Competition Competence Report

CARTEL DAMAGE CALCULATIONS

This article discusses private claims for damages caused by an undertaking's failure to comply with Article 101 TFEU or corresponding national laws. In this context, a central issue is the quantification of incurred damages. In the following, different methods to quantify such damages are discussed. Further, the EE&MC approach to damage calculation will be illustrated.

Reasons for Damage Calculations

The implementation calculations for damages in antitrust presupposes an infringement that caused harm to undertakings active in the relevant market(s). An example would be a cartel where prices have been set above the competitive level. Damage caused by such a cartel depends on the specific market situation of the cartel and non-cartel members as well as their relationship to their customers.

At the commencement of a claim, fundamental questions have to be answered: who is claiming the damage payment (harmed competitors or customers), and the reason a damage payment is being claimed. The key principle underlying the quantification of damages requires calculations that reconstruct the "state of the world" without the alleged harm (so-called "but for" scenarios). The conceptual design of damage calculations has to be based on realistic assumptions about how the market(s) affected by an infringement work(s). Assumptions have to reflect the "but for" market that would have prevailed in the absence of the infringement. In this context a central element is to find the price in a competitive market. By comparing the hypothetical competitive prices with the prices during the infringement, the basis for the calculation of damages is found. Only when the calculation of the hypothetical competitive price reflects

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market realities, meaningful price differences and their effects on infringed undertakings can be quantified.

Calculation Methods

The EU Commission commissioned a study to elaborate on the satisfactory implementation of the assessment of damages in general, as well as in the different Member States. Subsequently, the so-called Ashurst study was published.[1]

One important aspect of the study is the conclusion that the selection of the most suitable calculation method demands a case-by-case assessment. In such an assessment, economic expertise is indispensable.

In order to obtain a hypothetical "but for" price, a number of methods of calculation can be applied:

- The before-and-after method is basically a comparison of prices during the period of the alleged cartel with the prices in the period before and/or after the infringement. The advantage of this method lies in its simplicity and the easy availability of data. Yet, this method suffers from some drawbacks since this approach assumes that all (other) market conditions prevailing during the infringement stay constant. The problem is that this approach does not take market dynamics into account.
- With the yardstick method basically a comparison of the infringed market with a similar market being unaffected by the offence is performed. The reference markets should dispose of similar competitive characteristics and facilitate a meaningful price comparison. With this approach biased results are not unlikely.
- The cost-based method calculates the hypothetical competitive price level based on the cost structure of the undertaking under scrutiny in the infringed market. The disadvantage of this approach lies in the underlying assumption that the cost and price structures during the infringement stay constant and are not affected by the infringement itself. Furthermore, the whole approach is based on imprecise estimations of the prevalent or required profit margin under competitive conditions, since, for example, the undertaking's willingness to invest or to carry a risk are not considered.

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1 http://europa.eu.int/comm/competition/antitrust/others/private_enforcement/index_en.html

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- A more advanced method is the price prediction approach. This method involves econometric analysis (e.g. multiple regression analysis) which predicts prices in a "but for" scenario on the basis of past determinants of prices in the market. As this price prediction is based on historic (price) data, its reliability consequently depends on the quality and availability of the respective data. Yet, although accounting for structural changes, this calculation method does not allow adaptations to changing market situations.
- The theoretical modelling (simulation) approach is the most advanced approach in this respect. This approach employs an econometric model that allows the reactions of market participants, i.e. producing firms and customers, to be taken into account in the construction of the "but for" state. Various market parameters and economic data are collected and fed into a theoretical (simulation) model. The relevant theory of interaction on the market (e.g. the Bertrand model) forms the foundation for implementing a simulation correctly. The success of such a model substantially depends on the assumptions' proximity to the real market. Such a judgement demands economic expertise and a good understanding of markets during the model building process. To conclude, the theoretical modelling (simulation) approach is so far the most appropriate method to calculate the hypothetical competitive price as it is the most encompassing one: the dynamics of the supply (cartel and non-cartel members) and the demand side (direct and indirect purchasers) are both explicitly taken into account.

In most cases, the first three methods illustrated are employed as supplementary plausibility checks only.

EE&MC Damage Calculation Model

In order to design a dynamic model that quantifies incurred damages as realistically as possible, EE&MC applies tailor-made computer based market simulation models. This simulation approach rebuilds the market as if no infringement had taken place. The aim of the EE&MC model is to discover the competitive market price that would have prevailed if no infringement had taken place. This derived hypothetical competitive price is necessary for subsequently calculating the price differential and damages assessment.

In order to obtain the competitive price, supply and demand sides have to be evaluated carefully.

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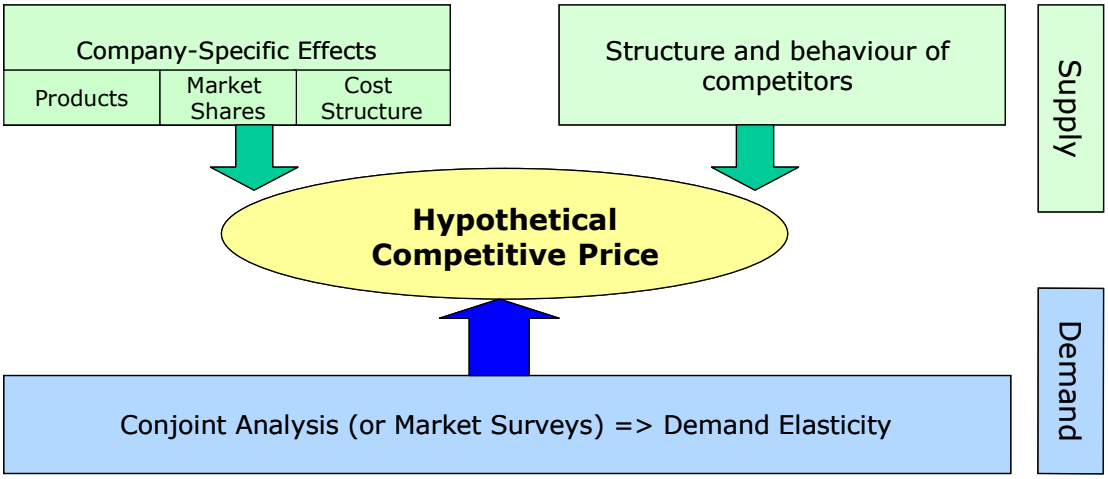
EE&MC Damage Calculation Model



Starting with the supply side, it is necessary to collect relevant data about the undertaking under scrutiny. These include, for example, the products of concern; their prices and cost structures; their market shares; etc. Furthermore, similar information from competitors has to be obtained. The aim is to estimate the reaction functions of the competitors in order to reconstruct the "but for" behaviour of the undertakings. A supply function representing the whole range of active companies is designed that represents the supply side behaviour exclusive of the infringement.

Correspondingly, the demand side has to be rebuilt equivalently in order to incorporate the reactions of the customers to the suppliers' "but for" behaviour. Hence, the demand side has to reflect how customers and consumers typically respond under normal competitive circumstances to price changes for the goods in question. Estimates can be obtained from historical data or market research. In market research, the use of conjoint analysis is strongly recommended in order to derive the demand curve/function for the market. This approach accounts for a variety of influences that may be neglected otherwise.

The hypothetical market price is calculated being the equilibrium price for which the market settles under perfect competition. This price is compared to the price under the infringement.

The EE&MC model is suited to predicting the hypothetical "but for" price as realistically as possible and meets high legal and economic standards. Consequently, harm suffered by an undertaking can be quantified precisely.

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