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Criminalising Collusion: A Comparative Analysis of Cartel Enforcement in India, Australia, And Singapore

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Abstract[1234]
This study presents a comparative legal analysis of cartel regulation in India, Australia, and Singapore, focusing on legal definitions, enforcement mechanisms, penalty regimes, and leniency programs. It examines how these jurisdictions, each operating within a common law framework but differing in economic maturity, address antitrust practices i.e. price-fixing, bid-rigging, and market allocation. This study adopts a doctrinal and comparative legal research methodology. It involves detailed analysis of statutory frameworks, judicial decisions, regulatory guidelines, and enforcement authority reports in each jurisdiction. The study is further supported by empirical data on penalties, case outcomes, and leniency program applications to assess enforcement effectiveness and practical impact.

The research reveals notable variation in enforcement strategies. Australia applies both civil and criminal sanctions, with a strong focus on individual accountability. India and Singapore rely primarily on civil and administrative enforcement. All three jurisdictions use leniency programs; however, Australia's and Singapore's programs are more structured and incentive-based, leading to higher disclosure and deterrence rates.
This paper provides a unique comparative perspective on cartel regulation in three understudied jurisdictions. It contributes to the fields of competition law and business compliance by highlighting enforcement trends, judicial interpretations, and cross- jurisdictional policy gaps. It further recommends that India adopt criminal liability for hardcore cartel conduct and strengthen its leniency framework. The study offers valuable insights for legal reform, policy development, and corporate risk management in an increasingly globalized enforcement environment.

Keywords: Cartel; Enforcement; Price Fixing; Leniency; Penalties; Market Allocation

I. INTRODUCTION

Cartels are widely regarded as one of the most serious violations of competition law, as they distort market dynamics, restrict consumer choice, and inflate prices artificially. They arise when firms coordinate to fix prices, allocate markets, limit production, or engage in bid- rigging. The regulation and enforcement of cartels are critical components of competition law frameworks worldwide, aimed at ensuring fair and competitive markets. The various jurisdictions, including the United States (U.S.), and the European Union (EU), have developed robust anti-cartel laws and enforcement mechanisms to combat such anti- competitive conduct. On the same line, certain other jurisdictions including India, Australia and Singapore also developed their competition law norms over time. Despite differences in legal systems and economic structures, these jurisdictions aim to promote fair competition through strict cartel regulations.

Cartel agreements, often secretive and difficult to detect, include price fixing, market allocation, output restrictions, and bid rigging. These practices are detrimental to consumer welfare and economic efficiency. Effective enforcement is necessary to deter such behaviour, protect consumers, and ensure a level playing field in the marketplace. Cartel regulation is essential for economic efficiency, consumer protection, and maintaining fair market practices. The rationale for strict anti-cartel enforcement includes safeguarding consumer interests by preventing artificially high prices, fostering economic growth by encouraging competition, and ensuring that businesses operate on merit rather than through collusion.

The legal frameworks for cartel regulation differ across jurisdictions (as mentioned) but follow a fundamental principle of preventing anti-competitive practices. As the concept evolved from the U.S., and later on was also adopted by the EU, have established rigorous mechanisms to detect and penalise cartels. Similarly, despite variations in enforcement mechanisms, all three jurisdictions use leniency programs, investigative tools, and substantial fines to combat cartelization effectively.

1. *Legal Research Questions*

This study aims to: a) understand the concept and economic theory of cartels in competition law, with a particular focus on their evolution in the U.S. and the EU; b) compare and examine the legal framework governing cartels under the competition laws of India, Australia, and Singapore; c) identify and study the landmark cases, extract key principles from them, presumptions, burden of proof, standard of evidence, enforcement mechanisms, and penalty principles to understand the core judicial approach of these authorities while dealing with cartel cases d) study a few important follow up cases, and e) evaluate the effectiveness of leniency programs and investigative tools in jurisdictions of India, Australia, and Singapore.

2. *Research Gap*

While extensive research has been conducted on cartel regulation in the U.S. and the EU, limited comparative studies exist on Australia and Singapore in relation to India. The selection of India, Australia, and Singapore as the focus jurisdictions is based on several key factors. All three countries have enacted modern competition laws aligned with global best practices while operating within common law legal systems. Additionally, Australia and Singapore represent developed economies, whereas India is a developing economy, allowing for a nuanced comparative analysis of how competition laws have evolved and adapted in diverse economic contexts. By shifting the focus to these jurisdictions, this study addresses a critical research gap, offering fresh insights into how their competition norms related to cartel differ from each other and how competition authorities have approached cartel enforcement in these jurisdictions. The research is structured to provide a comprehensive comparative analysis, identifying best practices and enforcement challenges. This culminates in a conclusion with recommendations aimed at strengthening cartel enforcement mechanisms in India, Australia, and Singapore.

3. Research Methodology

The researcher adopts a doctrinal / comparative legal method, case selection rationale, and data source validation. Through a comparative legal analysis, the study aims to highlight the strengths and limitations of each jurisdiction's legal framework and judicial approach in addressing cartelization.

II. ECONOMIC THEORY AND LEGAL FRAMEWORKS

Cartels undermine market competition by distorting prices, restricting output, and stifling innovation. Through collusion whether explicit or tacit businesses manipulate pricing, allocate markets, and rig bids, thereby harming consumer welfare and economic efficiency.

Recognizing this threat, the U.S. and the EU pioneered the development of anti-cartel enforcement mechanisms, shaping the foundational theories and regulatory frameworks that have influenced competition laws worldwide.

Building on these established principles, jurisdictions such as India, Australia, and Singapore have enacted stringent anti-cartel laws, adapting global best practices to their unique economic and legal landscapes. While variations exist in legal frameworks and enforcement approaches, the overarching objective remains the same: fostering fair competition and deterring collusion. Given the inherently secretive nature of cartels—ranging from price- fixing to bid-rigging—effective enforcement requires robust investigative tools, strict penalties, and well-structured leniency programs to safeguard consumers and maintain market integrity.

In the economic literature, the cartels have been studied extensively, with empirical evidence showing their adverse effects on market efficiency and consumer welfare. One of the studies[5] suggests that cartelized industries experience price increases ranging from 10% to 50% above competitive levels, leading to significant welfare losses for consumers. As such, the price- fixing cartels, in particular, have been found to reduce economic efficiency by limiting market entry and innovation, thereby creating artificial monopolies.[6] The European Commission and the U.S. Department of Justice (DOJ) have imposed billions of dollars in fines on cartel participants, emphasizing the economic and legal consequences of such agreements.[7] Similarly, the Competition Commission of India (CCI) and has significantly enhanced its enforcement mechanisms in recent years, imposing strict penalties on enterprises engaged in cartel behaviour.[8] Additionally, research has shown that leniency programs and whistleblower protections play a critical role in dismantling cartel structures, as firms have strong incentives to disclose collusive behaviour in exchange for reduced penalties.[9]

[5] JM Connor, 'Price Effects of International Cartels in Markets for Primary Products' (2014) 45(1) Agricultural Economics 21.

[6] MC Levenstein and VY Suslow, 'What Determines Cartel Success?' (2006) 44(1) Journal of Economic Literature 43.

[7] European Commission, 'Cartel Statistics Report' (2022) https://ec.europa.eu/competition/cartels/statistics.pdf accessed 02 June 2025.

[8] R Sagardeep, A Sakle, S Bagul and YV Singh, 'India: CCI increases enforcement activity and scrutiny of merger control' Global Competition Review (10 March 2023) https://globalcompetitionreview.com/review/the-asia-pacific-antitrust-review/2023/article/india-cci-increases-enforcement-activity-and-scrutiny-of-merger-control accessed 02 June 2025.

[9] G Spagnolo, 'Leniency and Whistleblowers in Antitrust' (2008) 39(2) RAND Journal of Economics 343.

Even the Australia and Singapore have also contributed to the body of research on cartel regulation, particularly in enforcement strategies and the effectiveness of leniency programs. In case of Australia, a study conducted by Beaton-Wells and Fisse (2011)[10] examines the impact of Australia's criminalization of cartel conduct under the Competition and Consumer Act, 2010. The study highlights how the introduction of individual criminal liability, along with corporate penalties, has strengthened deterrence against collusion. The Australian Competition and Consumer Commission (ACCC) has actively pursued cartel cases, including high-profile prosecutions in the banking and construction sectors, reinforcing its commitment to competition law enforcement.[11]

In Singapore, research by Ong and Wan (2019)[12] explores the effectiveness of the Competition Act, 2004, particularly its leniency program in uncovering cartel activities. Their findings suggest that firms are more likely to self-report cartel behaviour when the risk of detection is high and penalties are severe. The Competition and Consumer Commission of Singapore (CCCS) has leveraged leniency provisions to dismantle several major cartels, including cases in the shipping and financial services sectors.[13] This structured approach

provides empirical backing to cartel enforcement discussions and highlights the evolving role of competition regulators in curbing anti-competitive practices globally.

A comprehensive understanding of cartels necessitates exploring the economic theories that form the foundation of competition law and guide judicial reasoning on cartelization. These theories, including the collusion theory, game theory, price-fixing models, and oligopoly theory, shed light on the strategic behaviour of firms, the mechanisms sustaining collusion, and the broader implications for market structures. By analyzing these frameworks, one can better grasp the economic rationale behind antitrust enforcement and the challenges in curbing anti-competitive conduct.

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[10] C Beaton-Wells and B Fisse, Australian Cartel Regulation: Law, Policy and Practice in an International Context (Cambridge University Press 2011).

[11] Australian Competition and Consumer Commission, 'Major Cartel Prosecutions in Australia' (2022) https://www.accc.gov.au accessed 02 June 2025.

[12] D Ong and L Wan, 'Leniency and Cartel Detection in Singapore: A Policy Review' (2019) 10(2) Asian Journal of Law and Economics 175.

[13] Competition and Consumer Commission of Singapore, 'Enforcement Decisions on Cartel Cases' (2023) https://www.cccs.gov.sg accessed 02 June 2025.

1. *Collusion Theory*

In general, collusion occurs when firms coordinate actions to limit competition and maximize joint profits. This involves price-fixing, bid-rigging, output control, and market allocation. Firms engage in collusion to reduce uncertainty and stabilize prices, effectively functioning as a monopoly.[14] However, sustaining collusion is challenging due to the temptation of individual firms to defect for higher short-term gains. The economic rationale behind collusion suggests that in the absence of stringent legal enforcement, firms will attempt to collude as long as the expected benefits outweigh the risks of detection and punishment.[15] Regulatory frameworks across jurisdictions strictly prohibit collusion due to its detrimental effects on market competition and consumer welfare.[16]

2. *Game Theory*

Game theory provides insights into the strategic interactions among cartel members. The classic "prisoner's dilemma" illustrates the instability of cartels: while cooperation ensures mutual benefits, the incentive to cheat remains strong.[17] If one firm undercuts the agreed price, it gains a short-term competitive advantage, leading to potential cartel breakdowns. Repeated interactions, however, may sustain collusion through punishment strategies, where members deter defection by imposing retaliatory measures, such as price wars.[18] Firms also use reputation mechanisms to discourage cheating, ensuring long-term profitability. Economic models predict cartel breakdowns when external shocks, regulatory interventions, or internal conflicts arise.[19] Game theory has been instrumental in shaping enforcement strategies, as regulators leverage its principles to design leniency programs and other deterrence mechanisms.[20]

3. Price-Fixing and Market Distortions

Price-fixing agreements allow cartel members to artificially inflate prices, limiting consumer choices and reducing economic efficiency.[21] Such agreements create price rigidity,

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14 JE Harrington, 'How Do Cartels Operate?' (2006) 2(1) Foundations and Trends in Microeconomics 1.

15 GJ Stigler, 'A Theory of Oligopoly' (1964) 72(1) Journal of Political Economy 44.

16 M Motta, Competition Policy: Theory and Practice (Cambridge University Press 2004).

17 J Tirole, The Theory of Industrial Organization (MIT Press 1988).

18 EJ Green and RH Porter, 'Noncooperative Collusion Under Imperfect Price Information' (1984) 52(1) Econometrica 87.

19 M Ivaldi and others, 'The Economics of Tacit Collusion' (2003) Final Report for DG Competition, European Commission.

20 L Kaplow, 'An Economic Approach to Price Fixing' (2013) 79(1) Antitrust Law Journal 301.

21 GJ Werden, 'Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory' (2009) 75(3) Antitrust Law Journal 657.

preventing natural market fluctuations. By eliminating price competition, cartels reduce incentives for firms to innovate or improve product quality.[22] The economic analysis of price- fixing emphasizes the long-term harm to market efficiency and consumer surplus. Governments combat price-fixing through strict antitrust regulations and penalties. Empirical studies show that price-fixing results in significant overcharges to consumers, often ranging from 10% to 50% above competitive market prices.[23] Regulatory authorities employ economic tools such as market simulations and econometric analysis to detect and quantify price-fixing behaviour.[24]

4. Oligopoly Theory and Market Power

Cartels are common in markets controlled by a few large firms. These firms can silently agree to keep prices high without written agreement.[25] Their strong market position helps them limit competition and keep new players out.[26] Regulatory authorities closely monitor oligopolistic industries to prevent coordinated anti-competitive behaviour.[27]

5. *Allocative and Productive Inefficiencies*

Cartels create allocative inefficiencies by distorting the natural supply-and-demand equilibrium. By restricting output and controlling prices, they prevent resources from being allocated efficiently in the market.[28] Moreover, productive inefficiencies arise as cartel members face reduced competitive pressure to optimize production costs, leading to wasteful expenditure and higher production costs.

6. Barriers to Entry and Market Distortion

Cartels erect significant barriers to entry by maintaining artificially high prices and controlling market access. Potential competitors are deterred from entering the industry due to the uncompetitive market conditions imposed by cartelized firms. This suppression of

22 DW Carlton and JM Perloff, Modern Industrial Organization (Pearson Education 2015).

23 JM Connor and Y Bolotova, 'Cartel Overcharges: Survey and Meta-Analysis' (2006) 24(6) International Journal of Industrial Organization 1109.

24 RM Abrantes-Metz and others, 'A Variance Screen for Collusion' (2006) 24(3) International Journal of Industrial Organization 467.

25 FM Scherer, Industrial Market Structure and Economic Performance (Houghton Mifflin 1980).

26 JS Bain, Barriers to New Competition: Their Character and Consequences in Manufacturing Industries (Harvard University Press 1956).

27 J Tirole, The Theory of Industrial Organization (MIT Press 1988).

[28] GA Hay, 'The Economics of Predatory Pricing' (1987) 55(2) Antitrust Law Journal 365.

competition results in long-term market distortions, leading to monopolistic behaviour and reduced market dynamism.[29]

7. Reduction in Innovation and Technological Advancement

In competitive markets, firms invest in innovation to gain a competitive edge. However, cartelization reduces the incentive for technological advancements, as firms benefit from artificial price controls rather than efficiency-driven competition.[30] This stagnation can have long-term effects on industry development and economic growth.

8. Macroeconomic Consequencies

At a macroeconomic level, cartels contribute to reduced economic growth and increased income inequality. By limiting market competition, they concentrate wealth within a few dominant firms while reducing economic opportunities for smaller enterprises.[31] The World Bank has highlighted that anti-competitive practices, including cartelization, are a key factor in limiting economic development in emerging markets.[32]

9. Detection and Prosecution Challenges

Detecting cartel behaviour is complex due to its secretive nature.[33] Therefore, enforcement agencies rely on whistleblower programs, market analysis, and statistical models to identify collusive activities.[34] Further, the prosecuting cartels require substantial evidence, often gathered through dawn raids, document seizures, and electronic surveillance.[35] As a result, legal challenges arise in proving intent and quantifying market harm, requiring sophisticated economic modelling.

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[29] JS Bain, Barriers to New Competition (Harvard University Press 1956).

[30] P Aghion and others, 'Competition and Innovation: An Inverted-U Relationship' (2005) 120(2) Quarterly Journal of Economics 701.

[31] WE Kovacic and C Shapiro, 'Antitrust Policy: A Century of Economic and Legal Thinking' (2000) 14(1) Journal of Economic Perspectives 43.

[32] World Bank, Breaking Down Barriers: Unlocking Africa's Potential Through Vigorous Competition Policy (World Bank 2016).

[33] JE Harrington, 'How Do Cartels Operate?' (2006) 2(1) Foundations and Trends in Microeconomics 1.

[34] GJ Werden, 'Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory' (2009) 75(3) Antitrust Law Journal 657.

[35] RM Abrantes-Metz and others, 'A Variance Screen for Collusion' (2006) 24(3) International Journal of Industrial Organization 467.

III. COMPARATIVE LEGAL FRAMEWORK ON CARTEL REGULATION: INDIA, AUSTRALIA AND SINGAPORE

Cartel regulation varies across jurisdictions, but most competition laws share common principles in prohibiting collusion and imposing strict penalties. As mentioned previously, cartels threaten market competition by manipulating prices, limiting output, and restricting fair trade. Recognizing these risks, governments worldwide have developed comprehensive legal frameworks to combat cartelization, ensuring competitive markets and consumer protection.

Cartel laws in many countries are based on strong legal frameworks developed in the U.S. and the EU. Although their approaches differ, both regions have implemented strict rules against cartels. The Sherman Act 1890 and the Clayton Act 1914, are central to U.S. Competition law particularly in addressing cartel conduct but differ in approach and focus. The Sherman Act, 1890 directly prohibits contracts that unreasonably restrain trade practices[36] including price fixing, bid rigging and market allocation which are *per se* illegal and attracts criminal prosecution. On the other hand,
the Clayton Act plays a more preventive role by addressing conduct that may facilitate or lead to cartelization, though it does not criminalize cartel conduct directly. It supplements the Sherman Act by allowing civil remedies and empowering private parties to seek treble damages.

In the enforcement of these laws, the Federal Trade Commission (FTC)[37] and the Department of Justice (DOJ)[38] play pivotal roles. The DOJ primarily enforces the Sherman Act and has criminal prosecution authority, especially in cartels cases imposing severe penalties, including fines upto $1 million or 10 years' imprisonment for individual and maximum of
$100 million fines for corporate.[39] Additionally, private lawsuits allow businesses and consumers to claim damages, strengthening deterrence. Further the DOJ's Corporate Leniency Program guidelines[40] plays a crucial role in detecting cartels by offering immunity or reduced penalties to self-reporting entities. Whereas the FTC enforces the Clayton Act and

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[36] Sherman Antitrust Act 1890, 15 USC §1.

[37] Federal Trade Commission Act 1914, 15 USC §§ 41–58.

[38] 28 USC Part II, Judiciary and Judicial Procedure, Department of Justice https://uscode.house.gov/browse/prelim@title28/part2&edition=prelim accessed 02 June 2025.

[39] *supra* 32.

[40] DOJ, Antitrust Division's Corporate Leniency Policy (1993, revised 2008).

prohibits unfair methods of competition and deceptive practices. While the FTC lacks criminal enforcement powers, it can impose civil penalties and seek injunction relief. Both agencies coordinate to prevent overlap and ensure robust enforcement against cartel conduct and other anti-competitive practices that harm consumer welfare and market integrity.

Similarly, under the EU, the Treaty on the Functioning of the European Union (TFEU), prohibits anti-competitive agreements including cartel regulation banning price-fixing, market allocation, and output restrictions[41] and empowers the European Commission (EC) to impose substantial fines on violators.[42] The EC plays a central role in investigating cartel cases, with fines reaching up to 10% of a company's global turnover.[43] Through its leniency program[44], similar to the U.S., although proper codified, incentivizes whistleblowers to disclose cartel behaviour. The EU's legal framework balances deterrence with exemptions for agreements that contribute to economic progress while benefiting consumers. Some high- profile cases, including those in the airline and auto-parts industries, demonstrate the EU's aggressive enforcement approach.

Against this backdrop, this chapter provides a comparative analysis of cartel regulation in India, Australia, and Singapore, focusing on their legal provisions, enforcement mechanisms, and penalty structures, while drawing parallels with the U.S. and EU models to highlight the evolving nature of cartel enforcement. By examining the enforcement strategies of India, Australia, and Singapore, this chapter seeks to assess how different jurisdictions adapt global legal principles to their specific economic and legal environments. While these countries have tailored their frameworks to local market conditions, they continue to integrate lessons from the U.S. and EU enforcement models, particularly in areas such as leniency programs, penalty structures, and

cross-border cartel investigations.

1. *India: The Competition Act, 2002*

India's approach to competition law has evolved significantly over the decades, particularly in addressing cartelization, which is one of the most serious anti-competitive practices. The foundation of competition regulation in India was laid with the enactment of the Monopolies

[41] Treaty on the Functioning of the European Union (TFEU) 1957, art 101.

[42] TFEU, arts 103 and 105.

[43] Council Regulation (EC) 1/2003, art 23.

[44] European Commission, 'Notice on Immunity from Fines and Reduction of Fines in Cartel Cases (Leniency Notice)' [2006] OJ C298/17.

and Restrictive Trade Practices (MRTP) Act, 1969. The MRTP Act was primarily aimed at preventing the concentration of economic power and regulating monopolistic and restrictive trade practices. However, it lacked a clear and effective mechanism to detect and penalize cartels, as it was more focused on controlling large industrial houses rather than fostering fair market competition. Additionally, the MRTP Commission had limited powers,[45] as it could only issue cease-and-desist orders without imposing monetary penalties, making enforcement against cartel and other activities largely ineffective.

The need for a modern competition law became evident with India's economic liberalization in 1991, which marked a shift from a controlled economy to a market-driven system. The limitations of the MRTP Act in addressing emerging anti-competitive concerns, particularly in detecting and dismantling cartels, led to the formation of the Raghavan Committee in 1999.[46] The committee recommended the introduction of a new competition law aligned with global best practices, particularly drawing from the U.S. Sherman Act, 1890, and the EU's TFEU, which had well-established mechanisms for tackling anti-trust activities as earlier discussed.

In response to these recommendations, the Competition Act, 2002, was enacted, replacing the outdated MRTP Act. Further, the CCI was established as the regulatory and adjudicatory authority[47] to enforce the law, with strong provisions against cartels[48] thereby explicitly prohibits agreements that have an appreciable adverse effect on competition (AAEC), including price-fixing, bid-rigging, and market allocation—hallmarks of cartel behaviour. Unlike the MRTP Act, the Competition Act empowered the CCI to impose heavy penalties on cartel offenders. Additionally, the Act introduced leniency programs (as discussed under the U.S. and EU competition laws), encouraging cartel members to self-report in exchange for reduced penalties.

Over the years, the CCI has actively investigated and penalized cartels across various sectors, including cement, automotive parts, and pharmaceuticals. India's enforcement strategy now

[45] Monopolies and Restrictive Trade Practices Act 1969, s 36D (India).

[46] SVS Raghavan, Report of the High Level Committee on Competition Law (Government of India 2000).

[47] Competition Act 2002, ss 3.

[48] Competition Act 2002, ss 7.

uses modern tools such as data analytics and whistleblower protections. These are similar to practices followed in Australia and Singapore, which are discussed later in the paper.

Recent amendments to the Competition Act have further strengthened India's regulatory framework for cartel enforcement. The introduction of settlements and commitments[4950] has provided an alternative mechanism for resolving cartel cases efficiently, reducing litigation burdens while ensuring deterrence. Additionally, with the rise of digital markets, the CCI has been adapting its enforcement strategies to detect collusive behaviour in online platforms,[51] aligning India's approach with global best practices. Further amendment in determination of turnover[52] and monetary penalty[53] has made the CCI more robust while dealing with cartel matters.
Overall, India's competition law has transitioned from a structural regulation model under the MRTP Act to a conduct-based enforcement system under the Competition Act, 2002. This transformation has positioned India alongside developed jurisdictions like Australia and Singapore in adopting a strong anti-cartel framework while continuing to draw insights from the U.S. and EU enforcement mechanisms. The evolving legal landscape underscores the increasing importance of proactive cartel detection, international cooperation, and adaptive enforcement strategies in ensuring fair market competition.

In order to understand the legal framework on the cartel, it is important to first understand the agreement through which an enterprise can indulge in a cartel. Under the Competition Act 2002, the term 'agreement'[54] has been defined as any arrangement, understanding or action, whether formal or in writing, and whether it is intended to be enforceable by legal proceedings. Therefore, any formal or in writing agreement or any understanding or action can form the agreement. Similarly, the term cartel[55] has been defined as a situation wherein an association of producers, sellers, distributors, traders or service providers, by any agreement amongst themselves, attempts or do any limit or control over the production, distribution, sale or price of or trade in goods and services. Hence, such agreements including

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49 Competition Commission of India (Commitment) Regulations 2024.

50 Competition Commission of India (Settlement) Regulations 2024.

51 Digital Competition Bill 2024.

52 Competition Commission of India (Determination of Turnover or Income) Regulations 2024.

53 Competition Commission of India (Determination of Monetary Penalty) Regulations 2024.

54 Competition Act 2002, ss 2(b).

55 id., ss 2(c).

cartels which cause or are likely to cause an AAEC[56] within India have been termed as anti- competitive agreements and are void.[57]

The Act presumes that any horizontal agreement,[58] including cartels, among enterprises or persons in similar trade that: (a) fixes prices, (b) limits production or supply, (c) allocates markets, or (d) involves bid-rigging, causes an AAEC. However, this does not apply to efficiency-enhancing joint ventures. The Act also covers vertical agreements between parties at different stages of the production or distribution chain.[59] Recently through amendment in the Competition law, certain changes are made including making vertical agreements a part of the cartel,[60] limitation period of *three* years for filing information,[61] and with leniency plus program i.e., encouraging additional cartel disclosure by granting incentives to the disclosing party.[62]

When any such cartel proceedings come before the CCI, either based on inputs or referrals received from either the Central or State Government or from a statutory body, it will determine the AAEC based on the following factors[63] such as restricting entry for new players, driving out current competitors, obstructing competitive processes, enhancing consumer welfare, boosting production or distribution efficiency, and fostering

advancements in technology, science, and the economy.

Upon considering the relevant factors, if the CCI forms the opinion that a *prima facie* case exists, it may, in accordance with Section 41 of the Competition Act, 2002, appoint the Director General (DG)[64] to conduct a detailed investigation or, alternatively, dispose of the matter. Following the investigation, the DG is mandated to submit a report of findings[65] within a time frame specified by the CCI, with copies duly furnished to the concerned parties.

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[56] Appreciable Adverse Effect on Competition is a situation in which due to any anti-competitive activity it creates or likely to create a negative impact on the competition.
[57] Competition Act 2002, ss 3(1) & (2).
[58] id., ss 3(3).
[59] id., ss 3(4).
[60] id., ss 3 (second proviso).
[61] id., ss 19(1) (proviso).
[62] id., ss 46 (2) (3) & (4).
[63] id., ss 19(3).
[64] id., ss 41.
[65] id., ss 26.

If the DG concludes that there has been no violation of the cartel provisions, the CCI may, based on the report, call for objections or suggestions from the Central Government before closing the matter. However, if the CCI is satisfied that there has been a contravention of the provisions relating to cartels, it is empowered to issue any or all of the directions[66] including direct discontinuation of the agreement, impose penalties (up to three times the profit or 10% of turnover), order modifications, and ensure compliance with costs. Further in reference to any order issued by CCI, if there is any violation, company is punishable with a fine of Rs. 1 lakh with a maximum of Rs. 10 crore and for any further violation, imprisonment for *three* years or fine of Rs. 25 crores or with both.[67]

The CCI can reduce penalties,[68] under its leniency program if a person makes a full and truthful disclosure. Similar programs exist in countries like Australia and Singapore. This plays a critical role in the enforcement of competition laws across various jurisdictions with a primary goal to detect, deter and dismantle cartels, among the serious violations of competition law. However, under Indian laws, disclosure to be made before the receipt of report of investigation to the CCI, otherwise not be applicable.[69] Further, in case the person does not continue to cooperate with the CCI or not complied with direction on which lesser penalty was imposed or gave false evidence or disclosure not vital,[70] the leniency program will not be applicable and will be tried with an original penalty as per the law.

In conclusion, the legal framework under the Act of 2002, as amended in 2023, has significantly strengthened the mechanism to detect, regulate, and penalize cartels—both horizontal and vertical—that adversely affect market competition in India. By broadly defining the term “agreement” and expanding the scope of cartels to include enterprises across different levels of the production chain, the law ensures comprehensive coverage of anti-competitive conduct. The CCI plays a central role in investigating such practices, evaluating their impact through specified factors, and imposing stringent penalties to uphold market integrity. Moreover, the introduction of the leniency program acts as a crucial tool in uncovering cartel activities, promoting voluntary disclosures, and fostering a competitive and transparent business environment. Thus, the robust enforcement regime, coupled with preventive and remedial measures, reflects India’s evolving and assertive

approach towards curbing cartelisation and promoting fair competition.

66 id., ss 27.

67 id., ss 42 (2) & (3).

68 id., ss 46.

69 id., ss 46 (Proviso One).

70 id., ss 46 (Proviso Three)

2. Australia: The Competition And Consumer Act 2010

Australia's competition law framework has undergone significant evolution, heavily influenced by the U.S.'s Sherman Act, 1890, and the EU's competition policy, particularly in addressing cartel conduct. The first comprehensive legislation to regulate competition in Australia was the Trade Practices Act, 1974 (TPA), which marked a shift from earlier fragmented laws towards a unified competition policy. The Australian Competition and Consumer Commission (ACCC) was established as the enforcement authority, tasked with ensuring compliance with competition laws, including cartel prohibition.[71] The TPA explicitly outlawed price-fixing, market-sharing, output restrictions, and bid-rigging,[72] recognizing the significant harm these practices cause to consumers and market efficiency.

However, enforcement challenges necessitated reforms, leading to the Competition and Consumer Act, 2010 (CCA), which replaced the TPA. Now the Australia's legal framework on cartels is primarily governed by the CCA 2010, particularly under Part IV, which deals with restrictive trade practices. Under the Act, a cartel[73] is defined as an agreement between competitors to fix prices, restrict outputs or limiting the goods and services, allocate markets, or engage in bid-rigging and such conduct considered *per se* illegal[74] as it undermines competition and harms consumers. Therefore, the cartel exists when businesses agree to act together through a contract or arrangement or understanding instead of competing with each other. The law prohibits both formal and informal arrangements, and liability can arise even in the absence of a binding contract.

Further the Act distinguishes between civil and criminal cartel offences, in which the ACCC is the primary enforcement body responsible for investigating and prosecuting civil cartel conduct[75] whereas the Commonwealth Director of Public Prosecutions (CDPP)[76] is

71 Trade Practices Act 1974 (Cth) ss 7.

72 Id. ss 45-49.

73 Competition and Consumer Act 2010 (Cth) ss 45AD.

74 Id., ss 45AG

75 Id., ss 45AJ

76 Director of Public Prosecutions Act 1983 (Cth) s 8.

responsible for prosecution of criminal cartel offences,[77] in accordance with the Prosecution Policy of the Commonwealth[78] between the CDPP and the ACCC regarding the Serious Cartel Conduct. Once the charges as framed have sufficient evidence to proceed it is heard in the Federal Court of Australia (FCA). Thus the jurisdiction lies with the FCA whether its coming under civil or criminal prosecution in matters relating to cartel.[79] In reference to ACCC it consist of six members including one chairperson, two Deputy Chairs and three Commissioners and are collectively referred as the ACCC Commission[80] and appointed for *five* years.[81]

One of the salient hallmarks of Australia's anti-cartel regime lies in its implicit presumption of cartelisation—a nuanced understanding that agreements between competitors are inherently antithetical to fair competition. Interestingly, this presumption is not codified in any singular provision of the *CCA* but is rather extrapolated from overarching legal doctrines governing cartel conduct. Unless successfully rebutted by the accused, this inferred presumption casts a formidable burden on the parties under scrutiny, compelling them to justify or exonerate their conduct during investigations.

With respect to civil pecuniary penalties, the Act prescribes a tiered penalty structure for corporations: a maximum of AUD 50 million; or if the court can ascertain a quantifiable benefit obtained from the contravention, three times the value of that benefit; and where such quantification is not feasible, 30% of the corporation's adjusted turnover during the breach period.[82] In contrast, individuals found liable for civil contraventions may be subjected to fines of up to AUD 2.5 million.[83]

In the realm of criminal cartel offences, the punitive regime mirrors the civil framework for corporations. However, for individuals, the law contemplates imprisonment for up to 10 years and/or a fine of AUD 660,000 per offence, or 2,000 penalty units, reflecting the gravity with which criminal violations are treated.[84]This dual-track enforcement mechanism,

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[77] Competition and Consumer Act 2010 (Cth), ss 79.
[78] Memorandum of Understanding between the CDPP and the ACCC regarding Serious Cartel Conduct (2009, revised 2014 and 2024).
[79] supra at 73, ss 86 (1AA).
[80] id., ss 7.
[81] id., ss 32.
[82] id., ss 76 1(B).
[83] id., ss 76 1(A), item no. 3.
[84] id., ss 79.

encompassing both civil and criminal liabilities, underscores the rigorous stance Australia adopts against anti-competitive conduct.

Further bolstering its enforcement architecture, the ACCC operates a leniency regime,[85] formalised under the *Immunity and Cooperation Policy for Cartel Conduct* (2024 Amendment). First introduced in 2003, this program offers civil immunity to the first eligible applicant—whether an individual or a corporate entity—who voluntarily discloses their involvement in cartel conduct and cooperates with the investigation. This policy plays a pivotal role in cartel detection and deterrence by incentivising whistleblowing and internal compliance. It allows the first party to disclose a cartel and fully cooperate with the investigation to receive immunity or a significant reduction in penalties. However, the benefits of this program are contingent on timely disclosure, full cooperation, and cessation of cartel behaviour.[86]

Another material information relates to the ACCC's investigatory powers[87] which are extensive, allowing it to

compel the production of documents, examine individuals under oath, and conduct dawn raids with judicial authorization which is quite similar to CCI. These powers enhance its ability to detect and dismantle covert cartel operations.

Furthermore, Australia's extraterritorial jurisdiction[88] extends the reach of its cartel laws to conduct occurring outside Australia that has the purpose or effect of substantially lessening competition in the Australian market. In addition to public enforcement, the CCA provides for private enforcement and compensation,[89] enabling affected parties to initiate proceedings and claim damages. With regard to settlements and commitments,[90] the Act recognizes a range of mechanisms for resolving disputes and achieving compliance through a combination of enforcement actions, compliance agreements and negotiated settlement. Overall, Australia's legal framework reflects a comprehensive and proactive approach to deterring and penalizing cartel conduct, aligned with international best practices.

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85 Australian Competition and Consumer Commission, Immunity and Cooperation Policy for Cartel Conduct (2024 amended) https://www.accc.gov.au/system/files/immunity-cooperation-policy-cartel-conduct.pdf accessed 02 June 2025.

86 Id., para 23.

87 Competition and Consumer Act 2010, ss 28.

88 id., ss 44AD.

89 id., ss 82 and 87.

90 ACCC, 'Guidelines on ACCC Approach to Court Enforceable Undertakings' (2024) https://www.accc.gov.au/system/files/guidelines-accc-approach-court-enforceable-undertakings.pdf accessed 02 June 2025.

In conclusion, Australia's legal framework on cartels under the CCA 2010 is a robust and multi-faceted system designed to deter, detect, and penalize anti-competitive conduct. Through clear definitions, strong presumptions against cartel behaviour, and severe civil and criminal penalties, the law emphasizes the seriousness of such offences. The ACCC's wide investigatory powers, combined with an effective leniency program and provisions for both public and private enforcement, ensure that cartel activity can be addressed comprehensively. Additionally, the law's extraterritorial reach, settlement mechanisms, and narrowly tailored exemptions reflect a balanced yet firm commitment to maintaining market integrity and protecting consumer welfare in Australia.

3. Singapore: The Competition Act 2010

Unlike Australia, Singapore introduced formal competition law relatively late, influenced by global best practices in the U.S., EU, and Australia. Before 2004, Singapore relied on sector- specific regulations rather than a comprehensive competition law. However, with increasing international trade and the need for harmonization with global competition policies, the government enacted the Competition Act, 2004 (CA). Under the Act, the cartels as anti- competitive agreements are considered illegal and void if they prevent, restrict, or distort competition within Singapore.[91] The provision is quite similar to India regarding the identification of the factors of cartel agreements. It also prohibits price-fixing, market-sharing, output limitation, or bid-rigging in the market. In Singapore, these are considered hard-core restrictions and are presumed to have the object of preventing competition, making them *per se illegal*, without the need to demonstrate actual anti-competitive effects. Further, unlike Australia, in Singapore, it does not impose criminal sanctions on individuals for cartel offenses but relies on monetary penalties and corporate disqualification orders.

The Act also establishes the Competition and Consumer Commission of Singapore (CCCS)[92] acting as the regulatory body overseeing competition enforcement. The Commission consist of one Chairperson, and not less than two and not more than 16 members.[93] Additionally, the CCCS has effectively used dawn raids, leniency programs, and whistleblower protections to dismantle cartels, particularly in sectors such as transportation,

financial services, and retail.

[91] Competition Act 2004 (Singapore) ss 34 (2).
[92] id., ss 3,
[93] id., ss 5.

Unlike jurisdictions such as India, Singapore does not provide an explicit presumption of cartelization. However, once an agreement reveals an anti-competitive object—such as price- fixing or bid-rigging—the burden shifts to the undertaking to prove that it did not appreciably restrict competition. This approach functions as a practical presumption, enabling effective enforcement. The CCCS assesses agreements by both object and effect, depending on the conduct, market structure, and consumer harm. Armed with broad investigatory powers under the Competition Act such as inspections,[94] document seizure, and compelled testimony,[95] the CCCS can uncover concealed cartels. Notably, its extraterritorial jurisdiction[96] ensures that foreign entities are not immune if their conduct adversely affects Singapore's market. Thus, Singapore maintains a strong, economically grounded cartel enforcement regime without relying on formal presumptions.

In terms of penalties and sanctions,[97] the CCCS can impose financial penalties on infringing parties of up to 10% of their turnover in Singapore for each year of infringement, up to a maximum of three years. Unlike Australia or the US, cartel conduct in Singapore is not criminalized, and there is no provision for imprisonment. However, the monetary penalties and reputational damage act as significant deterrents. Additionally, parties may be subject to directions from the CCCS to cease or modify the anti-competitive agreement. In case, any party not complying with the directions or their commitments from the Commission, the District Court[98] has the same power to enforce it and impose full penalty on the party concerned.

It also has a well-established leniency program,[99] modeled after international best practices, to encourage the disclosure of cartel conduct. Even though the Act does not contain express provisions in respect of leniency policy, but it empoweres the CCCS to publish guidelines.[100] Under this program, an undertaking that is the first to come forward and provide evidence of cartel activity may receive full immunity from financial penalties, provided it has not coerced others to participate and cooperates fully. Subsequent applicants may also receive a reduction in penalties, depending on the value of the information provided and the level of cooperation.

[94] id., ss 62(2).
[95] id., ss 63.
[96] id., ss 33(4).
[97] id., ss 69(4).
[98] id., ss 82.
[99] CCCS, Guidelines on Lenient Treatment for Undertakings Coming Forward with Information on Cartel Activity Cases (2016).
[100] Competition Act 2004 (Singapore) ss 61.

Further the legal framework also accommodates settlement and commitment procedures,[101] allowing parties under investigation to propose legally binding commitments to address the CCCS's concerns, thereby avoiding a full investigation or penalty. While private enforcement and compensation mechanisms[102] are available, they are relatively underutilized. Affected parties may bring actions for damages, declarations, or injunctions in the courts after the CCCS has made a finding of infringement. Lastly, the law provides certain exemptions and defences,[103] such as for agreements that improve production or distribution or promote technical or economic progress, provided they allow consumers a fair share of the resulting benefit and do not eliminate competition. The block exemption for liner shipping agreements is a notable example, reflecting Singapore's strategic interests as a global maritime hub.

4. Empirical Trends In Enforcement

To provide a more grounded understanding of how cartel enforcement operates in practice, this section presents tabular data on penalty trends and the utilization of leniency programs in India, Australia, and Singapore. The tables below highlight the practical effectiveness and deterrent strength of each jurisdiction's competition law regime.

Table 1: Penalty Trends in Cartel Enforcement (2010–2024)

Jurisdiction	Total Number of Major Cartel Cases	Highest Single Penalty Imposed (In USD)	Range of Penalties (Corporate)	Criminal Sanctions Imposed
India	15+	$230 million (Tyre Manufacturers case)	$0.5M -$230M	Not Applicable
Australia	25+	$34.5 million (K-Line Shipping Case)	$1M – $50M	Yes (10-year imprisonment max)
Singapore	10+	$20 million (Chicken Distributors Case)	$0.1M – $20M	Not applicable

Source: CCI, ACCC, CCCS reports; court judgments; researcher's compilation.

[101] id., ss 60A & 60B.
[102] id., ss 86.
[103] id., ss 41.

Table 2: Leniency Program Utilization and Outcomes

Jurisdiction	First Leniency Program Introduced	Number of Cases with Leniency Applications	Notable Reductions Granted	Impact on Detection
India	2009	8	100% (Panasonic), 30% (Eveready), 20% (Nippo)	Full/Partial waiver depending on cooperation
Australia	2003	20+	Full immunity for first-in applicants	Substantial – Triggered criminal probes
Singapore	2010 (Guidelines)	6	Full/Partial waiver depending on cooperation	Key in uncovering cross-border cartels

Source: CCI annual reports, ACCC cartel register, CCCS enforcement data.

The data reveal that while India has imposed some of the highest monetary penalties, its reliance on civil enforcement and delayed procedural timelines may dilute the deterrent effect. Australia's dual-track system, combining criminal prosecution with structured leniency, presents a more aggressive model of enforcement. Singapore, despite not criminalizing cartel conduct, has achieved significant results through administrative efficiency and targeted penalties. The data show that leniency programs and fast, fair enforcement are essential to stop and prevent cartel.

IV. JUDICIAL APPROACH TOWARDS CARTELS: A COMPARATIVE STUDY OF INDIA, AUSTRALIA AND SINGAPORE

Cartels represent one of the most serious violations of competition law across jurisdictions owing to their potential to distort markets, raise prices, and harm consumer welfare. Over the years, competition authorities globally have intensified efforts to dismantle such cartels,

recognizing their detrimental impact on economies and consumer welfare. In India, to curb cartel in market, the CCI has developed a distinctive enforcement approach that is gradually aligning with international standards. Similarly, in Australia and Singapore, through the ACCC and CCCS, have robust legal frameworks (as already seen in the previous chapter) and institutional mechanisms to detect and penalise cartels.

While the legislative language may vary, the core objective remains the same, to prohibit anti-competitive agreements that result in the AAEC. The Indian jurisprudence, has evolved from requiring direct evidence of collusion to embracing economic and circumstantial evidence. In contrast, the approach in Australia employs a mix of civil and criminal sanctions with strong reliance on leniency policies and whistleblower tools. When it comes to Singapore, though relatively younger in competition enforcement has developed a strong record of deterrence through administrative penalties and streamlined procedures.

This chapter seeks to compare and contrast the judicial approaches of India, Australia and Singapore in cartel enforcement with a focus on the burden of proof, evidentiary standards, use of leniency and penalty determination, thereby highlighting both the convergence and divergence in their regulatory philosophies.

1. *India: Judicial Approach*

The establishment of the CCI under the Competition Act, 2002 marked a watershed moment in the regulation of market practices in India. As a body corporate constituted by the Central Government, comprising a chairperson and six members with expertise in law, economics, and public policy, the CCI operates as a quasi-judicial authority. It is imbued with both investigative and adjudicatory functions, albeit constrained by its lack of criminal enforcement powers—a limitation that continues to raise questions regarding its deterrent efficacy in serious cartel matters.

In its formative decade, the CCI adopted a cautious and formalistic approach, largely rooted in reliance on direct documentary evidence such as written agreements, meeting minutes, and overt communications. This phase reflected a jurisprudential conservatism, shaped perhaps by the infancy of Indian competition law and the need to establish procedural credibility. However, with increasing institutional maturity, judicial feedback, and jurisprudence osmosis from mature jurisdictions like the EU and the U.S., the Commission's evidentiary framework underwent a significant transformation. The adoption of a nuanced and circumstantial approach, particularly through the incorporation of "plus factors" such as parallel pricing, capacity curtailment, and trade association communications, became emblematic of this evolution.

This shift first crystallized in *Builders Association of India v. Cement Manufacturers Association*,[104] wherein the CCI confronted allegations of cartelization by major cement producers under the umbrella of the Cement Manufacturers Association (CMA). Despite the absence of direct evidence, the Commission inferred collusion from circumstantial patterns— simultaneous underutilization of production capacity during periods of high demand, uniform price hikes, and trade association-facilitated coordination. This case marked a doctrinal leap, affirming that the existence of a cartel could be inferred through indirect evidence, provided it was contextualized within broader behavioural and economic consistencies. The imposition of over ₹6,300 crore in penalties on 11 companies demonstrated the Commission's newfound assertiveness and set a foundational precedent in the use of economic inference.

This judicial confidence was further solidified in *Excel Crop Care Ltd. v. CCI*,[105] where the Supreme Court not only validated the CCI's reliance on circumstantial evidence in a bid- rigging case involving the supply of aluminium phosphide tablets to the Food Corporation of India, but also introduced a seminal jurisprudential refinement: the doctrine of "relevant turnover" in penalty imposition. The apex court held that penalties must be linked to the turnover derived from the cartelized product, ensuring proportionality and fairness in punitive measures. This case not only reaffirmed the sufficiency of indirect evidence in cartel findings but also calibrated the CCI's punitive discretion within constitutional boundaries.

While *Excel Crop Care* primarily focused on horizontal collusion, the CCI's interpretation of concerted practices was broadened in *Shamsher Kataria v. Honda Siel Cars India Ltd.*[106] Although a vertical restraint case concerning denial of market access in automobile aftermarkets, the Commission's articulation that a "meeting of

minds" could be inferred from coordinated conduct rather than formal agreement reinforced the evidentiary framework applicable in horizontal collusion scenarios. The emphasis on consumer harm and market foreclosure further harmonized Indian jurisprudence with global competition law standards, thereby influencing CCI's analytical lens in future cartel investigations.

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[104] Builder Association of India v Cement Manufacturers Association and others, Case No 29 of 2010, CCI.
[105] Excel Crop Care Ltd v Competition Commission of India (2017) 8 SCC 47.
106 *Shamsher Kataria v Honda Siel Cars India Ltd and others, Case No 11 of 2011, CCI.*

The public procurement sector became a key arena for the application of these evolving doctrines. In *LPG Cylinder Manufacturers' Cartel,*[107] the CCI investigated coordinated bidding behaviour in tenders floated by Indian Oil Corporation and Hindustan Petroleum Corporation. Despite the logistical complexities, the Commission meticulously identified patterns of identical bids, common withdrawal letters, and usage of shared digital infrastructure, thereby demonstrating a sophisticated application of digital forensic tools and behavioural evidence. The imposition of penalties, albeit moderate, sent a clear regulatory signal against collusive bidding and reaffirmed the sanctity of competitive tendering in state procurement.

In *another case*,[108] the CCI penalized 51 LPG cylinder manufacturers for collusive bid withdrawal in a 2011 Hindustan Petroleum tender, citing evidence like identical withdrawal letters, shared agents, and common IP addresses. A 1% penalty on average turnover was imposed, underscoring CCI's resolve to curb anti-competitive conduct in public procurement.

The jurisprudential momentum continued in *Cartelization in the Airline Industry*,[109] where the Commission analyzed the coordinated setting of Fuel Surcharge (FSC) rates by Jet Airways, IndiGo, and SpiceJet. This case marked a notable departure from traditional reliance on direct communication and instead pivoted towards market-based behavioural indicators—parallel pricing patterns devoid of economic justification. Although the penalties were eventually reduced on account of the financial fragility of the sector, the case reinforced the legitimacy of inferring collusion from unexplained pricing uniformity and contextual market behaviour.

One of the most telling indicators of institutional maturation has been the operationalization of the CCI's leniency program under Section 46 of the Act. In the *Indian Railways Electrical Items Cartel*,[110] the leniency mechanism played a pivotal role in exposing bid-rigging among Pyramid Electronics, Kanwar Electricals, and Western Electric. The self-reporting by Pyramid Electronics not only expedited the investigation but also culminated in significant

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[107] In Re Suo Motu against LPG Cylinder Manufacturers, Case No 03 of 2011, CCI.
[108] In Re Alleged Cartelisation in Supply of LPG Cylinders, Suo Motu Case No 01 of 2014, CCI https://www.cci.gov.in/antitrust/orders/details/722/0. accessed 02 June 2025.
[109] Express Industry Council of India Vs. Jet Airways (India) Ltd. & Others, Case No. 30 of 2013, https://www.cci.gov.in/antitrust/orders/details/1030/0 accessed 02 June 2025.
[110] Suo Motu Case No 03 of 2014, CCI https://www.cci.gov.in/antitrust/orders/details/820/0. accessed 02 June 2025.

penalty reductions, thereby incentivizing disclosure and disrupting the otherwise impenetrable information asymmetry inherent in cartel operations.

The subsequent *Zinc-Carbon Dry Cell Batteries*[111] case offered an even more pronounced success story of

leniency-based detection. Panasonic, by filing a comprehensive leniency application, provided detailed evidence of collusion under the aegis of the All India Dry Cell Manufacturers Association. The evidence included records of meetings, communication trails, and price coordination mechanisms. The differential penalty reductions served to institutionalize the principle of graduated leniency based on the value of cooperation, thus entrenching leniency as a credible enforcement tool.

Perhaps the most consequential development in Indian cartel jurisprudence emerged in the *Tyre Manufacturers'*[112] case. The CCI's finding that five tyre companies had colluded to fix prices in the replacement market—primarily through data sharing and coordination via the Automotive Tyre Manufacturers Association—was not only one of the largest penalty orders (₹1,788 crore), but also the most emphatic expression of the Commission's readiness to tackle industry-wide collusion. The subsequent affirmation of the CCI's findings by the Supreme Court elevated the Commission's institutional legitimacy and reinforced its
deterrent authority.

Finally, the *United Breweries*[113] case illustrated the CCI's technological adaptation and doctrinal sophistication in modern cartel enforcement. Here, digital evidence including emails and WhatsApp communications revealed price coordination and market allocation among beer manufacturers facilitated through the All India Brewers' Association. The extensive reliance on digital forensics, combined with voluntary disclosures under the leniency regime, culminated in substantial penalties ₹870 crore and highlighted the Commission's agility in navigating digital cartels.

From its tentative reliance on overt agreements to its current competence in deciphering tacit collusion through circumstantial and digital evidence, the CCI has demonstrated a notable

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111 Cartelisation in respect of Zinc Carbon Dry Cell Batteries Market in India v Eveready Industries India Ltd and others, Suo Motu Case No 02 of 2016, CCI https://www.cci.gov.in/antitrust/orders/details/736/0. accessed 02 June 2025.

112 Ministry of Corporate Affairs v Apollo Tyres Ltd and others, Reference Case No 08 of 2013, CCI https://www.cci.gov.in/images/antitrustorder/en/0820131652434997.pdf. accessed 02 June 2025.

113 Press Release No 40/2021-22, CCI https://www.cci.gov.in/images/pressrelease/en/pr40-2021-22pdf1652252223.pdf. accessed 02 June 2025.

trajectory of regulatory evolution. Judicial endorsement, particularly from the Supreme Court, has further cemented the Commission's interpretative latitude, while the operational success of the leniency program has bridged crucial information gaps. As India's markets continue to integrate with global supply chains and digital platforms, the CCI's evolving cartel enforcement regime is poised to play an increasingly central role in preserving market integrity, fostering competition, and upholding consumer welfare.

2. Australia: Judicial Approach

Australian Competition law enforcement has witnessed a significant evolution over the years, with a growing focus on curbing cartel behaviour across diverse sectors through both civil and criminal proceedings. The trajectory began prominently with the *Visy Industries*[114] case where Visy and Amcor colluded to fix prices and share the market in the corrugated packaging sector between 2000 and 2004. This case became a watershed moment, not only for its record breaking AUD $36 million penalty (calculated considering the seriousness, duration and deliberate nature of the conduct) imposed by ACCC but also for establishing the doctrine of per se illegality in hardcore cartel conduct, emphasizing that such conduct requires no proof of anti-competitive effect only the existence of the agreement.

The *Visy* precedent laid the foundation for the *Air Cargo Cartel*[115] which targeted a number of global airlines, for coordinating fuel surcharges affecting cargo shipments to Australia. Here, the *Visy* principles were extended to transnational cartels, as the ACCC and courts reinforced the extraterritorial application of Australia law, stating that collusion abroad, if it has effects in Australia, falls within domestic jurisprudence. The penalties across these proceedings exceeded AUD $100 million, and they showcased a trend toward cumulative deterence.

Building on this global outlook, the *Yazaki Corporation*[116] case marked an even more aggressive approach to offshore collusion. In this case, both Yazaki and Sumitomo being Japanese firms were penalised for price fixing in wire harnesses supplied to Toyota vehicles in Australia. The penalty, increased to AUD $46 million on appeal, reinforced not only extraterritorial reach but also clarified that direct dealings with Australian entities are not necessary as long as the conduct affects Australian markets.

[114] ACCC v Visy Industries Holdings Pty Ltd (No 3) [2007] FCA 1617.
[115] Garuda ordered to pay $19 million for price fixing, ACCC Release No 85/19.
[116] High Court refuses Yazaki $46 million appeal, ACCC Release No. 211/18.

The increasing cross-border nature of collusion led the ACCC to pursue criminal sanctions, beginning with the *Nippon Yusen Kabushiki Kaisha*[117] (NYK) case. This was the first criminal conviction for cartel conduct in Australia involving price fixing and market allocation in the roll on/roll off shipping of vehicles. While the fine of AUD $25 million reflected the seriousness of the offence, it also marked a shift in doctrine i.e., from merely penalising corporations to invoking criminal liability under the 2009 amendments to CCA.

Thereafter in *K-Line*[118] case, a japanese shipping company Kawasaki Kisen Kaisha Ltd. (K- Line) was convicted of criminal cartel conduct and was ordered to pay a fine $34.5 million (being the largest ever criminal fine imposed under the CCA) for fixing prices on the transportation of cars, trucks and buses to Australia from the US, Asia and carious European countries between 2009 and 2012. Although K-Line's conduct was punishable by a maximum penalty of $100 million but due to their level of assistance and cooperation, the federal court allowed a discount of 28% for early guilty plea. This case is relevant here as it send a powerful message that any anti-competitive conduct will not be tolerated and will be dealt harshly when it comes before this Court.

This move further solidified in the *Country Care Group*[119] case, the first fully contested criminal cartel trial, where individuals and the company were charged for price fixing and bid rigging in public tenders for rehabilitation equipment involving assistive technology products used in rehabilitation and uged care including beds and mattresses, wheelchairs and walking frames. The CDPP commenced prccedings against Country Care and their employees, after an ACCC investigation and after committed proceedings, the case was committed for trial before the FCA. Even though, the Court acquitted the company and its eight employees due to lack of evidence, but this case underscored a growing focus on individual criminal responsibility something foreshadowed earlier in the *Visy* case with the penalisation of executives.

The relevance of public procurement as a sensitive area for cartel enforcement was also highlighted in the *Cascade Coal*[120] case, where it was alleged that collusion took the form of bid-rigging in government tenders for coal mining licences during the 2009 tender process. This case, though not criminal, aligned with the principles of *Visy* and *NYK* in affirming that

[117] NYK convicted of criminal cartel conduct and fined $25 million, ACCC Release No MR 126/17.
[118] K-Line convicted of criminal cartel conduct and fined $34.5 million, ACCC Release No 134/19.

[119] Country Care acquittal, ACCC & CDPP Release No 77/21.

[120] Mount Penny Coal cartel proceedings, ACCC Release No MR 92/15.

collusion in public tenders causes direct harm to the public interest and must be met with stringent sanctions. It also clarified that even agreements to withdraw bids in exchange for inducements would constitute illegal market allocation. Though the proceedings were dismissed by the FC[121] still the case holds signifincance as a method of identifying cartel behviour in bid rigging cases.

In the *Australian Egg Corporation*[122] (AEC) case, the ACCC sought to broaden the scope of cartel regulation by targeting an attempted inducement to limit the supply of goods. The ACCC alleged that, during a meeting, the AEC attempted to persuade egg producers to reduce the supply of eggs in response to a perceived oversupply in the market. However, the FC found no conclusive evidence of an attempt to induce a cartel arrangement. Despite this, one member was penalised with a pecuniary fine of $120,000 for attempting to initiate a cartel arrangement among competing egg producers.

On appeal, the Full FC dismissed the case. The Court observed that even if the alleged attempted cartel arrangement had been successful and implemented, thereby reducing the supply of eggs and potentially increasing prices, the ACCC had failed to establish sufficient evidence to support this outcome. Nevertheless, the proceedings made a significant doctrinal contribution by recognising that even unsuccessful attempts to initiate cartel conduct may fall within the ambit of Section 45AD of the CCA, provided there is adequate evidentiary support.

Finally, the *Informed Sources*[123] case addressed the risk of facilitating practices.The ACCC alleged that Informed Sources and Petrol retailers shared pricing data, likely reducing competition in Melbourne's petrol market, breaching the cartel norms under the CCA. Although no penalties were imposed, and through undertakings, the informed sources were required to not supply a petrol price information exchange service unless it makes available at the same time the retail petrol price information that it provides to petrol retailers i.e. consumers etc. Thus the FC on court enforceable undertakings accepted by ACCC, dismissed the proceedings on consent. This case shown that the behavioural undertakings ensure a delay in price data publication, reflecting a preventive approach where traditional cartel enforcement was difficult due to lack of express agreement.

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[121] Appeal dismissed Release No 161/19.

[122] Australian Egg Corporation Case, Full Federal Court, ACCC Release No MR 161/17.

[123] BP Australia and others, s 87B undertaking, ACCC https://www.accc.gov.au/public-registers/undertakings-registers/section-87b-undertakings-register. accessed 02 June 2025.

Together, these cases portray an interconnected legal landscape where Australian cartel enforcement has gradually evolved from civil deterrence to criminal accountability, from domestic agreement to global conspiracies and from hard core price fixing to subtle forms of collusion and information sharing. The doctrines of per se illegality, extraterritorial application, individual liability, criminality in bid rigging and relevant turnover based penalties now serve as the foundational pillars shaping Australia's modern competiton law regime.

3. Singapore: Judicial Approach

Singapore's cartel enforcement framework has matured steadily since the introduction of the CA 2004, with a focus on maintaining price discipline, promoting transparency in tenders, and deterring collusion across both local and international markets. One of the earliest and most influential cases was the *Express Bus Services*[124],

involving collusion between SBS Transit Ltd and SMRT buses Ltd. Both firms were found to have exchanged future pricing information for express bus services. This case laid the groundwork for Singapore's interpretation of price coordination under Section 34 of the CA, affirming that even unilateral disclosures of sensitive pricing data can facilitate cartel conduct. Although no financial penalty was imposed due to cooperation, it set the tone for future investigations.

Previously, in the *Pest Control Operators*[125] case, the Singapore's jurisprudence advanced by targeting bid rigging in public tenders. In total *six* pest control companies were guilty of colluding in quotations submitted to town councils. The CCS (now the CCCS) highlighted that identical pricing and coordinated withdrawal of bids constituted clear infringement. This case reinforced the principle that collusion in procurement processes directly undermines public interest and the penalties ranging from SGD 5000 to SGD 50000 were proportionally imposed based on turnover and each firm's role in the infringement.

The *Ball Bearings*[126] case marked Singapore's first international cartel enforcement, involving global manufacturers like NTN, Nachi and NSK, which had already been penalised in the EU and Japan. The CCCS imposed fines exceeding S$ 9 million for engaging in anti- competitive agreements and unlawful exchange of information in respect of the price and sale

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124 CCS 500/003/08 (Coach Bus Services).

125 CCS 600/008/06 (Pest Control Operators).

126 CCCS, 'Penalties on Ball Bearings Manufacturers', Media Release 2014 https://www.cccs.gov.sg/media-and-consultation/newsroom/media-releases/ccs-imposes-penalties-on-ball-bearings-manufacturers-involved-in-international-cartel. accessed 02 June 2025.

of ball and other bearings sold to aftermarket customers in Singapore, applying the doctrine that foreign cartels with local market impact fall within its jurisdiction. This case expanded the scope of Singapore's enforcement to cross border conspiracies, mirroring Australia's reasoning in cases like Yazaki and NYK, where the extraterritorial effects were sufficient for liability.

Another significant case is the *Electrical Wiring Contractors,*[127] where several electrical wiring contractors were penalised for price fixing in quotations for Housing and Development Board (HDB) flats. It demonstrated the CCCS's increasing scrutiny of collusion in everyday consumer and infrastructure sectors, and how such conduct inflated costs for government agencies. Therefore, the penalties were calculated using a two-step approach i.e.,a base percentage of relevant turnover, adjusted for aggravating and mitigating factors and S$1.5 million were imposed across the 10 companies where four were granted leniency for cooperating with the Commission. This case is also relevant here as it interconnected the concept of cartel with bid rigging making it a serious offence.

In a more nuanced development, the *Chicken Distributors*[128] case targeted *thirteen* fresh chicken distributors for exchanging future price and sales information and agreeing not to compete for each other's customers in the market for the supply of fresh chicken products in Singapore, accordingly the Commission imposed financial penalties of S$26.94 millions on them. The CCCS emphasized that even information exchanges without express agreements can amount to infringement if they reduce uncertainty and influence market conduct. This aligned with Singapore's adoption of the object-based approach, much like the *Informed Sources* case in Australia, where the focus shifted from effect to facilitation and transparency reduction.

A landmark cartel involving bid rigging case followed in the *Employment Agencies*,[129] where *sixteen* employment agencies were found to have colluded to fix the monthly salaries of foreign domestic workers (FDWs) from Indonesia. The agreement was reached after a circular was issued by the Association of Employment Agencies suggesting that Indonesian domestic workers' salaries would rise due to Indonesian government policy. Instead of

[127] Public Consultation: Collusive Tendering in Electrical and Building Works https://www.cccs.gov.sg/public-register-and-consultation/public-consultation-items/collusive-tendering-bidrigging-in-electrical-and-building-works?type=public_register. accessed 02 June 2025.

[128] Case No CCCS 500/7002/14 (Fresh Chicken Distributors).

[129] Case No CCS 500/001/11 (Fixing FDW Salaries).

competing, the agencies collectively agreed on a fixed salary to present a uniform front to consumers, thereby eliminating price competition. The CCS (now CCCS) found this collusion reduced the ability of employers to negotiate salary levels, affecting consumer choice and distorting the market for hiring FDWs. While on *eleven fine* imposed S$ 150000 whereas the remaining *five* received leniency. The penalties varied by market share and degree of involvement, reaffirming the principle that public sector collusion invites stricter scrutiny much like in Australia's Country Care and Cascade Coal. It reinforced that trade associations must not become a platform for collusive behaviour and businesses must decide their pricing strategies independently.

In 2022, Singapore witnessed another significant enforcement in the *Lift Maintenance Services*[130] case where the CCCS found *five* lift contractors colluding by coordinating their bids for lift maintenance contracts for public housing estates managed by the Town Councils in Singapore. The contractors exchanged information on pricing and agreed on which company would submit the lowest bid, while others submitted cover quotes or higher prices bids to give an illusion of competition and the CCCS imposed penalties of S$ 7 million (after reducing fines) using a refined methodology i.e., calculating a percentage of turnover in the affected market segment and adjusting for cooperation and recidivism. This case served as a major example in competition compliance training, especially in facilities management and public procurement sectors.

Collectively, these cases demonstrate how Singapore's cartel enforcement has evolved from targeting local collusion in public tenders to extending jurisdiction over international cartels with domestic effects. Through doctrines like object-based liability, facilitating practice analysis, and extraterritorial reach, the Competition and Consumer Commission of Singapore (CCCS) has systematically built a regime rooted in deterrence, transparency, and procedural fairness. Much like Australia, Singapore has adapted its penalty framework to consider factors such as relevant turnover, the role and duration of the cartel, and the level of cooperation during investigation, thereby ensuring that sanctions are both proportionate and effective.

The evolution of cartel enforcement in India, much like in Australia and Singapore, reflects a maturing legal and institutional response to anti-competitive conduct. The CCI has

[130] CCCS, 'Lift Part Suppliers Commitments', 2019.

increasingly relied on economic evidence, leniency regimes, and proactive investigation strategies to uncover and penalize cartels, particularly in sectors affecting essential commodities and infrastructure. Drawing from international best practices, India's enforcement trajectory shows a gradual but firm shift toward aligning domestic jurisprudence with global standards—emphasizing deterrence, market efficiency, and consumer welfare. This comparative evolution underscores the converging trends in cartel regulation across jurisdictions, each adapting the foundational principles to their legal culture and market dynamics.

V. CONCLUSION AND SUGGESTIONS

This comparative study reveals that while India, Australia, and Singapore all demonstrate strong institutional and legal commitments to combatting cartelisation, their enforcement philosophies diverge significantly. Australia stands out with its criminalization of cartel conduct, enabling both individual and corporate

accountability through robust punitive mechanisms. Singapore, though lacking criminal sanctions, compensates with a streamlined and administratively efficient regime backed by strong investigative powers and a well-structured leniency framework. India's approach, though predominantly civil in nature, has evolved considerably with increasing reliance on economic inference, circumstantial evidence, and digital forensics. Yet, the absence of criminal sanctions and persistent procedural delays constrain the deterrent effect of its enforcement regime.

A comparative reflection reveals that while India, Australia, and Singapore have adopted significant features of global best practices in cartel enforcement, they diverge in critical areas from the EU and U.S. regimes, particularly in terms of procedural design and the severity of sanctions. The EU's enforcement model under Article 101 TFEU, grounded in an administrative system with heavy reliance on economic object and effect analysis, mirrors Singapore's approach in form but exceeds it in institutional maturity and the scale of fines—often up to 10% of global turnover.

However, unlike the EU, which lacks criminal liability at the EU level (though some member states have criminalized cartels), Australia uniquely blends civil and criminal enforcement, including individual imprisonment, thereby aligning more closely with the U.S. system under the Sherman Act. The U.S. DOJ pursues criminal sanctions aggressively, targeting both corporations and individuals, supported by a longstanding leniency program that has served as a global template. In contrast, India's civil enforcement model, while increasingly robust, lacks criminal sanctions and is procedurally slower, although it has shown a growing reliance on circumstantial and economic evidence akin to EU jurisprudence. Collectively, these contrasts underscore varying philosophies in cartel regulation: deterrence through criminalization in the U.S. and Australia, administrative efficiency in the EU and Singapore, and evolving hybridization in India.

To reinforce the effectiveness of cartel regulation, India should consider adopting criminal liability for hardcore cartel conduct, particularly in critical sectors such as public procurement. Further, both India and Singapore would benefit from codifying and institutionalizing their leniency programs to enhance predictability and encourage voluntary disclosures. Strengthening cross-border cooperation, digital investigative capacity, and judicial economic training will be vital in addressing increasingly complex and globalized cartel operations. As cartel enforcement becomes more data-driven and jurisdictionally fluid, aligning enforcement frameworks with international best practices remains essential to sustaining market integrity and promoting long-term consumer welfare.

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