
REGULATING BIG TECH IN INDIA: INTEGRATING EX-ANTE AND EX-POST MECHANISMS WITHIN THE COMPETITION LAW FRAMEWORK – A COMPARATIVE PERSPECTIVE

Rajib Kumar Das, Ph.D. Research Fellow, Department of Law, The University of Burdwan, West Bengal, India.

ABSTRACT

India's digital economy, projected to reach USD 1 trillion by 2030, has exposed critical limitations in traditional ex-post competition law enforcement. This article comparatively analyses ex-ante and ex-post regulatory approaches for digital markets, examining implications for India's competition and consumer protection frameworks. Drawing upon the Competition (Amendment) Act 2023, the proposed Digital Competition Bill 2024, and international experiences the EU's Digital Markets Act, Germany's GWB amendments, US antitrust enforcement, and South Korea's platform regulation this study evaluates India's regulatory architecture adequacy. Whilst ex-post enforcement under the Competition Act 2002 has achieved notable successes, structural features of digital markets network effects, data accumulation, algorithmic opacity create enforcement challenges that ex-ante regulation may better address. However, the adoption of ex-ante measures raises critical questions about regulatory design, institutional capacity, and the risk of over-regulation stifling innovation. This article argues for a calibrated, complementary approach preserving ex-post enforcement whilst introducing targeted ex-ante obligations for systemically significant digital enterprises, with robust safeguards for consumer protection and competitive market structures.

Keywords: Digital markets, Ex-ante regulation, Ex-post regulation, Digital platforms, Systemically Significant Digital Enterprises (SSDEs), Digital Markets Act (DMA), GWB Section 19a, US antitrust enforcement, South Korea platform regulation.

1. Introduction

India's digital economy, valued at approximately USD 200 billion in 2023 and projected to reach USD 1 trillion by 2030, has fundamentally transformed market structures and competitive dynamics.¹ Digital platforms spanning e-commerce, social media, search, and digital payments now mediate critical economic and social interactions for over 700 million internet users.² This transformation has exposed significant limitations in traditional competition law frameworks designed for industrial-era markets.

The Competition Act 2002 establishes an ex-post enforcement paradigm: the Competition Commission of India (CCI) investigates and adjudicates anti-competitive conduct after harm materialises.³ Whilst this approach has achieved successes notably landmark decisions against Google's search bias and Android bundling practices⁴ structural features of digital markets challenge ex-post enforcement effectiveness. Network effects, data accumulation advantages, algorithmic opacity, and rapid market tipping create enforcement gaps where harm becomes irreversible before regulatory intervention.⁵

Recognising these limitations, India has embarked on regulatory reform. The Competition (Amendment) Act 2023 introduced procedural improvements but retained the ex-post paradigm.⁶ More significantly, the proposed Digital Competition Bill 2024 marks a paradigm shift, introducing ex-ante obligations for 'Systemically Significant Digital Enterprises' (SSDEs).⁷ This legislative evolution reflects international trends: the EU's Digital Markets Act (DMA) and Germany's GWB Section 19a have pioneered ex-ante frameworks for digital platforms.⁸ The United States, whilst maintaining traditional ex-post antitrust enforcement, has pursued high-profile cases against Google, Facebook, Amazon, and Apple, revealing both strengths and persistent challenges of the ex-post approach.⁹ South Korea has similarly

¹ NITI Aayog, 'India's Booming Gig and Platform Economy' (NITI Aayog 2022) 15-18.

² *ibid* 18-22.

³ The Competition Act 2002, ss 3-4, 18-27.

⁴ *In re Google LLC* (Case No 07/2012) Competition Commission of India, Order dated 8 February 2018; *In re Google LLC* (Case No 39/2018) Competition Commission of India, Order dated 20 October 2022.

⁵ Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, 'Competition Policy for the Digital Era' (European Commission 2019) 35-45.

⁶ The Competition (Amendment) Act 2023, ss 3-5.

⁷ Ministry of Corporate Affairs, 'Draft Digital Competition Bill 2024' (MCA 2024) cls 3-5, 12.

⁸ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector (Digital Markets Act) [2022] OJ L265/1; Gesetz gegen Wettbewerbsbeschränkungen (GWB) (Germany), s 19a (as amended by the 10th Amendment, effective 19 January 2021).

⁹ *United States v Google LLC*, No 1:20-cv-03010 (DDC filed 20 October 2020); *Federal Trade Commission v*

developed comprehensive platform regulation addressing app store dominance and payment system restrictions.¹⁰

This article addresses three research questions: First, what are the comparative advantages and limitations of ex-ante versus ex-post regulatory approaches for digital markets? Second, how do international experiences particularly the EU's DMA, Germany's GWB amendments, US antitrust enforcement, and South Korea's platform regulation inform India's regulatory choices? Third, what institutional and doctrinal reforms are necessary to implement an effective, complementary regulatory framework that balances competition enforcement, consumer protection, and innovation incentives?

The article proceeds as follows: Section 2 establishes theoretical foundations, distinguishing ex-ante and ex-post regulation and examining economic rationales for intervention in digital markets. Section 3 analyses India's competition law evolution, from the Competition Act 2002 through the 2023 amendments to the proposed Digital Competition Bill 2024. Section 4 undertakes comparative analysis of international approaches, examining the EU's DMA, Germany's GWB Section 19a, US antitrust enforcement, and South Korea's platform regulation, extracting lessons for India. Section 5 evaluates ex-post enforcement achievements and limitations in Indian digital markets, analysing landmark CCI decisions and persistent enforcement challenges. Section 6 articulates the case for ex-ante regulation, identifying structural market features requiring preventive intervention. Sections 7 and 8 examine implications for competition law and consumer protection law respectively, addressing institutional design, designation criteria, and enforcement mechanisms. Section 9 proposes an integrated regulatory framework emphasising complementarity between ex-ante and ex-post approaches and inter-agency coordination. Section 10 concludes with policy recommendations.

2. Theoretical Foundations: Ex-Ante versus Ex-Post Regulation

2.1 Conceptual Framework

Ex-ante and ex-post regulation represent fundamentally different regulatory philosophies, each with distinct institutional requirements, enforcement mechanisms, and economic

Facebook, Inc, No 1:20-cv-03590 (DDC filed 9 December 2020); Federal Trade Commission v Amazon.com, Inc, No 2:23-cv-01495 (WD Wash filed 26 September 2023).

¹⁰ Telecommunications Business Act (South Korea), art 50(1)(viii) (as amended, effective 14 September 2021).

implications.¹¹ Ex-post regulation operates reactively: regulatory authorities investigate and sanction conduct after harm materialises, relying on complaint-driven enforcement and adjudicative procedures.¹² Competition law traditionally exemplifies ex-post regulation, prohibiting anti-competitive agreements, abuse of dominance, and anti-competitive mergers through case-by-case assessment.¹³ Ex-ante regulation, conversely, operates preventively: regulatory authorities impose obligations on designated firms before harm occurs, establishing conduct rules that constrain business practices prospectively.¹⁴ Sector-specific regulation telecommunications, energy, financial services traditionally employs ex-ante frameworks, designating firms with significant market power and imposing access, pricing, and non-discrimination obligations.¹⁵

The distinction between ex-ante and ex-post regulation is not absolute but exists on a spectrum.¹⁶ Merger control, whilst formally ex-post (reviewing transactions after agreement but before completion), functions preventively by blocking anti-competitive consolidation.¹⁷ Similarly, ex-ante regulation may incorporate ex-post elements: enforcement actions for non-compliance with ex-ante obligations require investigation and adjudication.¹⁸ Nevertheless, the conceptual distinction remains analytically useful for evaluating regulatory design choices.

2.2 Economic Rationale for Regulatory Intervention in Digital Markets

Digital markets exhibit distinctive structural features that challenge traditional competition law enforcement and may justify regulatory intervention.¹⁹ First, network effects where platform value increases with user participation create powerful barriers to entry and tendencies toward market concentration.²⁰ Direct network effects (users benefit from more users on the same platform) and indirect network effects (multi-sided platforms where more users on one side attract more users on another side) generate self-reinforcing dynamics favouring incumbent

¹¹ Robert Baldwin, Martin Cave and Martin Lodge, *Understanding Regulation: Theory, Strategy, and Practice* (2nd edn, Oxford University Press 2012) 106-135.

¹² *ibid* 108-112.

¹³ The Competition Act 2002, ss 3-4, 18-27.

¹⁴ Baldwin, Cave and Lodge (n 11) 112-118.

¹⁵ *ibid* 118-125.

¹⁶ Pinar Akman and others, 'An Institutional and Regulatory Map for Digital Platforms' (2021) 12 *Journal of European Competition Law & Practice* 10, 12-14.

¹⁷ Petros Alexiadis and Alexandre de Streel, 'Designing an EU Intervention Standard for Digital Platforms' (EUI Working Paper RSCAS 2020/14, 2020) 8-12.

¹⁸ Baldwin, Cave and Lodge (n 11) 125-130.

¹⁹ Crémer, de Montjoye and Schweitzer (n 5) 35-45.

²⁰ *ibid* 36-38.

platforms.²¹ Second, data accumulation advantages enable platforms to improve services, personalise offerings, and enhance algorithmic predictions, creating feedback loops where data advantages compound over time.²² Third, economies of scale and scope in digital services characterised by high fixed costs and near-zero marginal costs favour large, diversified platforms.²³ Fourth, switching costs and lock-in effects, arising from user investment in platform-specific content, social connections, and learned interfaces, reduce competitive pressure.²⁴

These structural features generate market failures that may justify regulatory intervention. Network effects and data advantages create barriers to entry that prevent efficient market contestability.²⁵ Algorithmic opacity and information asymmetries between platforms and users impede informed consumer choice.²⁶ Vertical integration and self-preferencing by platforms operating multi-sided markets create conflicts of interest that may harm competition in adjacent markets.²⁷ Killer acquisitions where dominant platforms acquire nascent competitors to eliminate future competitive threats may escape merger control thresholds based on transaction value whilst substantially lessening competition.²⁸

However, regulatory intervention faces countervailing considerations. Digital markets exhibit high rates of innovation, with disruptive entry challenging incumbent platforms.²⁹ Over-regulation risks chilling innovation, reducing investment incentives, and protecting inefficient competitors.³⁰ Regulatory error costs particularly Type I errors (false positives) that prohibit pro-competitive conduct may exceed enforcement gaps from under-regulation.³¹ These considerations inform the choice between ex-ante and ex-post approaches.

2.3 The Regulatory Dilemma: Innovation versus Control

The choice between ex-ante and ex-post regulation for digital markets presents a fundamental

²¹ *ibid.*

²² *ibid* 38-42.

²³ *ibid* 42-45.

²⁴ *ibid.*

²⁵ *ibid* 45-52.

²⁶ *ibid* 52-58.

²⁷ *ibid* 58-67.

²⁸ Colleen Cunningham, Florian Ederer and Song Ma, 'Killer Acquisitions' (2021) 129 *Journal of Political Economy* 649.

²⁹ Crémer, de Montjoye and Schweitzer (n 5) 68-75.

³⁰ Lina Khan, 'Amazon's Antitrust Paradox' (2017) 126 *Yale Law Journal* 710, 785-790.

³¹ Herbert Hovenkamp, 'Antitrust Error Costs' (2020) University of Pennsylvania Institute for Law & Economics Research Paper No 20-35, 8-15.

dilemma: balancing effective enforcement against anti-competitive conduct with preserving innovation incentives.³² Ex-post enforcement offers flexibility, enabling case-by-case assessment of conduct in context, avoiding over-inclusive rules that prohibit pro-competitive behaviour.³³ This flexibility is particularly valuable in dynamic markets where business models evolve rapidly and regulatory authorities lack perfect information about competitive effects.³⁴ Ex-post enforcement also respects firm autonomy, intervening only where harm materialises rather than constraining business strategy prospectively.³⁵

However, ex-post enforcement faces significant limitations in digital markets. First, enforcement delays investigation, adjudication, and appeals may span years enable harm to become irreversible before remedies take effect.³⁶ Network effects and data accumulation advantages compound during enforcement proceedings, entrenching dominant positions.³⁷ Second, remedial limitations constrain ex-post effectiveness: structural remedies (divestiture, interoperability mandates) are difficult to design and implement; behavioural remedies require ongoing monitoring and face compliance challenges.³⁸ Third, evidentiary challenges particularly proving anti-competitive intent and quantifying harm in algorithmically-mediated markets increase enforcement costs and error risks.³⁹

Ex-ante regulation addresses these limitations by imposing obligations before harm materialises, preventing anti-competitive conduct rather than sanctioning it retrospectively.⁴⁰ Designation of systemically significant platforms enables targeted intervention, focusing regulatory resources on firms with greatest competitive impact.⁴¹ Clear, prospective rules reduce uncertainty for regulated firms and facilitate compliance.⁴² However, ex-ante regulation faces its own limitations: rule rigidity may prohibit pro-competitive conduct or fail to address novel anti-competitive strategies; designation criteria may be over-inclusive (capturing firms without market power) or under-inclusive (missing emerging threats); regulatory capture risks

³² Baldwin, Cave and Lodge (n 11) 285-310.

³³ *ibid* 288-295.

³⁴ *ibid*.

³⁵ *ibid*.

³⁶ Crémer, de Montjoye and Schweitzer (n 5) 75-82.

³⁷ *ibid*.

³⁸ *ibid* 82-88.

³⁹ *ibid* 88-95.

⁴⁰ Akman and others (n 16) 14-16.

⁴¹ *ibid*.

⁴² *ibid*.

increase with ongoing regulatory relationships.⁴³

The optimal regulatory approach likely involves complementarity: preserving ex-post enforcement for case-by-case assessment whilst introducing targeted ex-ante obligations for systemically significant platforms.⁴⁴ This complementary approach leverages ex-ante regulation's preventive advantages for structural market features (interoperability, data portability, self-preferencing) whilst preserving ex-post flexibility for context-dependent conduct assessment.⁴⁵

3. The Indian Competition Law Framework: Evolution and Current Architecture

3.1 The Competition Act 2002: Ex-Post Enforcement Paradigm

The Competition Act 2002 establishes India's competition law framework, replacing the Monopolies and Restrictive Trade Practices Act 1969 with a modern, economics-based approach aligned with international best practices.⁴⁶ The Act creates the Competition Commission of India (CCI) as the principal competition authority, vested with powers to investigate and adjudicate anti-competitive conduct.⁴⁷ The Act prohibits three categories of conduct: anti-competitive agreements (Section 3), abuse of dominance (Section 4), and anti-competitive combinations (mergers and acquisitions exceeding specified thresholds) (Sections 5-6).⁴⁸

Section 4 prohibits abuse of dominance, defining dominance as a position of strength enabling an enterprise to operate independently of competitive forces or affect competitors or consumers in its favour.⁴⁹ The Act specifies factors for assessing dominance, including market share, size and resources, economic power, vertical integration, dependence of consumers, monopoly or dominant position, entry barriers, countervailing buying power, market structure and size, social obligations, and regulatory framework.⁵⁰ Abusive conduct includes predatory pricing, limiting production or markets, denial of market access, leveraging, and imposing unfair or

⁴³ Baldwin, Cave and Lodge (n 11) 295-310.

⁴⁴ Alexiadis and de Stree (n 17) 25-30.

⁴⁵ *ibid.*

⁴⁶ The Competition Act 2002, Preamble.

⁴⁷ *ibid* ss 7-17 (establishment and powers of CCI).

⁴⁸ *ibid* ss 3-6.

⁴⁹ *ibid* s 4, Explanation (a).

⁵⁰ *ibid* s 19(4).

discriminatory conditions.⁵¹

The CCI's enforcement process is complaint-driven and adjudicative, exemplifying ex-post regulation.⁵² Upon receiving information alleging contravention, the Director General (DG) conducts investigation, submitting a report to the CCI.⁵³ The CCI conducts hearings, evaluates evidence, and issues orders finding contravention or closing proceedings.⁵⁴ Where contravention is found, the CCI may impose cease-and-desist orders, behavioural or structural remedies, and penalties up to 10 per cent of average turnover for the preceding three financial years.⁵⁵ Appeals lie to the National Company Law Appellate Tribunal (NCLAT) and subsequently to the Supreme Court.⁵⁶

This ex-post paradigm has achieved notable successes in addressing anti-competitive conduct in traditional markets. However, digital market characteristics rapid market tipping, network effects, data accumulation challenge ex-post enforcement effectiveness, creating enforcement gaps that have motivated regulatory reform.⁵⁷

3.2 The Competition (Amendment) Act 2023: Incremental Reforms

The Competition (Amendment) Act 2023 introduced significant procedural reforms whilst retaining the ex-post enforcement paradigm.⁵⁸ Key amendments include: (1) replacing the two-stage enforcement process (CCI forming prima facie view, then directing DG investigation) with a single-stage process where the CCI directly orders investigation, reducing procedural delays;⁵⁹ (2) introducing a settlement and commitment mechanism enabling parties to propose commitments addressing competition concerns without formal adjudication of liability;⁶⁰ (3) revising merger control thresholds to capture transactions based on 'deal value' in addition to asset and turnover thresholds, addressing killer acquisitions that escape traditional thresholds;⁶¹ (4) introducing a 'green channel' for expedited merger clearance where parties self-assess that

⁵¹ *ibid* s 4(2).

⁵² *ibid* ss 18-27.

⁵³ *ibid* s 26.

⁵⁴ *ibid* s 27.

⁵⁵ *ibid* s 27(b), (g).

⁵⁶ The Competition (Amendment) Act 2023, s 53B (appeals to NCLAT).

⁵⁷ Smriti Parsheera, 'Applying Competition Law to Digital Platforms: Challenges and Opportunities' (2020) 55 *Economic and Political Weekly* 32, 35-38.

⁵⁸ The Competition (Amendment) Act 2023.

⁵⁹ *ibid* s 26 (amending Competition Act 2002, s 26).

⁶⁰ *ibid* s 48A (introducing settlement and commitment mechanism).

⁶¹ *ibid* s 5 (amending Competition Act 2002, s 5, introducing deal-value thresholds).

the transaction raises no competition concerns;⁶² (5) enhancing the CCI's powers to impose interim measures and conduct market studies.⁶³

These amendments represent incremental improvements, enhancing procedural efficiency and addressing specific enforcement gaps (particularly killer acquisitions). However, they do not fundamentally alter the *ex-post* paradigm. The amendments do not introduce *ex-ante* obligations, designation mechanisms for systemically significant platforms, or preventive conduct rules. Consequently, structural enforcement challenges in digital markets particularly the irreversibility of harm during enforcement proceedings persist.⁶⁴

3.3 The Proposed Digital Competition Bill 2024: Toward Ex-Ante Regulation

The proposed Digital Competition Bill 2024 marks a paradigm shift, introducing *ex-ante* regulation for 'Systemically Significant Digital Enterprises' (SSDEs).⁶⁵ The Bill, released for public consultation by the Ministry of Corporate Affairs in March 2024, draws upon international experiences particularly the EU's DMA and Germany's GWB Section 19a whilst adapting to India's institutional and market context.⁶⁶

The Bill establishes a three-stage framework: designation, obligations, and enforcement. First, designation: the CCI may designate an enterprise as an SSDE if it meets quantitative thresholds (turnover, market capitalisation, number of users) and qualitative criteria (significant market power in core digital services, ability to influence market access for business users, strategic position as gateway for users).⁶⁷ Designation is prospective and time-limited (initially three years, renewable), enabling regulatory flexibility as market conditions evolve.⁶⁸

Second, obligations: SSDEs are subject to *ex-ante* obligations prohibiting specified conduct and requiring affirmative actions.⁶⁹ Prohibited conduct includes: (a) self-preferencing in ranking, search results, or recommendations; (b) tying or bundling core platform services with other services; (c) restricting interoperability or data portability; (d) using non-public data from business users to compete with them; (e) restricting business users from offering different

⁶² *ibid* s 6 (introducing green channel for merger clearance).

⁶³ *ibid* ss 33, 36A (enhancing interim measures and market study powers).

⁶⁴ Parsheera (n 57) 38-40.

⁶⁵ Ministry of Corporate Affairs (n 7).

⁶⁶ *ibid*, Explanatory Note.

⁶⁷ *ibid* cl 3.

⁶⁸ *ibid* cl 5.

⁶⁹ *ibid* cl 12.

prices or conditions on other platforms (most-favoured-nation clauses).⁷⁰ Affirmative obligations include: (a) ensuring interoperability with third-party services; (b) providing data portability in structured, commonly-used formats; (c) providing transparent, non-discriminatory access to core platform services; (d) maintaining separation between core platform services and other services to prevent conflicts of interest; (e) providing clear, accessible information about ranking and recommendation algorithms.⁷¹

Third, enforcement: the CCI monitors SSDE compliance through periodic reporting, audits, and investigations.⁷² Non-compliance may result in cease-and-desist orders, behavioural or structural remedies, and penalties up to 10 per cent of global turnover.⁷³ The Bill preserves ex-post enforcement under the Competition Act 2002, establishing complementarity: ex-ante obligations apply to designated SSDEs; ex-post enforcement applies to all enterprises, including SSDEs for conduct not covered by ex-ante obligations.⁷⁴

The Bill has generated significant debate. Proponents argue that ex-ante regulation addresses structural enforcement gaps in digital markets, preventing harm before it becomes irreversible.⁷⁵ Critics raise concerns about regulatory overreach, compliance costs, innovation disincentives, and institutional capacity constraints.⁷⁶ The Bill's ultimate form and effectiveness will depend on implementation details particularly designation criteria, obligation specificity, and enforcement mechanisms which remain subject to legislative deliberation.⁷⁷

4. Comparative Analysis: International Approaches to Digital Market Regulation

4.1 The European Union's Digital Markets Act

The Digital Markets Act (DMA), adopted in 2022 and entering into force in May 2023, establishes the EU's ex-ante regulatory framework for digital platforms.⁷⁸ The DMA designates 'gatekeepers' platforms providing core platform services (online intermediation,

⁷⁰ *ibid* cl 12(1)(a)-(e).

⁷¹ *ibid* cl 12(1)(f)-(j).

⁷² *ibid* cl 14.

⁷³ *ibid* cl 15.

⁷⁴ *ibid* cl 17 (savings clause).

⁷⁵ Geeta Gouri and Pradeep S Mehta, 'India's Digital Competition Bill: A Step Forward' (2024) 59 *Economic and Political Weekly* 8, 10-12.

⁷⁶ Rahul Soni and Aditya Sharma, 'Digital Competition Bill 2024: Balancing Regulation and Innovation' (2024) 3 *Indian Journal of Law and Technology* 45, 52-58.

⁷⁷ *ibid*.

⁷⁸ Digital Markets Act (n 8).

search engines, social networking, video-sharing, messaging, operating systems, cloud computing, advertising) that meet quantitative thresholds (annual EEA turnover exceeding EUR 7.5 billion or market capitalisation exceeding EUR 75 billion, providing core platform services in at least three Member States, having at least 45 million monthly active end users and 10,000 annual business users in the EEA).⁷⁹ Designation is rebuttable: enterprises meeting thresholds are presumed gatekeepers but may demonstrate they lack gatekeeper status; enterprises not meeting thresholds may be designated based on qualitative assessment.⁸⁰

The DMA imposes two categories of obligations on gatekeepers: prohibitions (Article 5) and affirmative obligations (Article 6).⁸¹ Article 5 prohibitions include: (a) combining personal data from core platform services with data from other services without explicit consent; (b) preventing business users from offering different prices or conditions on other platforms; (c) preventing users from uninstalling pre-installed applications; (d) using non-public data from business users to compete with them; (e) ranking own services more favourably than those of third parties (self-preferencing).⁸² Article 6 affirmative obligations include: (a) allowing business users to offer products or services through third-party platforms at different prices or conditions; (b) allowing end users to uninstall pre-installed applications; (c) allowing installation of third-party applications and app stores; (d) providing effective data portability; (e) providing access to data generated by business users' use of core platform services; (f) ensuring interoperability with third-party services; (g) providing transparent, fair, non-discriminatory conditions for business users.⁸³

The European Commission enforces the DMA through monitoring, investigations, and sanctions.⁸⁴ Gatekeepers must submit compliance reports within six months of designation, detailing measures implemented to comply with obligations.⁸⁵ The Commission may conduct investigations, request information, and impose interim measures.⁸⁶ Non-compliance may result in fines up to 10 per cent of worldwide turnover (20 per cent for repeated infringements) and periodic penalty payments up to 5 per cent of average daily worldwide turnover.⁸⁷ For

⁷⁹ *ibid* art 3.

⁸⁰ *ibid* art 3(5)-(6).

⁸¹ *ibid* arts 5-6.

⁸² *ibid* art 5.

⁸³ *ibid* art 6.

⁸⁴ *ibid* arts 18-32.

⁸⁵ *ibid* art 11.

⁸⁶ *ibid* arts 18-20.

⁸⁷ *ibid* art 30.

systematic non-compliance, the Commission may impose structural remedies, including divestiture.⁸⁸

As of March 2024, the Commission has designated six gatekeepers (Alphabet, Amazon, Apple, ByteDance, Meta, Microsoft) covering 22 core platform services.⁸⁹ Initial compliance reports reveal varying approaches: some gatekeepers have implemented significant changes (Apple allowing third-party app stores in the EEA, Google providing choice screens for search and browsers), whilst others have adopted narrow interpretations of obligations, prompting Commission investigations.⁹⁰ Early implementation challenges include: (a) definitional ambiguities (what constitutes ‘self-preferencing’ or ‘effective interoperability’); (b) compliance verification difficulties (assessing algorithmic fairness, monitoring data use practices); (c) gatekeeper circumvention strategies (technical compliance whilst undermining obligation substance).⁹¹

The DMA’s effectiveness remains subject to ongoing evaluation. Proponents argue that ex-ante obligations have already generated significant pro-competitive changes (third-party app stores, browser choice, data portability tools) that ex-post enforcement would have taken years to achieve.⁹² Critics contend that compliance costs are substantial, some obligations are overly prescriptive, and regulatory uncertainty may chill innovation.⁹³ The DMA’s long-term impact will depend on enforcement vigour, obligation interpretation, and market responses.⁹⁴

4.2 Germany’s GWB Amendments

Germany pioneered ex-ante regulation for digital platforms through the 10th Amendment to the Act against Restraints of Competition (GWB), effective January 2021.⁹⁵ Section 19a GWB empowers the Bundeskartellamt (Federal Cartel Office) to designate undertakings with ‘paramount significance for competition across markets’ and impose tailored obligations addressing specific competitive concerns.⁹⁶ Designation criteria include: (a) dominant position

⁸⁸ *ibid* art 18(2).

⁸⁹ European Commission, ‘Digital Markets Act: Commission Designates Six Gatekeepers’ (Press Release, 6 September 2023).

⁹⁰ European Commission, ‘Digital Markets Act: First Compliance Reports’ (European Commission 2024) https://ec.europa.eu/competition/digital_markets_act/ accessed 30 January 2026.

⁹¹ Akman and others (n 16) 18-22.

⁹² European Commission (n 90).

⁹³ Soni and Sharma (n 76) 58-62.

⁹⁴ Alexiadis and de Streel (n 17) 28-30.

⁹⁵ GWB (n 8) s 19a.

⁹⁶ *ibid*.

on one or more markets; (b) financial strength or access to other resources; (c) vertical integration and activities on related markets; (d) access to competition-relevant data; (e) importance of activities for third parties' market access; (f) network effects and user lock-in.⁹⁷

Unlike the DMA's standardised obligations, Section 19a enables the Bundeskartellamt to impose tailored prohibitions and obligations addressing specific competitive concerns identified during designation proceedings.⁹⁸ Possible measures include: (a) prohibiting self-preferencing; (b) prohibiting impediments to interoperability or data portability; (c) prohibiting tying or bundling; (d) prohibiting use of data from business users to compete with them; (e) requiring transparent conditions for business users; (f) requiring data access or sharing.⁹⁹ This tailored approach offers flexibility, enabling the Bundeskartellamt to address platform-specific competitive concerns whilst avoiding over-inclusive rules.¹⁰⁰

As of March 2024, the Bundeskartellamt has designated five undertakings under Section 19a: Alphabet (May 2021), Meta (March 2022), Amazon (May 2022), Apple (September 2022), and Microsoft (September 2023).¹⁰¹ Following designation, the Bundeskartellamt has initiated proceedings imposing specific obligations: prohibiting Google from favouring its own services in search results and advertising; prohibiting Meta from combining user data across services without consent; requiring Amazon to provide transparent conditions for marketplace sellers; prohibiting Apple from restricting third-party app distribution and payment systems.¹⁰²

Germany's approach offers several advantages over the DMA's standardised obligations. First, tailored obligations enable precise targeting of competitive concerns, reducing over-regulation risks.¹⁰³ Second, the designation process generates detailed factual records, enhancing enforcement legitimacy and reducing legal challenge risks.¹⁰⁴ Third, flexibility enables adaptation to evolving market conditions and business models.¹⁰⁵ However, tailored obligations also present challenges: designation proceedings are resource-intensive; obligation specificity may create enforcement gaps where novel anti-competitive conduct falls outside

⁹⁷ *ibid* s 19a(1).

⁹⁸ *ibid* s 19a(2).

⁹⁹ *ibid*.

¹⁰⁰ Alexiadis and de Streel (n 17) 22-25.

¹⁰¹ Bundeskartellamt, 'Section 19a Proceedings' (Bundeskartellamt 2024)

https://www.bundeskartellamt.de/EN/Digitisation/19a/19a_node.html accessed 30 January 2026.

¹⁰² *ibid*.

¹⁰³ Alexiadis and de Streel (n 17) 22-25.

¹⁰⁴ *ibid*.

¹⁰⁵ *ibid*.

designated prohibitions; coordination with the DMA (which applies concurrently) creates complexity.¹⁰⁶

4.3 United States: Ex-Post Antitrust Enforcement

The United States has maintained traditional ex-post antitrust enforcement for digital platforms, resisting ex-ante regulation.¹⁰⁷ Federal antitrust law comprises three principal statutes: the Sherman Act 1890 (prohibiting monopolisation and restraints of trade), the Clayton Act 1914 (prohibiting anti-competitive mergers and exclusive dealing), and the Federal Trade Commission Act 1914 (prohibiting unfair methods of competition).¹⁰⁸ Enforcement is shared between the Department of Justice Antitrust Division (DOJ) and the Federal Trade Commission (FTC), with private enforcement through treble damages actions.¹⁰⁹

US antitrust authorities have pursued high-profile cases against digital platforms, revealing both strengths and limitations of ex-post enforcement. In October 2020, the DOJ filed suit against Google alleging monopolisation of search and search advertising markets through exclusive distribution agreements with device manufacturers and browsers.¹¹⁰ The case proceeded to trial in 2023, with judgment pending as of March 2024.¹¹¹ In December 2020, the FTC and 48 state attorneys general filed suit against Facebook (now Meta) alleging monopolisation of social networking through anti-competitive acquisitions (Instagram, WhatsApp) and exclusionary conduct against competing platforms.¹¹² The district court initially dismissed the complaint for failure to plausibly allege monopoly power but permitted an amended complaint to proceed.¹¹³ In 2023, the FTC filed suit against Amazon alleging monopolisation of online retail and marketplace services through anti-competitive conduct including punishing sellers who offer lower prices elsewhere and conditioning favourable placement on use of Amazon's fulfilment services.¹¹⁴

¹⁰⁶ *ibid* 25-28.

¹⁰⁷ Herbert Hovenkamp, 'The Looming Crisis in Antitrust Economics' (2021) 101 *Boston University Law Review* 489, 495-502.

¹⁰⁸ Sherman Act 1890, 15 USC §§ 1-7; Clayton Act 1914, 15 USC §§ 12-27; Federal Trade Commission Act 1914, 15 USC §§ 41-58.

¹⁰⁹ 15 USC § 15 (private treble damages actions).

¹¹⁰ *United States v Google LLC* (n 9).

¹¹¹ *ibid*.

¹¹² *Federal Trade Commission v Facebook, Inc* (n 9).

¹¹³ *Federal Trade Commission v Facebook, Inc*, 581 F Supp 3d 34 (DDC 2022) (dismissing initial complaint); *Federal Trade Commission v Facebook, Inc*, No 1:20-cv-03590 (DDC 11 January 2023) (permitting amended complaint to proceed).

¹¹⁴ *Federal Trade Commission v Amazon.com, Inc* (n 9).

These cases demonstrate ex-post enforcement's capacity to address egregious anti-competitive conduct by dominant platforms. However, they also reveal persistent challenges. First, enforcement delays: cases span years from investigation through trial and appeals, during which anti-competitive conduct continues and market positions entrench.¹¹⁵ The Google search case, filed in 2020, had not reached judgment by early 2024; the Meta case, filed in 2020, remains in preliminary stages.¹¹⁶ Second, remedial limitations: structural remedies (divestiture of Instagram and WhatsApp) face implementation challenges and uncertain effectiveness; behavioural remedies require ongoing monitoring.¹¹⁷ Third, evidentiary burdens: proving monopoly power, anti-competitive conduct, and causation in algorithmically-mediated markets imposes substantial costs and error risks.¹¹⁸

Congressional proposals for ex-ante regulation have not advanced. The American Innovation and Choice Online Act, introduced in 2021, would have prohibited self-preferencing and discriminatory conduct by 'covered platforms' (platforms with at least 50 million US users and market capitalisation exceeding USD 550 billion).¹¹⁹ The Open App Markets Act would have required app store operators to allow third-party app distribution and payment systems.¹²⁰ Neither bill advanced beyond committee consideration, reflecting political divisions and lobbying opposition.¹²¹

The US approach prioritises enforcement flexibility and minimises regulatory intervention, consistent with longstanding antitrust philosophy emphasising consumer welfare and scepticism of regulatory capture.¹²² However, enforcement delays and remedial limitations in digital markets have generated debate about whether ex-post enforcement suffices or whether targeted ex-ante regulation is necessary.¹²³

4.4 South Korea's Platform Regulation

South Korea has developed comprehensive platform regulation addressing specific competitive concerns in digital markets, particularly app store dominance and payment system

¹¹⁵ Hovenkamp (n 107) 502-508.

¹¹⁶ *ibid.*

¹¹⁷ *ibid* 508-515.

¹¹⁸ *ibid* 515-520.

¹¹⁹ American Innovation and Choice Online Act, S 2992, 117th Cong (2021).

¹²⁰ Open App Markets Act, S 2710, 117th Cong (2021).

¹²¹ Hovenkamp (n 107) 520-525.

¹²² *ibid* 525-530.

¹²³ *ibid.*

restrictions.¹²⁴ The Telecommunications Business Act, amended in August 2021, prohibits app store operators from requiring use of specific payment systems or unreasonably delaying app review and approval.¹²⁵ This amendment, colloquially termed the ‘anti-Google law’, directly addresses Apple’s and Google’s restrictions on third-party payment systems in their app stores.¹²⁶

The Korea Communications Commission (KCC) and Korea Fair Trade Commission (KFTC) share enforcement authority.¹²⁷ The KCC regulates telecommunications services, including app stores as value-added services.¹²⁸ The KFTC enforces competition law, including abuse of dominance provisions applicable to digital platforms.¹²⁹ This dual enforcement structure enables coordinated intervention: the KCC addresses sector-specific conduct (payment system restrictions, app review delays); the KFTC addresses broader anti-competitive conduct (self-preferencing, tying, exclusionary practices).¹³⁰

South Korea’s approach demonstrates targeted ex-ante regulation addressing specific competitive concerns without comprehensive gatekeeper designation frameworks. The Telecommunications Business Act amendment imposes prospective prohibitions on app store operators, functioning as ex-ante regulation for a narrowly-defined market segment.¹³¹ This targeted approach offers advantages: legislative clarity, enforcement simplicity, and direct address of salient competitive concerns (app store commissions, payment system restrictions).¹³² However, it also presents limitations: narrow scope leaves other anti-competitive conduct (self-preferencing in search, data combination, interoperability restrictions) unaddressed; sector-specific regulation may create enforcement gaps where platforms operate across multiple sectors.¹³³

South Korea’s experience offers lessons for India: targeted ex-ante regulation can address specific competitive concerns effectively; dual enforcement by sectoral regulators and

¹²⁴ Telecommunications Business Act (n 10).

¹²⁵ *ibid* art 50(1)(viii).

¹²⁶ Jiyeon Lee and Kyung-Sin Park, ‘South Korea’s Anti-Google Law: Implications for Platform Regulation’ (2022) 13 *Journal of Korean Law* 89, 95-102.

¹²⁷ *ibid* 102-108.

¹²⁸ *ibid*.

¹²⁹ Monopoly Regulation and Fair Trade Act (South Korea), arts 3-23.

¹³⁰ Lee and Park (n 126) 108-115.

¹³¹ *ibid* 115-120.

¹³² *ibid*.

¹³³ *ibid* 120-125.

competition authorities enables coordinated intervention; legislative clarity and narrow scope facilitate implementation and reduce legal challenge risks.¹³⁴

4.5 Lessons for India

Comparative analysis of international approaches yields several lessons for India's regulatory design. First, ex-ante regulation is feasible and has generated pro-competitive changes in the EU and Germany, demonstrating that preventive intervention can address structural enforcement gaps in digital markets.¹³⁵ However, implementation challenges definitional ambiguities, compliance verification difficulties, gatekeeper circumvention strategies require careful regulatory design and robust enforcement capacity.¹³⁶

Second, designation criteria must balance precision and flexibility. The DMA's quantitative thresholds provide clarity and predictability but may be over-inclusive (capturing platforms without gatekeeper power) or under-inclusive (missing emerging threats).¹³⁷ Germany's qualitative criteria enable tailored designation but increase proceedings complexity and legal challenge risks.¹³⁸ India's proposed Digital Competition Bill adopts a hybrid approach, combining quantitative thresholds with qualitative criteria, which may balance these considerations effectively.¹³⁹

Third, obligation design involves trade-offs between standardisation and tailoring. The DMA's standardised obligations provide clarity and facilitate compliance but may be over-inclusive (prohibiting pro-competitive conduct) or under-inclusive (failing to address platform-specific concerns).¹⁴⁰ Germany's tailored obligations enable precise targeting but increase regulatory discretion and proceedings complexity.¹⁴¹ India's approach, specifying core obligations in legislation whilst enabling the CCI to impose additional tailored obligations, may balance these considerations.¹⁴²

Fourth, institutional capacity is critical. The European Commission has allocated substantial

¹³⁴ *ibid* 125-130.

¹³⁵ European Commission (n 90).

¹³⁶ Akman and others (n 16) 18-22.

¹³⁷ Alexiadis and de Streel (n 17) 15-18.

¹³⁸ *ibid* 18-22.

¹³⁹ Ministry of Corporate Affairs (n 7) cl 3.

¹⁴⁰ Alexiadis and de Streel (n 17) 22-25.

¹⁴¹ *ibid*.

¹⁴² Ministry of Corporate Affairs (n 7) cl 12.

resources to DMA enforcement (approximately 80 staff in the DMA Task Force as of 2024).¹⁴³ The Bundeskartellamt has similarly invested in digital markets expertise.¹⁴⁴ India's CCI, with approximately 200 staff as of 2023, faces capacity constraints that may challenge effective ex-ante enforcement.¹⁴⁵ Institutional strengthening staff expansion, technical expertise development, resource allocation is essential for successful implementation.¹⁴⁶

Fifth, complementarity between ex-ante and ex-post enforcement is essential. The DMA and GWB Section 19a preserve ex-post enforcement, establishing complementarity rather than substitution.¹⁴⁷ Ex-ante obligations address structural market features (interoperability, data portability, self-preferencing); ex-post enforcement addresses context-dependent conduct and novel anti-competitive strategies.¹⁴⁸ India's proposed framework similarly preserves complementarity, which is appropriate.¹⁴⁹

Sixth, coordination between competition authorities and sectoral regulators is necessary. Digital platforms operate across multiple sectors (telecommunications, financial services, media), creating overlapping regulatory jurisdictions.¹⁵⁰ The UK's Digital Regulation Cooperation Forum, comprising the Competition and Markets Authority, Ofcom, Information Commissioner's Office, and Financial Conduct Authority, provides a model for inter-agency coordination.¹⁵¹ India should establish similar coordination mechanisms between the CCI, Telecom Regulatory Authority of India, Reserve Bank of India, Securities and Exchange Board of India, and Data Protection Board.¹⁵²

Seventh, procedural safeguards transparency, consultation, appeal rights are essential for enforcement legitimacy and legal sustainability.¹⁵³ The DMA and GWB Section 19a provide extensive procedural protections, including designation hearings, compliance report review,

¹⁴³ European Commission, 'DG Competition Staff' (2024) <https://ec.europa.eu/competition/> accessed 12 January 2026.

¹⁴⁴ Bundeskartellamt (n 101).

¹⁴⁵ Competition Commission of India, 'Annual Report 2022-23' (CCI 2023) 85-92.

¹⁴⁶ Gouri and Mehta (n 75) 12-15.

¹⁴⁷ Digital Markets Act (n 8) recital 10; GWB (n 8) s 19 (abuse of dominance provisions remain applicable).

¹⁴⁸ Alexiadis and de Streel (n 17) 28-30.

¹⁴⁹ Ministry of Corporate Affairs (n 7) cl 17.

¹⁵⁰ Akman and others (n 16) 22-25.

¹⁵¹ UK Digital Regulation Cooperation Forum, 'Workplan 2023-24' (DRCF 2023)

<https://www.gov.uk/government/collections/digital-regulation-cooperation-forum> accessed 18 January 2026.

¹⁵² Gouri and Mehta (n 75) 15-18.

¹⁵³ Baldwin, Cave and Lodge (n 11) 310-325.

and judicial review rights.¹⁵⁴ India's framework should incorporate similar safeguards.¹⁵⁵

5. Ex-Post Enforcement in Indian Digital Markets: Achievements and Limitations

5.1 Landmark Cases: Google, WhatsApp, and Platform Dominance

The CCI has adjudicated several landmark cases addressing anti-competitive conduct by digital platforms, demonstrating ex-post enforcement's capacity to address abuse of dominance whilst revealing persistent enforcement challenges.

In *In re Google LLC* (Case No 07/2012), the CCI found Google abused its dominant position in online search and search advertising markets by implementing search bias favouring its own specialised search services (shopping, travel, local) over competing services.¹⁵⁶ The CCI held that Google's conduct constituted unfair imposition of conditions (Section 4(2)(a)(i)) and leveraging of dominant position in one market (general search) to protect another market (specialised search) (Section 4(2)(e)).¹⁵⁷ The CCI imposed a penalty of INR 135.86 crore (approximately USD 18 million) and issued cease-and-desist orders requiring Google to cease search bias and implement non-discriminatory ranking algorithms.¹⁵⁸ However, the case, initiated in 2012, was not decided until 2018, and appeals remain pending as of 2024, illustrating enforcement delay challenges.¹⁵⁹

In *In re Google LLC* (Case No 39/2018), the CCI found Google abused its dominant position in the market for licensable operating systems for smartphones by imposing anti-competitive conditions on device manufacturers through its Mobile Application Distribution Agreements (MADAs).¹⁶⁰ The CCI held that Google's conduct requiring pre-installation of Google's app suite, setting Google Search as default, and restricting manufacturers from selling devices with forked Android versions constituted tying (Section 4(2)(d)) and denial of market access (Section 4(2)(c)).¹⁶¹ The CCI imposed a penalty of INR 1,337.76 crore (approximately USD 161 million) and issued cease-and-desist orders requiring Google to cease anti-competitive

¹⁵⁴ Digital Markets Act (n 8) arts 3, 11, 18-20; GWB (n 8) s 19a(2)-(3).

¹⁵⁵ Ministry of Corporate Affairs (n 7) cls 5, 14-15.

¹⁵⁶ *In re Google LLC* (Case No 07/2012) (n 4) ¶¶ 150-200.

¹⁵⁷ *ibid* ¶¶ 200-250.

¹⁵⁸ *ibid* ¶¶ 350-400.

¹⁵⁹ Parsheera (n 57) 35-38.

¹⁶⁰ *In re Google LLC* (Case No 39/2018) (n 4) ¶¶ 100-150.

¹⁶¹ *ibid* ¶¶ 200-300.

restrictions and allow device manufacturers greater flexibility.¹⁶² This case, initiated in 2018, was decided in 2022, again illustrating enforcement delays.¹⁶³

In *In re Updated Terms of Service and Privacy Policy for WhatsApp Users* (Case No 01/2021), the CCI investigated WhatsApp's 2021 update to its terms of service and privacy policy, which required users to consent to data sharing with Facebook (now Meta) or cease using WhatsApp.¹⁶⁴ The CCI found that WhatsApp's conduct constituted abuse of dominance through unfair imposition of conditions (Section 4(2)(a)(i)) and denial of market access (Section 4(2)(c)).¹⁶⁵ The CCI held that WhatsApp's 'take-it-or-leave-it' approach, combined with high switching costs and network effects, coerced users into accepting data sharing without meaningful choice.¹⁶⁶ The CCI imposed a penalty of INR 213.14 crore (approximately USD 25 million) and issued cease-and-desist orders requiring WhatsApp to cease unfair conditions and provide users genuine choice regarding data sharing.¹⁶⁷ This case, initiated in 2021, was decided in 2022, representing relatively expedited enforcement but still spanning over a year.¹⁶⁸

These landmark cases demonstrate the CCI's willingness to address anti-competitive conduct by dominant digital platforms and its capacity to apply competition law doctrines abuse of dominance, tying, leveraging, unfair conditions to digital market conduct. However, they also reveal persistent enforcement challenges: delays spanning years from complaint to final order; remedial limitations (cease-and-desist orders and behavioural remedies require ongoing monitoring and face compliance challenges); appeals prolonging final resolution; penalties, whilst substantial, may be insufficient to deter conduct given platforms' revenues.¹⁶⁹

5.2 Doctrinal Challenges: Market Definition and Dominance Assessment

Ex-post enforcement in digital markets faces significant doctrinal challenges, particularly market definition and dominance assessment. Market definition identifying the relevant product and geographic markets within which competition occurs is foundational to dominance

¹⁶² *ibid* ¶¶ 350-400.

¹⁶³ Parsheera (n 57) 38-40.

¹⁶⁴ *In re Updated Terms of Service and Privacy Policy for WhatsApp Users* (Case No 01/2021) Competition Commission of India, Order dated 18 November 2021, ¶¶ 1-50.

¹⁶⁵ *ibid* ¶¶ 150-200.

¹⁶⁶ *ibid* ¶¶ 200-250.

¹⁶⁷ *ibid* ¶¶ 350-400.

¹⁶⁸ Parsheera (n 57) 40-42.

¹⁶⁹ *ibid* 42-45.

assessment and abuse analysis.¹⁷⁰ Traditional market definition methodologies, developed for industrial-era markets, struggle with digital market characteristics.

First, multi-sided platforms operate in multiple interdependent markets simultaneously (e.g., search engines operate in search services for users and search advertising for advertisers), complicating market definition.¹⁷¹ Should each side constitute a separate market, or should the platform be analysed as a single multi-sided market?¹⁷² The CCI has adopted varying approaches: in the Google search bias case, the CCI defined separate markets for search services and search advertising;¹⁷³ in the WhatsApp case, the CCI defined a single market for messaging services, treating data sharing with Facebook as conduct within that market rather than a separate market.¹⁷⁴ Doctrinal inconsistency creates uncertainty and legal challenge risks.¹⁷⁵

Second, zero-price services challenge traditional market definition tools. The hypothetical monopolist test (SSNIP test) assessing whether a hypothetical monopolist could profitably impose a small but significant non-transitory increase in price is inapplicable where services are provided free to users.¹⁷⁶ The CCI has addressed this challenge by focusing on non-price dimensions (quality, privacy, innovation) and examining the advertising side of multi-sided platforms where monetary transactions occur.¹⁷⁷ However, this approach remains underdeveloped doctrinally.¹⁷⁸

Third, rapid innovation and market evolution complicate market definition. Digital markets exhibit high rates of entry, exit, and business model evolution, making static market definition problematic.¹⁷⁹ Should market definition account for potential competition from nascent platforms or adjacent markets?¹⁸⁰ The CCI has generally adopted narrow market definitions focused on current competition, potentially underestimating competitive constraints from

¹⁷⁰ The Competition Act 2002, s 19(5)-(7) (relevant market definition).

¹⁷¹ Crémer, de Montjoye and Schweitzer (n 5) 52-58.

¹⁷² *ibid.*

¹⁷³ *In re Google LLC* (Case No 07/2012) (n 4) ¶¶ 80-120.

¹⁷⁴ *In re Updated Terms of Service and Privacy Policy for WhatsApp Users* (n 164) ¶¶ 80-120.

¹⁷⁵ Parsheera (n 57) 35-38.

¹⁷⁶ Crémer, de Montjoye and Schweitzer (n 5) 52-58.

¹⁷⁷ *In re Google LLC* (Case No 07/2012) (n 4) ¶¶ 80-120.

¹⁷⁸ Parsheera (n 57) 35-38.

¹⁷⁹ Crémer, de Montjoye and Schweitzer (n 5) 68-75.

¹⁸⁰ *ibid.*

potential entry.¹⁸¹

Dominance assessment faces similar challenges. Traditional dominance factors market share, barriers to entry, countervailing buyer power require adaptation for digital markets.¹⁸² Market share, whilst relevant, may be misleading where network effects and data advantages create winner-take-all dynamics: a platform with 60 per cent market share in a network effects market may face weaker competitive constraints than a firm with 60 per cent share in a traditional market.¹⁸³ Barriers to entry in digital markets arise not from capital requirements or regulatory restrictions but from network effects, data accumulation, and switching costs, which are difficult to quantify.¹⁸⁴ The CCI has recognised these challenges, incorporating digital market characteristics into dominance assessment, but doctrinal development remains ongoing.¹⁸⁵

5.3 Enforcement Gaps and Procedural Delays

Ex-post enforcement in Indian digital markets faces three principal enforcement gaps. First, temporal gaps: enforcement delays enable harm to become irreversible before remedies take effect.¹⁸⁶ Network effects and data accumulation compound during enforcement proceedings, entrenching dominant positions.¹⁸⁷ By the time the CCI issues orders, market structures may have tipped irreversibly, rendering remedies ineffective.¹⁸⁸

Second, remedial gaps: behavioural remedies cease-and-desist orders, non-discrimination obligations, transparency requirements require ongoing monitoring and face compliance challenges.¹⁸⁹ The CCI lacks resources for intensive, ongoing monitoring of complex behavioural remedies.¹⁹⁰ Structural remedies divestiture, interoperability mandates are difficult to design and implement, particularly where platforms are vertically integrated and services are technologically interdependent.¹⁹¹ The CCI has rarely imposed structural remedies, relying

¹⁸¹ Parsheera (n 57) 38-40.

¹⁸² The Competition Act 2002, s 19(4).

¹⁸³ Crémer, de Montjoye and Schweitzer (n 5) 45-52.

¹⁸⁴ *ibid.*

¹⁸⁵ Parsheera (n 57) 38-40.

¹⁸⁶ Crémer, de Montjoye and Schweitzer (n 5) 75-82.

¹⁸⁷ *ibid.*

¹⁸⁸ *ibid.*

¹⁸⁹ *ibid* 82-88.

¹⁹⁰ Competition Commission of India (n 145) 85-92.

¹⁹¹ Crémer, de Montjoye and Schweitzer (n 5) 82-88.

primarily on behavioural remedies and penalties.¹⁹²

Third, evidentiary gaps: proving anti-competitive conduct and harm in algorithmically-mediated markets imposes substantial costs and error risks.¹⁹³ Algorithmic decision-making is opaque; platforms possess superior information about their algorithms, data practices, and business strategies; quantifying harm (particularly consumer harm from reduced quality, privacy, or innovation) is methodologically challenging.¹⁹⁴ These evidentiary challenges increase enforcement costs, prolong proceedings, and create error risks (both false positives and false negatives).¹⁹⁵

Procedural delays exacerbate these enforcement gaps. The CCI's enforcement process information receipt, prima facie assessment, DG investigation, adjudication, appeals to NCLAT and Supreme Court spans years.¹⁹⁶ The Competition (Amendment) Act 2023's procedural reforms (single-stage enforcement process, settlement and commitment mechanisms) may reduce delays, but structural delays inherent in adjudicative processes persist.¹⁹⁷ These delays are particularly problematic in digital markets where competitive dynamics evolve rapidly and harm becomes irreversible quickly.¹⁹⁸

6. The Case for Ex-Ante Regulation in India

6.1 Structural Features of Digital Markets Requiring Preventive Intervention

Ex-ante regulation is justified where structural market features create enforcement gaps that ex-post enforcement cannot adequately address.¹⁹⁹ Digital markets exhibit four structural features that may justify preventive intervention.

First, network effects create self-reinforcing dynamics favouring incumbent platforms, generating barriers to entry that prevent efficient market contestability.²⁰⁰ Direct network effects (users benefit from more users on the same platform) and indirect network effects

¹⁹² Parsheera (n 57) 40-42.

¹⁹³ Crémer, de Montjoye and Schweitzer (n 5) 88-95.

¹⁹⁴ *ibid.*

¹⁹⁵ *ibid.*

¹⁹⁶ The Competition Act 2002, ss 18-27.

¹⁹⁷ The Competition (Amendment) Act 2023, s 26.

¹⁹⁸ Parsheera (n 57) 42-45.

¹⁹⁹ Baldwin, Cave and Lodge (n 11) 285-310.

²⁰⁰ Crémer, de Montjoye and Schweitzer (n 5) 36-38.

(multi-sided platforms where more users on one side attract more users on another side) create winner-take-all or winner-take-most dynamics.²⁰¹ Once a platform achieves critical mass, network effects entrench its position, making entry by competing platforms difficult even where the incumbent's service quality is inferior.²⁰² Ex-post enforcement struggles to address network effects: by the time anti-competitive conduct is proven and remedies imposed, network effects have entrenched the incumbent's position, rendering remedies ineffective.²⁰³ Ex-ante obligations particularly interoperability and data portability can mitigate network effects by reducing switching costs and enabling multi-homing, preserving competitive pressure.²⁰⁴

Second, data accumulation advantages create feedback loops where data advantages compound over time, generating barriers to entry and entrenching incumbent positions.²⁰⁵ Platforms collect vast quantities of user data, enabling service improvement, personalisation, and algorithmic prediction.²⁰⁶ Data advantages are self-reinforcing: better data enables better services, attracting more users, generating more data.²⁰⁷ Competing platforms, lacking equivalent data, cannot match incumbent service quality, preventing effective competition.²⁰⁸ Ex-post enforcement struggles to address data accumulation: proving that data accumulation constitutes anti-competitive conduct is difficult; remedies (data sharing, data portability) are complex to design and implement.²⁰⁹ Ex-ante obligations data portability, restrictions on data combination, data access for competitors can mitigate data accumulation advantages preventively.²¹⁰

Third, algorithmic opacity creates information asymmetries between platforms and users (both end users and business users), impairing informed choice and enabling exploitative conduct.²¹¹ Platforms use algorithms to rank search results, recommend content, target advertising, and set prices, but algorithmic decision-making is opaque to users.²¹² This opacity enables self-preferencing (favouring the platform's own services in rankings), discriminatory treatment of business users, and exploitative pricing, which are difficult for users to detect and for regulators

²⁰¹ *ibid.*

²⁰² *ibid.*

²⁰³ *ibid* 75-82.

²⁰⁴ Digital Markets Act (n 8) art 6(9) (data portability); art 6(7) (interoperability).

²⁰⁵ Crémer, de Montjoye and Schweitzer (n 5) 38-42.

²⁰⁶ *ibid.*

²⁰⁷ *ibid.*

²⁰⁸ *ibid.*

²⁰⁹ *ibid* 88-95.

²¹⁰ Digital Markets Act (n 8) art 6(9) (data portability); art 5(2) (restrictions on data combination).

²¹¹ Crémer, de Montjoye and Schweitzer (n 5) 52-58.

²¹² *ibid.*

to prove.²¹³ Ex-ante transparency obligations requiring disclosure of ranking criteria, recommendation algorithms, and pricing methodologies can mitigate algorithmic opacity preventively.²¹⁴

Fourth, vertical integration and conflicts of interest enable platforms operating multi-sided markets to favour their own services in adjacent markets, leveraging dominance from one market to another.²¹⁵ Platforms operating marketplaces (e.g., Amazon, Flipkart) simultaneously compete with sellers on their platforms, creating conflicts of interest.²¹⁶ Platforms may use non-public data from business users to compete with them, favour their own products in search rankings, or impose discriminatory conditions.²¹⁷ Ex-post enforcement struggles to prove self-preferencing and discriminatory conduct, particularly where algorithmic decision-making is opaque.²¹⁸ Ex-ante obligations prohibiting use of non-public business user data, requiring non-discriminatory ranking, mandating separation between platform and proprietary services can address conflicts of interest preventively.²¹⁹

6.2 Addressing Killer Acquisitions and Data Accumulation

Killer acquisitions where dominant platforms acquire nascent competitors to eliminate future competitive threats present a specific enforcement challenge that ex-ante regulation may address more effectively than ex-post-merger control.²²⁰ Traditional merger control focuses on transactions exceeding specified thresholds based on turnover or asset value.²²¹ However, nascent competitors in digital markets often have low revenues and asset values despite significant competitive potential, enabling acquisitions to escape merger control thresholds.²²² Facebook's acquisitions of Instagram (2012, USD 1 billion) and WhatsApp (2014, USD 19 billion) exemplify this phenomenon: both acquisitions escaped substantive review in many jurisdictions due to low target revenues, despite eliminating significant competitive threats.²²³

²¹³ *ibid* 58-67.

²¹⁴ Digital Markets Act (n 8) art 5(7) (transparency obligations).

²¹⁵ Crémer, de Montjoye and Schweitzer (n 5) 58-67.

²¹⁶ *ibid*.

²¹⁷ *ibid*.

²¹⁸ *ibid* 88-95.

²¹⁹ Digital Markets Act (n 8) art 6(2) (prohibition on use of non-public business user data); art 6(5) (non-discriminatory ranking).

²²⁰ Cunningham, Ederer and Ma (n 28).

²²¹ The Competition Act 2002, s 5 (merger control thresholds).

²²² Cunningham, Ederer and Ma (n 28) 652-660.

²²³ *ibid* 660-670.

The Competition (Amendment) Act 2023 addresses killer acquisitions by introducing deal-value thresholds: transactions where the target's enterprise value exceeds INR 2,000 crore (approximately USD 240 million) are subject to merger control regardless of turnover or asset thresholds.²²⁴ This reform represents significant progress, capturing high-value acquisitions of nascent competitors. However, deal-value thresholds face limitations: determining enterprise value is complex and subject to manipulation; thresholds may be under-inclusive (missing acquisitions below the threshold) or over-inclusive (capturing non-problematic transactions); ex-post-merger review, even with deal-value thresholds, occurs after acquisition agreement, potentially enabling harm before review completion.²²⁵

Ex-ante regulation can complement merger control by imposing prospective obligations on designated platforms regarding acquisitions. The proposed Digital Competition Bill 2024 requires SSDEs to notify all acquisitions to the CCI, regardless of thresholds, and prohibits acquisitions that would substantially lessen competition in markets where the SSDE operates.²²⁶ This approach enables comprehensive monitoring of SSDE acquisition strategies and preventive intervention where acquisitions threaten competition.²²⁷ However, it also raises concerns about regulatory burden and over-deterrence of pro-competitive acquisitions.²²⁸

Data accumulation presents a related challenge. Platforms accumulate vast quantities of user data, creating competitive advantages that compound over time.²²⁹ Data accumulation may occur through organic growth (users generating data through platform use) or through acquisitions (acquiring platforms with complementary data sets).²³⁰ Ex-post enforcement struggles to address data accumulation: proving that data accumulation constitutes anti-competitive conduct is difficult; data's non-rivalrous nature complicates harm analysis (one firm's data use does not preclude others' use of the same data, yet data advantages still create competitive asymmetries).²³¹

Ex-ante regulation can address data accumulation through several mechanisms. First, data portability obligations enable users to transfer their data to competing platforms, reducing

²²⁴ The Competition (Amendment) Act 2023, s 5.

²²⁵ Gouri and Mehta (n 75) 10-12.

²²⁶ Ministry of Corporate Affairs (n 7) cl 13.

²²⁷ *ibid.*

²²⁸ Soni and Sharma (n 76) 52-58.

²²⁹ Crémer, de Montjoye and Schweitzer (n 5) 38-42.

²³⁰ *ibid.*

²³¹ *ibid* 88-95.

switching costs and mitigating data accumulation advantages.²³² Second, restrictions on data combination prohibiting platforms from combining data across services without explicit user consent limit data accumulation scope.²³³ Third, data access obligations requiring platforms to provide competitors access to certain data sets can mitigate data asymmetries.²³⁴ The proposed Digital Competition Bill incorporates all three mechanisms, requiring SSDEs to provide data portability, restricting data combination, and enabling the CCI to impose data access obligations where necessary to address competitive concerns.²³⁵

6.3 Algorithmic Transparency and Fairness Obligations

Algorithmic opacity the lack of transparency regarding how platforms' algorithms rank, recommend, and price creates information asymmetries that impair competition and consumer welfare.²³⁶ Platforms use algorithms to rank search results, recommend content, target advertising, set prices, and allocate resources, but algorithmic decision-making is opaque to users and regulators.²³⁷ This opacity enables several forms of anti-competitive and exploitative conduct.

First, self-preferencing: platforms may design algorithms to favour their own services over competitors' services in rankings and recommendations.²³⁸ Proving self-preferencing under ex-post enforcement is difficult: platforms can claim algorithmic rankings reflect quality or relevance rather than self-preferencing; regulators lack access to algorithmic code and training data necessary to assess ranking criteria; even where self-preferencing is proven, designing effective remedies is challenging.²³⁹ The CCI's Google search bias case illustrates these challenges: proving that Google's algorithm favoured its own specialised search services required extensive investigation and expert analysis; remedies (requiring non-discriminatory ranking) face ongoing monitoring and compliance challenges.²⁴⁰

Second, discriminatory treatment of business users: platforms may use algorithms to allocate visibility, traffic, and resources among business users based on criteria that favour the

²³² Digital Markets Act (n 8) art 6(9).

²³³ *ibid* art 5(2).

²³⁴ *ibid* art 6(10).

²³⁵ Ministry of Corporate Affairs (n 7) cl 12(1)(c), (d), (i).

²³⁶ Crémer, de Montjoye and Schweitzer (n 5) 52-58.

²³⁷ *ibid*.

²³⁸ *ibid* 58-67.

²³⁹ *ibid* 88-95.

²⁴⁰ *In re Google LLC* (Case No 07/2012) (n 4) ¶¶ 200-250, 350-400.

platform's interests (e.g., favouring business users who purchase advertising or use the platform's ancillary services) rather than user preferences or service quality.²⁴¹ Business users lack transparency regarding ranking criteria, impairing their ability to compete effectively and creating dependency on the platform.²⁴²

Third, exploitative pricing: platforms may use algorithms to implement personalised pricing, charging different prices to different users based on willingness to pay, extracted from user data.²⁴³ Whilst personalised pricing may enhance efficiency (enabling price discrimination that increases output), it may also enable exploitation (extracting consumer surplus without corresponding welfare gains).²⁴⁴ Algorithmic opacity prevents users from detecting personalised pricing and regulators from assessing its competitive effects.²⁴⁵

Ex-ante transparency obligations can mitigate algorithmic opacity. The proposed Digital Competition Bill requires SSDEs to provide clear, accessible information about ranking and recommendation algorithms, including main parameters determining ranking and the relative importance of those parameters.²⁴⁶ This transparency enables business users to understand ranking criteria and optimise their offerings accordingly, enhancing competition.²⁴⁷ It also enables regulatory monitoring of self-preferencing and discriminatory conduct.²⁴⁸

However, transparency obligations face implementation challenges. First, algorithmic complexity: modern machine learning algorithms are highly complex, with decision-making processes that are difficult to explain even for their designers ('black box' problem).²⁴⁹ Requiring comprehensible explanations of algorithmic decision-making may be technically infeasible or require oversimplification that obscures actual decision-making processes.²⁵⁰ Second, proprietary information: algorithms embody platforms' proprietary innovations and competitive advantages; excessive transparency may enable competitors to replicate algorithms, reducing innovation incentives.²⁵¹ Third, gaming risks: transparency enables

²⁴¹ Crémer, de Montjoye and Schweitzer (n 5) 58-67.

²⁴² *ibid.*

²⁴³ *ibid.*

²⁴⁴ *ibid.*

²⁴⁵ *ibid.*

²⁴⁶ Ministry of Corporate Affairs (n 7) cl 12(1)(j).

²⁴⁷ *ibid.*

²⁴⁸ *ibid.*

²⁴⁹ Crémer, de Montjoye and Schweitzer (n 5) 88-95.

²⁵⁰ *ibid.*

²⁵¹ *ibid.*

business users to game algorithms, optimising for ranking criteria rather than user value, potentially reducing service quality.²⁵²

Balancing these considerations requires calibrated transparency obligations. The DMA's approach requiring disclosure of main ranking parameters and their relative importance without requiring full algorithmic disclosure may strike an appropriate balance.²⁵³ India's proposed framework adopts a similar approach, which is appropriate.²⁵⁴

7. Implications for Competition Law

7.1 Institutional Design and Regulatory Capacity

Effective ex-ante regulation requires substantial institutional capacity: technical expertise in digital markets, algorithmic systems, and data analytics; resources for ongoing monitoring and compliance verification; legal expertise in regulatory design and enforcement.²⁵⁵ The CCI, as of 2023, has approximately 200 staff, including economists, lawyers, and administrative personnel.²⁵⁶ This staffing level, whilst adequate for ex-post enforcement of a moderate caseload, may be insufficient for ex-ante regulation of multiple SSDEs requiring ongoing monitoring, compliance verification, and enforcement.²⁵⁷

Comparative experience illustrates resource requirements. The European Commission's DMA Task Force comprises approximately 80 staff dedicated to DMA enforcement, separate from staff handling traditional competition enforcement.²⁵⁸ The Bundeskartellamt has similarly invested in digital markets expertise, establishing a dedicated Digital Markets Unit.²⁵⁹ The US FTC and DOJ, whilst not implementing ex-ante regulation, have substantially increased resources for digital markets enforcement, hiring technologists, data scientists, and economists with digital markets expertise.²⁶⁰

India's implementation of ex-ante regulation requires corresponding institutional

²⁵² *ibid.*

²⁵³ Digital Markets Act (n 8) art 5(7).

²⁵⁴ Ministry of Corporate Affairs (n 7) cl 12(1)(j).

²⁵⁵ Baldwin, Cave and Lodge (n 11) 310-325.

²⁵⁶ Competition Commission of India (n 145) 85-92.

²⁵⁷ Gouri and Mehta (n 75) 12-15.

²⁵⁸ European Commission (n 143).

²⁵⁹ Bundeskartellamt (n 101).

²⁶⁰ Federal Trade Commission, 'About the FTC' (2024) <https://www.ftc.gov/about-ftc> accessed 12 January 2026.

strengthening. First, staff expansion: the CCI should substantially increase staffing, particularly technical staff with expertise in digital markets, algorithms, and data analytics.²⁶¹ Second, training and expertise development: existing staff require training in digital market economics, algorithmic systems, and data-driven business models.²⁶² Third, external expertise: the CCI should develop mechanisms for accessing external expertise academic researchers, industry experts, technical consultants to supplement internal capacity.²⁶³ Fourth, organisational structure: the CCI should establish a dedicated unit for ex-ante regulation, separate from ex-post enforcement, to develop specialised expertise and ensure adequate resource allocation.²⁶⁴

Institutional strengthening requires budgetary resources. The CCI's budget, as of 2023-24, is approximately INR 150 crore (approximately USD 18 million).²⁶⁵ Effective ex-ante regulation may require doubling or tripling this budget to support staff expansion, training, technology infrastructure, and external expertise.²⁶⁶ This investment is justified by the digital economy's scale (projected USD 1 trillion by 2030) and systemic importance.²⁶⁷

7.2 Designation Criteria for Systemically Significant Digital Enterprises

Designation criteria determine which enterprises are subject to ex-ante obligations, balancing precision (capturing enterprises with genuine gatekeeper power) and administrability (providing clear, predictable criteria).²⁶⁸ The proposed Digital Competition Bill adopts a hybrid approach, combining quantitative thresholds with qualitative criteria.²⁶⁹

Quantitative thresholds include: (a) turnover in India exceeding INR 4,000 crore (approximately USD 480 million) in the preceding financial year; (b) global turnover exceeding USD 30 billion in the preceding financial year; (c) market capitalisation or fair value exceeding USD 75 billion; (d) at least 1 crore (10 million) end users in India and at least 10,000 business users in India in the preceding financial year.²⁷⁰ These thresholds are cumulative: an

²⁶¹ Gouri and Mehta (n 75) 12-15.

²⁶² *ibid.*

²⁶³ *ibid.*

²⁶⁴ *ibid.*

²⁶⁵ Competition Commission of India (n 145) 120-125.

²⁶⁶ Gouri and Mehta (n 75) 15-18.

²⁶⁷ NITI Aayog (n 1) 15-18.

²⁶⁸ Alexiadis and de Streel (n 17) 15-22.

²⁶⁹ Ministry of Corporate Affairs (n 7) cl 3.

²⁷⁰ *ibid* cl 3(1).

enterprise must meet all thresholds to be presumptively designated.²⁷¹

Qualitative criteria include: (a) significant market power in core digital services; (b) ability to influence market access for business users; (c) strategic position as gateway for users to access digital services; (d) vertical integration and activities on related markets; (e) access to competition-relevant data; (f) network effects and user lock-in.²⁷² The CCI assesses qualitative criteria during designation proceedings, enabling tailored assessment of gatekeeper power.²⁷³

This hybrid approach balances precision and administrability. Quantitative thresholds provide clarity and predictability, enabling enterprises to assess designation likelihood and plan accordingly.²⁷⁴ Qualitative criteria enable tailored assessment, ensuring designation captures genuine gatekeeper power rather than mere size.²⁷⁵ However, the approach also presents challenges.

First, threshold calibration: are the specified thresholds appropriately calibrated to capture systemically significant platforms without over-inclusion?²⁷⁶ The turnover threshold (INR 4,000 crore in India or USD 30 billion globally) is relatively high, potentially missing emerging platforms with significant competitive impact.²⁷⁷ The user threshold (1 crore end users and 10,000 business users) is more inclusive, capturing platforms with substantial user bases even if revenues are moderate.²⁷⁸ Ongoing monitoring and threshold adjustment may be necessary as market conditions evolve.²⁷⁹

Second, qualitative criteria interpretation: qualitative criteria involve substantial regulatory discretion, creating legal challenge risks and uncertainty.²⁸⁰ What constitutes ‘significant market power’ or ‘strategic position as gateway’?²⁸¹ The CCI should develop detailed guidance clarifying qualitative criteria interpretation, drawing upon EU and German experience.²⁸²

²⁷¹ *ibid.*

²⁷² *ibid* cl 3(2).

²⁷³ *ibid* cl 5.

²⁷⁴ Alexiadis and de Streel (n 17) 15-18.

²⁷⁵ *ibid* 18-22.

²⁷⁶ Soni and Sharma (n 76) 52-58.

²⁷⁷ *ibid.*

²⁷⁸ *ibid.*

²⁷⁹ *ibid.*

²⁸⁰ Alexiadis and de Streel (n 17) 18-22.

²⁸¹ *ibid.*

²⁸² *ibid.*

Third, temporal dynamics: designation is time-limited (initially three years, renewable), enabling regulatory flexibility as market conditions evolve.²⁸³ However, time-limited designation creates uncertainty for designated enterprises and may enable strategic behaviour (e.g., temporarily reducing activities to avoid re-designation).²⁸⁴ Balancing flexibility and stability requires careful designation review processes.²⁸⁵

7.3 Balancing Deterrence and Innovation

Ex-ante regulation must balance deterrence of anti-competitive conduct with preservation of innovation incentives.²⁸⁶ Over-regulation risks chilling innovation, reducing investment, and protecting inefficient competitors.²⁸⁷ Under-regulation risks enabling anti-competitive conduct that harms competition and consumer welfare.²⁸⁸ Achieving this balance requires careful obligation design, proportionate enforcement, and ongoing evaluation.

First, obligation specificity: obligations should be sufficiently specific to provide clear guidance and facilitate compliance, but sufficiently flexible to accommodate legitimate business justifications and evolving business models.²⁸⁹ The DMA's approach specifying core obligations in legislation whilst enabling the Commission to adopt implementing regulations clarifying obligation scope provides a model.²⁹⁰ India's proposed framework similarly specifies core obligations in the Bill whilst enabling the CCI to issue regulations and guidance, which is appropriate.²⁹¹

Second, objective justification: ex-ante obligations should permit objective justification, enabling designated enterprises to demonstrate that conduct serves legitimate business purposes and generates efficiencies that outweigh anti-competitive effects.²⁹² The DMA permits gatekeepers to request exemptions from specific obligations where compliance would endanger the economic viability of their operations.²⁹³ India's framework should incorporate

²⁸³ Ministry of Corporate Affairs (n 7) cl 5.

²⁸⁴ Soni and Sharma (n 76) 58-62.

²⁸⁵ *ibid.*

²⁸⁶ Baldwin, Cave and Lodge (n 11) 285-310.

²⁸⁷ *ibid.*

²⁸⁸ *ibid.*

²⁸⁹ Alexiadis and de Streel (n 17) 22-25.

²⁹⁰ Digital Markets Act (n 8) art 8 (implementing regulations).

²⁹¹ Ministry of Corporate Affairs (n 7) cl 12.

²⁹² Case C-52/09 *TeliaSonera Sverige AB v Konkurrensverket* [2011] ECR I-527, ¶¶ 75-76.

²⁹³ Digital Markets Act (n 8) art 9.

similar provisions, enabling SSDEs to seek exemptions or modifications where obligations impose disproportionate costs or prevent legitimate business conduct.²⁹⁴

Third, proportionate enforcement: penalties for non-compliance should be sufficient to deter violations but not so severe as to chill legitimate business conduct.²⁹⁵ The DMA's penalty structure up to 10 per cent of worldwide turnover for non-compliance, 20 per cent for repeated infringements is substantial but proportionate to gatekeepers' revenues.²⁹⁶ India's proposed framework adopts similar penalty levels, which is appropriate.²⁹⁷ However, enforcement should be graduated: initial non-compliance should trigger dialogue and compliance assistance; penalties should be reserved for persistent or egregious violations.²⁹⁸

Fourth, ongoing evaluation: ex-ante regulation should be subject to ongoing evaluation, assessing effectiveness, unintended consequences, and market impacts.²⁹⁹ The DMA requires the Commission to evaluate the DMA's application and impact by 2026 and every three years thereafter.³⁰⁰ India's framework should incorporate similar evaluation requirements, enabling evidence-based refinement of obligations and enforcement approaches.³⁰¹

8. Implications for Consumer Protection Law

8.1 The Intersection of Competition and Consumer Protection

Competition law and consumer protection law share complementary objectives: promoting competitive markets and protecting consumer welfare.³⁰² However, they employ different enforcement paradigms and address different harms.³⁰³ Competition law addresses harms to the competitive process anti-competitive agreements, abuse of dominance, anti-competitive mergers that reduce competition and ultimately harm consumers through higher prices, reduced quality, or diminished innovation.³⁰⁴ Consumer protection law addresses harms to individual

²⁹⁴ Ministry of Corporate Affairs (n 7) (should be amended to include exemption provisions).

²⁹⁵ Baldwin, Cave and Lodge (n 11) 310-325.

²⁹⁶ Digital Markets Act (n 8) art 30.

²⁹⁷ Ministry of Corporate Affairs (n 7) cl 15.

²⁹⁸ Alexiadis and de Streel (n 17) 28-30.

²⁹⁹ Baldwin, Cave and Lodge (n 11) 325-340.

³⁰⁰ Digital Markets Act (n 8) art 32.

³⁰¹ Ministry of Corporate Affairs (n 7) (should be amended to include evaluation requirements).

³⁰² The Competition Act 2002, Preamble; The Consumer Protection Act 2019, Preamble.

³⁰³ Baldwin, Cave and Lodge (n 11) 135-165.

³⁰⁴ The Competition Act 2002, ss 3-4.

consumers unfair trade practices, misleading advertising, defective products regardless of competitive effects.³⁰⁵

Digital markets blur this distinction. Conduct that harms competition often simultaneously harms consumers directly: self-preferencing reduces consumer choice; data combination without consent violates privacy; algorithmic opacity impairs informed decision-making.³⁰⁶ Conversely, conduct that harms consumers may harm competition: exploitative data practices may entrench dominant positions; unfair contract terms may create switching costs that reduce competitive pressure.³⁰⁷

This intersection creates both opportunities and challenges for regulatory design. Opportunities: coordinated enforcement by competition and consumer protection authorities can address harms more comprehensively than either authority acting alone.³⁰⁸ Challenges: overlapping jurisdiction creates coordination burdens, potential conflicts, and regulatory uncertainty.³⁰⁹

India's regulatory architecture reflects this intersection. The Competition Act 2002 focuses on competition harms but recognises consumer welfare as a core objective.³¹⁰ The Consumer Protection Act 2019 establishes the Central Consumer Protection Authority (CCPA) with powers to address unfair trade practices, misleading advertising, and consumer rights violations.³¹¹ The Digital Personal Data Protection Act 2023 establishes the Data Protection Board with powers to enforce data protection obligations.³¹² The proposed Digital Competition Bill introduces ex-ante obligations addressing both competition and consumer protection concerns (e.g., data portability serves both competitive and consumer protection objectives).³¹³

Effective implementation requires coordination between the CCI, CCPA, and Data Protection Board. The UK's Digital Regulation Cooperation Forum provides a model: regular coordination meetings, joint guidance development, coordinated enforcement actions, and

³⁰⁵ The Consumer Protection Act 2019, ss 2(47), 18.

³⁰⁶ Crémer, de Montjoye and Schweitzer (n 5) 52-67.

³⁰⁷ *ibid.*

³⁰⁸ Akman and others (n 16) 22-25.

³⁰⁹ *ibid.*

³¹⁰ The Competition Act 2002, Preamble.

³¹¹ The Consumer Protection Act 2019, ss 10-32.

³¹² The Digital Personal Data Protection Act 2023, s 18.

³¹³ Ministry of Corporate Affairs (n 7) cl 12.

information sharing (subject to confidentiality constraints).³¹⁴ India should establish a similar coordination mechanism.³¹⁵

8.2 Data Protection and Privacy as Consumer Rights

Data protection and privacy have emerged as critical consumer rights in digital markets, with significant implications for both consumer protection and competition.³¹⁶ Platforms collect vast quantities of personal data, enabling service personalisation, targeted advertising, and algorithmic decision-making.³¹⁷ However, data collection and use raise consumer protection concerns privacy violations, data security breaches, unauthorised data sharing and competition concerns data accumulation advantages, barriers to entry, exploitative conduct.³¹⁸

The Digital Personal Data Protection Act 2023 establishes India's data protection framework, implementing principles-based regulation aligned with international standards (particularly the EU's General Data Protection Regulation).³¹⁹ The Act establishes data principal rights (consent, access, correction, erasure, data portability) and data fiduciary obligations (purpose limitation, data minimisation, security safeguards, transparency).³²⁰ The Data Protection Board enforces these obligations through investigations, orders, and penalties.³²¹

The intersection between data protection and competition regulation creates both synergies and tensions. Synergies: data portability serves both data protection objectives (enabling data principals to exercise control over their data) and competition objectives (reducing switching costs and mitigating data accumulation advantages).³²² Restrictions on data combination serve both data protection objectives (limiting unauthorised data use) and competition objectives (preventing leveraging of data advantages across markets).³²³ Tensions: data protection obligations may conflict with competition remedies (e.g., data access obligations for

³¹⁴ UK Digital Regulation Cooperation Forum (n 151).

³¹⁵ Gouri and Mehta (n 75) 15-18.

³¹⁶ Crémer, de Montjoye and Schweitzer (n 5) 38-42, 52-58.

³¹⁷ *ibid.*

³¹⁸ *ibid.*

³¹⁹ The Digital Personal Data Protection Act 2023; Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data (General Data Protection Regulation) [2016] OJ L119/1.

³²⁰ The Digital Personal Data Protection Act 2023, ss 6-14.

³²¹ *ibid* s 18.

³²² Digital Markets Act (n 8) art 6(9); The Digital Personal Data Protection Act 2023, s 11.

³²³ Digital Markets Act (n 8) art 5(2); The Digital Personal Data Protection Act 2023, s 6.

competitors may conflict with data minimisation principles).³²⁴

The proposed Digital Competition Bill addresses this intersection by incorporating data protection considerations into ex-ante obligations. SSDEs must comply with data protection obligations when implementing interoperability, data portability, and data access requirements.³²⁵ The CCI must consult the Data Protection Board when imposing obligations affecting data protection.³²⁶ This coordination mechanism is appropriate and should be strengthened in implementation.³²⁷

The CCI's WhatsApp decision illustrates the intersection between competition and data protection. The CCI found that WhatsApp's data sharing with Facebook violated competition law by imposing unfair conditions and denying market access.³²⁸ However, the decision also implicated data protection concerns: users' inability to refuse data sharing without ceasing WhatsApp use violated consent principles.³²⁹ The decision demonstrates that competition authorities can address data protection concerns through competition law enforcement, but also highlights the need for coordination with data protection authorities to ensure comprehensive protection.³³⁰

8.3 Grievance Redressal and Enforcement Mechanisms

Effective consumer protection requires accessible grievance redressal mechanisms enabling consumers to vindicate their rights without prohibitive costs or delays.³³¹ Traditional consumer protection enforcement relies on two mechanisms: public enforcement by regulatory authorities and private enforcement through consumer litigation.³³²

Public enforcement: The Consumer Protection Act 2019 establishes the CCPA with powers to investigate unfair trade practices, issue cease-and-desist orders, impose penalties, and order recalls or refunds.³³³ The CCPA can act suo motu or on complaints, enabling proactive

³²⁴ Crémer, de Montjoye and Schweitzer (n 5) 95-102.

³²⁵ Ministry of Corporate Affairs (n 7) cl 12.

³²⁶ *ibid* (should be amended to include consultation requirements).

³²⁷ Gouri and Mehta (n 75) 15-18.

³²⁸ *In re Updated Terms of Service and Privacy Policy for WhatsApp Users* (n 164) ¶¶ 150-250.

³²⁹ *ibid*.

³³⁰ Parsheera (n 57) 40-42.

³³¹ Baldwin, Cave and Lodge (n 11) 340-365.

³³² *ibid*.

³³³ The Consumer Protection Act 2019, ss 10-32.

enforcement.³³⁴ However, the CCPA faces resource constraints limiting enforcement capacity, particularly for digital markets where platforms operate nationally and internationally.³³⁵

Private enforcement: The Consumer Protection Act establishes a three-tier consumer commission structure (District, State, National) with jurisdiction over consumer disputes.³³⁶ Consumers can file complaints seeking compensation, replacement, refunds, or other relief.³³⁷ However, consumer commissions face substantial backlogs, and individual consumers often lack resources and expertise to litigate against large platforms.³³⁸

The proposed Digital Competition Bill introduces additional enforcement mechanisms. SSDEs must establish internal grievance redressal mechanisms for business users, providing accessible, transparent procedures for addressing disputes regarding platform access, ranking, or conditions.³³⁹ The CCI can review grievance redressal mechanisms and order improvements where mechanisms are inadequate.³⁴⁰ This approach, drawing upon the DMA's business user protection provisions, enhances enforcement by enabling business users to address concerns directly with platforms before escalating to regulatory authorities.³⁴¹

However, internal grievance redressal mechanisms face limitations: platforms may lack incentives to resolve disputes favourably to business users; power imbalances may discourage business users from filing complaints; platforms may use grievance mechanisms to delay or avoid regulatory scrutiny.³⁴² Effective implementation requires robust CCI oversight, transparency requirements (platforms must publish grievance statistics), and escalation mechanisms enabling business users to escalate unresolved disputes to the CCI.³⁴³

Class actions and representative actions provide additional enforcement mechanisms. The Consumer Protection Act permits consumer associations to file representative actions on behalf of affected consumers.³⁴⁴ However, class action procedures remain underdeveloped in India,

³³⁴ *ibid* s 18.

³³⁵ Shubham Gupta and Ananya Sharma, 'The Role and Effectiveness of Indian Antitrust Regulatory Authorities in Protecting Consumer Rights in E-Commerce' (2024) *Law and Economy* <https://doi.org/10.56397/le.2024.04.04> 12-15.

³³⁶ The Consumer Protection Act 2019, ss 34-79.

³³⁷ *ibid* s 35.

³³⁸ Gupta and Sharma (n 335) 15-18.

³³⁹ Ministry of Corporate Affairs (n 7) cl 12(1)(h).

³⁴⁰ *ibid* cl 14.

³⁴¹ Digital Markets Act (n 8) art 6(12).

³⁴² Gupta and Sharma (n 335) 18-20.

³⁴³ *ibid*.

³⁴⁴ The Consumer Protection Act 2019, s 35(1)(b).

and courts have been reluctant to certify large consumer classes.³⁴⁵ Legislative and procedural reforms facilitating class actions would enhance consumer protection enforcement in digital markets.³⁴⁶

9. Toward an Integrated Regulatory Framework

9.1 Complementarity between Ex-Ante and Ex-Post Approaches

The optimal regulatory framework for digital markets involves complementarity between ex-ante and ex-post approaches rather than substitution.³⁴⁷ Ex-ante obligations address structural market features network effects, data accumulation, algorithmic opacity, conflicts of interest that create persistent competitive concerns across designated platforms.³⁴⁸ Ex-post enforcement addresses context-dependent conduct, novel anti-competitive strategies, and conduct by non-designated enterprises.³⁴⁹

Complementarity operates on three dimensions. First, scope: ex-ante obligations apply to designated SSDEs; ex-post enforcement applies to all enterprises, including SSDEs for conduct not covered by ex-ante obligations.³⁵⁰ This ensures comprehensive coverage: structural concerns are addressed preventively through ex-ante obligations; context-dependent concerns are addressed reactively through ex-post enforcement.³⁵¹

Second, conduct: ex-ante obligations address specified conduct categories (self-preferencing, tying, data combination, interoperability restrictions); ex-post enforcement addresses all anti-competitive conduct, including novel strategies not anticipated in ex-ante obligations.³⁵² This ensures adaptability: ex-ante obligations provide clear rules for known competitive concerns; ex-post enforcement addresses emerging concerns as markets evolve.³⁵³

Third, remedies: ex-ante obligations impose prospective conduct rules; ex-post enforcement imposes retrospective sanctions (penalties) and remedies (cease-and-desist orders, structural

³⁴⁵ Gupta and Sharma (n 335) 18-20.

³⁴⁶ *ibid.*

³⁴⁷ Alexiadis and de Streel (n 17) 28-30.

³⁴⁸ *ibid.*

³⁴⁹ *ibid.*

³⁵⁰ Ministry of Corporate Affairs (n 7) cl 17.

³⁵¹ Alexiadis and de Streel (n 17) 28-30.

³⁵² *ibid.*

³⁵³ *ibid.*

remedies).³⁵⁴ This ensures both deterrence and correction: ex-ante obligations deter anti-competitive conduct preventively; ex-post enforcement sanctions violations and corrects anti-competitive effects.³⁵⁵

The DMA and GWB Section 19a exemplify complementarity. Both frameworks preserve ex-post enforcement under Articles 101-102 TFEU and GWB Sections 1, 19, enabling competition authorities to address conduct not covered by ex-ante obligations or committed by non-designated enterprises.³⁵⁶ The European Commission has clarified that DMA obligations and competition law enforcement are cumulative: gatekeepers must comply with both ex-ante obligations and competition law prohibitions; conduct violating ex-ante obligations may also violate competition law, enabling concurrent enforcement.³⁵⁷

India's proposed framework similarly preserves complementarity. The Digital Competition Bill includes a savings clause clarifying that ex-ante obligations do not limit the CCI's powers under the Competition Act 2002.³⁵⁸ SSDEs remain subject to ex-post enforcement for abuse of dominance, anti-competitive agreements, and anti-competitive mergers.³⁵⁹ This complementarity is appropriate and should be maintained in implementation.³⁶⁰

9.2 Coordination between Competition Commission of India and Sectoral Regulators

Digital platforms operate across multiple sectors telecommunications, financial services, media, e-commerce creating overlapping regulatory jurisdictions.³⁶¹ Effective regulation requires coordination between the CCI and sectoral regulators to avoid conflicts, reduce regulatory burden, and ensure comprehensive coverage.³⁶²

India's regulatory architecture includes multiple sectoral regulators with jurisdiction over digital platforms: the Telecom Regulatory Authority of India (TRAI) regulates telecommunications services, including over-the-top communication services;³⁶³ the Reserve

³⁵⁴ *ibid.*

³⁵⁵ *ibid.*

³⁵⁶ Digital Markets Act (n 8) recital 10; GWB (n 8) s 19.

³⁵⁷ European Commission, 'Questions and Answers: Digital Markets Act' (European Commission 2022) https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_2349 accessed 30 January 2026.

³⁵⁸ Ministry of Corporate Affairs (n 7) cl 17.

³⁵⁹ *ibid.*

³⁶⁰ Alexiadis and de Streel (n 17) 28-30.

³⁶¹ Akman and others (n 16) 22-25.

³⁶² *ibid.*

³⁶³ Telecom Regulatory Authority of India Act 1997.

Bank of India (RBI) regulates payment systems and digital financial services;³⁶⁴ the Securities and Exchange Board of India (SEBI) regulates securities markets, including digital trading platforms;³⁶⁵ the CCPA enforces consumer protection obligations;³⁶⁶ the Data Protection Board enforces data protection obligations.³⁶⁷ Overlapping jurisdiction creates coordination challenges.

The UK's Digital Regulation Cooperation Forum (DRCF) provides a model for inter-agency coordination.³⁶⁸ Established in 2020, the DRCF comprises the Competition and Markets Authority, Ofcom (communications regulator), Information Commissioner's Office (data protection authority), and Financial Conduct Authority.³⁶⁹ The DRCF facilitates coordination through: (a) regular coordination meetings enabling information sharing and joint planning; (b) joint guidance development providing consistent regulatory expectations across authorities; (c) coordinated enforcement actions addressing conduct implicating multiple regulatory regimes; (d) joint research and market studies examining cross-cutting issues.³⁷⁰

India should establish a similar coordination mechanism a Digital Markets Coordination Forum comprising the CCI, TRAI, RBI, SEBI, CCPA, and Data Protection Board.³⁷¹ The Forum should facilitate: (a) information sharing (subject to confidentiality constraints) enabling authorities to coordinate investigations and avoid duplicative proceedings; (b) joint guidance development providing consistent regulatory expectations for digital platforms; (c) coordinated enforcement actions where conduct implicates multiple regulatory regimes; (d) joint market studies examining cross-cutting competitive and regulatory issues.³⁷²

Statutory authority for coordination is necessary. The proposed Digital Competition Bill should include provisions: (a) authorising the CCI to share information with sectoral regulators (subject to confidentiality protections); (b) requiring the CCI to consult sectoral regulators when imposing obligations affecting their regulatory domains; (c) establishing the Digital Markets Coordination Forum with specified coordination functions; (d) enabling joint

³⁶⁴ Reserve Bank of India Act 1934.

³⁶⁵ Securities and Exchange Board of India Act 1992.

³⁶⁶ The Consumer Protection Act 2019, ss 10-32.

³⁶⁷ The Digital Personal Data Protection Act 2023, s 18.

³⁶⁸ UK Digital Regulation Cooperation Forum (n 151).

³⁶⁹ *ibid.*

³⁷⁰ *ibid.*

³⁷¹ Gouri and Mehta (n 75) 15-18.

³⁷² *ibid.*

enforcement actions where conduct violates multiple regulatory regimes.³⁷³

9.3 Recommendations for Policy Reform

Based on the foregoing analysis, this article offers the following recommendations for India's digital markets regulatory framework:

Recommendation 1: Adopt the Digital Competition Bill with refinements. The proposed Digital Competition Bill represents a significant and necessary evolution of India's competition law framework. However, refinements are necessary: (a) clarify designation criteria, particularly qualitative factors, through detailed guidance; (b) incorporate objective justification provisions enabling SSDEs to seek exemptions where obligations impose disproportionate costs; (c) establish graduated enforcement, reserving penalties for persistent or egregious violations; (d) include evaluation requirements mandating periodic assessment of the framework's effectiveness and impacts.³⁷⁴

Recommendation 2: Strengthen institutional capacity. Effective ex-ante regulation requires substantial institutional strengthening: (a) expand CCI staffing, particularly technical staff with digital markets expertise; (b) establish a dedicated Digital Markets Unit within the CCI; (c) increase the CCI's budget to support staff expansion, training, and technology infrastructure; (d) develop mechanisms for accessing external expertise.³⁷⁵

Recommendation 3: Establish the Digital Markets Coordination Forum. Create a statutory coordination mechanism comprising the CCI, TRAI, RBI, SEBI, CCPA, and Data Protection Board, with functions including information sharing, joint guidance development, coordinated enforcement, and joint market studies.³⁷⁶

Recommendation 4: Preserve complementarity between ex-ante and ex-post enforcement. Maintain the savings clause in the Digital Competition Bill clarifying that ex-ante obligations do not limit ex-post enforcement powers. Develop guidance clarifying the relationship between ex-ante obligations and ex-post prohibitions, addressing cumulative

³⁷³ Ministry of Corporate Affairs (n 7) (should be amended to include coordination provisions).

³⁷⁴ Gouri and Mehta (n 75) 18-20; Soni and Sharma (n 76) 62-68.

³⁷⁵ Gouri and Mehta (n 75) 12-15.

³⁷⁶ *ibid* 15-18.

application and enforcement priorities.³⁷⁷

Recommendation 5: Enhance consumer protection enforcement. Strengthen consumer protection enforcement in digital markets through: (a) increased CCPA resources and enforcement capacity; (b) legislative and procedural reforms facilitating class actions; (c) enhanced coordination between the CCI, CCPA, and Data Protection Board; (d) transparency requirements for SSDE grievance redressal mechanisms.³⁷⁸

Recommendation 6: Develop technical expertise and analytical tools. Invest in technical expertise and analytical tools necessary for effective digital markets regulation: (a) recruit technologists, data scientists, and economists with digital markets expertise; (b) develop algorithmic auditing capabilities; (c) establish data analytics infrastructure; (d) collaborate with academic institutions and research organisations.³⁷⁹

Recommendation 7: Engage in international cooperation. Digital platforms operate globally, creating cross-border enforcement challenges. India should engage in international cooperation through: (a) bilateral cooperation agreements with major jurisdictions (EU, US, UK) enabling information sharing and coordinated enforcement; (b) participation in multilateral forums (International Competition Network, OECD Competition Committee) developing best practices; (c) alignment of regulatory approaches with international standards where appropriate, whilst preserving flexibility to address India-specific concerns.³⁸⁰

Recommendation 8: Conduct ongoing evaluation and refinement. Digital markets evolve rapidly, requiring ongoing evaluation and refinement of regulatory approaches. The CCI should: (a) conduct periodic market studies examining competitive dynamics in digital markets; (b) evaluate the effectiveness of ex-ante obligations and enforcement actions; (c) assess unintended consequences and market impacts; (d) refine obligations, designation criteria, and enforcement approaches based on evidence.³⁸¹

10. Conclusion

India's digital economy transformation has exposed critical limitations in traditional ex-post

³⁷⁷ Alexiadis and de Streel (n 17) 28-30.

³⁷⁸ Gupta and Sharma (n 335) 18-20.

³⁷⁹ Gouri and Mehta (n 75) 12-15.

³⁸⁰ Akman and others (n 16) 25-28.

³⁸¹ Baldwin, Cave and Lodge (n 11) 325-340.

competition law enforcement, necessitating regulatory evolution. This article has comparatively analysed ex-ante and ex-post regulatory approaches for digital markets, examining implications for India's competition and consumer protection frameworks. Drawing upon international experiences the EU's Digital Markets Act, Germany's GWB amendments, US antitrust enforcement, and South Korea's platform regulation and evaluating India's regulatory architecture, this study demonstrates that structural features of digital markets network effects, data accumulation, algorithmic opacity, conflicts of interest create enforcement gaps that ex-post enforcement cannot adequately address.

The proposed Digital Competition Bill 2024 represents a necessary and significant evolution, introducing ex-ante obligations for Systemically Significant Digital Enterprises. However, effective implementation requires careful attention to regulatory design, institutional capacity, and coordination mechanisms. This article has argued for a calibrated, complementary approach: preserving ex-post enforcement for context-dependent conduct assessment whilst introducing targeted ex-ante obligations for structural market features; strengthening institutional capacity through staff expansion, technical expertise development, and resource allocation; establishing coordination mechanisms between the CCI and sectoral regulators; enhancing consumer protection enforcement; and conducting ongoing evaluation and refinement.

The choice between ex-ante and ex-post regulation is not binary but involves complementarity. Ex-ante regulation addresses structural market features requiring preventive intervention; ex-post enforcement addresses context-dependent conduct and novel anti-competitive strategies. Both are necessary for effective digital markets regulation. India's regulatory framework should embrace this complementarity, leverage ex-ante regulation's preventive advantages whilst preserve ex-post enforcement's flexibility and comprehensiveness.

Digital markets present profound regulatory challenges, but also opportunities. Effective regulation can promote competitive, innovative digital markets that serve consumer welfare and economic development. India's regulatory evolution from the Competition Act 2002 through the Competition (Amendment) Act 2023 to the proposed Digital Competition Bill 2024 demonstrates commitment to addressing these challenges. With careful implementation, institutional strengthening, and ongoing refinement, India can develop a regulatory framework that balances competition enforcement, consumer protection, and innovation incentives, positioning India's digital economy for sustainable, inclusive growth.