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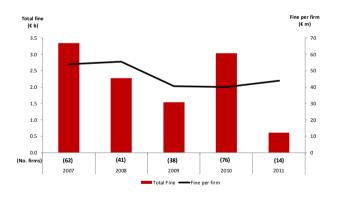
Economics of Competition & Regulation

Are European Cartel Fines Ridiculously High?

At the European Commission's Competition Forum a leading antitrust lawyer declared during the morning coffee break that Europe's cartel fines were "ridiculously high", and that the European Commission had recently taken its foot off the pedal (my not his phrase). It is true that European cartel fines have been very high. It is also true that the aggregate fines in 2011 collapsed to just over €000 million compared with €3 billion in 2010 i.e. nearly one-fifth of the previous year.

What happened in 2011?

In 2011 the European Commission penalised four cartels, three through its new settlement process. The number of completed prosecutions and the aggregate fines in 2011 represented a major reduction in the European Commission's enforcement activity (see Table overleaf). Moreover, the average fine imposed on each cartel was €154 million, less than half of the average €348 million over the previous four years under the 2006 Penalty Guidelines (Veljanovski, 2011). This clearly reduces the general deterrent effect of the law since it implies a decline in the prosecution rate and the expected fine.



However, if one looks behind the headline figures a different picture emerges for those firms unlucky enough to have been successfully prosecuted. The cartels prosecuted in 2011 were smaller (an average of 3.5 v. 7.6 firms) and shorter (average duration 3.3 v. 8.9 years) than those of the preceding four years. That is the cartels prosecuted in 2011 had less than half the firms and allegedly fixed prices for less than half the number of years.

The fact that the 2011 cartels were smaller and shorter suggests that the fines imposed on each firm may not have been so dramatically different from those in previous years. This was the case. The average fine per

firm (inclusive of the full leniency applicant) across the four cartels was €43.9 million compared to the average of €46 million for those prosecuted in the previous four years. Indeed if we adjust for partial leniency and settlement discounts, and make some assumption about the fine that would have been paid by the four full leniency applicants we get an estimated average fine per firm of around €89 million. Note that the implied reduction in fines due to the leniency and settlement programmes is a massive 50%.

If these fines are further adjusted to take account of both the number of firms and the duration of the cartel – that is normalised for the number of what I term "cartel years" - then the fine was over €13 million per cartel year compared to an average €5.0 million per cartel year in the previous four years.

Three of the four cartels prosecuted in 2011 were settled (Refrigeration Compressors, CRT Glass, and Washing Power). By agreeing to settle each firm received a 10% reduction in the notional fine which would have otherwise been imposed. Given the similarity of the post-settlement fines in 2011 with the post-leniency fines of previous years, it suggests that the 10% discount may have been illusory.

So was our lawyer right? Yes (as always) - the European Commission is slowing down its prosecutions but the punishments meted out to firms caught remain "ridiculously" high.

Bid Rigging

Bid rigging is conventionally regarded as the worst type of price-fixing. It tends to attract more severe punishment. Our research shows that the European Commission sets the percentage gravity of annual sales based on two main factors - the collective market share of the firms in the cartel, and whether it is a bid rigging cartel or not. If the cartel has engaged in bid rigging the European Commission increases the gravity by a massive 4 percentage points holding all other factors constant (Veljanovski, 2011).

Yet some evidence suggests that bid rigging is no worse than any other cartel. Indeed that it might even inflict less economic harm. Connor's (2010) survey of empirical studies of cartel overcharges reveals that average bid rigging cartel overcharged on average 34% less than the average of other price fixing cartels. Is the

European Commission also setting "ridiculously" high fines on bid riggers?

Myths about Deterrence

The European Commission's fines are designed to foster general and specific deterrence. They have been set very high to achieve this. But when the low detection probability is taken into account many argue that the fines should be even higher to achieve optimal deterrence. Given an estimated detection rate of around 15% or lower this suggests that fines should probably be 7 or more times greater than they have been.

There is however a revisionist view. First, it challenges the published research that cartels typically overcharge their customers by between 20% to 50% (Connor, 2010). Using the same data they revise the estimated overcharge to a median of around 13% from over 20% (Boyer & Kochoni, 2011).

Second, the revisionists say that the naïve theory uses the wrong probability of prosecution. Instead of using the one-period estimate of a 15% annual probability of detection/prosecution, the conditional probability of detection/prosecution in the nth year of the cartel should be used. This implies a deterrence multiplier of 1.6 instead of nearly 7 for the average cartel which has a 6 year life. This reduces the optimal fine substantially. Allain *et al* (2011) estimate that the fine necessary for optimal deterrence is a round 28% to 67% of annual

sales depending on assumptions as to profit margins and demand elasticities rather than 503% to 923% estimated by Coombe & Monnier (2011). Allain *et al* estimate that for the 64 firms prosecuted over the period 1975 to 2009 for which data was available, 56% were fined at levels that were sufficient or more than sufficient to satisfy the goal of optimal deterrence.

Using my database of 50 firms of the 168 firms for which data on sales was available prosecuted under 2006 Penalty Guidelines, about 69% of firms received final fines at or in excess of 67% of annual sales. Indeed 28% were fined in excess of their annual sales. Those firms implicated in bid rigging (Marine Hoses) were fined between over two to 6.5 times annual sales. This suggests that some fines may have been excessive, while others inadequate.

Conclusion

The European Commission's fines are high, set often at levels that may encourage optimal deterrence and many appear "ridiculously high". Others are too low, and the leniency and settlement programmes seem to have heavily discounted the fines. And if you are rigging bids watch out.

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European cartels prosecuted in 2011

Cartel	Fine	Duration	No	Fine/firm	Fine/cartel
	(€m)	(yrs)	Firms	(€m)	year (€m)
Washing Powder	315.2	3.2	3	105.1	33.2
Bananas	8.9	0.8	2	4.5	5.9
CRT Glass Bulbs	128.7	5.8	4	32.2	5.5
Refrigeration	161.2	3.5	5	32.2	9.2
Compressors					
	614.1	13.3	14		
	153.5	3.3	3.5	43.9	13.2
07-2010	348.0	8.9	7.6	45.6	5.1
	Washing Powder Bananas CRT Glass Bulbs Refrigeration Compressors	Washing Powder 315.2 Bananas 8.9 CRT Glass Bulbs 128.7 Refrigeration 161.2 Compressors 614.1 153.5	(€m) (yrs) Washing Powder 315.2 3.2 Bananas 8.9 0.8 CRT Glass Bulbs 128.7 5.8 Refrigeration 161.2 3.5 Compressors 614.1 13.3 153.5 3.3	(€m) (yrs) Firms Washing Powder 315.2 3.2 3 Bananas 8.9 0.8 2 CRT Glass Bulbs 128.7 5.8 4 Refrigeration 161.2 3.5 5 Compressors 614.1 13.3 14 153.5 3.3 3.5	(€m) (yrs) Firms (€m) Washing Powder 315.2 3.2 3 105.1 Bananas 8.9 0.8 2 4.5 CRT Glass Bulbs 128.7 5.8 4 32.2 Refrigeration 161.2 3.5 5 32.2 Compressors 614.1 13.3 14 14 153.5 3.3 3.5 43.9

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