



CCR - Competition Competence Report autumn 2014/1

## COMPENSATION FOR LOSS OF PROFIT

The Damages Directive will be adopted before the end of this year under the Italian Presidency. The Directive establishes a rebuttable presumption that cartels cause harm. An increase in damages claims and, consequently, in the calculation of antitrust damages is already observed.

The Directive clarifies that victims have a right to obtain full compensation for actual loss as well as for loss of profit plus payment of interest from the time the harm occurred until compensation is paid.

Actual loss implies a reduction in a person's assets whereas loss of profit means that an increase in those assets, which would have occurred without the infringement, did not happen.

In damages analysis, the actual loss is the price overcharge. The overcharge is the difference between the actual price resulting from the cartel and the competitive price that would have prevailed, if the cartel never existed.<sup>1</sup>

The concept of 'loss of profit' is used in a broad sense, defined as any difference between the actual profits generated by an undertaking and the profits it would have generated in the absence of an infringement. While the calculation of actual losses is already established, the estimate of lost profits remains a challenge. This CCR elaborates on the calculation of the loss of profit, which is of particular interest in two situations: passing-on and exclusionary practices.

### ▪ **Loss of profit & passing on defence**

Direct customers of an infringer might be able to offset, fully or partially, the increased price they paid by raising the prices they charge to their own customers (indirect purchasers). In these situations, the Directive ensures that those who actually suffered the damage will be entitled for compensation. The burden of proof for passing on the overcharged price lies with the infringer.

If the direct purchaser passes on the overcharge, partially or totally, indirect customers will typically respond by purchasing less. Demand generally decreases when price goes up. Hence passing on implicitly causes a lost sales effect, too. The profit losses from this lost-sales effect are added to the cartel damage suffered by the direct purchaser.

### ▪ **Loss of profit & exclusionary practices**

'Exclusionary practices' might cover both infringements of Article 101 and of Article 102 TFEU. These infringements can have the effect of completely excluding competitors from a market or of reducing their market shares. Such effects are called 'foreclosure'. Examples of these practices are abuses of a

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<sup>1</sup> For a thorough discussion on how to calculate the price overcharge caused by a cartel, please refer to our previous CCR on Cartel Damage Calculations at: <http://www.ee-mc.com/competition-competence-reports.html>.

dominant position prohibited by Article 102 TFEU through, for instance, predation, exclusive dealing, refusal to supply, tying, bundling, or margin squeeze. In these situations, loss of profit quantification takes place too. Whereas such a loss of profit calculation might be simple in a refusal to supply situation, bundling or tying are more demanding exercises.

## Basics: Constructing a Counterfactual Situation

Quantification of lost profits is based on comparing the actual position of the claimant with the hypothetical position, in case the antitrust law breach had not occurred. Such a hypothetical situation is estimated by constructing a ‘*counterfactual scenario*’.

The counterfactual scenario models the market conditions and the interaction of market participants in a competitive market. Whenever it can be shown that higher profits would have been earned in a counterfactual scenario, and that the difference is caused by the infringement, damage has been suffered. This harm can be claimed on top of the actual loss based on overcharge calculations.

Figure 1 shows in a simple way how lost profit is estimated: the actual profit during the infringement period is subtracted from the estimated counterfactual profits. The difference between these two depicts the lost profits due to the breach of antitrust laws.

### Equation 1. Loss of profit

$$(\text{Revenue}_{\text{breach}} - \text{Cost}_{\text{breach}}) - (\text{Revenue}_{\text{no breach}} - \text{Cost}_{\text{no breach}})$$

It has to be noted that the calculation of lost profits and the parameters estimated will depend on who the claimant is (competitor or customer), the type of infringement and its effects (rise in price, reduced quality, margin squeeze, etc.) and data availability. Further below two examples are used to illustrate lost profit calculations.

1. One example shows lost profits for a direct customer due to a rise in prices, which was passed on to indirect customers;
2. The second example presents lost profits for a direct customer because of an exclusionary practice.

### Example 1: Loss of profit & passing on defence

Certain breaches of EU competition law, such as price cartels, limitations of output, allocation of consumers or excessive pricing by a dominant undertaking, can lead to an increase in prices. Economic theory suggests that such an infringement can cause two kinds of harm:

1. Price effect: The price charged by the infringer is a cost for the direct customer. The assumption is that costs in case of an infringement are higher than costs in a competitive market. Thus, quantification of the overcharge paid by a direct customer requires an estimate of the counterfactual cost price which would have occurred in a competitive scenario (*‘but for price’*). The actual loss is then calculated by multiplying the overcharge per unit with the actual quantity demanded during the infringement period.

Several methods and techniques are available. These are e.g. comparator-based methods, market simulation models, cost-based methods and

finance-based methods. The quantification of the overcharge is relatively straightforward.

2. Volume effect: Higher costs may result in a decrease in the quantity demanded too. Some customers might consider that the higher price they have to pay exceeds the value of owning the product or benefiting from the service. In practice, volume effects are more difficult to estimate.

### **Quantifying lost profits caused by the volume effect**

If a direct customer does not pass-on a price increase, the downstream demand for its own products will not decrease either: Indirect customers keep buying the products. This means on the other hand, that the direct customer is prepared to undertake 100% of the damages. This is the price effect discussed above.

The volume effect occurs when the direct purchaser decreases his demand for the product due to the price increase. Then the direct customer also foregoes profits on the units he is not selling. This foregone profit constitutes harm for which compensation needs to be awarded.

In principle, the same techniques apply to calculate lost profits because of a decrease in demanded volumes. Factors such as price elasticity of direct customers, competition on the downstream market, market phases, and opportunities for innovation, reduction of common costs or possible cross-subsidies from other products determine the extent of such lost profits.

### **Passing-on to indirect customers**

Damage calculations gain extra momentum when infringers successfully claim a passing-on defence. If the price overcharge is (partly or completely) passed on to the indirect customer, then this final customer is faced with higher prices and will reduce its demand. Economic theory suggests that consumers typically respond by purchasing less in case of a price increase.

Passing-on entails two elements: (1) the estimation of the extent to which the claimant has passed on the price overcharge to its customers (the pass-on rate), and (2) in the case of successful passing-on, the estimation of lost volumes resulting from the fact that some indirect customers stop buying the cartelized product due to the higher price.

In case of passing-on, lost profits at the downstream level depend on several factors:

- First, price elasticity of demand: If consumer demand is very inelastic (price-insensitive consumers), it is likely that sales volume will not really decrease. Conversely, if demand is very elastic (price-sensitive consumers), demand might drop considerably. In highly competitive markets price-sensitive consumers react immediately.
- The number of competitors affected by the cartel is also an important element, which influences the extent of lost profits. The smaller the number of firms affected by the cartel is the more likely are loss of profits. This is because the cost increase puts the affected firms at a competitive disadvantage compared to the unaffected competing firms. Consequently, demand of indirect purchasers will be lower.

Whenever there is passing-on there is also a lost sales effect too. The profit losses from this lost-sales effect need to be added to the price overcharge absorbed by the direct customer when computing damages.

The following equation represents such foregone profits.

## Equation 2. Profits foregone due to lost margins on unsold units

$$(\text{Quantity}_{\text{no breach}} - \text{Quantity}_{\text{breach}}) * (\text{Price}_{\text{no breach}} - \text{Cost}_{\text{no breach}})$$

Depending on the situation, a direct customer may experience lost profits either due to both volume effects or due to one of the two.

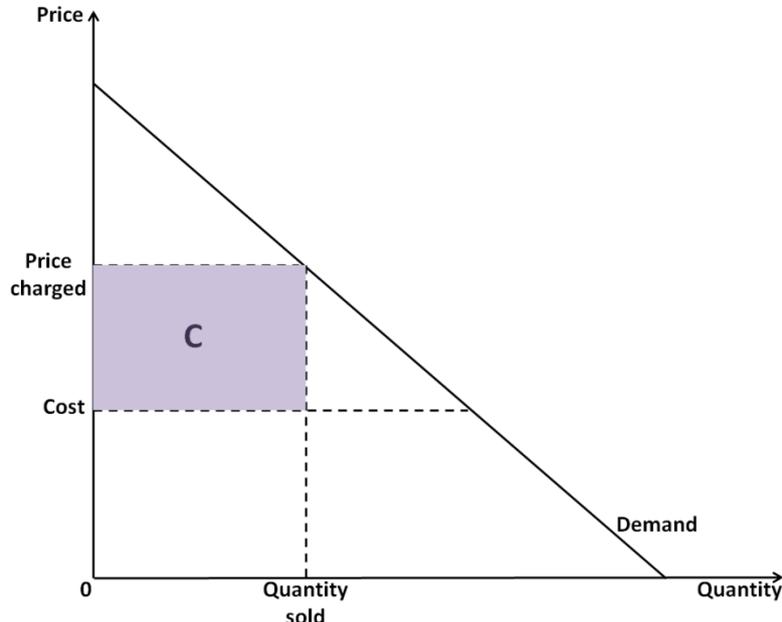
### Example 2: Loss of profit & exclusionary practices

In cases of exclusionary practices, competitors may also experience lost profit. The general idea behind the quantification of lost profits is very similar to the previous situation. We want to value that proportion of a business that has been lost as a result of an anti-trust infringement. This will involve using accounting, finance and economic methodologies to estimate the counterfactual situation.

The calculation of lost profits depends also on the type of infringement. Examples of exclusionary practices are predation, exclusive dealing, refusal to supply, bundling, etc. In our example, we focus on lost profits for a direct customer in case of a refusal to supply-situation.

With a refusal to supply situation, the principle component of the claimant's damages consists of lost profits from income foregone due to the infringer's exclusionary conduct. The customer does not have the opportunity anymore to gain profits at all. These lost profits are represented in figure 1 below.

**Figure 1: Effects of a refusal to supply – "C" as lost profit**



In the case of a refusal to supply, the quantity in case of the breach will be zero so the loss in profit is depicted as area "C" represented in figure 1.

## Equation 3. Lost profits due to a refusal to supply

$$(\text{Quantity}_{\text{no breach}} - \text{Quantity}_{\text{breach}}) * (\text{Price}_{\text{no breach}} - \text{Cost}_{\text{no breach}})$$

Concluding it should be noted that in the future not only the calculations of the actual losses are important in damages claims. Estimates of lost profits will gain in importance too. EE&MC has solid experiences in doing this kind of calculations.