Entering the Jungle
The Exhaustion of Intellectual Property Rights and Parallel Imports

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The doctrine of exhaustion related to the protection of intellectual property rights (IPRs) is one of the most complicated regulations of international business. It defines the territorial rights of intellectual property owners after the first sale of their protected products. Under a system of *national* exhaustion, a title holder can prevent parallel importation of his product from a foreign country, where it is sold either by the IPR's owner himself or by an authorized dealer. In contrast, if rights exhaust *internationally,* the title-holder loses his exclusive privilege after the first distribution of his product, thus allowing parallel imports from abroad. A hybrid between national and international exhaustion is *regional* exhaustion, whereby parallel trading is allowed within a particular group of countries but parallel imports from countries outside the region are banned.

Parallel trade refers to trade in genuine products outside official channels of distribution; it should not be confused with trade in counterfeit goods, i.e., trade in products that infringe on someone's IPRs. If unrestricted, parallel trading activities can generally take two forms. The most common form is *passive* parallel imports, whereby arbitrageurs buy goods in a foreign country and sell them in the domestic market. The other form, *active* parallel imports, occurs when a foreign

Notes will be found on pages 187–90. The views expressed in this paper are the author's own and should not be attributed to the World Bank, its Executive Board of Directors, its management, or any of its member countries.

licensee (or distributor) of the IPR holder enters the domestic market to compete with the IPR holder himself or his official domestic licensee. Regardless of the form parallel imports take, they are subject to the same border measures as "regular" imports, including tariffs, quantitative restrictions, and technical standards.

The economic significance of the exhaustion doctrine is difficult to evaluate. The size of the market that could be subject to parallel trading activities, if unrestricted, is undoubtedly significant as most tradable goods (besides commodities) and services are protected by at least one form of IPR (e.g. trademarks).[1] There are virtually no statistics available on this so-called gray-market segment of international trade. In addition, if intellectual property owners and their licensees respond to the threat of parallel imports by pricing more uniformly across national markets—thereby eroding opportunities for international arbitrage—trade statistics would give an insufficient indication of the economic impact of international exhaustion.

The significance of the exhaustion doctrine depends also on the extent to which private contractual means can substitute for territorial rights exhaustion in restricting parallel imports. Territorial restraints in licensing agreements can put limits to active parallel imports and restrictive purchasing contracts can do so to passive parallel imports, even though IPRs may exhaust internationally. The extent to which such private contractual means can be used depends, in turn, on whether or not they are considered to be anti-competitive.

Current exhaustion regimes differ widely among countries and across the different forms of IPRs. Although most developed countries maintain significant restrictions on parallel imports, recent initiatives by policy-makers in several OECD countries have been favourable to international exhaustion. It would be premature, however, to interpret these initiatives as a fundamental shift in the regulations governing parallel imports. Nonetheless, there has been mounting interest in the economic implications of parallel trade—reinforced by the possibility that the exhaustion issue may be revisited within the multilateral trading system.

The effects of national or international exhaustion are highly complex and have been subject to extensive debate among economists, lawyers, lobbyists, and policy-makers. This chapter offers an introduction into this "jungle" of intellectual property exhaustion, focusing on the economic aspects of the debate. It starts by outlining the current state of national and international regulations that govern parallel imports. The subsequent two sections discuss the pros and cons of national and international exhaustion and review the (limited) empirical evidence. The chapter concludes by pointing to some issues that may be of relevance in the context of multilateral negotiations on the exhaustion of intellectual property rights.

The current legal framework

Unless bound by an international agreement, countries are free to adopt their preferred exhaustion regime for each form of IPR. So far, no international convention or multilateral agreement on IPRs has mandated a particular regime. The only provision in the various multilateral and plurilateral agreements of the World Trade Organization (WTO) that explicitly addresses exhaustion is Article 6 of the Agreement on Trade Related Intellectual Property Rights (TRIPS), which states: "For the purposes of dispute settlement under this Agreement, subject to the provisions of Articles 3 and 4 above nothing in this Agreement shall be used to address the issue of the exhaustion of intellectual property rights."[2] Article 6 of TRIPS is widely interpreted as an "agreement to disagree," giving WTO members the freedom to opt for national, regional, or international exhaustion.[3] It reflects the negotiating history of the TRIPS Agreement, in which the exhaustion issue was raised, but member countries could not form consensus on a multilateral statute.

At regional level, the European Union (EU) applies a system of regional exhaustion that denies parallel imports from outside the EU territories but does not restrict parallel trading within those territories. This system has emerged from jurisprudence by the European Court of Justice (ECJ), which, in the early 1970s, ruled that national exhaustion would be inconsistent with the Treaty of Rome, which aims at "[uniting] national markets into a single market."[4] The regional exhaustion regime applies to all forms of intellectual property. At the time of writing, however, the European Commission was considering the revision of the EU trademark directive, so as to free parallel imports from outside the EU.[5]

Other regional trade agreements largely remain silent on the exhaustion issue. The North American Free Trade Agreement (NAFTA), for example, has no explicit provision on the exhaustion question and the substantive provisions of NAFTA's Chapter 17 on IPRs can be interpreted as giving member countries freedom on their preferred exhaustion regime. The Treaty of Asunción, establishing the Southern Cone Common Market (MERCOSUR) among Argentina, Brazil, Paraguay, and Uruguay, also does not address the question of parallel imports.[6]

At national level, the United States applies (with few exceptions) a system of national exhaustion for all forms of IPRs.[7] The exhaustion regimes of other OECD countries also lean toward national exhaustion, although there are important cases where IPRs exhaust internationally. In Japan, for example, a recent decision by the Supreme Court confirmed the lawfulness of parallel imports of patented products unless restrictions are clearly displayed on the products.[8] In 1998, New Zealand became the first OECD country to adopt a system of international exhaustion with respect to copyright.[9] Following the removal of parallel

import restrictions on CDs in 1998, the Australian government is currently considering to expand the international exhaustion rule in the area of copyright to books and computer software (*Financial Times*, March 4, 1999).

In non-OECD countries, regulations regarding parallel imports differ widely. According to a recent survey on parallel import protection in the area of copyright, for example, 25 non-OECD country were classified as providing such protection and 21 non-OECD countries were classified as allowing parallel imports (the regime was unclear in 33 non-OECD countries).[10] The exhaustion regimes of Argentina and Chile generally seem to follow many other Latin American countries in not imposing restrictions on parallel imports. The new Argentine patent law, for example, explicitly establishes a rule of international exhaustion.[11]

The recent decisions by New Zealand and Australia to open their markets for parallel imports of products protected by copyright as well as the current initiative on reforming the EU's trademark directive on this issue have brought increased attention to the parallel-import question. The exhaustion issue may also be revisited within the multilateral trading system. Article 71 of TRIPS mandates a review of the Agreement in the year 2000 and proposals for a multilateral statute on the exhaustion of IPRs have been brought forward in the context of the Millennium Round of trade negotiations that may be launched in late 1999.[12]

The pros and cons of national and international exhaustion of international property rights

Before turning to the various arguments and counter-arguments that have been brought forward to defend either exhaustion regime, it is useful to recall the economic justification for granting intellectual property rights.[13] One can broadly classify the various forms of IPRs into two categories: (1) IPRs that stimulate inventive and creative activities (patents, utility models, industrial designs, copyright, plant breeders' rights, and layout designs for integrated circuits); (2) IPRs that resolve information asymmetries (trademarks and geographical indications).[14] IPRs in both categories seek to address certain failures of private markets to provide for an efficient allocation of resources.

IPRs in the first category can be seen as a solution to the problems created by the public-good characteristic of knowledge and information. If creators of intellectual works cannot protect themselves against imitation and copying, they may not have an incentive to engage in inventive or creative activities, as they may be unable to recoup any expenditures incurred in the process of creating new knowledge or information. Societies have, therefore, granted exclusive commercial

rights to intellectual works—most prominently patents to foster industrial innovation and copyright to promote literary and artistic expression as well as, from the late 1980s, the development of computer software and digital information. IPRs in the second category resolve inefficiencies that result from asymmetries of information between buyers and sellers on certain attributes of goods and services. Thus, trademarks identify a product with its producer and his reputation for quality; they assure consumers that they are purchasing what they intend to purchase.

There is an important difference between these two basic groups of intellectual property. IPRs that stimulate inventive and creative activities explicitly confer market power in the supply of the protected good to the title holder, who can thereby reap monopolistic profits that finance knowledge and information-generating investments. From a welfare perspective, the market power entailed in patents and copyright poses a cost to society, which, however, is outweighed by the benefits that the creation of new knowledge and information brings to society. IPRs that resolve information asymmetries, in contrast, are not designed to confer any direct market power. Trademarks do not restrict imitation or copying of protected goods as long as they are sold under a different brand name. This difference is reflected in the attribute that protection of IPRs in the first category is limited to a fixed time period (e.g., 20 years for patents) in order to minimize the costs of a distorted market structure, whereas IPRs in the second category can endure virtually indefinitely provided they remain in use. At the same time, it should be noted that trademark owners typically differentiate their products (e.g. through promotional activities) and are thus also able to create market power.

The remainder of this section will present and discuss the main arguments that have been made for or against a particular exhaustion regime. Although these arguments are not necessarily independent of each other, it is for analytical purposes useful to consider them separately.

The classic free-trade argument

The most general argument in favour of international exhaustion has been that a system of territorial market segmentation is at odds with the principle of free trade (Abbott 1998). For a long time, economists have been arguing the case for free trade. Through the international exchange of goods and services, countries have the possibility of specializing in what they can do best, leading to mutual gains for all trading partners. A dismantling of trade barriers causes a reallocation of production based on comparative advantage, which expands countries' production possibility frontiers. As illustrated in the previous section,

the free-trade argument has been at the core of the European Union's adoption of a regional exhaustion regime.

Undoubtedly, a system of national exhaustion poses a non-tariff barrier to trade. Yet, can the classic free-trade argument be applied in an ad-hoc manner to parallel trade? To put it differently, do the assumptions on which economists base their case for free trade fit into the environment in which parallel trade takes place? The standard trade theory of comparative advantage—which has arguably provided the most significant intellectual thrust toward the worldwide liberalization of international trade—assumes that trade occurs under the conditions of free entry and perfect competition. In perfectly competitive markets, however, competition between different producers forces firms to set their prices equal to marginal costs in all free-trading countries, thereby eroding the basis for parallel imports. Parallel trading opportunities can only arise in an environment of imperfect competition, where firms have pricing power and therefore the ability to set different prices in different markets. Thus, parallel imports do not seem to fit into the standard framework in which economists make their case for free trade based on comparative advantage.[15] An ad-hoc application of the classic free trade argument to parallel trade seems therefore problematic.

Abusive price discrimination or welfare-enhancing price differentiation?

A system of national exhaustion allows firms to charge different prices in different markets for the same goods and services. Some observers generally consider price discrimination as the result of anticompetitive behaviour and have stressed the policing function parallel imports exercise in restraining abusive business practices (Abbott 1998). The potential for anticompetitive behaviour in the presence of the ownership of IPRs is well known, as firms may attempt to exploit their exclusive rights beyond the established limits.[16] The policing function of parallel imports may be especially important for small developing countries, where competition from substitute goods may be limited and competition policies are often absent or undeveloped (Hoekman and Holmes 1999).

Nevertheless, while price discrimination can indeed be related to anticompetitive practices, it can also take a benign form and is then sometimes labeled with the more neutral term "price differentiation." Such welfare-enhancing price discrimination *may* occur when firms charge different prices to different consumer groups with heterogeneous demand structures (so-called third degree price discrimination). In the context of international price discrimination, it may be illustrated by the following example. Suppose there are two countries—one rich, one poor—and a firm would serve only the consumers in the rich

country if parallel trade between the two countries were allowed and the firm could thus not engage in price discrimination. In contrast, it would charge the same price to consumers in the rich country but also serve the consumers of the poor country at a lower price if parallel trade were prohibited. In the latter scenario, both the firm and consumers in the poor country would be better off while consumers in the rich country would not be worse off.[17]

Malueg and Schwartz (1994) develop a formal partial equilibrium model and find that uniform pricing by a monopolist can yield lower global welfare than discriminatory pricing if the dispersion of demand across countries is sufficiently large. Moreover, they show that global welfare can be maximized if one places countries into designated groups and allows discriminatory pricing among those groups but uniform pricing within groups.

Can this theoretical result give useful guidance about welfare-maximizing exhaustion regimes? It should first be pointed out that national regulations that would maximize global welfare may not necessarily maximize national welfare: consumers in countries that would have lower prices under international price discrimination than under uniform pricing would benefit from restrictions on parallel trade whereas consumers in countries that would have higher prices under price discrimination would be worse off from such restrictions. Yet, it would be the country with high prices that would decide whether or not to curb parallel trade (ignoring voluntary restraints on parallel exports by low-price countries). This may partly explain why countries such as Australia and New Zealand, which are not significant producers of intellectual property, have begun to lift restrictions on parallel imports.

Second, holders of IPRs hardly operate as full monopolists. They typically compete with substitute goods in national and international markets and are thus limited in their pricing power and their ability to practise price discrimination. Third, it is difficult to generalize in which countries market demand is relatively more elastic for a given product and would thus imply a lower price. Although demand elasticities typically vary with per-capita incomes, prices in developing countries are not always lower than in developed countries. One example would be that suppliers target their products in poorer countries to richer income classes where demand is less elastic than in the mass consumer market of developed countries. Observed price differentials between countries may be a misleading indicator of differences in demand structures. Aside from transportation, distribution and marketing costs, duties and other taxes, price differentials can be the result of differences in market structure or other supply characteristics.

The possibility of welfare-enhancing price discrimination is likely to be higher for goods covered by IPRs that stimulate inventive or creative activities rather than the other category of IPRs, because the exclusive rights of patents and copyright put explicit limits to the degree to which a protected product may be substituted by competing products. Examples of goods where the possibility of benign price discrimination has been pointed out include pharmaceuticals and educational and scientific publications, which are often priced at substantial discounts in developing countries.

Assuming that there are cases where price discrimination is indeed welfare-enhancing, it would nonetheless be difficult to translate this into explicit proposals for countries' exhaustion regimes. A system of territorial exhaustion would extend to all goods covered by a particular IPR although price discrimination may only be desirable for a selected range of products. In addition, the concept of national exhaustion has its origin in the territorial character of IPRs in general. However, it seems unlikely that "optimum exhaustion areas" as proposed by Malueg and Schwartz would coincide with national boundaries. The formation of regional exhaustion areas, in turn, would face many practical and political difficulties.[18] Notwithstanding these difficulties, the proposition that price discrimination may open otherwise unserved markets could be of importance with respect to certain developing (especially least developed) countries.

National exhaustion as a reinforcement of IPRs

Restrictions on parallel trade give holders of IPRs the ability to fix a profit-maximizing price in each national market and therefore tend to raise their overall profitability. Consequently, firms may boost their investments in knowledge and information-generating activities and this may lead to an accelerated pace of industrial innovation and increased production of new literary and artistic works. Obviously, this argument applies only to IPRs that stimulate inventive and creative activities, not to trademarks and geographical indications. Simply stated, it means that a system of national exhaustion increases the strength of intellectual property protection.[19] This explains, for example, why the United States—as the world's largest producer of intellectual property—generally favours national exhaustion of patent rights and copyright both at home and abroad.

The optimal scope of the protection of IPRs and the desirability of stronger IPRs have been subject to extensive debate, yet there is only limited empirical evidence available to policy-makers. As such, it remains inherently difficult to evaluate the desirability of a national exhaustion regime in this context. It could be argued, however, that for

the sake of policy coherence it would be better (if possible) to adjust the strength of the protection of IPRs through other regulations—notably the length of protection—given the various other implications of parallel import protection.

The special case of government intervention

So far, it has implicitly been assumed that prices are the outcome of competitive market forces. This is not always the case, however. In some industries, governments intervene in private markets by controlling prices or regulating companies' rates of return. Some observers have argued that parallel trade in goods covered by an IPR and subject to "artificially" low prices due to government intervention would represent "unfair" competition in intervention-free countries. This has been repeatedly pointed out in the pharmaceutical industry, where government price controls are common in both developed and developing countries. A system of national exhaustion would deny parallel imports from countries where the holder of the IPRs or his licensee are subject to government intervention.

Obviously, this argument applies only to industries and countries where governments intervene in private markets. In addition, it is only relevant for those government interventions that target domestic consumption and would thus lead to a different treatment of parallel exports vis-à-vis regular exports. In the particular case of pharmaceutical price controls—leaving aside their desirability and effectiveness—one could argue that parallel import restrictions are appropriate, as the commonly stated goal of price controls is to make medicines affordable to domestic low-income consumers and there would be little justification of extending such a national policy to foreign consumers.[20] At the same time, it could be reasoned that consumers in a particular country would benefit from low-priced parallel imports regardless of the cause of low prices.[21] However, if significant "leakage" from price-controlled countries would lead to markedly lower worldwide profits for holders of IPRs, they may decide to stop serving price-controlled markets altogether.

National exhaustion as an extension of vertical control

Some observers have advocated national exhaustion on the ground that such a system extends the control of the holders of IPRs over the international distribution of their goods and services. Several benefits of territorial market segmentation have been brought forward in this context. First, segmented distribution systems may protect investments in marketing as well as services that may be associated with the sale of certain goods before and after sales. Parallel imports from different sales territories that do not provide these services—or where such

activities are substantially cheaper—would have a "free ride" on the investments made by official licensees and distributors. Territorial sales restraints are therefore in the interest of consumers because the threat of parallel imports would lead firms to relinquish any marketing and sales-support activities. At the same time, it should be mentioned that this argument is only valid insofar sales support services (e.g., warranty or product maintenance) cannot be extended beyond territories.

Second, parallel imports from different territories may be of a different quality from goods sold through official distribution channels and this may lead to the deception of consumers. It has even been suggested that, in some cases, parallel imports may undermine the enforcement of technical, health, and safety standards in the importing country.[22] The potential magnitude of consumer deception is hard to generalize, however. Moreover, with the provision of adequate information, parallel imports of different quality can actually increase the choice of consumers and thus be beneficial. Third, holders of IPRs may be reluctant to license proprietary technology to a different market unless they are assured that the licensee will not compete with the holder of the IPRs in his home market or in a third market. This may slow down the pace of technology diffusion and thus be harmful to subsequent innovation and productivity growth.[23]

Although vertical restraints can indeed be beneficial, there is no presumption that this is always the case. They also carry costs—most significantly, in the form of reduced "intra-brand" competition. In fact, there is no consensus among economists and competition lawyers when vertical restrictions are procompetitive and when they are detrimental. An IPR holder may even seek to encourage parallel trade between different territories in order to avoid collusive behaviour among his various dealers. A uniform system of national exhaustion—i.e., a system applied to every good covered by a particular IPR—seems, therefore, an unapt regulation in reaping the potential benefits of vertical restraints. Moreover, such a system would be quite inflexible as it may be desirable to have complete denial of parallel imports for some goods, restrictions on active but not on passive parallel imports for others, and no limits at all on parallel trading for others.

Statutory exhaustion of intellectual property rights or private contractual arrangements?

One fundamental argument that has been brought against national exhaustion is that restrictions on parallel imports—if they are desirable—are better created through private contractual arrangements, which can be scrutinized by competition policies (Gallini and Hollis 1996). This seems appealing for several reasons. First, it would allow

a tailor-made approach that could directly address the specific environment of different sectors and products. Second, private restrictions on parallel imports may not necessarily be bound to national territories, which may be especially important for small countries. Third, governments would be able to address country-specific concerns in national competition policies.

Indeed, this approach is followed domestically in the United States and on a regional basis in the European Union with regard to active parallel trading. With few exceptions, American antitrust law and European competition law permit territorial restraints in connection with the licensing of an IPR (Abbott 1998). Vertical restrictions in international licensing agreements are also common practice in many sectors.

Could private contractual means also be used in regulating passive parallel imports? In fact, this occurs under the common-law approach to intellectual property rights exhaustion. In common-law countries, exhaustion remains at the discretion of the holder of the IPR, who can deny parallel imports by including an appropriate notice of restriction in licensing and purchasing agreements (e.g. by attaching a label on a product indicating "Not for sale in countries X, Y, and Z"). It is not clear, however, whether such a system could work effectively on a world-wide level, as holders of IPRs would have to give proper notice—most likely in several languages—to all re-sellers involved (Heath 1997). It would also depend on the degree to which restrictions on passive parallel imports are deemed desirable. Policy-makers in both the United States and the European Union deliberately decided to leave the internal market open to passive parallel trade. However, if restrictions on passive parallel imports are deemed to be welfare-enhancing on a wider scale and uniformly across all goods covered by a particular type of IPR, a statutory regime of national or regional exhaustion may overall be less cumbersome.

Opponents of a system of private contractual arrangements advance that such a system is unrealistic in light of undeveloped competition policies and inadequate enforceability of private contracts in many developing countries. In addition, some observers argue that such a system could not work effectively before a harmonization of national competition policies has taken place at the international level. It is unclear, however, how much harmonization is necessary and to what degree private restraints on parallel imports can effectively be regulated by national competition policies. Undoubtedly, the development of competition institutions in developing countries and increased international harmonization of competition policies would facilitate the functioning of private contractual regulations on parallel imports and thus ease the need for national exhaustion systems.

The (limited) empirical evidence

As mentioned in the introduction, there are virtually no statistics available on the parallel segment of international trade. Available data on parallel trade comes from a few business surveys in developed countries and is mostly confined to goods where producers are particularly sensitive to parallel trade, such as well-known consumer brands, CDs, or pharmaceuticals. Accordingly, it is difficult to develop a picture of the overall direction and magnitude of parallel trade flows. In addition, available evidence on the impact of parallel trade typically concentrates on prices in the importing countries and profits of intellectual property owners; no evidence exists with regard to the price effects in exporting countries. Notwithstanding these caveats, the fragmented evidence that is available gives some indications as to the causes and consequences of parallel trade.

Parallel imports became a cause of concern for American policymakers in the mid-1980s, where they were estimated at 2 to 3 percent of total imports to the United States.[24] They were concentrated in goods with well-known brands that typically involved heavy investments in marketing and promotion, suggesting the free-riding explanation of parallel trade discussed above. At the same time, parallel imports surged in line with the marked appreciation of the US dollar up to the mid-1980s and fell sharply thereafter. This points to incomplete exchange rate pass-through as the cause of parallel trade (i.e. firms adjusted prices in the United States or abroad by a smaller percentage than the dollar's relative appreciation).[25] Incomplete exchange rate pass-through could be due to firms' behaviour to adjust their prices to the new demand conditions created by the movement of the exchange rate (Dornbusch 1987). This would suggest a pattern of international price discrimination, although one could not conclude that pricing to market was necessarily welfare-enhancing. It is likely that parallel imports to the United States during the 1980s were caused both by free riding and by price discrimination and the relevance of these two factors is confirmed by several court cases during this time period (Gallini and Hollis 1996).

Some recent empirical evidence on parallel imports comes from a study that was commissioned by the European Commission as part of its initiative to reform the European Union's trademark directive (National Economic Research Associates 1999). The study focuses on ten consumer-goods sectors in which trademarks are important and where the scope of parallel trade is significant.[26] It is first interesting to note that despite the absence of restrictions on parallel trade within the European Union, there generally remain substantial price differentials among member states. Some of these differentials may reflect factors such as transportation and distribution costs, transitory exchange rate

movements and tax differences but it appears that parallel imports do not prevent trademark holders from price discrimination across national markets. The significance of parallel trade varies among the ten sectors, from below 5 percent of sales for footwear and leather goods, domestic appliances and alcoholic drinks to around 13 percent of sales for premium cosmetics and perfumes and up to 20 percent for some releases of musical recordings.

The study then considers the potential impact of opening the market in the European Union to parallel imports from other countries, notably Japan and the United States. The scope of parallel trade in the ten sectors analyzed seems large as there are significant differences between retail prices in the European Union, Japan, and the United States. With some exceptions, it appears that retail prices are generally lower in the United States, and higher in Japan, than in the European Union. When estimating the effect of freeing parallel imports on retail prices and trademark holders' profits in the European Union, the study finds only small or moderate decreases in prices (on average, less than 5 percent), but marked falls in profits—by as much as 35 percent in the consumer electronics sector.

These estimates depend on various assumptions about market structure and demand and it is hard to evaluate how realistic the reported figures are. Anecdotal evidence from Australia, for example, is more optimistic about price reductions that resulted from the removal of parallel import restrictions on CDs in October 1998. Some retailers reduced the price of selected top-selling CDs by nearly one-third (*Financial Times*, March 4, 1999).

Conclusion

The question of whether or not businesses should be allowed to control parallel imports of goods and services from foreign countries on the basis of local ownership of IPRs has been subject to controversy. The foregoing discussion makes it clear that the welfare implications of a particular exhaustion regime are theoretically ambiguous, are likely to differ among the various forms of IPRs, and involve considerations specific to various industries and products. A better case can probably be made for international exhaustion of IPRs that resolve information asymmetries than of IPRs that stimulate inventive and creative activities. In the latter group of IPRs, imperfectly competitive market structures are inherently related to IPRs and the possibilities of benign international price discrimination may thus be higher. At any rate, the empirical evidence on the causes and consequences of parallel imports is still too scattered to make a case for a particular exhaustion regime for one or more forms of IPRs.

A question that is fundamentally related to the exhaustion of IPRs is whether or not it would be more desirable to regulate parallel imports through private contracts scrutinized by competition policy. Such an approach seems attractive because it would offer flexibility in addressing the specific environment of each industry and in accounting for concerns specific to a country. It is not clear, however, whether such a system can be practically implemented on a global basis and to what degree it would presuppose harmonized competition policies.

The exhaustion issue may be revisited within the multilateral trading system—either in the context of the mandatory review of the TRIPS Agreement in the year 2000 or in the framework of a new Millennium Round of trade negotiations. In principle, multilateral negotiations on the exhaustion of IPRs seem warranted, as a country's choice of exhaustion regime imposes an externality on its trading partners in the form of either uniform or discriminatory international pricing strategies. Hence, the exchange of concessions on the exhaustion issue with concessions in other areas that are being negotiated could theoretically be a mutually beneficial affair. For many countries, it is far from obvious, however, whether a particular obligation on exhaustion would mean they would give or receive a concession.

The United States, as the world's single largest producer of intellectual property, is likely to favour a statute of national exhaustion (maybe with the exception of trademarks). The position of other developed countries is less clear. Depending on the economic and political weight of intellectual property producers in these countries on the one hand and the potential benefits countries see in allowing parallel imports on the other, they may be more or less open to a rule of international exhaustion. The stance of developing countries is also uncertain. When the exhaustion issue was raised during the Uruguay Round (1986–1994), many developing countries supported a system of international exhaustion (Watal 1998). They were motivated by the expectation that parallel imports would lead to increased competition and could thus restrain monopolistic prices and potentially abusive behaviour of IPR holders (especially against the background of stronger intellectual property rights standards as mandated by the TRIPS Agreement). Many developing countries also saw the removal of restrictions on parallel imports as opening export opportunities. But there is also a potentially significant downside for developing countries of freeing parallel imports. If the threat of parallel imports would lead holders of IPRs and their licensees to price their goods more uniformly across countries, prices in developing countries may well rise and there may be only limited scope for parallel exports. Moreover, parallel exports are unlikely to be a reliable source of foreign exchange as they are highly sensitive to movements of exchange rates.

Various other considerations besides price discrimination, however, are relevant in setting a regulatory framework for parallel trade. A multilateral agreement on the exhaustion question may also depend on progress in establishing harmonized rules for competition policies. In this regard, it is not clear, whether a "market access-driven" multilateral agreement on competition disciplines, as proposed by some WTO members (Hoekman and Holmes 1999), would make a significant difference in this context. In sum, it remains difficult to assess whether WTO members will be able to agree on a multilateral statute on the exhaustion of IPRs (if the issue is raised) and whether or not a possible agreement would be "globally" beneficial.

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Notes

1 Arguably, the scope for parallel trade in services is smaller than that for parallel trade in goods. Most services are closely related to the person supplying the service, thus confining parallel trade to active parallel imports. In addition, differences in national standards or languages limit the substitutability of foreign and domestic services even though they may be supplied under the same service mark.

2 Articles 3 and 4 of TRIPS require national treatment and most-favoured-nation treatment of intellectual property owners. Hence, exhaustion regimes that discriminate between foreign and national holders of IPRs or among foreign holders of IPRs can be challenged in the WTO's dispute settlement proceedings (Bronckers 1998). The full text of the TRIPS Agreement is available on the website of the World Trade Organization at www.wto.org.

3 Notwithstanding Article 6, some observers have argued that other provisions of the TRIPS Agreement, notably Article 28 expounding the exclusive rights of patent owners (Barfield and Groombridge 1999) or obligations under the General Agreement on Trade and Tariffs (GATT) 1994 (Cottier 1998) mandate the adoption of a particular exhaustion regime. However, Bronckers (1998) convincingly argues that the TRIPS Agreement, as a lex specialis, is the relevant WTO agreement that establishes multilateral disciplines on the protection of IPRs (including exhaustion of IPRs) and it is quite clear that Article 6 is the overriding provision of TRIPS that removes

exhaustion from WTO dispute settlement. This view is supported by the fact that, to date, no case related to the exhaustion question has been brought to the WTO's dispute settlement system.

4 The quotation is from the ECJ's seminal ruling on the case of Deutsche Grammophon vs. Metro of 1971, whereby Deutsche Grammophon invoked its copyright in order to block parallel imports. The regional exhaustion doctrine was subsequently applied by the ECJ to other forms of intellectual property (see Yusuf and von Hase 1992). In 1998, the ECJ underscored this doctrine by ruling that the EU trademark directive precludes individual member states from applying a rule of international exhaustion with respect to trademarks (*Silhouette International vs. Hartlauer,* Case C-355/96, July 16, 1998).

5 See *Financial Times*, February 24, 1999: 7 and *The Economist*, February 27, 1999: 72–73.

6 In 1995, the MERCOSUR countries concluded a Protocol on the Harmonization of Provisions on Marks, Indications of Source and Appellations of Origin (MERCOSUR/CMC/Decision Nº 8/95), of which Article 13 could be interpreted as sustaining a rule of international exhaustion. This Protocol has not yet been ratified by the MERCOSUR member states, however.

7 One exception is the "common control exception" in the field of trademarks, which allows parallel imports if the domestic and foreign trademark holder are the same, affiliated companies, or otherwise subject to common ownership or control (see Gallini and Hollis 1996). In addition, a recent ruling by the United States Supreme Court found that a copyright holder cannot block parallel importation if the copyrighted work was lawfully manufactured under the United States copyright title and subsequently exported abroad (Quality King Distributors vs. L'anza Reseach International, 96-470, March 1998).

8 See *BBS vs. Rasimex* cited in Heath 1997.

9 New Zealand's move prompted severe protests from the United States Trade Representative, since it was feared that parallel imports could harm American car, pharmaceutical, and CD manufactures. See *Financial Times*, May 20, 1998.

10 See International Intellectual Property Alliance 1998. It should be noted that the survey excluded sub-Saharan African countries except South Africa.

11 This information is based on informal correspondence with lawyers acquainted with the Argentinean and Chilean IPRs systems. In several cases, intellectual property laws in Chile and Argentina do not contain provisions on exhaustion and it is unclear to what extent other provisions can be applied to deny parallel importation.

12 An entirely different development that has raised new questions about parallel trade has been the rapid growth of electronic commerce. If goods protected by an IPR are delivered through computer-mediated networks, it becomes close to impossible to enforce a system of national exhaustion, as goods no longer cross borders in the traditional sense. In this regard, it is worth mentioning that the two new treaties that were concluded in 1996 to address copyright questions posed by the convergence of information

and communication technologies—the WIPO Copyright Treaty and the WIPO Performance and Phonograms Treaty—contain provisions similar to Article 6 of TRIPS, giving member countries freedom on the exhaustion question.

13 For a more comprehensive review of the economic principles of intellectual property protection, see Primo Braga and Fink 1997 and Primo Braga, Fink, and Sepulveda forthcoming.

14 Trade secrets, which are also part of IPRs systems, could be either classified as an IPR that stimulates inventive and creative activity or put in a separate category. They are not relevant for the present discussion, however, as they do not grant an exclusive right and are thus not subject to exhaustion.

15 It is worth noting that the so-called new trade theory introduces imperfectly competitive market structures into models of international trade (see, for example, Helpman and Krugman 1985). However, I am not aware of any formal general equilibrium trade model that has incorporated the possibility of price discrimination across national markets under free trade.

16 Article 40 of the TRIPS Agreement recognizes " that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology." The Agreement gives its signatories the freedom to adopt measures to prevent and control such abusive practices (Primo Braga, Fink and Sepulveda forthcoming).

17 See Hausman and MacKie-Mason 1988 for a formal exposition of this example. They also show that price discrimination can have a further beneficial effect if it allows firms to achieve scale and learning economies.

18 The adoption of regional exhaustion systems based on existing regional trade agreements (RTAs) would be one conceivable possibility. Many RTAs, however, are formed among countries at different stages of development. Malueg and Schwartz conjecture that the European Union may not even constitute an optimum exhaustion area—to the detriment of low income countries such as Greece, Ireland, or Portugal that may experience sharply curtailed sales due to uniform EU-wide pricing. It is interesting to note in this context that regional exhaustion does not violate the non-discrimination requirement of TRIPS Article 6, since non-discrimination is only required with respect to the IPRs holder, not with respect to the origin of parallel imports.

19 Note, however, that the classic IPRs trade-off between innovation incentives and static welfare losses would not hold if price discrimination enhances static welfare—by opening, for example, new markets (see the discussion above). See also Hausman and MacKie-Mason 1988.

20 It should be noted that parallel exports in this case may already violate certain regulations that apply in connection with the price-control regime: regulations, for example, designed to avoid domestic shortages in the supply of drugs.

21 To the extent that price controls lead to lower profitability for the holders of IPRs and thus weaken the innovation incentive, parallel exports would further undermine IPRs by extending price controls to foreign consumers.

22 This argument does not appear convincing, however. As explained in the introduction, parallel imports are subject to the same border measures on technical standards as regular imports. For example, parallel imports of pharmaceutical products into Germany from other members of the European Union are packaged and sold according to German health and safety requirements.

23 A fourth argument that is sometimes made is that the absence of barriers to parallel imports may increase the occurrence of counterfeit imports. This has been pointed out in the musical recording industry, where genuine and counterfeit CDs have been mixed in a single shipment. However, it generally does not seem appropriate to attack an illegal activity by curbing a legitimate activity.

24 The evidence presented on parallel imports to the United States is based on Malueg and Schwartz 1994.

25 It also needs to be pointed out that in 1984 the United States Supreme Court abolished the "authorized use exception," which prevented trademark holders from blocking parallel imports of goods manufactured by (uncontrolled) foreign licensees (Yusuf and von Hase 1992). It remains open to what extent this decision may have contributed to the fall of parallel imports in the second half of the 1980s.

26 The ten sectors are footwear and leather goods, musical recordings, motorcars, consumer electronics, domestic appliances, cosmetics and perfumes, clothing, soft drinks, confectionery, and alcoholic drinks.

References

Abbott, F.M. (1998). First Report (Final) to the Committee on International Trade Law of the International Law Association on the Subject of Parallel Importation. *Journal of International Economic Law* 1: 607–36.

Barfield, C.E., and M.A. Groombridge (1999). Parallel Trade in Pharmaceuticals: Implications for Innovation, Economic Development and Health Policy. Unpublished manuscript. Washington, DC: American Enterprise Institute.

Bronckers, M.C.E.J. (1998). The Exhaustion of Patent Rights under World Trade Organization Law. *Journal of World Trade* 32, 5: 137–159.

Cottier, T. (1998). The WTO System and Exhaustion of Rights. Paper presented at the Conference on *Exhaustion of Intellectual Property Rights and Parallel Importation in World Trade*, Committee on International Trade Law of the International Law Association (November 6–7), Geneva.

Dornbusch, R. (1987). Exchange Rates and Prices. *American Economic Review* 77, 1: 93–106.

Gallini, N.T., and A. Hollis (1996). A Contractual Approach to the Gray Market. Working Paper No. UT-ECIPA-GALLINI-96-01. Department of Economics, University of Toronto.

Hausman, J.A., and J. MacKie-Mason (1988). Price Discrimination and Patent Policy. *RAND Journal of Economics* 19, 2: 253–65.

Heath, C. (1997). Parallel Imports and International Trade. *International Review of Industrial Property and Copyright Law* 28, 5: 623–32.

Helpman, E., and P.R. Krugman (1985). Market Structure and Foreign Trade. Cambridge, MA: MIT Press.

Hoekman, B., and P. Holmes, P. (1999). International Rules for Competition Policies? Unpublished manuscript.

International Intellectual Property Alliance (1998). Parallel Import Protection in 107 Selected Countries. Paper presented at the Conference on *Exhaustion of Intellectual Property Rights and Parallel Importation in World Trade*, Committee on International Trade Law of the International Law Association (November 6-7), Geneva.

Malueg, D.A., and M. Schwartz (1994). Parallel Imports, Demand Dispersion, and International Price Discrimination. *Journal of International Economics* 37: 167–95.

National Economic Research Associates (1999). The Economic Consequences of the Choice of a Regime of Exhaustion in the Area of Trademarks. Final Report prepared for DGXV of the European Commission.

Primo Braga, C.A., and C. Fink (1997). The Economic Justification for the Grant of Intellectual Property Rights: Patterns of Convergence and Conflict. In F.M. Abbott and D.J. Gerber (eds), *Public Policy and Global Technological Integration* (The Netherlands: Kluwer Academic Publishers): 99–121.

Primo Braga, C.A., C. Fink, and C.P. Sepulveda (forthcoming). Intellectual Property Rights and Economic Development. *World Bank Discussion Paper.*

Watal, J. (1998). The TRIPS Agreement and Developing Countries: Strong, Weak, or Balanced Protection? *Journal of World Intellectual Property Protection* 1, 2 (March): 281–307.

Yusuf, A.A., and A.M von Hase (1992). Intellectual Property Protection and International Trade: Exhaustion of Rights Revisited. *World Competition: Law and Economics Review* 16, 1: 115–31.