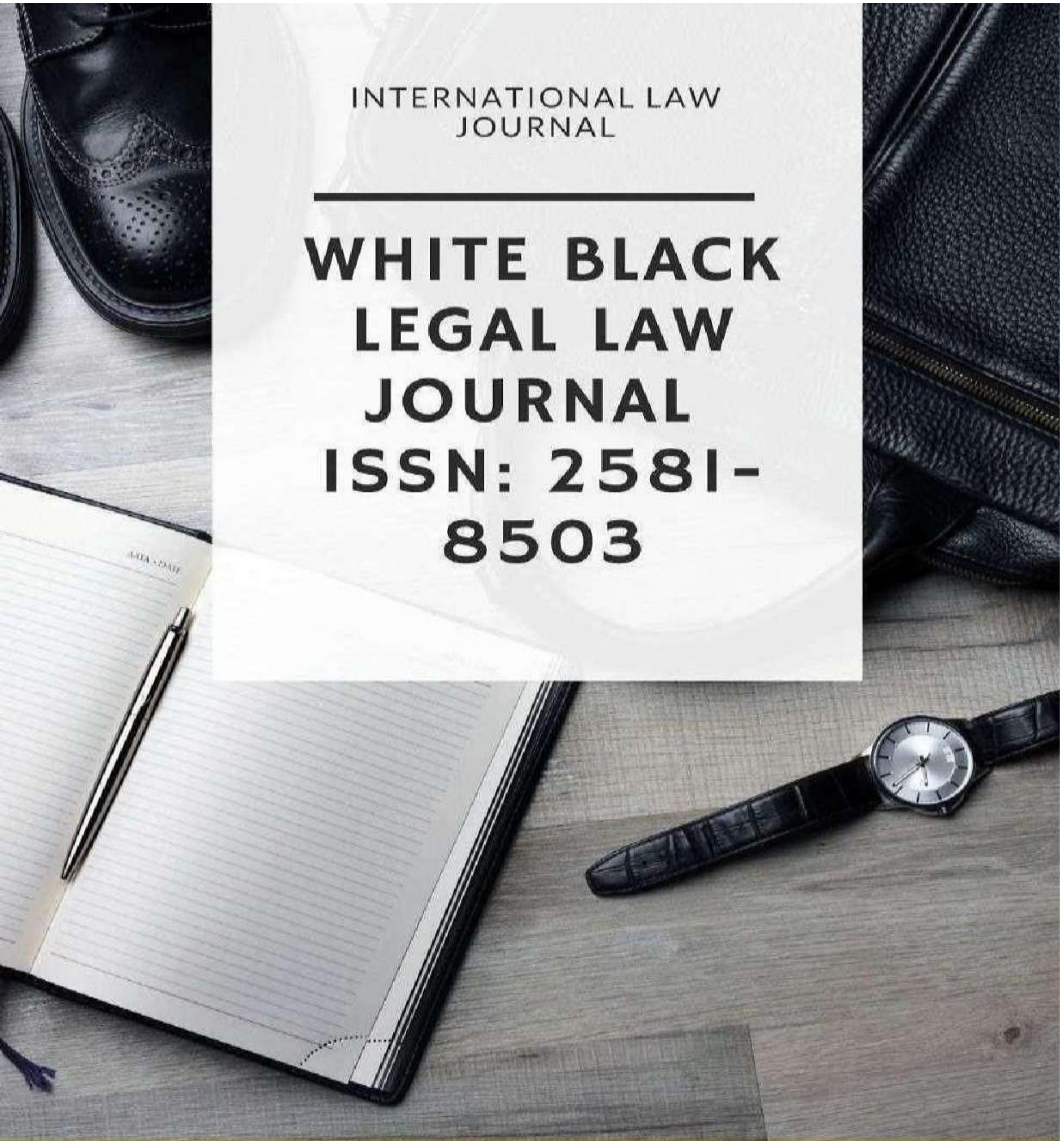

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ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

THE DIALECTICS OF DIGITAL TAXATION: INDIA'S DOUBLE TAXATION DILEMMA

AUTHORED BY - LAKSHYARAJ SINGH & SHAMEEHA TARAFDAR

ABSTRACT

Double taxation remains a pressing issue in India for corporations engaged in cross-border activities, especially in technology, manufacturing, and services. The overlapping tax jurisdictions and lack of comprehensive Double Taxation Avoidance Agreements (DTAAs) have increased the costs of compliance and reduced the attractiveness of foreign investments. While the government has made efforts to negotiate DTAAs and adopt international tax reforms, challenges such as treaty shopping, administrative inefficiencies, and the rise of digital economies are yet to be solved. These issues are further compounded by outdated tax frameworks that struggle to understand and cover modern business models, such as digital transactions and remote work arrangements. Most studies focus on traditional cross-border taxation, but the rise of digital businesses (e.g., tech giants, crypto firms) challenges existing frameworks. This paper explores the linkages between double taxation and corporate taxation, focusing more on its impact on multinational corporations (MNCs) and their global operations. It examines how double taxation affects corporate profitability, compliance costs, and investment decisions, while also analyzing the role of DTAAs in mitigating these challenges. The study highlights the limitations of current tax frameworks, including issues like treaty shopping and the inadequacy of traditional rules in regulating digital economies, and evaluates the implications of emerging trends, such as digitalization and remote work, on corporate taxation and double taxation risks. The primary area of question is the effectiveness of existing tax policies and DTAAs in addressing double taxation for corporations. The results for addressing the same are promising but require strategic reforms. Updating DTAAs to reflect the realities of digital economies, enhancing administrative capacity, etc. is one of the critical steps to achieve the goal. These efforts can strengthen the country's position in the global economy and support sustainable economic growth.

KEYWORDS- *Double Taxation Avoidance Agreements, Corporate Taxation, Digital Transaction, cross-border transactions, Risks, Treaty Shopping.*

LITERATURE REVIEW

1. Double Taxation Avoidance Agreements (DTAAs) are the primary mechanism for reducing tax liabilities on cross-border multinational corporations (MNCs). India's DTAA policy is, however, threatened by duplicate tax jurisdictions, treaty shopping, and obsolete provisions that cannot be adapted to new digital and virtual work economies (Nualslaw Journal, 2025). For example, India- Switzerland DTAA amendment is concerned about compliance intricacies for technology majors such as Infosys and Logitech, with unilateral actions (e.g., India's equalization levy) contradicting bilateral agreements, causing over-taxation and lower profitability (Nualslaw Journal, 2025). In the same manner, cross-border mergers confront challenges such as capital gains tax, transfer pricing issues, and Permanent Establishment (PE) hazards, resulting in higher compliance costs (PKC India, 2025).[1]

2. Scaling up online businesses reveals loopholes in conventional tax regimes. India's SEP thresholds (₹20M in revenue/300k users) do not cover cloud computing services, cryptocurrency transactions, and gig economy websites, enabling companies such as AWS to escape taxes while contributing heavily to revenue (Nualslaw Journal, 2025). OECD Pillar I and II models, taxing rights redistribution on the basis of user engagement and charging a 15% global minimum tax, are challenging as well as opportunities for Indian MNCs. Pillar I dealing with digital taxation is complex and increases compliance costs with the need for sophisticated data analytics and highly skilled professionals (KnavCPA, 2025).[2]

3. Double taxation forms reduced profitability by way of direct financial expenses (e.g., constant tax burdens) and indirect costs such as elevated cost of capital (Lano, 2024). Double taxation to Indian MNCs amounts to more than $1 million yearly, and 93% of companies expect strategic interferences (IFC Review, 2025). Redundancies in administration such as slow settlement of disputes and differential treaty implementations dissuade foreign investment too. The Supreme Court focus on DTAA enforceability under Section 90 of the Income Tax Act highlights systemic legal

[1] Nualslaw Journal. (2025). Double taxation vs. digital taxation: DTAA shifts in India and Switzerland. *Nualslaw Journal*, *12*(2), 45–61. https://nualslawjournal.in/dtaa-digital-taxation-india-switzerland
[2] KnavCPA. (2025). Impact of OECD Pillar I & II on Indian multinationals. *KnavCPA Reports*. https://knavcpa.com/impact-oecd-pillar-indian-multinationals

uncertainties (IAS Express, 2023).[3]

4. DTAAs aim to spur FDI through taxation relief, but their success hinges on equitable tax residence-source distribution. The literature indicates residence-based treaties (e.g., in India's DTAAs) that deny developing countries revenue, their overall benefits are undermined (IISc, 2015). Swiss businesses in India pay more royalties taxation after DTAA changes, while Indian IT service providers such as TCS contend with withholding taxes when operating in Europe, stifling competitiveness (Nualslaw Journal, 2025).[4]

5. DTAAs should be harmonized to represent digital economies. Alignment of India's SEP with OECD's Pillar I "Amount A" would facilitate fair profit reallocation to tech businesses (KnavCPA, 2025). Enhancing anti-avoidance measures (e.g., GAAR) and implementing AI-based tax systems can prevent treaty shopping and grant ease of compliance (PKC India, 2025). Bilateral coordination, as in the EU digital levy proposals, and multilateral like the UN Tax Initiative provide the vehicle to harmonize regulations and hold arbitrage (IFC Review, 2025).[5]

6. The expansion of India’s digital economy[6] the third largest globally-has outpaced the capacity of existing double taxation frameworks to address new business models, such as cross-border digital advertising, cloud services, and remote work.[7]

7. Administrative inefficiencies and the lack of comprehensive DTAAs tailored to the digital era increase compliance costs and deter foreign investment. The digital divide also persists, with millions lacking access to basic digital infrastructure and services,

[3] IFC Review. (2025). UN international tax cooperation: Counting the compliance costs. *IFC Review*. https://www.ifcreview.com/news/2025/march/un-international-tax-cooperation-counting-the-compliance- costs/
[4] IISc. (2015). The role of double taxation treaties on attracting FDI: A review. *Indian Institute of Science Working Paper*. https://iisc.ac.in/publications/2015/double-taxation-treaties-fdi-review
[5] IFC Review. (2025). UN international tax cooperation: Counting the compliance costs. *IFC Review*. https://www.ifcreview.com/news/2025/march/un-international-tax-cooperation-counting-the-compliance- costs/
[6] International Trade Administration. (2025). India - Digital economy. https://www.trade.gov/country-commercial- guides/india-digital-economy
[7] Prosus. (2025). The state of India’s digital economy (SIDE) 2025 report. https://www.prosus.com/news-insights/group-updates/2025/the-state-of-indias-digital-economy-side-2025-report

limiting the inclusivity of India's digital growth.[8]

INTRODUCTION

Background

Globalization and technological advancements have transformed India into a critical hub for multinational corporations (MNCs) in technology, manufacturing, and services. However, cross- border operations expose these corporations to complex taxation challenges, particularly double taxation-where income is taxed in both the source (host) and residence (home) countries. To mitigate this, India has established a network of Double Taxation Avoidance Agreements (DTAAs) with 94 countries, aimed at eliminating tax barriers, reducing compliance costs, and fostering foreign direct investment (FDI) (India Briefing, 2023). Despite these efforts, overlapping tax jurisdictions, outdated frameworks, and the rise of digital economies have rendered existing policies insufficient. For instance, India's digital tax regime-featuring a 6% equalization levy and the "significant economic presence" (SEP) threshold-reflects attempts to tax digital transactions but struggles to address ambiguities in remote work and e-commerce (ITIF, 2025).

The abolition of the Dividend Distribution Tax (DDT) in 2020 and the adoption of the OECD's Base Erosion and Profit Shifting (BEPS) guidelines marked significant reforms. Yet, domestic double taxation persists, particularly for corporations distributing dividends, with studies showing a 12% increase in effective tax rates post-DDT abolition (Benny, 2024). Simultaneously, treaty shopping-routing investments through jurisdictions like Mauritius and Singapore to exploit favorable DTAAs has eroded India's tax base, prompting stricter measures like the General Anti- Avoidance Rules (GAAR) and Multilateral Instrument (MLI) provisions (Bajaj Finserv, 2025). While FDI inflows surged to $81.9 billion by 2021, sectors like IT and financial services remain disproportionately reliant on treaty-driven investments, exposing vulnerabilities to policy shifts (Narendran et al., 2025).

Problem Statement

1. Double taxation remains a pressing issue for Indian corporations engaged in cross-border activities due to three systemic gaps:

[8] Jain, A. (2025, February 10). India's Finance Bill 2025: A game changer for digital transformation and economic growth.

2. Existing treaties lack provisions for digital economies and remote work. For example, India’s SEP thresholds (₹20 million revenue or 300,000 users) target tech giants but fail to address cloud-based services or crypto transactions, leaving 34% of digital MNCs in compliance limbo (ITIF, 2025).
3. Overlapping state and federal tax jurisdictions increase compliance costs by 18–22% for MNCs, with disputes averaging 5–7 years for resolution (Narendran et al., 2025).
4. Despite anti-avoidance measures, $12 billion annually is lost to treaty shopping, as firms exploit loopholes in agreements with Mauritius and Singapore (Bajaj Finserv, 2025).

Research Question:

1. How do digital business models exacerbate or mitigate double taxation issues in corporate tax regimes?
2. What are the gaps in current international tax treaties regarding digital services?

1. Inadequate DTAA Frameworks for Digital and Remote Work Economies

1.1 The Digital Tax Nexus Dilemma

India's Significant Economic Presence (SEP) thresholds-₹20 million in annual revenue or 300,000 users-were established in 2021 to tax foreign digital companies doing business in India with no physical presence. But these thresholds fail to capture the complexity of today's digital economies. For example, cloud service providers such as AWS and Azure make a considerable amount of revenue from Indian firms but may not cross the tally of 300,000 users because their clients are firms and not individual consumers. An international cloud provider which makes ₹50 crore in revenues every year from Indian clients may be exempted from taxation under SEP provisions due to low user bases, and this creates a regulatory gap. In like manner, crypto exchanges are not touched since the SEP regime is not applicable to digital assets under its definition of taxable "goods, services, or property." A foreign crypto exchange that processes ₹30 crore worth of Indian transactions per annum can do so tax-free, costing India revenue from this runaway industry.

India's SEP's shortcomings become particularly prominent in contrast with the OECD's Pillar

1 "Amount A" solution. Pillar 1 redistributes taxing rights across market jurisdictions based on user involvement and residual profits such that tax is imposed on digital giants like Google or Meta where their users are, regardless of physical presence. Conversely, India's high SEP thresholds are margin- and user-engagement-blind and hence permit high-margin SaaS platforms with small user bases to remain untaxed. For instance, a U.S.-based SaaS firm with ₹50 crore Indian revenue (above SEP's ₹20M threshold) remains untaxed under the India-U.S. DTAA that preserves legacy physical presence tests. This disparity not only denies India revenue but also induces profit diversion to low-taxing jurisdictions.

1.2 Remote Work and Permanent Establishment (PE) Rules

The growth of hybrid work models has revealed shortcomings in India's PE definitions in DTAAs, especially for remote workers who cross borders. Take the case of an NRI IT software professional remotely working from Bengaluru for a U.S. technology company. If he remains in India for more than 182 days, he can become tax residents, subject to Indian taxation on his worldwide income. Yet, DTAAs such as the India-U.S. deficiency double taxation avoidance agreements for income, forcing employees to contend with inconsistent rules. Foreign businesses are also in danger of generating an unforeseen PE in India if teleworking staff engage in key business actions, including the solicitation of clients or negotiation of contracts. The majority of DTAAs, however, applying the 2017 guidelines of the OECD, need a fixed place of business or dependent agent to generate a PE-not often achieved in virtual environments.

A landmark judgment in Clifford Chance Pte Ltd. v. ACIT [9](2024) brought out such loopholes in the law. The Income Tax Appellate Tribunal held that virtual legal services rendered by a Singaporean law firm to Indian clients were not a PE since the treaty demanded physical presence. This ruling indicates the insufficiency of existing frameworks: A German technology company hiring Indian remote developers for European projects evades PE status in India, though the team is crucial, since the India-Germany DTAA does not have "virtual PE" provisions. These loopholes allow foreign companies to avail themselves of Indian expertise without taxes, diluting the local tax base.

1.3 Modernizing DTAAs for Emerging Sectors

To meet these challenges, India needs to implement treaty amendments reflecting the dynamics

[9] 2681 & 3377/Del/2023

of digitalization and distance work. First, DTAAs need to incorporate norms from OECD's Pillar 1, whereby fixed SEP thresholds are substituted with share-based distributions. By doing so, cloud operators and crypto platforms playing a substantial role in India's digital economy would be taxed proportionally to their shares. Second, new "virtual PE" rules could redefine taxable presence to cover strategic remote work. As an example, a foreign firm can be considered to have a PE in India if the remote employees are involved in onboarding clients or product development even without having an office.[10]

Third, the treaties need to address specifically new industries. Cryptocurrencies, for instance, need to be treated as taxable "services" under DTAAs with a need to adhere to international standards such as the Financial Action Task Force (FATF) guidelines.[11] Likewise, platforms of the gig economy such as Uber or Swiggy can trigger PE status if they exercise control over deliverables of workers, subjecting platform-based incomes to fair taxation. These reforms would bring India's taxation system into line with international best practice, shutting down loopholes used by digital arbitrage and treaty shopping.

2. Administrative Inefficiencies in Multi-Level Tax Governance

Strong tax administration is needed to facilitate compliance and induce economic growth. Nonetheless, the administrative setups existing in most countries, especially multi-jurisdictional tax arrangements, are burdened by inefficiencies that frustrate the efficacy of taxation as well as escalate the cost of compliance. The present section explores three fundamental challenges undermining effective tax administration: jurisdiction overlap, time lag in settling disputes, and the potential of technology-mediated options to facilitate the ease of compliance.

2.1 Overlapping Jurisdictions: State vs. Federal Tax Conflicts

One of the most urgent problems of multi-level tax government is state-federal tax jurisdictional conflict. In federations, in which state and federal governments possess taxing power, the risk of conflicting or duplicative tax law exists, posing enormous tax compliance

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[10] Dentons. (2024, July 8). *Pillar One deadline has passed: New Digital Services Taxes on the horizon*. https://www.dentons.com/en/insights/alerts/2024/july/8/pillar-one-deadline-has-passed-new-digital- services-taxes-on-the-horizon

[11] Wolters Kluwer. (2023). *Q2 2023: BEPS 2.0 Pillar One: Reallocating taxing rights for certain profits of large multinational enterprises*. https://www.wolterskluwer.com/en-gb/expert-insights/q2-2023-beps-2-0-pillar-one-reallocating-taxing-rights-certain-profits-large-enterprises

and enforcement difficulties. The popular example for such is in case of cross-crediting involving Goods and Services Tax (GST), specifically when the countries concerned are very big, as the case with India. Firms under GST legislation can credit input tax against outputs collected under tax. Yet, inconsistencies in the enforcement of federal and state tax regimes have frequently caused controversies over entitlement to input tax credits, which lead to lengthy and complicated determinations that obstruct the overall tax process. These controversies also illustrate the complexity brought about by the decentralized taxation administration in federations.[12]

In addition, the emergence of state-level digital services taxes creates another layer of complexity. India and the EU, for instance, have imposed or will impose digital services tax on multinational enterprises (MNEs) with large turnover earned from the delivery of digital services to locals in their jurisdiction. The digital taxes will most likely break the old international tax regimes and agreements and engender jurisdictional competition between federal debts and state government revenues. The uncertainty arising from this makes it more challenging for companies dealing in several jurisdictions to comply because they must navigate federal and state laws that could be incompatible or conflicting.[13]

Compliance cost from an administrative perspective under concurrent systems of taxation is most intimidating to MNCs, whose likelihood of disputes as well as tax inefficiencies is greater because of the complexity of tax administration between jurisdictions. Empirical studies have established that MNCs incur significant compliance costs, with estimated tax administration burden between 18% and 22% of their total tax burden. The costs are associated with the amount of time and effort involved in legal advice, litigation, and establishing in-house systems to monitor and monitor multi-jurisdictional tax liabilities. The overlap between federal and state taxation renders tax compliance a challenge and undermines the general efficiency of tax administration.

2.2 Delays in Dispute Resolution Mechanisms

A second overarching inefficiency of multi-level tax administration is the time needed to settle

[12] Rao, M. G. (n.d.). Indian fiscal federalism: Major issues. The Australian National University, Economics Division Working Papers. https://openresearch-repository.anu.edu.au/bitstream/1885/210290/1/b19545149.pdf

[13] European Parliament. (2018, December). *Interim digital services tax on revenues from certain digital services* [PDF]. https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625132/EPRS_BRI(2018)625132_EN. pdf

disputes. In sophisticated tax regimes in countries with bilateral tax treaties and international tax treatises, settlement of cross-border disputes is both slow and entrenched in administrative paperwork. One of the most important mechanisms of international tax policy dispute resolution is the Mutual Agreement Procedure (MAP), under which tax administrations of two countries can settle differences in the interpretation of double taxation agreements. MAPs are an important tool to prevent double taxation and equitable taxing, but they fail because of administrative lags.

The experience of working through a MAP may take 5 to 7 years, a time period exacerbated by bureaucratic inefficiencies and the absence of special arbitration provisions in most tax treaties. The delay is brought about by the lengthy procedure of negotiations between tax authorities and the complexity of settling cross-border tax disputes, which are typically time-consuming and entail much documentation and information exchange between jurisdictions. Secondly, the reason that binding arbitration is not typically part of most tax treaties is that authorities will have no incentive to act quickly to reach a deal. It produces decades-long delays for taxpayers and businesses and keeps them in limbo, subject to great financial and operating uncertainty for decades while the matter hangs on.

One highly exposed example of such delays is the India Vodafone retrospective tax case. Vodafone was sent a tax notice by the Income Tax Department in 2007, claiming that Vodafone had not made payment of tax in respect of the purchase of Hutchison Essar, an Indian mobile company. According to the tax department, Vodafone should have paid capital gains tax on the transaction since it represented the sale of assets of a foreign entity. The deal was between two foreign firms, Hutchison Whampoa (Hong Kong-based) and Vodafone Group (British), and there was no immediate Indian firm party to the deal.[14]

Though the deal was not executed in India, India's tax department held that the deal indirectly involved India since the Hutchison Essar shares were valued on the basis of Indian assets. The position taken by the government of India was that Vodafone had, albeit indirectly, picked up Indian assets, and so they should be compelled to pay capital gains tax. But Vodafone challenged the demand on grounds that the structure of the deal was such that Indian taxation

[14] SCC Online. (2022, November 29). Vodafone versus India: A never-ending saga. https://www.scconline.com/blog/post/2022/11/29/vodafone-versus-india-a-never-ending-saga/

norms could not apply since there had been no movement of Indian assets or shares.

The Bombay High Court judged in 2010 in favor of Vodafone that the deal was exempt from Indian capital gains tax since the transfer was among foreign entities. The ruling appeared to quiet the furor. But in 2012, the government of India passed a retrospective tax law amendment aimed at making tax legislation binding on transactions dealing in Indian assets even when the transfer was between foreign firms. This act retrospectively affected Vodafone's deal, overturning in effect the previous judgement and charging it a tax demand.

The matter escalated into a drawn-out legal battle, with Vodafone filing petitions to oppose the retrospective application of the tax act. After years of litigation and red tape, the matter went on for an extremely long period of time, pitching Vodafone's bottom line and reputation against one another. The firm also threatened to exit India because of the uncertainty caused by the retrospective tax legislation. The Indian government was finally forced to settle the issue, but the case is a good example of the inefficiencies in India's system of resolving tax disputes.

The case not only illustrates the intricacies of cross-border tax disputes but also the time gap in the absence of a binding resolution mechanism. The retrospective tax law's passage, having altered rules after the fact that the deal had been completed, contributed to uncertainty and extending the row further. The Vodafone row demonstrates the type of tax uncertainty inherent in multi- jurisdictional tax regulation under which companies become vulnerable to divergent interpretations of tax legislation as well as excessive delay in dispute resolution.

The Vodafone case is also a grim reminder of the absence of the proper mechanisms to settle tax disputes in a time-bound manner. If binding arbitration provisions existed in India's tax treaties, the matter would have been settled at the earliest and financial burden on Vodafone and the Indian economy could have been eased. The delay in resolution of disputes also indicated deeper inefficiencies in the administrative mechanisms of India's tax regime, which resulted in foreign investors and companies doing business in the country losing confidence.

Finally, the Vodafone retrospective tax dispute makes a compelling argument for the most pressing need of reform of systems of dispute resolution in international tax governance. Applying binding arbitration clauses and using more obvious and decisive procedures, tax authorities may avoid prolonged delays and resolve doubt suffered by business corporations involved in cross border tax disputes. The Vodafone case strains the supreme need for a streamlined and transparent system to resolve tax disputes, which is important for the creation of a stable investment climate and compliance cost savings for international enterprises.

2.3 Technology-Driven Solutions

In the context of administrative burdens within multi-jurisdictional taxation systems, applying technology-based solutions may be a way to simplify tax compliance as well as resolving tax disputes. Integration of artificial intelligence (AI) and blockchain technology with taxation is one solution that can serve this purpose. AI-powered tax compliance systems may enable automatic detection of discrepancies in tax returns, identify probable sources of tax evasion, and provide real- time views on tax dues. These systems would not only enhance the efficiency and precision of tax compliance but also eliminate the time-consuming and error-prone manual audits.[15]

The other exciting solution is available through blockchain technology, specifically real-time reporting. Through the use of a distributed ledger, blockchain can potentially make taxation data report transparent and traceable. This technology can enable taxpayers and tax authorities to share information in real-time, cutting down considerably the time it takes to audit taxes and maintain the correctness of financial reports. Additionally, blockchain's power to monitor the movement of goods and services across borders could make it easier to settle problems of indirect taxes, e.g., VAT and GST, as it can deliver an unerasable record of transactions.[16]

Estonia is a shining example of the successful application of digital technology in tax administration. Praised to the hilt for innovative e-government practices, Estonia has implemented electronic tax reporting and filing systems that allow taxpayers to file their taxes with ease and efficiency. The Estonian Tax and Customs Board (ETCB) utilizes AI-based systems in enforcing compliance and identifying discrepancies in real-time, minimizing the length of audits by considerable margins and enhancing overall tax administration efficiency. Estonia's digital tax system's efficiency establishes the capability of technology-driven

[15] Jain, A. (2025, February 10). *India's Finance Bill 2025: A game changer for digital transformation and economic growth*. https://www.linkedin.com/pulse/indias-finance-bill-2025-game-changer-digital-growth-jain-infj--50njc

[16] Superkalam. (2025, February 4). *India's digital growth: Opportunities, challenges, and the way forward*. https://superkalam.com/current-affairs/article/current-affairs-2025-transforming-indias-digital-future- insights-into-the-draft-digital-personal-data-protection-rules-2025

solutions in providing alternatives to inefficiencies of multi-level taxation governance.[17]

In summary, administrative inefficiencies in multi-jurisdictional tax administration pose serious hurdles to efficient administration of taxes, especially to MNCs and taxpayers with cross-border transactions. Repetitive tax jurisdictions, protracted dispute settlement procedures, and archaic administrative procedures heighten the intricacies and costs of compliance in international taxation. Technical remedies such as AI-powered submission platforms and block-chain supported real time reporting signify an interesting future path. With the assistance of these tools, tax administrations can enhance their capacity to handle complex tax regimes, remove administrative barriers, and ultimately achieve a more transparent, efficient, and responsive tax environment.

3. Treaty Abuse, BEPS, and Revenue Leakages

Global economies have been subject to matchless change in recent years on the surge of multinational companies' presence, digitalization, and extraterritorial activities. Although this triggered economic growth, they simultaneously showcased loopholes of global tax regimes. Two dominant issues, misuse of treaties and base erosion and profit shifting (BEPS) have turned into widespread issues, generating vast drainages of taxation to countries all over the world. This part critically assesses how BEPS and treaty abuse take place, how corporate firms manipulate loopholes in the law, and how the world has reacted to these risks.[18]

3.1 Treaty Abuse: Undermining the Spirit of Tax Agreements

Tax treaties are bilateral or multilateral amid states with the aim of avoiding double taxation, encouraging investment, and increasing international cooperation. Tax treaties have usually been used falsely by individuals seeking to take advantage of positive provisions in ways not imagined by the contracting parties. Abuse of treaties commonly covers the conduct of "treaty shopping," where a party structures its affairs in a way so as to take benefit of a better tax treaty by using a transitional state, without much economic activity in the intermediary state.[19]

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[17] International Tax Review. (2021, August 10). *Cairn and Vodafone pursue talks to settle Indian tax claims*. https://www.internationaltaxreview.com/article/2a6a9ipgp0eg9m706twjk/cairn-and-vodafone-pursue-talks- to-settle-indian-tax-claims

[18] Organisation for Economic Co-operation and Development (OECD). (2025). *Base erosion and profit shifting (BEPS)*. https://www.oecd.org/en/topics/policy-issues/base-erosion-and-profit-shifting-beps.html

[19] Melbourne LawSchool. (2022, December). *BEPS Action 6 – Prevention of treaty abuse* [PDF]. https://law.unimelb.edu.au/ data/assets/pdf_file/0011/4389095/BEPS-Action-6-Policy-Brief-10-12- 2022.pdf

The essence of treaty abuse is the inconsistency between the substance and form of transactions. The form of transactions is structured to satisfy the formal conditions of a treaty rather than the economic substance. This not only leads to reduced tax receipts for high-tax countries but also undermines the trust base on which cross-border cooperation in taxation depends. OECD's Base Erosion and Profit Shifting (BEPS) Project has recognized treaty abuse as a major issue, with proposals to include anti-abuse rules and the principal purpose test (PPT) in treaties to deny treaty benefits where one of the primary purposes of an arrangement is to obtain those benefits.

3.2 Base Erosion and Profit Shifting (BEPS): Strategies and Impacts

BEPS involves tax planning arrangements that use loopholes and gaps in tax legislation to drive profits artificially into low or zero-tax jurisdictions where minimal or no economic activity takes place. Multinational companies use various techniques such as manipulation of transfer pricing, taking advantage of hybrid mismatch arrangements, and abusive deductibility of interest to reduce their overall tax burden worldwide.

One of the most infamous structures is the "Double Irish with a Dutch Sandwich," in which profits are channeled through Irish and Dutch subsidiaries into tax havens, dramatically lowering the overall effective tax rate. This tax avoidance weakens the tax base of high-tax nations and misrepresents the global economic playing field against minor, purely domestic businesses because they do not have the resources to continue.

The impact of BEPS is important. Tax experts miss out on billions of dollars each year, which adversely affects their ability to finance basic public commodities like healthcare, education, and infrastructure. Also, public trust in the honor of tax organizations is lost, causing political and social tensions.[20]

3.3 Revenue Leakages: The Broader Economic Consequences

BEPS led and treaty abuse driven income losses flow through economies in two manners. Primarily they coerce fiscal space, depriving governments of resources to invest in long-term development projects. Secondly, they lead to a harsh "race to the bottom," in which

[20] Finexity. (n.d.). *"Double Irish with a Dutch Sandwich": The billion-dollar tax trick.* https://finexity.com/en/blog/double-irish-with-a-dutch-sandwich-billions-tax-scheme

governments cut the company tax rates and provide weaker tax incentives to try to pull footloose capital, potentially at the expense of domestic needs.[21]

Moreover, poor countries are excessively obstructed by these scams, having fewer administrative skills to fight tax evasion and fewer resources to renegotiate agreements or implement anti abuse provisions, such nations suffer massive revenue losses as a fraction of their GDPs. This deteriorates global inequality and delays the achievement of overall development objectives.

3.4 International Response: Toward a Coordinated Framework

Seeing the impact of these problems, the international community, led by the OECD and G20, started the BEPS Project in 2013. The project came up with a complete package of 15 actions aimed at disputing harmful tax practices, enhancing transparency, and ensuring coherence in cross- border tax policies.

One of the major activities is the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, also called the Multilateral Instrument or MLI. The MLI enables governments to quickly streamline their bilateral tax treaties to address anti-abuse provisions without the need to renegotiate each of them independently. It incorporates elements like the minimum standard to counter treaty shopping, better dispute resolution mechanisms, and enhanced tax certainty in cross-border transactions.

In addition, the OECD two-pillar approach under the Inclusive Framework proposal aims at resolving tax challenges resulting from the digital economy. Pillar One redistributes taxing rights to jurisdictions of market and Pillar Two introduces a minimum global corporate tax rate to deter profit shifting to low-tax countries.

Despite the significant advances, the fight against treaty abuse, BEPS, and tax leakages never ends. MNEs keep developing new modes of avoidance, and the speed of technological change introduces new challenges to regulators. To be successful, there needs to be ongoing global cooperation, intense enforcement of anti-abuse provisions, and adherence to transparency and

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[21] **Laudage Teles, S.** (2023). *What did the BEPS project achieve for low- and middle-income countries?* [PDF]. German Institute of Development and Sustainability (IDOS). https://www.idos-research.de/uploads/media/PB_22.2023.pdf

fairness in tax policy-making.

Finally, it is essential that taxing profits where economic activity is truly occurring and value is being created not only for revenue mobilization but also to ensure the integrity and legitimacy of the international tax system.

3.5 The Mauritius-Singapore Conduit: A Legacy of Treaty Shopping

Treaty shopping as a practice has never escaped the aim of bilateral tax treaties to enable investors to avail themselves of the best provisions in the absence of significant economic activities in the transit country. An example that is perhaps most eerie and telling would be the Mauritius- Singapore pipeline, a tool to direct record foreign capital into India but in the process strip its own tax base. In the longer term, the structure showed deep vulnerabilities in India's tax treaties, and policy regime was overhauled. This section examines the conduit mechanism, quantifies the revenue foregone by it, and assesses the impact of India's renegotiation of its Double Tax Avoidance Agreement (DTAA) with Mauritius in 2016.

3.6 Quantifying Losses: $12 Billion Annual Revenue Leakage

The magnitude of the economic effect generated by treaty shopping via Mauritius and Singapore is astronomical. Studies estimate India's exposure at around $12 billion in lost revenue each year through tax evasion based on treaties (Bajaj FinServ, 2025). The genesis of the problem was that the India-Mauritius and India-Singapore DTAAs previously enabled capital gains to be taxed solely in the resident state. Foreign investors would be permitted to structure their investments in a way so that they could claim residency status in these two countries and thus either escape or lower significantly their tax burden in India.[22]

The losses did indeed occur. Skewed levels of foreign direct investment (FDI) in India channeled through Singapore and Mauritius were found by empirical analysis despite the actual economic source of the investment usually being something other than what the two countries stated. For instance, American private equity funds and overseas multinationals often set up shell companies in Singapore or Mauritius to take advantage of the favorable terms of the treaties. Therefore, even as India's economy grew at a fast pace, much of taxable capital

[22] India Briefing. (n.d.). *India-Mauritius DTAA amendment closes tax avoidance loophole*. https://www.india-briefing.com/news/india-mauritius-dtaa-amendment-addresses-tax-avoidance-loophole-32041.html

gains that accrued within the country went untapped, tightly hugging government coffers that could otherwise be invested in the development of infrastructure, healthcare, and education.

The scale of the leak imposed tremendous pressure on Indian policymakers. The tax authorities were facing high-tech arrangements that complied with the letter of the agreements but outpaced their spirit. Furthermore, the lack of transparency in investment structures made it extremely difficult to create a clear link between intermediary structures and beneficial owners, again contributing to the enforcement problem.

3.7 Impact of India's 2016 DTAA Renegotiations with Mauritius: Did It Curb Round- Tripping?

Looking to the unviability of the current order, India had already started renegotiating its DTAA with Mauritius, with the resulting historic 2016 protocol amendment. Under the updated treaty, India regained the taxation right on capital gains from selling shares of Indian companies purchased post-April 1, 2017. A phased roll-out approach was adopted: investment made prior to April 1, 2017, enjoyed grandfathered benefits, while partial taxation at 50% of the Indian domestic tax rate from 2017 to 2019 applied subject to fulfilling specified Limitation of Benefits (LOB) conditions on new investments.

Renegotiation disrupted harshly the old vintage round-tripping models which had flourished under the previous regime. Withholding tax on capital gains at source and making substantive economic presence a prerequisite to be eligible for treaty benefits, the Indian government plugged the most glaring loopholes. Post-amendment Indian data from the country's Department of Industrial Policy and Promotion (DIPP) reflected a sharp decline in the percentage of FDI channeled through Mauritius. Simultaneously, Singapore as a conduit jurisdiction also lost traction after the similar renegotiation of the India-Singapore DTAA in 2017, which was a replica of the Mauritius amendments.[23]

But whereas the immediate impact was beneficial, there are some qualifiers. Investors started diversifying treaty shopping activities by routing money through other preferential nations like

[23] Squire Patton Boggs. (2016). *Updates on India's tax treaties with Mauritius* [PDF]. https://www.squirepattonboggs.com/~/media/files/insights/publications/2016/10/updates-on- indias-tax-treaties-with-mauritius-and-its-impact-on-the-india-singapore-tax treaty/updatesonindiastaxtreatieswithmauritiusanditsimpactontheindiasingaporetaxtreaty.pdf

the United Arab Emirates and the Netherlands. Certain luxury investors also evolved by structuring investments such that they qualified for LOB eligibility with minimal economic substance having a handful of employees and leasing minuscule Mauritius offices to qualify for reduced tax rates.

Thus, though the 2016 renegotiations with Mauritius were a watershed moment, a point of turning away from the most egregious abuses of treaty shopping and round-tripping, they did not eliminate the root incentives of tax planning. The inherent conflict between opening the door to cross-border investment and preventing treaty abuse persists. India's recent joining of the OECD's Multilateral Instrument (MLI) and inclusion of Principal Purpose Test (PPT) provisions in new treaties is part of a wider acknowledgment that treaty abuse has to be dealt with through proactive, multi-faceted efforts and not ad hoc bilateral adjustments.

Finally, the Mauritius-Singapore tunnel story offers a fundamental lesson to international tax policy: treaties need to be drafted with strong anti-abuse provisions from the beginning, and caution needs to be exercised to remain in step with changing trends in investment. Although India has made excellent progress in plugging gaps from previous loopholes, ongoing regulatory innovation and global cooperation will be necessary to protect national revenues in an increasingly complex world economy.

3.8 GAAR and MLI: Efficacy in Curbing BEPS

The battle against Base Erosion and Profit Shifting (BEPS) has caused the introduction of different anti-abuse instruments in different jurisdictions, with India presenting domestic as well as international instruments to safeguard its tax base. Some of the most remarkable developments in this regard are India's introduction of the General Anti-Avoidance Rules (GAAR) and joining the OECD's Multilateral Instrument (MLI) framework. These actions were taken to close treaty loopholes, avoid harmful tax practices, and ensure that value is taxed where value is generated and where economic activities giving rise to the income are led. Still, challenges remain, mainly due to the abusive use of shell companies in a creative manner and deliberate channeling of investments through non-MLI jurisdictions.

India's GAAR regime, effective from April 1, 2017, gives powers to tax authorities to disallow tax benefits in situations where arrangements have been entered into with the sole aim of securing a tax benefit. GAAR gives a wide framework to examine arrangements that are devoid of commercial substance and entered into with the sole motive of tax avoidance. Its enactment brought about a transition from a substance-over-form approach to a form-over-substance practice in Indian taxation, substituted by a substance-over-form rule of taxation. Unlike the classic Specific Anti-Avoidance Rules (SAAR), which aimed at a particular transaction, GAAR allows an end-to-end examination of the structure of the transaction and tax authorities broad freedom to ignore persons and recharacterize transactions.

Although India's ratification of the MLI in 2019 had signified that it was keen to implement BEPS Action Plan proposals globally, the MLI included traditional anti-abuse provisions into India's tax treaties, and one such traditional rule was the Principal Purpose Test (PPT). As of the PPT, benefits in a treaty could be denied when one of the fundamental objectives of an arrangement or transaction is for the purpose of receiving such benefits, except granting the benefit was consistent with the object and aim of the treaty. The MLI also replaced dispute resolution systems and introduced binding arbitration clauses for mandatory inclusion in India's covered tax treaties to provide greater certainty in law to cross-border tax payers.[24]

In spite of such robust frameworks, the efficacy of GAAR and the MLI in curbing BEPS has been faced with challenges. One of the important loopholes is due to strategic diversion of investment via non-MLI countries. The United Arab Emirates (UAE), for example, emerged as a favored jurisdiction to divert investments to India after the Mauritius and Singapore treaties were revised. Since the UAE was not an original signatory to the MLI, it was a low-tax or no-tax jurisdiction that was still available as an alternative for investors and still offered substantive treaty benefits without subjecting itself to the more recent anti-abuse provisions contained in MLI-covered treaties.

In addition, investors have been very clever at organizing their affairs so as to satisfy the minimum threshold of the Limitation of Benefits (LOB) provisions and escape the PPT. Shell entities with minimal activities, small employees, and passive income streams continue to exist in countries that provide effective tax treaties with India but are not signed up for MLI reforms. This fact has watered down the expected effect of GAAR and the MLI, and it points towards greater international cooperation and stronger local control measures.

[24] Central Board of Direct Taxes (CBDT). (2017). *Clarifications on implementation of GAAR provisions under the Income-tax Act, 1961*. Press Information Bureau. https://pib.gov.in/PressReleasePage.aspx?PRID=1481279

Another limitation is the application of GAAR itself. Due to its general and subjective tests, there are allegations of abuse or discriminatory application by tax authorities, which could result in lengthy litigation. In spite of regulations having been implemented to ensure reasonable application of GAAR and in a non-discriminatory way, taxpayers and investors continue to be apprehensive about uncertainty and discretionary application.

Finally, though GAAR and the MLI have immensely fortified India's arsenal against BEPS and treaty abuse, they are handicapped by the persistence of tax planning schemes and variable implementation of anti-abuse principles across jurisdictions. Closing the loopholes remaining will bring with it not only domestic re-alignment of GAAR's applicability but also ongoing international negotiations to get more jurisdictions on the MLI framework or to renegotiate bilateral treaties with stringent anti-abuse provisions. Only collective action on multiple fronts will assist India in successfully achieving this goal of aligning taxing rights with economic activity and protecting its tax base against erosion.

3.9 BEPS 2.0 and India's Compliance Challenges

The dynamic shape of international taxation has moved into a new chapter with the introduction of the OECD's BEPS 2.0 aimed at combating the threats of an interconnected and digitalized global economy. Two pillars are at the heart of BEPS 2.0: Pillar 1, which redistributes taxing power to market jurisdictions, and Pillar 2, which imposes a minimum rate of 15%. Cumulatively, the reforms seek to limit abusive tax avoidance, enhance tax certainty, and ensure multinational enterprises (MNEs) contribute a reasonable amount of tax where they generate and create income. Yet India's adherence to these international standards, while profoundly important, raises a multifaceted set of challenges on home as well as foreign fronts.

Pillar 2's call for a 15% global minimum tax aims to level the field against the benefit conferred by tax havens and low-tax systems. By creating a floor for the corporate tax in the world, Pillar 2 in theory reduces the profit-shifting incentive and makes tax revenues more stable in countries, including India. For India, which has been a long-time victim of base erosion through profit shifting to low-tax countries, the global minimum tax has the potential to bolster its tax collections by ending artificial arrangements created to take advantage of differential tax rates. But the actual impact will hinge significantly on the severity with which countries enforce these provisions and whether major MNEs reorganize their operations to meet the new regime or make use of other tools to sustain tax efficacies.[25]

Although Pillar 2 can be beneficial, India has very serious compliance and administrative issues. Compliance of Indian subsidiaries of foreign MNEs with the new global minimum tax rules will involve fundamental reform of domestic law, renegotiation of tax treaties, and considerable enhancement of administrative capabilities. Additional challenges arise due to the presence of India's own Minimum Alternate Tax (MAT) system, which charges a minimum tax on firms, and which questions the nexus between MAT and OECD's new global rules. Balancing domestic law and international obligations without generating overlaps or contradictions will be a sensitive tightrope walk for Indian policymakers.

More contentious is the battle between India's Equalization Levy and the OECD's Pillar 1 regime. India first imposed the Equalization Levy in 2016 on foreign digital businesses earning revenues from Indian users without physical presence in India. Initially imposed on the revenues of online advertising, the tax came to be levied on e-commerce operators later on, India's strong assertion of taxing the digital economy. Pillar 1, however, aims to create a multilateral approach by redistributing part of the residual profits of the largest and most profitable MNEs to the market jurisdictions in an attempt to bring an end to the proliferation of unilateral digital services taxes (DSTs).

The pressure is because Pillar 1 is requesting nations like India to withdraw unilateral actions like the Equalization Levy once the new regulations have been implemented fully. For India, this is a tough choice. The Equalization Levy is now a valuable source of income and is an easy way to tax digital giants that would otherwise go untaxed in India. Sacrificing this pillar at the expense of a multilateral model might mean short-term sacrifice of revenue, although Pillar 1 pledges a more settled, collaborative worldwide tax regime over the longer run. Also, India has fretted that Pillar 1's narrow aim covering merely the largest and most lucrative multinationals is likely to miss out a tremendous number of digital businesses which receive a huge volume of revenues in India.

Besides revenue issues, administrative issues are numerous. The sophistication of applying

[25] Ernst & Young (EY). (2024, November 22). *How to alleviate BEPS 2.0 Pillar Two data challenges*. https://www.ey.com/en_gl/insights/tax/how-to-alleviate-beps-2-0-pillar-two-data-challenges

Pillar 1's new profit allocation regime will necessitate India's tax administrators to develop new competencies, exchange confidential taxpayer information across borders, and resolve disputes through binding arbitration regimes, at the cost of potential sovereign discretion. There is also the broader geopolitical issue of ensuring that BEPS 2.0 commitments are applied equally across all major economies, or else India would be placed at a competitive disadvantage.

Overall, while BEPS 2.0 vows to meet the tax challenges of globalization and digitalization, India's journey towards compliance is beset by legal, administrative, and strategic obstacles. Domestic legal change would be arduous to implement, and prolonged diplomatic negotiation as well as balancing of costs versus benefits in subsuming India's unilateral tax action within evolving global trends would be necessary. Balancing short term revenue interests and long term stability in the global tax system will be India's success mantra in challenging the BEPS 2.0 complexity.

4. Synthesis: Policy Recommendations

4.1 DTAA Reforms: Towards a Digital-Ready Framework

Growing digitalization of the global economy compels a rethinking of conventional double taxation avoidance agreements (DTAAs). Conceived with an era of physical business and trade models tied to physical locations in the first place, current DTAAs have little ability to respond to complex issues caused by the digital economy, including cloud computing services, cryptocurrencies, and remote work arrangements. The insufficiency of current treaty wordings makes it possible for substantial revenue streams to go untaxed or be taxed twice, generating uncertainty for enterprises and revenue erosion to states. In order to address these new needs, there is a pressing necessity to propose reforms with "Digital DTAA" provisions that can properly capture and assign taxing rights in this new economic environment.

One of the reform areas is taxing cloud services. The classical DTAA instruments depend on the notion of a "permanent establishment" (PE) as the primary source for assigning taxing rights, but cloud service providers are not required to have physical presence in the user jurisdictions. A Digital DTAA would redefine PE thresholds to encompass high digital presence or user base thresholds so that cloud service providers bear a fair share of tax revenues collected by the value- generating markets. These rewrites will have to be carefully phrased in order to strike a suitable balance between facility of compliance and necessity to include significant economic activity carried out remotely.

Second are cryptocurrencies and blockchain transactions, which present unique attribution, valuation, and enforcement issues. Current DTAAs tend to take a neutral stance on the treatment of income from cryptocurrencies, resulting in inconsistencies between jurisdictions and opportunities for tax avoidance. Electronic DTAAs should include provisions ensuring that there is a source for the income generated from digital assets, making determinations on proper residence rules for decentralized participants, and offering guidelines for exchange of information on crypto transactions. Such moves would assist in curbing the revenue leakages tax authorities across the globe are encountering today due to the pseudonymous nature of crypto markets.[26]

Not least is the topic of remote employment, which has grown exponentially throughout the COVID-19 pandemic and is increasingly redrawing the maps of borderless working. Older DTAAAs often apportion taxing rights using physical presence points, but such an approach is increasingly out of step with today's working behaviors in which staff can reside and work abroad as easily as anywhere else. Provisions of digital DTAA would need to deal with remote work income, clarifying the tax residence rules for employees and source rules for employers who tap cross-border talent. This shift would prevent double taxation while ensuring that revenues from taxes are equitably distributed among the participating countries.

Also, for Digital DTAAs to roll out, member countries need to upgrade their MAPs to deal with soon-to-be-estimating disputes brought about by divergent interpretations of digital income rules. The use of arbitration provisions and augmented bilateral cooperation through apt digital data sharing will be essential to make such improved treaties succeed.

Short of it is that it's not a matter of choice but necessity to modify DTAAs to encompass digital economic realities about protecting tax sovereignty and ensuring tax revenue equity distribution. With the implementation of Digital DTAA clauses related to cloud services, cryptos, and remote work, countries like India can preserve their tax base without deterring compliance and providing legal certainty for digital business. Collaboration, investing in

[26] International Monetary Fund (IMF). (2023, July 5). *Crypto poses significant tax problems-and they could get worse*. https://www.imf.org/en/Blogs/Articles/2023/07/05/crypto-poses-significant-tax-problems-and-they-could- get-worse

technology at tax bureaus, and an active legal environment will be the forces that guide us through this new world of cross-border tax law.

4.2 Administrative Overhaul: Strengthening Dispute Resolution Mechanisms

The sophistication of modern cross-frontier taxation calls not just for legislative reorganization but for revolutionary administrative reform if efficacious enforcement can be garnered. As tax disputes that cross frontiers rise in number as well as in quality, the traditional methods of coping with them clog and fragmented appear ever more unable to cope. To fill this gap, one would need to implement centralized tax dispute resolution courts and mandatory arbitration time periods that construct a quicker, more efficient system that can be capable of coping better with the complexities of international taxation.

Implementing centralized tax dispute resolution courts would itself be a paradigmatic shift from the current decentralized setup, where tax disputes are typically resolved disparately by home country authorities of differing knowledge. The creation of a core court or tribunal with members who are experts in international tax law, taxation of the digital economy, and treaty interpretation would create a specialized forum for speedy resolution of cross-border disputes. Such institutions would introduce uniformity in applying the treaty provisions, eliminate jurisdictional differences, and create a body of precedents to be applied in future decisions. By localizing knowledge and streamlining process, such courts would thus be able to greatly reduce uncertainty and cost of lengthy litigation for taxpayers and governments alike.[27]

In addition to the formation of specialist courts, mandatory arbitration timelines would also improve the effectiveness and legitimacy of the international tax system. Presently, the MAP under most DTAs does not give a binding resolution within a stipulated time, leaving the arguments open for years. Requiring mandatory timelines that is, ensuring the disputes are resolved within 24 months from the date of initiation would introduce much-needed discipline to the procedure. In case the competent authorities fail to agree within the time provided, the case should automatically go to binding arbitration by impartial panels.

Mandatory arbitration, particularly if accompanied by strict timelines, would discourage states

[27] Noonan, C. (2023). *Swimming against the tide? The arbitration of international tax disputes*. Indian Journal of International Economic Law, 14. https://repository.nls.ac.in/cgi/viewcontent.cgi?article=1153&context=ijiel

from indulging in dilatory tactics and invite states to actively engage in the settlement of disputes. It would also increase confidence among multinational enterprises, making cross-border transactions more hassle-free and easier to occur, while enhancing voluntary compliance. For developing countries like India, adopting such a policy change would also signal very clearly to international investors about the country's seriousness towards effective and equitable tax administration, which is likely to spur foreign direct investment and economic growth.

Yet, for administrative reforms to gain effect, these must be supplemented by developing tax administration capacities. Tax administrators will have to receive training on technical topics such as transfer pricing, taxation of digital economy, and proceedings under international arbitration. Investment in technology such as information sharing portals operating real-time and case handling software operating with AI can even further automate settlement of disputes and enhance transparency.

Briefly, without the powerful administrative transformation, even the best legal reforms will prove futile. Centralized courts of dispute resolution and mandatory arbitration time limits present a practical and visionary approach to addressing the oncoming tide of cross-border tax disputes.

Their adoption would not only enhance administrative efficiency, but also enhance the legitimacy and integrity of the global taxation system in a world that is interdependent.

4.3 Anti-Avoidance Measures: Strengthening GAAR with AI Audits and Stricter Beneficial Ownership Disclosures

In order to combat increasingly complex cross-border tax evasion schemes, the tightening of existing measures against evasion has been an integral part of tax system improvement. The General Anti-Avoidance Rule (GAAR) continues to be a cornerstone of much of the jurisdictions' fight against abusive tax planning. But to match the velocity of the velocity of evolving complexity and international nature of new tax avoidance techniques, GAAR must be supplemented by new technology-driven solutions such as AI-based audits and stricter beneficial ownership disclosure standards. These can go a long way in increasing the effectiveness of anti-avoidance measures so that they become more sensitive to counter new threats in the area of international taxation.

GAAR, on an abstract level, gives the tax authorities the power to deny transactions or arrangements that have no substance business purpose and are arranged for the only or dominant motive of escaping tax liability. While GAAR law is a gem in countering tax evasion, its implementation is usually stifled by the ploys and uncertainties of modern-day financial transactions. Large multinationals and rich individuals are going to have high-end tax haven shells and cross-border vehicles which are more difficult to identify or open to attack in the absence of tools of technological progress. For them, embracing artificial intelligence (AI) to avail oneself in the matter of tax audit has enormous potential to the level of description. AI can move through huge databases and create patterns and anomalies which would easily be beyond human ability. Machine learning algorithms can be instructed to detect probable abusive tax evasion fraud, such as circular flows or diverting profits into tax havens, that are targeted by GAAR.

AI audits would not only mechanize the identification of aggressive tax planning but would also immensely improve the efficiency and speed of tax inquiries. By means of mechanized routine checks and preoccupation of human manpower with advanced analysis, AI may enable tax authorities to deal with the growing volume of intricate transactions without sacrificing the intensity of audit process. Such technological advantage would become of particular significance in countries such as India, where tax administrations have to work with resource constraints and arrears. Additionally, AI will be used to simulate various tax situations so that government agencies will have an estimation of the likely fate of tax evasions before they catch on. Use of AI in taxation audits is a pioneering solution which comes in accordance with the exigencies of contemporary tax administrations.

In addition to AI audits, heightened disclosure requirements in terms of beneficial ownership are core in perspective of filling loopholes being used in taxation evasion. Most tax evasion scams are founded on intricate ownership arrangements behind anonymous entities, trusts, or shell companies, which conceal identities of asset holders and of initiators of transactions. In spite of global efforts such as the Common Reporting Standard (CRS) and the OECD's BEPS Action Plan, these are still being undermined by a lack of implementing these efforts in a concerted way across all jurisdictions. To prevent this, states need to implement stricter beneficial ownership disclosure requirements requiring all legal persons, especially those registered in low corporate transparency states, to disclose ultimate beneficial owners of interests and assets. This will give tax administrations better data on the flow of funds and ownership structure and will make it more difficult for tax evaders to use shadow corporate vehicles.

In addition, cross-border collaboration will be required to ensure that beneficial ownership data is properly shared between jurisdictions. Although beneficial ownership transparency requirements have already been imposed by the Financial Action Task Force (FATF), the effectiveness of the measures remains incomplete. By combining these disclosures with audit powers based on artificial intelligence, tax administrations would be better positioned to monitor illegal activity and follow the ownership chain abroad. For instance, AI systems might match up beneficial ownership information with other databases of financial information, highlighting discrepancies or red- flagged trends for further scrutiny.

A combination of AI-enhanced audits and more beneficial ownership disclosure requirements would enhance GAAR's ability to prevent tax evasion, while creating a more transparent and accountable worldwide tax framework. These steps would not only deter aggressive tax avoidance but also equip governments with the means they have to detect and take action against tax avoidance before it can become airborne on a large scale. By reforming their anti-avoidance tools in this manner, nations can be able to ensure that their tax systems are resilient against more complex tax avoidance strategies.

CONCLUSION

The keen analysis of India's Double Taxation Avoidance Agreements (DTAAs) and cross-border tax administration determines a system requiring imperative reform and modernization. As India has emerged as a growing source for technology, manufacturing, and services across the world, the inadequacies of its existing framework of international taxes have become more discernible. Literature always emphasizes that whereas DTAAs have hitherto been leading the way in minimizing tax barriers, promoting foreign direct investment, and introducing a touch of certainty into MNCs, they are now confronting the pace of digital business models, telecommuting, and the spread of intangible assets.

One of the key conclusions is that India's current DTAA provisions, especially concerning Permanent Establishment (PE), Significant Economic Presence (SEP), and taxing digital and virtual transactions, are lacking to effectively address the implications of a digitalized economy. High thresholds of SEP, residual physical presence tests, and no clear rules on cloud computing, cryptocurrencies, and gig economy platforms have led to loopholes in regulation. These loopholes, besides enabling big digital firms to reduce their Indian tax burdens, also lead to government revenue losses of gargantuan proportions-losses which are further aggravated by base erosion and treaty shopping behavior. The readings indicate that India needs to align its tax treaties with global reforms like the OECD's Pillar I and Pillar II proposals, which prescribe user-based profit allocation and global minimum taxation, respectively.

India's administrative aspects of the tax system offer more challenges. The presence of state and federal tax authorities, duplicative jurisdictions, and the levy of state-level digital service taxes have added to MNCs' compliance burden, typically resulting in lengthy controversies and higher litigation expenses. Empirical data mentioned in the literature suggest that administrative burdens in taxation can account for as much as 22% of a multinational's overall tax expense, and dispute resolution processes-including the Mutual Agreement Procedure (MAP)-frequently take several years. Such inefficiencies not only discourage foreign investment but also adversely affect the image of the perceived efficiency and equity of India's tax regime.

Additionally, the review acknowledges that administrative inefficiencies are systemic rather than being procedural in character. The absence of harmonized rules on digital tax, pending settlement of tax disputes, and lack of expert forums on international tax issues have cumulatively created a fragmentary and unsure tax regime. The literature indicates that the establishment of expert- judgment centralized tax dispute resolution courts, required arbitration time periods, and the use of state-of-the-art technologies-including AI-powered compliance products and blockchain- enhanced audit trails-would go a long way toward improving the efficiency, transparency, and certainty of India's tax administration.

The second key theme is that DTAAs and domestic taxation policies need to be future-focused and inclusive. India's digital economy, which is now the world's third largest, has grown faster than the ability to meet new business models like cross-border digital advertising, cloud computing, and telecommuting. In parallel, however, there is a digital divide, with millions of people with no access to basic digital facilities and services, and thus a need to have policies that facilitate tax equity along with digital inclusiveness.

In general, the literature converges to conclude that India is at a crossroads. In order to protect its tax base and drive sustainable economic growth in the digital economy age, India needs to make a complete overhaul of its tax treaties with other countries and administration. This would involve upgrading DTAAs so that India stays in step with digital and remote work economy tendencies, aligning anti-avoidance measures with international standards, and investing in technological and institutional capacities required for tax governance. Such all-encompassing reform is the only way of ensuring India ends up with a fair, competitive, and stable tax regime appropriate for both the state's needs and the increasingly global business community.