Leading by Example
Could denying leniency to ringleaders create trust among cartel members?

Holger Rau1 and Georg Clemens2

Introduction

Cartel leniency has been hailed as one of the most successful tools in fighting hard-core cartels over the last two decades. Leniency applicants were not only instrumental in the discovery of numerous hard-core cartels, but also provided valuable information on the functioning of cartels. The number of discovered cartels has surged, which has been attributed to the successful implementation of leniency policies in most jurisdictions in OECD countries.3

The success of cartel leniency, however, strongly depends on the design of the policy itself. The US Department of Justice (“DOJ”) has recently called for more convergence of leniency policies across jurisdictions, noting that the divergence of approaches regarding the disqualification of “sole ringleaders” or “any leader” for leniency applications creates reluctance among firms to report cartels.4

Should leniency be denied to ringleaders? Such a policy could make it harder to form a cartel, as no firm would want to sacrifice its right to apply for leniency by becoming a ringleader. However, there are two countervailing effects. First, reducing the availability of leniency reduces the number of firms that might potentially blow the whistle. Second, by becoming a ringleader, when leniency is not available to ringleaders, a firm can signal its commitment to the cartel, helping to generate trust. This effect could help cartels to form.

To examine this question, we conducted economic experiments simulating a competitive market, with participants taking the decisions of potentially colluding firms. We found that discriminatory leniency policies do indeed make cartels more likely to form and, therefore, we argue that policies denying leniency to ringleaders could backfire. If the aim is to prevent cartels, it may be better to have leniency policies that do not discriminate against ringleaders at all.

Discriminatory Leniency Policies

The EU has always denied leniency to ringleaders, ever since the first EU leniency framework in 1996.5 In its 2002 and 2006 revisions, the European Commission decided to discriminate against companies that “took steps to coerce other undertakings to join the cartel or to remain in it”.6 Discriminatory treatment thus extends to many companies and is not limited to a single ringleader only.

Unlike the European Commission, the US DOJ identifies at most one ringleader in a cartel. Leniency can only be granted if the “corporation did not coerce another party to participate in the illegal activity and clearly was not the leader in, or originator of, the activity”7.

This international inconsistency could make leniency policies less effective. A cartel member that is considering revealing the cartel to the DOJ, being certain that he was not the sole ringleader, could still be identified as one among many cartel leaders by the European Commission. Fearing this, the company might renounce blowing the whistle on the cartel altogether.

International consistency would obviously be preferable – but to what standard? Should the rules provide scope to deny leniency to several ringleaders of the same cartel, or only the leader or originator? Alternatively, might it be better to allow all companies to be eligible for leniency, even if they acted as ringleaders? We have examined these questions, in an experimental setting.

Experimental Assessment of Ringleader Discrimination

We opted for an experimental approach to tackle the research questions at hand. This would allow the inference of behavioural aspects of conduct in cartels which could not be deduced from field data. We recruited volunteers to take part in an economic experiment, where they found themselves in an experimental setting.

1 University of Mannheim, University of Göttingen, Platz der Göttinger Sieben 3, 37073 Göttingen, Germany.
2 Economist, Compass Lexecon, Königsallee 2b, 40212 Düsseldorf, Germany. Email: gclemens@compasslexecon.com. The views expressed in this document do not reflect the opinion of Compass Lexecon, its experts or its clients.
5 See OECD “Roundtable on challenges and co-ordination of leniency programmes - Note by the United States”, 2018.
6 See European Commission “Commission Notice on the non-imposition or reduction of fines in cartel cases”, C 236/7/1, 2006.
7 See Department of Justice “Corporate Leniency Policy”, 1993.
8 On average participants earned 16.53€ including a show-up fee of 4€. The experiment was financed by the Anton-Betz-Foundation.
We designed a mechanism to form a hard-core cartel, which allowed multiple ringleaders to emerge. There were four scenarios:

- **Antitrust Authority only**: In this scenario, there is no leniency policy, only an antitrust authority that could uncover the cartel with a likelihood of 15%.
- **Non-discriminatory Leniency Policy**: A leniency policy under which all firms are eligible for leniency.
- **Limited Discrimination**: A leniency policy where only those firms that do not become cartel leaders can opt for leniency. There can be at most two leaders.
- **Unlimited Discrimination**: A leniency policy where only those firms that do not become cartel leaders can opt for leniency. All firms could potentially be leaders.

In our experimental setting, a company became a leader when it decided to pro-actively start communicating with other competitors to instigate a cartel. This approach follows the experimental cartel literature which shows that communication facilitates the implementation of collusive agreements. Hence cartel leaders are not only instigating a cartel but also facilitating its implementation.

As we analysed the formation of cartels in an experimental context, we were able to observe behavioural aspects of antitrust such as “trust” among the different cartel members. We were particularly interested in whether frameworks in which leaders were denied leniency provide incentives for firms to adopt leadership positions in order to signal their commitment to the cartel to other potential members.

### Results

We found that discriminating against ringleaders in our experiment did not help deter cartels. On the contrary, as we show in Figure 1 below, “non-discriminatory leniency”, in which even leaders are eligible to receive leniency, was the most successful policy to prevent the emergence of cartels. Results show the number of cartels formed, compared to a benchmark experiment in which no leniency was available. The non-discriminatory policy scored 63%, deterring 37% of the cartels formed in the absence of a leniency programme.

**Figure 1: Average development of established cartels over time**

![Figure 1: Average development of established cartels over time](source: Analysis based on Clemens and Rau (2019))

By comparison, the rates of cartel formation were, on average, 80% in the case of limited discrimination and 86% in the case of unlimited discrimination. The non-discriminatory policy therefore deterred about twice as many cartels as either of these discriminatory policies, which approximate existing EU policy.

It is also noteworthy that the unlimited-discrimination leniency regime performed worse in terms of deterrence (86% cartel formation rate) than the limited-discrimination regime (80%). This result is also consistent with our hypothesis: it appears that, in providing scope for more than just one firm to signal commitment by becoming a ringleader, the unlimited-discrimination regime undermines leniency policy even more than the limited-discrimination regime.

Our analysis of communications between our experimental ‘cartelists’ reveals that they were well aware of the commitment value of becoming a ringleader under the discriminatory leniency regimes. The following excerpts illustrate this:

**firm 2**: firm 1, you never activate chat, I hope you will not report us. However, this will not give you an advantage.

**firm 3**: If firm 1 in addition activated the chat, then trust would be strengthened

**firm 1**: This has worked out very well in former periods. Hopefully the strategy will turn out to be even more successful in the future. From now on I will also take part.

### Concluding Remarks

Leniency programmes have been game-changers for antitrust enforcers over the last two decades, as they substantially increased the number of uncovered cartels. However, our experiment suggests they could be more effective still. Excluding ringleaders from the leniency programme has the perverse effect of stabilising the cartel.

The US approach excludes fewer firms than that of the EU and is therefore likely to be more effective. If one of the existing approaches must be adopted as an international standard, the US approach therefore seems preferable. However, our results suggest that the most effective leniency policy of all is one that allows all cartel members to apply for leniency, whether they acted as leaders or not.10

---
