regimes to autarky, while foreign consumers have the opposite preference. Worldwide profits are lower under contractual preemption regimes, and there is a distributional difference between the two types of regimes as well. The key policy question is whether the gains in consumer welfare gained by requiring businesses to preempt gray markets outweigh the losses in profits that firms will face under contractual preemption regime. Because trademark laws have a pro-consumer inclination, contractual preemption is the preferred solution. Since gray marketing costs are borne almost exclusively by domestic firms, it would be more equitable to place the burden of preventing gray markets on
those firms than on society as a whole.

Should the courts adopt different standards for regulating gray markets based on whether the entities are commonly controlled?

Under the *K Mart* doctrine, gray marketing is allowed if the entities are under common control but not if they are separate. The result is a dual regime in which markets with common control are described by the model of gray marketing with common control and markets without common control are essentially described by the autarky model. This distinction leads to several discrepancies. First, businesses may attempt to reduce the appearance of common control by spinning off subsidiaries or by establishing third party shells through which trademark rights are licensed. Second, there is a distortion between goods sold through separate entities and those sold through entities under common control. The current regime provides a subsidy to goods sold through separate entities. Finally, since domestic consumers prefer the gray marketing regime without common control to the other three types of regimes, the distinction drawn in *K Mart* is misguided. Consumer welfare would be improved by abandoning the distinction between the two regimes and allowing gray marketing regardless of the corporate relationship between the foreign and domestic entities.

Will permitting gray marketing lead domestic or foreign trademark owners to abandon overseas markets?

The discussion of price discrimination above noted that price discrimination between two markets is sometimes necessary in order to guarantee that smaller markets are served. However, price discrimination alone is insufficient to accomplish this goal; territorial restrictions such as restrictions on gray markets are also necessary. To the extent that this model of price discrimination applies to gray markets, allowing gray markets may in fact lead to the abandonment of overseas markets. This analysis suggests, however, that incentives to abandon will not arise, since foreign markets still provide profits for domestic trademark owners. Unless these overseas enterprises become money-
losing ventures, incentives for overseas investment will continue to exist.

**What if gray market goods are materially different?**

An element thus far ignored by this analysis is the possibility that domestic goods and gray market goods may differ in quality. The potential harm to purchasers from purchasing gray market goods of lower quality than their domestic counterparts may militate against allowing gray market goods to enter the domestic market. The technical appendix shows that under the assumptions of this model, quality differences could make consumers worse off through gray marketing. This problem could, however, be alleviated by proper labeling of gray market goods, which would remove the uncertainty associated with their purchase. Therefore, even if gray market goods were materially different, consumers would fare better under a regime where gray marketing was permitted but the goods were properly labeled.

3.6. **Summary**

This Section provides a formal economic model of the various economic issues raised by gray markets. Its purpose is to assess the various legal arguments that are made for and against gray marketing. The model presented, though obviously simplified, captures many essential elements of gray markets: licensing, transportation costs, demand goods versus for trademarks versus generic goods, and material difference. It is important to note that governments always have the option to leave gray markets unregulated, relying instead on contractual preemption by business entities to provide control over the market. While contractual preemption leads to lower global profits for the businesses, it appropriately places the cost of regulating gray markets on the parties that directly benefit from such regulation. Even if contractual preemption is impossible due to high transaction costs, unregulated gray marketing is still preferable to regulated gray marketing from the perspective of consumers. The one caveat is that consumers would benefit from proper labels for gray market goods. Therefore, this analysis provides a rationale for the New York and California legislative responses to gray
marketing as well as the proposed legislation by Senator Orrin Hatch.\textsuperscript{127}

The discussion of consumer welfare rested on the assumption that foreign consumers do not count in social welfare from the perspective of domestic policy, which is not an unreasonable assumption. Foreign profits were, however, explicitly considered. This asymmetry is justified since one issue raised by gray marketing is the incentive for international business entities to come under common control; the preceding analysis provides a basis for understanding when common control is appropriate. While asymmetry makes it difficult to assess the harmonization of intellectual property laws, this model nevertheless does allow for the comparison of foreign and domestic economies.

\section*{4. Conclusion}

Economic arguments play an important role in many legal debates. This is exemplified by the discussion of gray markets, which raises questions involving the economics of international trade and intellectual property. There has been, however, very little formal economic analysis of the gray marketing problem or the intellectual property issues raised in this Article. Consequently, no systematic analysis has yet carried over into the legislative or judicial debates. This Article represents an important first step in providing such an analysis. It is hoped that the models described will provide the basis for a more rational and systematic discussion of the economic issues raised by gray marketing.

As the discussion of the case law illustrates, domestic firms have pursued several means of restricting gray markets. In the context of administrative remedies, the U.S. Supreme Court has based protection against gray markets on the corporate relationship between the domestic and foreign entities, depending upon whether or not they are under common control. In the context of the preceding model, this distinction is at least somewhat logical. If gray marketing occurs, firms under common control achieve higher profits than if the firms were under separate ownership. In this sense firms under common control are hurt less by gray

\textsuperscript{127} See supra text accompanying note 102.
marketing than firms that are not under common control. This analysis, however, adopts the wrong baseline. Domestic firms unquestionably prefer an outright ban on gray markets to all other possible regimes. Foreign firms, however, favor gray markets because the presence of gray markets increases consumer demand in the foreign market. These conflicting tendencies result in a tension between the policy goals of domestic and foreign firms. The *K Mart* decision assumes that firms under common control can resolve coordination problems through the side payments between domestic and foreign entities. Even if side payments can be made, the issue of whether gray marketing should occur remains unresolved. Under current law, the legislative and judicial searching for restrictions on gray markets reflect an attempt by domestic firms to increase their domestic profits at the expense of foreign firms. This Article suggests that a global perspective may be needed in order to develop a more comprehensive response to the gray marketing problem.
DERIVATIONS OF PRICES IN FOUR REGIMES

Autarky

For the technical discussion of this regime, I will not use the subscripts to represent the foreign and domestic economies.

In each country, the trademark licensee solves the following problem:

\[(1) \text{max by choosing } x: \quad (a-b \cdot x) \cdot x - r \cdot x - F \]

The solution to this problem yields market output as a function of \(r\) and \(F\) and market price as a function of \(r\) and \(F\). These functions are respectively \(x(r,F)\) and \(P_t(r,F)\).

The trademark licensor solves the following problem:

\[(2) \text{max by choosing } r \text{ and } F: \quad r \cdot x(r,F) + F - c \cdot x(r,F) \]

Solving these problems yields the prices listed in Table Two.

Contractual Pre-emption

In this problem, the licensee fees in the two countries are set in order to make gray marketing unprofitable. Each country solves the licensing problem as discussed above. This means that in each country, output and price will be functions of the royalty and licensing fee in each country. Explicitly, in each country

\[(3) \quad x_d = x_d(r_d,F_d) \]
\[P_d = P_d(r_d,F_d) \]
\[x_f = x_f(r_f,F_f) \]
\[P_f = P_f(r_f,F_f) \]
The profit maximization problem can be written as follows:

\[
\begin{align*}
\text{(4)} & \quad \text{max by choosing } r_d, r_d, F_d: \\
& \quad (r_d\cdot x_d + F_d - c_d\cdot x_d) + (r_f\cdot x_f + F_f - c_f\cdot x_f) \\
& \quad \text{such that } P_d(r_d, F_d) = P_f(r_f, F_f) + t
\end{align*}
\]

The autarky problem is the problem described in (4) without the restriction on final prices.

**Gray Marketing**

Gray marketing results in the entry of foreign goods into the domestic market. Let \( g \) be the amount of foreign goods that enter into and compete with the domestic market. The price in the domestic market is determined as follows:

\[
\text{(5)} \quad P_d = a - b\cdot(x_d + g).
\]

Gray market goods will enter until the profit to gray marketeers is driven to zero, or

\[
\text{(6)} \quad P_d = P_f + t.
\]

Combining (5) and (6) yields one equation to determine output in the domestic market:

\[
\text{(7)} \quad a - b\cdot(x_d + g) = P_f + t.
\]

The domestic trademark licensee solves the following problem:

\[
\text{(8)} \quad \text{max by choosing } x_d: \\
(a - b\cdot(x_d + g))\cdot x_d - r\cdot x_d - F.
\]

Taking (7) and (8) together yields functions for domestic production \( x \), gray market output \( g \), and domestic price \( P_d \), as functions of \( r_d \) and \( F_d \).

In the foreign market, the gray marketeers will increase the demand for the final product. To incorporate the demand, re-write the demand curve for the product as a function of \( P_f \).

This expression is
The foreign trademark licensee's problem is

\[
\text{max by choosing } x_f:
\text{ (a-b.(x_f+g)).x_f - r_f x_f - F_f.}
\]

Notice that because the gray market demand enters both the foreign and domestic profit maximization problem, the foreign output and market price will be affected by the licensing fee set in the domestic economy as well as the fee set in the foreign economy. This is the externality mentioned in the text of the Article. The difference between the common control and separate entity cases is whether this externality is taken into consideration in the profit maximization problem.

**No Common Control**

In this case, the trademark licensors in the two countries solve the profit maximization problems separately. In the domestic economy, the problem is

\[
\text{max by choosing } r_d 	ext{ and } F_d:
\text{ r_d'x_d(r_d,F_d) + F_d - c_d' x_d(r_d,F_d).}
\]

In the foreign economy, the problem is:

\[
\text{max by choosing } r_f 	ext{ and } F_f:
\text{ r_f x_f(r_d,F_d,r_f,F_f) + F_f - c_r x_f(r_d,F_d,r_f,F_f).}
\]

Notice in this case that the domestic trademark licensor is not taking into consideration the effect of its choices of \( r_d \) and \( F_d \) on the foreign output and price.

**Common Control**

In this case, the trademark licensors do take into consideration the externality resulting from the setting of the licensing fees. The common control problem is

\[
\text{max by choosing } r_d,F_d,r_f,F_f:
\]

**TECHNICAL APPENDIX**
Since the common control problem internalizes the externality, global profits and prices should be higher.

**Material Differences**

If the gray market goods are not perfect substitutes for the domestically produced goods, then a domestic consumer will buy a gray market good for the same price as the trademarked domestic good but obtain a lower level of utility. Suppose $s$ is the probability that a consumer will buy a gray market good thinking it is the genuine good; therefore, \((1-s)\) is the probability that the good is the actual trademarked good. The expected utility gain from buying a trademarked good is

\[
(14) \quad (1-s)[h-b\cdot z-P_t] + s[1-P_t].
\]

This expression assumes that the consumer gets a utility from gray market goods identical to what he would receive from purchasing a generic good because, for example, neither provides the same warranty or quality assurances as the trademark good. For the inframarginal consumer in this case, it must be that

\[
(15) \quad (1-s)[h-b\cdot z-P_t] + s[1-P_t] = 1 - c_g.
\]

The resulting demand curve is

\[
(16) \quad (1-s)(h-l) + c_g - b\cdot(1-s)\cdot z = P_t.
\]

Comparing this demand curve with the one derived in the text shows that if gray market goods are materially different, the main change is that the demand curve is flatter and has a lower intercept. This means that qualitatively the comparisons of profits across the four regimes will be identical in the material difference case than in the case where gray market goods and domestic goods are perfect substitutes. However, consumers will be worse off with gray marketing.
than in the autarky case because the demand curve has shifted in and therefore consumer surplus has been reduced.

This problem can however can better be remedied by allowing gray marketing but labelling gray market goods as different from the domestically produced trademark goods if in fact they are materially different, i.e. because of differences in quality or other attributes such as warranties. With labelling, consumers will not face the uncertainty described above and the resulting demand curve will be the one derived in the text. Once the basic uncertainty is removed, the analysis in the text will apply.

TECHNICAL APPENDIX

Published by Penn Law: Legal Scholarship Repository, 2014
TABLE ONE: Summary of Cases

<table>
<thead>
<tr>
<th>CASE</th>
<th>DATE</th>
<th>PRODUCT</th>
<th>TYPE</th>
<th>RESULT</th>
<th>THEORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>K Mart</td>
<td>S.Ct 1988</td>
<td>watches</td>
<td>2a</td>
<td>DNI</td>
<td>§ 526</td>
</tr>
<tr>
<td>Vivitar</td>
<td>Fed 1985</td>
<td>photo equipment</td>
<td>2b</td>
<td>DNI</td>
<td>§ 526</td>
</tr>
<tr>
<td>Olympus</td>
<td>2nd 1986</td>
<td>photo equipment</td>
<td>2a</td>
<td>DNI</td>
<td>§ 526</td>
</tr>
<tr>
<td>Daewood</td>
<td>9th 1983</td>
<td>shirts</td>
<td>3</td>
<td>DNI</td>
<td>§ 42</td>
</tr>
<tr>
<td>Mamiya</td>
<td>EDNY 1982</td>
<td>photo equipment</td>
<td>2a</td>
<td>I</td>
<td>§§42 &amp; 43</td>
</tr>
<tr>
<td>Granada</td>
<td>2nd 1987</td>
<td>dolls</td>
<td>3</td>
<td>I</td>
<td>§ 42</td>
</tr>
<tr>
<td>NEC</td>
<td>9th 1987</td>
<td>computer chips</td>
<td>2a</td>
<td>DNI</td>
<td>§ 42</td>
</tr>
<tr>
<td>Lever Bros.</td>
<td>DC 1989</td>
<td>soap</td>
<td>2c</td>
<td>DNI</td>
<td>§ 42</td>
</tr>
<tr>
<td>Yamaha</td>
<td>DC 1990</td>
<td>music equipment</td>
<td>2a</td>
<td>DNI</td>
<td>§ 42 &amp; § 526</td>
</tr>
<tr>
<td>Ferrero</td>
<td>3d 1991</td>
<td>candy</td>
<td>3</td>
<td>I</td>
<td>§ 42</td>
</tr>
<tr>
<td>Well Ceramics</td>
<td>3d 1989</td>
<td>clay figurines</td>
<td>2a</td>
<td>DNI</td>
<td>§§42 &amp; 43</td>
</tr>
<tr>
<td>Scorpio</td>
<td>3d 1984</td>
<td>records</td>
<td>3</td>
<td>I</td>
<td>§§602 &amp; 109</td>
</tr>
<tr>
<td>Sebastian</td>
<td>3d 1988</td>
<td>hair care products</td>
<td>3</td>
<td>DNI</td>
<td>§§602 &amp; 109</td>
</tr>
<tr>
<td>BMG Music</td>
<td>9th 1991</td>
<td>records</td>
<td>3</td>
<td>I</td>
<td>§§602 &amp; 109</td>
</tr>
<tr>
<td>Red Baron</td>
<td>4th 1992</td>
<td>video games</td>
<td>1</td>
<td>IOPR</td>
<td>§§602 &amp; 109</td>
</tr>
</tbody>
</table>

TECHNICAL APPENDIX

https://scholarship.law.upenn.edu/jil/vol15/iss3/2
TABLE I LEGEND:

Type:  
(1)= U.S firm bought rights from foreign firm  
(2a)= U.S. firm subsidiary of foreign parent  
(2b)= U.S. firm parent of foreign subsidiary  
(2c)= U.S. firm and foreign firm same  
(3)= foreign firm bought rights from U.S. firm

Result:  
DNI= Gray market goods did not infringe  
I= Gray market goods infringed  
IOPR = Gray market goods infringed on performance right

Theory: § 526= Tariff Act  
§§ 42, 43= Lanham Act  
§§ 602, 109= Copyright Act/First Sale Doctrine
TABLE TWO: Price Comparisons of the Four Regimes

2(a): Analytical Comparison

<table>
<thead>
<tr>
<th>Regime</th>
<th>Domestic</th>
<th>Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autarky</td>
<td>(a+c_d)/2</td>
<td>(a+c_f)/2</td>
</tr>
<tr>
<td>Contract</td>
<td>a/2+c_d/4+c_f/4+t/2</td>
<td>a/2+c_d/4+c_f/4+t/2</td>
</tr>
<tr>
<td>Gray Market No Common Control</td>
<td>a/3+c_f/2+2t/3</td>
<td>a/3+c_f/2-t/3</td>
</tr>
<tr>
<td>Gray Market Common Control</td>
<td>a/2+(3c_r c_d)/4+t</td>
<td>a/2+(3c_r c_d)/4</td>
</tr>
</tbody>
</table>
2(b): Numerical example (a=30; c_d=24; c_f=18; t=2)

<table>
<thead>
<tr>
<th>Regime</th>
<th>Domestic</th>
<th>Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autarky</td>
<td>$27</td>
<td>$24</td>
</tr>
<tr>
<td>Contract</td>
<td>$26.50</td>
<td>$24.50</td>
</tr>
<tr>
<td>Gray Market No Common Control</td>
<td>$20.33</td>
<td>$18.33</td>
</tr>
<tr>
<td>Gray Market Common Control</td>
<td>$24.50</td>
<td>$22.50</td>
</tr>
</tbody>
</table>