RGNUL Financial & Mercantile Law Review

ISSN(O): 2347-3827

Volume XIII Issue 1

2025

PEER REVIEWED

2025 13 (1) RFMLR

RAJIV GANDHI NATIONAL UNIVERSITY OF LAW, PUNJAB

RGNUL FINANCIAL AND MERCANTILE LAW REVIEW

PEER REVIEWED

Volume XIII Issue I
2025

RAJIV GANDHI NATIONAL UNIVERSITY OF LAW, PUNJAB

RGNUL FINANCIAL AND MERCANTILE LAW REVIEW

[Citation:<Author> <Title of the article> 2025 13 (1) RFMLR <web address> date accessed <Date>]

Visit us at: www.rfmlr.com

Published and owned by the Registrar, Rajiv Gandhi National University of Law, Punjab, Bhadson-Patiala Rd, Sidhuwal, Patiala, Punjab, 147 006.

ADVISORY BOARD

EDITORIAL NOTE

Dear Readers,

Periods of economic change and regulatory transition inevitably test the limits of existing legal frameworks. As markets evolve and commercial practices grow more complex, the law is required not only to keep pace but also to reflect carefully on the values of fairness, accountability, and institutional stability that it seeks to protect. It is against this backdrop that we present Issue I of Volume XIII of the RGNUL Financial and Mercantile Law Review ("RFMLR"), curated with the aim of contributing meaningfully to ongoing conversations in financial and mercantile law.

The contributions featured in this Issue engage with questions that we increasingly encounter in both academic and professional spaces. From regulatory responses to evolving market structures to doctrinal uncertainties in corporate and insolvency law, the articles reflect concerns that are neither purely theoretical nor confined to the courtroom. Each piece, in its own way, attempts to bridge the gap between legal principle and commercial reality, recognising that the effectiveness of law ultimately depends on how well it responds to lived economic practices. What emerges across the Issue is a shared attentiveness to balance. Several authors grapple with the tension between encouraging innovation and ensuring accountability, while others revisit established legal doctrines to assess whether they remain fit for purpose in changing contexts. Rather than offering definitive answers, these contributions invite reflection and debate. They remind us that legal development is often incremental, shaped as much by careful questioning as by clear conclusions.

The Editorial Board has brought together work that is rigorous without being detached and critical without losing sight of institutional constraints. We remain committed to fostering academic work that does more than merely catalogue legal developments. In doing so, this Issue continues RFMLR's effort to remain a space for thoughtful engagement rather than a purely descriptive account of the law.

We are deeply grateful to the authors for the time and care invested in their submissions, and to the members of the Peer Review and Advisory Boards for their considered feedback and guidance throughout the publication process. Their involvement has been central to maintaining the intellectual standards of the Review, and we are sincerely appreciative of their continued support.

As this Issue reaches its readers, we hope it encourages careful reading, critical thought, and sustained dialogue. We assure our contributors and readers that we remain committed to enhancing the Journal's visibility and impact, and we warmly invite feedback and submissions for our forthcoming Issues.

SHASHWAT SHARMA

SHIVI

Managing Editors

(*On behalf of the Editorial Board)*

RGNUL Financial and Mercantile Law Review

TABLE OF CONTENTS

I. MUSIC COPYRIGHT SECURITISATION IN INDIA LEGAL, FINANCIAL, AND INSTITUTIONAL PERSPECTIVES

Dr. Shiva Satish Sharda & Avantika Chaudhary[*]

The creation of a Special Purpose Vehicle to generate future royalties from various songs released by David Bowie in 1997 led to Moody's assigning an A3 rating to these bonds. Due to concerns about digital privacy, they were downgraded to junk in 2004, thanks to the sound of Napster piracy. Although Bowie bonds remained unaffected, the survivability of music asset-backed security, ABS, was exposed to increased risk. Market shrinkage occurred but rebounded after 2020, mainly due to streaming services such as Spotify, Apple Music, and YouTube adopting a recurring-usage model based on micro-royalties. Notable sales, including Bruce Springsteen's catalogue valued at USD 500 million and Bob Dylan's at USD 300 million, heightened market interest. Although Bollywood films have traditionally generated greater revenue, streaming platforms such as Gaana and Spotify India are experiencing rapid growth in popularity, which could stabilise music revenues and facilitate securitisation. India, a prominent producer and consumer of music, lacks established precedents for royalty-backed securitisation, underscoring a paradox in which substantial cultural production has not been matched by corresponding financial innovation. The Insolvency and Bankruptcy Code, 2016 (IBC), is silent on the issues at the centre of royalty securitisation. This paper, therefore, follows the steps outlined by four interrelated goals. Firstly, it examines the valuation of music copyrights in the light of evolving consumption patterns and investor expectations. Secondly, it analyses the structural mechanisms of securitisation, along with its advantages and vulnerabilities. Thirdly, it evaluates India's legal and regulatory preparedness for the introduction of Music ABS. Lastly, it proposes reforms that could enable music copyright securitisation to contribute meaningfully to both the financial system and the cultural economy in India.

Keywords: Music bonds, Asset-backed Security, Royalty-backed securitisation, Users' rating, Collective Management Organisations, Special Purpose Distinct Entities, Copyright Act, SEBI, IBC

[*] Dr. Shiva Satish Sharda is an Assistant Professor of law at Rajiv Gandhi National University of Law, Punjab and Avantika Chaudhary is a Research Scholar at Rajiv Gandhi National University of Law, Punjab. The views stated in this paper are personal

I. INTRODUCTION

The origin of music securitisation can be more clearly traced to the Bowie Bonds workings as a first example. In this structure, a Special Purpose Vehicle **("SPV")** was created and backed by the future royalty income generated from 287 songs across 25 albums released by David Bowie. Bonds were sold exclusively to Prudential Insurance Company,[1] which bought them in its entirety. The arrangement was made to be a genuine transaction, thus the assets of the SPV were protected against any potential insolvency of the company and from any financial risks potentially arising out of Bowie's personal sphere.[2]

Moody's Investors Service had given these bonds an A3 rating.[3] Their decision was based on three key points: (1) The stability of the catalogue, which has been selling more than a million copies a year for a long time; (2) the safety measures in the structure, such as the overcollateralization and reserve accounts; and (3) the qualitative longevity of David Bowie's fame.[4] The 7.9% coupon was attractive to investors, as it was comparable to corporate bonds of similar risk. For Bowie, the transaction allowed him to raise a good amount of cash without compromising his catalogue. From the perspective of

---

[1] Dominic Bencivenga, 'Bowie Bonds; Pioneer Deal Uses Copyright to Raise Capital' (1997) 217 N.Y.L.J. 5; see also FJ Fabozzi and V Kothari, *Introduction to Securitization* (Wiley 2008) 3.
[2] Investing in French and Foreign Music Catalogues: Practices and Risks (2022) 40.
[3]ICRA Ratings criteria available at https://www.icra.in/Rating/Methodology?Page=CreditRatingScale (last assessed Sep24, 2025).
[4] Sam Adler, 'Bowie Breakthrough: Structuring Music Bonds' (1997) Ent L & Fin 6; see also Teresa N Kerr, 'Bowie Bonds' (2000) 7 UCLA Ent L Rev 389, 143.

the capital markets, the deal was a clear signal that intellectual property might be securitized as a receivable.[5]

However, the weaknesses of such an innovative model were revealed not long after. The rise of digital piracy, with Napster as its flagship, had an enormous impact on CD sales and changed the basic assumptions that artists' incomes would be stable over time.[6] Moody downgraded these bonds to almost junk category by 2004. Although Bowie was unaffected as he had already been paid in full, Prudential was the one that remained exposed to the increased risk.[7] This incident highlighted the importance of an instructive lesson: the survivability of Music Asset-Backed Securities **("ABS")** depends not only on the cleverness of the financial plan but also on the tech and legal systems being strong enough to withstand the changes.

The bad ride of Bowie Bonds, and later on the failures of artists like James Brown and the Isley Brothers, led to a phase of silence.[8] The shrinkage is accounted for by three reasons- *firstly*, piracy upset the money flow from royalties making it very difficult to predict. *Secondly*, the lack of transparency in valuations, which came from incomplete reports of collection societies and late sales data, left investors with no reliable models for planning. *Thirdly*, the trust of the investors declined as the borrowing seemed to be incompatible with the nature of cultural revenues.[9] Around the middle of the 2000s, music rights were turned into money by selling the total catalogues, while borrowing as a method lost prominence.

---

[5] Bowie Bonds: A Key to Unlocking the Wealth of Intellectual Property (1999) Hastings Comm/Ent LJ 21:469.

[6] SFA Research Corner, 'Music Royalty ABS—Remastered for Streaming and Beyond' (SFA Research, 25 May 2023).

[7] David Bowie's Bonds Hit Low Note, *BBC News* (23 March 2004).

[8] Jamaica IP Securitization Report (Capital Business Advisors LLC) 29; Fabozzi & Kothari (n 3) 3.

[9] Chapman and Cutler LLP, 'Royalty-Backed Securitization' (2015).

The substantive revival of the market commenced post-2020. The streaming services like Spotify, Apple Music, and YouTube changed the way music was used, it became a recurring, usage-based model. Every play would earn micro-royalties, which were combined into steady flows, while detailed data on location, age, and behaviour of listeners helped to solve the problem of valuation opacity.[10] Rating agencies reacted by coming up with new methods that would take into account the diversification of the catalogue, the possibility of sync, and platform risks. These instruments standardised risk assessment and brought back the confidence of investors.[11]

Nonetheless, the decisive trigger was, without a doubt, the arrival of institutional funds. Companies like Hipgnosis, Concord, KKR, and Blackstone made billion-dollar purchases, which were later turned into large-scale ABS. The USD 1.8 billion deal (2022) by Concord and the USD 1.47 billion issuance (2024) by Hipgnosis are among the most representative examples of how big the space has become.[12] The highly publicised sales of Bruce Springsteen's USD 500 million catalogue and Bob Dylan's USD 300 million catalogues[13] were two among several extraordinary valuations that further attracted market interest.

In conclusion, both legal and technological developments contributed to the stabilisation of the system. Among the various legal reforms, strengthened copyright enforcement significantly reduced the impact of piracy. Additionally, Collective Management Organisations **("CMOs")** became more digitally integrated with streaming platforms, and blockchain-based tools for

---

[10] Reuters, 'The Resurgence of Music Securitization' (Thomson Reuters Attorney Analysis, 8 July 2025).
[11] ibid.
[12] ibid; see also GlobalCapital (2025), cited in Reuters (n11).
[13] Bowie Bond Returns: A Resurgence in Music Royalty Investments' (*FasterCapital*, 3 April 2025) <https://fastercapital.com/content/Bowie-Bond-Returns--A-Resurgence-in-Music-Royalty-Investments.html#The-Future-of-Music-Royalty-Investments.html> accessed 23 September 2025.

tracking provenance and rights ownership began to be tested.[14] Taken together, these measures substantially contributed to closing the gaps that lay at the core of the Bowie Bonds' shortcomings. While global markets continue to develop this innovation, India remains significantly behind in this regard. The Copyright Act, 1957, recognizes musical compositions as one of the intellectual property features, and the Insolvency and Bankruptcy Code, 2016 **("IBC")** deals with the intellectual property features, but the regulatory framework for royalty-backed securitisation is not yet clear.[15] The CMOs are completely non-transparent and have inconsistent data practices, while the Securities and Exchange Board of India (SEBI) is yet to introduce music-specific ABS guidance.[16] As India stands on the threshold of a major surge in streaming consumption, it risks missing a significant opportunity to monetise cultural assets unless these regulatory and institutional gaps are addressed.

This paper, therefore, follows the steps of four interrelated goals. *Firstly*, it examines the valuation of music copyrights in the light of evolving consumption patterns and investor expectations. *Secondly*, it analyses the structural mechanisms of securitisation, along with its advantages and vulnerabilities. *Thirdly*, it evaluates India's legal and regulatory preparedness for introduction of Music ABS. *Lastly*, it proposes reforms that could enable music copyright securitisation to contribute meaningfully to both the financial system and the cultural economy in India.

II. SECURITISATION OF MUSIC INTELLECTUAL PROPERTY IN INDIA

Intellectual property in music is not the sole category to undergo securitisation. Film earnings, mainly those from box office and distribution,

---

[14] ibid.

[15] Copyright Act 1957 (India); Insolvency and Bankruptcy Code 2016 (India).

[16] Chapman and Cutler LLP.

were bundled in Hollywood, roughly, in the first decade of the century.[17] Patents in pharmaceuticals, mainly for large-scale drugs, turned into securities to generate easy-to-predict royalties after the launch of the product.[18] Book publishing rights, in limited instances, have been securitised; however, such transactions have generally taken place at a comparatively modest scale.

However, there are certain benefits that music has which other types of intellectual property do not. The revenues from movies are made mostly in the first period, and after that, they diminish very fast, while the royalties in pharmaceuticals stop at the expiration of the patent protection. On the other hand, music catalogues keep providing income from various sources that include performance, synchronisation, and streaming. Also, according to Indian law, the copyright period i.e. 60 years after the death of the author, is much longer than for patents or publishing rights.[19]

Data availability and accuracy are equally critical considerations. Streaming platforms allow investors to be informed about the performance almost in real-time, thus, they can invest with confidence. With box office receipts or book sales, data are much less current and at times, they are even under-reported. Given the universal nature of music across languages and cultures, combined with the growing availability of reliable data, rights management has become significantly more transparent. As a result, securitisation has emerged as a comparatively more viable option for music catalogues.

The implications of this are very severe for India. Despite the fact that Bollywood movies have traditionally generated more revenue and attracted

[17] H Chen,'Don't Sell Out, Sell Bonds: The Pullman Group's Securitization of the Music Industry' (2000) Vanderbilt J Ent & Tech L, cited in Bettina Harvey, *Music Royalty Securitization: Is It Truly a Platinum Investment?* (Syracuse University Honors Thesis, 2023) 29–30.
[18] *Future Flows to Securitisation* (Vinod Kothari Consultants, 2023) 122–123.
[19] Copyright Act 1957, s 22 (India).

more global attention than music, the popularity of streaming platforms such as Gaana, JioSaavn, Wynk, and Spotify India is increasing rapidly.[20] Consequently, music revenues may soon be more stable than film revenues, allowing the issue of securitisation. Although India ranks among the largest global producers and consumers of music[21], it lacks any precedent for royalty-backed securitisation. This reflects a paradox wherein substantial cultural output has not been matched by parallel developments in financial innovation.

Music valuation forms the foundation of music securitisation.[22] It operates as the mechanism through which the inherently intangible creative labour invested in musical works is assessed and expressed in financial terms. The arrival of the streaming economy has changed the market. Spotify, Apple Music, and YouTube, among others, are platforms that bring in a large amount of data: the number of streams, how much a song is played in a playlist, how many times it was skipped, how many times it was played till the end, and the geographical areas from where it was listened to. These data lead to the creation of more complex Discounted Cash Flow ("DCF") models that can provide a better projection of the revenue than the sales-based metrics, which once constituted the sole permissible basis for valuation.[23]

Besides DCF, machine learning and AI-based analytics tools have also become very important. The algorithms which are fed with both historical and

[20] ET Bureau, 'Daily streams on audio streaming platforms reached 460 million in FY23: RedSeer' (The Economic Times. 20 April 2023) <https://economictimes.indiatimes.com/industry/media/entertainment/daily-streams-on-audio-streaming-platforms-reached-460-million-in-fy23-redseer/articleshow/99638858.cms?from=mdr>.

[21] Pranav Tiwari and Garima Saxena, Tuning into Change: Empirical Insights into India's Evolving Music Industry (*Survey Report*, The Dialogue 2025) <https://thedialogue.co/wp-content/uploads/2025/03/The-Dialogue_Survey_Report_Tuning-into-Change-Empirical-Insights-into-Indias-Evolving-Music-Industry.pdf>.

[22] John Cottera et al, 'The Value of Music Royalties' (2025) SSRN <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5958554>.

[23] J Nutting, *More Than a Feeling: Exploring the Drivers of Music Catalog Value* (Claremont McKenna College Thesis, 2021) 24-26.

real-time data can come close to the idea of permanence of catalogue performance, point out the “long-tail potential”, and even predict the chances of virality.[24]

However, the ability to forecast is subject to certain limitations. The attribute of virality being entirely unpredictable remains; a not-so-user-friendly track might suddenly become globally popular through TikTok or Instagram, and at the same time, the trend of listener's preference may move away from that of traditional catalogues.

In addition, the "long-tail" structure of streaming further exacerbates the issue. While niche works may yield relatively modest revenues on an individual basis, their aggregate performance can generate substantial financial returns. However, such income streams are difficult to model with precision, given their fragmented, irregular, and data-contingent nature.[25]

In addition, data fragmentation exacerbates the challenges associated with administration of music royalties in India. The digitalisation of systems has been identified as a priority for Collective Management Organisations (CMOs), particularly the Indian Performing Rights Society (IPRS), which only initiated its digital transition a few months ago.[26] Additionally, inconsistency is the norm in reporting, and it is also done in a closed manner that is often unaudited.[27] Indian CMOs are not equipped with the same transparent dashboards for investors as their international counterparts. If data standardisation, independent audits, and statutory reporting requirements are not put into practice, then Indian catalogues will continue to be unattractive for securitisation markets that depend on valuation precision.

---

[24] Mark Levy and Klaas Bosteel, 'Music Recommendation and the Long Tail' (2010) *Workshop on Music Recommendation and Discovery*.
[25] WIPO, *Standing Committee on Copyright and Related Rights, 40th Session Report* (2021) 27.
[26] *Future Flows to Securitisation* (n 2) 129.
[27] ibid.

Music securitisation is largely influenced by the architecture of general structured finance but needs to be adjusted for intellectual property assets. At the centre of the Indian framework is the proposal for a Special Purpose Distinct Entity **(“SPDE”).** In this structure, the originator, whether an artist, label, or aggregator, would transfer the royalty receivables to the SPDE through a transaction that qualifies as a true sale. Such a transfer establishes bankruptcy remoteness, which would help insulate investors from the insolvency risks of the originator.[28]

Moreover, investors are lured by the transactions which are given credit enhancements to provide them with reinforcements. Among such measures are overcollateralization, reserve accounts, liquidity facilities, and subordinated tranches. These kinds of mechanisms create situations where uncertain cultural revenues can be turned into instruments capable of receiving investment-grade ratings.[29]

Since 2020 rating agencies have developed new methodologies specifically for Music ABS. These approaches no longer assess only past earnings; they also evaluate key structural features such as diversification across genres and artists, the concentration of revenues in particular hits, the potential for sync licensing, and exposure to platform-policy changes or piracy shocks. Additionally, Stress testing under adverse scenarios has also become a routine component of the assessment process.[30]

---

[28] ibid.
[29] ibid.
[30] Bowie Bond Returns: A Resurgence in Music Royalty Investments (FasterCapital, 3 April 2025) <https://fastercapital.com/content/Bowie-Bond-Returns--A-Resurgence-in-Music-Royalty-Investments.html#The-Future-of-Music-Royalty-Investments.html> accessed 23 September 2025.

III. DIGITAL MARKET AND LEGAL VULNERABILITIES IN INDIA MUSIC SECURITISATION

Music securitisation, although developed in an effort to reduce volatility within the inherently uncertain world of creative revenues, remains highly sensitive to technological, market-based, and legal disruptions. The most critical technological problem is the proliferation of AI-generated compositions, which undermines the foundational principles of the copyright law. Copyright protection under the Copyright Act, 1957 is heavily dependent on human authorship and a clear threshold of creativity, both of which are challenged by AI-created works.[31] In practice, algorithms are now capable of producing works which are visually, and probably also intellectually, indistinguishable from human ones.[32] Consequently, a questions arises: does the law protect these types of works, and if so, who would be the author? Unless there is a well-organized countering statutory measure, limited recognition, sui generis classification, or total elimination, the legality of the royalties coming from AI-assisted works is still doubtful.[33] Hence, the uncertainty for the investors turns into the problem, where the investors face the volatility of valuation which in turn leaves securitisation in the deep pit without any predictability or stable cash flows.[34]

Another analogous technological hazard is algorithmic governance of discoverability by digital platforms like Spotify, TikTok, and YouTube. The valuation models usually take the road of predicting the future revenues based on historical consumption. However, when playlists, recommendations, and

[31] Copyright Act 1957, ss 2(d), 13–14 (India).
[32] T Trequattrini and others, 'Intellectual Capital and Digital Transformation: The Case of Music Industry' (2022) 30 *Meditari Accountancy Research* 1216, 1224-1226.
[33] S Gaon, *Music ABS: Pool Variations Emerge Amid Constructive Sector View* (Academy Securities, 9 December 2024) 2-3
[34] WIPO, *Standing Committee on Copyright and Related Rights, 40th Session Report* (2021) 27.

viral amplification are governed by undisclosed algorithms, the consumption ceases to be organic and becomes dependent on the platform policy.[35] A catalogue may rise to prominence through a viral trend, only to decline just as rapidly when algorithmic priorities shift. In India, where local platforms compete alongside global services, the opacity of algorithmic decision-making constitutes a significant barrier to establishing reliable valuation norms for Music ABS.[36]

The streaming industry is already facing risks of technological uncertainties. The streaming market power resides in the few global platforms that have the control of the revenues and the licensing policies on which the catalogues depend. Any reduction, that is done unilaterally, in per-stream pay outs or a change from pro-rata to user-centric distribution can not only reduce the expected cash flows but also cause a domino effect of credit-rating downgrades. For instance-in India, where average revenue per user is one of the lowest in the world, these kinds of changes may become a milestone for the economics of Music ABS.[37]

Another source of weakness is consumer behaviour which is constantly changing. Traditional securitisation relies on the existence of "evergreen" works from which artists get steady annuity-like returns. However, the digital culture tends to reward the popularity of the short-form. TikTok and Instagram Reels are examples of such platforms that profit from snippets rather than from the full recording of works. In this way, they separate the engagement from

[35] J Galuszka and A Legiedz, 'Financialisation of Music, Song Management Firms and Fractionalised Copyright' (2024, preprint) 14-16.

[36] Bowie Bond Returns: A Resurgence in Music Royalty Investments (FasterCapital, 3 April 2025) <https://fastercapital.com/content/Bowie-Bond-Returns--A-Resurgence-in-Music-Royalty-Investments.html#The-Future-of-Music-Royalty-Investments.html> accessed 23 September 2025.

[37] Trading Bowie Bonds: A Guide to Investing in Music Royalties (FasterCapital, 7 April 2025) <https://fastercapital.com/content/Trading-Bowie-Bonds--A-Guide-to-Investing-in-Music-Royalties.html#Understanding-the-Music-Royalty-Ecosystem.html> accessed 23 September 2025.

the way royalties are traditionally accumulated.[38] The paradox is quite prominent: the aforementioned platforms that make Indian music accessible worldwide are the ones that inject the instability, due to which its securitisation is undermined.

Nonetheless, the most deeply-rooted weak points are of legal nature. Copyright ownership in India is still highly decentralized, spread over the writers, lyricists, performers, producers, and labels. Under-registration, completely informal assignments, and ambiguous contractual clauses worsen uncertainty. In the context of securitisation, the absence of a clearly provable ownership title can lead to disputes that are ultimately fatal to the transaction structure. Without reforms mandating transparent registration, centralised recordation, and rigorous verification mechanisms, Indian catalogues will continue to remain insecure as collateral.[39]

Moreover, the non-performance of contractual obligations by an insolvent party exposes a doctrinal gap of significant concern. Music licences typically involve continuing obligations on the part of the musician or rights holder, and disruption of these obligations can undermine the commercial arrangement. Under U.S. bankruptcy law, licensees are afforded robust protection against the licensor's insolvency, ensuring continuity of rights and preventing transactional interruption.[40] In contrast, the Indian Insolvency and Bankruptcy Code, 2016, deliver no comparable protection. In the absence of statutory clarity confirming that true-sale transfers to Special Purpose Distinct Entities (SPDEs) are excluded from the insolvency estate, the principle of bankruptcy

[38] Rahmah, 'Promoting Intellectual Property Securitization for Financing Creative Industry in Indonesia' (2019) 17 *Journal of Indonesian Creative Economy* 33-34.
[39] F Aarons, 'Intellectual Property Securitisation: The Jamaican Experience' (2018) *JIPO Journal* 41.
[40] US Bankruptcy Code, 11 USC § 365(n) (1994).

remoteness, central to securitisation structures remains vulnerable.[41] Until these gaps are addressed, Music ABS will be difficult to implement in India as institutional capital will be unlikely to participate at scale.

IV. JUDICIAL APPROACH OF MUSIC ROYALTY ENTITLEMENTS IN INDIA

The Courts of India have recently been involved in cases where the question of who should receive the music royalties and under what terms were the subject of a conflict. The Hon'ble Supreme Court held that, under the pre-2012 statutory regime, a broadcaster was required to pay royalties to the sound recording copyright owner only and not separately to writers or composers of the work.[42] Nevertheless, by virtue of the 2012 Amendment to the Copyright Act, the authors of music and literary works were explicitly guaranteed the right to share in the royalties arising from the use of their works in sound recordings, which changed the whole scenario of exclusivity in the mutual context.[43]

Moreover, the decision of the Hon'ble Bombay High Court[44] is worth mentioning, where the judge concluded that FM radio stations should pay royalties to the authors of the original musical works, even if they had already made a payment for the sound recordings. The court noted that 2012 amendments had created a '*substantial property right'* for songwriters and composers, therefore, the old practice of total transfer was overruled.[45] Practically, the authors' right to share in each public performance of a song now exists irrespective of the recording owner's license.

[41] Insolvency and Bankruptcy Code 2016 (India), ss 18, 36; see also *Future Flows to Securitisation* (Vinod Kothari Consultants, 2023) 126–127
[42] (2016) 11 SCC 671 (SC).
[43] Copyright (Amendment) Act 2012, ss 18, 19, 19A and 33.
[44] 2023 SCC OnLine Bom 1264 (Bom).
[45] ibid.

Similarly, the Hon'ble Calcutta High Court[46] affirmed the same principle. The court, in the decision, merged the action filed by IPRS and a few music companies, holding that a telecom provider should definitely get permission separately from IPRS and pay the required royalties for the use of the musical and literary works in its Caller Ring-Back-Tone service. In addition to Vodafone's arguments, the court decided that a license only from the sound-recording owner will not be sufficient to discharge the authors from their rights.

V. THE U.S. FRAMEWORK AND REGULATORY POSITION

Music securitization in the USA is the outcome of a somewhat complex system consisting of provisions of the bankruptcy code, securities regulation, and market practice. Venturing into the details of the protection of IP licenses is a concept arising in Section 365(n) of the Bankruptcy Code, introduced in 1994, which defines a scenario, where the licensee may continue the use of the bankrupt licensor's patents or copyrights even though the executory contract has been rejected.[47] More precisely, Section 365(n) declares that upon the rejection of an IP license by a debtor-licensor, the licensee shall have the power to choose the option of retaining his rights and, therefore, continue paying the royalties that were agreed upon.[48]

Similar to the tenant under a rejected lease, the U.S. Supreme Court in *Mission Product Holdings, Inc. v. Tempnology, LLC*[49] considered the treatment in bankruptcy as the one of the licensees who can "stay and pay rent." The Hon'ble U.S. Supreme Court stated that the non-termination of the licensee's rights was the result of rejection of a trademark license. Further,

[46] 2024 SCC OnLine Cal 1262 (Cal).
[47] US Bankruptcy Code, 11 USC § 365(n) (1994).
[48] ibid.
[49] 139 S Ct 1652 (USSC)

Section 365(n) strictly speaking does not extend to trademarks, however, the reasoning is that rejection normally means breach, rather than the immediate revocation of rights granted.[50] Accordingly, the U.S. law ensures royalty-in-pay streams by permitting licensees (and therefore investors who have purchased the royalties) to continue the exploitation of the IP in consequence of the bankruptcy.

The regulatory frameworks in the U.S. have a significant effect on the way IP is securitized. Securitizations of any assets are in accordance with the securities laws: the issuers usually file for registration of asset-backed securities offerings or use the exemption for private placements. The SEC's Regulation AB (and its successor Reg AB II) establishes the standards of disclosure for asset-backed deals, which are also applicable to music royalty bonds as those in mortgage or franchise ABS.[51] Besides that, credit rating agencies and market participants also provide the public with information. For instance, the industry reports (e.g. by Fitch or KBRA) give an overview of structuring issues like license compliance, renewal risk, and "most favoured nation" clauses.[52]

On a practical level, issuers could use data from a historical royalty collection and insurance/guarantees as a way of attracting investors just like the securitized streaming revenues in the tech media industry.[53]

[50] ibid.
[51] SEC, 'Asset-Backed Securities' Regulation AB, 17 CFR Parts 229, 232, 239, 240, 1100, 1103, and 1105 (first adopted 2004; updated as Reg AB II, 2014).
[52] Fitch Ratings, *Global Structured Finance Rating Criteria* (2023); KBRA, *Music ABS Methodology* (2022).
[53] Academy Securities, *Music ABS: Pool Variations Emerge Amid Constructive Sector View* (Academy Securities, 9 December 2024) 2-3

VI. TOWARDS A REGULATORY FRAMEWORK FOR MUSICAL SECURITIZATION IN INDIA

India possesses a statutory and institutional architecture that, at first glance, appears capable of accommodating royalty-backed securities. However, on closer scrutiny, it becomes clear that the framework is fragmented, doctrinally underdeveloped, and pragmatically ill-suited to the peculiarities of music copyright securitisation. A credible roadmap for reform must therefore diagnose deficiencies across copyright law, insolvency jurisprudence, capital markets regulation, and rights-management practice, before prescribing targeted interventions that reconcile financial innovation with cultural policy.

A. Statutory and Institutional Deficiencies

The Copyright Act, 1957 is still the main law that regulates the rights of the authors, the transfer, and the bundle of rights in the works, texts, and sound recordings. Gradual changes have expanded the scope of the rights of artists as well as the digital exploitation of the rights.[54] However, the Act was still not created with the idea of securitisation. The Act does not contain any particular conditions for the temporary but irrevocable transfer of future royalties in a way that demonstrates a true sale with certainty. The same kind of legal certainty is essential in securitisation as investors want structures that are remote from bankruptcy and are thus protected from the insolvency risk of the originator.[55]

---

[54] Copyright (Amendment) Act 2012 (India), ss 18-19A.
[55] Teresa N Kerr, 'Bowie Bonding in the Music Biz: Will Music Royalty Securitization Be the Key to the Gold for Music Industry Participants?' (2000) 7 UCLA Ent L Rev 389, 392-393.

The Insolvency and Bankruptcy Code, 2016 (IBC), while is very detailed in its handling of the corporate rescue and the distribution of assets, is silent on three issues that are at the centre of royalty securitisation-driving: (i) the option of assigning receivables during moratorium, (ii) the treatment of executory licences like synchronisation or performance rights, and (iii) the rationale behind the avoidance of security claims on transfers to SPDEs. The issue of bankruptcy remoteness, which is at the very core of securitisation, still remains uncertain without statutory clarifications.[56]

The SEBI has set out the frameworks that are applicable to traditional ABS, which include mortgages, auto loans, and leases. However, no guidelines exist in the case of intellectual property receivables.[57] Due to this omission in the regulations, issuers, trustees, and investors are unsure of how music-backed securities will be classified and whether they will be enforceable. Besides statutory gaps, there are practical barriers that are difficult to overcome. CMOs, in particular, the IPRS are the main intermediaries through which royalties are collected and distributed.[58] Nevertheless, their digitisation initiatives are quite recent, reporting protocols are inconsistent, and audit practices are sporadic.[59] For investors who are used to real-time, machine-readable dashboards, such lack of transparency is out of the question.

Valuation practices add to this uncertainty: while international markets use a combination of methods discounted cash flow, streaming analytics, and multiples benchmarked against comparable sales, Indian valuations are still

[56] Insolvency and Bankruptcy Code 2016 (India), ss 18, 36; see also *Future Flows to Securitisation* (Vinod Kothari Consultants, 2023) 126-127.
[57] SEBI (Issue and Listing of Securitised Debt Instruments and Security Receipts) Regulations 2008 (India).
[58] Indian Performing Right Society (IPRS), 'Annual Report 2023-24' (IPRS, 2024).
[59] Rahmah, 'Promoting Intellectual Property Securitization for Financing Creative Industry in Indonesia' (2019) 17 *Journal of Indonesian Creative Economy* 33-34.

done on a case-by-case basis, relying on bespoke expert reports with no supervisory validation.[60]

To sum up, title fragmentation is the most critical problem. The rights to the music are scattered among composers, lyricists, performers, producers, and labels, and there are a lot of historical copyright assignments that have not been documented or have been informally recorded.[61] In securitisation, indefeasible title is the most important thing. Without a centralised registry, any alleged transfer to an SPDE can be the cause of competing claims.[62]

B. Reform Imperatives

It is important to have a reliable framework to legally identify royalty receivables as financial assets under SEBI's ABS framework, while also integrating them with SARFAESI-type enforcement mechanisms.[63] This type of acknowledgment should come with specific safety features, including disclosure schedules, servicer audits, and trustee duties unique to intellectual property income streams.

The Copyright Office should be a functional repository capable of time-stamped, machine-readable recordation of assignments and licences.[64] By this approach, records would have presumptive priority, thus reducing transaction costs and resolving title disputes.

The IBC must operate in harmony with the principles of securitisation. It is essential to incorporate a framework for executory licences, while ensuring

---

[60] J Nutting, *More Than a Feeling: Exploring the Drivers of Music Catalog Value* (Claremont McKenna College Thesis, 2021) 24-26.

[61] F Aarons, 'Intellectual Property Securitisation: The Jamaican Experience' (2018) *JIPO Journal* 41.

[62] Chapman and Cutler LLP, 'Royalty-Backed Securitization' (2015) 4-6.

[63] Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act 2002 (SARFAESI), s 13.

[64] Copyright Act 1957, s 30 and Copyright Rules 2013, rr 56–60 (provisions on registration of assignments).

that bona fide SPDEs are insulated from avoidance claims, subject to appropriate anti-fraud safeguards.[65] This would give practical effect to the principle of bankruptcy remoteness, a feature that is critical to the viability of Music ABS.

Besides, that, cultural and distributive safeguards are a must. Without regulation, the process of securitisation may result in the concentration of ownership in institutional hands at the expense of creators. For that reason, protective measures should ensure that residual entitlements exist, the transfers of contracts are made transparently, and there are consent-based regimes for the transactions which affect the economic interests of artists.[66]

At last, data infrastructure has to be improved. CMOs should be required to implement interoperable metadata standards, real-time reconciliation with digital platforms, and independent audits.[67] SEBI may permit a category of "IP servicers" who hold a license to carry out the enforcement of these standards and report to the trustees, thereby ensuring the necessary data integrity for the investor to be confident.

C. Policy and Regulatory Roadmap

The reform path should be multidimensional. *Firstly*, SEBI needs to change the SEBI (Issue and Listing of Securitised Debt Instruments and Security Receipts) Regulations, 2008 to explicitly include royalty receivables as eligible assets, make it mandatory for independent true-sale and non-consolidation opinions to be obtained and also clarify that duly registered

---

[65] Insolvency and Bankruptcy Code 2016 (India), ss 18, 36; see also *Future Flows to Securitisation* (Vinod Kothari Consultants, 2023) 126-127.
[66] Rahmah, 'Promoting Intellectual Property Securitization for Financing Creative Industry in Indonesia' (2019) 17 *Journal of Indonesian Creative Economy* 33-34.
[67] Indian Performing Right Society (IPRS), 'Annual Report 2023-24' (IPRS, 2024).

transfers to SPDEs are not insolvency estates.[68] *Secondly*, the Copyright Office can be a centrally located registry of all assignments with statutory presumptions of validity.[69] *Thirdly*, the IBC ought to legally sanction the continuation of executory contracts and protect the securitised assets from the claw back of insolvency.[70] *Lastly*, SEBI needs to set out the disclosure duties that are specifically related to Music ABS, which may include stress-testing for platform-risk and AI-risk scenarios, and also dual rating requirements for public issuances.[71]

Further, regulations must be introduced by SEBI to address future risks arising from new developments. Valuation is gradually becoming reliant on algorithmic discoverability and the ambiguous status of AI-generated works. SEBI should require disclosure of significant changes in platform-pay out models, mandate that AI-assisted works in the collateral pool be identified, and require rating agencies to factor in platform and AI scenarios in their rating methodologies.[72]

VII. CONCLUSION

On one hand, the music copyright securitisation is a financial innovation, on the other hand, it is a distinctively cultural change. The journey of global markets from the initial hope and final collapse of Bowie Bonds to the coming back to life of large-scale catalogue securitisations in the streaming era teaches the markets that intellectual property is capable of being a steady asset class if the legal and technological framework are thorough. However, this remains a

[68] SEBI (Issue and Listing of Securitised Debt Instruments and Security Receipts) Regulations 2008 (India).
[69] Copyright Office, 'Handbook on Copyright Registration' (Government of India, 2022).
[70] Insolvency and Bankruptcy Code 2016 (India), ss 14, 36.
[71] Academy Securities, *Music ABS: Pool Variations Emerge Amid Constructive Sector View* (Academy Securities, 9 December 2024) 3-4.
[72] Bowie Bond Returns: A Resurgence in Music Royalty Investments (FasterCapital, 3 April 2025) <https://fastercapital.com/content/Bowie-Bond-Returns--A-Resurgence-in-Music-Royalty-Investments.html#The-Future-of-Music-Royalty-Investments.html> accessed 23 September 2025.

significant "if" in India, where the market opportunity is largely overlooked. Although several court rulings since the 2012 Copyright Amendment have affirmed that authors possess an independent right to royalties, the legal and policy framework necessary to govern the securitisation of music assets remains fragmented and underdeveloped. The Copyright Act, the Insolvency and Bankruptcy Code, and SEBI's ABS guidelines are not yet harmonised to provide features of genuine sale, bankruptcy remoteness, and enforceability that investors require. Moreover, opaque data practices within CMOs and inadequate clarity regarding ownership interests significantly undermine the reliability of valuation assessments.

If India wants to make use of this opportunity, the reform must be multi-faceted. Firstly, there should be statutory recognition of royalty receivables as securitisable assets; secondly, there should be harmonisation of insolvency law with structured finance; thirdly, a transparent and reliable data infrastructure should be established; lastly, distributive safeguards for creators must be ensured so that the interests of authors and performers are not compromised. If properly implemented, music securitization could unlock cultural capital, providing the artists and the labels with liquidity, and also making India's financial markets larger and deeper; while still preserving the constitutional commitments to property rights, freedom of expression, and the promotion of cultural development.

II. TOKENISATION AS AN ALTERNATIVE TO SECURITIZATION: LEGAL, REGULATORY AND OPERATIONAL CHALLENGES

Bhadra Anil & Advait Sharma[*]

ABSTRACT

This paper explores tokenization as a modern alternative to securitization, analyzing its legal, regulatory, and operational challenges. While tokenization leverages blockchain to enhance liquidity, enable fractional ownership, and democratize access to financial assets, it faces hurdles in classification, custody, settlement, interoperability, and jurisdiction. The study compares global regulatory approaches and highlights India's fragmented framework, proposing phased licensing, legal recognition of smart contracts, regulated digital custody, and interoperability mandates. Concluding that tokenization is not a panacea but a transformative tool, the paper argues it can bridge financial markets and retail investors, fostering a resilient and inclusive financial ecosystem.

Keywords: Tokenization, Securitisation, Securities, Blockchain and Financial Markets

* Bhadra Anil & Advait Sharma are Final- year students of B.A.LL.B (Hons.) at the National University of Advanced Legal Studies, Kochi. The views stated in this paper are personal.

I. INTRODUCTION

While traditional and digital finance are becoming entangled, the securitization of assets has reached the zenith of its amalgamation with tech through tokenization. Tokenization is a term for using smart contracts and blockchain technology to represent ownership or rights to an asset as a tradable, on-chain token. Research shows that tokenized market capitalization could reach around $2 trillion by 2030, excluding Bitcoin and cryptocurrencies, which reflects huge potential. If one were to design the future of financial services, the inclusion of features of digital assets would be inevitable. Amid this momentum, the complete adoption of tokenization of financial services is complex, with regulatory and operational challenges. Tokenized assets face legal ambiguity, especially regarding classification, ownership and regulatory over jurisdiction. India lacks a unified system that deals with the enforcement, conduct and recognition of smart contracts. Therefore, it is advocated that a phased licensing regime be implemented and steps be taken to recognize smart contracts legally and SEBI-regulated digital custody reform to bridge the gap between the financial market and investors. This article discusses the conceptual foundations of tokenisation and securitization, examines the legal challenges associated with the unrestricted use of tokenised assets, and proposes necessary reforms.

II. TOKENISATION AND SECURITIZATION: CONCEPTUAL AND LEGAL OVERVIEW

The financial alchemy of pooling in not–easily or non-tradable assets and repackaging them into interest-bearing securities can be termed securitization. This practice can be traced back to the 1970s when US-based agencies pooled home mortgages, culminating in the securitization of various income-producing assets. Financial institutions employ securitization for various reasons. One among those is that it is cheaper to raise money through securitization, making it easier for banks to hold assets, as financial regulators have different stances towards them. It also gained momentum because of its broad economic benefits, including credit exposures, reduced systemic vulnerability and less risk concentration. The process of securitization includes multiple stages. In the first stage, the financial institutions recognize the asset they want to get out of their balance sheet and group them into a single pool called the reference portfolio.[1] This is then sold to an issuer, such as a Special Purpose Vehicle, an entity run by a financial institution, to purchase and realize the assets for legal and accounting purposes. In the last stage, the SPV issues securities to the investors, representing a claim on the underlying asset. In this process, the issuer acts as a servicer, collecting payments from the original borrower and distributing them to the investor after deducting the servicing fee. The investors receive fixed or floating rate payments from a trustee account funded by the cash flows generated by the reference portfolio.

The SARFAESI Act primarily regulates the inflow and outflow of securities. Securitization means the acquisition of financial assets by any asset

[1] IMF, "Classification of Financial Assets and Liabilities" (*IMF*, Sep 2008) <https://www.imf.org/external/pubs/ft/mfsmcg/c4.pdf>accessed 12 May 2025.

reconstruction company from any originator.[2] Whether by raising funds by such asset reconstruction companies from qualified buyers by issuing security receipts representing an undivided interest in such financial assets or otherwise. It also empowers the companies to acquire financial assets from banks or financial institutions through an agreement or assignment and gives the right to SPVs to issue Security Receipts **("SRs")** to Qualified Institutional Buyers **("QIBs")** in exchange for funds.[3] Further, the SEBI (Issue and Listing of Securitized Debt Instruments and Security Receipts) (Regulations, 2008) also talks about compliance to be involved in the process of securitization.[4]

While securitization is still prominent in the market, the entry of new forms of it has gained momentum. With the growing retail investor interest enabled by the fintech innovation and exposure of the public to trading,[5] tokenization has emerged as a pivotal mechanism, facilitating fractional ownership, enhancing market liquidity, and democratizing access to a wide range of assets. The tokenization of financial assets refers to representing real-world financial assets, such as stocks, bonds, or currencies, using digital tokens.

In this, security tokens are created through an Initial Coin Offering **("ICO")** to distinguish them from other ICOs, which can produce different tokens such as equity, utility, or payment tokens.[6] A Security Token Offering **("STO")** can be used to create a digital representation – a security token- of

---

[2] Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, Act No. 54 of 2000.
[3] Mayashree, "Asset Reconstruction Companies (ARCs)- Business Model" (*ClearTax*, 21 April 2025) <https://cleartax.in/s/asset-reconstruction-companies-arcs>accessed 12 May 2025.
[4] SEBI (Issue and Listing of Securitized Debt Instruments and Security Receipts) Regulations, 2008, Gazette of India, No LAD-NRO/GN/2008/13/127878, 17 June 2008.
[5] McKinsey & Company, "Fintechs: A New Paradigm of growth" (*McKinsey & Company*, 24 October 2024) <https://www.mckinsey.com/industries/financial-services/our-insights/fintechs-a-new-paradigm-of-growth>accessed 12 May 2025.
[6] Doreth Clemon, "Initial Coin Offering (ICO): Coin Launch Defined, With Examples" (*Investopedia*, 02 June 2024) <https://www.investopedia.com/terms/i/initial-coin-offering-ico.asp>accessed 12 May 2025.

an asset, meaning that a security token could represent a share in the company, ownership of a piece of real estate, or participation in investment funds. Despite their structural differences, securitization and tokenization pursue fundamentally similar financial goals. While both processes aim to spread the financial risk among an extensive base of investors and allow multiple investors to participate in the ownership of tokens, specific fundamental differences exist. The securitization process is heavily intermediated with the Originator, Special Purpose Vehicle, and underwriter, but the tokenization is largely disintermediated.[7] Another difference is about legal compliance; the law requires contracts between multiple parties and serving agreements in securitization, while in tokenization, laws are fragmented and nascent.

III. LEGAL, REGULATORY, AND OPERATIONAL CHALLENGES IN TOKENIZED ASSETS

In any emerging field where money is the central player, it becomes the imperative duty of the law to govern the field with utmost care and precision. With tokenization emerging as one of those, regulating them has become a herculean task for global leaders. The following are some of the challenges assessed in the legal and regulatory sectors, coupled with operational challenges associated with tokenization that should be taken into consideration.

A. Existing Laws Governing Tokenization

In the existing regulatory framework, Singapore has one of the most comprehensive systems. Its Monetary Authority categorizes the tokenization

[7] OECD, "The Tokenization of Assets and Potential Implications for Financial Markets" (*OECD*,2020) <https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/03/the-tokenisation-of-assets-and-potential-implications-for-financial-markets_370f9853/83493d34-en.pdf> accessed 12 May 2025.

of such instruments into three parts, i.e., firstly, as a Security Token, representing an ownership interest.[8] Secondly, it is a payment token used as a medium of exchange, and thirdly, it is a utility token providing access to services and products without conferring ownership rights. These categories are governed by their respective statutory laws, such as the Securities and Futures Act,[9] Payment Service Act and the Digital Token Service Providers framework, with specific provisions governing each aspect, including the offshore activities targeting Singapore residents and augmenting existing laws. On the same note, the UAE has also framed a similar structure where its Securities and Commodities Authority regulate both the Security Token and Commodity Token.[10] Additionally, tokens that come under the Payment Token's ambit are governed by the Central Bank of the UAE through the Payment Token Services Regulation.

Moreover, the Securities and Commodities Authority **("SCA")** released its draft regulations defining security tokens and established rules for their issuance,[11] trading and promotion so that only licensed platforms like Multilateral Trading Facilities or Organized Trading Facilities are allowed to trade. It is also mandated that the Distributed Ledger Technology **("DLT")** is required to have a strong technical standard to ensure data integrity and security. On the other side of the world, the European Union has established a law where tokenized assets are governed based on their qualification as a Financial Instrument, filtering through the criteria under the Markets in

---

[8] Somer Anderson, "Cryptocurrency Security Token: Definition, Forms, and Investment" (*Investopedia*, 31 August 2024) <https://www.investopedia.com/terms/s/security-token.asp>accessed 12 May 2025.

[9] Securities and Futures Act 2001 (Singapore).

[10] Gregory Man, "UAE Securities & Commodities Authority Consults on new Security Token Regime" (*Bird Bird*, 07 February 2025) <https://www.twobirds.com/en/insights/2025/united-arab-emirates/uae-securities-,-a-,-commodities-authority-consults-on-new-security-token-regime>accessed 12 May 2025.

[11] Crypto Assets Regulations, SCA, Administrative Decision no. (11) of 2021 concerning Guidance for Crypto Asset Regulations, (17 March 2021).

Financial Instruments Directive II **("MiFID II").**[12] Failing to comply with the ambit of MiFID II might get it regulated under the Markets in Crypto-Assets Regulation **("MiCA"),** marking a crucial distinction between the regulatory frameworks.

In a similar line of thought, the United States, following the notion of '*If it looks like a security, it is a security*', governs the tokenization based on its nature, in which the nature of any tokenized asset would be determined on its qualification as an '*Investment Contract*', as per the famous '*Howey Test*'.[13] Once labelled as a security, the token's offering, trading, and management must comply with U.S. securities laws, mainly the Securities Act of 1933 and the Securities Exchange Act of 1934.[14]

Lastly, India falls short on all these fronts, as its current regulatory framework operates on the principle of 'substance over form', meaning that the legal treatment of tokenized assets is based on their underlying nature and function rather than their formal classification. Elements from foreign models that are realistically transplantable into the Indian context include the EU's clear asset-class definitions for tokenized instruments, Singapore's calibrated risk-based licensing thresholds, and the UK's functional categorization of digital tokens, all of which could provide India with greater regulatory clarity while remaining adaptable to domestic market conditions." For instance, if the token serves as a security, like shares or debentures, it would come under the ambit of the Securities Contracts (Regulation) Act, 1956 and SEBI regulations.[15] Similarly, tokens representing real estate ownership, pool investments, and promise returns will be governed by property laws such as

[12] MiFID-II, Directive 2014/65/EU, European Parliament and of the Council (15 May 2014).
[13] Crypto Law, "The Howey Test: Is Your Crypto Token a Security?" (*Gordon Law*, 2023) <https://gordonlaw.com/learn/howey-test-is-your-token-security/>accessed 12 May 2025.
[14] Securities Exchange Act, 1934 15 U.S.C. § 78a et s.
[15] Securities Contracts (Regulation) Act, 1956 (India)

the Real Estate (Regulation and Development) Act, 2016 **("RERA")** and the Collective Investment Scheme under SEBI regulations, respectively.[16] However, while this doctrine correctly emphasizes intrinsic characteristics, it falls short because it does not provide a unified or technology-specific regulatory approach suited to the unique risks and structures of tokenized assets. Regardless of these functional similarities in regulatory approaches across different nations, tokenized assets still face significant legal hurdles of not being governed under a uniform, technology-specific regulation, creating uncertainty in consistently classifying and governing tokenized assets.

1. REGULATORY CLASSIFICATION AND UNCERTAINTY

Tokenized assets in this technologically dominant era could be termed as shapeshifter assets, as they can represent any assets from stock, bonds, and real estate to gold-backed tokens and access to services. One of its key features is that it creates a major hurdle of being regulated in a structured format, which is an integral issue in determining how to legally classify tokens, affecting how the token is regulated, traded, and taxed. The key question that emerge here are whether a token should be treated in a singular format regardless of its diverse nature and, if not, how it will be treated uniformly. The question might seem simple to answer, as previously, it has been analyzed under the governing laws of different jurisdictions; wherever the token's nature ends up, the respective statute will govern the token; however, do the existing laws cover them adequately? A prime example could be the emergence of hybrid tokens, which represent a mixture of utility and profit rights. For instance, a gaming-platform token may allow users to access in-game features (utility) while simultaneously entitling holders to a share in the platform's transaction-fee revenues (profit), thereby complicating the question of whether it should

[16] Real Estate (Regulation and Development) Act, 2016.

fall under consumer-protection law, securities regulation, or both. This makes it the most challenging to classify under which respective law it should be governed. These uncertainties surrounding the correct classification of tokenized assets carry far-reaching consequences for the financial ecosystem. On a transnational level, inconsistent, erratic classification across nations will create a fertile field for regulatory shopping, allowing entities to exploit loopholes and relocate to less stringent regimes. Moreover, it would critically jeopardize the investors' protection as the inadequacy of a clear categorization may deprive investors of essential disclosures and statutory safeguards. Different regulatory sandboxes of several nations are currently dealing with these emerging challenges; however, the clear-cut answer to the said issue remains a mystery.

B. Ownership, Custody, and Settlement Issues

Tokenized assets in the Indian market present a three-layer issue that is a significant hurdle for financial regulators to overcome. Firstly, no specific legal framework could recognize digital tokens as a security or property, which creates an ambiguity in contending the ownership rights over such assets. In addition, although the assets based on blockchain technologies are immutable, their admissibility as evidence in the courts under the Bharatiya Sakshya Adhiniyam, 2023 remains unclear, obscuring the enforcement of ownership claims.[17] Moreover, tokenized assets existing on the decentralized ledger fall outside the frame of the Depositories Act of 1996, which until now governs traditional securities held in dematerialized format through the recognized depositors.[18]

---

[17] The Indian Evidence Act, 1872, Act No. 1(India Code).
[18] The Depositories Act, 1996 (India).

Secondly, there is an absence of Licensed Digital Custodians. India presently lacks a framework which could furnish licensing for digital assets custodians, abandoning the investors without regulated entities to securely store their digital assets. Moreover, the assets' reliance on private keys for asset control unveils the risk of loss, which cannot be mitigated without a regulatory custodian. At last, there is the issue of settlement and finality with the regulators and investors. Tokenized assets often work on the atomic settlement, which contrasts with the traditional T+2 & T+1 settlement cycle,[19] showcasing a question about the finality and reversibility of transactions. It is also imperative to note that such assets function by employing smart contracts, which removes the need for central counterparties, which is a financial intermediary that stands between the buyer and seller in a trade, guaranteeing its completion from the whole transaction. However, due to the absence of such central counterparties, there is an increase in the overall systemic risk of any issue emerging in the transaction, such as a security breach, transaction failure, or price fluctuation. Moreover, markets where such assets are traded often lack the netting benefits and other protection facilitated by the regulated intermediaries, shaping enforcement of rights and dispute resolution even more complex.

C. Operational Challenges in Tokenization

While tokenization undertakes to modernize real-world asset management by facilitating improved liquidity and tokenization, its deployment is replete with significant operational challenges that must be considered to ensure long-term viability and trust. Firstly, Tokenization functions on smart contracts,

[19] Giraldo Mora, "It is Along Ways Global Payment Infrastructure in Movement" (*Juna*, 2023) <https://research-api.cbs.dk/ws/portalfiles/portal/96635637/juan_camilo_giraldo-mora_phd_series_28_2023.pdf>accessed 12 May 2025.

which, although they automate the transactions but, are susceptible to several vulnerabilities, such as reentrancy attacks, integer underflow and overflows, access control issues and logic errors, which can lead to the drainage of funds to incorrect execution of contract functions. Secondly, tokenizing real-world assets entails a reliable link between the physical asset and its digital representation; however, the 'On Chain' model which records asset information directly on the blockchain- fails to do what is required.

Additionally, with the '*Off Chain*' model, the real asset is in the physical world, and only its representation is on the blockchain, so ensuring a token accurately reflects the asset's actual status is problematic. Thirdly, this blockchain ecosystem comprises various networks, each one of them having its own protocols and standards; however, all of these systems are isolated from one another, which makes assets on one blockchain hard to transfer to another one, thereby limiting liquidity and utility. Moreover, the current solutions, like token bridges, which allow tokens to be transferred across different blockchain networks aim to solve the problem but introduce security vulnerabilities.

D. Jurisdiction and Enforcement Issues

For a traditional system, the legal framework governs a transaction based on the location of the assets, parties involved, or the place where it was executed. However, the said presumption is defied by the distributed ledger technology. Tokenized assets existing on the distributed ledgers that traverse multiple jurisdictions hinder ascertaining which nation's law would be applicable. Moreover, the decentralized nature of the blockchain worsens the situation by challenging the traditional legal 'situs', which is crucial in determining the applicable laws. Another facade that the tokenized assets face is the dispute resolution in decentralized networks. Since smart contracts are employed to execute such transactions, an absence of a built-in mechanism for dispute resolution could lead to serious legal disputes that could not be entertained under the traditional legal system. While decentralized resolution platforms like Kleros have emerged as a potential solution, Kleros provides decentralized dispute resolution, but its rulings lack clear legal recognition internationally, making enforceability across jurisdictions uncertain.

IV. TOKENIZATION AS A BRIDGE BETWEEN FINANCIAL MARKETS AND RETAIL INVESTORS

On a global scale, tokenization, regardless of its uncertainty over legal governance, is seen as a perfect tool to democratize investment access, bridging the gap between retail investors and financial markets. The reason could be associated with the first mover advantage, to the lower barriers to entry and a widespread engagement of asset classes, once exclusive to high-worth investors. However, this tool does not come clean but with some of its complexities, such as losing the protection of banks, custodians and auditors, heightened technology vulnerability and little or no recourse to redressal. Thus, it becomes imperative to assess how tokenization will unleash funding avenues for the retail participants, as well as the associated risks it comes with.

A. Democratizing Access through Tokenization

Tokenization, through its primary function, facilitates a reduced minimum investment threshold so investors can buy small shares or tokens of an asset instead of meeting the high premium needs. This eases the entry barrier in traditional high-value markets such as private equity funds and other alternative assets restricted under the ambit of high-net-worth individuals, demanding high capital commitments and prolonged retention periods.[20] Tokenization can convert this ownership stake into digital tokens of smaller denominations. This enables individual investors to participate in private equity value creation for the first time in a digitally native way. This fractionalization facilitates tokens to lower the per-unit investment and delivers liquidity via secondary trading, which acts as a significant interest for private equity, evading locking up capital for years. As per a report published by the Chartered Alternative Investment Analyst Association, fractional ownership via blockchain *"can facilitate investments by lowering entry barriers in certain markets, such as private equity and private debt."*[21] Given India's legal and regulatory challenges, advancing on this opportunity is narrowly accessible; however, sandbox initiatives are underway, and GIFT City's regulators are exploring the tokenized fund under controlled conditions.[22]

B. Risks of Unregulated Tokenization and Disintermediation

Given the regulatory challenges, the investors and market altogether are exposed to notable downsides, one of which stems from disintermediation, i.e., the reduced role of intermediaries such as banks, brokers, custodians, and auditors. Since the transaction occurs peer to peer on the blockchain, digital tokens, with the assistance of smart contracts, enforce rules by themselves, reducing the dependency on traditional institutions. This process has led to efficiency, but if not curtailed, it will eliminate safeguards facilitated by very

---

[20] KPMG Assets, The Asset Tokenization C- Suite Playbook (*KPMG*, 2022)<https://assets.kpmg.com/content/dam/kpmg/sg/pdf/2024/02/kpmg-sfa-the-asset-tokenization-c-suite-playbook.pdf> accessed 12 May 2025.

[21] Chartered Alternative Investment Analyst Association, *Blockchain and the Future of Finance* (*CAIA* Association, 2022) <https://caia.org/research/blockchain-and-future-finance> accessed 12 May 2025.

[22] PIB, IFSCA introduces Framework for Regulatory Sandboxto tap into innovative FinTech solutions *(PIB*, 2023) <https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1665858> accessed on 12 May 2025.

traditional institutions. The following is an analysis of such risks. Below, we examine key risk factors when tokenized markets operate without adequate regulation:

1. LOSS OF TRADITIONAL INVESTOR PROTECTIONS:

In mainstream finance, intermediaries such as banks and custodians hold assets on behalf of investors with legal obligations and require capital to secure those assets. In addition, auditors and regulators extend eternal oversight by authenticating the assets and records as accurate and flagging any misconduct that might be there. Circumventing these intermediaries would lead to losing these core layers of protection and might pose risks such as fraud and misrepresentation. According to the International Financial Services Authority of India,[23] tokens issued without regulatory control would open the doors to issuer malfeasance or errors – to illustrate, a compromised system or deceitful issuer could issue illegitimate tokens not backed by any assets, leading to losses and eroding confidence.

2. FRAUD, SCAMS AND OPERATIONAL VULNERABILITIES:

To our dismay, the vast boom of tokenization, especially in the crypto arena, has been accompanied by numerous fraud cases and technical vulnerabilities. Fraudulent schemes such as fake token offerings and Ponzi schemes with unrealistic, high returns proliferate. Moreover, smart contracts governing tokenized assets are prone to harbor bugs and loopholes where the code has an anomaly, attackers can prey on it to steal funds or alter records. The past few years have affirmed the same, witnessing massive security

---

[23] Thakkar, Tokenization of Assets in IFSC: IFSCA's Proposed Legal Framework*, (Taxmann,*2022*) < https://www.taxmann.com/research/fema-banking-insurance/top-story/105010000000026878/tokenization-of-assets-in-ifsc-ifscas-proposed-legal-framework-experts-opinion> accessed on 12 May 2025.*

breaches on decentralized finance (DeFi) protocols and the crypto sector, with over $2 billion in losses reported in 2024 alone.[24]

3. ABSENCE OF GRIEVANCE REDRESSAL MECHANISMS:

Unlike traditional finance, a purely decentralized token market lacks a grievance redressal mechanism. A retail investor often finds himself without an institution accountable for a loss that occurred to him due to an unregulated entity defrauding him in a state of defraud by an unregulated token scheme. Additionally, the law enforcement agency would face an issue of jurisdiction. If the perpetrators are anonymous and lack the formal legal status of a token, it becomes muddled with what rights the investor even had. Moreover, the dispute over ownership and smart contract execution becomes complex. This gap is cognizant amongst regulators worldwide. International Financial Services Centres Authority (IFSCA) has clearly emphasized the need to impose standards of due diligence, disclosure and grievance redressal on the entities involved in the market.[25]

Concisely, disintermediation has reinvented tokenization but has also altered the risk dynamics. Without a level-headed oversight, investors will be at a continuously exposed risk of becoming susceptible to fraud or software bugs, with little or no hope of remedy. This would also result in the erosion of confidence in the market due to high-profile failures. Rather than being against the favorable use of tokenization, these concerns underscore the need for a

[24] Editor, "*Category deep-dive: $2.2 billion was stolen in crypto-related hacks in 2024*" (*TRM Labs*, 2025) <https://cdn.prod.website-files.com/6082dc5b670562507b3587b4/67f7132b33d3535ca28a54a4_TRM_2025%20Crypto%20Crime%20Report.pdf> accessed on 12 May 2025.

[25] Financial Sector Conduct Authority, Regulation of Crypto Assets under the Financial Advisory and Intermediary Services Act (*FSCA*, 2021) 4 https://www.fsca.co.za accessed 12 May 2025.

robust regulatory approach ensuring a safe and sustainable bridging between traditional and new finance.

V. RECOMMENDATIONS

The tokenization of assets happens at both institutional and government levels. This shift would change the preface of the financial landscape. Adopting these measures is not widespread, but institutions with blockchain capabilities will have a strategic advantage.

A. Codify Security- Token Definitions and Jurisdiction

To eliminate the ambiguity and provide a clear regulatory approach toward tokenized assets, the SEBI Act,[26] 1992, should be amended to introduce an inclusive definition of "security token". The definition should encompass any digital representation of traditional financial instruments equity shares, corporate debt, government bonds or units of collective investment schemes that are made, recorded or transferred via a distributed ledger technology system. By doing this, market participants would get clarity that all would fall squarely under the SEBI's supervision. SEBI could develop rulebooks and publish adequacy norms for token issuers. It would also be useful in a single window for permitting token issuance and trading platforms under SEBI to avoid delays inherent in multi-system clearances.

B. Phased Licensing and Sandbox Approach

Tokenization is an emerging domain, and regulators may adopt a phased licensing approach, which would typically include stages such as a sandbox (testing phase), a restricted license (limited operations phase), and a full license (unrestricted phase), with progression contingent on meeting regulatory benchmarks.

26 Securities and Exchange Board of India Act 1992 (India).

1. REGULATORY SANDBOX PHASE:

This is the testing phase where the tokenization projects can operate within a regulatory sandbox, which could be defined as a controlled environment under regulatory oversight but with certain restrictions. This allows the innovators to test *products, services, or business models under regulatory supervision* without being overburdened by huge compliance requirements. Like the U.K.'s Digital Securities Sandbox (DSS) model,[27] India could also develop a model where the sandboxes cap the scales and run for a definite period. This would ultimately enable business learning on refining tech with real users and regulatory authorities to observe the technology in action and identify what risks need managing.

2. RESTRICTED OR CONDITIONAL LICENSE:

After proving itself in the sandbox phase, a sandbox platform will receive a restricted license to operate in a broader market but under specific constraints. For instance, if a platform has undergone the first phase, that platform might be allowed to offer tokenized assets but only to accredited or institutional investors, which would limit retail exposure during the nascent phase. The whole purpose of this phase comes down to the fact that one could continue observing the platform under real market conditions.

3. FULL LICENSE (EXPANDED PHASE):

In the last stage, the platform is granted a full license, akin to any other traditional financial market license. A full license would permit the firm to offer its services to the public. By this point, the regulatory framework for

[27] Sarah Breeden, "Digital Securities Sandbox (DSS)" (*Bank of England,* 2024) <https://www.bankofengland.co.uk/financial-stability/digital-securities-sandbox>accessed 12 May 2025.

tokenized assets would be fully applicable to the firm, meaning it must conduct business just as safely as any traditional market player. For example, even if tokenized assets are deemed securities, the platform might become a licensed broker-dealer or stock exchange alternative, with obligations to perform suitability checks, disclosure, market surveillance, etc.

This phased approach ensures that regulatory oversight keeps pace with innovation. It allows regulators to start very seemingly and cautiously and scale up with the risk mitigation measures. Ultimately, a phased licensing regime strives to strike a balance: encourage fintech innovation through sandboxes and gradual integration, but require that by the time the retail public is widely involved, the operators are fully vetted and accountable under the law.

C. Legal Recognition of Smart Contracts and Regulated Custody

The legal framework should recognize Smart contracts through the Indian Contract Act of 1872 and the Indian Evidence Act of 1872.It will also be imperative to institute a "Digital Custodian" regime under SEBI, authorizing only licensed custodians to hold underlying assets backing tokens. This framework would primarily segregate token-backed assets into bankruptcy-remote trusts, ensuring that these assets remain insulated from the issuer's financial distress. By maintaining real-time audit trails on a distributed ledger, every transaction can be transparently recorded and verified, while quarterly attestations submitted to SEBI would provide regulatory oversight and independent confirmation of asset integrity. Collectively, these measures safeguard token-holders against counterparty insolvency, enhance transparency, and ensure that the property rights associated with tokenized assets are legally enforceable.

D. Mandate Interoperability, Operational Resilience, and Investor Disclosures

It would also require a token platform to adopt common technical standards to ensure cross-chain interoperability and uniform regulatory reporting. Such imposition would mandate periodic independent security audits, penetration testing and reporting to regulators.[28] It is also mandated that token issuers publish a standardized "Token Prospectus" detailing the underlying asset custodian details and risk factors.[29] Along with the SEBI-IFSC investor-education portal, these measures will empower investors to make informed decisions and foster confidence in tokenized markets. Unless government intervention is effective and righteous, these changes would not fall in the right place. The legal recognition of tokens and smart contracts and the implementation of the sandbox phased approach would ultimately make India a pioneer in the growing market.

VI. CONCLUSION

For the past 3 decades, several business stakeholders have witnessed the transition from the offline model to an embracing digital platform employing cutting-edge technologies for better adaptability and extended market presence. This digital adaptation has transformed how a business operates and now necessitates modernizing conventional fundraising, i.e., securitization. Tokenization offers the required modernization, leveraging blockchain technology and furnishing an enhanced, transparent, accessible, and efficient

[28] SEC, IoT-Enabled Tokenization of Physical Assets with Verifiable Physical Proof: A Comprehensive Regulatory and Technical Framework, (*SEC*, 2023) < https://www.sec.gov/files/ctf-written-input-daniel-bruno-corvelo-costa-092125.pdf> accessed 12 May 2025.

[29] Bitpanda, Capital Market Prospectus,(*Bitpanda*, 2022) <https://cdn.bitpanda.com/media/documents/securities/en-prospectus.pdf> accessed 12 May 2025.

fundraising mechanism to democratize investment opportunities. BlackRock, an American multinational investment management corporation, has already taken a first-mover advantage by launching its USD Institutional Digital Liquidity Fund (BUIDL) on the Ethereum blockchain.[30] This fund tokenizes shares of a money market fund, facilitating liquidity and equitable access for investors. It has already surmounted $1.87 billion in assets under management within three weeks of launch, showcasing an advancing institutional appetite for tokenized real-world assets. Analogously, JPMorgan launched a platform, '*Onyx*,' facilitating intraday repo transactions using blockchain, which has processed over $900 billion, exhibiting the scalability and portability of blockchain solutions in traditional finance.[31]

Nevertheless, the extensive tokenization application faces regulatory, legal, and operational challenges, requiring the development of a legal framework, compliance, and standard protocol for mainstream tokenized assets in mainstream finance. Whilst tokenization is not a panacea, its ability to address and fulfil the shortcomings of traditional securitization orients itself as an achievable bridge between financial markets and a broader investor base. By endorsing tokenization, the financial industry can transition into a more resilient and inclusive future.

---

[30] Vicky Ge Huang, "BlackRock Launches First Tokenized Fund on Ethereum Blockchain" (*The Wall Street Journal*, 20 March, 2024)<https://www.wsj.com/livecoverage/fed-meeting-fomc-interest-rate-decision-march-2024/card/blackrock-launches-first-tokenized-fund-on-ethereum-blockchain-nzDSJjH5mEijUzKO24T4> accessed on 12 May 2025.

[31] Peter Gaffney, "Legacy Names, Modern Brands: Security Tokens"(*CAIA Association*, 23 February, 2024)<https://caia.org/blog/2024/02/23/legacy-names-modern-brands-security-tokens> accessed on 12 May 2025.

III. FROM TARMAC TO TRUST: NAVIGATING A TURBULENCE-FREE FLIGHT PATH FOR DATA IN INSOLVENCY

Shaurya Kapoor[*]

ABSTRACT

The recent liquidations of SpiceJet and Jet Airways bring to the fore an overlooked legal issue that of what to do with passenger data when an airline is in corporate distress. Resolution professionals can and should maximise the value of the assets, including corporate data-driven ones, such as loyalty programs, passenger records, and transaction histories, under the Insolvency and Bankruptcy Code, 2016 (IBC). However, with the Digital Personal Data Protection Act, 2023 (DPDP Act), much greater safeguards have been placed on consent and the need not to have personal data spill over its intended purpose, and erasure, so the question arises whether such personal data can be commodified in insolvency without infringing individual rights. This paper looks critically at the conflict and crossing between the IBC and the DPDP Act. It takes a closer look at the Jet Airways CIRP and how data assets became the pivot of cross-border restructuring negotiations. Comparative learning experiences are also drawn from various jurisdictions. This paper will argue that the current Indian approach of taking a focused and regulated view of data as an asset, and a subject of insolvency, and securing privacy at the same time is necessary. It suggests specific exemptions under the DPDP Act in the context of insolvency and Standard Operating Procedures (SOPs) to be followed by the resolution professionals. A framework of this kind would match business efficacy with the constitutional promise of privacy in the context of both recovery by creditors and trust by consumers.

Keywords: Liquidation, CIRP, Standard Operations, Data and Asset.

---

[*] Shaurya Kapoor is a Third-year student of B.A.LL.B (Hons.) at the West Bengal National University of Juridical Sciences, Kolkata. The views stated in this paper are personal.

I. INTRODUCTION

India’s aviation sector has been a witness to a lineup of airline insolvencies in recent times. From Kingfisher Airlines to Jet Airways, and also the more recent Go First Airlines.[1] This lineup exposes multiple legal gaps in how Insolvencies have been handled. Furthermore, the Insolvency Bankruptcy Code, 2016 **(“IBC”)** itself has been subject to six legislative enactments since its enactment in 2016, while the IBBI has also introduced over a hundred changes to the code.[2] While the broader question of whether IBC was enacted in haste persists, the aviation sector insolvencies point to a specific scenario where an oversight by the IBC can be pointed out. A neglected aspect of these airline insolvencies is the treatment of the vast amount of customer data held by these companies, including but not limited to names, contact details, travel histories, credit card information, etc. and sometimes even biometrics.[3]

---

[1] Financial Express, ‘Jet Set Wait: The Airline’s Liquidation Exposes the Shortcomings of India’s Much-Vaunted Insolvency Resolution Process’ (12 November 2024), <https://www.financialexpress.com/opinion/jet-set-wait-the-airlines-liquidation-exposes-the-shortcomings-of-indias-much-vaunted-insolvency-resolution-process/>; Rimjhim Singh, ‘NCLT Approves Liquidation of Go First Airways Amid Insolvency Crisis’ (*Business Standard*, 20 January 2025), <https://www.business-standard.com/companies/news/go-first-airways-liquidation-nclt-insolvency-bankruptcy-crisis-125012000326_1.html>.

[2] Sanjay Buch and Jay Zaveri, ‘The Indian Insolvency Regime: Recent Amendments under the Insolvency and Bankruptcy Code 2016, (*International Bar Association)*<https://www.ibanet.org/article/3fb95409-8dc4-458e-be98-eafff085cc8c>.

[3] Statewatch, ‘EU: European Commission to Propose EU PNR Travel Surveillance System, *Statewatch* (2011), archived at <https://web.archive.org/web/20120105132147/http://www.statewatch.org/news/2011/nov/eu-pnr-proposal.htm>.

When an airline goes into bankruptcy, this data could be sold, exposed, or even misused without any consent or knowledge of the passengers' consent. The Jet Airways case of 2019 is an illustration of the same, where passenger data was effectively treated as an asset in the resolution process.[4] Data is certainly a very valuable asset, generally, and for the purposes of insolvency proceedings for a company.[5] However, it is essential that its treatment does not come into conflict with data protection protocols.

The data privacy landscape in India has been fundamentally reshaped by the enactment of the DPDP Act.[6] Principles such as consent-based data processing, data minimization, and granting of data principles (individuals whose data is involved) the rights to withdraw consent and erasure of personal data when it is not required further for the specific purpose with which it was given are enshrined in the DPDP Act. There is also a mandated requirement of breach notification to the affected individuals as well as the authorities.[7] However, the DPDP Act is also silent on such specific scenarios, with the lack of any explicit exception or separate rules for the companies going under insolvency scenarios. This raises questions about the reconciliation of passenger data as an asset with the stringent consent and erasure requirements

---

[4] *State Bank of India & Ors v Consortium of Mr Murari Lal Jalan & Ors* (2024) SCC Online SC 3187.

[5] 'Data Privacy In Bankruptcy: The Consumer Privacy Ombudsman' (2025) 138 HLR 1451 <https://harvardlawreview.org/print/vol-138/data-privacy-in-bankruptcy-the-consumer-privacy-ombudsman/#:~:text=section%20363(b)(1,a%20debtor%E2%80%9D%20motions%20for%20it>.

[6] Digital Personal Data Protection Act No 22 of 2023 (India).

[7] Kirsten Doyle, 'Brace Yourselves: The Game-Changing Impact Of India's DPDP Act, 2023' (*Tripwire*, 16 June, 2025) <https://www.tripwire.com/state-of-security/brace-yourselves-game-changing-impact-indias-dpdp-act#:~:text=correct%2C%20and%C2%A0erase%C2%A0their%20personal%20data,a%20breach%20of%C2%A0personal%20data%20happen>.

under the DPDP Act. Does the Resolution Professional (hereinafter referred to as RP) have the right to retain and subsequently sell the passenger data (such as the loyalty program database in the Jet Airways case) as a part of the estate, and how do the data protection norms function in securing the rights of data deletion or protection, especially with the estate's value diminution consequently? Considering the same, this paper aims to pitch solutions that assist in harmonization of the goal of asset maximization under the IBC with the data protection protocols, specifically the Digital Personal Data Protection Act, 2023 (hereinafter referred to as the DPDP Act). It further examines the conundrum with the Jet Airways case as a key referral point.

A. Key Research Questions

1. Are there any conflicts between the IBC objective to maximise asset values and the DPDP Act requirements of consent, purpose limitation, and data subject rights in cases of insolvency over personal data, as in the case of an airline loyalty program?
2. How have Indian insolvency processes that include large amounts of personal data, such aviation sector, navigated this conflict between asset monetisation and data privacy in practice?
3. What operational and legal reforms can resolve such a conflict if it exists?

I. COMPARATIVE LEGAL AND REGULATORY APPROACHES: LITERATURE REVIEW

Personal data treatment in insolvency is an intensely contentious legal terrain, especially in digital economies, where assets consisting mainly of intangibles (such as data and code) can be a significant constituent of the value of an enterprise. International best practices are forged in different levels of coordination between insolvency regimes and privacy regimes, and every surrounding jurisdiction can teach India both normative and practical lessons. In this section, prominent directions to this harmonization are outlined, and the relevance of these approaches to one another is highlighted.

A blueprint for the regulated commodification of data about insolvency proceedings exists in the United States. The landmark *FTC v. Toysmart.com* case illustrates the intervention of the Federal Trade Commission in blocking the sale of consumer data due to contravention of the company's own privacy policy by such a sale.[8] US has subsequently had reforms leading to the inclusion of privacy ombudsman safeguards within the U.S.C. section 363(b)(1) of the U.S. Bankruptcy Code,[9] while allowing selling of personal data when consistent with the debtor's previous privacy policy during bankruptcy. However, the idea of a privacy ombudsman, as well as section 363(b)(1), has been discussed at length in the Harvard Law Review paper titled *"Data Privacy in Bankruptcy: The Consumer Privacy Ombudsman."*[10] The paper contributes significantly to the debate of data privacy during insolvency, especially in the US context. It critically examines section 363(b)(1) and the privacy ombudsman requirement. The paper argues that despite being introduced as a means of injecting consumer-friendly checks into the mechanism of asset sales, in practice, the CPO mechanism has not been implemented as an effective oversight mechanism. Citing the examples of the *Borders Group* and *Celsius Network* cases,[11] the note points out the fact that CPOs generally lack institutional bargaining power, do not provide a veto, and are appointed in most cases at the discretion of the court, which exercises it not as a right, but rather as a discretionary power. Further, these ombudsman

---

[8] *FTC v Toysmart.com, LLC* (FTC File No. 002-3145, 21 July 2000) <http://ftc.gov/legal-library/browse/cases-proceedings/x000075-toysmartcom-llc-toysmartcom-inc>.
[9] Bankruptcy Abuse Prevention and Consumer Protection Act 2005, 11 USC § 363(b)(1).
[10] Data Privacy in Bankruptcy (n 6).
[11] *In re Borders Group Inc* (Bankr SDNY, No 11-10614, 14 September 2011); *In re Celsius Network LLC* (Bankr SDNY, No 22-10964, 4 January 2023).

reports are also largely advisory and the judges have continued to favour efficiency and maximization objectives.

This literature is especially instructive in terms of how a statutory framework can develop to accommodate data protection provisions in insolvency regimes, particularly where courts are encouraged to do so by regulators with an interest in protecting privacy such as the FTC. However, the paper does not discuss the interaction of the newer data protection regimes e.g. APPI in Japan,[12] or LGPD in Brazil,[13] with the insolvency proceedings, or the issues of localization requirements making cross-border data transfers during liquidation difficult. It also fails to capture a rising conflict between a growing number of sectoral data retention requirements (e.g., aviation, finance) and the broad concept of privacy in jurisdictions such as India and South Korea. Such a gap reinforces the importance of jurisdictions such as India developing both commercially feasible and rights-compliant hybrid models of insolvency-data privacy. This paper has left open the middle ground questions of comparative law, which are key to this paper: What should be the role of consent once the insolvency occurs? Who decides who will have continuing legitimacy of data use? And is insolvency law to govern over the principles of limitation of purpose that are embedded in the data protection laws?

Though more recently, in the U.S., the *RadioShack* bankruptcy case saw over 117 million customer records being offered for sale purposes, which led to a multi-state attorney general settlement restricting data use until prior consent was strictly respected.[14] However, this case simply indicates the lack

[12] Act on the Protection of Personal Information Act No 57 of 2003 (Japan).
[13] Lei Geral de Proteção de Dados Pessoais (General Law for the Protection of Personal Data) (Lei nº 13.709 de 14 de agosto de 2018) (Brazil).
[14] *In re RadioShack Corp* (Bankr D Del, No 15-10197, 2015) settlement details available at <https://www.sec.gov/Archives/edgar/data/96289/000119312515338728/d38755dex22.htm

of codified federal protection in the U.S, which allows ad hoc regulatory intervention only, and further indicates the weakness of consumer protection when privacy interests conflict with asset monetisation demands. Ultimately, this also highlights the issue of regulatory uncertainty in the U.S. with regard to this conundrum.

There are also anti-commodification inclined jurisdictions like that of the United Kingdom. Holding privacy as a right, similar to the legal status of privacy in India,[15] it becomes a compelling case to confront to evaluate if IBC asset monetization can even coexist. The *Thomas Cook* liquidation is a testament to this stance, where the Information Commissioner's Office warned publicly with regard to the sale or transfer of customer data without renewal of consent.[16] The General Data Protection Regulation (GDPR) of the European Union takes an even stricter stance by not recognizing data as a property of the enterprise itself.[17] Precisely, Article 5(1)(b) of the GDPR allows processing of personal data only for specified and lawful purposes.[18] Further, Article 6(1)(f) also allows data processing without consent for legitimate interests of the business, only if such interests are not overridden by any rights of the data subject.[19]

While privacy prioritization is commendable, Art. 5(1)(b) is devoid of the specificity needed for insolvency. The GDPR fails to strike a balance between commercial necessities of insolvency and the rights of data subjects, usually leaving resolution professionals with a stark dichotomous decision to make:

#:~:text=except%20as%20otherwise%20indicated%2c%20the,deadline%20to%20object%20to%20confirmation>.

[15] *Justice KS Puttaswamy (Retd) v Union of India* (2017) 10 SCC 1 (SC).

[16] *In re Thomas Cook Group plc (in liquidation)* (Ch D, No CR-2019-006093, 25 September 2019).

[17] 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 and on the Free Movement of Such Data (General Data Protection Regulation) [2016] OJ L119/1.

[18] Regulation (EU) 2016/679 art 5(1)(b) 2016 OJ L119/36 (EU).

[19] Regulation (EU) 2016/679 art 6(1)(f) 2016 OJ L119/36 (EU).

delete data or face legal action. Although ethically sound, the strict anti-commodification framing can, by mistake, undermine the valuation of good assets, aggravate the collection of such assets by creditors, and deter restructuring. This lack of a tailored, insolvency-sensitive framework in the GDPR therefore bringing uncertainty, not clarity. Article 6(1)(f) also employs generic terms and has a dearth of specificity for insolvency. While it attempts to carve out some exceptions as a balancing act for legitimate interests, by subjecting them to the rights and freedoms of data subjects, it ends up going in circles.

With respect to many jurisdictions taking different paths in balancing data protection with the insolvency regimes, examining Japan's framework is essential, as it is an economy that commits to strong privacy policies as well as to its wide-ranging international business activities. The Act on the Protection of Personal Information (APPI) is a significant step towards balancing between user consent and fair use of commercial information,[20] an approach similar to what India should look towards. More importantly, APPI insists on a post-transfer use that must conform to the intended purposes or consent again. This provides a balance between the avoidance of freely commodifying data in insolvency to realize value. Reflecting an evolving data economy and the presence of remaining insolvency-data overlaps, APPI offers a convenient statutory benchmark in a potential future convergence of Indian laws.

The APPI does balance data commoditization and privacy, with Article 27(1)(ii) requiring prior consent for data transfers,[21] and Article 16(1) mandating the purpose limitation post-transfer.[22] This ensures that insolvency

[20] Act on the Protection of Personal Information Act 2003 (Japan) (n 12).
[21] Act on the Protection of Personal Information Act 2003 art 27(1)(ii) (Japan).
[22] Act on the Protection of Personal Information Act 2003 art 16(1) (Japan).

professionals cannot monetize data as they fancy. However, there is still a dearth of a proper oversight mechanism in place for such transfers. While cross-border data transfers are allowed under Article 28, it requires an "adequate" level of protection, and this list of adequacies is rather narrow, thereby largely limiting multinational insolvency resolutions.[23] However, the issue of enforcement uniformity is based on this limitation, compounded by the fact that Article 28 of APPI grants a relatively lenient opt-out regime in cross-border data transfers.[24] Whereas the law stipulates that there must be a provision of similar protection in the receiving country, it authorises such transfers even when there are no adequacy decisions issued, where the protection only rests on self-regulatory frameworks or on standard contractual clauses. This provides an opportunity to apply consent norms and post-transfer obligations inconsistently in insolvency, including voting inconsistency between before and after transfer, on a debt-by-debt basis where foreign resolution professionals or purchasers are involved. The lack of any required audits, or instantaneous regulatory oversight adds to the risk that personal information can be repurposed or monetised beyond the original purpose and negates the otherwise robust consent-based structure in APPI.

A similarly situated Global South jurisdiction that attempts a reconciliation of cross border data transfers and data privacy, as a developing digital economy, is Brazil. The General Data Protection Law (LGPD) in Brazil gives an extensive framework on cross-border data transfers.[25] Article 33 of the LGPD provides that international transfer can only be enabled under one of the following mechanisms: adequacy decisions, ANPD-approved Standard

---

[23] Act on the Protection of Personal Information Act 2003 art.28 (Japan).
[24] Andrew Clearwater, 'Japan's Amended APPI Comes into Effect: These APPI Amendments Include Data Breach Reporting, Stricter Data Transfers, and Increased Data Access Rights' (*OneTrust*, 1 April 2022) <https://www.onetrust.com/blog/japans-amended-appi-comes-into-effect/>.
[25] General Law for the Protection of Personal Data (Brazil) (n 14).

Contractual Clauses (SCCs), Binding Corporate Rules (BCRs) or specifically-authorised specific contractual clauses.[26] Resolution CD/ANPD No. 19/2024, of the National Data Protection Authority (ANPD) in August 2024, has outlined details of SCCs, equivalence assessment, and transparency requirements.[27] The SCCs will have to be used verbatim, and a set of transparency requirements, including disclosures on websites and enabling data subjects to access the text of comparable clauses within 15 days, will follow. The Brazilian model balances privacy with commercial flexibility, similar to the APPI, but with structured enforcement safeguards.

Despite its structured approach, the Brazilian system exposes weaknesses in terms of its enforcement and timing, especially when it involves insolvency situations. So far, ANPD has not made any adequacy decisions, and this has necessitated the use of SCCs as the only possible ready-made alternative. Approval of BCRs or clauses takes time and has not been definitively decided, leading to a legal bottleneck.[28] In cross-border insolvency situations, this may cause an incoherent application of privacy standards. Buyers may act on unverified clauses or have to wait to obtain information that is crucial to asset valuation. Moreover, the transparency requirements provided in Brazil cannot ensure real-time control; no regulatory audits or quick enforcement measures can be applied to eliminate the possibility of insolvent entities monetizing the personal data under poorly enforced safeguards. Lastly, the inflexibility of SCCs, although privacy-preserving, can prohibit effective restructurings, as

---

[26] General Law for the Protection of Personal Data, arts 33–36 (Brazil); Fernando Bousso and Matheus Kasputis, 'Brazil's New Regulation on International Data Transfers' (*IAPP*, 4 September 2024) <https://iapp.org/news/a/brazil-s-new-regulation-on-international-data-transfers>.

[27] ANPD Resolution CD/ANPD No 19/2024 (Brazil); Trade.gov, 'Brazil's New Rules on International Data Transfers' (12 August 2025) <https://www.trade.gov/market-intelligence/brazils-new-rules-international-data-transfers>.

[28] Renata Neeser, 'Brazilian SCCs Only Viable Mechanism Now' (*JD Supra*, 12 August 2025)<https://www.jdsupra.com/legalnews/brazil-standard-contractual-clauses-8491471/>.

well as disincentivize foreign bidders, unused to the hard formatting under Brazil.

Although the privacy protection of Japan APPI and Brazil LGPD contains compelling cross-border privacy protections, neither framework resolves the specific exigency of insolvency proceedings, where the transfers of data might be time-sensitive and value-based. In the lack of specific insolvency-related statutory regulation and live regulation inspection, the voluntary nature of insolvency rules and regulations threatens to derail their voluntary mechanisms by permitting data to be commercialised or moved without any sufficient procedural discernment, thus affecting both debtors and creditors to the possibilities of legal obscurity.

Indian research and legislation on the other hand, is scant in the interplay between data protection and insolvency despite the burgeoning interest in the field globally. This gap in passenger data treatment after insolvency, especially in the aviation industry, has been noted in one such commentary in *Legal500*,[29] which calls out lack of specific protection against the monetization of confidential customer information by acquirers or resolution professionals as outlined in the DPDP Act, 2023.[30]

The other contribution of particular interest is by Adam Feibelman and Renuka Sane, who support a maximalist treatment of the information in an insolvency system, but their inferential contribution is to institutional transparency and efficiency of information rather than privacy per se.[31]

[29] Agrud Partners, 'Airline Insolvency in India: Legal Gaps in Lessors' Rights and Passenger Data Protection (*Legal500*, 10 June 2025)<https://www.legal500.com/developments/thought-leadership/airline-insolvency-in-india-legal-gaps-in-lessors-rights-and-passenger-data-protection>.
[30] Digital Personal Data Protection Act 2023 (India).
[31] Adam Feibelman and Renuka Sane, 'A Maximalist Approach to Data from India's New Insolvency and Bankruptcy System' (Tulane Public Law Research Paper No 19-4, 28 December 2018) <https://ssrn.com/abstract=3311195> or <http://dx.doi.org/10.2139/ssrn.3311195>.

Although these discussions are useful, significant gaps can be observed. The literature on formulating or collecting macro-level information on the reformation or bankruptcy administration does much of the existing literature, failing to spotlight the privacy threats and legal tangles arising when the personal data eventually falls into the estate of the debtor. Operational and doctrinal analyses are absent. How the consent and erasure requirements in the DPDP Act and RP requirements under the IBC are at loggerheads, or what regulatory regimes can lawfully potentially guide cross-border data transfers as part of a resolution.

Therefore, even as these jurisdictions and commentaries present diverse approaches to regulatory ideas, their failure to harmonise insolvency-specific needs with data protection requirements reveals a sharp necessity in an equilibrated hybrid model, which the paper now goes on to develop in the Indian context. This further underscores the essential contribution that this paper seeks to make by extending the conversation to fill the void presented above by proposing procedural and legislative reforms for the reconciliation of data protection and insolvency. If India effectively acts on the same towards its addressal, it could lead to a potential framework for various digital economies to refer to.

II. ANALYSING THE CONFLICT BETWEEN THE IBC, 2016 AND THE DPDP ACT, 2023

A. Legal Treatment of Data as an Asset in the Indian Insolvency Landscape

The Supreme Court of India in *Justice K.S. Puttaswamy v. In the Union of India (2017)* case judgment, the right to privacy was established as a fundamental right under Article 21 of the Constitution.[32] Another important aspect of this ruling was the establishment of informational privacy, which is the right to control the circulation and use of personal data by people. The Court reiterated the role of individuals in the data economy not as passive data subjects but active data principals, with an ability to make decisions over their personal information. Critically, firms that receive such information are referred to as data fiduciaries who are merely custodians of the data but not the owners of the data.

However, the customer data and, in particular, data aggregated into databases remain a potentially monetized asset to commercial and insolvency law. Airlines, e-commerce companies, and technology companies use data as capital. The IBC 2016 has an expansive definition of assets that form a part of the debtor's estate and explicitly includes intangible assets in the same.[33] A key point of reference, which will also be further elaborated upon in this paper, is the case of Jet Airways, one of whose most treasured property assets was its ownership stake with Jet Privilege Pvt. Ltd. (JPPL), the operator of its frequent flyer programme.[34] JPPL also had the personal and behavioural data of more than 9 million passengers under management. Using nearly all this data, valuations estimated the company to be worth more than 7,000 crore.[35] This customer base met the fancy of bidders, including global investors.

India's Digital Personal Data Protection Act, 2023 (DPDP Act),[36] which frames a modern consent-based data governance framework, but does not specifically address data governance in insolvency situations. It puts into

---

[32] *Puttaswamy* (n 16).
[33] Insolvency and Bankruptcy Code No. 31 of 2016 § 18(f)(iv) (India).
[34] Gopika Gopakumar and Rhik Kundu, 'Jet Airways' Stake in Frequent Flyer Scheme Key for Potential Bidders' (*Mint*, 21 July 2019) <https://www.livemint.com/companies/news/jet-airways-stake-in-frequent-flyer-scheme-key-for-potential-bidders-1563730990896.html>.
[35] ibid.
[36] Digital Personal Data Protection Act 2023 (India).

writing the fundamental principles that include purpose limitation, informed consent, data minimization, and right to erasure. Section 8(7) states that a person must erase the personal data when the purpose is reached, or when the individual has withdrawn his or her consent, unless it needs to be held in order to comply with any law.[37] Also, the DPDP Act in Section 16(1) enacts a localisation requirement, which obliges the storage of significant classes of personal data in India, providing one more layer of compliance by cross-border bidders in insolvency proceedings.[38]

However, the Insolvency resolution is not considered as a legitimate basis to retain the data, and similarly, the Act does not create exemptions for resolution professionals (RPs) or liquidators who work under the IBC, 2016. This adds legal uncertainty because RPs are mandated under Sections 25 and 29 of the IBC to maintain and maximize the value of the assets of the corporate debtor, including datasets,[39] but transferring or otherwise monetising such data that is not required by the IBC without a renewed consent or statutory basis may violate the DPDP Act. This brings a fundamental tension, while data protection law favours dignity and consent, insolvency law favours value maximization.

B. Case Study: Illustrating the IBC and DPDP Conflict via the Jet Airways Insolvency

Jet Airways, which was one of the largest airways belonging to the private sector of India, closed down in April 2019 on account of financial turmoil. In June 2019, the airline entered the Corporate Insolvency Resolution Process

[37] Digital Personal Data Protection Act 2023 s 8(7) (India).
[38] Digital Personal Data Protection Act 2023 s 16(1) (India).
[39] Digital Personal Data Protection Act 2023 SS 25(C), 29(2) (India).

(CIRP) under the IBC 2016, at the request of the creditors.[40] The recovery of such a company was left to the Resolution Professional (RP) to identify a resolution applicant or to drive the company into liquidation. During the insolvency proceedings, Jet Airways had only a few tangible assets; most of the aircraft were on lease, and there was no real estate. However, there is one important intangible asset that caught the attention, a 49.9 percent stake in JetPrivilege Pvt. Ltd. (JPPL), which is involved in managing loyalty programs. The rest, or 50.1 percent of JPPL, was owned by Etihad Airways. When Jet collapsed, JPPL kept functioning under the shelter of Etihad and re-branded to the name of "InterMiles" in 2020.[41]

By the middle of 2019, JetPrivilege had a database with more than 9 million frequent flyer members. The profile of these members contained names, travel history, meal preferences, passport information, and other sensitive personal information, which could be a very valuable resource to any bidding entity that wants to restore or use the Jet brand name.[42] Nevertheless, JPPL was a distinct corporate entity, which meant that all the RP could transfer was Jet 49.9 per cent ownership in JPPL, not the data itself. Notwithstanding this shortcoming, the worth of the data played a big role in attracting potential bidders in the case of JPPL, which has been estimated to be 7,300 crore (approximately 1.1 billion USD) by the industry watchers.[43]

This raises two key legal issues:

---

[40] Koustav Das, 'Jet Airways Retail Shareholders Stare at Total Loss after Liquidation Order: Report' *India Today* (7 November 2024) <https://www.livemint.com/companies/news/jet-airways-stake-in-frequent-flyer-scheme-key-for-potential-bidders-1563730990896.html>.

[41] ET Bureau, 'Jet Privilege Goes for Brand Revamp; to Be Known as 'InterMiles' *Economic Times* (14 November 2019) <https://www.economictimes.indiatimes.com/industry/transportation/airlines-/-aviation/jet-privilege-goes-for-brand-revamp-to-be-known-as-intermiles/articleshow/72053969.cms>.

[42] Gopika Gopakumar and Rhik Kundu (n 35).

[43] ibid.; Agrud Partners, 'Airline Insolvency in India: Legal Gaps in Lessors' Rights and Passenger Data Protection' (n 30).

1. Firstly, Jet did not own the passenger data and was merely an equity holder in the entity owning the data.
2. Secondly, even if a sale occurred, could the transfer of customer data without their informed consent be legally done as a part of Jet's insolvency estate?

While in Jet's case, a question of data ownership arises, the same would not arise in a case where a company directly owns data, which is the focus of this paper. There was no general data protection law in India during the period when no Personal Data Protection Bill, 2019 (then pending) or the current Digital Personal Data Protection Act, 2023 (DPDP Act) were applicable. This provision of law would leave privacy rights vulnerable to the contractual privacy policy of JPPL and its own ethical norms. Etihad continued to retain operational control of InterMiles, and the loyalty program was continued for members.[44] This arguably may mitigate some immediate privacy risks. The situation could vastly differ if Jet's JPPL stake passed to another organization or a competing airline. Hence, the fundamental legal ambiguity regarding the sale of passenger data without informed and active consent continued to be unaddressed.

If the entire Jet Airways insolvency saga is to be viewed from the perspective of the DPDP Act, 2023, serious legal crossroads would arise. Firstly, the Act requires erasure of personal data by data fiduciaries post fulfilment of the purpose of withdrawal of consent, unless retention is legally mandated.[45] In fact, the new Draft Digital Personal Data Protection Rules, 2025, suggest a three-year inactivity threshold for significant data fiduciaries

[44] ibid.
[45] Digital Personal Data Protection Act 2023 s 8(7) (India).

(SDFs), post which it requires a mandatory data deletion.[46] Such a threshold would be easily crossed in the Jet Airways case.

A new data fiduciary would further require fresh consent and notice before processing the acquired data,[47] and the DPDP also requires data processing only for the originally specified purpose.[48] Therefore, any transfer or revival of any kind for these loyalty programs would require proper reassessment of purpose and fresh opt-ins. Moreover, the DPDP Act, 2023, though it allows cross-border data transfer, follows a negative listing approach whereby the Central Government can bar certain jurisdictions from such a transfer.[49]

The DPDP Rules, 2025, further propose a white-listing type model, including empowering the Central Government to place conditions on access to Indian personal data for certain foreign states and localization-specific data classes for SDFs.[50] This practically makes cross-border resolutions legally challenging and cumbersome to operate, as data was collected under a currently defunct fiduciary's policies and terms and conditions. Especially, if the third party wishes to use it for a different purpose, such as targeted marketing or an alternate scheme. This could, in fact, draw penalties under the DPDP for unlawful processing, up to rupees two hundred crores.[51] Unlike Article 6(1)(f) of the GDPR, the Indian law also lacks a "legitimate interest"

[46] Ministry of Electronics and Information Technology, Draft Digital Personal Data Protection Rules, 2025, rule 7(2) (India).
[47] Digital Personal Data Protection Act 2023 s 16(1) (India).
[48] Digital Personal Data Protection Act 2023 s 5 (India).
[49] Taxmann,'Cross-Border Data Transfers under the DPDP Act 2023' (last updated 4 May 2025) <https://www.taxmann.com/post/blog/cross-border-data-transfers-under-the-dpdp-act/>.
[50] Trilegal, 'The Draft Digital Personal Data Protection Rules, 2025 – Operationalising India's Data Protection Law' (3 January 2025) <https://trilegal.com/dataprotection/the-draft-digital-personal-data-protection-rules-2025-operationalising-indias-data-protection-law/>.
[51] Digital Personal Data Protection Act 2023 s 33 (India).

basis for personal data processing based on a business justification without consent.[52]

Furthermore, DPDP allows data principal to withdraw consent for their data in its entirety, and such a request during the insolvency process would directly conflict with the IRP's/RP's duty to take control and custody of the asset and protect and preserve the same.[53] If a moratorium were to be further imposed under Section 14,[54] any deletion of data by the data principals could arguably cause these estate assets to be disposed of in an unauthorised manner. This could also conflict with the value maximization goal of the IBC as if data as an asset becomes susceptible to deletion based on the data principal's consent, its value gets jeopardized.

On the data protection front, while the IBC states that Insolvency Professionals (IPs) must follow "reasonable care and diligence" in their professional conduct,[55] no specific protocols exist with regard to the handling of personal data. Moreover, the DPDP itself also lacks any exceptions or safe harbour for RPs and the risk of civil as well as criminal liability remains active.[56]

The Jet Priviledge case, hence, serves as a caution for any data-based insolvencies in the future, pointing to a requirement of integration between data protection laws and the IBC, without which these frameworks will continue to be at a crossroads, and the conundrum will continue. Such a regulatory gap contributes to variable practice and detracts predictability of outcomes to the bidders, creditors, as well as data principles.

52 Regulation 2016/679, art 6(1)(f) (n 20).
53 Insolvency and Bankruptcy Code 2016 ss 18(f) 25(1) 25(2)(c) (India).
54 Insolvency and Bankruptcy Code 2016 s 14 (India).
55 Insolvency and Bankruptcy Code 2016 s 208(2)(a) (India).
56 Digital Personal Data Protection Act 2023 ss 33–34 (India).

IV. RECONCILIATION OF THE IBC, 2016, AND THE DPDP, 2023: TOWARDS A HARMONIZED FRAMEWORK

To ensure that the insolvency regime in India does not come into conflict with the emerging data protection landscape in the country, there is a need to formulate both legal and practical changes. There are a few conceptual and practical challenges where the IBC and the DPDP intersect, as previously discussed. Accommodating both the commercialisation of data assets and the privacy concerns of individuals poses a dual challenge, namely, how to allow resolution professionals (RPs) to take advantage of the commercial value of data assets without infringing the privacy rights of individuals. It demands a two-pronged solution: Specific amendments to the IBC and DPDP Act, and operative procedures to be followed by insolvency professionals, in the form of standard operating procedures (SOPs).

A. Recognition of Data as a Regulated Asset under the IBC

The legal recognition of personal data as one of the constituents of the insolvency estate and the recognised regulatory nature of personal data shall be the first reform agenda. The interests of personal data are now covered by the term of assets according to IBC, yet it is not defined and does not imply a particular inclusion. Nevertheless, in a digital economy, a database of customer information is typically a valuable resource for companies.[57] To make such assets subject to the insolvency resolution, the phrase "assets" should be supplemented in either Section 18(f) (giving the interim resolution professional control of assets of the corporate debtor) or Section 36(3) (defining the liquidation estate), to clarify that the term extends to databases,

---

[57] OECD*, The Value of Data in Digital-Based Business Models: Measurement and Economic Policy Implications* (2020).

digital repositories and personal data of the debtor.[58] However, only insofar as such data is being processed in line with the applicable data protection law.

B. Carving Insolvency-Specific Exemptions under the DPDP Act

Although the DPDP Act does provide that personal data may be processed without the consent of the owner when it is required by law,[59] this broad delineation does not necessarily provide sufficient guidance in insolvency legislation. To ensure this, a new provision under DPDP rule-making power authority would provide that data processing may be carried out by an RP under the IBC and will be deemed lawful under Section 7(b) of the Act in case it is strictly necessary in the context of insolvency including, but not limited to resolution, sale as a going concern,[60] or liquidation.

In a situation where the requirements of the IBC and the DPDP Act come into conflict, e.g., when a data principal's right to erasure under the DPDP Act is exercised,[61] but the data sought to be deleted is considered vital to continued insolvency resolution efforts, then a limited and specific exemption should be provided. This clause must clearly make it clear that during the short period that the Corporate Insolvency Resolution Process (CIRP) or liquidation proceedings may be in progress, the mandates of resolution professionals under the IBC will be accepted over any conflicting mandate laid out by the DPDP Act. For reference, CIRP may need customer transactional data or past consent logs in assessing proposals by bidders or in determining claims. Allowing deletion at this point would serve to provide a frustration to the

[58] Insolvency and Bankruptcy Code 2016 ss 18(f) 36(3) (India).
[59] Digital Personal Data Protection Act 2023 s 7(b) (India).
[60] IBCLAW, 'Going Concern Sale during the Liquidation Process under Insolvency and Bankruptcy Code, 2016 (IBC)' (*IBC Law*, 25 May 2019) <https://ibclaw.in/going-concern-sale-during-the-liquidation-process-under-insolvency-and-bankruptcy-code-2016-ibc/>.
[61] Digital Personal Data Protection Act 2023 s 12(3) (India).

resolution objective in Section 31 of the IBC.[62] But to preclude the vast derogation of privacy in this override, it must be strictly limited. It must only be applied to data that can clearly be shown to be required for insolvency-related purposes, and must automatically expire with the adoption of a resolution plan or entry of liquidation. Standard DPDP obligations, e.g., data minimisation, purpose limitation, should be reverted to after the appropriations, and continued use or transfer of personal data should either be consent-based or within one of the few statutory reasons under Section 7 of the DPDP Act.[63] This framework would not bring the IBC to undertake a commercial purpose at the expense of the essence of the privacy protections offered in data law.

The DPDP framework allows the Central Government to notify sector-specific rules to deal with privacy considerations that may be issues related to various context sensitivities.[64] In consideration of this, a specific provision, which can be referred to as *"Processing of Personal Data during Insolvency or Restructuring"* should be developed. The first rule should give the Resolution Professional (RP) the statutory status of a data fiduciary in a Corporate Insolvency Resolution Process (CIRP), making the RP subject to all the provisions of a data fiduciary under the DPDP Act, including the information purpose limitation, data minimisation, and lawful processing requirements in Section 8 of the DPDP Act.[65]

---

[62] Insolvency and Bankruptcy Code 2016 s 31 (India).
[63] Digital Personal Data Protection Act 2023 s 7 (India).
[64] Digital Personal Data Protection Act 2023 s 11(3) (India); Shivalik Chandan and Others, 'India: Examining the Digital Personal Data Protection Act as Government Publishes Draft Rules Ahead of Implementation' (*Global Investigations Review*, 31 July 2025) (noting that sector-specific laws in areas such as banking, insurance, healthcare, and telecom "continue to apply, provided they do not conflict with the provisions of the DPDPA or are expressly repealed.")<https://globalinvestigationsreview.com/guide/the-guide-cyber-investigations/fourth-edition/article/india-examining-the-digital-personal-data-protection-act-government-publishes-draft-rules-ahead-of-implementation>.
[65] Digital Personal Data Protection Act 2023 s 8 (India).

Furthermore, to provide transparency in insolvency regarding data processing, the rule must specifically require the RP to provide notice to all data principals that (a) insolvency has occurred; and (b) their personal data, which had at that point been gathered and processed by the corporate debtor, will thereafter be handled differently. This notice should describe how the information will be used: retained only for post-resolution activities, handed over to a successful resolution applicant, or anonymized and removed after CIRP. This reflects the obligations of transparency provisions under regimes such as GDPR,[66] where a data subject must be informed about material changes in the context of control and processing.

Also, any resolution applicant or acquirer that wants to access the data assets of the corporate debtor, such as its customer list, usage pattern, or loyalty database, should be mandated to either (a) use the same data solely for the original intended purpose, or (b) obtain the express and individual consent of the data principals in case it wants to use the data in a new purpose. Such a requirement upholds the principle of limiting purposes of use under Section 8(2) c of the DPDP Act,[67] and discourages lapses in using personal data as a commodity to make a quick profit without due process.

C. SOPs for Resolution Professionals

Apart from legislative amendments, it is advised that the Insolvency and Bankruptcy Board of India (IBBI) and the Data Protection Board (DPB) collaborate on elaborating a comprehensive Standard Operating Procedure (SOP) that RPs follow when handling personal data in the course of insolvency proceedings. Regulatory SOPs have been a longstanding regulatory practice; for instance, the Reserve Bank of India (RBI) had issued a Master Direction

[66] Regulation 2016/679, arts 13, 14 (n 18).
[67] Digital Personal Data Protection Act 2023 s 8 (2)(c) (India).

on Digital Payment Security Controls, which included SOPs for customer data management, upholding encryption, and mandated a secure transfer if a business is discontinued in the event of shutdown or mergers.[68] Such a model should be created for the insolvency domain to fill the operational void between the IBC and DPDP regimes with a gradual data governance environment.

The SOP must start with the obligatory data mapping, when RP will be required to provide a comprehensive list of all the personal data possessed by the corporate debtor. This is spread across customer names, contact information, payment and travel history, browsing history (where applicable), loyalty program data, and related metadata. The RP should further analyse the privacy policy of the debtor to gauge the legality of pre-CIRP gathering of the data, especially clauses dealing with transfers of data during mergers/ restructuring, with the help of which limited application of these clauses post-CIRP can be initiated. The RP should be obliged to introduce secure access and storage controls after this. Under section 8(5) of the DPDP Act, reasonable security measures against breaches are required to be taken.[69] To that end, the SOP must mandate such items as encryption at rest, access logging, multi-factor authentication, and third-party security audits. Where customers revoke their consent or request erasure of the data, the RP can invoke the exemption in Section 7(b),[70] which is based on legal obligations to retain such data where that is necessary to preserve the estate. An example is that deleting loyalty transaction histories can drive down the value of a monetised frequent flyer programme in CIRP. The RP can also initiate NCLT permission to defer loss

[68] Reserve Bank of India, *Master Direction on Digital Payment Security Controls* § 7.2.2 (18 February 2021) (mandating business continuity and customer data safeguards during business transitions or shutdowns).
[69] Digital Personal Data Protection Act 2023 s 8 (5) (India).
[70] *id.* s 7(b) ("processing necessary for compliance with any law for the time being in force").

of deletion obligations as part of CIRP on the basis of commercial need and burden of compliance.

To maintain transparency, it is advisable that the SOP compel the RP to issue notices in public domain, including via email, the firm's webpage, or through publication on stock exchanges, to inform data principals that (a) the corporate debtor is in a situation of insolvency, (b) the RP is the trustee in place, and (c) that the obligations and restrictions regulating processing operations, as prescribed by the law, will be observed to the letter during CIRP.

In a case where resolution applicants request disclosure of data, layering disclosure should be suggested in the SOP. Preliminary figures must be anonymised or aggregated. When granular or identifiable data is required, a Non-Disclosure Agreement (NDA) and a Data Processing Agreement (DPA) will be signed. Such agreements must oblige the applicant to erase the data in the case of an unsuccessful bid and utilize it only according to the evaluation purpose.

Once a resolution plan is passed, the new data fiduciary is the winning applicant. The SOP should also instruct the RP to proceed with a structured handover, including providing consent logs, any outstanding data subject requests, reports of previous breaches, and any other obligations that are assumed under the privacy policy. The new fiduciary is obliged either to keep utilizing the information on the same basis as above or to seek new informed consent, a policy captured in the purpose limitation principle under the DPDP Act.[71]

In cases of liquidation, the SOP would have to differentiate between a situation where personal data needs destruction and where such data is to be

---

[71] *id.* s 6(2) (data can only be used for specified, lawful purposes and must be deleted when no longer necessary).

sold as assets. In the event that the liquidator intends to monetise personal data, such as the customer lists, loyalty program logs, or usage analytics, as a part of an asset sale, the SOP should encompass high procedural safeguards. The data should only be sold to a data fiduciary as defined by the DPDP Act,[72] who is willing to abide by its duties (considering the parallelly suggested amendments and additions in the DPDP Act). Second, the sale of the data must be within the scope of the initial collection purpose for which the data was collected and informed to the data principals, or it must be the subject of new, informed consent among the data principals. The requirement of proper notices, as previously delineated should be required.

In case a buyer is not found or the data is no longer required with a legal or business aspect, it should be deleted or anonymised in accordance with industry standards, i.e., DoD 5220.22-M or NIST 800-88 programs.[73] A final report of compliance and a public notice are to be issued that proves data disposal and closure of fiduciary obligations.

D. Balancing Cross-Border Transfer Restrictions

In instances such as JetAirways, cross-border sharing is contentious, where proceedings in the Netherlands were conducted simultaneously with the Indian CIRP.[74] DPDP Act places a limit on data transfers to jurisdictions negatively listed by the government of India.[75] The Draft DPDP Rules, 2025, provide additional constraints as the Centre may impose other restrictions, such as access by foreign States.[76]

---

[72] Digital Personal Data Protection Act 2023 s 3 (d) (India).
[73] National Institute of Standards & Technology, *Guidelines for Media Sanitization*, Special Publ'n 800-88, Rev 1 (December 2014).
[74] Olivia Nahak, 'The Jet Airways Case: Addressing India's Cross-Border Insolvency Inadequacies' (*IBC Laws*, 5 August 2025) <https://ibclaw.in/the-jet-airways-case-addressing-indias-cross-border-insolvency-inadequacies-by-olivia-nahak/>.
[75] Taxmann, 'Cross-Border Data Transfers under the DPDP Act 2023' (n 50).
[76] Trilegal, 'The Draft Digital Personal Data Protection Rules, 2025' (n 51).

For such scenarios, the Rules need to be amended to grant a foreign bidder a carve-out as an opportunity to perform due diligence. Transfer in the case of contractual adherence by the foreign party to Indian standards, and submission to the Indian jurisdiction for dispute resolution, though the country that might be blacklisted, could be admitted.

V. CONCLUSION

The business insolvency of companies dealing directly with the people, such as Jet Airways, highlights one such key policy gap in law, i.e., the regulation of personal data, which can be paramount in terms of value and should be more firmly entrenched within the insolvency regime. The DPDP Act, 2023, is right in focusing on personal data privacy, whereas the IBC 2016 is based on the idea of maximisation of asset value to creditors. These goals do not have to be contradictory. A structured integration is not only feasible but necessary, as was discussed in this paper.

This paper demonstrates that under the current state of law, resolution professionals are placed in an untenable position; expected to maximise value (including data) under the IBC, but also potentially endangering consent and erasure obligations under the DPDP. This problem is compounded even in cross-border cases, where data localisation and limitations on the transfer of data may impede any restructuring involving bidders in other jurisdictions. By analysing the legislative gaps in detail, through comparative studies surrounding the U.S., EU, Japan, Brazil, and the Indian context, this paper has proposed a balanced legal and procedural framework. Both regimes can be aligned by recognising personal data as a regulated asset, with the insolvency professionals being given clear SOPs and fiduciary responsibilities, and carving out two narrow, time-limited exemptions under DPDP.

There needs to be, however, not a trade-off decision between privacy and a business rescue, but an integration of the two. Information privacy is vital to the respectability of a resolution plan, and in a digital economy, a resolution plan cannot afford to lose that quality. Jet Airways must not only be regarded as a learning experience, but also a legislative turning point- one that will lead India to mature insolvency laws that can accommodate the digital future of our country.

IV. GEOLOGY, GEOPOLITICS AND TRADE: UNEARTHING THE FAULT-LINES IN EXPORT RESTRICTIONS ON CRITICAL MINERALS

Dhruv Singhal[*]

ABSTRACT

Critical Mineral Resources have been called the 'oil' of the 21st century, given their indispensable role in the global clean energy transition. However, the geographic concentration of these minerals, coupled with complex supply chains, exposes the world to geopolitical risks, trade restrictions, and supply disruptions. Several resource-rich nations have imposed export restrictions to safeguard domestic industries and assert economic sovereignty, raising concerns over the legality of such measures under World Trade Organization rules. This paper examines the legal framework governing export restrictions on CMR under the General Agreement on Tariffs and Trade, focusing on quantitative restrictions under Article XI and general exceptions under Article XX. Additionally, it assesses the role of export duties and their implications for global trade governance. A key challenge for the WTO is balancing the competing interests of resource-endowed nations seeking control over their critical minerals and resource-dependent nations relying on stable supply chains. The paper explores how WTO policy can mediate these tensions, ensuring a legally sound yet pragmatic approach to CMR trade regulation. In light of emerging trends in international trade law, this study also evaluates India's position as a resource-dependent economy vulnerable to supply shocks. By analysing global best practices and recent WTO disputes, the paper provides policy recommendations for India to enhance its trade resilience, mitigate geopolitical risks, and secure critical mineral supply chains. Ultimately, this paper contributes to the broader discourse on sustainable, legally coherent trade policies for CMR in an increasingly fragmented global economy.

Keywords: CMR, World Trade Organisation, Tariffs, Trade and Policies.

[*] Dhruv Singhal is a Fourth-Year student of B.A.LL.B (Hons.) at National Law University, Jodhpur. The views stated in this paper are personal.

I. INTRODUCTION: ASSESSING THE 'CRITICALITY' OF MINERALS IN GEOLOGY AND GEOPOLITICS

"*The response from policy makers and companies will determine whether critical minerals remain a vital enabler for clean energy transitions or become a bottleneck in the process.*"

– Dr. Fatih Birol, Executive Director, International Energy Agency[1]

Critical Mineral Resources **("CMR")** have been called the 'oil' of the 21st century.[2] With resources like lithium, cobalt, and rare earths serving as the foundation of future economies,[3] the global competition for vital minerals is fuelled by changing political, economic, and technical environments.[4] From the development of the "continental shelf" theory, which permits offshore oil

[1] International Energy Agency, *The Role of Critical Minerals in Clean Energy Transitions* (World Energy Outlook Special Report, May 2021).
[2] C H M Schmitt, *The Geopolitics of Critical Minerals* (2019).
[3] ibid.
[4] Annie Lee, 'China Jumps Ahead in the Rush to Secure Lithium from Africa', (*Bloomberg,* July 3, 2023) <https://www.bloomberg.com/news/articles/2023-07-03/china-jumps-ahead-in-the-rush-to-secure-lithium-from-africa> accessed 22 December 2025.

drilling,[5] to land rules that support large-scale farming,[6] law has long influenced resource extraction and commerce.[7] With trade regulations, national laws, and international agreements controlling important mineral markets, legal frameworks are still changing today. The legal framework supporting key minerals reflects not just economic need but also the rising geopolitical stakes of resource ownership as countries negotiate supply chain security and economic strategy.[8]

This section looks at *first*, how the assessment of 'criticality' may be made on demand and supply factors, and *second*, the linkages between this criticality and the geopolitical rush and tumult to either acquire or gatekeep these resources, and further introduces the issues dealt with in this paper.

A. Identification of CMRs based on Demand & Supply Determinants

Presently, there is no universally accepted definition of critical materials. To reduce import dependence for CMRs, industrialized nations have emphasised efforts towards their identification.[9] The United States took the lead in 2008 when a committee under the National Research Council developed a '*criticality matrix*,' outlining key minerals essential to its

---

[5] Surabhi Ranganathan, 'Ocean Floor Grab: International Law and the Making of an Extractive Imaginary' (2019) 30 EJIL 573.

[6] Lorenzo Cotula, 'Land Grabbing and International Investment Law: Toward a Global Reconfiguration of Property?' in (eds) *Yearbook on International Investment Law & Policy 2014–2015* (Oxford University Press 2016) 177–214.

[7] Weihuan Zhou and others, 'Demystifying China's Critical Minerals Strategies: Rethinking "De-risking" Supply Chains' (2023) UNSW L & Just Rev 23 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4578882> accessed 22 December 2025.

[8] 'The 21st Century Gold Rush: Will There be a New Cold War over Lithium?', *(Foreign Policy,* 16 April 2023), <https://foreignpolicy.com/2023/04/16/lithium-rush-critical-minerals-mining-energy-transition-south-america/> accessed 22 December 2025.

[9] I Espa, *Export Restrictions on Critical Minerals and Metals: Testing the Adequacy of WTO Disciplines* (CUP 2016) ch 1.

economy.[10] Following this, the European Commission established an Ad-hoc Working Group under the Raw Materials Initiative, tasked with defining critical raw materials for the EU.[11] The group released its first report in 2010 and updated the list in 2014, which was later approved by the European Commission.[12] Reflecting growing concerns over potential supply shortages, the OECD also identified a set of 'strategically' important minerals.[13]

This 'criticality' is a result of both supply and demand factors. Mineral criticality may be measured using the supply risk factor, determined by geological, technological, social, and political availability.[14] The US Committee considers mine exploration, production, and national political impacts.[15] The EU Ad-hoc Working Group factors in, *first*, primary production concentration in poorly governed countries, *second*, substitutability, and *third*, recycling rates.[16] The first determinant combines geological and political availability, significantly affecting supply risk, while the second and third indicators reduce risk.[17]

In the short to medium term, the demand for critical minerals is inelastic owing to limited substitutability without a detrimental effect on the quality of

---

[10] National Research Council, *Minerals, Critical Minerals, and the U.S. Economy* (The National Academies Press, Washington DC 2008).
[11] European Commission, *On the Implementation of the Raw Materials Initiative* COM(2013) 442 final.
[12] Espa (n9).
[13] J Korinek and J Kim, 'Export Restrictions on Strategic Raw Materials' (2010) OECD Trade Policy Papers No 95, 104 <https://www.oecd.org/content/dam/oecd/en/publications/reports/2010/03/export-restrictions-on-strategic-raw-materials-and-their-impact-on-trade_g17a1e30/5kmh8pk441g8-en.pdf> accessed 22 December 2025.
[14] Espa (n 9).
[15] ibid.
[16] European Commission (n 11).
[17] Sophia Kalantzakos, 'The Race for Critical Minerals in an Era of Geopolitical Realignments' (2020) 55(3) *Intl Spectator* 1, 7, 8, 10.

the goods produced. So, the demand reacts slowly to any change in mineral prices.[18]

The demand for these minerals comes from various sources. On one hand, the global energy landscape is undergoing a profound shift toward cleaner alternatives.[19] This skyrocketing demand for clean energy technologies is in line with the mandate of the Paris Agreement, which requires countries to commit to net-zero emissions.[20] This gradual move towards cleaner energy sources is not achievable without resilient supply chains for CMRs.[21] Low-carbon intensive energy sources such as EV-batteries, wind & solar energy parks necessitate the usage of CMRs like copper, nickel, rare earths, graphite, antimony, lithium, and cobalt, among others.[22]

A critical perspective that analyses this energy transition questions the overemphasis on energy transition rather than on a shift in the patterns of production and consumption.[23] From this perspective, the global surge in the demand for CMRs represents the refurbishing of an economic model that is based on extracting exhaustible resources, albeit a transition away from more harmful fossil fuels.[24]

Beyond the energy transition, these minerals are also key components in industrial sectors such as metallurgy, building, communication, electronic gadgets, automotive sector, aeronautics, optical technologies, glass industry,

---

18 European Commission, Critical Raw Materials for the EU COM (2014) <https://rmis.jrc.ec.europa.eu/uploads/crm-report-on-critical-raw-materials_en.pdf> accessed 22 December 2025.
19 International Energy Agency, *World Energy Outlook 2023* (IEA 2023) 37-42.
20 *Paris Agreement* (adopted 12 December 2015) UNTS I-54113.
21 IEA (n 1).
22 ibid.
23 Lorenzo Cotula, 'Critical Minerals: International Economic Law in a Global Resource Rush', (2023) 15(2) *Trade Law & Development* 19.
24 Breno Bringel and Maristella Svampa, Del "Consenso de los Commodities" al "Consenso e la Descarbonización" (2023) 306 *Nueva Sociedad* 51, 52.

and plastic, among others.[25] According to the EU Ad-hoc Working Group, the mega-sectors identified where CMRs are key, formed approximately 90% of the total value added in the manufacturing sector of the European Union.[26]

Rare earth elements like indium and tantalum are integral to the manufacturing of portable computers, plasma screens, handheld electronics, and military technologies.[27] Gallium plays a crucial role in integrated circuits for wireless communication, smartphones, and aerospace and defence applications, while also being a key component in LEDs and laser diodes.[28] Copper and silver facilitate radio-frequency identification ("**RFID**") technology, whereas germanium is indispensable for fibre optics, infrared optics, and space-based solar cells.[29] Additionally, several critical materials contribute to the development of alloys and superalloys essential for metallurgical applications, particularly in the nuclear, defense, and aviation industries—these include manganese, molybdenum, beryllium, niobium, rhenium, tantalum, and platinum-group metals ("**PGMs**").[30] Furthermore, many of these elements are vital in medical technology, with materials like beryllium, chromium, molybdenum, silver, tantalum, titanium, and vanadium commonly used in orthopaedic implants and diagnostic equipment.[31]

---

[25] Korinek and Kim (n13).
[26] European Commission, *Critical Raw Materials* <https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en> accessed 22 December 2025; European Commission, *Critical Raw Materials for the EU* COM (2014) <http://ec.europa.eu/enterprise/policies/raw-materials/critical/index_en.htm> accessed 22 December 2025.
[27] European Commission, *Critical Raw Materials Profiles* <https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en> accessed 22 December 2025; US Geological Survey, *Mineral Commodity Summaries 2014* (US Government Printing Office, Washington DC 2014).
[28] US Geological Survey (n 27).
[29] US Department of Energy, *Critical Minerals Strategy*, (US DOE 2010).
[30] ibid.
[31] Cotula (n 23).

To reiterate, critical minerals and metals are those essential to industrial economies yet highly vulnerable to supply disruptions. Their significance stems from their indispensable role in key industries, limited global production concentrated in specific regions, and challenges in substitution and recycling.[32] These factors heighten the risk of shortages, making any supply shock, whether from demand surges or production constraints, potentially disruptive to economic stability.

B. Understanding the Geopolitical Rush for CMRs

The global supply of critical minerals is highly concentrated, with a handful of countries dominating both extraction and processing.[33] Lithium is primarily sourced from Australia and Chile,[34] rare earth elements from China,[35] nickel from Indonesia,[36] and cobalt from the Democratic Republic of Congo **("DRC").**[37] However, China maintains a commanding role in refining key minerals, including graphite, rare earths, cobalt, and lithium.[38]

China's dominance in mineral processing is the result of decades of government-driven industrial policies and heavy investments.[39] Since the 1980s, the country has implemented measures to strengthen its rare earth sector, requiring foreign investors to form partnerships with domestic companies and share technological expertise.[40] Over time, these policies

---

[32] ibid.
[33] IEA (n1) 13-16.
[34] International Energy Agency, *Critical Minerals Market Review* 2023 (IEA 2023) 11-14.
[35] ibid.
[36] ibid.
[37] ibid.
[38] Kalantzakos (n17).
[39] Christoph Nedopil, *China Belt and Road Initiative (BRI) Investment Report 2023 H1*, (FISF Fudan University 2023), <https://greenfdc.org/wp-content/uploads/2023/07/Nedopil-2023_China-Belt-and-Road-Initiative-BRI-Investment-Report-2023-H1-1.pdf> accessed 22 December 2025.
[40] Zhou and others (n7).

expanded to include a broader range of essential raw materials, culminating in the official designation of "strategic minerals" in 2016.

To meet the demands of its rapidly growing economy, China has also facilitated financial backing for both state-owned and private enterprises to acquire mineral assets overseas. Through initiatives like the Belt and Road Initiative, Chinese companies have significantly expanded their mining and processing operations beyond national borders, securing vital resources while reinforcing China's influence over global supply chains.[41]

As a result, China has increasingly turned to imports, not only for minerals it lacks, like chromium and cobalt, but even for those in which it already holds a strong position, such as gallium, fluorspar, germanium, and graphite. This trend reflects the rapid expansion of China's metals industry and resource-intensive sectors like construction, further reinforcing its influence over global supply chains.[42]

At the same time, industrialized economies that have long depended on imports now face heightened competition from emerging players like China. This rivalry plays out in two key ways. *First*, countries are competing for direct access to critical raw materials in an increasingly contested marketplace.[43] *Second*, traditional industrial powers are struggling to maintain their competitive edge as newly industrializing nations expand their share of high-value exports.[44] The European Union is particularly exposed, as only 3% of the world's critical raw materials originate within its borders. It remains

---

[41] Nedopil (n 39).
[42] Cotula (n 23).
[43] IEA (n 34) 32-34.
[44] World Trade Organization, *World Trade Report 2023: Adapting to a Changing Global Economy* (WTO 2023) 78-84.

heavily dependent on imports for more than half of the minerals essential to its economy, many of which are at risk of supply disruptions.[45]

Geopolitical tensions have only intensified these concerns. Strategic competition between major economies—particularly between the United States and China—has pushed 'resource security' to the forefront of policy discussions.[46] The U.S. has responded by seeking to reduce its reliance on Chinese imports, embracing a more interventionist approach to securing critical mineral supply chains.[47] Meanwhile, the European Union, spurred by the disruption of Russian gas supplies following the war in Ukraine, has begun to frame its economic policies through the lens of 'economic security.'[48] In both cases, the goal is to assert greater control over mineral sourcing, processing, and distribution.[49]

While the U.S. and EU strategies differ, they share common elements. Both have developed critical raw materials lists and strategic action plans aimed at ensuring long-term supply.[50] They have also introduced policies – ranging from subsidies[51] to regulatory incentives[52] – to promote domestic extraction and processing. These measures reflect a broader effort to reshape global trade patterns, moving away from traditional models that outsourced extraction and refining to the Global South.[53] However, many resource-rich

[45] European Commission, 'Critical Raw Materials Act: Securing the EU's Supply of Critical Raw Materials' COM (2023) 160 final 4-6.
[46] James Guild, 'The Geopolitics of Critical Minerals' (*The Diplomat*, 5 March 2025) < https://thediplomat.com/2025/03/the-geopolitics-of-critical-minerals/> accessed 22 December 2025.
[47] ibid.
[48] Espa (n 9).
[49] ibid.
[50] NRC (n 10); European Commission (n 11).
[51] Kalantzakos (n 17).
[52] ibid.
[53] Thea Riofrancos, *The Security–Sustainability Nexus: Lithium Onshoring in the Global North* (2023) 23 Global Environmental Politics 20

nations are pushing back, seeking to use their mineral wealth to fuel domestic industrialization rather than simply exporting raw materials.[54]

As a result, export restrictions on critical minerals have been on the rise. Countries are imposing duties, quotas, and outright bans to encourage local processing and retain more economic value from their resources.[55] While often justified as policies to support domestic industry, these measures are also part of a broader shift toward resource nationalism.[56] As global competition intensifies, export controls are becoming a central tool in the struggle for supply chain dominance.

Building on this, this paper examines the WTO legal framework on export restrictions on CMRs. The paper, inclusive of the Introduction and Conclusion, is divided into five parts. Part II examines the legality of export restrictions on critical minerals, focusing on GATT's Article XI (quantitative limits) and Article XX (exceptions), along with export duties. Part III proposes WTO reforms to strengthen global supply chains, balancing resource-rich and resource-dependent nations' interests. Part IV takes the analysis home by looking into India's CMR trade strategy, its vulnerabilities, and policy measures to enhance supply security and resilience. Ultimately, this research paper contributes to the broader discourse on sustainable and legally coherent trade strategies in an increasingly fragmented global economy.

[54] Cotula (n 23).

[55] P Kowalski and C Legendre, 'Raw Materials Critical for the Green Transition: Production, International and Export Restrictions' (2023) OECD Trade Policy papers No 269, 35-51 < https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/04/raw-materials-critical-for-the-green-transition_85a69007/c6bb598b-en.pdf> accessed 22 December 2025.

[56] ibid.

II. QUESTIONING THE LEGAL VALIDITY OF EXPORT RESTRICTIONS ON CRITICAL MINERAL RESOURCES

Within the multilateral trading system, all commodities, including essential raw materials, fall within the purview of the WTO's legal framework.[57] A fundamental tenet of the WTO is the eradication of biased treatment in cross-border commerce.[58] In this context, the Most-Favoured-Nation (**"MFN"**) principle, enshrined in Article I of the General Agreement on Tariffs and Trade 1994 ("**GATT 1994"**), explicitly forbids preferential treatment among equivalent goods originating from or destined for different nations.[59] Similarly, the National Treatment principle in Article III of GATT 1994 prohibits differential treatment of imported goods when compared to domestically produced equivalents.[60] These stipulations extend to transactions involving critical minerals.

Trade restrictions on key raw materials predominantly take the form of export limitations and outright bans. As reported by the Organisation for Economic Co-operation and Development ("**OECD"**), the global prevalence of export constraints on critical raw materials has surged fivefold over the past ten years.[61] The OECD reports that at least one export restriction measure has been enforced on 10% of the total global trade value of CMRs.[62] By 2022,

---

[57] International Centre for Trade and Sustainable Development (ICTSD), *Raw Materials and the WTO: Addressing a Disconnect between Trade and Development Policy*, Issue Paper No 18 (2010), <https://ictsd.iisd.org/sites/default/files/review/2010/06/raw-materials-and-the-wto-addressing-a-disconnect-between-trade-and-development-policy.pdf>

[58] Marrakesh Agreement Establishing the World Trade Organization (adopted 15 April 1994) 1867 UNTS 154 (Preamble).

[59] General Agreement on Tariffs and Trade (adopted 30 October 1947) 55 UNTS 194 art I.

[60] ibid art III.

[61] OECD, *Raw Materials Critical for the Green Transition: Production, International Trade and Export Restrictions* (2023) <https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/04/raw-materials-critical-for-the-green-transition_85a69007/c6bb598b-en.pdf>

[62] ibid.

nearly 30% of the worldwide trade in such resources, by monetary value, was subject to restrictive measures – an exponential rise from just 5% in 2019.[63]

While WTO rules aim to promote free trade, countries frequently impose restrictions on critical mineral exports through various mechanisms. Article XI of GATT 1994 generally prohibits quantitative restrictions[64], but exceptions under Article XI and Article XX allow for justified trade barriers in specific circumstances. Additionally, export duties, which fall outside the scope of Article XI, have become a strategic tool for regulating resource flows.

A. Quantitative Restrictions Under Article XI of GATT

As a general rule, quantitative restrictions on exports are prohibited under Article XI of GATT 1994, reflecting the fundamental principle of free trade.[65] A quantitative restriction **("QR")** is any measure that limits the quantity of a product that may be imported or exported, encompassing outright bans, quotas (both global and country-specific), and licensing requirements.[66] Article XI:1 prohibits such measures unless they fall within recognized exceptions, ensuring that members do not impose arbitrary trade barriers beyond duties, taxes, or charges.[67]

The broad scope of this provision was confirmed in *Japan – Semi-Conductors* (1988), where even non-mandatory government measures restricting the export of certain semi-conductors at below-cost price were nevertheless deemed restrictive.[68] It was said in that case that:

---

[63] ibid.
[64] *General Agreement on Tariffs and Trade* (adopted 30 October 1947) 55 UNTS 194 art XI.
[65] World Trade Organization, *Quantitative Restrictions* <https://www.wto.org/english/tratop_e/markacc_e/qr_e.htm>.
[66] ibid.
[67] ibid.
[68] *Japan – Trade in Semi-Conductors*, GATT Panel Report L/6309 (adopted 4 May 1988).

> "*…it applied to all measures instituted or maintained by a contracting party prohibiting or restricting the importation, exportation or sale for export of products other than measures that take the form of duties, taxes, or other charges…*"[69]

Similarly, in *China – Raw Materials* (2012), the Appellate Body clarified that 'restrictions' is a broad term that refers generally to something that limits trade volume, reinforcing the comprehensive reach of Article XI:1.[70]

QRs on the export of CMRs have been a contentious issue in international trade, frequently challenged before the WTO Dispute Settlement System. Consistent case law has ruled against such restrictions, reaffirming the general prohibition under Article XI:1 of GATT 1994.[71] This primarily includes:

a) *China – Raw Materials (2009)*, where export restrictions on bauxite, manganese, yellow phosphorus, zinc, coke, etc. were challenged by the U.S., European Union, and Mexico.[72]
b) *China – Rare Earths (2012)*, where export restrictions, including export duties, export quotas and certain limitations on the enterprises permitted to export the products were imposed on several rare earths, tungsten, and molybdenum. The restrictions were challenged by the U.S., European Union, and Japan.[73]
c) *China – Raw Materials II (2016)*, where duties and other alleged restrictions on the export of various forms of antimony, chromium,

---

[69] ibid.
[70] *China – Measures Related to the Exportation of Raw Materials,* WTO Appellate Body Report WT/DS394/AB/R (adopted 30 January 2012).
[71] WTO, *WTO Analytical Index*, *General Agreement on Tariffs & Trade* (GATT) 1994, Art. XI (DS Reports) <https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994_art11_jur.pdf>.
[72] *China – Raw Materials* (2009), WTO Appellate Body Report WT/DS394/AB/R (adopted 30 January 2012).
[73] *China – Rare Earths* (2012), WTO Appellate Body Report WT/DS431/AB/R (adopted 29 March 2012).

cobalt, copper, graphite, indium, lead, magnesia, talc, tantalum, and tin were challenged by the U.S. and European Union.[74]

d) *Indonesia – Raw Materials (2019)*, where the European Union lodged a complaint against restrictions imposed by the Indonesian Government on exports of nickel, including an actual prohibition to export, domestic processing requirements for nickel, iron ore, chromium and coal, domestic marketing obligations for nickel and coal products, export licensing requirements for nickel and a prohibited subsidy scheme.[75]

These cases underscore the WTO's strict stance against export curbs, limiting the ability of resource-rich nations to control CMR outflows for economic or strategic reasons. This is more than strict fidelity to the text of GATT, and it reflects a deeper institutional logic, which is rooted in preserving negotiated tariff bargains and preventing disguised restrictions on trade. Panels and the Appellate Body, particularly in *China – Raw Materials (2009)* and *China – Rare Earths (2012)* have consistently sought to frame the QR prohibition as a structural cornerstone of the multilateral trading system. This approach signals judicial reluctance to broaden the scope of permissible export restrictions in ways that could allow WTO Members to reintroduce non-tariff barriers through industrial or resource policies.

The result is a jurisprudence that recognises only narrow justifications for export restrictions, even where states face long-term developmental constraints or structural vulnerabilities in their resource sectors.

---

[74] *China – Raw Materials II* (2016), WTO Appellate Body Report WT/DS516/AB/R (adopted 7 September 2016).

[75] *Indonesia – Raw Materials* (2019), WTO Dispute Settlement Panel Report WT/DS592/R (adopted 12 November 2019).

B. Exceptions to Article XI

While Article XI:1 of the GATT 1994 generally prohibits quantitative restrictions on exports and imports,[76] Article XI:2(a) allows for an exception in cases where export restrictions are *temporarily applied to prevent or relieve critical shortages* of foodstuffs or other essential products.[77] However, WTO jurisprudence has interpreted this exception narrowly, setting a high threshold for its application one that typical export restrictions on CMRs do not meet.

The WTO Panel in *China – Raw Materials (2009)* clarified that although the language of Article XI:2(a) refers to what is "essential to the exporting Member," this does not mean that Members can unilaterally designate products as essential without scrutiny.[78] The Panel emphasised that:

> "*The Panel does not consider that the terms of Article XI:2, nor the statement made in the context of negotiating the text of Article XI:2 that the importance of a product 'should be judged in relation to the particular country concerned', means that a WTO Member may, on its own, determine whether a product is essential to it.*"[79]

The Panel contrasted this with Article XXI, which does permit unilateral determination, suggesting that had the drafters intended such broad discretion in Article XI:2(a), they would have adopted similar language:

> "*If this were the case, Article XI:2 could have been drafted in a way such as Article XXI(b) of the GATT 1994, which states: 'Nothing in this Agreement shall be construed ... to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests.'*"[80]

[76] WTO (n 71).
[77] ibid.
[78] *China – Raw Materials* (2009), WTO Appellate Body Report WT/DS394/AB/R (adopted 30 January 2012).
[79] ibid.
[80] ibid.

Further, WTO rulings have repeatedly held that a mere reduction in supply or desire to preserve resources does not rise to the level of a *critical shortage*. In *Indonesia – Raw Materials*, the Panel held that:

> "*A critical shortage within the meaning of Article XI:2(a) cannot simply be a situation of short supply. It cannot also merely be a situation of needing to secure essential quantities for a domestic industry to meet demand. A critical shortage must be of decisive importance or at a turning point and capable of being resolved.*"[81]

This means that routine efforts to manage domestic consumption or encourage downstream value addition, common justifications for mineral export restrictions, do not meet the criteria. The emphasis is on responding to a temporary and urgent crisis of supply, not long-term industrial planning.[82]

The Appellate Body in China – Raw Materials further reinforced this interpretation by defining "critical shortage" as:

> "*Those deficiencies in quantity that are crucial, that amount to a situation of decisive importance, or that reach a vitally important or decisive stage, or a turning point*."[83]

Most restrictions on CMRs are neither applied temporarily nor aimed at averting an immediate crisis. Instead, they are often driven by policy goals such as conserving non-renewable resources, enhancing export value through domestic processing, or ensuring strategic control—all of which fall outside the narrow scope of Article XI:2(a). For instance, in *Indonesia – Raw Materials*, the Panel noted that Indonesia's nickel-ore restrictions had been applied almost continuously since 2014, with no credible end-point or

[81] *Indonesia – Raw Materials* (2019), WTO Dispute Settlement Panel Report WT/DS592/R (adopted 12 November 2019).
[82] *China – Rare Earths* (n 73).
[83] *China – Raw Materials* (2009), WTO Appellate Body Report WT/DS394/AB/R (adopted 30 January 2012).

triggering criteria for lifting them, and were tied to long-term goals such as conserving reserves and expanding domestic processing capacity.[84] Third parties (Brazil, Japan, US, UK, Canada) further emphasised that measures maintained until depletion of reserves or until structural industrial objectives are achieved cannot "bridge a passing need" and therefore fall outside Article XI:2(a)'s temporary, crisis-relief scope.[85]

In fact, the WTO has consistently warned against an expansive reading of this exception, noting that, "the prohibition on the use of quantitative restrictions forms one of the cornerstones of the GATT system."[86] In sum, the tightly drawn contours of the XI:2(a) exception make it clear that most export restrictions on critical minerals cannot be justified under the guise of relieving a "critical shortage."

Such an interpretation illustrates an intentional judicial restraint. Panels have required an acute, temporary shortage supported by concrete evidence, rejecting broader claims, grounded in long-term developmental or industrial vulnerabilities. In the China disputes, the Panel emphasised that Members cannot unilaterally deem particular minerals "essential" because they serve strategic purposes domestically. Adjudicators thus signal that any systemic rebalancing must come from political negotiation, not case law.

However, this doctrinal rigidity also means the WTO framework struggles to accommodate structural realities of critical minerals markets, such as concentrated supply, inadequate domestic processing capacity, or exposure to oligopolistic pricing, conditions widely documented in OECD and WTO monitoring analyses.[87] These long-term vulnerabilities fall outside the scope

---

[84] *Indonesia – Raw Materials* (2019), WTO Dispute Settlement Panel Report WT/DS592/R (adopted 12 November 2019).
[85] ibid 7.107-7.110.
[86] *Turkey – Restrictions on Imports of Textiles and Clothing Products*, GATT Panel Report L/6621 (adopted 7 November 1991) BISD 38S/245.
[87] P Kowalski and C Legendre (n 55).

of what current jurisprudence treats as a "critical shortage," even though they are precisely the types of risks that shape contemporary resource governance.

C. Exceptions in Article XX

To justify restrictions on CMRs, Members may invoke the general exceptions under Article XX. In the context of CMRs, two sub-clauses are particularly relevant:

A) Article XX(b) allows measures "necessary to protect human, animal or plant life or health;"
B) Article XX(g) allows measures "relating to the conservation of exhaustible natural resources" if made effective in conjunction with restrictions on domestic production or consumption.[88]

These exceptions operate within a carefully structured legal framework, clarified over successive disputes. Under the order of analysis affirmed by the Appellate Body in *Indonesia – Import Licensing Regimes* (para. 5.96),[89] a panel must first assess whether the challenged measure satisfies the requirements of a specific sub-paragraph (such as XX(b) or XX(g)), and only thereafter determine whether it complies with the chapeau of Article XX. This sequencing underscores that even if a measure is *prima facie* justified under XX(b) or XX(g), it must still avoid "arbitrary or unjustifiable discrimination" or "disguised restrictions on international trade."[90]

Jurisprudence has further tightened the conditions for invoking XX(g). In 2009, in the case of *China – Raw Materials*,[91] China attempted to justify its

---

[88] *General Agreement on Tariffs and Trade* (adopted 30 October 1947) 55 UNTS 194 art XX.
[89] *Indonesia – Import Licensing Regimes* (2017), WTO Appellate Body Report, WT/DS477/AB/R; WT/DS478/AB/R (adopted 22 January 2018).
[90] Espa (n 9) ch 6.
[91] *China – Raw Materials* (2009), WTO Appellate Body Report WT/DS394/AB/R (adopted 30 January 2012).

export restrictions under both clauses. However, the WTO Panel and Appellate Body rejected these arguments. It held that China had not imposed equivalent restrictions domestically, rendering the measures ineffective under Article XX(g). Similarly, under Article XX(b), China failed to demonstrate that its export duties were the least trade restrictive means to achieve its environmental goals.[92]

This jurisprudence clarifies that export restrictions for conservation or environmental protection must be part of a consistent domestic framework. For instance, if a state imposes duties on the export of lithium to conserve resources for green technologies, it must also regulate domestic extraction and consumption in a comparable manner.

Ultimately, the Article XX framework shows that although environmental and conservation goals are acknowledged as acceptable foundations for regulating trade in CMRs, the legal bar for doing so is high. A structural preference for regulatory coherence over unilateralism is indicated by the jurisprudence: Members may pursue public health or conservation objectives, but only by implementing policies that are calibrated to minimise distortions to global trade and integrated into a fair domestic system. Resource-rich nations wishing to use export restrictions as instruments of industrial strategy or environmental stewardship are severely constrained by this. Simultaneously, it reveals a more profound conflict within the WTO system, which recognises the environmental consequences of finite resources while directing them through a legal framework that was initially created for a different period of international trade.

---

[92] Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres* WT/DS332/AB/R (3 December 2007).

D. Export Duties

Export duties, or taxes imposed on goods leaving a country, are a central tool used by resource-rich states to control the outflow of CMRs. These duties are often justified on grounds of resource conservation, economic development, or securing domestic supply chains.[93] However, their operation within the WTO system presents three intertwined challenges: first, the absence of comprehensive WTO rules disciplining export taxes; second, the **ris**k of conflict with the WTO's broader liberalisation principles, particularly when duties distort access to essential minerals; and third, the difficulty of reconciling such duties with Article XX jurisprudence, which demands domestic regulatory consistency and non-discrimination.

Unlike import tariffs, export duties are not comprehensively regulated under the GATT 1994. Article XI:1 prohibits quantitative restrictions on exports, but it does not explicitly prohibit export taxes.[94] This has created a legal vacuum where WTO members, unless specifically bound by accession commitments (as in the case of China and some former Soviet states), retain policy space to impose export duties, even on essential commodities like CMRs.[95]

The WTO Secretariat acknowledges this gap, noting that "*[t]here are no general WTO rules disciplining export taxes*."[96] This legal lacuna allows major exporters to impose export duties on CMRs without violating GATT per se—unless such measures are shown to be disguised restrictions on international trade, thereby violating Article XX chapeau.

[93] Espa (n 9) ch 4.
[94] *General Agreement on Tariffs and Trade* (adopted 30 October 1947) 55 UNTS 194 art XI.
[95] Espa (n 9) ch 6.
[96] ibid.

Export restrictions, including duties, run counter to the WTO's liberalization ethos, particularly when they distort global supply chains for critical inputs like rare earths, lithium, cobalt, and nickel. When a resource-rich country leverages its market dominance through export duties—especially in situations where global alternatives are scarce—it undermines the predictability and fairness of trade.

This has been reflected in WTO disputes. In *China — Raw Materials*[97] and *China — Rare Earths*,[98] WTO panels found that China's export duties and quotas on rare minerals violated its accession commitments, which included specific bindings on export duties. These cases, however, do not create general disciplines for other members not bound by such commitments, illustrating the patchwork nature of current WTO rules.

Countries use export duties on CMRs for several purposes, *first*, encouraging downstream processing (e.g., refining lithium or cobalt domestically), *second*, discouraging over-extraction of non-renewable resources, and *third*, ensuring strategic reserves of essential minerals.[99]

While such goals might align with Article XX exceptions (e.g., for environmental protection or conservation of exhaustible resources), the challenge lies in proving that such duties are non-discriminatory and not a means of arbitrary or unjustifiable restriction on trade, a high bar under WTO jurisprudence.

---

[97] *China – Raw Materials* (2009), WTO Appellate Body Report WT/DS394/AB/R (adopted 30 January 2012).

[98] *China – Rare Earths* (2012), WTO Appellate Body Report WT/DS431/AB/R (adopted 29 March 2012).

[99] Cotula (n 23).

III. RECOMMENDATIONS FOR GLOBAL CRITICAL MINERAL SUPPLY-CHAIN RESILIENCE

A key challenge for the WTO lies in navigating the delicate balance between two competing imperatives: the right of resource-endowed nations to exercise sovereign control over their critical minerals and the dependence of other nations on uninterrupted, predictable supply chains.[100]

The WTO's current legal structure, especially its rules on QRs under Article XI of GATT and the narrow interpretation of exceptions under Article XX, often constrains the policy space of mineral-rich countries, even when their restrictions are motivated by legitimate environmental, developmental, or strategic concerns.

WTO jurisprudence in cases like *China – Raw Materials* and *Indonesia – Raw Materials* has reaffirmed a restrictive reading of these provisions, disproportionately benefiting import-reliant economies.[101] This imbalance risks deepening global inequalities and undermining cooperative sustainability efforts. It is therefore imperative that the WTO adapt its framework to accommodate both ends of this spectrum—preserving the open trade regime while recognising differentiated responsibilities and strategic constraints.

A. Defining "Critical Shortages"

The narrow interpretation of "critical shortages" under Article XI:2(a) of the GATT, as adopted in cases like *China – Raw Materials* and *Indonesia – Raw Materials*, reflects a historically contingent understanding of shortages, one premised on emergency-like scarcities rather than long-term strategic

[100] ibid.
[101] *China – Measures Related to the Exportation of Various Raw Materials*, WT/DS394/R, WT/DS395/R, WT/DS398/R (adopted 5 July 2011); *Indonesia – Raw Materials* (2019), WTO Dispute Settlement Panel Report, WT/DS592/R, (adopted 12 November 2019).

dependencies.[102] While such a reading may have been defensible in the post-war era, it is increasingly ill-suited for a 21st-century global economy in which critical minerals serve not merely as inputs, but as strategic enablers of decarbonisation, industrial catch-up, and digital infrastructure.

The current interpretive framework rests on the assumption that Members cannot unilaterally designate what is "essential" for the purposes of Article XI:2(a). This was justified in *China – Raw Materials* on the grounds that such a move would effectively allow self-judging exceptions, thereby undermining the objectivity of GATT 1994 obligations. However, this logic overlooks the complex economic functions of critical minerals, particularly for developing and resource-rich countries attempting to move up global value chains.[103] In contrast to food or petroleum, where short-term availability concerns dominate, critical minerals raise long-term questions of *technological sovereignty*, *environmental stewardship*, and *industrial resilience*.

A development-sensitive reinterpretation of "critical shortages" could be articulated not by altering treaty text (a politically infeasible solution), but through *soft law instruments*, such as an interpretive note adopted by the General Council under Article IX:2 of the WTO Agreement,[104] or by guidance from the Committee on Trade and Environment. These tools have been previously used to clarify ambiguous treaty language – e.g., the Doha Ministerial Declaration's affirmation of Members' rights to protect public health under the Trade-Related Aspects of the Intellectual Property Rights (TRIPS) Agreement.[105] In a similar fashion, an authoritative clarification could recognise that critical shortages may also include *structural deficiencies*

[102] Espa (n 9) ch9.
[103] ibid.
[104] *Marrakesh Agreement Establishing the World Trade Organization* (adopted 15 April 1994) 1867 UNTS 154.
[105] World Trade Organization, *Doha Declaration on the TRIPS Agreement and Public Health* WT/MIN(01)/DEC/2 (2001).

in access that endanger a country's industrial or green transition, even if immediate physical scarcity is absent.

Such an approach is not antithetical to WTO jurisprudence. The Appellate Body in *US – Gasoline*[106] and *EC – Asbestos*[107] has embraced *evolutionary interpretation* in areas like health and the environment. Reinterpreting "critical shortages" to include development-linked vulnerabilities, such as persistent lack of mineral processing capacity or exposure to export cartels, would be consistent with this trajectory. It would also operationalise the WTO's development mandate under the Marrakesh Agreement, particularly when export restrictions are used as part of *targeted industrial policy* aimed at reducing dependency and mitigating the "resource curse."[108]

Moreover, such a reading could incorporate clear procedural safeguards—such as transparency requirements, proportionality assessments, and defined time limits—to avoid abuse and ensure compatibility with multilateral trade norms. In this way, sovereignty concerns of mineral-rich states can be accommodated without compromising the WTO's core commitments.

C. Institutionalizing Transparency through Structured Notifications and a WTO-Administered CMR Repository

While WTO disciplines traditionally aim to promote liberalisation, a more urgent priority in the context of critical minerals is *predictability*. Export restrictions on CMRs are not inherently trade disruptive, rather, their unpredictability, whether due to sudden bans, opaque justifications, or arbitrary durations, creates disproportionate volatility in downstream sectors

---

[106] *United States – Standards for Reformulated and Conventional Gasoline* WTO Appellate Body Report WT/DS2/AB/R, pt 17.

[107] *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products* WTO Appellate Body Report WT/DS135/AB/R, para 177.

[108] Richard M Auty, *Sustaining Development in Mineral Economies: The Resource Curse Thesis* (Routledge 1993).

such as clean energy, electronics, and defence.[109] The WTO, rather than mandating blanket liberalisation, can play a constructive role by requiring structured notifications of export restrictions on CMRs. Such notifications should go beyond the often-perfunctory disclosures under current practice and include detailed justifications, specific policy objectives, and estimated timeframes, subject to periodic review.

This would align with existing obligations under Article XI:2(c) of the GATT, which allows Members to temporarily apply export restrictions to prevent or relieve critical shortages but presumes a good faith, transparent, and limited use of such measures.[110]

However, enforcement of notification duties has historically been weak, as seen in the WTO's own Trade Policy Review Mechanism (**TPRM**) reports, where many export restrictions go unreported or under-explained.[111] By introducing a structured, standardised template for CMR notifications, perhaps endorsed by the Committee on Market Access or a specialised sub-body, Members could bring a degree of *legal formality and procedural discipline* to what are currently ad hoc measures.

To further institutionalise this effort, the WTO could establish a Critical Minerals Transparency Repository, which would be a publicly accessible, centralised database compiling all notifications related to CMR export measures. This would function similarly to the Integrated Trade Intelligence Portal (**I-TIP**) or the SPS/TBT Notification Alert System,[112] and could serve multiple functions: enhancing trust among trading partners, enabling better

---

[109] Nisha Taneja and others, *Critical Mineral Supply Chains: Risks, Vulnerabilities, and Policy Gaps* (ICRIER Working Paper No 421, 2023) 5–6.
[110] *General Agreement on Tariffs and Trade* (adopted 30 October 1947) 55 UNTS 194, art XI.
[111] WTO Secretariat, *Trade Policy Review: China 2021* WT/TPR/S/415 paras 3.39–3.41.
[112] WTO, *Integrated Trade Intelligence Portal (I-TIP)* and *Notification Alert Systems*, <https://www.wto.org/english/res_e/statis_e/itip_e.htm>.

risk assessments by importing countries, and reducing the frequency of dispute-triggering surprises.

The establishment of such a repository does not require a renegotiation of treaty texts. It can be enabled through a Ministerial Conference or General Council decision under Article IV:1 and IX:1 of the WTO Agreement,[113] which would provide sufficient institutional cover to mandate such notifications and create the database infrastructure. Additionally, it would be consistent with WTO jurisprudence promoting transparency and good faith—principles recognised in *US – Shrimp*[114] and *EC – Hormones*[115] as foundational to the stability of the multilateral trading system.

D. Reimagining the Role of CTE in Environmental Export Restrictions

Given the centrality of CMRs to clean energy transitions, strategic manufacturing, and digital infrastructure, trade in such resources has become highly politically charged. Varying national strategies, from domestic beneficiation mandates to export bans and price floors, have made it difficult to craft a unified multilateral solution within the WTO's consensus-based framework. In this context, a plurilateral agreement among a coalition of "willing" WTO Members could provide a more agile and politically realistic path forward.

Such an agreement, tentatively termed a "Critical Minerals Trade and Sustainability Agreement" (**CM-TSA**) would not aim to liberalize trade in CMRs indiscriminately, but rather to coordinate regulatory frameworks,

---

[113] *Marrakesh Agreement Establishing the World Trade Organization* (adopted 15 April 1994) 1867 UNTS 154.
[114] *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WTO Appellate Body Report WT/DS58/AB/R, paras 180–181.
[115] *European Communities – Measures Concerning Meat and Meat Products (Hormones)* WTO Appellate Body Report WT/DS26/AB/R, para 123.

reduce friction, and embed shared sustainability norms into mineral value chains.

Drawing inspiration from the Information Technology Agreement (**ITA**) and Joint Statement Initiatives (**JSIs**) on services domestic regulation and e-commerce, this plurilateral would be open to accession and function under WTO auspices, ensuring coherence with core obligations.[116]

Rather than banning export restrictions altogether, which would impinge on sovereignty, the agreement could list *legitimate justifications* (e.g., environmental conservation, industrial upgrading, or national security) and require disciplines such as transparency, proportionality, and time-limited application.[117] A carveout for development-linked restrictions could be negotiated, subject to notification and review. This would help curb the misuse of opaque or politically-motivated restrictions while preserving policy space.

The agreement could articulate core sustainability norms, such as those found in OECD Due Diligence Guidance, Environmental, Social and Governance (**ESG**) standards, and MEA-aligned extraction protocols.[118] By embedding these into trade rules, the agreement would align mineral supply chains with climate and biodiversity goals while reassuring consumers and investors of ethical sourcing.

One of the key asymmetries in CMR trade is the concentration of processing and refining infrastructure in a handful of countries.[119] To correct this, the CM-TSA could include investment facilitation measures, technology

---

[116] Robert Wolfe, 'Letting the Sun Shine in at the WTO: How Transparency Brings the Trading System to Life' (2010) 9(4) *World Trade Review* 631; Joost Pauwelyn and others, *Plurilateral Trade Agreements: A New Paradigm?* (EUI RSCAS Working Paper No 2014/24, European University Institute 2014).
[117] *China – Measures Related to the Exportation of Raw Materials* WTO Appellate Body Report WT/DS394/AB/R, paras 307–309.
[118] OECD, *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, (3rd ed, 2016); UNEP, *IRP Global Resources Outlook* (2019).
[119] IEA, *The Role of Critical Minerals in Clean Energy Transitions* (2021) at pts 73–75.

transfer frameworks, and policy space for local content requirements, provided they are transparent and targeted.[120] These rules could promote equitable value distribution across the supply chain and reduce over-dependence on a few processing hubs.

To operationalize the principle of common but differentiated responsibilities, the agreement could establish a Critical Minerals Development Fund, financed primarily by resource-consuming economies such as the US, EU, Japan, and South Korea.[121] This Fund could support geo-surveying, environmental safeguards, mining rehabilitation, and downstream infrastructure in developing countries, especially in Africa and South Asia. By linking market access to sustainable development, the Fund would help address the resource curse while fostering long-term supply resilience.

Such a plurilateral initiative would not fragment WTO law but would *build upon its architecture*, similar to how the ITA succeeded in liberalizing trade in technology products without a formal multilateral mandate.[122] By offering a club-based, opt-in framework, the CM-TSA would lower the cost of consensus while encouraging regulatory convergence, trust-building, and institutional innovation. Over time, as confidence builds, the agreement could expand into a "critical minerals pillar" of WTO law or be incorporated into a broader Sustainability Trade Framework under WTO auspices.

Moreover, such an initiative would help pre-empt resource nationalism, reduce geo-economic tensions, and foster South–South cooperation—as resource-rich developing countries gain from both strategic exports and structured international support for value addition.

---

[120] UNCTAD, *World Investment Report 2023: Investing in Sustainable Energy for All* at pts 91–95.
[121] IMF, *Resource Revenue Management and Fiscal Rules for Sustainable Development* (2022); Global Battery Alliance, *Battery Passport Initiative* (2021).
[122] See WTO, *Implementation of the Ministerial Declaration on Trade in Information Technology Products* WT/L/956 (2015).

E. Development Sensitive and Environmentally Grounded Flexibilities

To address the historical asymmetries embedded in the global trade regime, the WTO must recognize that export restrictions on CMRs are often not protectionist manoeuvres, but developmental or environmental imperatives. Many resource-endowed developing countries impose such measures to foster domestic value addition, employment generation, and industrial upgrading: goals consistent with the right to development enshrined in international law.[123]

However, under current WTO jurisprudence, these objectives receive limited deference. For instance, while Article XVIII of GATT 1994 allows developing countries to adopt trade measures in support of economic development, it remains both underutilized and ambiguously interpreted.[124]

To remedy this, the WTO could adopt an interpretive note or waiver mechanism affirming that carefully tailored export restrictions aimed at escaping the "raw material trap" are consistent with Article XVIII. Such guidance would operationalize the WTO's development mandate and provide legal certainty to countries seeking to avoid being perpetual exporters of unprocessed commodities.

Simultaneously, export restrictions are increasingly deployed to serve legitimate environmental goals—such as preventing over-extraction, mitigating carbon leakage, or ensuring compliance with MEAs like the Paris Agreement or the Convention on Biological Diversity.[125]

---

[123] UN Declaration on the Right to Development UNGA Res. 41/128 (1986); Dani Rodrik, *Straight Talk on Trade* (PUP 2017).
[124] *GATT* 1994, Article XVIII; WTO Secretariat, *Special and Differential Treatment in WTO Agreements and Decisions* WT/COMTD/W/66 (2001).
[125] UNEP, *Mineral Resource Governance in the 21st Century* (2020); OECD, *Trade and Environment: The Environmental Impacts of Export Restrictions on Natural Resources* (2010).

However, WTO panels currently adjudicate the legality of such measures solely through ex post litigation, evaluating exceptions under Article XX(b) or (g) in a binary, adversarial setting. This approach limits flexibility and may disincentivize early cooperation.

A promising alternative lies in empowering the Committee on Trade and Environment (**CTE**) to provide non-binding, ex ante assessments of proposed export restrictions on CMRs, especially those justified on environmental or developmental grounds.[126] By functioning as a deliberative rather than adjudicative body, the CTE could bring greater transparency, dialogue, and legitimacy to contentious restrictions before they escalate into disputes.

Integrating these two strands, regulatory flexibility for development under Article XVIII, and proactive environmental governance through an empowered CTE, would allow the WTO to move from a model of reactive enforcement to one of 'cooperative rule evolution'.[127]

IV. INDIAN PERSPECTIVE ON THE GEOPOLITICS & TRADE OF CRITICAL MINERAL RESOURCES

India's critical minerals strategy cannot be a reaction to geopolitical volatility; it must be a deliberate exercise in rule-shaping, resource governance, and economic sovereignty. While much commentary focuses on India's mineral dependencies,[128] this paper contends that India is uniquely placed to recalibrate global trade governance on CMR by aligning its domestic policy with WTO reform initiatives. Rather than remaining a passive demander of stability, India should become an active norm entrepreneur in the emerging mineral order.

---

[126] WTO, *Committee on Trade and Environment (CTE): Functions and Mandate* WT/CTE/1.
[127] Joost Pauwelyn, 'The Role of Public International Law in the WTO: How Far Can We Go?' (2001) 95(3) *AJIL* 535.
[128] Sparsha Janardhan, Aparna Bhattacharya, 'Critical Allies and Core Geopolitics in Minerals Trade: Deving a Strategy for India' (2024) 19(3) *Global Trade and Customs Journal* 143.

A. From Dependency to Leverage: Redefining India's Position

India's vulnerabilities in CMR supply chains are well-documented: a high import dependency on lithium from Latin America,[129] cobalt from the DRC,[130] and rare earths from China[131] renders its green transition precarious. However, this binary framing of India as merely a "resource-dependent" country fails to acknowledge the latent strength India holds, as a *demand driver* for critical minerals and as a *potential steward* of untapped reserves across its own geological basins and those of the Global South.

By 2030, India's electric vehicle, solar, and semiconductor sectors are projected to multiply mineral demands several-fold.[132] This exponential demand gives India a unique form of trade leverage: while it may not control mineral deposits, it influences where value is captured in the supply chain. India's negotiating power, then, must be exercised not in resistance to trade rules, but in reshaping them, particularly around export restrictions, technology transfers, and sustainability standards.

A useful comparative frame emerges when India's position is contrasted with that of other major demand-intensive economies. The EU and Japan, for example, have responded to mineral supply insecurity by embedding their strategies within legally dense trade and investment frameworks, such as the EU's Critical Raw Materials Act,[133] which explicitly ties domestic industrial goals to external partnerships and WTO-compliant subsidy structures. Similarly, Japan's 2010 rare earths shock prompted a structural shift toward

---

[129] ibid.
[130] ibid.
[131] ibid.
[132] Manah Popli and Melissa Cyrill, 'India's EV Production Capacity and Domestic Auto Market Trends' (*India Briefing*, 5 February 2024) <https://www.india-briefing.com/news/indias-prospects-as-an-ev-hub-consumer-market-and-production-capacity-30157.html/> accessed 22 December 2025.
[133] European Commission (n 45).

coordinated stockpiling and plurilateral rule-shaping through forums like the G7 and the Minerals Security Partnership (**MSP**).[134] India, by contrast, has articulated ambitious domestic targets but has not yet integrated its mineral strategy into a wider legal or institutional trade framework.

This disparity reveals a deeper strategic gap: while other demand economies are shaping rules ex ante to protect long-term industrial competitiveness, India remains reliant on ad hoc diplomatic arrangements and bilateral offtake agreements. The comparative experience therefore underscores that India's vulnerability is not merely geological, but is institutional, stemming from its limited participation in shaping the normative architecture governing global mineral flows.

B. Mineral Strategy as Trade Strategy: Domestic Reforms Are Not Enough

India has taken commendable steps to secure overseas mineral assets, most notably through the *KABIL joint venture (Khanji Bidesh India Ltd.)* which is a joint venture of three state-owned companies, and issued a domestic Critical Minerals List.[135] However, these efforts remain siloed from its trade policy. Without integrating its mineral diplomacy into WTO engagement, India risks being bound by rules that do not account for its developmental priorities.

This paper argues that India should lead the call for a reinterpretation of WTO disciplines to allow export restrictions for developmental upgrading and environmental conservation. For instance, if India discovers and seeks to reserve graphite or lithium for downstream processing (e.g., battery

---

[134] Tatsuya Terazawa, 'How Japan Solved Its Rare Earth Minerals Dependency Issue' (*World Economic Forum* 2023) <https://www.weforum.org/stories/2023/10/japan-rare-earth-minerals/> accessed 22 December 2025.

[135] Khanij Bidesh India Limited, Ministry of Mines, Government of India, <https://mines.gov.in/webportal/content/kabil>.

manufacturing), current GATT rules may expose it to challenges under Article XI. Yet such restrictions, if transparently notified and linked to industrial policy, serve a legitimate objective: avoiding the 'resource curse' and escaping the colonial pattern of exporting raw materials for minimal gains.

This calls for a reinterpretation of Articles XI and XVIII of GATT, as well as India's proactive participation in drafting plurilateral understandings on export discipline exceptions for developmental purposes.

India has long been a vocal advocate for Special and Differential Treatment (SDT) provisions as well under the WTO.[136] Yet SDT remains underutilized in the domain of export restrictions and critical mineral trade.[137] India can, and should, push for two strategic reforms at the WTO, whereby *firstly*, Article XVIII is operationalized to justify development-oriented export restrictions, *secondly*, CTE is institutionally empowered to make ex-ante assessments and there can be a plurilateral compact on critical minerals among resource-endowed and resource dependent countries. Crucially, it would offer a counterweight to mineral-exporting cartels and avoid regulatory fragmentation.

A robust domestic policy framework must complement these multilateral efforts. Measures such as extending Minimum Support Prices for domestically extracted minerals, reforming auction processes to reduce entry barriers, and creating strategic stockpiles for high-risk minerals are essential.[138] These steps would reduce volatility, attract private capital, and signal India's long-term seriousness in securing critical resources.

---

[136] World Bank, *India and the WTO* (2003), <https://openknowledge.worldbank.org/handle/10986/15082>.
[137] Janardhan and Bhattacharya (n 128).
[138] Federation of Indian Chambers of Commerce (FICCI) *Ensuring India's Mineral Security: Policy Recommendations* (2022).

V. CONCLUSION

In conclusion, the WTO faces a complex challenge in balancing the interests of resource-rich nations and those dependent on critical minerals for their economic and industrial needs. The current WTO legal framework, particularly under Article XI of GATT, restricts the ability of resource-endowed countries to implement export restrictions based on legitimate developmental, environmental, or strategic considerations.

This results in a skewed trade regime that disproportionately favors import-reliant nations, potentially deepening global inequalities. Therefore, there is an urgent need for the WTO to evolve, acknowledging the unique role of critical minerals in contemporary economies and adopting more nuanced interpretations of "critical shortages" that reflect long-term industrial and environmental priorities.

One possible solution lies in reinterpreting the concept of "critical shortages" to include structural vulnerabilities, such as lack of mineral processing capacity or exposure to exploitative export cartels, which threaten the developmental aspirations of resource-rich countries. This can be achieved through soft law mechanisms like interpretive notes or guidance from relevant WTO bodies, thus providing greater flexibility for these nations to pursue sustainable economic development.

Alongside this, enhancing transparency in trade policies by institutionalizing structured notifications and creating a Critical Minerals Transparency Repository would offer predictability and reduce the disruptive effects of unpredictable export restrictions. Such steps could help build trust among nations and mitigate trade tensions in this vital sector.

Further, the WTO should support the creation of a plurilateral agreement on critical minerals, similar to the ITA, which would allow for greater regulatory coordination and shared sustainability norms among nations.

Additionally, empowering the Committee on Trade and Environment (CTE) to provide proactive, non-binding assessments of such restrictions could enhance dialogue and reduce the risk of disputes, contributing to a more cooperative approach to global resource governance.

Looking home, India, with its growing demand for critical minerals and its leadership in advocating for the rights of developing nations, is well-positioned to play a pivotal role in reshaping the global trade governance of critical mineral resources. By aligning its domestic policies with WTO reform efforts, India can foster greater trade stability while protecting its developmental and environmental interests.

By redefining trade rules to align with both sustainability and development, we can transform critical minerals from a source of geopolitical tension into a foundation for global cooperation and shared prosperity.

V. TREATY SUPREMACY ON TRIAL: THE NESTLÉ RULING AND ITS AFTERMATH

Mahi Agrawal[*]

ABSTRACT

This article examines the doctrine of treaty supremacy in India's international taxation law through the evolving interpretation of the Most-Favored-Nation (MFN) clauses. While Indian jurisprudence historically recognized that treaty provisions prevail over inconsistent domestic law where they are more beneficial to the assessee, several High Court decisions extended this principle to treat MFN clauses as self-operational, permitting the automatic importation of favorable terms from third-country treaties without further executive action. This approach was disrupted by the Supreme Court's decision in *Assessing Officer v. Nestlé SA* (2023) and its reaffirmation in *Income Tax Officer v. Deccan Holdings B.V.* (2025), which clarified that MFN clauses are not self-executing and become enforceable only upon an express notification under Section 90(1) of the Income-tax Act. The shift to a notification-based framework has introduced significant uncertainty for investors and treaty partners, leading to diplomatic and fiscal repercussions. The most notable fallout is Switzerland's suspension of the MFN clause from the Switzerland-India DTAAs in late 2024. This article argues that India's rigid dualist framework undermines the predictability essential for cross-border investment. It recommends legislative clarification of Section 90 of the Act, time-bound notifications regarding the operation of the MFN clause, and transparent administrative guidance to reconcile sovereignty with predictability and certainty, which are vital for sustaining investor confidence and preserving India's credibility as a reliable participant in global tax governance.

Keywords: MFN, DTAA, Taxes, Nestle Conflict and Policies.

[*] Mahi Agrawal is a Third-year student of B.A.LL.B (Hons.) at Hidayatullah National Law University, Raipur. The views stated in this paper are personal.

I. INTRODUCTION

Double Tax Avoidance Agreements **("DTAAs")** are bilateral treaties between nations that prevent the same income from being taxed twice, once in the source country and again in the residence country.[1] They ensure clarity and fairness in cross-border taxation by allocating rights over various categories of income, including dividends, interest, royalties, and fees for technical services. For foreign investors, particularly in emerging markets like India, consistency in the application and interpretation of DTAAs is of paramount importance.[2] Stability in the tax regime promotes predictability in investment structuring, accurate calculation of tax liabilities, and avoidance of disputes. Any inconsistency, whether arising from judicial divergence or policy shifts, carries the potential to weaken investor confidence by creating uncertainty in withholding tax outcomes and increasing compliance burdens, which may in turn influence investors' willingness to commit capital.

In India, the statutory foundation for DTAAs is found in Section 90 of the Income Tax Act, 1961 **("IT Act"),** which empowers the Central Government to enter into agreements with foreign countries to avoid double taxation and promote the exchange of information.[3] This provision also establishes a key principle that where a conflict exists between domestic law and a DTAA, provisions more beneficial to the assessee shall prevail, effectively granting DTAAs an overriding status over domestic tax laws. This ensures that India's

---

[1] Parthasarathi Shome, *Taxation History, Theory, Law and Administration* (Springer International Publishing 2021) 321–328.

[2] Evert-jan Quak and Hannah Timmis, *Double Taxation Agreements and Developing Countries* (Institute of Development Studies, K4D Helpdesk Report, 2018).

[3] Income Tax Act 1961, s 90; Annapurna Chakraborty, 'Double Taxation Avoidance Agreements in India' (2014) SSRN <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2404797>.

international commitments are honored irrespective of domestic laws, boosting investor confidence and global credibility.

However, this position has been contested in recent years in the context of the interpretation and application of the MFN clause. Several of India's DTAAs, especially those with Organization for Economic Cooperation and Development **("OECD")** member countries, contain an MFN clause to ensure parity among treaty partners.[4] This clause allows a contracting state to claim the same favorable tax treatment that has been extended to another OECD member state. The controversy arises over whether MFN clauses are triggered automatically once a more beneficial third-country treaty comes to existence, or whether they require an explicit governmental notification under Section 90(1) of the IT Act before becoming applicable.[5]

Earlier judicial interpretations have leaned toward the automatic operation of MFN clauses.[6] Investors and tax professionals alike widely welcomed these rulings, as they reinforced the perception of India's commitment to treaty stability and predictability. This clarity was unsettled by the Supreme Court's 2023 decision in *Assessing Officer v. Nestlé SA*, which held that MFN benefits require explicit notification under Section 90(1) of the IT Act rather than operating automatically.[7] This marked a significant departure from earlier understandings, effectively conditioning the application of treaty-based benefits on domestic executive action. While the Court emphasized statutory compliance, the ruling introduced an element of uncertainty into the doctrine of treaty supremacy, which, in the Indian context, holds that once a DTAA is

---

[4] Ines Hofbauer, 'Most-Favoured-Nation Clauses in Double Taxation Conventions – A Worldwide Overview' (2005) 33 *Intertax* 445.

[5] Manoj Kumar Sharma, Shiva Gaur and Namrata Rawat, *Most Favoured Nation Clauses in Double Taxation Agreements: Identifying Problems and Recommending Policy Solutions for the Global South* (Institute of Development Studies, ICTD Research in Brief 159, 2025).

[6] *Steria India Ltd v CIT* (2016) 386 ITR 390 (Del); *Concentrix Services Netherlands BV v ITO* (2021) 434 ITR 516 (Del).

[7] *Assessing Officer v Nestlé SA* (2023) 458 ITR 756.

duly notified under Section 90, its provisions prevail over conflicting provisions of domestic law to the extent they are more beneficial to the taxpayer.[8] This principle has traditionally ensured stability and predictability in cross-border tax arrangements, but the Court's insistence on additional notifications for MFN-triggered benefits has complicated its practical operation.

From an international law perspective, conditioning treaty operation on domestic notification risks being viewed as a form of treaty override.[9] While India is not a signatory to the Vienna Convention on the Law of Treaties **('VCLT'),** Article 26 of the Convention, pacta sunt servanda, and Article 27, which provides that a state may not invoke its internal law as justification for failing to perform its treaty obligations, are widely regarded as reflecting customary international law.[10] Applied to DTAAs, which operate as bilateral treaties under public international law, these principles require that India adhere to its commitments in good faith and not subject treaty-based rights to excessive procedural barriers. Heightened insistence on domestic notifications before giving effect to MFN clauses may therefore erode confidence in India's treaty performance. Switzerland's recent suspension of its MFN clause in 2025 exemplifies the diplomatic unease this has generated.[11]

---

[8] *Union of India v. Azadi Bachao Andolan* (2003) 263 ITR 706 (SC).

[9] A Kumar, 'Incoherence in Applying International Tax Law: Hemorrhaging Development' (2016) 56 *Indian Journal of International Law* 59; Vik Kanwar, 'Treaty Interpretation in Indian Courts: Adherence, Coherence, and Convergence' in Helmut Philipp Aust and Georg Nolte (eds), *Domestic Courts and the Interpretation of International Law: Converging Approaches* (OUP 2015); Reuven Avi-Yonah and Ajitesh Kir, 'The Meaning of "Is": Reflections on Nestle' (2024) 52(4) *Intertax 258.*

[10] Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331, arts 26–27.

[11] Département fédéral des finances (DFF), 'Suspension of the Application of the Most Favoured Nation Clause of the Protocol to the Agreement between the Swiss Confederation and the Republic of India for the Avoidance of Double Taxation with respect to Taxes on Income' (*ESTV*, 11 December 2024)

Against this backdrop, this article attempts to address the central question regarding the stability of India's doctrine on tax supremacy and MFN application in the aftermath of Nestlé SA ruling... Section II of the article examines the evolution of India's doctrine on treaty supremacy and MFN interpretation. Section III analyses the post-Nestlé SA conflict and its impact on taxpayers and treaty partners. Section IV provides a comparative perspective with other jurisdictions, and Section V advances policy recommendations and concluding remarks.

II. THE EVOLUTION OF INDIA'S TREATY SUPREMACY DOCTRINE

India's international tax framework in relation to the application of DTAAs and MFN clauses has evolved dynamically through judicial interpretations. The foundation for this evolution lies in the IT Act, which explicitly empowers the Central Government to negotiate and enter into DTAAs with foreign countries. Section 90 of the Act grants the government the authority to execute such treaties, and Section 90(2) states that where a DTAA exists, the provisions of the treaty or the domestic law may apply, with precedence given to whichever is more beneficial to the taxpayer.[12] This provision effectively enshrines the principle of treaty supremacy for the benefit of taxpayers. Complementary provisions, including Section 90A and 91, extend this power to treaties with associations of countries or other foreign jurisdictions, thereby broadening India's ability to mitigate double taxation for residents and non-residents alike.

<https://www.estv.admin.ch/dam/estv/en/dokumente/international/laender/int-laender-indien-suspension-mfn-en.pdf.download.pdf/int-laender-indien-suspension-mfn-en.pdf>.

[12] The Income Tax 1960, ss 90, 92.

The Supreme Court first addressed the practical implications of these statutory provisions in the landmark *Azadi Bachao Andolan* case of 2003.[13] The litigation arose in the context of tax benefits claimed by Indian subsidiaries of foreign companies under the India-Mauritius DTAA. The Supreme Court affirmed that the treaty provisions take precedence over inconsistent domestic law. It emphasized that even fundamental charging sections of the IT Act, which ordinarily determine tax liability, are subordinate to the provisions of Section 90(2) in situations where they conflict with treaty obligations. The Court upheld a Central Board of Direct Taxes **("CBDT")** circular granting Mauritius treaty benefits on the DTAA, highlighting that the notification of the treaty itself was sufficient to confer enforceability. This decision effectively cemented the principle that once a DTAA is formally notified, its terms automatically override less favorable domestic provisions.[14]

A decade later, judicial attention shifted to the interpretation of MFN clauses. In 2016, the Delhi High Court addressed the first major MFN controversy in *Steria (India) Ltd. v. CIT*, concerning the India-France DTAA.[15] The treaty included a protocol containing an MFN clause promising that if India subsequently agreed to more favorable terms with another OECD country, France would enjoy the same benefits. The Court confronted the question of whether Clause 7 of the Protocol required additional legislative action to become operational. It held that no such further notification was necessary because Clause 7 was drafted as an integral and self-executing component of the DTAA. The Court interpreted its phrasing to mean that once India granted a more favorable rate or narrower scope in another Convention,

[13] *Union of India v Azadi Bachao Andolan* (2004) 10 SCC 1.
[14] Mohak Thukral, 'Treaty Shopping: Abuse of Double Taxation Avoidance Agreement (DTAA): Special Focus on the Case Study of India's DTAA with Mauritius and the MLI Framework' (2022) 1 *DNLU Student Law Journal* 40.
[15] Steria India Ltd (n 6).

Agreement, or Protocol, the beneficial treatment automatically extended to the present Convention without requiring any distinct or subsequent notification. This interpretation allowed the beneficial definition of "Fees for Technical Services" in the India-UK treaty, which excluded managerial services, to be imported into the India-France treaty. Practically, this meant that Steria could avoid taxation on certain managerial service fees that would have otherwise been included. This ruling thus provided an expansive understanding of MFN clauses, holding them as self-executing instruments capable of automatically conferring the most favorable tax treatment available under comparable treaties.

The principles laid down in *Steria* were further tested in *Concentrix Services (India) B.V. v. ITO* in 2021.[16] The dispute arose under the India-Netherlands DTAA, which prescribed a default dividend withholding rate of 10 percent. India had subsequently entered into treaties with Slovenia, Lithuania, and Colombia, each providing a reduced 5 percent dividend rate. The assessees contended that the MFN clause should entitle them to a lower 5 percent rate. Drawing upon the reasoning in *Steria*, the Delhi High Court affirmed that the MFN clause operates as a self-trigger provision, meaning that its applicability depends on the occurrence of specified triggering events rather than operating automatically in all circumstances.[17] The Court emphasized that two conditions must be satisfied for the clause to be triggered: first, the third-country treaty relied upon must be with a State that was an OECD member at the time of signing the India–Netherlands DTAA; and second, that treaty must in fact extend a lower rate or a more restricted scope of taxation.

[16] Concentrix (n 6).

[17] Saurabh Sharma and Mukesh Rawat, 'MFN Dilemma in India's DTAAs Post Concentrix Ruling: A Ticking Time Bomb' in Mariela de Amstalden, Niall Moran, and Henok Asmelash (edts), International Economic Law: New Approaches and Issues (Springer Nature Switzerland 2023) 259.

The Court concluded that the MFN clause did not require a separate gazette notification under Section 90 to take effect.[18]

In Nestlé SA (2023), the Supreme Court departed from the earlier High Court approach, including Steria and Concentrix, and clarified the enforceability of MFN clauses.[19] The Court held that such clauses are not self-executing and require explicit notification under Section 90(1) to be operative. It clarified that India's entry into a treaty or protocol does not make it automatically enforceable before courts or tribunals. The provisions of such instruments confer rights only once the Central Government issues the necessary notification under Section 90(1). On the issue of OECD membership, the Court affirmed that the same treatment benefit under an MFN clause is only applicable if the third country was an OECD member at the time of entering into the treaty with India. Therefore, countries that joined the OECD after concluding their DTAA with India, such as Slovenia, Lithuania, and Colombia, do not trigger MFN benefits for older treaties. By imposing these conditions, the Supreme Court signaled a more restrictive approach, prioritizing procedural compliance alongside the realization of treaty benefits. This marked a departure from the expansive interpretations of the Delhi High Court and introduced two-fold procedural rigidity in claiming MFN benefits.

Alongside the MFN jurisprudence, the Gujarat High Court's ruling in *CIT v. Adani Wilmar Ltd. (2025)* examined treaty supremacy in the context of domestic withholding provisions.[20] Unlike the Supreme Court's decision in Nestlé SA, which held that treaty-based benefits, particularly those derived through MFN clauses, do not apply unless separately notified under Section 90(1), the Gujarat High Court treated the DTAA rate as immediately

[18] Concentrix (n 6).
[19] Nestlé SA (n 7).
[20] *CIT v Adani Wilmar Ltd* 2025 Latest Caselaw 5064 (Guj).

enforceable and held that Section 206AA could not override it.[21] The Court reasoned that once a treaty is notified, Section 90(2) gives it primacy over domestic law, including procedural TDS provisions, without requiring any further executive action. This approach effectively diverges from the notification-centric framework adopted in Nestlé SA, as it applies treaty benefits directly even in the absence of subsequent notifications.

More recently, in *Income Tax Officer v. Deccan Holdings B.V.* (2025), the Supreme Court reaffirmed the reasoning adopted in Nestlé SA, reiterating that MFN clauses contained in DTAAs are not self-executing and cannot operate in the absence of a specific notification under Section 90(1) of the Income-tax Act .[22] The Court expressly overruled the Delhi High Court's stance in *Deccan Holdings B.V. v. ITO* (2021), which had treated the MFN clause as automatically applicable, and instead aligned itself with the notification-based framework laid down in Nestlé.[23]

The journey from Azadi Bachao Andolan through Steria, Concentrix, and later the Gujarat High Court's approach in Adani Wilmar, reflects an earlier judicial tendency to treat treaties and their Protocols as self-operational instruments capable of directly overriding domestic law. MFN clauses, in particular, were interpreted to permit the automatic importation of favourable rates from third-country treaties without further executive action. This approach has now been decisively recalibrated. With Nestlé SA, and its reaffirmation in Deccan Holdings B.V., the Supreme Court has clarified that treaty-derived benefits, especially those expanding through MFN clauses, do not become enforceable unless expressly incorporated through a Section 90(1)

---

[21] Section 206AA, inserted by the Finance (No. 2) Act, 2009, obligates the deductor to apply a withholding rate of 20 percent where the deductee does not furnish a Permanent Account Number (PAN), thereby functioning as a statutory deterrent against non-compliance with the PAN regime.

[22] *Income Tax Officer v Deccan Holdings B.V.* (2025) SCC OnLine SC 332.

[23] *Deccan Holdings B.V. v ITO* (2022) 445 ITR 486.

notification. The contemporary position therefore places procedural incorporation, rather than automatic operation, at the center of India's treaty-supremacy framework. The following section discusses the fallout from Nestlé SA in detail and examines the current conflict it has generated within India's international tax regime.

III. THE FALLOUT FROM NESTLÉ SA RULING

In the aftermath of Nestlé SA, multinational corporations and Indian subsidiaries are now facing reassessments of tax positions that were previously settled. For years, companies had structured their cross-border payments, whether in the form of dividends, royalties, interest, or fees for technical services, on the assumption that MFN clauses embedded in their treaties automatically entitled them to reduced withholding tax rates. With the Supreme Court's ruling, tax authorities are empowered to issue revisional notices seeking higher withholding tax payments, along with interest and penalties. Dutch companies that had invoked the MFN clause under the India-Netherlands treaty to benefit from a 5% rate on dividends now face reassessment at 10%.[24] Indian companies that withheld tax at 5% in line with these interpretations must now pay the differential, along with potential penalties. What had been treated as a stable element of India's tax landscape has become uncertain, as both taxpayers and authorities revisit years of transactions executed under a different understanding of treaty law.

This reversion to higher withholding rates also creates the risk of double taxation. The problem is especially acute for investors from jurisdictions like Switzerland. When Colombia and Lithuania acceded to the OECD,

[24] Pavan Burugula, 'Dutch FPIs face tax concerns following apex court ruling' (*LiveMint*, 22 October 2023) <https://www.livemint.com/market/dutch-fpis-face-tax-concerns-following-apex-court-ruling-11697997684414.html>.

Switzerland retrospectively applied the lower 5% dividend rate under the MFN clause, rather than the 10% rate in the India–Switzerland agreement, and Indian companies correspondingly withheld tax at that rate.[25] Swiss investors were thus credited for only 5% tax in their home jurisdiction, consistent with their domestic laws on foreign tax credits. Following Nestlé, if Indian authorities now demand 10% withholding, those investors cannot claim an additional credit in Switzerland, since their tax authority has already treated the lower rate as final. The result is a double burden without relief.[26] Recognizing this asymmetry, the Swiss Federal Tax Administration announced that it would suspend its unilateral application of the MFN clause and revert to a 10% withholding tax on dividends from January 1, 2025.[27] By doing so, Switzerland sought to restore reciprocity and parity in treatment between the two countries' investors, albeit at the cost of higher taxes for both. This development demonstrates the cascading impact of a judicial interpretation that, while doctrinally sound within India's dualist framework, disrupts the balance of expectations underpinning international agreements.

Beyond the diplomatic fallout, there are practical economic consequences. The uncertainty surrounding MFN application may drive companies to reconsider their investment structures and treaty routes. Jurisdictions like Mauritius and Singapore, long regarded as more stable due to clear treaty terms and limited reliance on MFN clauses, could become the preferred vehicles for routing investment into India. The India-Mauritius DTAA, despite

---

[25] P. Sunil, 'Switzerland scraps MFN status to India; dividend income to face higher tax' (*Moneycontrol,* 3 December 2024), <https://www.moneycontrol.com/news/world/switzerland-scraps-mfn-status-to-india-dividend-income-to-face-higher-tax-12889570.html>.

[26] Dhruv Janssen-Sanghavi and Anirudh Srinivasan 'Some Reflections on the Swiss Response to the Indian MFN Position in Nestlé' (*Wolters Kluwer International Tax Law Blog*, 30 December 2024) <https://legalblogs.wolterskluwer.com/international-tax-law-blog/some-reflections-on-the-swiss-response-to-the-indian-mfn-position-in-nestle/>.

[27] DFF (n 11).

being revised, continues to be viewed as predictable compared to those involving European countries.[28] Similarly, the India–Singapore DTAA explicitly defines its benefits without the interpretive ambiguities attached to MFN clauses. Consequently, India's stance could unintentionally encourage treaty shopping, as investors gravitate toward jurisdictions where benefits are more straightforward and less susceptible to retroactive reinterpretation.

The broader conflict revealed by Nestlé also raises constitutional questions about the interaction between international obligations and domestic legislative authority. Article 253 of the Constitution empowers Parliament to enact laws implementing any treaty or international agreement.[29] However, in the absence of parliamentary legislation or a specific executive notification under Section 90(1), no treaty provision, including an MFN clause, automatically becomes part of Indian law. Thus, the Supreme Court effectively upheld the Parliament's exclusive power to legislate upon such conventions and mandated that international obligations must pass through a domestic filter before affecting taxpayers or citizens. However, the price of this constitutional fidelity is the perception of inconsistency and administrative rigidity. When taxpayers perceive treaty benefits as contingent on bureaucratic discretion rather than clear legal entitlements, it weakens India's treaty network as a reliable framework for cross-border investment.

The fallout of Nestlé thus brings into light a deeper structural conflict between India's constitutional dualism and the functional expectations of global commerce. While India is moving toward a procedurally strict framework, investors seek stability and predictability. The result is a system

---

[28] Satabdee Banerjee and Verena Tandrayen-Ragoobur, 'Indo–Mauritian Investment Trends Post-amendment of the Double Taxation Avoidance Agreement (DTAA)' (2025) 16(2) *IIMS Journal of Management Science* <https://journal.iimshillong.ac.in/pages/table-of-contents/fulltext/?id=392>.

[29] The Constitution of India, art 253.

where neither side achieves complete satisfaction. As Switzerland's response demonstrates, unilateral actions taken in reaction to such decisions can lead to a tit-for-tat adjustment in treaty benefits, raising doubts about mutual trust essential for the global tax order.

IV. LESSONS FROM ABROAD: UK, NETHERLANDS, AND FRANCE

Most developed nations adopt a smoother and more automatic approach to the interpretation and application of MFN and non-discrimination clauses. In contrast to India's approach, these clauses are treated as self-executory once the treaty comes into force. This section examines how countries such as the United Kingdom, the Netherlands, and France implement MFN clauses as an integral part of their DTAAs, prioritizing reciprocity, investor certainty, and the seamless operation of international law over sovereign control.

A. United Kingdom

In the United Kingdom, MFN clauses in DTAAs do not become automatically operative merely because the treaty has entered into force. Under the UK's dualist constitutional framework, treaties ratified by the executive bind the UK internationally but acquire domestic legal effect only when incorporated by Parliament through primary or delegated legislation.[30] For tax treaties, For tax treaties, incorporation is ordinarily effected by a statutory instrument made pursuant to the Taxation (International and Other Provisions) Act 2010.[31] However, once a DTAA is duly incorporated, no further notification or administrative endorsement is required for the MFN

[30] *R (Miller) v. Secretary of State for Exiting the European Union* [2017] UKSC 5 (UK); Charley Coleman, '*Parliamentary Scrutiny of Treaties'* (*House of Lords Library*, 16 May 2023) <https://lordslibrary.parliament.uk/parliamentary-scrutiny-of-treaties/>.

[31] Taxation (International and Other Provisions) Act 2010, s 2 (UK).

provision to operate; it applies by virtue of the treaty instrument itself.[32] The UK-Chile DTAA, for instance, includes an MFN clause relating to tax rates, and this provision became effective immediately after ratification without any need for supplementary action by the tax authorities.[33] Guidance from HM Revenue and Customs (HMRC), the United Kingdom's tax, payments, and customs authority, confirms this approach, emphasizing that DTAAs "usually override domestic law" and that treaty-based exemptions or credits are available to taxpayers upon claim.[34] Even though the UK Treasury retains the authority to enact domestic amendments, in practice, such amendments are unnecessary, as treaty ratification itself suffices to operationalize all provisions, including MFN benefits.

B. Netherlands

The Netherlands follows an even stronger model of automaticity, with Dutch courts affirming that MFN clauses operate without any need for government intervention once the relevant conditions are triggered.[35] A notable illustration is the India–Netherlands DTAA, whose protocol contained an MFN clause linked to OECD membership.[36] Dutch courts considered the clause immediately effective once India concluded a more beneficial treaty with another OECD member. However, from the Indian perspective, this

---

[32] HM Revenue & Customs, '*Double Taxation Agreements: Introduction – Domestic Law* (INTM152060)' (*GOV.UK*, 24 November 2025) <https://www.gov.uk/hmrc-internal-manuals/international-manual/intm152060>.

[33] UK/Chile Double Taxation Convention, signed in London on 12 July 2003, art 22(2); Double Taxation Relief (Taxes on Income) (India) Order, SI 1993/1801.

[34] Ibid.

[35] Netherlands Ministry of Finance, Decree of 22 June 1998; Netherlands Ministry of Finance, Decree of 28 February 2012.

[36] Convention between the Republic of India and the Kingdom of Netherlands for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and on Capital, arts 10–12.

interpretation has not been adopted, as India requires a formal domestic act of recognition before an MFN clause can take effect.[37]

C. France

France occupies a middle ground between full automaticity and procedural confirmation. French constitutional practice, under Article 55 of the Constitution, gives treaties a status superior to domestic law once ratified and published in the Journal Officiel.[38] In principle, this makes MFN clauses self-executing upon entry into force. However, the French tax administration occasionally issues decrees or notices to clarify the implementation of treaty provisions.[39] The France–Latvia DTAA illustrates this self-executing approach. In binding comments issued on 16 October 2024, the French authorities confirmed that the MFN clause had been triggered following the entry in force of Latvia's treaty with Japan on July 5, 2017.[40] The notice merely affirmed these effects for administrative clarity, as the MFN clause operated automatically once its conditions were met.

Overall, the comparison with other jurisdictions underscores that India's post-Nestlé interpretation of MFN clauses stands as an outlier in international tax practice. In the United Kingdom, the Netherlands, and France, MFN provisions operate directly upon treaty ratification, either by virtue of constitutional supremacy or established administrative practice. No additional

---

[37] Concentrix (n 6).

[38] Constitution of October 4, 1958, art. 55 (France).

[39] Jérôme Monsenego, 'Tax Treaty Disputes in France' in Eduardo Baistrocchi (ed), *A Global Analysis of Tax Treaty Disputes* (CUP 2017) 237–89.

[40] Sophie Tardieu et al, 'Most-Favored-Nation Clause in France–Latvia Tax Treaty Is Triggered' (*Tax at Hand*, 2024) <https://www.taxathand.com/article/37107/France/2024/Most-favored-nation-clause-in-France-Latvia-tax-treaty-is-triggered>; PwC SIA – Mindlink, *France includes most-favoured-nation clause in double tax treaty with Latvia* (*Mindlink*, 3 December 2024), <https://mindlink.lv/en/news/view-pdf?id=23672>.

procedural instrument is needed to activate them. India's continued dependence on notification under Section 90 makes its framework more rigid and less aligned with the cooperative norms that define contemporary international taxation. This divergence calls for reconsideration of whether such procedural formalities truly serve India's interests or merely hinder its credibility as a reliable treaty partner in the evolving landscape of global tax governance.

V. POLICY PATHWAYS FOR A PREDICTABLE TREATY REGIME IN INDIA

India's international tax regime stands at a crossroads between maintaining fiscal sovereignty and sustaining the credibility of its treaty network. The judicial and administrative inconsistencies in interpreting the MFN clause have not only affected investor sentiment but also raised questions on India's commitment to international obligations. In this context, a coherent policy response is essential to reinforce predictability and fairness without compromising legitimate revenue interests.

Firstly, a key source of ambiguity arises from the lack of clarity in the Income Tax Act, 1961 regarding the self-executing nature of MFN clauses. While treaties are negotiated under the executive's authority, their implementation has been read as contingent upon notification under Section 90. To eliminate this uncertainty, Parliament may potentially consider amending Section 90 to explicitly provide that once the preconditions in an MFN clause are satisfied, such as a third-country treaty with an OECD member offering more favourable terms, the clause automatically becomes operative. Such statutory language would align domestic law with international best practice and ensure that the benefits contemplated by the MFN clause are realized without administrative delay.

Secondly, in the meantime, the government may adopt an administrative safeguard by setting up a fixed notification timeline. To bring procedural certainty, an order mandating that MFN-related notifications be issued within four-to-six months of the relevant third-country treaty, and clearly specifying the scope of modification to the earlier treaty and the applicable date of effect, may be brought in. Such a transparent, time-bound process would compel administrative accountability and prevent selective or retrospective notifications, which have been a source of litigation.[41] To enhance accessibility and institutionalise consistent record-keeping, the CBDT may consider establishing a *separate, clearly indexed* digital notification mechanism exclusively for MFN-related communications, in addition to the existing digital framework for circulars already hosted on the CBDT portal.[42]

Thirdly, even though the Gujarat High Court in *CIT v. Adani Wilmar Ltd.* has reaffirmed that treaty provisions under section 90(2) override domestic provisions such as section 206AA, this very judicial divergence from the Supreme Court's more text-strict approach in Nestlé SA underscores the need for administrative clarity. Pending any legislative amendment, the CBDT may still issue detailed guidance clarifying the treatment of taxpayers who have already relied on earlier judicial stance recognising automatic MFN benefits.[43] Rather than offering leniency in light of legal ambiguity, such guidance would operate to ensure nationwide uniformity in assessment practices, reduce avoidable litigation, and restore confidence in tax administration by

[41] P.R.L. Rajavenkatesan and Shanmuga Sundaram Angamuthu, '*Westminster Principles and Twin Ghosts of McDowell and Retrospective Laws*' (2024) SSRN <https://ssrn.com/abstract=4957000>; Aayushi Singh and Harsh Mahaseth, '*A Long and Winding Road—India's Tryst with Retrospective Taxation'* (2023) 26 Int'l Arb. L. Rev. 51; A. Niranjanaa, '*The Fallouts of Retrospective Amendments in Taxing Statutes: A Critical Analysis*' (2021) 6 Int'l J. L., 1221.

[42] Central Board of Direct Taxes, Circular No. 3/2022 (2022) <https://incometaxindia.gov.in/communications/circular/circular-3-2022.pdf>.

[43] Suranjali Tandon, 'Issues and Challenges with Applying Investment Agreements to Tax Matters in the Context of India's Experience' (2023) 31(1) *Asia Pacific Law Review* 235.

preventing inconsistent application of MFN-related positions across jurisdictions.

Lastly, if India intends to maintain its present interpretative position, it should adopt a clearer and more structured long-term approach to the drafting of MFN clauses in its tax treaties. It should first review its existing treaties containing MFN-clauses to identify ambiguities that have led to litigation and inconsistent administration, and use these findings to guide future treaty drafting. In upcoming treaties or renegotiations, the MFN clause should be framed in explicit terms that clarify whether the benefit applies automatically or only upon formal notification by both competent authorities. India may also adopt a standardised MFN clause that clearly defines the scope of the benefit, the point at which it becomes operative, and any safeguards such as reciprocal notifications and anti-abuse conditions. To support this approach, India should strengthen its domestic notification process through timely publication and the maintenance of a transparent public repository of all DTAA-related notifications.

A sample phrasing that could be included in future treaties is as follows: "Any benefit arising under this Most-Favoured-Nation clause shall apply only upon the issuance and publication of a notification by both Contracting States. The extended benefit shall take effect from the date specified in such notifications." Such clear and precise drafting would minimise interpretative disputes and provide certainty to taxpayers and treaty partners.

To sum up, India's way forward requires institutional clarity, legislative foresight, and administrative fairness. Automatic MFN application, time-bound notifications, and transparent guidance can collectively rebuild certainty in cross-border taxation. By ensuring that treaties are implemented as negotiated and that taxpayers are treated with predictability, India can reconcile its revenue objectives with the integrity of its international commitments. The overarching policy goal should be to replace ad-hoc decision-making with a structured framework that minimizes litigation, safeguards treaty credibility, and strengthens India's standing in global tax governance. Only through consistent, transparent, and balanced reforms can India transform its international tax policy from a field of dispute into a model of reliability and trust.

VI. CONCLUSION

India's jurisprudence on treaty supremacy and the interpretation of MFN clauses reflects a gradual shift from a liberal to a markedly restrained approach. Beginning with *Azadi Bachao Andolan*, where the Supreme Court affirmed that treaty obligations prevail over conflicting domestic law, the position has progressively evolved through *Nestlé SA* into a framework that makes the availability of treaty benefits contingent upon explicit executive notification.

The resulting uncertainty has tangible costs, namely retrospective reassessments, potential double taxation, and diplomatic tensions with key treaty partners. Comparative experience from jurisdictions such as the United Kingdom, France, and the Netherlands highlights that procedural flexibility and automatic MFN application can coexist with fiscal sovereignty. India's insistence on notification formalities, by contrast, risks eroding its treaty credibility.

A well-planned path forward requires aligning domestic law with international expectations. Clarifying Section 90 to recognize automatic MFN operation, or at least mandating timely notification, would restore predictability. Equally, transitional relief for taxpayers acting in good faith would uphold fairness. If the current approach is to be continued, India must clarify its interpretation within the treaty wording itself. Ultimately, India must balance the imperatives of sovereignty and certainty: only through legislative clarity and administrative transparency can it transform its unsettled doctrine into a stable and trusted international tax regime.

VI. EVOLVING BUT UNCLEAR: THE FUTURE OF EFFECTS-BASED APPROACH UNDER SECTION 4 OF INDIAN COMPETITION LAW

Vaishnavi Kulkarni & Maitreyi Shinde[*]

ABSTRACT

This paper examines the evolution of the concept of "abuse of dominance" under Section 4 of the Competition Act, 2002. It focuses on the recent Schott Glass judgment, which marks a clear shift from a rigid, form-based approach to a more flexible, effects-based approach. Effect-based analysis focuses on the actual or likely impact on the market rather than relying on the earlier tick-box approach that focused only on the form of the practice. The paper examines the understanding of exclusionary and exploitative abuses, as well as the relevance of the As Efficient Competitor (AEC) Principle in assessing these abuses, with an emphasis on case-by-case analysis. It discusses the position of the Doctrine of Special Responsibility and the defense of objective justification as a tool for assessing legitimate business conduct. In doing so, it reflects on the ongoing challenges of defining what constitutes abuse, understanding when competition is harmed, and striking the right balance between maintaining fair markets and allowing dominant firms to compete on their strengths.

Keywords: Effects, Section 4, Competition, Abuse of Dominance, Exclusionary Harm, Special Responsibility, Objective Justification.

[*] Vaishnavi Kulkarni & Maitreyi Shinde are Fourth -Year students of B.Com. LL.B. at Ramaiah College of Law. The Views stated in this paper are personal.

I. INTRODUCTION

In modern competition law regimes, the challenge of regulating market power has become increasingly complex. As industries consolidate and dominant firms gain unprecedented influence, the legal framework governing their conduct becomes extremely important. Within this context, Section 4 of the Competition Act, 2002 [1] (the Act) assumes a central role. It helps to ensure that markets remain fair and contestable, particularly at a time when rising concentration heightens concerns about fairness, innovation, and consumer choice.[2]

Over the years, courts, the Competition Commission of India **("CCI"),** and scholars have continued to debate on what amounts to abuse of dominance under the Act. In general, such abuse can take many forms: imposing unfair prices or conditions, limiting production, engaging in predatory pricing, creating barriers to entry, or applying different terms to similar transactions[3]. Given this diversity, cases involving dominance and its abuse need to be approached with the 'rule of reason' framework that focuses on two stages: first, proving that dominance exists, and second, examining whether the conduct harms competition.[4]

---

[1] Competition Act 2002 (India), s 4.

[2] International Monetary Fund, Rising Corporate Market Power: Emerging Policy Issues (Staff Discussion Note SDN/21/01, 2021).

[3] Lakshay Anand, 'Abuse of Dominant Position – Meaning, Definition and Case Laws' (Legal Bites, 5 February 2021) <https://www.legalbites.in/abuse-dominant-position-competition-law/> accessed 10 October 2025.

[4] Alexander J Kububa, 'Dominance and Abuse of Dominance' (CUTS International 7Up3 Project, September 2007) <https://cuts-ccier.org/pdf/Paper-2-Ethopia.pdf> accessed 10 October 2025.

Yet defining abuse is rarely straightforward. It continues to be marked by ambiguity, falling short of a coherent normative framework.[5] A practice that seems perfectly fair in one market might turn out to be harmful in another; it all depends on who the players are and how that market operates. For example, long credit terms may be normal in the furniture market but damaging in the cement industry. Long credit terms might be harmless in the furniture market, where slow sales and flexible payments are normal, but the same practice can hurt competition in the cement industry because smaller companies cannot afford to wait so long for their money, letting the dominant firm push them out. When done well, tackling such abuse benefits not just the competitive process but also consumers,[6] by ensuring that markets remain fair, open, and driven by genuine efficiency rather than power.

The recent *Schott Glass*[7] Judgment marks a moment in the trajectory of India's Competition law. Long invoked as a landmark case to define the contours of dominance, the case has now reaffirmed India's transition towards an effects-based approach. By embracing this framework, the Supreme Court has marked a clear break from the earlier, rigid form-based approach. In doing so, India is moving closer to European Union style competition law.

Moreover, the effects approach requires formulating rules that assess conduct that is harmful to the competition and thus abusive, which is neither an easy nor an intuitive task.[8] This raises a set of important and practical questions. What does it really mean for competition to be harmed, and how should that harm be assessed? If such harm can be shown, can dominant firms

---

[5] Robert O'Donoghue and Jorge Padilla, *The Law and Economics of Article 102 TFEU* (3rd edn, Hart Publishing 2020) 266.

[6] OECD, Remedies and Commitments in Abuse Cases (Competition Policy Roundtable Background Note, 2022) <https://www.oecd.org/daf/competition/remedies-and-commitments-in-abuse-cases-2022.pdf > accessed 10 October 2025.

[7] *CCI v. Schott Glass India (P) Ltd.,* [2025] 257 Comp Cas 1.

[8] Opinion of AG Rantos in Case C-377/20 *Servizio Elettrico Nazionale SpA v Autorità Garante della Concorrenza e del Mercato* EU:C:2021:998, [53].

still defend their actions with legitimate justifications? And even within an effects-based approach, do these firms continue to carry a special responsibility not to impair competition in the market?

The broader aim of this Paper is to examine the consequences of adopting an effects-based approach within the Indian framework. This has been facilitated through a Comparative and Critical methodology. The paper is divided into eight parts. Part [I] provides a brief introduction. Part [II] gives a summary of the *Schott Glass* Case. Part [III] provides an overview of Section 4 and the distinction between form-based and effects-based approaches. Part [IV] discusses the classification of abuses as exclusionary or exploitative. Part [V] examines the implementation of the AEC Principle and AEC Test in Indian Competition Law. Part [VI] assesses the Doctrine of Special Responsibility. Part [VII] explores the concept of objective justification and its challenges. Finally, Part [VIII] concludes the paper.

II. OVERVIEW OF SCHOTT GLASS RULING

A. Background

After 11 long years, a division bench of the Supreme Court finally delivered its verdict on the landmark case of *Schott Glass v. Competition Commission of India & Anr.* on May 13th, 2025. It dismissed the appeal filed by the CCI and Kapoor Glass Private Limited ("Kapoor Glass") against the judgment delivered by the now dissolved Competition Appellate Tribunal (COMPAT) in 2014. Initially, the CCI had levied a penalty of Rs 5.66 crores against Schott Pharmaceutical Packaging GmbH ("Schott Glass") for engaging in discriminatory practices. Schott Glass challenged this before COMPAT. The COMPAT discharged its liability for anti-competitive practices. This was challenged in the Supreme Court, wherein the Court upheld the decision of COMPAT and overruled the CCI's decision of holding Schott Glass liable for abusing its dominant position under Section 4 of the Act. The Supreme Court set a precedent for all Competition law cases, justifying volume-based discounts as an industrial norm, emphasizing the importance of ensuring procedural transparency and establishing an effect-based approach.

B. Facts of the case

In May 2008, Schott Glass entered into a Joint Venture agreement with a downstream ampoule manufacturer, Kaisha Manufacturers Pvt. Ltd. ("Kaisha"). This vertical integration was known as Schott Kaisha Private Limited ("Schott Kaisha"). Through this joint venture, the companies were able to produce both borosilicate glass tubes and glass ampoules.

On the other hand, Kapoor Glass is a private company that manufactures glass ampoules, vials, and dental cartridges, which serve as primary packaging materials for liquid injectables in the pharmaceutical industry.

Kapoor Glass claimed Schott Glass, as a dominant player in the market, was abusing its position by selling glass tubes below production cost, engaging in predatory pricing that threatened to push competitors, including Kapoor Glass, out of the market. Additionally, Kapoor Glass alleged that Schott Glass implemented discount schemes and loyalty rebates that created an uneven playing field. By offering preferential benefits to selected companies, it placed other competitors at a disadvantage.

1. CCI'S RULING

Relevant Market: The CCI[9] identified two markets: the upstream market for borosilicate glass tubes in India (Schott Glass operated in this market) and the downstream market for containers such as ampoules, vials, dental cartridges etc (wherein Schott Kaisha and Kapoor Glass operated).

Establishing Dominance: The CCI found that Schott Glass held a dominant position under Section 19(4) of the Act.[10] exercising considerable power across both the upstream and downstream markets. Smaller players in the industry were heavily dependent on Schott Glass for the supply of glass tubes, leaving them with little ability to counter its conduct or influence market dynamics. The CCI further observed that significant barriers to entry, such as high capital costs, long gestation periods, and the advantages of economies of scale, prevented new competitors from entering the market. All these factors led the CCI to conclude that Schott Glass occupied a dominant position.

Unfair discounting schemes: Schott Glass mainly offered two types of discounts to downstream converters: (i) volume/target discount, (ii) loyalty discount/functional bonus.

Initially, they granted quantity-based discounts on purchase volume, with different target slabs. The discounting process expanded when Schott Glass introduced functional discounts. To qualify this, buyers had to purchase a minimum quantity and avoid using China Glass while maintaining fair prices for Schott's tubing products. Additionally, converters signed a Marketing Support Agreement to promote Schott and its products, receiving quarterly financial compensation. Due to this, Kapoor Glass challenged Schott Glass' policies for infringement of Section 4(2) (i) and/or (ii) of the Act.[11]

[9] *Kapoor Glass Private Limited v Schott Glass India Private Limited* [2012] SCC OnLine CCI 15.
[10] Competition Act 2002, s 19(4).
[11] Competition Act 2002, s 4(2)(i),(ii).

The CCI observed that Schott Glass offered Schott Kaisha significantly higher discounts than other converters. Schott Glass defended this by saying Kaisha placed larger orders, but the CCI rejected this argument. It noted that while offering discounts isn't always anti-competitive, giving one player special terms can still disrupt fair competition. In this case, even though other converters sold more, their profits shrank, while Kaisha's profits grew, showing how the playing field had tilted in its favor.

Margin Squeeze: The CCI also found that Schott Glass strengthened its position in both upstream and downstream markets, reducing competition significantly. Its joint venture with Kaisha squeezed other converters' profit margins, forcing them to consider joining Schott Glass' structure. This discriminatory pricing drove out players like Kapoor Glass and reduced others' market share, threatening downstream competition.

In conclusion, the CCI in its majority order determined that the discount policy violated Sections 4(2)(a)(i) and 4(2)(a)(ii) of the Act, which prohibits unfair or discriminatory pricing by dominant enterprises. Additionally, Schott Glass used its upstream market dominance to gain downstream advantages, violating Section 4(2)(e) of the Act.[12] However, it is pertinent to note that the minority order by Smt Geeta Gouri[13] held that Schott Glass' discount policy does not impose unfair conditions and does not have the potential to harm competition. Through her analysis, it was observed that the policy was not capable of creating any exclusionary effect. Hence, Schott Glass was relieved of these allegations in the minority order.

---

[12] Competition Act 2002, s 4(2)(e).

[13] *Kapoor Glass Private Limited v Schott Glass India Private Limited* [2012] SCC OnLine CCI 16.

2. COMPAT'S AND SUPREME COURT'S JUDGEMENT

Aggrieved by CCI's decision, Schott Glass appealed against the order that held them guilty of contravening Section 4. COMPAT considered the minority order by Smt. Geeta Gouri, who exonerated Schott Glass from several allegations. Both COMPAT and later the Supreme Court dealt with similar issues of discriminatory pricing, exclusionary policies under Section 4(2)(a), and leveraging dominant position under Section 4(2)(e).

Unfair discounting schemes: CCI had concluded that Schott Glass offered discriminatory discounts by giving favorable terms to Schott Kaisha. COMPAT refuted this by stating that Schott Kaisha's purchases far exceeded other converters' capabilities. In order to retain a valued downstream market customer, Schott Glass's discounting policies were objectively justified. Other converters promising 30% or more purchase would receive similar discounts.

The Supreme Court[14] found that no converter purchasing equivalent glass tube was denied benefits, and the discount policy reflecting larger volumes was not discriminatory under Section 4(2)(a). The Court emphasized that borosilicate requires mass production, making high-volume orders crucial. Volume-based discounts benefit manufacturers, customers, and pharmaceutical consumers.

It further referred to the landmark EU case of *Intel*[15], wherein it was observed that incentivizing distributors to sell slower-moving products was reasonable. The Supreme Court's views aligned with COMPAT's principles and the European Court's Intel case, requiring proof of harm on competition while allowing valid business reasons.

Dissimilar treatment of equivalent transactions: One of the major takeaways from COMPAT, which the Supreme Court later relied on, was that

[14] *CCI v Schott Glass* (n 7).
[15] *ESYS Information Technologies Pvt Ltd v Intel Corporation* [2014] SCC OnLine CCI 10.

dissimilar treatment of transactions that were similar in nature was held to be anti-competitive. Since discounts were provided on a slab basis with fixed rates for transactions under the same quantity slab, transactions of different volumes could not be considered "equivalent transactions". Hence, maintaining different slabs for different quantities cannot be deemed discriminatory.

Harm caused in the downstream market: COMPAT indirectly introduced the foundation of effect-based analysis by focusing on the harm that discriminatory policies caused in the downstream market. The downstream market consisted of Schott Kaisha as the largest tube converter, followed by two other companies and several small players. The price charged by converters to pharmaceutical companies was similar, sometimes identical, indicating that "the cost differential in inputs caused by the volume-based discount scheme of the Appellant did not get translated into price differential in the final products for the pharmaceutical companies."[16] This meant that the pharmaceutical companies faced the same pricing levels from Schott Kaisha and the other small converters.

Hence, any change in converters' market structure was not due to Schott Glass's volume-based discounts, as converters' selling prices were similar. In fact, Schott Kaisha's prices were sometimes higher than other players. Thus, COMPAT concluded there was no contravention by Schott Glass regarding target discounts.

Margin Squeeze: While CCI ruled that preferential input pricing through discount policies and agreements allowed Schott Kaisha to squeeze competitors' profit margins, COMPAT stated the discount policies were not preferential and anti-discriminatory. Schott Kaisha's container prices were often equivalent to or higher than downstream market rivals. Thus, concluding

[16] *Schott Glass (India) (P) Ltd v CCI* [2014] SCC OnLine Comp AT 3, [20]–[22].

that Schott Kaisha did not use its position to squeeze competitors' profits through lower pricing.

The Supreme Court fully endorsed COMPAT's findings using the ECJ criteria in *TeliaSonera Sverige AB v. Konkurrensverket* [17], requiring 3 essential elements. This case provided a 3-step test that the complainant must demonstrate to show margin squeeze:

(1) <u>The Dominant enterprise should be active in the downstream market</u> - The Court held that Schott Glass had no downstream participation as it neither converted nor sold containers. Schott Kaisha, a separate company with a 50% Schott AG stake, operates downstream. This doesn't constitute leveraging under Section 4, as the upstream entity merely supplies.

(2) <u>No demonstrable margin squeeze of equally competitive rivals</u> - A price differential would constitute a squeeze only if it drove equally competitive converters into a loss. Evidence showed other converters recorded increasing profits while Schott Kaisha's prices exceeded competitors'.

(3) <u>The compression threatens competitive harm</u> - No market foreclosure was evident as imports increased and competitors expanded capacity. No converters exited the downstream market. The Supreme Court found the policies justified, as Schott India's factory needed continuous full capacity operation. The Court noted that "take-or-pay" commitments are allowed if their competitive benefits exceed restrictions. The Court explained that "take-or-pay" clauses are not automatically anti-competitive. They can be necessary to ensure a

[17] Case C-52/09 *TeliaSonera Sverige AB v Konkurrensverket* [2011] ECR I-527.

steady supply, encourage investment, or manage production costs. In this case, the clause helped maintain a consistent supply and did not prevent converters from choosing other suppliers. Since its benefits outweighed any potential restrictions, the Court held that it did not violate Section 4(2)(e).

Effect-based analysis is essential under Section 4: The Supreme Court emphasized effect-based analysis in examining abuse of dominance. It held that there was no competitive harm as independent converters expanded output and margins, and buyers paid similar or higher prices from Schott Kaisha. It upheld COMPAT's Order, rejecting CCI's Order for lacking a credible harm assessment. Further, it also accepted the precedence of *Alphabet Inc. v. Competition Commission of India.* [18], where the National Company Law Tribunal **("NCLAT")** held that the actual or likely effects of a company's conduct on competition must be examined. The Court clarified that to hold any conduct as abusive under Section 4 of the Act, the CCI must demonstrate competitive harm through evidence, not merely theoretically. This requires the CCI to analyze the effects of the conduct by weighing its pro-competitive and anti-competitive impacts under Section 19(4) of the Act, ensuring a proper assessment based on facts before declaring conduct abusive.

By analyzing the three different judgments given by CCI, COMPAT, and the Supreme Court, it becomes quite evident that the approach of CCI vastly differed from that of the Supreme Court and COMPAT. Indian Competition law is undergoing a noticeable shift as to how abuse is to be examined.

[18] *Alphabet Inc v Competition Commission of India* [2025] SCC OnLine NCLAT 850.

III. ABUSE UNDER SECTION 4

The debate over the form-effect dichotomy has been longstanding in EU and Indian jurisprudence. However, one often fails to analyze the ground on which this dilemma stems from. The core issue arises from the uncertain definition of what constitutes an abuse under the Act. This conceptual ambiguity finds its legal anchor in Section 4 of the Act. Section 4 bars enterprises or groups from abusing a dominant position. Section 4 sub-section (2) illustrates what counts as abuse, such as charging unfair or discriminatory prices, restricting production or innovation, blocking market access for rivals, forcing tie-in sales or bundles, and using dominance in one market to gain an edge in another.

The Explanation of Section 4 clearly defines the term dominant position as "a position of economic strength that enables an enterprise to operate independently of competitive forces or to affect the relevant market in its favor."[19] Notably, dominance itself is not prohibited; only abuse is. Yet, how abuse must be proven has been a matter of evolving interpretation. In contrast, Section 3 of the Act[20] includes the AAEC test, which focuses on the actual or likely harm to competition. The lack of a clear definition of abuse under Section 4 and the absence of AAEC raise concerns and leave enterprises uncertain about the threshold for liability. This gave rise to significant ambiguity on whether Section 4 treated certain practices as abusive by their very nature (form-based approach), or whether proof of actual anti-competitive effects was required to establish abuse.

Pre-Schott Glass / Form-based approach: For a long time, before *Schott Glass*, Section 4 had been interpreted or implemented according to the

[19] Competition Act 2002, s 4 Explanation.
[20] Competition Act 2002, s 3.

language of the Act. Abuse of dominance was treated as a *per se* violation, meaning that engaging in certain prohibited practices can itself constitute a violation, regardless of the actual harm caused. The CCI had at times interpreted Section 4[21] as permitting form-based findings, particularly where pricing practices appeared exclusionary on their face without a rigorous demonstration of harm to competition.

This form-based approach traces back to the landmark case *Hoffmann-La Roche & Co. AG v. Commission of the European Communities.*[22] The European Court of Justice ruled that Hoffmann-La Roche had abused its dominant position by entering into exclusive purchasing agreements with certain customers and offering loyalty rebates to others. The Court's decision made it clear that certain practices could be considered abusive in themselves, suggesting that a company could be held liable for abuse of dominance simply by engaging in them, without requiring separate proof of anti-competitive effects. This case is also heavily relied upon in India and is frequently cited by the CCI. [23]

In India, landmark judgments in *Belaire Owner's Association v. DLF Ltd*.[24] and *MCX Stock Exchange v. National Stock Exchange*[25], abuse was inferred mainly based on structural dominance with a clear prima facie case of unfair or "below-cost" conduct without requiring a detailed proof of market harm. Hence, form-based approach was followed.

---

[21] *Fx Enterprise Solutions India Pvt Ltd v Hyundai Motor India Ltd* [2017] SCC OnLine CCI 26.

[22] Case 85/76 *Hoffmann-La Roche & Co AG v Commission* EU:C:1979:36.

[23] 'Abuse of Dominance: Effect over Form?' (Competition – Cyril Amarchand Mangaldas Blog, March 2018) <https://competition.cyrilamarchandblogs.com/2018/03/abuse-dominance-effect-form/> accessed 8 October 2025.

[24] *Belaire Owners' Association v DLF Limited* [2011] SCC OnLine CCI 89.

[25] *MCX Stock Exchange Ltd v National Stock Exchange of India Ltd* [2011] SCC OnLine CCI 52.

But form-based approach struggles in modern markets because it often results in false positives: punishing actions that are pro-competitive. For instance, while rebates that are offered by a dominant firm may appear as exclusionary practices, as it may push out existing competitors from the market, on the other hand, it may also have procompetitive effects when lower costs and greater incentives to innovate due to economies of scale are passed on to consumers.

Traditional competition law focused on protecting competitors, and so it primarily enforced a form-based approach. The logic behind this was that perfect competition is an ideal scenario, and firms were price-takers with limited or no market power.[26]

In modern markets, relying on a form-based approach to assess abuse of dominance has brought several problems. The biggest issue relates to the meaning of dominance itself. The most common indicator of dominance is the market share, which is an unreliable measure when used in isolation, especially since there is no clear threshold at which a firm automatically becomes dominant. Above all, a form-based approach tends to overlook legitimate business reasons or efficiency justifications for the conduct in question. As a result, behaviour that may ultimately benefit consumers could be wrongly penalised.[27]

Hence form-based approach focuses only on the type of conduct, for example, rebates, exclusive agreements, tying etc, without examining why the firm behaved that way or what actual impact the conduct had on the market. Therefore, such a model will actually end up limiting consumer

---

[26] Frank Easterbrook, 'Changing Views of Competition, Economic Analysis and EC Antitrust Law' (Macerata Lecture on European Economic Policies, University of Macerata, Macerata, 2008).

[27] Payal Malik, Neha Malhotra, Ramji Tamarappoo and Nisha Kaur Uberoi, 'Legal Treatment of Abuse of Dominance in Indian Competition Law' (2019) 54(2) *Review of Industrial Organization* 435.

welfare and creating inconsistencies in outcomes of competition assessment, which results in the evolution of a muddled jurisprudence.[28] Moreover, it may also become a hindrance to growth in today's fast-moving, digital evolution, and extremely complex and inter-linked markets, by unnecessarily restricting the freedom of firms to pursue strategies in their best business interest.

Post-Schott Glass / Effect-based approach: Through the *Schott Glass* case, the interpretation of abuse has shifted from the approach that a dominant entity abuses its position merely by practicing the conduct given under Section 4 to an approach where anti-competitive effects must be shown to constitute abuse. The Court acknowledged the difficulty that Section 4 does not expressly require Appreciable Adverse Effect on Competition (AAEC) unlike Section 3, but nevertheless identified 3 legislative signposts for this effect requirement:

1. The Preamble states that the Act prevents practices having adverse effects on competition.

2. A dominant position is defined as power enabling enterprises to affect the relevant market in their favor.

3. Section 19(4)(l)[29] requires CCI to consider "relative advantage through economic development," indicating that dominant companies supporting development should not face penalties.

The Supreme Court based its interpretation on the Raghavan Committee Report (2000)[30] and Article 102 of the European Union Treaty regarding the assessment of competition harm, and stated that nowhere in the enacted text does it suggest an irrebuttable presumption of competitive harm. Section 4's

---

[28] Ibid.
[29] Competition Act 2002, s 19(4)(1).
[30] High Level Committee on Competition Policy and Law, *Report of the High Level Committee on Competition Policy and Law* (Government of India 2000) <https://theindiancompetitionlaw.files.wordpress.com/2013/02/report_of_high_level_committee_on_competition_policy_law_svs_raghavan_committee.pdf> accessed 12 October 2025.

implied presumption cannot be conclusive without a rebuttal opportunity. CCI must assess actual competitive harm using economic tests and apply the "fairness test" uniformly[31] to comply with Article 14.

However, even with the shift to an effects-based analysis, several interpretative inconsistencies remain. The judgment does not clarify how effects are to be assessed, whether the effects requirement applies uniformly across different types of abuses, or how this approach aligns with the additional burden placed on dominant enterprises. It also leaves the scope of efficiency-based defences unresolved. All these issues are examined further in this paper.

IV. EXCLUSIONARY OR EXPLOITATIVE HARM?

Although the Court insisted on an effects analysis for every case under Section 4, it raises a genuine concern: is it practical to apply this blanket requirement for every type of abuse?

Addressing this question requires understanding that Section 4 recognizes two types of abuse: exclusionary and exploitative. In its ordinary sense, "exploitative abuse refers to any conduct that directly causes harm to the customers of the dominant undertaking." [32] Whereas, exclusionary conduct includes "those actions that attempt to exclude competitors from the competitive landscape."[33]

In India, this was recognized by the CCI in *HT Media Ltd v Super Cassettes Ltd* (2014). The CCI observed that pricing abuses may be 'exclusionary' (i.e., pricing strategies adopted by dominant firms to foreclose

---

[31] *Indian National Shipowners' Association v ONGC* [2019] SCC OnLine CCI 26.

[32] R O'Donoghue and AJ Padilla, *The Law and Economics of Article 82 EC* (Hart Publishing Oxford 2006) 174.

[33] Observer Research Foundation, *ORF Report* (2023) <https://www.orfonline.org/public/uploads/posts/pdf/20230814004736.pdf> accessed 8 October 2025.

competitors) or 'exploitative' (i.e., which cover instances where a dominant firm is accused of exploiting its customers by setting excessive prices)[34].

This view is seen in the Report of the Competition Law Review Committee in 2019[35] which stated that effects analysis in Section 4(2) is unnecessary, since certain types of abuse, like exploitative abuse, do not always require such an analysis. Cosidering this, it becomes crucial to evaluate the correctness of the Supreme Court's approach. Two interpretative viewpoints have emerged on how *exploitative* and *exclusionary* abuses should be understood under Competition law.

Viewpoint 1: Scholars like Aditya Battacharjea[36] argue that Competition law should primarily focus on exclusionary abuses. He opines that exploitative abuse harms the consumers without necessarily harming the competition. This is better addressed through sector-specific regulation, such as licensing conditions, consumer protection laws. Competition law, therefore, should be reserved for exclusionary behavior that harms the competitive process and deters market entry.

Further, in the absence of any barriers to entry, a dominant undertaking that makes competitive profits will attract new entrants to the market. This means that if a business has already entered the market but faces exploitative abuse, the competitive process itself is considered a better way to remedy the situation. For instance, if a dominant firm offers excessive prices and low-quality products, it will naturally lose customers if a new entrant comes along and provides lower prices with better quality. But if this does not happen, it

---

[34] *HT Media Ltd v Super Cassettes Industries Ltd* [2014] SCC OnLine CCI 120.

[35] Competition Law Review Committee, *Report of the Competition Law Review Committee* (Ministry of Corporate Affairs, Government of India 2019) <https://www.ies.gov.in/pdfs/Report-Competition-CLRC.pdf> accessed 16 October 2025.

[36] Aditya Bhattacharjea, 'Abuse of Dominance under the Competition Act: The Need for a Competitive Effects Test' (2022) 7(2) *Indian Competition Law Review* 36.

may be because the incumbent is blocking entry in ways that amount to exclusionary abuse.

In contrast, exclusionary practices directly block competition at the entry stage, making it more relevant to address them under Competition law. Hence, effects on the competition and not the consumers should be considered under Section 4.

Despite this perspective, Bhattacharjea acknowledges the challenges exploitative abuse poses to the effects approach under Section 4. He proposed an alternative to amend Section 19(3)(d) of the Act to include the phrase "benefits or harm to the consumers". This aims to make it possible to capture both exploitative and exclusionary abuses within an effects-based framework. The same has been incorporated in the Competition (Amendment) Act, 2023.[37]

It is however important to note the context in which the scholar included the pharse "harm to consumers" in the provision. Competition law, with respect to exploitative abuse, must only be resorted to if there are inconsistencies or gaps in the regulation specific to the sector. For example, in the case of *Belaire Owners' Association v. DLF Limited & Ors*[38] , CCI imposed penalty on the property developer for imposing unilateral contracts on purchasers, which constitutes exploitative abuse. This intervention occurred because, at the time, there was a clear regulatory vacuum in the real-estate sector, leaving consumers without adequate protection. Through the introduction of Real Estate (Regulation and Development) Act, 2016[39], this regulatory void has now been filled and these matters fall primarily within RERA's domain, reducing the need for CCI intervention in such cases.

[37] The Competition (Amendment) Act, 2023.
[38] *HT Media Ltd v Super Cassettes Industries Ltd* (n 34).
[39] Real Estate (Regulation and Development) Act, 2016.

Viewpoint 2: Whereas other Scholars take a different approach. They believe that there should be only one type of abuse, i.e., exploitative abuse.[40] They emphasize the notion that the Act is ultimately a welfare act; hence, every conduct of a dominant undertaking that is being scrutinized for abuse has to consider whether it is impacting consumer welfare in any manner. That is to say that a conduct should be considered abusive only when it leads to the exploitation of consumers.

These Scholars believe that there is no place in Competition law for both exploitative and exclusionary conduct to exist separately from each other. They argue that the exclusion of competitors without exploitation should not be found offensive. Similarly, pure exploitation without the harm to competition cannot be abuse under the Competition law. Ultimately, there is only one type of abuse, that is, exploitative abuse, and exploitation should be the result of harm to competition. [41]

Pınar Akman provides three advantages of this type of interpretation over the one that completely excludes exploitative abuse, as given by Aditya Bhattacharjea. Firstly, it acknowledges that the true nature of this legislation is to protect consumer welfare and thus prohibit exploitation. Secondly, it ensures that practices that harm both consumers and competitors, not merely competitors, are prohibited. Lastly, it ensures that abuse is found in competition rather than contract or consumer law, as in the case of purely exploitative abuses. Thus, the ideal test for abuse must be harm to competition that results in harm to consumers.

The scholar emphasizes that exploitation should be part of the effects test itself. By treating exploitation as a measurable effect, the effects-based

[40] **Eleanor M Fox,** 'What Is Harm to Competition? Exclusionary Practices and Anticompetitive Effect' (2002) 20 *Antitrust Law Journal* 371.

[41] Pinar Akman, 'Article 82 Reformed? The EC Discussion Paper on Exclusionary Abuses' (2006) *Journal of Business Law* 816, 821–22.

framework stays true to the goal of protecting consumers. Hence, exploitation serves as concrete evidence of harm to competition, translating into consumer harm, rather than automatically creating abuse.

For example, if a dominant firm is undertaking the practice of excessive pricing, on its own, a high price does not constitute abuse. However, if the undertaking uses exclusivity agreements to block competitors from entering the market, and this leads to exploitation of consumers, then it is considered anti-competitive. Hence, exploitative effects should serve as evidence of the impact on the market. Akman further emphasizes that, unlike exclusionary abuse, exploitation must demonstrate actual and not merely potential harm. In doing so, exploitation becomes the key indicator of market harm.

To evaluate the two viewpoints, it is necessary to identify the role they play in shaping effects analysis. As identified in this paper, the core difficulty in applying an effects-based inquiry was the fact that Section 4 covers two distinct types of abuses: exclusionary and exploitative, raising the question of whether both can meaningfully be subjected to an effects test.

Exploitative abuses were traditionally regarded as *per se* unlawful under a form-based framework. This is because it was a presumption, from early Article 102 TFEU jurisprudence, that allowed exploitative conduct to be condemned without proving harm, relying solely on the form of the conduct. Both Bhattacharjea and Akman respond to this analytical gap.

Bhattacharjea initially distinguishes between exclusionary and exploitative abuses, stating that exploitative abuses do not form part of section 4; hence, effects analysis under the provision is with respect to exclusionary abuse. Yet he ultimately carves out an exception that, in certain circumstances, where there is a regulatory gap in a sector, exploitative conduct can be addressed by competition law. Therefore, he proposes a structured effects-based test using Section 19(3), expanded to explicitly include consumer harm.

Akman reaches the same destination through a different route. She argues that the conceptual divide between exclusionary and exploitative abuses is artificial because both categories produce competitive harm; one harming rivals and market structure, and the other harming consumers directly. Thus, she contends that both forms must "work hand in hand" under a unified effects-based standard. She insists that effects analysis must link harm to competition with harm to consumers.

Despite starting from different premises, both viewpoints converge on one critical conclusion: *all* abuses under Section 4 must undergo an effects-based analysis. This shared conclusion resolves the long-standing ambiguity surrounding exploitative conduct and reinforces that, in modern markets, neither exclusionary nor exploitative behaviour can be meaningfully assessed without examining actual economic effects. Together, Bhattacharjea's pragmatic approach and Akman's conceptual route reinforce the correctness of the *Schott Glass* judgment in asserting that effects-based analysis must exist in every inquiry under Section 4.

V. AEC PRINCIPLE OR AEC TEST?

With the effects approach established in Section 4, the Supreme Court, in the *Schott Glass* case, had to apply a framework to assess such abuses. It then chose to apply the AEC Test in the context of margin squeeze. It was asserted that *Schott Glass* offered preferential pricing to Schott Kaisha, thereby constraining the profit margins of the competitors in the downstream market. Drawing on the EU's jurisprudence, the Court laid down the three-pronged test in *TeliaSonera Sverige AB v Konkurrensverket*[42]. To establish margin squeeze, the test requires the informant to show that (i) the dominant firm operates both in upstream and downstream market, (ii) the act forces equally

[42] Competition Act 2002 (n 20), s 3.

efficient competitors into losses, (iii) there is a threat of actual or likely harm. In doing so, the Court analyzed whether an equally efficient competitor can compete in the market despite Schott Glass's pricing strategy, thus operationalizing the AEC Test in India's Competition law.

While this is a step towards introducing a more structured assessment of competitive harm, it is pertinent to note that the Court applied the AEC Test, not the principle, for assessing margin squeeze. In this light, the authors opine that it would be more effective if the Competition authorities, as well as the Courts, apply the AEC Principle and not the Test. To delineate the contours of such an approach, it is needed to understand and make a distinction between the AEC Principle and the AEC Test.

AEC Principle may be understood as a general framework or standard for assessing whether a practice is pro-competitive or anti-competitive.[43] Posner first put forward the AEC Principle as a tool for examining allegedly exclusionary conduct, describing it as the "equally efficient or more efficient competitor standard."[44] In other words, it ensures that a dominant enterprise can appropriate its gains while making sure that exclusion of less efficient competitors through *per se* means does not impose an unnecessary liability. The application of the AEC principle shifts the focus from the *per se* approach of protecting smaller competitors to protecting the broader competitive process itself, where firms that succeed in lowering costs and driving innovation are the primary beneficiaries.[45]

---

[43] Pablo Ibáñez Colomo, *The Shaping of EU Competition Law* (Cambridge University Press 2018) 312–35.

[44] Richard A Posner, *Antitrust Law* (2nd edn, University of Chicago Press 2001) 194–95.

[45] Carl Shapiro, 'Competition and Innovation: Did Arrow Hit the Bull's Eye?' in Josh Lerner and Scott Stern (eds), *The Rate and Direction of Inventive Activity Revisited* (University of Chicago Press 2012); Gunnar Niels, Helen Jenkins and James Kavanagh, *Economics for Competition Lawyers* (2nd edn, Oxford University Press 2016).

Whereas the AEC Test generally refers to a technical aspect of price-cost analysis and whether the competitors must compete with a dominant entity charging below cost, leading to their exclusion.[46] It checks whether an equally efficient competitor would be able to match the policies/offers that a dominant entity makes in terms of the costs it incurs. This distinction was made clearer in *ENEL*, wherein it held that the AEC Principle must be used as a standard rule in all exclusionary abuses, whereas the AEC Test applies to only pricing conduct.[47]

The authors suggest that the AEC Principle must be used as a general and broader rule for assessing all kinds of exclusionary abuse. Whereas, AEC Test involves technical economic formulas that must be used in cases of pricing-based conduct, such as predatory pricing, margin squeeze, and rebates. [48] This is because one of the most effective practices to build a 'dynamic' and 'workable' effects-based approach is by applying the AEC Principle.[49] The AEC Principle provides a practical analytical framework, whereas the AEC Test is vulnerable to misinterpretation, producing outcomes that do not reflect true competitive harm. For instance, the Intel[50] case failed to recognize that the outputs of AEC Tests must be interpreted as ranges and not as point

[46] European Commission, 'Call for Evidence for an Initiative: EU Competition Law—Guidelines on Exclusionary Abuses by Dominant Undertakings' (27 March 2023) <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13796-EU-competition-law-guidelines-on-exclusionary-abuses-by-dominant-undertakings_en\> accessed 8 October 2025 [23], [25]– [27].
[47] Case C-377/20 Servizio Elettrico Nazionale SpA and Others v Autorità Garante della Concorrenza e del Mercato (AGCM) EU:C:2022:379, [72].
[48] Adriano Barbera, Nicolás Fajardo Acosta and Timo Klein, 'The Role of the AEC Principle and Tests in a Dynamic and Workable Effects-Based Approach to Abuse of Dominance' (2023) 14 *JECL* 582–94.
[49] European Commission, *A Dynamic and Workable Effects-Based Approach to Abuse of Dominance* (Publications Office of the European Union 2023) <https://op.europa.eu/en/publication-detail/-/publication/ef8f0a39-cf77-11ed-a05c-01aa75ed71a1/language-en\> accessed 8 October 2025.
[50] Case T-286/09 RENV *Intel Corporation Inc.* v Commission EU: T:2022:19.

estimates due to the margin of error in mathematical equations.[51] Courts often treat the numerical output as precise and definitive but it consists of statistical uncertainty. This has major implications for the evidence put forth and may lead to mechanically rigid outcomes.

Additionally, the AEC Test also fails to capture modern exclusionary strategies in technological and digital markets. For example, there is a dominant digital platform engaging in discriminatory data practices. There is no pricing conduct involved, making the AEC Test useless. Therefore, applying AEC Test in this circumstance may lead to over-enforcement or under-enforcement errors.[52] Whereas the AEC Principle would still identify that an equally efficient competitor cannot survive due to these data access restrictions as it does not depend on prices.

Moreover, in exclusionary abuse cases, where the scope of the conduct is often unclear and continues to evolve through case laws, a framework like the AEC Principle provides legal certainty and a tool for the Courts to assess such conduct. As noted by the EU Commission **("EC"),** the AEC Principle is seen as a part of the broader objective to focus antitrust investigations on the preservation of 'consumer welfare'. [53] Thus, it is consistent with the Act's objective of protecting consumer welfare because it distinguishes between legitimate competition and exclusionary conduct.

However, it is also worth noting that there is no one-size-fits-all approach to the extent of the AEC Principle and tests. They must be used by the Courts and Antitrust authorities depending on the varying circumstances of each case.

---

[51] Damien J Neven, 'The As-Efficient Competitor Test and Principle: What Role in the Proposed Guidelines?' (2023) 14 *Journal of European Competition Law & Practice* 483–91.
[52] Ibid.
[53] European Commission, 'Commission Imposes Fine on Microsoft for Non-Compliance with March 2004 Decision' (2008) (IP/08/1877) <https://ec.europa.eu/commission/presscorner/detail/en/ip_08_1877\> accessed 8 October 2025.

One way to assess the relevance of the AEC Principle is whether the protection of less efficient competitors is detrimental to consumer welfare.

VI. DOES SPECIAL RESPONSIBILITY SURVIVE EFFECTS-BASED MANDATE?

One of the important legal questions arising from the *Schott glass* case is whether a dominant firm carries a 'special responsibility' to follow Indian Competition law, particularly in light of the Supreme Court's growing emphasis on the need for effects analysis. However, the Court in this case has once again missed the chance to guide on the issue, which is crucial for understanding cases where a dominant company is accused of unfair or discriminatory practices.[54]

The Doctrine of Special Responsibility conveys that dominant entities have a special responsibility to ensure genuine competition is not distorted. This concept was originally derived from the Michelin I Judgment pronounced by the European Court of Justice **("ECJ").** In this case, it was held that,

> *"a finding that an undertaking has a dominant position is not in itself a recrimination but simply means that, irrespective of the reasons for which it has such a dominant position, the undertaking concerned has a special responsibility not to allow its conduct to impair genuine undistorted competition on the common market."*[55]

In essence, the Doctrine of Special Responsibility clarifies that being dominant is not an issue *per se*, but an entity with such a position is cast with an additional responsibility. This is solely because the presence of a dominant

---

[54] Sumit Jain and Vikrant Singh, 'Abuse of Dominance under Indian Competition Law: A Review of the Schott Glass Case' (*Kluwer Competition Law Blog*, 29 June 2025) <https://legalblogs.wolterskluwer.com/competition-blog/abuse-of-dominance-under-indian-competition-law-a-review-of-the-schott-glass-case/\> accessed 8 October 2025.

[55] Case 322/81 *Michelin* v Commission [1983] ECR 3461, [57].

entity suggests a weakened competitive market; hence, they must be subject to a higher standard. Here, the dominant enterprise faces a heavier burden, as certain practices they carry out may be deemed unlawful, even though the same practices would be perfectly legal if done by a non-dominant firm.[56]

In India, the liability of a dominant entity is embedded in Section 4 of the Act. They are prohibited from performing certain acts, such as engaging in market denial, discriminatory policies, leveraging, etc. This is an additional liability imposed on dominant entities, wherein they are penalized for distorting the market by engaging in the prohibited activities; a clear shift from the earlier Monopolies and Restrictive Trade Practices Act of 1969, which treated monopolies as inherently harmful. However, the CCI has, at times, interpreted Section 4 as embedding the Doctrine of Special Responsibility, thereby placing dominant firms under scrutiny, even in cases lacking demonstrable competitive harm.

Following the Michelin I Principle, the CCI in the case of *Biocon Ltd., Banglore v. F. Hoffmann-La Roche* held that dominant firms have a special responsibility not to disrupt competition in their markets[57]. Another instance where the CCI held that Section 4 places a heavier burden on dominant firms was *Belaire Owners' Association v. DLF Limited*. In this case, it was observed that practices which might be acceptable when carried out by non-dominant firms could still breach Section 4 when undertaken by a dominant player, reflecting the stricter standards imposed on them[58].

---

[56] Bhawna Gulati and Ikleen Kaur, 'How "Special" Is the Responsibility of Dominant Enterprises?' (2020) Indian Competition Law Review <http://iclr.in/wp-content/uploads/2020/05/HOW-SPECIAL-IS-THE-RESPONSIBILITY-OF-DOMINANT-ENTERPRISES.pdf> accessed 8 October 2025.

[57] *Biocon Ltd v F Hoffmann-La Roche Ltd* [2017] Comp LR 503.

[58] *HT Media* (n 34).

However, this approach by CCI has not gone unchallenged. In the landmark case of *Alphabet Inc. v CCI (Google Play Store)* [59] The NCLAT provided opposing views. It reduced the penalties imposed on Google by CCI and criticized it for imposing ex-ante directions. NCLAT clarified that merely designating Google as a "gatekeeper" in the digital ecosystem does not justify the imposition of special responsibilities under Section 4 of the Act. The Tribunal emphasized that any finding of abuse of dominant position must be grounded in specific pleadings and supported by concrete evidence. It held that a conclusive determination of contravention under Section 4 cannot rest solely on its dominance, but must instead meet the statutory threshold of establishing actual anti-competitive conduct. Consequently, penalties under Section 27 of the Act can only be imposed following a clear and substantiated finding of violation based on the effects-based assessment mandated by law.

NCLAT's decision in the *Google Play Store*[60] case signifies that while the Doctrine of Special Responsibility is a sound theoretical ground, it does not reflect the same in its practicality, as it may shrink the effect-based analysis. This is because the Doctrine follows a form-based approach wherein a dominant entity is automatically burdened with special responsibility regardless of whether its conduct results in exclusionary abuse.[61] It penalizes dominant entities that use perfectly acceptable discount schemes or loyalty rebates that are competitive when applied by non-dominant firms, but are suddenly abusive when applied by entities that have special responsibility without a proper economic analysis of the harm.[62] Many Critics argue that this

[59] Malik, Malhotra, Tamarappoo and Uberoi (n 28).
[60] Ibid.
[61] Ariel Ezrachi, *Article 82 EC: Reflections on its Recent Evolution* (Hart Publishing 2009).
[62] Rafael Allendesalazar Corcho, 'Can We Finally Say Farewell to the "Special Responsibility" of Dominant Companies?' (2007) EUI-RSCAS/Competition 2007/Proceedings, available at <https://www.eui.eu/Documents/RSCAS/Research/Competition/2007ws/200709-COMPed-Allendesalazar.pdf> accessed 8 October 2025.

approach risks punishing fair commercial behavior just because it makes "life harder for competitors."[63] Hence, its application may do more harm than good.

What is clear, however, is that Indian competition jurisprudence is heading decisively towards an effects-based approach. The Supreme Court in the *Schott Glass* ruling has effectively rejected any form-based approach to dominant entities. It can often be inferred that when an effects-based approach is used, special responsibility cannot be applied. But every time the Supreme Court had the opportunity to rule on Section 4, it seemed to miss the chance to clarify the scope of special responsibility. Meanwhile, the possibility of CCI continuing to apply the Doctrine creates uncertainty. A direct statement from the Court on special responsibility was needed to remove any doubt about its role in future CCI cases.

While this seems to be the appropriate approach to ensure fair competition in the market for the entities that gained dominance through their competitive merit, the problem arises from the ineffective and not-so-established standards of effects-based analysis in Indian law. The question that arises is whether an effects-based approach will be enough to regulate future super-dominant firms, or will a special responsibility be needed in this regard?

The concept of super-dominant firms, although not prevalent in India yet, was first introduced in *Napp Pharmaceutical Holdings Limited and Subsidiaries v Director General of Fair Trading*[64] Wherein the UK Competition Appeal Tribunal found that "super dominant firms may have particularly more onerous responsibilities than other dominant undertakings." It essentially proposes that a firm with 50% market share is dominant, but a

---

[63] Gunnar Niels, Helen Jenkins and James Kavanagh, *Economics for Competition Lawyers* (2nd edn, OUP 2016).

[64] Phumudzo S Munyai, 'Competition Law and Corporate Social Responsibility: A Review of the Special Responsibility of Dominant Firms in Competition Law' (2020) 53(1) *De Jure* (Pretoria), available at <https://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2225-71602020000100018> accessed 8 October 2025.

firm with 90% market share is even more dominant.[65]. If a super-dominant entity is not burdened with heightened responsibilities, it can easily surpass the underdeveloped law on effects analysis. Hence the authors suggest that effects-based analysis may not be enough on its own once companies reach the scale of true "super-dominance." Imagine a scenario where a company in the pharmaceutical sector controls 90% of the insulin market in India, which is a clear super-dominant position. Under an effects-based approach, regulators would have to assess the actual or potential harm that the firm's conduct may cause to the competition.; by that time, the market could already be severely concentrated. Additionally, determining "potential harm" can be difficult in practice, especially in the case of a super-dominant firm where even a small action can reshape competitive conditions.

With a framework of special responsibility for these super-dominant firms, the company would have a proactive duty to avoid practices such as exclusive supply agreements with hospitals or bulk discounts that block smaller players from the market. Hence, the degree of dominance must be taken into account while analysing the scope of abuse. Therefore, the Competition Authorities must be given limited discretion to invoke special responsibility in case of super-dominant entities. This will require the authorities as well as the Courts to spell out its scope and how it works alongside effects-based analysis, so that dominant firms are held responsible only for real harm, without discouraging any legitimate activities.

However, it is not easy for super-dominance to work alongside an effects-based approach. For instance, in the case of *Post Danmark v Konkurrencerådet.*[66]The Court held that in applying effects-based tests such

---

[65] Damien Geradin, Nicolas Petit, Mike Walker, Paul Hofer and Frédéric Louis, *The Concept of Dominance in EC Competition Law* (July 2005), available at <https://ssrn.com/abstract=770144> accessed 8 October 2025.

[66] Case C-23/14 *Post Danmark A/S v Konkurrencerådet* EU:C:2015:651, [2015] 5 CMLR 25.

as the AEC test in a market which makes the emergence of an as-efficient competitor is practically impossible and would be of no relevance. Most super-dominant firms arise because they possess certain market characteristics like statutory monopoly, IP etc, causing huge entry barriers. Hence, there would practically be no as-efficient competitors.

This does not entirely vitiate the role of super-dominance in proving abuse of dominance through the effects approach. For instance, in the case of *Google Shopping*[67] Google was a super-dominant entity. But, its degree of dominance was not used to prove the existence of abuse; rather it was used as an assessment to establish the anticompetitive effects of Google's conduct.

By characterizing Google as the primary gatekeeper to the internet, the General Court emphasised that Google's responsibility exceeds that of an ordinary dominant firm. In markets with regular dominance, competitive conditions remain more open. Whereas, in the general search engine market, it had tipped in Google's favour completely as it maintained a market share of around 90% across several national markets. This level of dominance enabled Google to leverage its super-dominant position in the shopping service market without any competitive risk. Thus, although the finding of abuse was supported by effects assessment, the Court's conclusion ultimately rested on Google's dominant role in the digital markets and the impact its behavior could have on the competitive process.

The judgment reflects how an effects-based approach can be in line with recognizing the special responsibilities of a dominant firm in a market. Like any kind of dominance, super-dominance does not establish abuse, but it can influence the assessment of abuse. Additionally, in markets that already have

[67] Case T-612/17 *Google and Alphabet v Commission* EU:T:2021:763.

weak competitive dynamics, the risk of over-enforcement is limited. Hence, a more proactive regulatory stance is both justified and necessary. [68]

The *Google Shopping* case offers guidance to India in understanding super-dominance. However, the Indian context requires a more cautious adoption of this reasoning. The Government recently withdrew the Draft Digital Competition Bill[69] due to concerns relating to inflexible ex-ante regulations, excessive compliance burden, stifling competition etc. This signals that India is not yet prepared to impose Digital Markets Act-style obligations on its nascent digital economy. In this environment, the CCI should warrant a special responsibility while still grounding liability in demonstrative competitive effects. Where markets are tipping towards one super-dominant firm or where an as-efficient competitor is unlikely to emerge, the CCI should take a more proactive stance. However, such intervention must be reasonable and sensitive to India's fast-growing digital markets.

VII. REAL IMPACT OF CONDUCT- OBJECTIVE JUSTIFICATION

Effect-based analysis is about more than just ticking a box to see whether a practice restricts competition. Its true value lies in recognizing that once harm is alleged, there should be room for companies to explain *why* they acted the way they did.

In most cases where abuse of dominance is proven, firms accused of such behavior always try to defend themselves, and this defense is allowed if their actions were driven by legitimate reasons rather than an intent to harm

[68] Alessia Sophia D'Amico and Baskaran Balasingham, 'Super-dominant and super-problematic? The Degree of Dominance in the Google Shopping Judgment' (2022) *European Competition Journal*, available at <https://doi.org/10.1080/17441056.2022.2059962> accessed 3 December 2025.

[69] Draft Digital Competition Bill, 2024.

competition. This means that not every practice is illegal. For instance, offering fidelity rebates can be considered a legitimate use if demonstrated with economic justifications such as increased efficiency derived for the consumers.[70] But the true idea behind the defense of objective justification is fairness: it prevents the law from punishing the conduct which, while restrictive on the surface, may benefit customers or the market.

In the present case of *Schott Glass*, the Supreme Court noted that the volume-based discounts offered by Schott Glass were uniform and transparent and did not constitute abuse of dominance as they were objectively justified. It was observed that merely because Schott Kaisha produced larger volumes, it did not result from unequal treatment, since all converters had access to the same volume-based discount structure. It further noted that such volume-based discounts are an industry norm and were applied equally to all converters. The Court also found that the discounts showed demonstrable efficiency gains, hence they cannot constitute abuse. This is because the upstream supply expanded and the prices remained stable during the period. Hence, there were no anti-competitive effects in the market, and it resulted in efficiencies.

In addition to this, the Supreme Court held that the functional discounts given by Schott Glass were not violative of Section 4(2). In fact, the Court found that each eligibility requirement was objectively justified. They were genuinely aimed at protecting patient safety and preserving the company's brand integrity, and were proportionate to those goals. However, the Court also made clear that not every explanation offered by a dominant company will be accepted. For instance, a claim that tying simply helps to maintain a uniform presence of the product in the market is not enough.

---

[70] Yash Bhatt, 'The Defence of Objective Justification in Competition Law: Is the Defence Really "Objective"?' (IRCCL Blog, 22 April 2020), available at <https://www.irccl.in/post/the-defence-of-objective-justification-in-competition-law-is-the-defence-is-really-objective> accessed 8 October 2025.

However, the *Schott Glass* case failed to elaborate on how to assess objective justification. Courts need to set out, very clearly, how these justifications will be assessed because effect-based analysis and objective justification are intertwined. For instance, in the European Union (EU), a firm accused of abuse of dominance can use objective justification as a defense under Article 102 of the Treaty on the Functioning of the European Union (TFEU)[71]. In this scenario, a dominant enterprise can justify either by demonstrating that its conduct is objectively necessary or it producing substantial efficiencies that outweigh any anticompetitive effects on consumers.[72]

On the other hand, in India, it is observed that objective justification is often invoked but is accepted only in limited circumstances. For instance, in *East India Petroleum v. South Asia LPG Company*[73], the CCI rejected South Asia LPG claim that its exclusionary conduct was necessary to protect its commercial interests, holding that the conduct imposed unfair conditions and effectively foreclosed competition. Similarly in *Auto Parts Case (2014)*[74], the COMPAT rejected the car manufacturers' claim that restricting access to spare parts was justified to prevent counterfeiting and unskilled repairs. It held that the restriction was disproportionate and that consumer interests would be better served by allowing affordable spare parts in the open market, coupled with government-mandated quality standards for repairers.

[71] Tjarda van der Vijver, 'Objective Justification and Article 102 TFEU' (2012) 35(1) *World Competition* 55–76, available at <https://kluwerlawonline.com/journalarticle/World+Competition/35.1/WOCO2012004> accessed 8 October 2025.

[72] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (24 February 2009), available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52009XC0224%2801%29> accessed 8 October 2025.

[73] *East India Petroleum Pvt Ltd v South Asia LPG Company Pvt Ltd* [2018] SCC OnLine CCI 59.

[74] *Shamsher Kataria v Honda Siel Cars India Ltd* [2014] SCC OnLine CCI 95.

That said, there are instances where Indian authorities have accepted objective justification. In *Ghanshyam Das Vij v. Bajaj Corp Ltd & Others (2015)*[75]*,* the CCI has observed that exclusive distribution agreements can be objectively justified on certain grounds, such as protection from free-riding, efficient management of product sales, and economic efficiencies. In *Hemant Sharma v. All India Chess Federation (AICF).*[76]In the special context of sports governance, certain restraints on competition may be justified if they are genuinely necessary for the development or integrity of the sport. But where such restraints serve no credible purpose and merely distort competition, they remain abusive. Apart from these, we have already seen how the Supreme Court in the Schott Glass case accepted objective justification for uniform, transparent, and efficiency-enhancing discounts, while clarifying that not all explanations offered by dominant firms will pass scrutiny of this justification.

A few scholars believe that the Act imposes a strict liability on enterprises abusing their dominant position, but they do not consider the conduct of an enterprise.[77] Whereas some scholars argue that a dominant enterprise's actions should not automatically be treated as abusive under Section 4 of the Act. They suggest that if the enterprise can show a valid and objective reason for its conduct, or prove that its behavior brings about efficiencies and benefits that outweigh any harm to competition, it may fall outside the scope of the prohibition.[78]

[75] I*n Re Ghanshyam Dass Vij and Bajaj Corp Ltd* [2015] CCI 155.
[76] *Hemant Sharma v All India Chess Federation* [2018] SCC OnLine CCI 53.
[77] Cyril Shroff and Nisha Kaur Uberoi, 'Chapter 4: India' in *Competition Law in Asia Pacific: A Practical Guide* (2015) <https://www.amt-law.com/asset/pdf/bulletins8_pdf/150220.pdf> accessed 8 October 2025.
[78] Abir Roy, *Competition Law in India: A Practical Guide* (2nd edn, Kluwer Law International 2016) 223.

It is at this point that the efficiency becomes crucial. Efficiency is considered to be one of the objectives of Competition law[79], while many also consider it to be the ultimate goal of Competition law[80]. But relying on it as a defense in real cases is rarely simple. The term efficiency includes cost savings, intensive use of existing capacity, economies of scale, or efficiencies such as increased network size or product quality.[81] However, one particular efficiency may lead to the loss of another kind of efficiency. For instance, a merger may lead to greater efficiency because of increased resources, whereas the merged entity may also yield greater market power, leading it to impose supra-competitive prices, an outcome fundamentally at odds with the principle of allocative efficiency.[82] This makes it more difficult for this defense to succeed because of the inherent contradictions between different efficiencies. Above all, most cases have suggested that reasoning provided for objective justification does not show any real efficiency gains or consumer benefits; it only reflects that the company uses its dominance to shape the market on its own terms. If that is allowed, it would give a dominant undertaking the freedom to impose its own rule on the market rather than letting competition and consumer choice determine.

Given these difficulties, the authors argue that the *Schott Glass* case makes objective justification crucial. Since the Supreme Court has allowed effect-based analysis, there is a possibility that dominant companies might now use objective justification as a shield. Over time, this could enable firms to tighten their grip on the market and edge closer to a monopoly. The uncertainty and

[79] D Hildebrand, *The Role of Economic Analysis in the EC Competition Rules* (2nd edn, Kluwer Law International 2002) 388.
[80] M Furse, 'The Role of Competition Policy: A Survey' (1996) 17 *ECLR* 257–58.
[81] ICN Merger Working Group, Investigation and Analysis Subgroup, 'Merger Guidelines Workbook' (2006) 62.
[82] Roger J van den Bergh and Peter D Camesasca, *European Competition Law and Economics* (Intersentia 2001) 5.

inconsistency seen across existing Indian cases already demonstrate the risks of an unstructured approach. Therefore, the focus of Section 4 should now expand; courts must assess both the effects of the conduct and the firm's claimed efficiencies. This makes investigations more complex and increases the burden on the CCI unless a clear testing framework is developed. To avoid this, the Guidance Note of the EC with respect to abusive exclusionary conduct can be examined. It outlines specific conditions for accepting objective justifications.[83]

a) the efficiencies are or are likely to be realized by such conduct;

b) the conduct and the efficiencies are indispensably connected;

c) the efficiencies outweigh the negative effects on competition; and

d) the conduct does not lead to the removal of all effective competition."[84]

India would benefit from adopting a similar standard. A clear framework would ensure that justifications are assessed rigorously, based on evidence and proportionality, rather than accepted at face value. Without such a framework, there is a risk that justifications will become an *ex-post* excuse allowing dominant firms to shape the market on their own terms.

VIII. CONCLUSION

Traditionally, much like the EU, India has relied on a form-based approach in cases involving abuse of dominance. Although some decisions, both majority and minority, have shown elements of effects-based reasoning, the broader consensus is that the Competition Act, 2002, has largely been interpreted through a form-focused lens. However, as India's economy expands and private enterprises play an increasingly significant role, it

---

[83] European Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' (n 73).

[84] Ibid

becomes crucial to understand what amounts to a violation of competition law and to recognise that firms may have genuine efficiency gains or business justifications behind their conduct.

In this context, an effects-based approach offers greater clarity and predictability. By grounding decisions in economic principles and evaluating both the pro-competitive and anti-competitive impact of a practice, the law can distinguish harmful behaviour from legitimate competitive strategies, ultimately leading to a more consistent enforcement regime. To assess abuse of dominance under Section 4 of the Act, requires a structured analytical framework. Thus, it is suggested by the authors that the Competition Authorities move from the conventional method of interpreting the Section by delineating relevant market, determining dominance and classifying conduct as abuse under section 4(2) to a more nuanced approach.

It must be done by adopting a four-stage effects-based enquiry. Firstly, we must first define the relevant market in which the abuse is taking place. Apart from this, the investigation must also be based on the market in which the conduct is likely to cause exclusionary effects. For example, effects may be seen in the same market, neighbouring market, and in vertical markets. Secondly, once delineated, the authority must assess whether the enterprise holds a dominant position as per section 19(4) of the Act. Here, the Authority can give relevance to the degree of dominance the entity possesses. For instance, once the Competition Authority recognises cases of super-dominance, obligations on the enterprise may be stricter, and this must be taken into consideration in the assessment of abuse.

Thirdly, once dominance is established, the next step is to identify whether the conduct falls within the forms of abuse under section 4(2). For example, price discrimination, rebates, tying, refusal to deal etc. At this stage, to reduce the evidentiary burden on the CCI, a rebuttable presumption of abuse may be drawn when the conduct satisfies the threshold under Section 4(2). Thus, shifting the burden to the dominant enterprise. At this final stage, Authorities must weigh in the anti-competitive effects and pro-competitive effects arising from the impugned conduct. The Authorities must apply clear and conduct-specific tests for evaluating competitive harm. The task before them is to ensure that detailed guidelines specify the enforcement mechanism through standard tests and required evidentiary thresholds.

Looking ahead, the implications of operationalizing this framework are significant. To make this model workable, the CCI must institutionalise it through publicly issued guidelines, specifying the evidentiary standards and economic tools applicable to each type of conduct. Adopting this structured four-stage framework will offer a clear route to the CCI in implementing what has been laid down in the Schott Glass case and bring in consistency and standard in the assessment of abuse.

Moreover, this evolution will change the way abuse of dominance is looked at in Section 4. It redefines how exploitative and exclusionary practices are understood. It places Special Responsibility in antithesis to effects analysis with craved out exceptions. The defense of objective justification also gains renewed significance when backed up by demonstrable efficiencies. In the end, the real test for Indian competition law is to apply this shift in a clear, consistent, and economically sensible way.

Articles

MUSIC COPYRIGHT SECURITISATION IN INDIA LEGAL, FINANCIAL AND INSTITUTIONAL PERSPECTIVES

~ *Dr. Shiva Satish Sharda & Avantika Chaudhary*

TOKENISATION AS AN ALTERNATIVE TO SECURITISATION: LEGAL, REGULATORY, AND OPERATIONAL CHALLENGES

~ *Bhadra Anil & Advait Sharma*

FROM TARMAC TO TRUST: NAVIGATING A TURBULENCE-FREE FLIGHT PATH FOR DATA IN INSOLVENCY

~ Sharuya Kapoor

UNEARTHING THE FAULT-LINES IN EXPORT RESTRICTIONS ON CRITICAL MINERALS

~ Dhruv Singhal

TREATY SUPREMACY ON TRIAL: THE NESTLÉ RULING AND ITS AFTERMATH

~ Mahi Agarwal

EVOLVING BUT UNCLEAR: THE FUTURE OF EFFECTS-BASED APPROACH UNDER SECTION 4 OF INDIAN COMPETITION LAW

~ *Vaishnavi Kulkarni & Maitreyi Shinde*