

# The Distortive Effects of Antitrust Fines Based on Revenue

V. Bageri, Y. Katsoulacos and G. Spagnolo

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A very important tool for the effective enforcement of Competition Law is the penalties imposed on violators by regulators and courts. In this paper, we uncover a number of distortions that current penalty policies generate, we explain how their size is affected by market characteristics as the elasticity of demand, and quantify them based on market data.

In contrast to what economic theory predicts, in most jurisdictions, Competition Authorities (CAs), but also courts where in charge, use rules-of-thumbs to set penalties that - although well established in legal tradition and in sentencing guidelines, and possibly easy to apply - are hard to justify and interpret in logical economic terms. Thus, antitrust penalties are based on affected commerce rather than on collusive profits and caps on penalties are often introduced based on total firm sales rather than on affected commerce.

A first and obvious distortive effect of penalty caps linked to total (worldwide) firm revenue is that *specialized firms active mostly in their core market expect lower penalties than more diversified firms active in several other markets* than the relevant one. This distortion – why for God’s sake should diversified firms active on many markets face higher penalties than more narrowly focused firms? – could in principle induce firms that are at risk of antitrust legal action to inefficiently under-diversify or split their business to reduce their legal liability.

We examine two other, less obvious, distortions that occur when the volume of affected commerce is used as a base to calculate antitrust penalties:

If expected penalties are not sufficient to deter the cartel, which seems to be the norm given the number of cartels that CAs continue to discover, penalties *based on revenue rather than on collusive profits induce firms to increase cartel prices above the monopoly level* that

they would have set if penalties were based on collusive profits. Intuitively, this in order to reduce revenues and thus the penalty, but this exacerbates the harm caused by the cartel relative to a monopolized situation with similar penalties related to profits, or even relative to a situation with no penalties, due to the distortive effects of the higher price and, in the case where the comparison is to a situation with no penalties, the presence of antitrust enforcement costs.

*Firms with a high revenue/profit ratio*, e.g. firms at the end of a vertical production chain, *expect larger penalties* relative to the same collusive profits *than firms that have a lower revenue/profit ratio*, e.g. because of the fact that they are at the beginning of the production chain. Our empirically-based simulations suggest that the welfare losses produced by these distortions can be very large, and that they may generate penalties differing by over a factor of 20 for firms that should instead have the same penalty.

It is worth noting that, in the US case, the above rules of thumbs do not produce any saving in enforcement costs, because the prescribed cap on fines requires courts to calculate firms' collusive profits anyway. Further, the distortions we identified are not substitutes, so that either one or the other is present. Instead, they are all present simultaneously and add to one another in terms of poor enforcement.

Developments in economics and econometrics make it possible to estimate illegal profits from antitrust infringements with reasonable precision, as regularly done to assess damages. It is time to change these distortive rules-of-thumb that make revenue so central for calculating penalties, if the only thing the distortions buy for us is saving the costs of data collection and illegal profits estimation.