

Price differences for homogeneous products are often a source of concern for competition authorities. Typically, competition authorities will rely on price differences to define narrow markets. Large differences on the prices charged by a company with a significant market share will also be considered as indicative of discriminatory or exclusionary conduct (fidelity rebates).

With regard to merger filings, price differences and international price comparisons feature prominently in Form CO. The kind of information Form CO requires with respect to prices can in some cases be rather misleading.

The idea that there is something meaningful in a "comparison of price levels in each Member State" may not be realistic even for largely homogeneous products.

Considerable price dispersion is a pervasive feature of capitalistic markets, and this has nothing to do with lack of competition within the market nor does it necessarily imply that the relevant market should be narrowed down in the search of a similar price level.

There are many reasons for price dispersion to exist in competitive markets. These reasons should help preventing national market definitions just because price levels are different across member states.

They should also help defending a case of discriminatory pricing just because some customers pay different prices or a case of exclusionary practices because a group of customers obtains larger rebates.

Price equality in market definition.

The law of the one price in a market has for long been a fundamental point in neoclassical theory. Under the rarefied assumptions of perfect competition, the "invisible hand" or walrasian auctioneer would lead to one single price in equilibrium, necessarily aligned on marginal costs and the only one that clears the market.

Slow but steady progress in economic thinking since the formulation of this abstract idea has shown that there are many reasons why the idea is rather useless to interpret the competitive forces at play in almost any market.

We will briefly examine a number of those reasons. But before that, let's consider a test that may work even within the framework of the law of one price.

If someone were defending a national market definition because average prices in country X are higher than in neighbouring countries, it would generally be useful to collect a sample of actual transaction prices within country X and within neighbouring countries.

If price differences or price dispersion within the national sample are equal or larger than price differences across countries, then the case to define a national market on the basis of price differences is considerably weakened.

Usually, the price distributions at national levels will overlap to a large extent, ideally supporting a European wide market

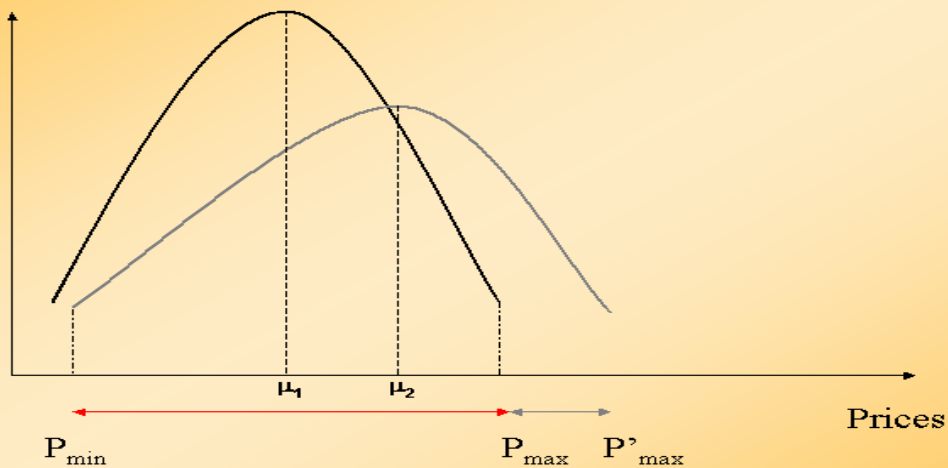
definition in spite of differences in average prices.

In the hypothetical case illustrated in the graphic, country 1 has a lower average price (μ_1) than country 2 (μ_2). Most customers in country 2 however, pay similar prices than in country 1. It is only because a (small) number of customers in country 2 pay prices above the maximum price in country 1 that the average price is

higher in country 2. But the price range in both countries is largely similar. Arguably both countries belong to the same relevant market.

Price dispersion is so pervasive that theoretical models have already been developed to account for equilibria in terms of equilibrium price distribution rather than one single equilibrium price.

Frequency



Reasons for price differences.

Can substantial price dispersion exist in a competitive market for a largely homogeneous product? The answer is a clear yes, both from a theoretical and empirical point of view.

The consideration of heterogeneity in economic agents, less than perfect information, capacity constraints, search costs or costs to acquire information and mixed strategies by incumbents may explain the existence of price dispersion for homogeneous products in a competitive market. Empirical research has also found the persistence of substantial price

dispersion, for which no clear explanation has been found yet.

Mixed strategies.

It refers to companies changing low-price/high-price strategies over time, so that customers cannot learn which supplier is consistently a low price agent. Empirical analysis shows that this may explain retail price variations as large as 43% for the same branded refrigerator across retail stores and more than 200% for a selection of repeat purchase food products (same brand and same package).

Publicity.

Changes in the regulation of publicity may affect the pricing strategy of companies. The lifting of a ban on liquor advertising for instance, may induce some companies (but not all) to compete harder on prices, thereby increasing price dispersion.

Bidding markets.

Contract mechanisms do have an influence in price levels. Auction as opposed to negotiation of real state contract prices has been found to lead to higher prices for high price houses in the UK. The introduction of auction mechanisms would increase price dispersion within a country or across countries.

Auction design and the point in time in which auctions are carried out may have a tremendous impact on price levels. We just need to recall the example of the auctions for "third generation" mobile telephony, where the prices ranged between 650 euros *per capita* in the UK and 20 euros *per capita* in Switzerland, a price difference over 3000% for a licence with largely the same value in *per capita* terms.

Search costs.

The most plausible and traditional explanation for the existence of price differences is that consumers do not bother to search for low price goods and services. Being the most plausible explanation for price differences, it is amazing that it is the one that finds less empirical support.

If search costs are important for individual consumers, then price dispersion for e-commerce products should be small, in particular because there are specialised search motors that look for the cheapest product on the net.

There has been considerable empirical research on price dispersion on the

Internet. Books and CDs are ideal for a price comparison for homogeneous goods, since any particular title is identical independently of who sells it.

Differences of prices quoted on the net of up to an average of 27% have been found for a selection of hardcover books, and as large as 73% on average for paperback books. Differences of 25% on average have been found on CDs.

With these averages, price dispersion and price range has to be very substantial. These price differences have usually been found to persist even after controlling for e-tailers' heterogeneity in terms of reliability, delays in delivery, etc...

Specific characteristics of the product.

Some products may be costly to store and the volume of production cannot be adjusted at will. It is generally the case of by-products, or where technology imposes continuous batches of production (as steel or aluminium).

Once the storage capacity has been filled up, companies will be willing to dispose of additional production at much lower prices, avoiding thereby the need to invest in new storage capacity or avoiding high storage costs. Customers that are better informed, or can afford to purchase with higher flexibility will profit from lower prices in these markets.

Conclusion.

There are a number of explanations for the observation of significant price differences for homogeneous products within the same relevant market. Price differences are also consistent with competitive conduct. Which explanation may be used depends, of course, on the industry at stake.

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