

# India's Cartel Penalty Practices, Optimal Restitution and Deterrence

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## Abstract

We analyze the cartel penalty regime in India in light of the literature on optimal penalty for restitution and deterrence, as well as current penalty practices in different jurisdictions. Our analysis reveals that though India's Competition Act allows for a much harsher penalty than other jurisdictions in cartel cases, the actual practices followed by the Competition Commission of India (CCI) are often inconsistent and non-transparent, resulting in a large number of court cases and very low penalty recovery. This inconsistency also weakens the leniency programme adopted by the CCI in order to induce cartelists to come forward with evidence. Our analysis reveals that in the majority of cases, penalties fall short of restitution and deterrence benchmarks suggested by some earlier literature. We suggest that in order to enhance both punishment and deterrence, CCI should adopt a consistent profit and duration-based penalty regime already prescribed in the law, and issue penalty guidelines taking into account the lack of profit/turnover data, aggravating and mitigating factors, as well as aberrations such as the role trade associations in the Indian context.

Keywords: Cartel penalty, Leniency, Optimal deterrence

JEL classifications: L40, L41, L44

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## 1. Introduction

Enforcement of the anti-cartel provisions of India's Competition Act began in 2009. Out of 120 antitrust orders passed until December 2020 by the Competition Commission of India (CCI) that found a violation under section 27 of the Competition Act, 80 (two-thirds) involved horizontal agreements between competitors. However, not all the horizontal agreements cases resulted in monetary penalties. Using information from the CCI orders and judgments of the appellate bodies up to 2016, Bhattacharjea and De (2017) discussed in detail how CCI used both direct and circumstantial evidence in prosecuting cartels and how arbitrary penalty calculation, procedural lapses and inadequate evidence resulted in many orders being overturned on appeal, or remanded for reconsideration. In many cases in which the Commission's verdict was upheld, penalties were substantially reduced. Since that article was published, major breakthroughs for CCI in the last few years have been successful prosecution of the cases under lesser penalty guidelines (a leniency/amnesty programme to induce cartelists to give evidence against each other), and establishment of liability and fines on individual executives without dismissal by higher courts. Moreover, a Supreme Court judgment also mandated the use of a firm's relevant turnover (instead of total turnover) as the basis for penalty calculation, which significantly reduced uncertainty. Nonetheless, many inconsistencies and inadequacies still persist in the fining decisions of the Commission, which may hinder cartel deterrence. In this backdrop, with additional data up to 2020, we revisit and try to evaluate the fining practices of the Commission in the light of the recent theoretical and empirical literature on optimal deterrence, as well as international practices, and suggest a few steps that can be taken to improve deterrence in the Indian context.

## 2. Literature Review

Competition authorities around the world most commonly use monetary penalties or fines to penalize cartels.<sup>1</sup> The objective of the authorities is not only to desist cartels but also to deter them.<sup>2</sup> Accordingly, the fines can be restitutive (compensation based) or dissuasive/deterrent (to make cartelization unprofitable) (Allain et al, 2011).<sup>3</sup> The optimal cartel fine has remained

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<sup>1</sup> In the United States of America (USA), United Kingdom (UK), and few other jurisdictions where participation in a cartel is a criminal offence, individuals (managers/executives) involved in the cartel agreement can be imprisoned.

<sup>2</sup> A few recent studies point out the role of public and reputational sanctions in deterring anti-competitive conduct instead of fines (see Aguzzoni et al, 2013; Bos et al, 2019 and Mariuzzo et al, 2020). These authors explored stock market effect of cartel detection and prosecution and found its negative impact on the stock prices and/or firm valuation.

<sup>3</sup> Deterrence can be either specific (if it deters the infringing firms stopping illicit activities in the future) or it can be general (if it dissuades other potential infringing firms to take up illicit activities).

a debated issue in the academic and policy literature. Most of the discussion centres around US and EU competition practices. Several authors try to shed light on whether the current fining guidelines are optimal in deterring collusion or suffer from over- or under-enforcement. Since Becker (1968), the economic approach to law enforcement states that a crime will be committed if gains from the illegal act outweighs the penalty imposed.<sup>4</sup> Therefore, penalty should compensate damages (net harm to others). Landes (1983) applied this concept in the context of hard-core cartels where the gain for the cartelized firms are expected profit from the collusion, which is based on the price overcharge relative to the counterfactual competitive price that would have prevailed 'but for' the cartel, multiplied by the reduced quantity. Harm is equal to the lost consumer surplus (CS). He assumed detection and conviction probability equal to 1, and postulated that the deterrent fines will be a multiple if this probability is less than 1.<sup>5</sup> This approach also assumes that all firms in the cartel are identical and risk-neutral.

Using the lost consumer surplus as benchmark for optimal fines, Connor and Lande (2012) showed that in practice, cartels are under-deterred. They calculated US cartel sanctions (cartel fines, individual fines, private damage payout as well as opportunity of cost of imprisonment/house arrest) for 75 cartels, and compared them to their calculation of optimal deterrence based on net harm to others which corresponds to cartel overcharge, estimate of allocative inefficiency, probability of detection and conviction. Their estimates of overcharge (mean=49%, median=23.3%) came from two different sources: Scholarly publications and USA cartel verdicts. They relied on previous empirical literature to get the estimates on allocative inefficiency multiple (3-20%), probability of detection (25-30%) and probability of conviction (80%).

However, given that for cartels, net harm to others and illicit gains are highly correlated and given the fact that CS is harder to estimate, many economists agree with the view that fines meant to achieve deterrence could be based on either harm or illicit profit gained from the agreement (Bageri et al (2013)).<sup>6</sup>

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<sup>4</sup> Becker's economic approach recognizes that zero violation is not efficient outcome in presence of enforcement costs, and also the outcome where gains from violations exceeds the harm it causes should not be deterred.

<sup>5</sup> See Polinsky and Shavell (1979) for elaborating on the probability of detection and the magnitude of 'Beckerian fines'

<sup>6</sup> Werden (2009) as well as Lande and Connor (2008, 2012) also endorsed this view that a cartel's illegal gain should be the basis of the fines. Lande and Connor (2018) repeated their earlier exercise without accounting for the allocative efficiency loss, and obviously the degree of under-deterrence only increased.

Combe and Monnier (2011) estimated optimal fines using the illegal profit or gain of cartelization instead of net harm to others. Following the static model proposed by Buccirosi and Spagnolo (2007), their optimal fine estimate can be expressed in terms of sales or turnover data:

$$\frac{\Delta\pi}{\alpha} = \frac{k[(1+m)(1-\varepsilon k)-\varepsilon m]}{\alpha(1+m)(1+k)(1-\varepsilon k)} S \dots\dots\dots (1)$$

Where  $\Delta\pi$  = illicit profit due to cartelization ;  $k$  = overcharge by cartel;  $m$  = competitive mark up (without cartel);  $\alpha$  = probability of detection;  $\varepsilon$  = elasticity of demand and  $S$ =value of sales/turnover.

This estimate is useful in deriving the excess profit since a majority of jurisdictions including India use sales/turnover data as the basis of setting the cartel fine. The authors estimated both optimal restitutive fine (seizing the cartel gain) and dissuasive/deterrent fine where the former simply does not take into account the probability of detection. Though not explicitly stated in the equation above, their estimates of two types of optimal fines use duration of the cartel ( $n\Delta\pi$  and  $\frac{n\Delta\pi}{\alpha}$  where  $n$  = length of cartel) . Combe and Monnier (2011) used the information on duration, affected sales and competitive mark-up (operating result/turnover of cartel members or industry leaders (average over five years)) on case to case basis whereas price elasticities (-2, -1 and 0), cartel overcharge (20% for national cartels and 30% for international cartels) and probability of detection (20% for dissuasive fine and none for restitution fine) are taken from the previous empirical literature. Applying this method on 64 cartels penalized by the European Commission between 1975 and 2009, the authors found that the level of fines compared to the illegal gain made by cartel members remains low, as only half the fines equal the amount of illicit gain captured by the cartels.<sup>7</sup>

This approach is contested both theoretically and empirically when dynamic games of collusion are considered (members can deviate from collusive outcome). Therefore, a new breed of literature has emerged that shows that for deterrence, it is not necessary to make collusion unprofitable, but it is sufficient to make collusion unstable (Buccirosi and Spagnolo, 2007). In game theoretic parlance, the recent approach focuses on the incentive constraint rather than participation constraint that was used in earlier writing (Harrington, 2014). Optimal fines

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<sup>7</sup> Werden and Simon (1987) also used illegal profit based optimal fine calculation for cartels in the USA.

required under the static framework (present value of expected collusive profits minus expected sanction from antitrust conviction) are higher than the optimal fines required under a dynamic framework (expected profits from secretly deviating/undercutting the cartel price minus expected antitrust sanction after deviating). Allain et al (2011, 2015) adopted this approach in their theoretical and empirical work and found evidence of over-deterrence in EC prosecuted cartels. In fact, they argued that the measurement of static deterrent fine used by Combe and Monnier (2011) is flawed. According to the authors, in a static framework, deterrent fine should be:  $\frac{n\Delta\pi}{(1-(1-\alpha)^n)}$  where  $\alpha$  is per year probability of detection which is constant over  $n$  years (cartel life). Intuitively, the longer the cartel lives, ex-ante probability that cartel will be detected increases. On the other hand, in the dynamic framework, optimal cartel fine should be  $\frac{\Delta\pi}{\alpha}$ , lower than the fines in the static framework and independent of length of the cartel. Restitutive fine remains the same ( $n\Delta\pi$ ) under dynamic framework as well. Using probability of detection (15%), mark up values (5-20%), overcharge (5-30%) and elasticity of demand (0 to 2) from the literature, Allain et al (2015) computed optimal fines for 138 cartelized firms and concluded that EC cartel fines exceeds the optimal fines in a majority of the cases. Boyer et al (2018) point out that legal jurisprudence often uses the criterion of principle of proportionality which may be violated if we follow a Beckerian fining rule, but is consistent with dynamic deterrence proposed by Allain et al (2015).

In recent theoretical models, due consideration is also given to the practices of competition authorities which were not considered previously such as incremental fines linked to duration of cartels, use of sales revenue instead of profit in determination of harm, leniency policy, private damage actions etc. Harrington (2010, 2014) discussed the issue of incremental penalty linked to duration of the cartel. Harrington (2010) showed that if the cartel is caught in the same period it colluded, the cartel fine multiple will be  $\frac{1}{\alpha}$  ( $\alpha$  is probability of detection) whereas if the cartel is discovered some time in future, we need to consider discounted expected penalty. His argument is that the foregone interest on duration is never paid by the violators, so the effect of the penalty depreciates, the longer the cartel survives. Assuming that the penalty associated with a period of collusion is reduced by  $(1 - \beta)$  where  $0 < \beta < 1$ , and the usual discount factor is  $\delta$ , the penalty multiple in dynamic scenario becomes  $\frac{1-(1-\alpha)\delta\beta}{\alpha}$ . Harrington (2014) on the other hand, set up a model to integrate a duration-based penalty approach with that of cartel stability in an infinite horizon oligopoly setting. According to the author, if we

include this depreciation rate in the fine calculation, along with penalties proportionate to cartel duration, the resulting damage-based penalty multiple (between 0.125 and 2.5) is lower than what is practiced in the USA. According to his model, if the penalty is independent of duration, the penalty multiple required is again  $\frac{1}{\alpha}$ , and considering rough estimates of  $\alpha$  given by the empirical literature (between 0.05 and .20), this multiple becomes 5 to 20, much higher than in practice. However, Harrington et al (2014) also pointed out that working out European Commission's penalty multiple without the knowledge of cartel overcharge is difficult to establish since the Commission imposes penalty that is proportional to revenue/turnover.<sup>8</sup>

Heimler and Mehta (2012) provided a slightly different version of static cartel fines from Combe and Monnier (2011) or Allain et al (2015), which requires information on price elasticity of demand, Lerner index and cartel overcharge but no information on probability of

$$\text{detection: } F_s = \frac{\Delta\pi}{\text{sales}} = (1 - \varepsilon L) \frac{\Delta p}{p} - \varepsilon \left( \frac{\Delta p}{p} \right)^2$$

Using specified range for overcharge (15%), demand elasticity (0.5-1.2) and Lerner index (0.3-0.8), they estimate that the expected extra cartel profits as percentage of sales lie between 1%-12.2%. To consider the dynamic elements of the fining policy, they include detection probability, discount factor and duration related depreciation rate as proposed by Harrington (2010) to arrive at the dynamic fine calculation as:  $F_D = \frac{\Delta\pi}{\text{sales}} [1 - (1 - \alpha)\beta\delta]/\alpha$ .

According to the authors, with a 10% probability of detection, 95% depreciation rate and 5% discount rate, the fine should exceed excess profit by a factor of 1.86. Using this method, Jing et al (2020) analysed 76 firms in 10 antitrust cases in China with an objective to explore whether optimal deterrent fine has good explanatory power for the actual fines imposed in China. They found that though the correlation is positive and significant, the magnitude depends on the overcharge ratio assumption. They further conducted an iterative simulation process reducing the overcharge rate with each iteration (starting with 15%) to find the critical overcharge ratio where the actual/optimal fine ratio is not significantly different from 1. This critical overcharge ratio found in the study is 4.9%.

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<sup>8</sup> In a slightly different context, Katsoulacos and Ulph (2013) considered the probability of detection while the cartel is still alive and the same probability when cartel is dead and find that incorporating these adjustments (time lapse between cartel death and investigation), optimal cartel penalty will be lower than without them (optimal penalty in their model is 25-31% with overcharge estimate 17.5% and 40-48% with overcharge estimate of 30%).

As mentioned earlier, Harrington (2014) explicitly states the problem associated with fines based on sales/turnover data which is also the predominant practice of the competition authorities in most jurisdictions. In a series of papers, Yannis Katsoulacos with other co-authors (2013a, b, 2015, 2017, 2019 etc.) examined the issue of revenue vs profit vs overcharge-based penalties and derived welfare properties of various penalty regimes. They found that if the jurisdiction uses revenue-based penalties, revenue will be distorted for non-deterred cartels. A profit maximizing firm will try to reduce its expected penalty by reducing revenue. But with a positive MR and MC, this implies reduction in output and increase in price. Further, with revenue as basis of fine, tighter penalty regime (higher percentage of revenue fined or probability of enforcement etc) or longer duration of cartel will distort revenue even further which results in higher cartelized price.

On the other hand, if the penalty is based on profit, optimal cartel output will be undistorted monopoly output and the cartel price is unaffected by the penalty or toughness of the penalty regime (Baghri et al (2013), Katsoulacos and Ulph (2013)).<sup>9</sup> Moreover, with very high fine, deterrence effect (fewer cartels operating) kicks in. Their results show that even with lesser number of cartels operating, a tighter penalty regime results in higher overcharge if antitrust penalty is independent of cartel overcharge. If the penalty depends on cartel overcharge, tightening of the penalty regime will reduce overcharge. Even after considering a dynamic model of cartel stability, the authors found similar results (Katsoulacos et al, 2015). So they conclude that competition authorities should switch to overcharge-based fines which target price directly. Profit-based fines target firms' earnings instead which is a weaker instrument, while a revenue-based fine is strongly counterproductive since it increases cartel market prices.<sup>10</sup> However, their research clearly shows that a tighter penalty regime increases deterrence irrespective of the penalty base used. In a few recent papers (Katsoulacos & Motchenkova, 2017, Katsoulacos et al 2019) the authors proposed a new penalty regime called sophisticated revenue-based penalty regime in which the penalty base is revenue but penalty rate applied to that base varies with the percentage overcharge set by the cartel which can be derived from the methodologies used in private damage claims. According to the authors, this

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<sup>9</sup> Except when the probability of cartel enforcement is endogenous and depends on price overcharge. In this case, cartel price will be lower than monopoly price, and increase in penalty will lower the overcharge even further.

<sup>10</sup> Additional distortions of revenue-based penalty as suggested by the authors (Bagheri et al, 2013) are that if total turnover is used as base of fines or as upper limit, more diversified firms face a higher fine than the ones which have a narrower business focus. Second, firms at the end of the value chain with lower profit-revenue ratio will expect larger fines (relative to collusive profit) than firms at the beginning of the value chain.

penalty regime has equivalent welfare properties as overcharge-based regime. However, they also point out that simple revenue-based regimes score higher in implementation compared to illegal gain/profit, overcharge or damage based regimes because of its observability and legal certainty.

Our discussion of the literature makes it very clear that there are several empirical challenges regarding optimal fine calculation. First, ‘but for’ price or overcharge from cartel agreements is difficult to measure. As we will explore more fully in the next section, the majority of jurisdictions rely on value of affected sales/turnover as the basis of fines. Use of turnover data, as pointed out above make matters complicated due to unknown elasticity of demand and competitive mark ups. Second, as discussed in detail in De (2010), Levenstein and Suslow (2011), it is difficult to measure the exact length of cartel agreements since start of an agreement is hard to determine due to lack of hard evidence /documentation and the end date may also be imprecise since a few cartels will still be active even after being detected. Third, probability of detection and conviction cannot be ascertained correctly and varies significantly across jurisdictions.

Competition authorities find it difficult to obtain evidence of cartel agreements, which by their very nature are secret. Although investigative agencies are usually empowered to raid corporate offices to search for incriminating evidence, this requires some prior suspicion of a collusive agreement. Moreover, such agreements are usually not recorded in documentary form. A very useful weapon in advanced jurisdictions has been a leniency/amnesty programme, whereby a cartel participant that provides evidence against others is entitled to a reduction or waiver of the fine. Offering leniency only to the first firm that provides evidence sets up a Prisoners’ Dilemma that incentivizes all participants to engage in what is called a “race to the courthouse door”. To strengthen the case, and to economize on investigative resources, reduced penalties on a sliding scale can also be offered to other firms that provide evidence subsequently. As the theoretical models reveal, collusive agreements, like other organized crimes must be self-enforcing (incentive compatible). Therefore, a leniency programme destabilizes a collusive outcome by tightening this constraint. This reduces the amount of the monetary penalty required to deter cartels (Aubert et al, 2006).

### 3. Cartel Sanctions: A Comparative analysis

Moving on from the theoretical and empirical literature on optimal fine calculation, in this section we provide a comparative view of the penalty guidelines under a few jurisdictions and their implications for India.<sup>11</sup> We review a few competition jurisdictions: Australia, Brazil, Canada, China, EU, India, Japan, Korea, Mexico, Russia, South Africa, USA and UK using International Competition Network (2008, 2017) and OECD (2016). First thing to notice that apart from specific and general deterrence, many competition authorities have other cartel sanctions objectives such as punishment,<sup>12</sup> restitution, or recovery of illegal gain, though these objectives are not always mutually exclusive.<sup>13</sup> For example, in the *Excel Crop Case*, the Supreme Court of India clarified that the objective purpose of India's Competition Act is deterrence and punishment: "...Penal provision contained in Section 27 of the Act serves this purpose as it is aimed at achieving the objective of punishing the offender and acts as deterrent to others." [Para 74, page 79]. However, our comparative assessment of the said jurisdictions reveal that deterrence is the predominant objective of cartel sanctions across the board.

Similarly, jurisprudence on competition laws is different in the sense that they can be either criminal, administrative or civil or even dual in nature and generally the objectives of the penalty is linked with the choice of jurisprudence. It is quite interesting to see that with the exceptions of EU,<sup>14</sup> China and India, most of the jurisdictions, irrespective of their income status have moved towards criminal sanctions for individuals involved in the cartel, though most countries still impose administrative/civil penalties on corporations. Another important point to note that many OECD countries (other than Mexico), bid-rigging receives the harshest punishment. Even in a few countries in the EU (Germany, Austria, Italy, Poland, Hungary), criminal sanctions are allowed only for bid-rigging cartels. Similarly, for China, bid rigging also receives a jail sentence. It is also to be noted that the method of setting fines in the cartel cases in different jurisdictions follow a general step by step process which starts with a base fine and then adjust it according to aggravating and mitigating factors within the limit of a maximal cap/limit if any. Leniency/reduction in fines is considered thereafter. However, it is important to remind ourselves that penalty objectives/guidelines mentioned are imprinted in

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<sup>11</sup> We review BRICS members and a few OECD countries (Australia, Brazil, Canada, China, EU, India, Japan, Korea, Mexico, Russia, South Africa, USA and UK) using ICN (2008), ICN (2017) and OECD (2016).

<sup>12</sup> Punishment here means retributive justice.

<sup>13</sup> In few countries punitive or exemplary punishment beyond the harm caused can be sought (as used under tort law in civil offence). This may result in fines beyond restitution or even deterrence.

<sup>14</sup> Many countries within EU have criminal sanctions for cartels such as France, Greece, Romania, Denmark.

the law and not necessarily practiced as laid down. We will come back again to this issue while discussing the penalty provisions vis a vis practices in India's competition regime.

There are a few noteworthy characteristics of the penalty provisions for cartels. First, most of the jurisdictions use some form of relevant turnover/sales as the basis for fine calculation. That is, if a firm earns revenue from selling more than one product or service, the fine is based only on the turnover of the one involved in the infringement. Only Brazil has the flexibility to use total turnover (for the firm or group of firms within the national boundary) if relevant turnover information is unavailable.<sup>15</sup> The Competition Commission of India also used to calculate penalties based on total profits or turnover, but from 2017 onwards it has been forced to move to relevant turnover regime after the Supreme Court judgment in the *Excel Crop Care* case. Moreover, it is interesting to note here that India is the only jurisdiction that uses profit (and not excess profit or overcharge) as a basis of penalty calculation among all the jurisdictions reviewed here. Apart from administrative fines, Chinese anti-monopoly law also permits confiscation of illegal gains of cartels.

In terms of duration of the cartel, the legal provisions are more diverse. Japan, Australia and Brazil consider fixed term penalty (one year for Australia and Brazil and three years for Japan). For a few other countries in our sample, calculation of duration is an aggravating factor, and no clear definition is provided in the law (Canada, China). In those jurisdictions that consider the continuous duration of infringement (US, EU, UK, Korea, Mexico, South Africa), two different measurement approaches are used. EU, UK and South Africa use a simplified method where number of years of infringement is multiplied. If the duration is less than 6 months, it is considered as  $\frac{1}{2}$  in EU and UK and in proportion of months in case of SA. On the other hand, US, Korea, and Mexico use the entire duration of the cartel. The disadvantage of using the second method is that a specific start and end date of the agreement need to be identified and documented. Indian competition law allows penalty based on the whole duration of cartel whereas for other anti-competitive practices, the penalty is based on last three years of turnover/sales. However, as we shall show in the next section, cartel penalty practices in India are more or less based on the three-year fixed term only.

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<sup>15</sup> For other individuals or public and private entities that do not perform business activity (e.g. trade associations), Brazil imposes monetary penalty between 50K and 2 billion BRL.

The most important aggravating factors mentioned by most authorities are recidivism, leadership/coercion in cartels, or refusal to cooperate with the authorities; whereas mitigating factors are cooperation with the agency (outside of a leniency programme), immediate termination of the agreement, compliance programme etc. These provisions are vague in most of the jurisdictions except where separate penalty guidelines are issued (EU, UK, Korea and South Africa).

As pointed out above, the probability of detection and conviction increases substantially under the leniency regime, which in turn may increase deterrence. In the US, The Department of Justice (DOJ) revised its 1978 Amnesty programme in 1993 for the purpose of better detection and deterrence of the collusive agreements. Similar programmes were introduced subsequently in other parts of the world including European Union that introduced its own first leniency programme in 1996 with moderate success and later modified it twice with better results. Leniency programs are now present in all the jurisdictions reviewed here, although many differences are visible. A majority of the jurisdictions have corporate leniency programmes where individuals can apply for leniency as part of the corporate application (e.g. Mexico, India, South Africa). However, a few countries like Brazil, UK, and USA have an advanced individual leniency programme which allow individual ‘whistle blowers’ to apply for leniency independently of the company that infringed the competition law. On the other hand, the EU penalty regime as well as leniency regime are only meant for corporations, not individuals, and Japan’s leniency policy is only extended towards administrative surcharge on corporations, not criminal sanctions to individuals.

Other important characteristics of any leniency programme are criteria for immunity and presence or absence of sliding scale leniency. Most of the jurisdictions (except Japan) provide immunity from fines irrespective whether the violation was unknown or known to the competition authority. However, USA and Canada put additional restrictions that cartel ringleaders are not allowed to apply for full immunity. Except USA, Canada and South Africa, all the other jurisdictions reviewed here have some form of sliding scale penalty, with full amnesty for the first to apply, and smaller reductions for subsequent applications. (Under the US amnesty programme, only the first confessing firm gets immunity from the fine and no further reduction in fine is allowed for other firms.) Australia, Brazil, Canada and USA also

have ‘Amnesty-plus’ programmes where a corporation applying for immunity in cartel A can also reveal and be granted immunity for cartel B.<sup>16</sup>

#### **4. An Overview of India’s Cartel Enforcement Regime**

In this section, we discuss India’s cartel enforcement regime, focusing exclusively on cartel penalty/sanctions and leniency. First, we review the penalty provisions specified in the law, discuss the status of cases, and provide an overview of CCI’s penalty practices in horizontal restriction cases. Next, we critically evaluate the methodology used by CCI to penalize cartels and whether the practice is consistent with the economic theory of optimal deterrence or even with the practices of other jurisdictions. Last, we reflect upon India’s leniency regime and make a few observations on the regulation and practices so far.

##### *4.1 Cartel Penalty Provisions and Practices in India*

As discussed in detail in Bhattacharjea and De (2017), India moved from a reformatory to a punitive competition regime with the enactment of the Competition Act, 2002. Antitrust offences (anti-competitive horizontal/vertical agreements and abuse of dominance) in India are civil offences that result in cease and desist order under section 27 (a) and civil fines or penalties under Section 27 (b) of the Act.<sup>17</sup> Civil penalties contained in section 27(b) of the act have two components: one is general for all types of agreements and abuse of dominance and the other part is specific for cartel agreements, which are more severe in nature. Where the prescribed limit for general civil penalty is not more than ten percent of the average of the turnover for the last three preceding financial years, the limit for the specific penalty (for cartel agreements) is up to three times of its profit for each year of the continuance of such agreement or ten percent of its turnover for each year of the continuance of such agreement, whichever is higher.<sup>18</sup>

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<sup>16</sup> The US programme allows a firm to get full immunity from fines in cartel B (a separate product market) and also substantial reduction in fines for its engagement in cartel A. This element of the amnesty programme induces the firms to report cartels in a separate product market even if they did not get the chance to apply for full immunity in the primary market concerned. OECD (2002a) argues that the programme has proven fruitful in the US and half of the then ongoing investigations in the US started because of the cooperation by the parties involved in other cartel investigations.

<sup>17</sup> Section 27(a) deals with cease and desist order without any monetary penalties.

<sup>18</sup> In the original Act, penalty provision for cartels was mandatorily ‘equivalent to’ three times of profit or ten percent of the average of the turnover for the ‘preceding three financial years’ which is now replaced by ‘up to’ and ‘for each year of the continuance of such agreement’ in the amended Act in 2007. Therefore, the amended act is more discretionary in nature and puts more emphasis on the duration of cartel agreement (longer lived cartel) and less emphasis on the severity/gravity of the infringement (multiple of cartel gain).

Some simple analytics can be applied to this structure of penalties. First, if we consider only the turnover-based penalty, the aggregate turnover during the cartel's life is highly likely to be larger than the average of the last three years' turnover. This is trivially true for cartels lasting three or more years; but even for a one-year cartel, it is true if turnover in the cartel year is higher than the average annual turnover of the non-cartel years. In general, longer-lived agreements will attract a much harsher penalty under the cartel-specific penalty regime than the general penalty regime. Second, it is easy to figure out that three times the profit will always be higher than 10% of turnover if profit/sales ratio is more than 3.33%, which is on the lower side under normal circumstances. So, the profit-based cartel penalty will normally be higher than the turnover-based penalty. Finally, a penalty based on *actual* profits will always be higher than one based on the *excess* profits (overcharges) attributable to collusion. It also obviates the need to calculate the 'but for' competitive price and the elasticity of demand, for which data and econometric expertise may be lacking. On paper, therefore, cartel penalties in India are quite severe by international standards, and easier to compute. However, as we will see in the next section, these provisions are diluted in practice by the CCI and also by the judgments of the appellate bodies.

Section 48 of the act deals with individual culpability and personal liability of the directors and other office bearers of the firms/associations. Administrative penalties can be imposed on the individuals involved in the cartel agreements on behalf of the convicted firms. According to Srinivas et al (2018),<sup>19</sup> the important distinction between Sections 48(1) and (2) of the Act is that, Section 48(1) puts the onus only on the relevant individuals who were in charge and responsible for the conduct of the firms/associations at the time of the contravention of the Act, and also allows this presumption to be rebutted if the relevant individual or individuals can demonstrate that the contravention has taken place without their knowledge, or that they had tried their best to prevent such contravention. In contrast, the consent, connivance, or neglect of the relevant individuals is established by their de facto involvement under Section 48 (2) and is therefore not rebuttable. Moreover, Section 48(2) applies to any individual or person that has been involved with the contravention and is not limited to the individuals in charge.

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<sup>19</sup> Srinivas K, Rajain D and Venkatakrishnan, B (2018) "Individual Liability in Cartel Cases" (2018) PL (Comp. L) September 68.

Till December 2020, total number of Section 27 (a) and 27 (b) orders pertaining to the antitrust cases (except mergers/acquisitions or combinations) are 120. Five of them are repeat orders where the Commission issued fresh orders in response to appeal courts' remanded judgments. Out of these 120 (115 if we remove remanded cases) orders, 80(75) of them were passed under section 3 (1) and/or (3(3)) which are related to horizontal agreements among firms/associations (67%). What is more interesting is that since 2017 onwards, the majority of the cases were section 3(3) cases: 31 out of 44 or 70.4%. The table below (Table 1) summarizes the absolute number and percentages of the cases in the two time periods.

Table 1: Number and percentages of cases overtime

Time period	Total Cases	Section 3(1)/3(3) cases	Percentage
Beginning-31/12/2016	76	49	64.5
01/01/2017-30/11/2020	44	31	70.4
Beginning-30/12/2020	120*	80	67

\* (Includes 5 remanded orders. All five original orders and three remanded orders were passed till 2016 and remaining two were passed after that)

Broadly, there are in total 34 cartels in the drug/pharma distribution and film distribution market (18 for pharma and 16 for film associations). There is a sizable literature regarding competition issues in the pharmaceutical sector in India with a focus on cartelization (see Bhashkarabhatla et al, 2016; Bhattacharjea and Sindhvani, 2014; Bhattacharjea and De, 2017; Mondal and Pingali, 2017). The major offenders have been associations of wholesale and retail drug distributors. It is apparent from the case laws that the situation did not improve in the last few years. Seven new cases were decided by the commission since 2017, and one remanded case for which a new order was passed. There are also a few cases in which penalty was not imposed due to their involvement in simultaneous cases, or due to the fact that the Commission was satisfied with the compliance programme put in place by the association. Three associations were also found to be repeat offenders. In film distribution market too, all the big associations were found to be repeat offenders. In fact, among the three new cases since 2017, two involved repeat offenders. However, unlike many other jurisdictions mentioned in the previous section, neither the law nor commission's penalty practices point towards increased penalty for recidivist cartels in India.

A large number of cartel cases (26) involves bid rigging in public procurement. It is also interesting to note that a large number of recent cases (post 2016) consist of bid-rigging (15 out of 32), and among them, five arise out of leniency applications, which we shall discuss later. It was pointed out in the previous section that most of the OECD countries in our sample (except Mexico) consider bid-rigging in public procurement as the most serious offence as it involves tax payers' money, and consequently they impose harsher penalties to firms and individuals involved. However, there is no such special provision in the Indian law in this regard.

Table 2 summarizes the penalty status of the cases in which the Commission found a contravention of section 3(3), and their current status in the higher courts (NCLAT and/or Supreme Court). There are 16 cases where only cease and desist orders were passed under Section 27 (a), and no fines were imposed. In half of these cases (8), non-imposition of penalty was due to similar penalty imposed on the respective firms/associations in a concurrent case. In four other cases, restrictive contractual arrangements were modified/removed, hence no penalty was imposed. In the case of Orissa Concrete and Hindustan Composites and Ors., the penalties were waived on the ground of parties' MSME (micro, small and medium enterprises) status and ability to pay criteria. In the case against Bengal Chemists and Druggists Association (BCDA), penalty was not imposed taking into consideration BCDA's effort in demonstrating a widespread compliance programme. In a very recent lesser penalty case concerning industrial and automotive bearings, though the Commission established contravention by bearing manufacturers, penalty was not imposed. Though there was enough evidence that bearing manufacturers were exchanging detailed price information with an objective to seek price increase by OEMs in the industrial components market, the investigation could not find evidence of resulting concerted action. Since exchange of price information does not constitute AAEC per se and no evidence was found on the concerted price increase, only a cease and desist order was pronounced. In the remaining 64 cases, the Commission imposed monetary penalties on the firms/ corporations/associations involved in the cartel. The fining pattern emerging from these cases is discussed in the next subsection.

Since 2014, CCI also started penalizing individuals (managers/ executives/office-bearers) involved in horizontal agreements and so far, penalized a large number of office bearers in 28 cases. Out of these 28 cases, the first two cases were very problematic where CCI imposed penalty on individuals invoking section 27 of the act. In both the cases, individual penalties

were dismissed in appeal. In a few other cases, individual penalties were dismissed on the ground of violation of principle of natural justice, or because the CCI's finding was reversed due to insufficient evidence of cartelization.

Table 2: Penalty Status in CCI and Appeal Court/Supreme Court Cases

<b>Penalty Status</b>	<b>No. of Cases</b>
No penalty	16
Firms/Corporations penalised	64
Individuals penalised	28
No appeal	13
Appeal allowed (penalty dismissed) #	11
Appeal dismissed (penalty upheld)	13
Appeal pending	33*
Penalty modified	5

# Includes one 'no fine' cases and also LPG manufacturers case where the Supreme Court found no contravention and dismissed the CCI order.

\* Includes 8 cases pending at Supreme Court.

There has been a growing backlog of pending appeals at different levels. In the original Competition Act, appeals against CCI orders were heard by a dedicated Competition Appellate Tribunal (COMPAT), with any further appeal to the Supreme Court. But in 2017, the COMPAT was abolished, and appeals were transferred to the existing National Company Law Appellate Tribunal (NCLAT), which was already overburdened by appeals under the Companies Act, and was subsequently flooded with appeals under the new Insolvency and Bankruptcy Code. Not surprisingly, we see a slowdown of appeals and appeal disposals in the post COMPAT period. There were 70 Competition Act related NCLAT judgments between mid 2017 and November 2020. Five of them were review applications and 19 of them were repeat judgments (for multiple parties in the same case). Effectively, there are only 46 judgments in the last three years. Taking a closer look, we find that many of these judgments are related to Section 26 (2) cases where the Commission closed the case without ordering an investigation. During this whole period, NCLAT disposed of very few Section 27 cases, which are the focus of this paper. A few noteworthy judgments were also passed by the Supreme Court of India, which we will be discussing in detail in the next section since they have important implications for the methodology adopted by CCI in cartel penalty calculations.

#### 4.2 Methodology of cartel sanctions:

As mentioned in the previous section, India's competition law allows penalty calculation on the basis of firm profit during the whole cartelized period. It should be noted that the law mentions total profit instead of excess profit (or, but-for profit) which is the basis of theoretical models of optimal deterrence. However, in practice, the Competition Commission has rarely used profit (8 cases only) in fine calculation, and the majority of these cases (6 out of 8) were decided in the last three years. At this point, we should also mention that in 23 out of 64 cases, trade associations rather than firms were involved, and since associations do not have profits, the basis of fines was income or turnover (membership fees), which would have been very small relative to the income or turnover of the distributors who constituted the associations' membership. Firms on the other hand were predominantly fined on the basis of average turnover for one, two or three years depending on the availability of data (28/64 cases).

Table 3: Criterion Used for Fine Calculation

Criterion	No. of Cases
No fine	16
Income receipts (Association)	23
Turnover/Profit mixed (Firms)	4
Turnover (with income for Association)	28
Profit (with income for Association)	6
Total	75

Note: Relevant profit/turnover/income are used only in 9 cases (including two remanded orders)

A major shift in the penalty/fining calculation came after the Supreme Court verdicts in the *Coordination Committee of Artists and Technicians of West Bengal* and *Excel Crop Care* case. The Supreme Court, in its first substantive order on competition issues stressed on the fact that 'relevant market' needs to be defined by the Commission in the section 3(3) cases, not only for the calculation of fines (which is standard under US or EC competition law) but also for the assessment of competition:<sup>20</sup>

It is for this reason, the first and foremost aspect that needs determination is: 'What is the relevant market in which competition is effected?.... Market definition is a tool to identify and define the boundaries of competition between firms. It serves to establish the framework

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<sup>20</sup> *Competition Commission of India v. Coordination Committee of Artists and Technicians of West Bengal Film and Television and others*, (2017) 5 SCC 17 (para 36)

within which competition policy is applied by the Commission. [Para 30 and 31 of the Judgment]

In another very important case *Excel Crop Care vs. CCI*, Hon'ble Supreme Court, held that the penalty to be imposed on enterprises involved in anti-competitive practices should be calculated on the basis of 'relevant turnover' of the enterprise and not the 'total turnover' to maintain the principle of proportionality:<sup>21</sup>

When the agreement leading to contravention of Section 3 involves one product, there seems to be no justification for including other products of an enterprise for the purpose of imposing penalty... Even the doctrine of 'proportionality' would suggest that the Court should lean in favour of 'relevant turnover'..... [Para 74]

It is also noteworthy that Justice N.V. Ramana also passed a concurring judgment discussing the penalty provisions of the Act. In his view, the Commission should follow a two- step guideline for imposition of fines where in the first step, penalty will be determined by the relevant turnover and in the second step, aggravating and mitigating factors will be considered. He proposed a number of aggravating and mitigating factors including duration of the alleged agreement. However, Justice Ramana also capped the penalty limit up to 10% of the relevant turnover:

At the cost of repetition it should be noted that starting point of determination of appropriate penalty should be to determine relevant turnover and thereafter the tribunal should calculate appropriate percentage of penalty based on facts and circumstances of the case taking into consideration various factors while determining the quantum. But such penalty should not be more than the overall cap of 10% of the entity's relevant turnover. [Para 14, Concurring judgment].

Another important aspect of this judgment is that the Supreme Court also permits the CCI's Director General to look into the past and subsequent conduct of the parties to ascertain any pattern in the firms' behaviour, even though the findings and penalty will be confined to a period post-notification of the relevant provisions of the Act (mentioned in the *Excel Crop Care* judgment (para 46) and also in Case No. 6/2013 *Surendra Prasad Vs. Maharashtra State Power Generation Co. Ltd. & Others*, Order dated 10/1/2018 [Para 94]).

Our analysis from the last section tells us that all jurisdictions use 'relevant turnover' or 'value of affected sales' as the starting point for the imposition of penalty. Therefore, the *Excel Crop Care* judgment is more or less consistent with the practices of more evolved well as the newer

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<sup>21</sup> *Excel Crop Care Limited v. Competition Commission of India & Another* (2017) 8 SCC 47.

jurisdictions. The recognition that the penalty calculation must follow a certain step by step procedure is also a welcome move. Most of the jurisdictions where the penalty is not solely decided by the Court (e.g. Australia) more or less follow a step by step procedure. However, two major drawbacks of the judgment are that it completely overlooked the profit-based penalty method for cartels, and suggested a penalty cap based on relevant turnover. Effectively, the 10% relevant turnover cap suggested by Justice Ramana leaves no room for considering aggravating circumstances like leadership in cartel or recidivism etc. unless the base penalty begins with a lower percentage of turnover.

After the pronouncement of this judgment in May 2017, CCI more or less followed the proportional turnover/profit criteria for penalty calculation (10 out of 27 cases where fines were calculated on the basis of relevant turnover/profit/income). Exceptions are a few bidding cases where the parties were not present in that particular product market and put cover bids, cases involving associations with income receipts only, cases where parties could not demonstrate that they are multi-product firms or cases with no penalty. There are a handful of cases where the Commission did not mention whether the turnover used for penalty calculation is relevant turnover or global turnover and a few others where the firms' penalty was calculated according to turnover because three times average profit was less than 10% average turnover. Another important point to note is the Commission's arbitrariness in dealing with duration of cartels. *Pre-Excel Crop care* judgment, duration of the horizontal agreement was seldom mentioned in penalty calculation. In a few recent cases, duration is considered for penalty calculation, and it is interesting to note that all these cases are leniency cases where length of the cartel is relatively easy to establish. Moreover, in these cases, Commission tried to establish duration on the basis of date of entering and exiting the cartel rather than the years, which may be difficult to prove other than leniency cases.

Apart from refraining from calculating penalties on the basis of profits and cartel duration in most cases, which could have resulted in much larger penalties, the Commission has usually not imposed penalties at the maximum statutorily permissible rates. Moreover, it has not shown much consistency in determining the rates to be applied in different cases, sometimes mentioning a couple of aggravating or mitigating factors, and sometimes arbitrarily fixing the rate of penalty without giving any justification at all. Table 4 shows the different criteria and range used by the Commission:

Table 4: Distribution of penalty rates for each penalty criterion

<b>Criterion</b>	<b>Range</b>	<b>No. of cases</b>
<b>Income receipt</b>	At 10%	26
	Below 10%	3
<b>Profit</b>	1-2 times	7
	Less than 1	2
<b>Turnover</b>	At 10%	5
	5-10%	10
	Below 5%	10
	Below 1%	1

Income receipt criterion was used for cases involving associations, and most of the cases attracted the 10% limit since the base amount was negligible. Penalty was partially or fully based on profit in nine cases but none of these cases attracted 3 times of profit which is the statutory limit. Two cement cases attracted 50% of profit and 7 other cases received penalty in the range of 1 to 2 times of profit. However, we should also note that 6 out of these 7 are leniency cases where relevant reduction in the range of 20-100% was applied after these base fines were calculated.<sup>22</sup> There are more variations within the turnover criterion, ranging from 0.3% to 10%. One point that emerges clearly from the analysis above is that leniency cases most definitely eased the informational constraint faced by CCI, and enabled fines more in line with the requirements of the law, be it profit criterion or duration.

On top of monetary penalties payable to the state, liability for payment of damages to affected parties can be a powerful disincentive to cartelization. Section 43A of the Competition Act allows any firms, individuals or government bodies to apply to the NCLAT for compensation for any loss or damages suffered as a result of any contravention of the Act by firms/associations. As mentioned in the literature review, successful damage/ compensation claims reduce optimal fines required for cartel deterrence. In June, 2020, NCLAT for the first time passed a judgment affirming the maintainability of the compensation claim by the Food Corporation of India in the *Excel Crop Care* case and laid down a few rules which may

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<sup>22</sup> One outlier is Case no 61/2013, *Surendra Prasad Vs. Maharashtra State Power Generation Co. Ltd. & Others*, order dated 10/01/2018 where the allegation was that a public entity was also part of the cartel. However, Director General refrained from investigating the public entity due to higher court's intervention.

determine the future course in cartel damage claims in India.<sup>23</sup> However, it remains to be seen whether claims will be entertained from other buyers who were not party to the original case, or ‘indirect purchasers’ (those who are harmed if the direct purchasers are retailers or producers of intermediate goods who pass on some of the overcharge to their customers). Consequences for the leniency program will also have to be considered: cartel members may be less willing to come forward with evidence in exchange for leniency, if they anticipate that it may be used against them in private compensation claims.

We have shown that theoretical literature and international practices point towards using relevant turnover/profit, duration as well as some measure of probability of detection and conviction in the calculation of optimal restitution based or deterrence based fines. We now analyse all 17 CCI orders on horizontal agreement cases in which fines were imposed after the Supreme Court’s *Excel Crop Care* judgment, which established relevant turnover as the basis for the penalty. We try to ascertain whether the actual fines imposed were optimal. In our sample of 17 cartels, 11 cartels were penalized purely on the basis of turnover/sales, 3 were based on profit only and in three cases, mixed methods were used.<sup>24</sup> For our understanding, we included these three cases for deducing both profit based and turnover based optimal fine. We first calculate optimal fines where percentage of sales/turnover are used (11+3=14 cases). We are using the static and dynamic deterrence and restitutive fines methodology proposed by Allain et al (2015) to estimate the optimal fines.

These authors used Buccirosi and Spagnolo (2007) methodology to first measure the excess profit from the revenue data using equation 1 stated in section 2. Therefore, their restitution, static and dynamic deterrent fine equations are given by  $n\Delta\pi$ ,  $\frac{n\Delta\pi}{(1-(1-\alpha)^n)}$  and  $\frac{\Delta\pi}{\alpha}$  where  $n$  = duration of the cartel and  $\alpha$  = probability of detection per year. Their paper chose parameter values from earlier literature. To simplify our analysis, we used lower bound of  $m$  and  $k$  (5% only) and elasticity=1.5 (elastic demand). If we increase values of  $m$  and  $k$ , resultant restitution and deterrent fines benchmarks will be higher. Since the profitability of a cartel is reduced if the price elasticity of demand is high, deterrence will be easier to achieve. Therefore, lower

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<sup>23</sup> *Food Corporation of India vs. Excel Crop Care Ltd and Ors*, compensation application no 01/2019 in Competition appeal no 79-81/2012, judgment dated 3<sup>rd</sup> June, 2020.

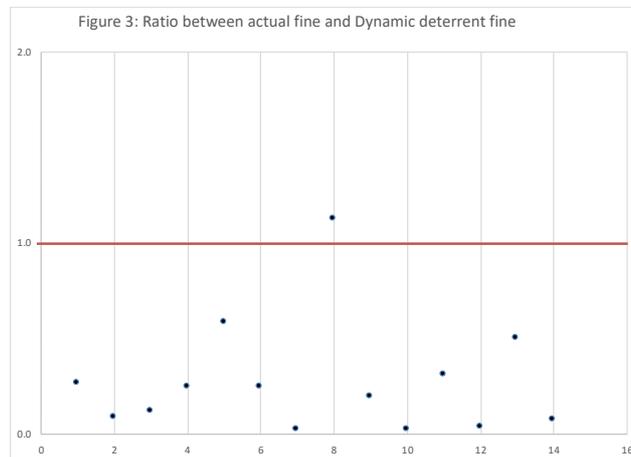
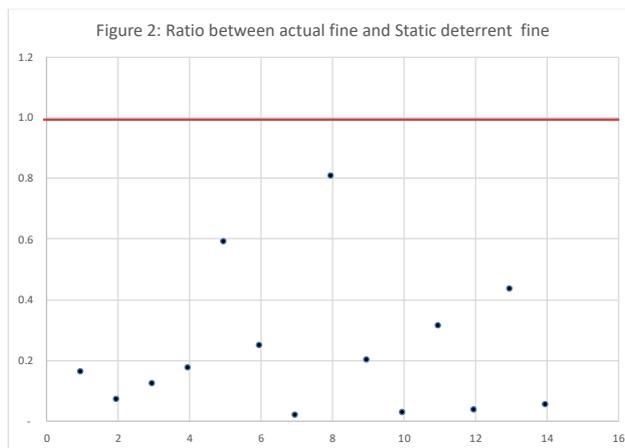
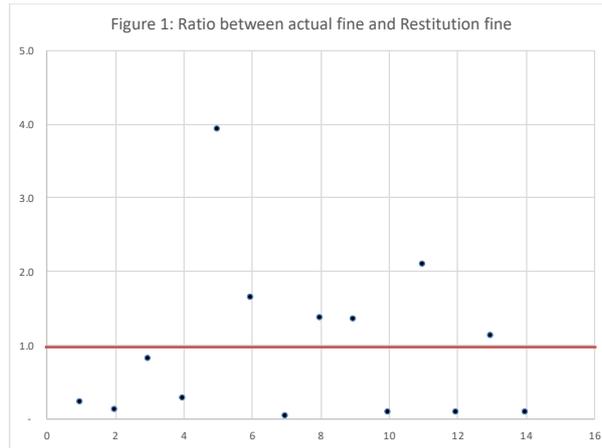
<sup>24</sup> 27 cases have been decided after the *Excel Crop Care* judgment (including the *Excel Crop Care* case itself, and one remanded case). No fine was imposed on 7 of them and 3 cases had only trade associations who are fined on the basis of income receipt. We remove these 10 cases from our analysis.

value of  $\varepsilon$  will result in higher restitution and deterrence benchmark. Moreover, we have used probability of detection=15% which both Combe and Monnier (2011) and Allain et al (2015) have taken as lower bound (deterrence) whereas the same is 100% (upper bound) for restitution fine. Given the inexperience and capacity constraint of a new competition jurisdiction like India, this probability of detection seems reasonable. Increasing this percentage will decrease the static and dynamic deterrent optimal fines benchmark. The ratio of actual fines and calculated optimal fines are shown in figures 1, 2 and 3 (restitution, static deterrent and dynamic deterrent respectively) for 14 cartels after *Excel Crop Care* judgment. It is important to note that we have used actual fines before any reduction under lesser penalty guidelines. Also, we worked out the duration of the cartel from the evidences discussed in the order. The Commission did not systematically established length of the cartel barring few leniency cases as mentioned previously. Therefore, the actual length may be much longer than the duration reported here.

Our results are presented diagrammatically in Figures 1 to 3, which plot the ratio of actual to optimal penalties for the different kinds of optimality criteria. We can see that 6 out of 14 cases in our sample meets the restitution fine criteria (values above 1) with the very minimum values of mark-up and overcharge considered in the literature.<sup>25</sup> It is more interesting that 4 out of 6 cases are lesser penalty cases. Also, if we observe closely, in 3 of these cases, CCI could not use relevant turnover since they were not players in the bidding market and put cover bids. In one case, it is not known whether the turnover is relevant or not. Moving to deterrent fines, none of the fines in our sample actually achieve static deterrence criteria and fine only in one of the dry cell batteries cases (case no 02/2017) is higher than calculated optimal fine. It is important to note that this case is a leniency case so the final penalty after reduction is substantially lower than what is considered here.

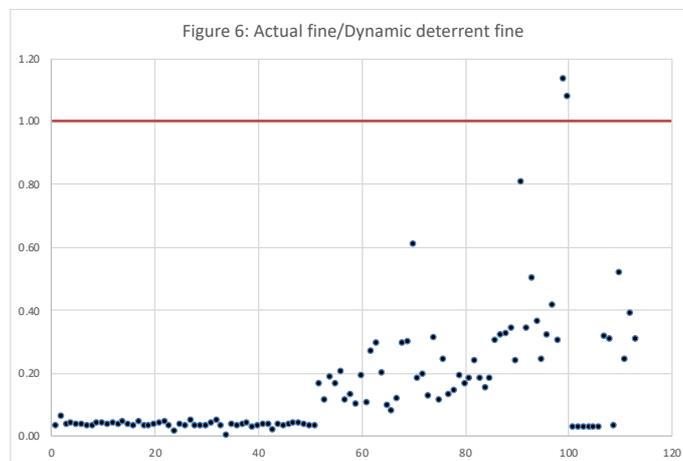
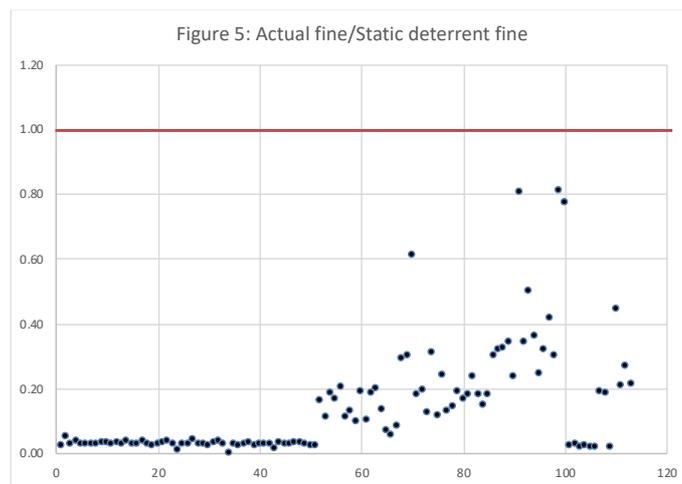
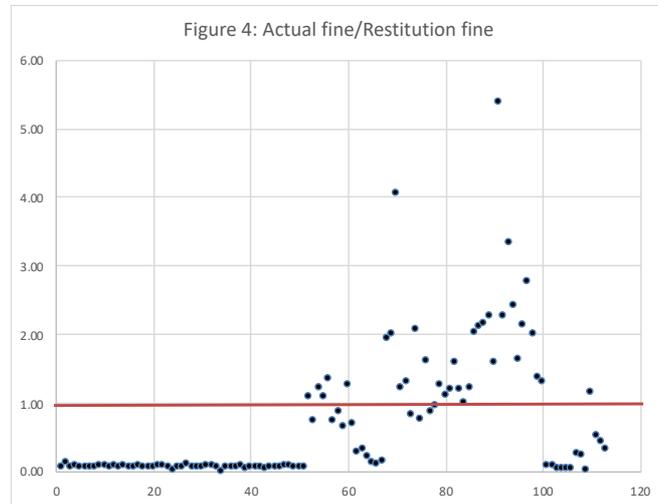
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<sup>25</sup> These 6 cases are Nagrik Chetna Manch and fortified security solutions (leniency), Pune Municipal Corporation (leniency), Dry cell batteries (02/2017, leniency), Dry cell batteries (03/2017, leniency), Indian sugar mills association and Nagarik Chetna Manch vs. SAAR IT resources.



Though the results presented here are revealing, it is distant from the economic theory of optimal deterrence since fines are calculated here at the aggregate cartel level assuming homogeneous incentive and participation constraints across firms. However, reality can be different. Therefore, it is more practical to calculate optimal fines at the firm level. There are 113 firms involved in these 14 cartels. However, a little less than half (51) are firms involved

in LPG case. Figures 4, 5 and 6 calculate actual fines in proportion to optimal restitution, static deterrent and dynamic deterrent fines respectively using the same method discussed above, but for individual firms within each cartel.



First thing to notice here is the very low penalty ratio of first 51 firms involved in the LPG case where actual fine is very small compared to the restitution and deterrence benchmark fine. There are 35 firms that satisfy restitution benchmark (figure 4, values above 1). All the firms involved in the cartels that satisfied aggregate restitution criteria earlier (figure 1, values above 1) individually satisfy the same criteria except 4 firms involved in Sugar mills association cartel. Additionally, fines imposed on 5 out of 10 firms in SSV coal carriers also individually satisfy the benchmark though the overall penalty for the cartel falls short of the restitution benchmark. The above calculations are based on the penalties handed down in the original CCI orders. The degree of under-deterrence would be even greater if we consider the reduction or reversal of many of these penalties on appeal,<sup>26</sup> and the erosion of the real value of penalties by the passage of time, even if they are upheld.

#### *4.3. Leniency in the cartel cases*

Full or partial penalty reduction to the whistleblowing cartel members is one of the significant steps taken by the competition authorities around the world in cartel detection and prosecution. The leniency regime in India is embodied under Section 46 of the Competition Act, 2002 (Act), and the procedure is laid down under the Competition Commission of India's Lesser Penalty Regulations, 2009 (LP). India's leniency structure is more similar to that of European Union where the Commission provides full immunity from fines to the first whistle blowing firm and also reduced fines for other leniency applicants depending on the cumulative conditions set up by the relevant leniency notice. There are a few differences to note between the EU and India's leniency programme.

First, according to the latest leniency policy of the European Union, the ringleader/instigator of the cartel cannot apply for complete immunity, but may apply for the reduction in fines which is not a requirement in India. Second, unlike India, EU gives automatic immunity from fines to the first reporting firm, while in India it is discretionary. Third, in the latest leniency notice, EU has done away with the requirement of terminating the cartel agreement immediately after leniency application to safeguard the confidentiality of the investigation process, but this is still a requirement in India. Fourth, India's corporate leniency programme

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<sup>26</sup> In Bhattacharjea and De (2017), we showed that the reductions were disproportionately higher for larger penalties.

(after amendment in 2017) extends immunity and penalty reduction to the individuals (managers/executives) involved in the cartel agreement. Neither individual penalty nor individual leniency is part of EU cartel enforcement. This feature of India's cartel penalty/leniency regime is similar to the US, though individuals can also be imprisoned for the violation of US antitrust law. However, the US has a separate individual leniency programme since 1994 where individuals can apply for amnesty/leniency independently of their employers.

Till now, immunity/lesser penalty has been applied in nine cases starting with *Cartelization in respect of tenders floated by Indian Railways for supply of Brushless DC Fans and other electrical items* in 2017. In five out of these nine cases, full immunity was granted. The first LP case (brushless DC fans) began with a piece of information received from the Central Bureau of Investigation from their inquiry into a corruption case of a public servant where they found that three firms rigged the bids for tender notices floated by the Indian Railways and the Bharat Earth Movers Limited. 75% reduction was granted to Pyramid Electronics. This case also opens up questions about cartel whistleblowing programme when the cartel members are involved in multiple infringements and conviction. Luz and Spagnolo (2017) argue that lack of coordination between agencies increases the complementarity between corruption and bid rigging in public procurement by substantially reducing wrongdoers' incentives to blow the whistle.

From our review of these nine cases, the first thing to notice is that the firms who received 100% immunity are global players and operating in India through subsidiaries. Probably their knowledge about other jurisdictions helped them to move before the CCI investigation started. Second, in all of these cases (except in the case of brushless fans, which was decided before the 2017 amendment), leniency was extended to the individuals of the firms that applied for leniency. Third, it is clear that disclosure of a new cartel for which the Commission has no prior information will bring full immunity to the firms.

However, lesser penalty guidelines, like CCI's overall penalty imposition practices, are very open ended regarding the subsequent penalty reductions. Four criteria are laid out but the weightage of each is not known: (a) the stage at which the applicant comes forward with the disclosure; (b) the evidence already in possession of the Commission; (c) the quality of the information provided by the applicant; and (d) the entire facts and circumstances of the case. Before the amendment, only an order of priority was given (1<sup>st</sup> player will get up to 100%, 2<sup>nd</sup>

player up to 50%, and 3<sup>rd</sup> player till 30%; only the first 3 were allowed). However, the amendment changed that. Now more than 3 firms can now apply for lesser penalty. It also seems that 100/50/30 rule was not necessarily followed. Even when the Commission applied a sliding scale, they considered the minimum reduction possible. In the first dry cell battery case (Case no.02/16), 2nd and 3rd applicants received 30% and 20% reduction (Para 16 and 17), and also in a sports broadcasting case, the second applicant received 30%. In Nagrik Chetna and Pune Municipal Corporation, the first one (though after investigation started) received only 50%. In two cases, the leniency applicant got no reward for providing information: in a case involving flashlights, the Commission held that the information was insufficient to establish collusive price fixing, while in a case involving bearings no penalties were imposed on any party even though violation of the law was clearly established.

## **5. Conclusions**

The theoretical models of optimal cartel penalties that we reviewed in section 2 of this paper would be difficult to apply to any real-world cartel regime, without good estimates of cartel overcharges, demand elasticities, and the probability of detection and punishment. In India, our assessment is further complicated by the inconsistent pattern of penalties imposed by the CCI. But our rough exploratory calculation shows that fines are considerably below optimal. It is certainly evident that penalties have been far lower than what were statutorily permissible, for several reasons: the use of the turnover rather than profit base (this is quite apart from the fact that theory shows that basing fines on turnover can be counterproductive); calculations based on an average of three years (with either base) rather than the actual duration of the cartel; penalties at much lower rates than the allowable maximum; imposition of penalties on the revenue of trade associations, which would be a tiny fraction of the turnover or profits of their members; failure to impose enhanced penalties on recidivists; imposition of penalties in only a single case when offences were established in multiple similar cases; and waiver of penalty on state-owned enterprises or MSMEs.

Whatever penalties were imposed were frequently reversed or reduced on appeal. The appellate process is getting prolonged, which increases the uncertainty of the outcome and reduces the present value of whatever fine might ultimately be upheld. It is not surprising that according to CCI's Annual Report for 2018-19, only about 0.4% of the antitrust penalties imposed since 2009 have been actually realized by the Commission. And this entire discussion is based on

cases that reached the stage of establishing that a cartel in fact existed; as we showed in Bhattacharjea and De (2017), many cases fail to reach that far due to inadequate evidence or procedural lapses.

As for the leniency program, which has just started showing results in the last few years, theory suggests that its success depends on the certainty and predictability of the leniency regime, as well as the prospect of substantial penalties if another cartel member provides evidence, or the authorities obtain it independently. We have shown that penalties seem to be getting attenuated, while the inconsistent pattern of awarding reductions in penalty can only increase uncertainty and discourage meaningful leniency applications.

Some obvious policy implications follow from our analysis. Foremost of these is the need to announce guidelines to reduce the scope for arbitrary and inconsistent penalties. These guidelines should provide for a base penalty and specify enhancements and reductions for aggravating and mitigating factors, with recidivism and bid rigging in public procurement high on the list of aggravating factors. The guidelines should also endorse a consistent profit and duration-based penalty regime, as already prescribed in the law. The severity of such a penalty gives more scope for fixing the base penalty at less than three times profit, and adjusting it upwards for aggravating factors, whereas there is less scope for adjusting the turnover-based penalty within the cap of 10%. Given that trade associations do not have profits, and their turnover is negligible relative to the profits their members earn from collusion, the turnover of individual members should form the basis of penalty calculations in the Indian context. As for leniency, the sliding scale specified in the regulations should be adhered to and repeat offenders should not be given any reduction at all. Otherwise, we might see cycles of collusive pricing followed by collusive applications for leniency.

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