



THE ABUSE OF DOMINANCE THROUGH ADJACENT MARKET EXPANSION: A COMPETITION LAW ANALYSIS

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ABSTRACT :

The digitisation of markets has transformed the analytical problem at the heart of abuse-of-dominance law: firms dominant in one market increasingly leverage that position to capture adjacent, structurally connected markets through tying, bundling, self-preferencing, data leverage and platform design conduct that often escapes conventional price-cost tests. This paper examines abuse of dominance through adjacent market expansion under section 4 of the Competition Act 2002 (India), Article 102 of the Treaty on the Functioning of the European Union, and section 2 of the Sherman Act 1890 (United States). It traces the evolution of the leveraging theory of harm from *Hoffmann-La Roche* through *Tetra Pak*, *Microsoft* and the Google trilogy of cases, and undertakes a close doctrinal analysis of the Competition Commission of India's decisions in the *Android* and *Play Store* matters against their European and American counterparts. It argues that while the essential facilities doctrine and the equally-efficient-competitor test remain useful heuristics, digital ecosystems demand a recalibrated framework attentive to multi-sidedness, network effects and non-price harms, and evaluates the turn toward ex-ante regulation the EU's Digital Markets Act and India's proposed Digital Competition Bill 2024 as a response to the structural limits of ex-post enforcement.

Keywords: *abuse of dominance, adjacent markets, leveraging theory, Section 4 Competition Act, Article 102 TFEU, essential facilities doctrine, digital markets, Google Android, self-preferencing*

I. INTRODUCTION

Competition law has traditionally organised itself around discrete relevant markets, each separately defined by demand-side substitutability and each analysed as a largely self-contained arena of rivalry.¹ Yet dominant firms rarely confine their commercial ambitions to the market in which their dominance was first established. A firm with an entrenched position in one market whether built on network effects, first-mover advantage, intellectual property, or regulatory licence is structurally well placed to extend that position into markets that are technologically, commercially or functionally adjacent to it. The operating system that controls access to a device becomes the gateway to app stores, browsers, maps, payments and cloud storage; the search engine that indexes the internet becomes the gateway to shopping comparison and local business listings; the exchange that clears trades becomes the gateway to data vending and post-trade services. This phenomenon the use of dominance in one market as a springboard into a neighbouring market is the subject of this paper.

The doctrinal difficulty is threefold. First, competition authorities must identify when the exploitation of a lawfully acquired dominant position crosses into unlawful leveraging, given that expansion and diversification are themselves ordinary and generally pro-competitive features of a market economy.² Second, the conduct through which adjacent markets are captured tying, bundling, self-preferencing, exclusive dealing, margin squeeze, data leverage and interoperability restrictions is heterogeneous, and no single legal test captures its full range. Third, and increasingly pressingly, digital ecosystems complicate the very idea of a bounded relevant market: platforms are often multi-sided, monetise attention rather than price, and integrate services so tightly that the boundary between one market and its neighbour becomes analytically unstable.³

This paper proceeds in eight further parts. Part II develops the conceptual architecture of dominance, leveraging and adjacency. Part III sets out the Indian statutory framework under the Competition Act 2002. Part IV compares this with Article 102 TFEU in the European Union and section 2 of the Sherman Act in the United States. Part V examines the principal doctrinal tools used to assess adjacent-market abuse tying and bundling, the essential facilities doctrine, refusal to deal, margin squeeze and self-preferencing. Part VI undertakes a detailed analysis of Indian case law, principally the Competition Commission of India's decisions concerning Google's Android and Play Store ecosystems, alongside earlier precedents such as *MCX Stock Exchange v*

¹Massimo Motta, *Competition Policy: Theory and Practice* (Cambridge University Press 2004) 115–119.

²Richard Whish and David Bailey, *Competition Law* (10th edn, Oxford University Press 2021) 199–201.

³OECD, 'Abuse of Dominance in Digital Markets' (2020) DAF/COMP(2020)9, 14–19.

National Stock Exchange. Part VII turns to foreign jurisprudence the European Union's *Microsoft*, *Google Shopping* and *Google Android* decisions, and the American *Microsoft* litigation and its progeny. Part VIII considers recent regulatory developments, including the EU's Digital Markets Act and India's proposed Digital Competition Bill 2024. Part IX offers a critical assessment of the adequacy of existing doctrine, and Part X concludes.

II. CONCEPTUAL FRAMEWORK: DOMINANCE, LEVERAGING AND ADJACENT MARKETS

A. Dominance as a Threshold Concept

Dominance is ordinarily understood, in both Indian and European law, as a position of economic strength that enables a firm to behave to an appreciable extent independently of its competitors, customers and, ultimately, consumers.⁴ Section 4 of the Competition Act 2002 defines dominant position in near-identical terms, and Indian tribunals have repeatedly relied on the European jurisprudence particularly *United Brands* and *Hoffmann-La Roche* as persuasive authority given the structural similarity of the two provisions.⁵ Dominance is not itself unlawful. What section 4(1) of the Act prohibits is the *abuse* of that position a structural feature (dominance) is legal; conduct that instrumentalises the structural feature to distort competition is not.

Under Article 102 TFEU, the Court of Justice in *Hoffmann-La Roche v Commission* defined abuse as conduct which, through recourse to methods different from those governing normal competition, has the effect of hindering the maintenance or growth of competition.⁶ American law takes a structurally different approach: section 2 of the Sherman Act condemns monopolisation and attempts to monopolise, but reflecting a more permissive, efficiency-oriented tradition requires proof of monopoly power *and* the wilful acquisition or maintenance of that power through exclusionary rather than competitive means, as articulated in *United States v Grinnell Corp.*⁷ The comparative exercise in this paper is thus not merely descriptive: it reveals that the three regimes calibrate the balance between deterring exclusionary leverage and protecting the legitimate fruits of competitive success quite differently.

B. The Concept of Adjacent Markets

An adjacent market may be defined as a distinct relevant market separately delineated under standard demand and supply-side substitutability analysis that is connected to the dominant firm's home market through complementarity, vertical linkage, or shared infrastructure, such that success in the home market confers a structural advantage in the adjacent one.⁸ Adjacency can take several forms. *Vertical adjacency* arises where the dominant firm operates at one level of a value chain and expands into an upstream or downstream level as where a stock exchange dominant in trading services expands into the adjacent market for market data and clearing.⁹ *Complementary adjacency* arises where two products or services are consumed together, such that control of one increases the attractiveness or necessity of the dominant firm's version of the other the paradigm example being an operating system and the applications that run on it. *Infrastructural adjacency* arises where the dominant firm controls a bottleneck facility, gateway or platform through which access to the adjacent market must be obtained for example, an app distribution platform through which all competing applications must pass to reach consumers.

The economic literature identifies leveraging as the mechanism by which dominance in one market is converted into an advantage in an adjacent one.¹⁰ Leveraging theories of harm were historically treated with scepticism by the Chicago School, which argued that a monopolist generally cannot extract more than a single 'monopoly rent' and has no independent incentive to monopolise a second market, since a firm can typically capture the full value of monopoly power in the primary market through pricing alone the so-called single monopoly profit theorem.¹¹ Subsequent post-Chicago scholarship, particularly the work of Whinston, demonstrated that the single monopoly profit theorem holds only under restrictive assumptions fixed proportions, no product differentiation in the tied market, and no threat of entry and that leveraging can be independently profitable and welfare-reducing where the tied market exhibits scale economies, network effects, or potential entry that the incumbent wishes to deter.¹² Digital markets, characterised precisely by strong direct and indirect network effects, economies of scope in data, and multi-homing costs, are the paradigm case in which the post-Chicago critique

⁴Competition Act 2002, s 4 Explanation (a); Case 27/76 *United Brands Co v Commission* [1978] ECR 207, para 65.

⁵*CCI v Fast Way Transmission Pvt Ltd* (2018) 4 SCC 316 [23]–[26]; *MCX Stock Exchange Ltd v National Stock Exchange of India Ltd*, Case No 13 of 2009 (CCI, 23 June 2011) para 5.20.

⁶Case 85/76 *Hoffmann-La Roche & Co AG v Commission* [1979] ECR 461, para 91.

⁷*United States v Grinnell Corp* 384 US 563 (1966) 570–571.

⁸Nicolas Petit, *Big Tech and the Digital Economy: The Monigopoly Scenario* (Oxford University Press 2020) 88–93.

⁹See *MCX Stock Exchange Ltd v National Stock Exchange of India Ltd*, Case No 13 of 2009 (CCI, 23 June 2011).

¹⁰Jean Tirole, 'The Analysis of Tying Cases: A Primer' (2005) 1 *Competition Policy International* 1, 3–8.

¹¹Robert H Bork, *The Antitrust Paradox: A Policy at War with Itself* (Free Press 1978) 372–375.

¹²Michael D Whinston, 'Tying, Foreclosure, and Exclusion' (1990) 80 *American Economic Review* 837, 838–844.

bites hardest which explains why leveraging theories have experienced a marked revival in the platform economy.

C. Mechanisms of Adjacent Market Foreclosure

Four mechanisms recur across the case law examined in this paper. *Tying and bundling* condition the supply of a dominant product on the acquisition of a second, adjacent product, artificially inflating the adjacent product's market share irrespective of its merits.¹³ *Self-preferencing* occurs where a vertically integrated platform ranks, displays or promotes its own downstream offering ahead of rivals that depend on the platform for access to consumers.¹⁴ *Denial of access or discriminatory access* to an essential input data, application programming interfaces, or technical interoperability starves rivals in the adjacent market of a resource they need to compete on the merits.¹⁵ *Exclusivity and anti-fragmentation obligations* imposed on complementors original equipment manufacturers, app developers, or distributors foreclose competitors from reaching the same complementors, and were central to the Competition Commission of India's findings against Google's Mobile Application Distribution Agreements.¹⁶

III. THE STATUTORY FRAMEWORK IN INDIA

A. Section 4 of the Competition Act 2002

Section 4(1) of the Competition Act 2002 prohibits any enterprise or group from abusing a dominant position. Section 4(2) enumerates six categories of abuse: directly or indirectly imposing unfair or discriminatory conditions or prices, including predatory pricing (section 4(2)(a)); limiting or restricting production, markets, technical or scientific development (section 4(2)(b)); applying dissimilar conditions to equivalent transactions with different parties, thereby placing them at a competitive disadvantage (section 4(2)(c)); making the conclusion of contracts subject to supplementary obligations unconnected with the subject of the contracts the statutory basis for tying claims (section 4(2)(d)); and using dominance in one relevant market to enter into, or protect, another relevant market (section 4(2)(e)).¹⁷ Section 4(2)(e) is the provision of most direct relevance to this paper: it is India's explicit statutory leveraging clause, textually broader than anything found in Article 102 TFEU, which contains no equivalent express cross-market provision and instead relies on judicial extension of the general abuse standard to leveraging scenarios.

The Explanation to section 4 defines a 'dominant position' as a position of strength enjoyed by an enterprise in the relevant market which enables it to operate independently of competitive forces or to affect its competitors, consumers or the relevant market in its favour.¹⁸ Section 19(4) directs the Commission to have regard to a non-exhaustive list of factors in assessing dominance, including market share, size and resources, economic power, vertical integration, dependence of consumers, and entry barriers.¹⁹ Determination of the relevant market is a statutory precondition to any finding of dominance, and section 2(r) read with sections 19(5)-(7) requires the Commission first to delineate the relevant product and geographic market before assessing dominance within it a sequencing the Supreme Court has treated as jurisdictionally mandatory.²⁰

B. Judicial Elaboration

The Supreme Court's decision in *CCI v Bharti Airtel Ltd* confirmed that the CCI's jurisdiction under sections 3 and 4 is distinct from, and cannot be ousted by, sector-specific regulatory jurisdiction a ruling of importance for adjacent-market cases in regulated sectors such as telecommunications and securities, where a sectoral regulator may have parallel jurisdiction.²¹ In *Excel Crop Care Ltd v CCI*, the Supreme Court clarified the relevant market determination methodology and endorsed reliance on the hypothetical monopolist test drawn from EU and US practice, underscoring the comparative orientation that pervades Indian jurisprudence in this field.²² The National Company Law Appellate Tribunal, as the appellate body for CCI orders since 2017, has since become the principal forum for elaborating section 4(2)(e), most significantly in its 2023 judgment upholding the Commission's findings against Google.²³

¹³Case T-201/04 Microsoft Corp v Commission [2007] ECR II-3601, paras 842-869.

¹⁴Case AT.39740 Google Search (Shopping) (Commission Decision, 27 June 2017) paras 592-596.

¹⁵Microsoft Corp (n 13), paras 319-436.

¹⁶In Re: Umar Javeed, Sukarma Thapar and Aaqib Javeed v Google LLC and Google India Pvt Ltd, Case No 39 of 2018 (CCI, 20 October 2022) paras 391-420.

¹⁷Competition Act 2002, s 4(2)(a)-(e).

¹⁸Competition Act 2002, s 4 Explanation (a).

¹⁹Competition Act 2002, s 19(4)(a)-(m).

²⁰CCI v Bharti Airtel Ltd (2019) 2 SCC 521 [94]-[97].

²¹Bharti Airtel (n 20) [101]-[107].

²²Excel Crop Care Ltd v CCI (2017) 8 SCC 47 [61]-[65].

²³Google LLC v CCI, Competition Appeal (AT) No 1 of 2023 (NCLAT, 29 March 2023).

C. The 2023 Amendment

The Competition (Amendment) Act 2023 introduced several changes of relevance to adjacent-market abuse, including a revised definition of 'control' based on material influence, a deal-value threshold for merger notification aimed at capturing digital acquisitions that evade turnover-based thresholds, and a settlement and commitment mechanism for section 4 proceedings modelled loosely on the EU's Article 9 commitment procedure under Regulation 1/2003.²⁴ The deal-value threshold responds directly to a documented pattern of 'killer acquisitions' the purchase of nascent adjacent-market competitors below existing thresholds precisely to neutralise future competitive threats a concern ventilated extensively in the Report of the Competition Law Review Committee of 2019.²⁵

IV. COMPARATIVE STATUTORY FRAMEWORK: THE EUROPEAN UNION AND THE UNITED STATES

A. Article 102 TFEU

Article 102 TFEU prohibits any abuse by one or more undertakings of a dominant position within the internal market, or a substantial part of it, in so far as it may affect trade between Member States. Unlike section 4(2)(e), Article 102 contains no express cross-market leveraging provision; the four illustrative categories in Article 102(a)-(d) are drafted around unfair pricing, limiting production, discrimination, and tying, and it fell to the Court of Justice to develop leveraging as an autonomous species of abuse through case law beginning with *Commercial Solvents v Commission*, where the Court held that a producer dominant in a raw material could not cease supplying a downstream manufacturer with which it began to compete, since to do so would eliminate a competitor in the derivative market.²⁶ *Tetra Pak International v Commission* extended the doctrine to permit a finding of abuse in a market where the dominant firm was not itself dominant, provided there existed 'close associative links' between the dominated and the associated market the clearest continental European articulation of pure leveraging liability, and one the General Court and Court of Justice have both since reaffirmed.²⁷

The Commission's 2009 Guidance Paper on enforcement priorities under Article 102 formally adopted the 'as-efficient-competitor' (AEC) test as the preferred analytical tool for price-based exclusionary conduct, asking whether a hypothetical competitor as efficient as the dominant firm would be excluded by the impugned conduct.²⁸ The Court of Justice's 2017 judgment in *Intel Corp v Commission* qualified the earlier per se approach to loyalty rebates articulated in *Hoffmann-La Roche*, holding that where a dominant undertaking submits evidence that its conduct was not capable of restricting competition, the Commission is obliged to analyse the actual or potential foreclosure effect using the AEC test and the surrounding economic context a significant move toward an effects-based standard that has since informed the Commission's approach to non-price self-preferencing conduct as well.²⁹

B. Section 2 of the Sherman Act

American monopolisation law under section 2 of the Sherman Act 1890 is structured around two elements: the possession of monopoly power in the relevant market, and the wilful acquisition or maintenance of that power by anticompetitive, as opposed to competitive, means as articulated in *United States v Grinnell Corp* and refined in *Verizon Communications Inc v Law Offices of Curtis V Trinko LLP*, where the Supreme Court emphasised the primacy of the incentive to innovate and warned against chilling the legitimate pursuit of monopoly profits, which the Court described as an important element of the free-market system.³⁰ American courts have been markedly more reluctant than their European counterparts to impose a duty to deal or share an essential facility with rivals in an adjacent market, *Trinko* itself declining to extend antitrust liability to a regulated incumbent's failure to provide adequate interconnection, on the ground that existing sectoral regulation and the risk of chilling investment counselled judicial restraint.³¹

Leveraging into an adjacent market nonetheless remains actionable in the United States where it takes the form of exclusionary conduct rather than a mere refusal to deal, as demonstrated by *United States v Microsoft Corp*, in which the DC Circuit upheld findings that Microsoft's commingling of Internet Explorer code with the Windows operating system, exclusive dealing arrangements with original equipment manufacturers, and technical restrictions on

²⁴Competition (Amendment) Act 2023, ss 6, 20, 48A-48B.

²⁵Ministry of Corporate Affairs, Report of the Competition Law Review Committee (2019) 34-41.

²⁶Joined Cases 6/73 and 7/73 Istituto Chemioterapico Italiano SpA and Commercial Solvents Corp v Commission [1974] ECR 223, paras 25-27.

²⁷Case T-83/91 Tetra Pak International SA v Commission [1994] ECR II-755, paras 115-122, affirmed Case C-333/94 P Tetra Pak International SA v Commission [1996] ECR I-5951, paras 25-31.

²⁸European Commission, 'Guidance on the Commission's Enforcement Priorities in Applying Article 82 EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings' [2009] OJ C45/7, paras 23-27.

²⁹Case C-413/14 P Intel Corp v Commission [2017] ECLI:EU:C:2017:632, paras 137-147.

³⁰United States v Grinnell Corp 384 US 563 (1966) 570-571; Verizon Communications Inc v Law Offices of Curtis V Trinko LLP 540 US 398 (2004) 407.

³¹Verizon Communications Inc v Law Offices of Curtis V Trinko LLP 540 US 398 (2004) 411-415.

removing the browser constituted unlawful maintenance of its operating-system monopoly by protecting it from the nascent threat that browser-based middleware posed to the applications barrier to entry.³² Attempted monopolisation of a second, adjacent market is separately actionable under the Sherman Act where the plaintiff proves specific intent, anticompetitive conduct, and a dangerous probability of achieving monopoly power in that second market, as set out in *Spectrum Sports Inc v McQuillan*.³³ More recently, the Federal Trade Commission and a coalition of state attorneys-general have pursued Meta Platforms and Amazon under section 2 theories premised substantially on adjacent-market acquisition and self-preferencing, litigation that remains ongoing and reflects a renewed American appetite for leveraging claims in digital markets after decades of relative dormancy.³⁴

C. A Comparative Observation

Three points of structural divergence emerge. First, only Indian law contains an express statutory leveraging clause; the EU and US doctrines are judge-made extrapolations from a general abuse or monopolisation standard. Second, the EU and Indian regimes both permit liability where the dominant firm is not itself dominant in the adjacent market, provided a sufficiently close associative link exists between the two markets, whereas American law under *Trinko* and its progeny remains considerably more reluctant to impose affirmative duties to deal that facilitate rivals' entry into adjacent markets. Third, the EU and India have both moved, through the Digital Markets Act and the proposed Digital Competition Bill respectively, toward ex-ante structural obligations targeted specifically at digital gatekeepers, a regulatory strategy that has no present American federal analogue notwithstanding repeated congressional proposals.³⁵

V. DOCTRINAL TOOLS FOR ASSESSING ADJACENT-MARKET ABUSE

A. Tying and Bundling

Tying arrangements where the sale of a tying product is conditioned on the purchase of a tied product are the classical mechanism of adjacent-market leverage and are expressly proscribed by section 4(2)(d) of the Competition Act, which requires proof of a dominant tying product, a separate tied product, coercion, a foreclosure effect on competitors in the tied market, and the absence of legitimate technical or commercial justification.³⁶ European law applies a substantially similar four-element test under Article 102(d), refined in *Microsoft v Commission*, which held that the bundling of Windows Media Player with the Windows operating system satisfied each element notwithstanding the absence of any formal contractual tie, because the technical integration itself amounted to functional coercion depriving original equipment manufacturers and consumers of any realistic choice.³⁷ American law, by contrast, historically treated certain tying arrangements as per se illegal under *Jefferson Parish Hospital District No 2 v Hyde*, though the DC Circuit in the Microsoft litigation departed from strict per se treatment for platform software ties, applying instead a modified rule-of-reason analysis in recognition of the genuine efficiencies that technological integration can generate.³⁸

B. The Essential Facilities Doctrine

Where an adjacent market cannot be entered without access to an input controlled by the dominant firm physical infrastructure, a distribution channel, or increasingly a dataset or interface the essential facilities doctrine imposes a conditional duty to grant access on fair, reasonable and non-discriminatory terms. The doctrine originates in American jurisprudence in *MCI Communications Corp v AT&T Co*, which identified four elements: control of an essential facility by a monopolist, a competitor's inability practically or reasonably to duplicate it, denial of its use, and the feasibility of providing access.³⁹ The doctrine's American vitality was substantially curtailed by *Trinko*, which questioned its very existence as an antitrust cause of action independent of specific statutory duties to deal.⁴⁰ European law reached a broadly similar four-part test through *Oscar Bronner v Mediaprint*, which added the requirement that refusal be likely to eliminate all competition in the downstream market and that no objective justification exist for the refusal a stringent formulation the Court has since relaxed somewhat in the context of intellectual property and data access in *IMS Health GmbH v NDC Health GmbH* and,

³²United States v Microsoft Corp 253 F3d 34 (DC Cir 2001) 58-80.

³³Spectrum Sports Inc v McQuillan 506 US 447 (1993) 456-459.

³⁴Federal Trade Commission v Meta Platforms Inc, No 1:20-cv-03590 (DDC, filed 4 December 2020); Federal Trade Commission v Amazon.com Inc, No 2:23-cv-01495 (WD Wash, filed 26 September 2023).

³⁵American Innovation and Choice Online Act, S 2992, 117th Cong (2022) (not enacted).

³⁶In Re: Uber India Systems Pvt Ltd, Case No 6 of 2019 (CCI, 4 November 2021) paras 18-24; see also FICCI Multiplex Association of India v United Producers/Distributors Forum, Case No 1 of 2009 (CCI, 25 May 2011).

³⁷Microsoft Corp (n 13), paras 859-869.

³⁸Jefferson Parish Hospital District No 2 v Hyde 466 US 2 (1984) 12-18; United States v Microsoft Corp 253 F3d 34 (DC Cir 2001) 84-95.

³⁹MCI Communications Corp v American Telephone & Telegraph Co 708 F2d 1081 (7th Cir 1983) 1132-1133.

⁴⁰Verizon Communications Inc v Law Offices of Curtis V Trinko LLP 540 US 398 (2004) 410-411.

most significantly for digital markets, in the Commission's Google Android and Google Shopping decisions, where access-denial concerns were folded into a broader self-preferencing and exclusivity analysis rather than pleaded as a standalone refusal to supply.⁴¹

Indian tribunals imported the essential facilities analysis directly from this European lineage in *MCX Stock Exchange Ltd v National Stock Exchange of India Ltd*, in which the Commission found that the National Stock Exchange's zero-pricing of transaction charges in the currency derivatives segment, cross-subsidised from its dominant position in the equity cash segment, was designed to foreclose MCX-SX's entry into the adjacent currency derivatives market, and constituted an abuse under sections 4(2)(a)(ii), 4(2)(b) and 4(2)(e).⁴²

C. Margin Squeeze

Margin squeeze arises where a vertically integrated dominant firm sets the wholesale price it charges to downstream rivals for an essential upstream input at a level that, combined with the retail price it charges end-consumers, leaves an as-efficient downstream competitor with insufficient margin to compete profitably. The European Court of Justice confirmed margin squeeze as an autonomous form of abuse, independent of any separate finding of refusal to supply, in *Deutsche Telekom AG v Commission* and *TeliaSonera Sverige AB*, the latter clarifying that the AEC test should ordinarily be applied by reference to the dominant firm's own downstream costs.⁴³ The doctrine translates readily to adjacent-market foreclosure wherever the dominant firm is vertically integrated into the adjacent market and controls a wholesale input required by its downstream rivals in that market, a fact pattern of obvious relevance to platform ecosystems in which the platform operator both provides distribution infrastructure and competes as an application provider on the very platform it controls.

D. Self-Preferencing

Self-preferencing the practice by which a vertically integrated intermediary favours its own downstream products or services over those of rivals that depend on the intermediary for access to the market has emerged as the signature theory of harm in digital-platform leveraging cases, most prominently in the Commission's *Google Search (Shopping)* decision, which found that Google systematically positioned and displayed its own comparison-shopping service more favourably within general search results than competing comparison-shopping services, irrespective of relevance, thereby diverting traffic on the basis of the platform's own market position rather than the merits of its downstream product.⁴⁴ The General Court's 2021 judgment, subsequently upheld by the Grand Chamber of the Court of Justice in September 2024, is significant for confirming that self-preferencing can constitute an autonomous, non-price form of leveraging abuse distinct from tying, refusal to supply, or margin squeeze, assessed instead by reference to whether the conduct departs from competition on the merits.⁴⁵ Indian law has not yet produced an equivalent standalone self-preferencing doctrine, though the Commission's Android findings incorporate self-preferencing concerns particularly Google's placement conditions for its own applications within the section 4(2)(e) leveraging framework, and the proposed Digital Competition Bill 2024 would introduce an explicit ex-ante prohibition on self-preferencing by systemically significant digital enterprises independent of any finding of dominance-based abuse.⁴⁶

E. The Equally-Efficient-Competitor Standard and Its Limits

Across all three jurisdictions, price-based exclusionary conduct is typically assessed against whether a hypothetical competitor as efficient as the dominant incumbent would be excluded by the impugned conduct an approach the Court of Justice endorsed in *Post Danmark A/S v Konkurrencerådet* as consistent with the objective of protecting competition rather than individual competitors.⁴⁷ The test's central limitation in the adjacent-market context is that it is calibrated for price-cost squeezes and translates poorly to non-price conduct such as design choices, default settings, interoperability restrictions and algorithmic ranking, where there is no comparable cost benchmark against which to measure exclusion a gap the General Court expressly acknowledged in *Google Shopping* when it declined to require an AEC-style quantitative test for the self-preferencing conduct at issue, holding a qualitative assessment

⁴¹Case C-7/97 Oscar Bronner GmbH & Co KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co KG [1998] ECR I-7791, paras 41-46; Case C-418/01 IMS Health GmbH v NDC Health GmbH [2004] ECR I-5039, paras 34-52.

⁴²MCX Stock Exchange Ltd v National Stock Exchange of India Ltd, Case No 13 of 2009 (CCI, 23 June 2011) paras 5.63-5.75, affirmed Competition Appellate Tribunal, Appeal No 15 of 2011 (2014).

⁴³Case C-280/08 P Deutsche Telekom AG v Commission [2010] ECR I-9555, paras 177-183; Case C-52/09 Konkurrenter v TeliaSonera Sverige AB [2011] ECR I-527, paras 31-33.

⁴⁴Case AT.39740 Google Search (Shopping) (Commission Decision, 27 June 2017) paras 344-421, upheld Case T-612/17 Google LLC v Commission [2021] ECLI:EU:T:2021:763 and Case C-48/22 P Google LLC v Commission [2024] ECLI:EU:C:2024:726.

⁴⁵Case C-48/22 P Google LLC v Commission [2024] ECLI:EU:C:2024:726, paras 155-168.

⁴⁶Ministry of Corporate Affairs, Report of the Committee on Digital Competition Law (12 March 2024) cl 8, Digital Competition Bill 2024 (draft).

⁴⁷Case C-209/10 Post Danmark A/S v Konkurrencerådet [2012] ECLI:EU:C:2012:172, paras 21-22.

of the departure from competition on the merits to be sufficient.⁴⁸

VI. ADJACENT MARKET ABUSE IN INDIAN JURISPRUDENCE

A. MCX Stock Exchange v National Stock Exchange: The Foundational Precedent

The Commission's earliest significant engagement with adjacent-market leveraging arose in *MCX Stock Exchange Ltd v National Stock Exchange of India Ltd*, where the informant alleged that NSE, dominant in the cash equity segment, had used that dominance to foreclose competition in the nascent currency derivatives segment by waiving transaction charges entirely and offering free data feeds and co-location facilities, cross-subsidised from its equity-segment revenues.⁴⁹ The Commission delineated the cash equity segment as the relevant market, found NSE dominant within it applying the section 19(4) factors, and held that the zero-pricing strategy in the adjacent currency derivatives segment sustainable only because of NSE's dominance-derived resources in the unrelated cash segment violated sections 4(2)(a)(ii), 4(2)(b)(i) and, critically, 4(2)(e), since NSE had used its dominant position in one relevant market to enter into and protect another relevant market.⁵⁰ The Commission imposed a penalty of Rs 55.5 crore, and the finding was substantially affirmed by the Competition Appellate Tribunal.⁵¹ The case remains doctrinally significant as the clearest early Indian articulation of pure cross-subsidisation leveraging, and it established the interpretive principle since consistently followed that section 4(2)(e) does not require the dominant firm to be independently dominant in the adjacent market, mirroring the European *Tetra Pak* 'associative links' standard.

B. The Google Android Case

The Commission's decision in *Umar Javeed v Google LLC* (the Android case) is the most significant Indian adjacent-market decision to date and closely parallels, while diverging in important respects from, the Commission's contemporaneous European Android investigation. The informants alleged that Google leveraged its dominance in licensable mobile operating systems a market in which the Commission found Google to enjoy dominance, Apple's vertically integrated iOS being excluded from the relevant market as non-licensable to protect and strengthen its position in the downstream markets for app stores, general web search, non-operating-system-specific web browsers, and online video hosting.⁵² The Commission delineated five separate relevant markets and found Google dominant in four of them, and examined Google's Mobile Application Distribution Agreement (MADA), Anti-Fragmentation Agreement, Android Compatibility Commitment, and Revenue Sharing Agreements as the instruments of leverage.

The Commission found, first, that mandatory pre-installation of the entire Google Mobile Suite of eleven applications under the MADA, without any option to uninstall, amounted to an unfair condition imposed on device manufacturers contrary to section 4(2)(a)(i), since it denied competing application developers the market access that pre-installation and default placement confer, particularly given documented status-quo bias among consumers who rarely alter default settings.⁵³ Second, the Commission held that the tying of the Play Store to the mandatory licensing of the entire GMS suite, and the tying of Google Search and Chrome to Play Store licensing, satisfied the section 4(2)(e) leveraging test, given that Google used its dominance in the licensable operating system and app store markets to enter and protect its position in the adjacent search and browser markets.⁵⁴ Third, revenue-sharing agreements conditioned on exclusive pre-installation of Google Search were found to restrict OEMs from pre-installing rival search applications, amounting to abuse under sections 4(2)(b) and 4(2)(e).⁵⁵ The Commission imposed a penalty of approximately Rs 1,337.76 crore and issued a suite of behavioural remedies, including a prohibition on tying MADA to GMS licensing, a requirement to permit uninstallation of pre-installed applications, and a prohibition on exclusivity-linked revenue sharing.⁵⁶

On appeal, the National Company Law Appellate Tribunal substantially upheld the Commission's findings on liability. Google's central defence that section 4 requires a rigorous effects-based analysis, and that the Commission had failed to independently establish anti-competitive effect before concluding abuse was rejected; the Tribunal held that the Commission's findings, considered cumulatively across the five relevant markets, adequately demonstrated foreclosure effects, and that Google's argument understated the significance of the Commission's uncontested findings of dominance across

⁴⁸Case T-612/17 Google LLC v Commission [2021] ECLI:EU:T:2021:763, paras 538-542.

⁴⁹MCX Stock Exchange Ltd v National Stock Exchange of India Ltd, Case No 13 of 2009 (CCI, 23 June 2011) paras 3.1-3.9.

⁵⁰MCX Stock Exchange Ltd (n 49) paras 5.63-5.80.

⁵¹NSE India Ltd v CCI, Appeal No 15 of 2011 (Competition Appellate Tribunal, 14 January 2014).

⁵²In Re: Umar Javeed, Sukarma Thapar and Aaqib Javeed v Google LLC and Google India Pvt Ltd, Case No 39 of 2018 (CCI, 20 October 2022) paras 12-17, 268-290.

⁵³In Re: Umar Javeed v Google LLC, Case No 39 of 2018 (CCI, 20 October 2022) paras 391-403.

⁵⁴Umar Javeed (n 53) paras 404-425.

⁵⁵Ibid paras 426-445.

⁵⁶Ibid paras 610-635.

four markets.⁵⁷ The Tribunal did, however, set aside four of the ten behavioural directions issued by the Commission, including directions requiring Google to permit third-party app stores within the Play Store and to allow OEMs to selectively license individual GMS applications, holding these particular remedies disproportionate or insufficiently linked to the established contraventions, while affirming the underlying liability finding and the quantum of the penalty.⁵⁸ Google's further appeal to the Supreme Court, heard on merits from early 2024, has not disturbed the fundamental structure of the NCLAT's findings on liability, and Google in the interim voluntarily amended several of its India-specific app-distribution policies, including permitting OEMs to license individual applications and un-tying the Play Store from Search and Chrome, in a manner that converges with though remains narrower than the concessions it had earlier accepted in the European Union.⁵⁹

C. The Google Play Store Billing Case

A related but analytically distinct Commission decision concerned Google's Play Store policy mandating the exclusive use of Google Play's in-app billing system for the sale of digital goods and services within Android applications, and its prohibition on developers linking to alternative purchase mechanisms outside the app.⁶⁰ The Commission found Google dominant in the market for licensable app stores for Android smart mobile devices in India, and held that the mandatory imposition of Google Play's proprietary billing system constituted both an unfair condition under section 4(2)(a)(i) and an instance of leveraging under section 4(2)(e), since Google used its dominance in the app store market to enter and protect its position in the adjacent market for payment processing services for app purchases.⁶¹ The Commission imposed a penalty of Rs 936.44 crore and directed Google to permit app developers to use third-party billing systems and to allow users to install apps from sources other than the Play Store.⁶² The decision closely tracks the theory of harm accepted, on different statutory grounds, in the American jury verdict in *Epic Games Inc v Google LLC*, in which a Californian jury found Google's Play Store practices, including its exclusive billing requirements and anti-fragmentation agreements with OEMs, to constitute unlawful monopolisation and unreasonable restraint of trade under sections 1 and 2 of the Sherman Act, a verdict a Ninth Circuit panel largely affirmed and for which the Supreme Court denied certiorari.⁶³

D. Other Notable Indian Precedents

Adjacent-market leveraging concerns have also arisen in more conventional industrial contexts. In *M/s HT Media Ltd v Super Cassettes Industries Ltd*, the Commission examined allegations that a dominant music-label rights holder leveraged its dominance in music licensing to impose unfair conditions on radio broadcasters in the adjacent market for FM radio content acquisition, ultimately finding the pricing structure abusive under sections 4(2)(a)(ii) and 4(2)(c).⁶⁴ In *Schott Glass India Pvt Ltd v CCI*, the Competition Appellate Tribunal considered, though ultimately did not sustain, allegations that a dominant glass tubing manufacturer leveraged its raw-material dominance to foreclose competition in the downstream pharmaceutical glass container market, the Tribunal emphasising the need for rigorous evidentiary proof of both dominance and a demonstrable foreclosure effect in the adjacent market rather than mere vertical integration.⁶⁵ More recently, the Commission's investigation into Amazon and Flipkart's preferential treatment of select sellers on their e-commerce marketplaces while primarily litigated as a section 3(4) vertical restraints matter before the Karnataka High Court and Supreme Court on jurisdictional grounds has been widely read as India's incipient self-preferencing controversy, foreshadowing the kind of platform-neutrality obligations the Digital Competition Bill would formalise.⁶⁶

Taken together, Indian jurisprudence reveals a doctrine that has matured considerably since *MCX-SX*, moving from a relatively simple cross-subsidisation fact pattern to the far more technically demanding multi-market, multi-instrument leveraging analysis required by the platform economy. The Commission's approach in the Google matters demonstrates a willingness to draw heavily on European precedent citing *Tetra Pak*, *Microsoft* and *Google*

⁵⁷Google LLC v CCI, Competition Appeal (AT) No 1 of 2023 (NCLAT, 29 March 2023) paras 187-210.

⁵⁸ Ibid paras 310-340.

⁵⁹Anu Bradford, 'The Brussels Effect and Global Antitrust' (2023) 44 Cardozo Law Review 1191, 1204-1211 (discussing regulatory convergence dynamics in the Google Android matters).

⁶⁰In Re: Match Group Inc and others v Google LLC and Google India Pvt Ltd, Case No 7 of 2020 and connected matters (CCI, 25 October 2022) paras 3-9.

⁶¹In Re: Match Group Inc v Google LLC, Case No 7 of 2020 (CCI, 25 October 2022) paras 92-118.

⁶²In Re: Match Group Inc v Google LLC, Case No 7 of 2020 (CCI, 25 October 2022) paras 145-160.

⁶³Epic Games Inc v Google LLC, No 3:20-cv-05671 (ND Cal, jury verdict 11 December 2023), affirmed *Epic Games Inc v Google LLC*, No 24-3556 (9th Cir, 31 July 2025).

⁶⁴HT Media Ltd v Super Cassettes Industries Ltd, Case No 40 of 2011 (CCI, 3 May 2014) paras 15.31-15.45.

⁶⁵Schott Glass India Pvt Ltd v CCI, Appeal No 91 of 2012 (Competition Appellate Tribunal, 2014), affirming CCI, Case No 3 of 2011 (2012).

⁶⁶Amazon Seller Services Pvt Ltd v CCI, WP No 3363/2020 (Karnataka HC, 11 June 2021); *Amazon Seller Services Pvt Ltd v CCI*, SLP (C) No 8318/2020 (Supreme Court, order dated 9 July 2021).

Shopping directly in its reasoning while adapting the analysis to the explicit textual demands of section 4(2)(e), a provision that, as observed above, has no direct European equivalent and arguably affords the Commission a somewhat more permissive evidentiary starting point for leveraging claims than Article 102 TFEU's judicially constructed doctrine.⁶⁷

VII. ADJACENT MARKET ABUSE IN FOREIGN JURISPRUDENCE

A. *Tetra Pak: The European Foundational Case*

Tetra Pak, dominant in the market for aseptic packaging machines and cartons, was found to have leveraged that dominance into the separate, non-aseptic packaging market in which it was not itself dominant through tying, predatory pricing and exclusive purchasing obligations. The General Court and, on further appeal, the Court of Justice confirmed liability notwithstanding the absence of dominance in the non-aseptic market, holding that 'close associative links' between the dominated and non-dominated markets arising from Tetra Pak's overall market leadership, the complementary nature of the two packaging technologies, and the same customer base sufficed to bring the conduct within Article 86 (now Article 102) TFEU.⁶⁸ *Tetra Pak* remains the doctrinal cornerstone for 'pure leveraging' liability in the European Union, establishing that Article 102 does not require dominance in the market where the abusive effect materialises, provided the requisite associative link with the dominated market is shown a principle subsequently relied upon extensively in digital-platform investigations where dominance in a 'core' market is used to advantage the dominant firm in numerous downstream markets in which, considered in isolation, it might not be independently dominant.

B. *Microsoft: Operating System Leverage in the United States and the European Union*

The parallel American and European Microsoft proceedings, arising from substantially overlapping conduct but decided under different legal standards, offer the clearest comparative illustration of how the leveraging doctrine diverges across jurisdictions. In the United States, the Department of Justice and a coalition of states alleged that Microsoft unlawfully maintained its operating-system monopoly by suppressing the competitive threat that Netscape's Navigator browser and Sun's Java posed as cross-platform middleware capable of eroding the 'applications barrier to entry' that protected Windows. The DC Circuit, applying section 2 of the Sherman Act, upheld findings that Microsoft's commingling of browser and operating-system code, exclusive dealing with OEMs and internet access providers, and contractual restrictions preventing OEMs from removing Internet Explorer constituted unlawful exclusionary conduct, while rejecting the district court's proposed structural break-up remedy as disproportionate and remanding for a more calibrated behavioural remedy.⁶⁹ Notably, the Court of Appeals declined to treat the tying claim under a per se rule, instead applying a modified rule of reason that balanced the anticompetitive foreclosure effect against Microsoft's asserted integration efficiencies a marked departure from the government's preferred per se theory and one that has shaped subsequent American reluctance to treat platform bundling as inherently unlawful.⁷⁰

The European Commission's parallel investigation into Microsoft addressed different but related conduct: the bundling of Windows Media Player with the Windows operating system, and Microsoft's refusal to disclose interoperability information necessary for competing work-group server operating systems to interoperate fully with Windows client PCs. The General Court upheld the Commission's finding that the Windows Media Player bundling satisfied all four elements of unlawful tying under Article 102(d), and separately upheld the finding that Microsoft's refusal to supply interoperability information met the exceptional-circumstances essential-facilities test, since the refused information was indispensable, its refusal risked eliminating all competition in the work-group server market, and it prevented the emergence of new products for which there was consumer demand.⁷¹ The Commission imposed a record fine of €497 million, later supplemented by further periodic penalty payments for continued non-compliance with the interoperability remedy, ultimately totalling over €1.6 billion across the full course of the Commission's enforcement action, underscoring the European Union's markedly more interventionist posture toward operating-system leverage than that ultimately adopted in the United States.⁷²

C. *The Google Trilogy in the European Union*

The European Commission's three decisions against Google *Search (Shopping)* (2017), *Android* (2018) and *AdSense* (2019) collectively constitute the most extensive body of adjacent-market leveraging jurisprudence yet developed anywhere and have proved deeply influential on the Competition

⁶⁷In Re: Umar Javeed v Google LLC, Case No 39 of 2018 (CCI, 20 October 2022) paras 260-267 (discussing comparative European authority).

⁶⁸Case T-83/91 Tetra Pak International SA v Commission [1994] ECR II-755, paras 115-122; Case C-333/94 P Tetra Pak International SA v Commission [1996] ECR I-5951, paras 25-31.

⁶⁹United States v Microsoft Corp 253 F3d 34 (DC Cir 2001) 58-80, 105-107.

⁷⁰Ibid 89-95.

⁷¹Case T-201/04 Microsoft Corp v Commission [2007] ECR II-3601, paras 319-436, 842-869.

⁷²Ibid (upholding the €860 million periodic penalty payment for non-compliance).

Commission of India's own Android reasoning.⁷³ In *Google Shopping*, the Commission found that Google's dominance in general internet search was leveraged to favour its own comparison-shopping service, *Google Shopping*, in the adjacent, separately delineated comparison-shopping services market, through preferential positioning, formatting and display within general search results conduct the Commission characterised as a departure from competition on the merits rather than as tying, refusal to supply, or predatory pricing, and which it fined at €2.42 billion.⁷⁴ The General Court substantially upheld the decision in 2021, and the Court of Justice's Grand Chamber dismissed Google's final appeal in September 2024, confirming self-preferencing as an autonomous, freestanding category of abuse under Article 102 TFEU, assessed without recourse to the AEC price-cost test that governs price-based exclusion.⁷⁵

In *Google Android*, the Commission examining conduct materially identical to that later scrutinised by the Competition Commission of India found that Google's MADA-tied pre-installation of Google Search and Chrome, its anti-fragmentation agreements preventing OEMs from selling devices running Android forks, and its revenue-sharing payments conditioned on exclusive pre-installation of Google Search, together constituted an integrated strategy to protect Google's dominant position in general search against the competitive threat posed by Android forks and alternative search engines. The Commission imposed a fine of €4.34 billion, later reduced modestly to approximately €4.125 billion by the General Court, whose judgment was substantially upheld on further appeal.⁷⁶ The General Court's judgment is notable for endorsing a nuanced, market-by-market assessment of each contractual instrument, ultimately annulling the Commission's finding on the revenue-sharing agreements while upholding the findings on MADA tying and the anti-fragmentation agreements an approach subsequently mirrored in the NCLAT's own instrument-by-instrument partial annulment of certain CCI directions in the Indian Android case, illustrating a convergence in appellate methodology even amid differences in substantive doctrine.

D. Intel and the Recalibration of Rebate Analysis

Intel's exclusivity and 'naked restriction' rebates to computer manufacturers, designed to secure their custom against AMD in the adjacent-but-overlapping x86 CPU market, had initially been condemned by the Commission and General Court applying a near-per se standard drawn from *Hoffmann-La Roche*, under which loyalty rebates by a dominant firm were presumptively abusive without any requirement to demonstrate actual or likely foreclosure effect.⁷⁷ The Court of Justice's 2017 judgment substantially qualified this approach, holding that where a dominant undertaking submits, during the administrative procedure, evidence capable of raising doubt as to the rebate scheme's capacity to restrict competition, the Commission is obliged to analyse that capacity by reference to the AEC test, market coverage, rebate duration and amount, and the presence of any strategy aimed at excluding as-efficient competitors a ruling of considerable importance for adjacent-market cases involving conditional rebates or exclusivity payments used to protect an incumbent's position against encroachment from a neighbouring market.⁷⁸ On remand, the General Court annulled the Commission's fine, finding the Commission's AEC analysis for a subset of the rebates insufficiently rigorous, a further illustration of how effects-based scrutiny has raised the evidentiary bar for leveraging claims premised on financial inducements.⁷⁹

E. Recent American Enforcement: Meta, Amazon and Google Search

American enforcement against adjacent-market leverage has intensified markedly since 2020. In *United States v Google LLC* (the general search case), the District Court for the District of Columbia held in August 2024 that Google's exclusive default-placement agreements with Apple, Mozilla and Android OEMs under which Google paid billions of dollars annually to secure default status for Google Search across browsers and devices constituted unlawful maintenance of monopoly power in the general search services market under section 2 of the Sherman Act, the court finding that the resulting scale advantages in query volume and advertising data created a self-reinforcing feedback loop that foreclosed rivals from the data and revenue needed to compete on the merits.⁸⁰ The court's remedies decision in September 2025 declined to order the divestiture of Chrome or Android sought by the Department of Justice, instead imposing behavioural remedies including a prohibition on exclusive default-placement agreements and mandated data-

⁷³Case AT.39740 Google Search (Shopping) (Commission Decision, 27 June 2017); Case AT.40099 Google Android (Commission Decision, 18 July 2018); Case AT.40411 Google Search (AdSense) (Commission Decision, 20 March 2019).

⁷⁴Case AT.39740 Google Search (Shopping) (Commission Decision, 27 June 2017) paras 662-699.

⁷⁵Case T-612/17 Google LLC v Commission [2021] ECLI:EU:T:2021:763; Case C-48/22 P Google LLC v Commission [2024] ECLI:EU:C:2024:726, paras 155-179.

⁷⁶Case AT.40099 Google Android (Commission Decision, 18 July 2018) paras 876-897; Case T-604/18 Google and Alphabet v Commission (Google Android) [2022] ECLI:EU:T:2022:541, paras 900-1043, appeal dismissed Case C-738/22 P Google and Alphabet v Commission [2025] ECLI:EU:C:2025:410.

⁷⁷Case COMP/C-3/37.990 Intel (Commission Decision, 13 May 2009); Case T-286/09 Intel Corp v Commission [2014] ECR II-0000.

⁷⁸Case C-413/14 P Intel Corp v Commission [2017] ECLI:EU:C:2017:632, paras 133-147.

⁷⁹Case T-286/09 RENV Intel Corp v Commission [2022] ECLI:EU:T:2022:19.

⁸⁰United States v Google LLC, No 1:20-cv-03010 (DDC, 5 August 2024) 130-230.

sharing with qualified competitors, a comparatively restrained outcome that echoes the DC Circuit's earlier rejection of structural relief in the original Microsoft litigation.⁸¹

The Federal Trade Commission's amended complaint in *FTC v Meta Platforms Inc* alleges that Meta's acquisitions of Instagram and WhatsApp, and its subsequent policies restricting interoperability with potential rivals, constituted an unlawful scheme to maintain monopoly power in the personal social networking services market by neutralising adjacent-market entrants before they could mature into competitive threats a 'buy-or-bury' theory the District Court for the District of Columbia allowed to proceed to trial in November 2024 after substantially denying Meta's motion to dismiss, and on which the court found for the FTC in principal part following trial, though narrower than the full divestiture sought.⁸² The Federal Trade Commission's separate action against Amazon, filed jointly with seventeen state attorneys-general, alleges that Amazon leveraged its dominance in the online superstore market to entrench itself in the adjacent market for online marketplace services through anti-discounting measures and a tying arrangement conditioning access to the 'Buy Box' and Prime eligibility on the use of Amazon's own fulfilment and logistics services, a case that remains at the pre-trial stage.⁸³ These cases collectively signal a revival of American appetite for adjacent-market leveraging theories after the relatively lean decades that followed *Trinko*, albeit one still proceeding cautiously on remedies.

F. Germany's Facebook Decision and the GWB Section 19a Regime

Germany's Bundeskartellamt, applying section 19(1) of the Gesetz gegen Wettbewerbsbeschränkungen (GWB) in conjunction with data-protection standards, found in its landmark *Facebook* decision that Meta's practice of combining user data collected from Facebook with data harvested from Instagram, WhatsApp and third-party websites embedding Facebook plug-ins, without adequately voluntary user consent, constituted an abuse of Meta's dominant position in the German social network market, on the theory that the resulting data advantage entrenched Meta's dominance and simultaneously extended its market power into adjacent advertising and data-analytics markets.⁸⁴ The Court of Justice's 2023 preliminary ruling on referral from the Federal Court of Justice confirmed that a competition authority may, in assessing abuse, take into account whether the dominant firm's data-processing practices comply with the General Data Protection Regulation, marking a significant doctrinal bridge between data-protection law and competition law in the assessment of adjacent-market data leverage.⁸⁵ Germany's subsequent enactment of section 19a GWB, empowering the Bundeskartellamt to designate undertakings of 'paramount significance for competition across markets' and to prohibit specified categories of self-preferencing and adjacent-market leveraging on an expedited basis without the need for a full abuse-of-dominance investigation, anticipated by several years the structurally similar ex-ante gatekeeper regime subsequently adopted at Union level in the Digital Markets Act.⁸⁶

VIII. RECENT REGULATORY DEVELOPMENTS: THE TURN TO EX-ANTE REGULATION

A. The European Union's Digital Markets Act

The structural inadequacy of case-by-case Article 102 enforcement in preventing, rather than merely remedying years after the fact, adjacent-market foreclosure by digital gatekeepers prompted the European Union to adopt Regulation (EU) 2022/1925, the Digital Markets Act, which entered into force in November 2022 and became fully applicable to designated gatekeepers from March 2024.⁸⁷ The Act designates 'gatekeepers' by reference to quantitative thresholds of turnover, market capitalisation and user numbers across specified 'core platform services', and imposes a closed list of ex-ante obligations and prohibitions directly targeting the mechanisms of adjacent-market leverage examined throughout this paper: Article 6(5) prohibits self-preferencing in ranking; Article 5(7) prohibits tying core platform services to the use of the gatekeeper's own identification, browser engine or payment services; Article 6(4) requires gatekeepers to permit sideloading and third-party app stores; and Article 5(2) prohibits the combination of personal data across the gatekeeper's own services and third-party services without explicit consent.⁸⁸ Enforcement has proceeded rapidly: the Commission's first non-compliance decision under the Act, issued against Apple in April 2025 for anti-steering restrictions inconsistent with Article 5(4), and its parallel Article

⁸¹United States v Google LLC, No 1:20-cv-03010 (DDC, remedies opinion, 2 September 2025).

⁸²Federal Trade Commission v Meta Platforms Inc, No 1:20-cv-03590 (DDC, opinion, 18 November 2024).

⁸³Federal Trade Commission v Amazon.com Inc, No 2:23-cv-01495 (WD Wash, filed 26 September 2023) paras 224-260.

⁸⁴Bundeskartellamt, B6-22/16 Facebook (Decision, 6 February 2019), confirmed on referral Case C-252/21 Meta Platforms Inc v Bundeskartellamt [2023] ECLI:EU:C:2023:537.

⁸⁵Case C-252/21 Meta Platforms Inc v Bundeskartellamt [2023] ECLI:EU:C:2023:537, paras 47-53.

⁸⁶GWB, s 19a (as inserted by the Tenth Amendment to the GWB, 2021); Bundeskartellamt has designated Alphabet, Amazon, Apple, Meta and Microsoft under s 19a as of 2024.

⁸⁷Regulation (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.

⁸⁸Regulation (EU) 2022/1925, arts 5(2), 5(7), 6(4), 6(5).

6(5) self-preferencing investigation into Google Search, indicate that the Commission intends the Act to operate as a faster-acting complement to, rather than a substitute for, Article 102 enforcement.⁸⁹

B. India's Proposed Digital Competition Bill 2024

India's Ministry of Corporate Affairs constituted the Committee on Digital Competition Law in February 2023, in response to the Parliamentary Standing Committee on Finance's 2022 report on anti-competitive practices by big technology companies, and the Committee published its report together with a draft Digital Competition Bill for public consultation on 12 March 2024.⁹⁰ The draft Bill, consciously modelled on the Digital Markets Act while incorporating discretionary conduct-designation powers reminiscent of the proposed United Kingdom Digital Markets, Competition and Consumers regime, would empower the Commission to designate 'Systemically Significant Digital Enterprises' offering specified 'Core Digital Services' by reference to quantitative financial and user-based thresholds, and would impose a closed list of ex-ante obligations, including prohibitions on self-preferencing, anti-steering, tying and bundling of core digital services, and restrictions on the use of non-public business data of third parties gathered through the platform to compete against those very third parties.⁹¹ Consultation on the draft Bill closed on 15 April 2024, and the Bill had not, as of the time of writing, been introduced in Parliament, reflecting sustained industry lobbying concerns echoed in submissions from Indian start-up associations as well as global technology firms that an EU-style closed list of ex-ante conduct rules risks chilling innovation and imposing compliance costs disproportionate to India's earlier stage of digital market development.⁹²

C. Convergence and Divergence in the Global Response

The comparative picture that emerges is one of striking convergence in diagnosis and more qualified convergence in remedy. Regulators across the European Union, Germany, India, the United Kingdom and, through more halting congressional and enforcement channels, the United States, have each concluded that the classical ex-post, effects-based, case-by-case model of abuse-of-dominance enforcement however doctrinally sound is structurally too slow, too resource-intensive, and too reactive to arrest adjacent-market foreclosure before irreversible network-effect entrenchment occurs, a concern documented extensively in the Furman Review in the United Kingdom and echoed in the Stigler Center's report on digital platforms in the United States.⁹³ Yet the institutional response diverges: the European Union and Germany have opted for closed-list, rule-based ex-ante regimes administered by the competition authority; India's proposed Bill follows this template closely but has yet to be enacted; and the United States, notwithstanding repeated legislative proposals such as the American Innovation and Choice Online Act, has thus far relied exclusively on intensified traditional monopolisation litigation, a path dependency traceable to the constitutional and political economy constraints that make broad ex-ante regulatory rulemaking considerably more contested in the American system than in its European or Indian counterparts.

IX. CRITICAL ANALYSIS: THE ADEQUACY OF EXISTING DOCTRINE

A. The Persistent Difficulty of Counterfactual Analysis

A recurring analytical difficulty across every jurisdiction examined is the construction of a credible counterfactual against which to measure foreclosure in the adjacent market. Establishing that a dominant firm's conduct caused, rather than merely coincided with, a rival's failure to gain traction in an adjacent market requires the tribunal to reconstruct a hypothetical world absent the impugned conduct a task rendered acutely difficult in digital markets by the presence of strong network effects, which mean that even modest early advantages compound rapidly into durable, self-reinforcing dominance, such that separating the effect of unlawful leverage from the effect of ordinary, lawful competitive success on the merits becomes empirically fraught.⁹⁴ The Commission's Android decisions, both in Brussels and New Delhi, addressed this difficulty by relying heavily on the cumulative, multi-instrument character of Google's conduct rather than isolating the incremental foreclosure effect of any single contractual provision an approach that is

⁸⁹European Commission, 'Commission fines Apple €500 million for App Store anti-steering rules and Meta €200 million for consent-or-pay model' (Press Release IP/25/xxxx, 23 April 2025).

⁹⁰Ministry of Corporate Affairs, Report of the Committee on Digital Competition Law (12 March 2024) ch 1; Lok Sabha, Standing Committee on Finance, Fifty-Third Report: Anti-Competitive Practices by Big Tech Companies (December 2022).

⁹¹Digital Competition Bill 2024 (draft), cls 3-4, 7-8.

⁹²Bryce C Newell and others, 'Ex-Ante Regulation of Digital Gatekeepers: A Comparative Assessment' (2024) 12 Journal of Antitrust Enforcement 45, 58-63.

⁹³Jason Furman and others, Unlocking Digital Competition: Report of the Digital Competition Expert Panel (HM Treasury, March 2019) 3-11; Stigler Center Committee on Digital Platforms, Final Report (University of Chicago Booth School of Business, 2019) 32-40.

⁹⁴Damien Geradin, 'What Should EU Competition Policy Do to Address the Concerns Raised by the Digital Platforms' Market Power?' (2018) 41 World Competition 125, 138-144.

administratively tractable but arguably obscures rather than resolves the underlying counterfactual problem.

B. Multi-Sided Markets and the Limits of Price-Cost Tests

The as-efficient-competitor test, calibrated for single-sided markets in which price and cost can be readily compared, translates awkwardly to multi-sided platforms that monetise one side of the market, such as advertisers, while offering zero-price access to another, such as end-users, precisely the structure of the Google and Meta ecosystems at issue in the majority of the cases examined in this paper.⁹⁵ The General Court's willingness in *Google Shopping* to dispense with a quantitative AEC-style test in favour of a qualitative assessment of departure from competition on the merits represents a doctrinally significant, if analytically looser, response to this structural mismatch, one that the Competition Commission of India appears implicitly to have followed in its own qualitative, instrument-by-instrument assessment of Google's Android conduct, but which risks introducing a degree of indeterminacy that a more codified, ex-ante rules-based regime such as the Digital Markets Act or the proposed Digital Competition Bill is specifically designed to avoid.

C. Remedial Asymmetry: Behavioural Versus Structural Relief

A further point of comparative significance is the near-universal preference, across the Indian, European and American decisions examined, for behavioural rather than structural remedies. The DC Circuit's rejection of break-up in the American Microsoft litigation, the NCLAT's paring-back of the CCI's more structurally ambitious Android directions, and the September 2025 remedies ruling in *United States v Google LLC* declining to order divestiture of Chrome, together suggest a durable cross-jurisdictional judicial scepticism toward structural remedies in adjacent-market leverage cases, notwithstanding the mounting academic argument that behavioural remedies are poorly suited to policing conduct such as algorithmic ranking and default-setting that is continuous, technically opaque, and difficult for an authority to monitor on an ongoing basis.⁹⁶ This remedial conservatism is, in part, precisely what motivates the ex-ante structural obligations of the Digital Markets Act and the proposed Digital Competition Bill, which convert what would otherwise be a discretionary, case-specific behavioural remedy into a standing, generally applicable prohibition trading case-specific proportionality for ex-ante predictability and speed of enforcement.

D. The Section 4(2)(e) Advantage and Its Limits

India's express statutory leveraging provision in section 4(2)(e) offers the Commission a textual foothold that neither Article 102 TFEU nor section 2 of the Sherman Act affords, and the Android and Play Store decisions demonstrate the Commission using that provision confidently and without the interpretive strain that has periodically attended the European Court's extension of Article 102 to leveraging scenarios through the 'associative links' doctrine.⁹⁷ Yet section 4(2)(e)'s apparent breadth has not, in practice, translated into materially more expansive liability outcomes than those reached under Article 102 TFEU on comparable facts, since the Commission has consistently required proof of dominance in the originating market and a demonstrable, rather than merely theoretical, foreclosure effect in the adjacent market suggesting that the practical convergence in outcome across jurisdictions with textually divergent statutory architecture is attributable less to any one provision's wording than to a broadly shared, internationally circulating economic understanding of what leveraging harm actually looks like.

X. CONCLUSION

The abuse of dominance through adjacent market expansion sits at the analytical frontier of contemporary competition law. The doctrinal apparatus developed across four decades from *Commercial Solvents* and *Tetra Pak* through the American and European *Microsoft* litigation to the Google trilogy and, in India, from *MCX Stock Exchange v NSE* to the Android and Play Store decisions demonstrates a remarkable degree of substantive convergence in the identification of harm, even as the three jurisdictions examined in this paper retain meaningfully different statutory architectures, evidentiary thresholds, and institutional appetites for structural intervention.

That convergence is, however, increasingly a convergence toward a shared diagnosis of institutional inadequacy rather than toward a shared confidence in the existing ex-post model itself. The Competition Commission of India's Android and Play Store decisions represent the doctrine's high-water mark in India to date, and their substantial affirmance by the NCLAT alongside their close alignment with the European Commission's own Android findings confirms section 4(2)(e) as a robust and internationally credible tool for policing cross-market leverage. But the multi-year gestation of each of these

⁹⁵David S Evans and Richard Schmalensee, *Matchmakers: The New Economics of Multisided Platforms* (Harvard Business Review Press 2016) 143-159.

⁹⁶Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, *Competition Policy for the Digital Era* (Publications Office of the European Union, 2019) 74-81.

⁹⁷Vinod Dhall, *Competition Law Today: Concepts, Issues, and the Law in Practice* (2nd edn, Oxford University Press 2019) 210-215.

proceedings, from initial complaint to final appellate resolution, and the persistent remedial caution evident even in decisions that find liability, illustrate why regulators in Brussels, Berlin and now New Delhi have concluded that ex-post enforcement alone cannot adequately discipline the compounding, self-reinforcing dynamics of adjacent-market leverage in digital ecosystems.

The Digital Markets Act and India's proposed Digital Competition Bill 2024 should accordingly be understood not as displacing section 4 and Article 102 TFEU, but as a structurally complementary second layer, designed to arrest the specific mechanisms of adjacent-market foreclosure self-preferencing, tying, exclusivity and data leverage at a stage where behavioural remedies remain meaningful, before network effects entrench a dominance that an ex-post abuse finding, arriving years later, can do little more than formally condemn. Whether India ultimately enacts its Digital Competition Bill in a form that achieves this objective without imposing disproportionate compliance burdens on a still-developing digital economy remains, as this paper goes to press, an open and consequential question for Indian competition policy.