

# The Issue of Repeat Cartel Offences

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*Leniency policies have become an important antitrust tool but it is not clear whether they have effectively prevented recidivism or whether firms have learned to collude under, and even make strategic use of them. If “recidivism” is really an industry-level phenomenon, the appropriate policy measures are very different from what is necessary if individual firms, having been detected and punished for colluding, engage in the behavior again. Following Levenstein et al. (2015), this brief discusses the recidivism question as one about post-cartel behavior, i.e. the set of policies required to assure that effective competition emerges post-cartel breakup.*

## Measuring Recidivism

Cartels are one of the main concerns of the European Commission (EC) and the US Department of Justice (DOJ) and so, the US and EU Leniency Programmes (LPs) were designed, in 1978 and 1996 respectively, as a device for the deterrence and dissolution of collusive agreements (see Marvão and Spagnolo (2015a) for an in-depth review on the available evidence of the effects of LPs).

In the analysis of cartel formation, recidivism is an important issue. In the set of 510 cartel members fined by the EC in 1998-2014, Marvão (2015) identifies 89 “multiple offenders” (firms fined for collusion more than once), 10 “repeat offenders” (firms which initiate a cartel after being investigated for another cartel), and 5 recidivists following the definition from Werden et al. (2011): firms which initiate a cartel after being fined for another cartel.

The DOJ dataset compiled by Levenstein and Suslow (2015), spanning 1961-2013, preliminarily finds 113 “multiple offenders” but only 14 “repeat offenders”. Of these 14

firms, 5 that had been previously indicted were caught in the 1990s, but none was indicted again by the DOJ in the 2000s.

Although the number of (discovered) “true recidivists” is not zero, it is less than 1% in these two samples (EU, US). Recidivism seems to arise when there are lapses in enforcement; not surprisingly, some firms take advantage of these lapses to return to old behaviors. Designing policies that are able to prevent recidivism requires understanding whether this is an industry or firm-level phenomenon.

## Industry Recidivism

Levenstein et al. (2015) use the above-mentioned EU and US datasets to show that collusion occurs in virtually all sectors of the economy, but with discernable patterns.

In the US, construction and chemicals are frequently cartelized (pre and post leniency). There are a large number of cartels in local markets in some industries, such as retail gasoline stations and dealers and ready-mix

concrete. While collusion in these local markets is frequently uncovered, it is not necessarily amongst the same firms.

In the EU, chemicals and transport cartels are also frequent areas of collusive activity (although cartels that are strictly within national boundaries and prosecuted by national competition authorities are not included in the sample).

The authors show that there is a large share of repeat and multiple offenders in chemicals and a surprisingly high proportion of repeat offenders in the manufacture of transport and electrical equipment. The highest proportion of multiple offenders is found in pharmaceuticals and refined petroleum products. The transportation and storage market is a sector with a high incidence of collusion (83 convicted cartel members), but no repeat offenders.

While the determinants of cartel activity are varied and endogenous, some correlations with industry-driven recidivism can be discussed:

1. **Industry concentration.** It increases the ease of tacit collusion and it should increase the likelihood of explicit collusion, but there are many cartel examples in unconcentrated industries. In some industries, it has been argued that high fixed costs make competition unstable, so that, absent collusion, firms price below long-run marginal cost and are unable to cover fixed costs (Pirrong, 1992).
2. **Culture and history.** Spar (1994) argues that the cooperative culture necessary for survival for diamond miners facilitated collusion as the industry matured. Policy fluctuations can also contribute to this problem, as was the case in the US during the Great Depression.
3. **Inelastic demand.** This is empirically challenging to capture if the observed prices have been affected by

monopoly power, thus potentially raised to a level at which demand is elastic. In many cases, the direct consumer is a producer, so the downstream cost function and competitive intensity also influence elasticity of demand for the cartelized product. Grout and Sonderegger (2005) estimate the likelihood of collusion in the US and EU and rank industries accordingly. This could be used to target competition authority resources to select industries.

## Firm Recidivism

Once a cartel breaks-up, cartel members may decide to compete in the market, merge, tacitly collude, or explicitly collude again. The latter does not mean that the cartel re-forms: a firm may collude in a new industry or product line or with a new set of co-conspirators.

U.S. Steel was involved in 6 different US cartels between 1948 and 1969, with different cartel partners and in different steel products. VSL construction was similarly involved (including as a leader) in multiple US cartels across several decades with distinct, but overlapping partners.

In the EU, Akzo Nobel N.V. has been convicted for 9 cartels, which lasted between 1987 and 2007, and in which its co-conspirators were mostly overlapping - e.g. collusion with Arkema in 6 instances (although the latter changed its name during the period). Many of the other co-conspirators were also multiple offenders. While Akzo only received one fine increase for recidivism, it received 7 leniency reductions, of which 3 were full immunity.

Other EC repeat offenders are ABB and Degussa Evonik - both convicted 4 times and received full immunity twice - as well as Brugg and Sumitomo. The latter was

convicted for 7 cartels, of which 5, in the automotive wire harness, were self-reported.

What may influence repeated cartel participation, at the firm level?

4. **Firm's corporate culture.** In such a case, the leadership of the organization expects managers to collude, and collusion occurs in many markets in which the firm operates. Firm norms and expectations of managerial behavior can repeatedly encourage collusion and “disregard” previous fines, as illustrated in the ADM case (Eichenwald, 2000).
5. **Firm structure.** Multi-market collusion literature focuses on the ability of firms to target punishments in particular markets. Multi-market firms may also encourage the spread of collusion if they have learned to collude in one market and share their “best practices” in another. This seems to have been the case, for example, in the spread of the vitamin cartel from vitamins A and E to other vitamins (Connor, 2008). Multi-market collusion is encouraged not only by multi-product multinationals, but also multi-market relationships between what appear to be smaller firms in local markets. For example, if gas stations are owned by multi-market firms such as large oil firms or chains of stations, that may facilitate repeated collusion over time and/or across geographic locations.

## Policy Tools

In complementarity with LPs, Levenstein et al. (2015) discuss additional (possibly) effective post-cartel policies, aimed at preventing firm-driven recidivism.

1. **Company Fines and Leniency.** Theoretical research has emphasized

the aptitude of well-designed and well-run LPs to improve cartel detection and deterrence (for a survey, see Spagnolo, 2008). However, Marvão and Spagnolo (2015b) note the generosity of the current EU LP: the average LP reduction is 45% and leniency is granted to 52% of convicted cartel members. In addition, Marvão (2015) shows that repeat offenders appear to receive larger EC leniency reductions, which suggests that firms can learn the “rules of the game”, colluding repeatedly and reporting the cartel to reduce their penalties. As such, fines need to be tougher and recidivism needs to be dealt with differently.

2. **Individual Accountability.** Senior management in EU cartels does not seem to suffer from their participation in cartels. For example, Robert Koehler became CEO of SGL Carbon in 2012, after being convicted in 1999 of price-fixing in the graphite electrodes cartel. Imposing tougher sanctions, such as individual prison sentences or disqualification of senior executives from employment in their sector or role, may prevent repeated collusive behaviors (in new firms) and thus, increase deterrence levels.
3. **Follow-On Damages.** Private damage suits may increase deterrence. In the US, private litigation plays a major role in the enforcement of antitrust law. Conversely, access to private damages is relatively new in the EU. A recently adopted EU Directive on damages (11/2014) prevents the use of LP statements in subsequent damage actions. However, Buccirossi et al. (2015) show that the effectiveness of damage actions can be improved if the civil liability of the immunity recipient is minimized and claimants receive full access to all evidence collected by the competition authority. Access to

previous cartel decisions, for a given firm, will increase the amount of available information and can increase the likelihood and/or amount of successful damage claims.

4. **Consent Decrees.** These impose conditions on the behavior of convicted firms (e.g. maximum price, and transparency). If these are violated, the authorities intervene, thus lowering the cost of prosecuting recidivists. In the US, decrees were routinely used by the DOJ in the 1960s and 1970s, but the practice was abandoned due to concerns of effectiveness and large costs. More recently, in September 2007, the Brazilian Administrative Council for Economic Defense enacted a resolution that allows for the use of consent decrees with the aim to settle cartel investigations. Two have already been executed.

If recidivism is industry-driven, its prevention may require a different set of tools, including those below, to complement leniency.

5. **Structural Remedies.** Competition authorities have repeatedly permitted mergers among former cartel members, often without review, let alone structural intervention. Davies et al. (2014) examine mergers among former cartel conspirators and conclude that only 29% of the mergers were investigated by the EC. Remedies such as disclosure, divestiture of assets, selling minority shares in competitors, or licensure of intellectual property to competitors may change the nature of competition in the market and make collusion more difficult (see Marx & Zhou, 2015 regarding post-cartel mergers). This is particularly relevant if recidivism is industry-driven.

6. **Monitoring and screening.** Some antitrust authorities have implemented monitoring and screening techniques to identify anticompetitive behavior in a given industry. These initiatives involve the analysis or monitoring of the characteristics of products or market structures that are thought to be more prone to collusion (mostly due to repeated offenses). Some examples are watch lists (e.g. Australia, UK, Chile), price observatories (e.g. Belgium, Spain, France), statistical screens (e.g. US FTC, Korea FTC), gasoline retail in Brazil and public procurement in Sweden (see Abrantes-Metz (2013) for further details on screens).

## Conclusions

While literal recidivism, i.e. the formation of a cartel after having been convicted of illegal collusion, appears to be rarely detected in the EU and US, there remain policy gaps closing which could improve competition post-cartel.

A variety of post-cartel policies should be explored for their ability to increase the likelihood that workable competition, rather than tacit collusion or single firm dominance, will emerge. These reduce the reliance of competition authorities on leniency-driven self-reports, which will in turn make leniency more effective and less amenable to strategic use by firms determined to collude.

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