European Economic Review 70 (2014) 186–196

Contents lists available at ScienceDirect

European Economic Review

journal homepage: www.elsevier.com/locate/eer

Retailers as agents and the limits of parallel trade ☆

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ARTICLE INFO

Article history:
Received 26 May 2013
Accepted 9 May 2014
Available online 24 May 2014

JEL classification:
F13
F15

Keywords:
Parallel trade
Trade cost
Incomplete information

ABSTRACT

The volume of retail-level parallel trade is surprisingly small despite persistent international price differences. We offer an agency-based explanation by considering competition between an original home manufacturer and a foreign retailer. The model endogenizes the role of the retailer as an agent with private information on the perceived quality of the good in its own market. The manufacturer cannot control the retailer once the latter has ordered its sales quantity but it can limit the initial offer. If parallel trade is permitted, this offer will fall if there is incomplete information, resulting in a small, or zero, volume of parallel trade. This outcome makes both the original producer and foreign consumers worse off, while offering little benefit to home consumers, compared to the case where such trade is banned.

1. Introduction

The phrase "parallel trade" (PT) refers to legal cross-border exchanges of brand-name goods outside the distribution channel controlled by the original producers. Thus, for example, Mercedes Benz (MB) may sell its cars through licensed dealers in Spain but some of those cars might be sold without MB's authorization in higher-priced France, whether by the licensees or independent trading companies. The rights of original producers like MB to control international distribution arise from the exercise of intellectual property rights (IPR – patents, copyrights and trademarks). A central feature determining the scope of IPR is each country's exhaustion doctrine, defining the point at which the rights to control distribution end. For example, if country A has a policy of international exhaustion then first sale of the good anywhere in the world ends the right-holders ability to exclude parallel imports. Thus, a retailer or distributor in any other country may legally resell the goods in A through a parallel (uncontrolled) distribution channel. It is quite possible for this process to incorporate both controlled exports of the good from the IPR owner in one nation to a licensed, but independent, retailer in another, with some of that volume returning as PT from that retailer to consumers in the originating nation. This is the case we consider in this paper.

It is evident that parallel trade, by offering competition outside authorized distribution chains, is likely to reduce profits of the original manufacturers. Thus, they might prefer outright legal restrictions against PT, which is largely the US policy of national exhaustion.[1] Other countries vary considerably in this regard. Japan, for example, is largely closed to parallel

☆ Earlier versions of this paper have been presented at several conferences and seminars. We thank the participants, an editor and two anonymous referees for helpful comments and suggestions.

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[1] See Ganslandt and Maskus (2008) for a detailed discussion of various regimes, including that of the European Union.

http://dx.doi.org/10.1016/j.euroecorev.2014.05.003
0014-2921/

imports, while Australia permits PT in copyrighted materials. In general, countries with higher income levels that produce large volumes of intellectual property are more likely to sustain full distribution-control rights. For its part, the European Union follows a compromise. Like the United States, the EU bars parallel imports from outside its region. However, it has long regarded within-region PT to be a key means of ensuring that the internal market is fully integrated. Thus, through provisions of the EC Treaty and findings in case law, EU policy rigorously supports the concept of regional exhaustion, or unimpeded PT among member states.

In that context, one might expect there to be substantial volumes of PT conducted by retailers, which in turn should narrow consumer price differences among EU countries. However, retail-level arbitrage of this kind appears to be quite small. This claim is impossible to verify systematically because trade authorities do not collect data on the amounts of PT, which is legal and therefore commands no policy-based need to distinguish it from authorized imports. However, anecdotal and survey evidence suggests three important stylized facts. First, parallel trade of any kind is small in relation to aggregate trade flows. Second, the vast bulk of the PT that exists occurs at the wholesale distributor level, not at retail, and is typically undertaken by organized parallel-trading companies (National Economic Research Associates, 1999). For example, there are differentiated consumer goods that sometimes experience perceptible volumes of PT, including cosmetics, automobiles, electronics, and pharmaceuticals, where manufacturers find it important to use wholesalers and retailers to reach consumers across markets. However, this parallel trade is exchanged primarily by wholesale distributors. Retailers and final consumers rarely engage in direct arbitrage except in small lots or single units.[2] Third, there appears to be considerably less price convergence within the EU than might be anticipated in a regime of free arbitrage. A good example is that, despite the increase in imported prescription medicines via parallel channels in Sweden after that country joined the EU in 1995, there was little detectable reduction in retail price differences between importing and exporting locations (Ganslandt and Maskus, 2004). Even for products that are not subject to national price controls, large variations in retail prices persist (European Central Bank, 2002). Thus, the stylized facts we wish to explain here are the small quantities of retail-level PT and the stubborn persistence of significant retail price variations across EC members.

The EU's enthusiasm for parallel trade presumes the existence of highly competitive markets at all distribution levels, which would support arbitrage against price differences. The reality that PT is limited could reflect two alternative factors. First, there may be higher costs of organizing PT for retailers than for wholesale PT companies. Second, and perhaps more likely, distribution markets are subject to imperfect competition. Specifically, by virtue of owning a patent or trademark, IPR holders may have substantial market power and act strategically to limit the profit-reducing impacts of PT. Indeed, there are realistic circumstances under which such behavior would deter parallel trade altogether even though it is perfectly legal. Put differently, allowing PT does not mean that it will in fact occur as IPR holders react to counter retailers' incentives for cross-border arbitrage.

The idea that strategic responses can deter PT over a range of trade costs was first noted in the seminal papers setting out models of distribution with vertical price control (VPC – see Maskus and Chen, 2004 and Chen and Maskus, 2005). In those models, the manufacturer sets a two-part tariff (a wholesale price and a fixed fee) and delivers any quantity the foreign distributor demands at this wholesale price, including sales that may leak back into the home market via PT. The originator firm uses such contracts to balance its interests in reducing PT, saving transport costs, and mitigating the double-marginalization effect in the home and foreign markets. Despite its insights, the VPC model displays two notable shortcomings in explaining reality. First, the assumption of perfectly elastic wholesale supplies from the originator sits awkwardly with evidence that firms in the EU try to limit quantities to distributors, presumably in order to limit the scope of PT (Ganslandt and Maskus, 2008). In that context, a more grounded approach would rely on quantity setting rather than price setting. Second, the VPC approach also assumes complete information, in that all players are fully aware of demand and cost conditions in all markets. Further, it treats independent distributors and retailers as passive players rather than purposeful participants and fails to offer a reason for their existence in the first place.

Our interest here is to overcome some of these shortcomings in a model that does not rely on vertical control and perfect information but does explain one potential reason why retailers engage in little or no arbitrage. We explore the situation in which an original manufacturer sells directly to an independent foreign retailer, over which it has no control once the two have reached an agreement on volume.[3] In the model, the manufacturer specifies a quantity and the retailer is free to do with that volume whatever it wants, including re-exporting back to the original firm's market. Indeed, this situation is, in principle, highly pro-competitive in that the originator cannot assert discipline over the retailer once the sales contract has been reached.

Accordingly, the model has two key features, both novel to the PT literature. First, the retailer treats the payment it makes for the contractual quantity offered as a sunk cost in the competitive stage of the game. Thus, that firm decides how to serve the home and foreign markets without taking into account its production cost (the wholesale price). Second, we endogenize the role of the retailer: the manufacturer hires the retailer because it has better (private) information about demand in his market than the manufacturer. Thus, the retailer is no longer a passive participant as in VPC models.

[2] Anticompetitive actions by manufacturers to restrict PT on occasion have attracted interest by competition authorities in the EU, though such cases tend to focus on distributor-level restraints (Ganslandt and Maskus, 2008).

[3] To focus on retailer incentives we do not model a competing wholesaler that might engage in PT. That wholesaler presumably would suffer from the same incomplete information we consider here.