



Technology transfer and investment law

edited by
Zoltan Vig

Technology transfer and investment law

edited by

Zoltan Vig

Ankara, Budapest, Mauritius, Novi Sad, Szeged, Skopje,
Yozgat
2024

© Mael Baummar, 2024
© Toni Deskoski, 2024
© Vangel Dokovski, 2024
© Tamara Gajinov, 2004
© Kitti Katalin Gondos, 2024
© Rajendra Parsad Gunpath, 2024
© Irina Iacovleva, 2024
© Ljuben Kocev, 2024
© Marija Mijatovic, 2024
© Jovana Tomic, 2024
© Mehmet Cemil Türk, 2024
© Marie Valerie Uppiah, 2024
© Zoltan Vig, 2024

This collection of studies is a joint publication of
Department of Business Law, Faculty of Economic and Social
Sciences of the Budapest University of Technology and Economics,
Budapest, Hungary
Department of Law, Faculty of Law & Management, University of
Mauritius, Mauritius
Department of Private International Law, Faculty of Law, University
of Szeged, Szeged, Hungary
Faculty of Law and Business Studies Dr Lazar Vrkatić, Novi Sad,
Serbia
Faculty of Law, Ankara Yıldırım Beyazıt University, Ankara,
Turkey
Faculty of Law, Yozgat Bozok University, Yozgat, Turkey
Iustinianus Primus Faculty of Law, Ss. Cyril and Methodius
University, Skopje, Macedonia

ISBN 978-963-421-978-1

Table of contents

Zoltan Vig: Editorial: Technology transfer and investment law	6
Mael Baummar: E-data collection and privacy: legal and ethical issues of big data	14
Toni Deskoski, Vangel Dokovski, Ljuben Kocev: Exploring the impact of new generation model BITs on technology transfer and sustainable development	46
Kitti Katalin Gondos: Intellectual property rights (IPR) management in public procurement	74
Rajendra Parsad Gunpath: Foreign direct investments: the spillover effect - the Mauritian success showcase study	100
Irina Iacovleva: The intersection of intellectual property and technology transfer	118
Marija Mijatovic, Tamara Gajinov, Jovana Tomic: Artificial intelligence consequences: the electronic personhood concept of autonomous robots through EU soft law sources	136
Mehmet Cemil Türk: Legal status of commercial enterprises headquartered outside Turkey	160
Marie Valerie Uppiah: The Pan African Investment Code: A catalyst for investment and transfer of technology across the African Continent?	182

Toni Deskoski*
Vangel Dokovski**
Ljuben Kocev***

Exploring the impact of new generation model BITs on technology transfer and sustainable development

Abstract: In the context of globalization, foreign direct investments (FDIs) play a pivotal role in the economic development strategies of nations. The widespread expansion of multinational corporations has led to the rise of foreign-owned or dominated trading companies, often placing FDI in a secondary position compared to portfolio investments. However, beyond providing capital, these investments frequently bring technological advancements, managerial expertise, innovation, and access to global markets, fostering more sustainable and comprehensive growth for the host country.

The appeal of a nation to foreign investors is shaped by three key factors. First, the overall economic conditions are crucial - countries experiencing strong economic growth naturally become more attractive to investors. Second, the political environment is equally important, as stability encourages foreign investors to commit. Lastly, legal certainty, which is closely tied to the country's legal framework and policies, is vital for ensuring investor confidence and predictability. In this context, FDIs play a critical role in driving economic development by introducing fresh capital, technology, and

* Toni Deskoski, PhD, full professor, Ss. Cyril and Methodius University in Skopje, Iustinianus Primus Faculty of Law, North Macedonia, e-mail: t.deskoski@pf.ukim.edu.mk; ORCID iD: 0009-0000-3481-5951.

** Vangel Dokovski, PhD, associate professor, Ss. Cyril and Methodius University in Skopje, Iustinianus Primus Faculty of Law, North Macedonia, e-mail: v.dokovski@pf.ukim.edu.mk; ORCID iD: 0009-0007-6808-6532.

*** Ljuben Kocev, PhD, assistant professor, Ss. Cyril and Methodius University in Skopje, Faculty of Economics, North Macedonia, e-mail: ljuben.kocev@eccf.ukim.edu.mk; ORCID iD: 0000-0002-5039-6643.

expertise that generate a wide range of benefits for the host economy, from infrastructure development to job creation.

Technology transfer, in this context, refers to the movement of scientific production or distribution methods between enterprises, institutions, or nations facilitated through foreign investment, international trade, patent licensing, technical assistance, or training. This paper will explore the potential of technology transfer within the framework of new-generation Bilateral Investment Treaties (BITs) and their broader implications for achieving sustainable development in a rapidly evolving global economy. New Model BITs are designed to facilitate FDI from capital-rich and highly skilled economies, predominantly members of the OECD, into less developed nations. These agreements aim to provide legal protection and stability for foreign investors, thereby reducing risks associated with investing in emerging markets. As a result, BITs promote the flow of capital, technology and expertise from developed countries to support the economic growth of the recipient nations.

Keywords: BITs, foreign investments, technology transfer, investors, economic development

1. Introduction

In an increasingly interconnected global economy, foreign direct investments (FDIs) have become a cornerstone of economic development strategies worldwide. The liberalization of trade and investment regimes, coupled with the accelerated pace of globalization, has encouraged nations to compete for FDIs to enhance their economic potential. Historically, the proliferation of multinational corporations has facilitated the rapid expansion of cross-border investment flows.⁹⁹ FDIs distinguish themselves by providing capital and many auxiliary benefits for host countries - technological innovation, managerial expertise, and access to global supply chains - that

⁹⁹ John H. Dunning, *Multinational Enterprises and the Global Economy* (2nd edn, Edward Elgar Publishing 2008) 295.

can have transformative effects on host economies.¹⁰⁰ These attributes make FDI a critical driver of sustainable and inclusive growth.

For developing nations, in particular, FDIs represent an opportunity to bridge gaps in domestic savings, enhance industrialization efforts, and accelerate knowledge transfer.¹⁰¹ The cumulative impact of these benefits is the promotion of more sustainable growth trajectories that align with long-term economic development objectives. Global trade liberalization and regional integration have enabled multinational corporations to establish international production networks, allowing even small countries to attract investments by serving broader regional or global markets from a single location.¹⁰²

FDIs thus stand at the intersection of economic growth, technological progress, and global integration. For host countries, especially in the developing world, FDIs offer a pathway to accelerate industrialization, build infrastructure, and create jobs. For investors, FDIs provide access to untapped markets, cost advantages, and opportunities for global diversification. The dynamic interplay between these motivations underscores the importance of creating an enabling environment that aligns the interests of investors with the developmental priorities of host nations. According to Borensztein et al., FDIs are contributing more to growth than domestic investment.¹⁰³ Similarly, Campos and Kinoshita have

¹⁰⁰ OECD, *Foreign Direct Investment for Development: Maximising Benefits, Minimizing Costs* (OECD Publishing 2002). UNCTAD, *World Investment Report 2013: Global Value Chains: Investment and Trade for Development* (United Nations 2013).

¹⁰¹ Eduardo Borensztein et al, 'How Does Foreign Direct Investment Affect Economic Growth?' (1998) 45 *Journal of International Economics*, 115.

¹⁰² Magnus Blomström and Ari Kokko 'The Economics of Foreign Direct Investment Incentives' (2003) Centre for Economic Policy Research 6.

¹⁰³ Borensztein et al. (1998) 115.

found that the effect of FDI on economic growth in transition economies is positive and statistically significant.¹⁰⁴

One of the most critical mechanisms through which FDI impacts host economies is technology transfer. In the broadest sense, technology transfer is defined as the process of sharing and disseminating knowledge, skills, scientific discoveries, production methods, and other innovations among universities, government agencies, private firms, and other institutions.¹⁰⁵ In terms of investment, technology transfer refers to the movement of knowledge, technical skills, and innovative practices from the investing entity to the host nation. Technology transfer occurs through various channels, such as joint ventures, licensing agreements, and the establishment of research and development (R&D) facilities.¹⁰⁶ In the context of developing economies, the transfer of advanced technologies and managerial expertise can significantly enhance productivity, stimulate industrialization, and elevate the global competitiveness of domestic industries. However, the extent to which these benefits materialize depends on the absorptive capacity of the host economy, including the availability of skilled labor, the quality of education systems, and the presence of complementary infrastructure.¹⁰⁷

It is worth noting that the benefits of FDIs have been challenged, with increasing concerns over the past decade about their potential negative impact on the environment. However, several studies have found that no direct correlation exists

¹⁰⁴ Nauro F Campos and Yuko Kinoshita, 'Foreign Direct Investment as Technology Transferred: Some Panel Evidence from the Transition Economies' (2002) 70 *The Manchester School* 417.

¹⁰⁵ David B Audretsch et al, *Technology Transfer in a Global Economy* (Springer Publishing 2012) 1.

¹⁰⁶ David B. Audretsch et al, 'Technology Transfer in a Global Economy' (2014) 39 *Journal of Technological Transfer* 301.

¹⁰⁷ Borensztein et al. (1998) 115.

between FDI and environmental degradation.¹⁰⁸ Nevertheless, countries are strongly encouraged to pursue strong environmental policies to ensure that potential investors act responsibly toward the environment.

While many aspects factor into the decision-making of investors, in essence, the attractiveness of a country to foreign investors is a function of three interrelated factors: economic conditions, political stability, and legal certainty.

First, robust economic fundamentals are indispensable. Countries with sustained economic growth, macroeconomic stability, and growing consumer markets naturally attract investors seeking profitable opportunities. The availability of skilled labor and the presence of critical infrastructure further amplify the appeal of these destinations.

Second, political stability is a critical determinant of investor confidence. Volatile political environments and frequent changes in government policies deter investors by increasing the unpredictability of the investment climate. Conversely, a stable and transparent governance structure sends a strong signal to foreign investors about the safety and security of their investments.

Third, legal certainty emerges as a key driver of FDI flows. Transparent regulatory frameworks, enforceable property rights, and adherence to international standards ensure that investors can navigate the host country's legal environment

¹⁰⁸ Teodoros Christoforidis and Constantinos Katrakilidis, 'Does Foreign Direct Investment Matter for Environmental Degradation? Empirical Evidence from Central–Eastern European Countries' (2022) 13(4) *Journal of the Knowledge Economy* 2665; see also Lyubov Tsoy and Almas Heshmati, 'Is FDI Inflow Bad for Environmental Sustainability?' (2024) 26 *Environment, Development and Sustainability* 28843.

with confidence. The predictability of these frameworks reduces the perceived risks of expropriation, arbitrary regulatory changes, or discriminatory practices, making the host country a more attractive destination for FDI.

In recent years, international frameworks such as Bilateral Investment Treaties (BITs) have played a pivotal role in shaping the legal and institutional environment for FDIs. The new generation of BITs goes beyond traditional investment protections to incorporate provisions aimed at promoting sustainable development. These include clauses on environmental standards, labor rights, and technology-sharing obligations. By addressing both investor concerns and host country priorities, modern BITs represent a shift towards more balanced and equitable investment arrangements.

This paper aims to explore the role of FDIs in economic development, with a particular focus on the interplay between FDI and technology transfer, demonstrated through the evolution of modern BITs. The next chapter offers an overview of the current state of Investor-State Dispute Settlement (ISDS), followed by a discussion of the challenges in existing regulations. The paper then explores issues related to sustainable development in BITs before analyzing the most recent draft model BIT from North Macedonia.

2. The state of play and potential challenges in the existing ISDS mechanism

The Investor-State Dispute Settlement (ISDS) remains a pivotal mechanism in international investment law, enabling foreign investors to seek redress against host states through arbitration. ISDS is primarily governed by international agreements that can be in the form of Bilateral Investment Treaties (BITs), Multilateral Treaties, or Free Trade Agreements (FTAs). In

addition, the majority of countries worldwide have adopted investment laws.¹⁰⁹

While there is no precise information on the number of multilateral agreements, according to available statistical information, there are roughly 700 FTAs in circulation,¹¹⁰ and almost 3.000 BITs.¹¹¹ The large number of agreements in circulation has significant implications for the volume and complexity of potential disputes that may arise under the Investor-State Dispute Settlement (ISDS) system. Aside from the increased number of potential disputes, this can also lead to a multiplicity of jurisdictions and applicable laws, overlapping protections, fragmentations, complexity, uncertainty regarding the dispute resolution method, and the potential for increased liability of the host state.

According to UNCTAD Investment Dispute Settlement Navigator, as of 31 December 2023, there are 1332 known treaty-based ISDS cases.¹¹² Out of these cases, 354 cases are still pending, 958 cases have been concluded, and for 20 cases, the status is unknown.¹¹³

¹⁰⁹ According to UNCTAD, *Investment Law Navigator*, there are 201 investment laws in circulation <<https://investmentpolicy.unctad.org/investment-laws>> accessed 1 November 2024.

¹¹⁰ Jean-Frederic Morin and Sikina Jinnah, 'The Untapped Potential of Preferential Trade Agreements for Climate Governance' (2018) 27(3) *Environmental Politics* 541.

¹¹¹ According to UNCTAD, *International Investment Agreements Navigator*, there are 2834 BITs, of which 2221 are in force <<https://investmentpolicy.unctad.org/international-investment-agreements>> accessed 1 November 2024.

¹¹² UNCTAD, *Investment Dispute Settlement Navigator* <<https://investmentpolicy.unctad.org/investment-dispute-settlement>> accessed 1 November 2024).

¹¹³ *ibid.*

Outcome	Number of cases
Decided in favor of State	361 (37.7%)
Decided in favor of investor	268 (28%)
Settled	177 (18.5%)
Discontinued	128 (13.4%)
Decided in favor of neither party (liability found but no damages were awarded)	24 (2.5%)
Total number of concluded cases	958

Table 1: Outcomes of the concluded known treaty-based ISDS cases¹¹⁴

Table 1 shows that host states have won nearly 40% of all concluded treaty-based ISDS cases, while investors have succeeded in 28%. At first glance, this suggests states might have an advantage or equal footing in the dispute mechanism. However, these numbers are incomplete, as 42% of cases were resolved without a tribunal's final decision - 18.5% through settlement and 13.4% through discontinuation. In such cases, it cannot be assumed that the host state dominated or prevailed over the investor since the settlement or the discontinuation might be the result of cost considerations, abandonment of the proceedings, change in the political or economic circumstances in the host country, or simply choosing the less harmful option.

Nevertheless, the ISDS mechanism has faced criticism for perceived biases, inconsistent rulings, and high costs. Since 2017, UNCITRAL's Working Group III has been engaged in discussions to reform the ISDS system, focusing on issues such as arbitrator appointments, costs, and transparency.¹¹⁵ The EU

¹¹⁴ *ibid.*

¹¹⁵ United Nations Commission on International Trade Law (UNCITRAL), *Working Group III: Investor-State Dispute Settlement Reform* <https://uncitral.un.org/en/working_groups/3/investor-state> accessed 2 November 2024.

is actively working to advance comprehensive reforms of the ISDS mechanism, aiming to uphold the highest standards of legitimacy, transparency, and impartiality. In particular, since 2015, the EU has promoted a reformed approach to investment dispute settlement by incorporating the Investment Court System (ICS) into bilateral agreements, ensuring greater independence, transparency, and recognition of states' regulatory rights. At the multilateral level, the EU is working through UNCITRAL to establish a permanent Multilateral Investment Court to replace existing arbitral tribunals established under thousands of existing bilateral investment treaties (BITs) and the ICS.¹¹⁶

In addition, ISDS has been scrutinized for potentially hindering governments' abilities to implement regulations addressing environmental and human rights issues. In July 2023, the UN Special Rapporteur on Human Rights and the Environment emphasized that ISDS has catastrophic consequences for the environment and human rights and has effectively discouraged governments from implementing crucial regulations to tackle environmental and human rights crises.¹¹⁷

On the other side, it seems that investors favor the existing system. A 2020 survey conducted by the School of International Arbitration, Queen Mary University of London, indicated that while investors recognize the need for reforms to improve the

¹¹⁶ European Commission, *Reform of the ISDS Mechanism* <https://policy.trade.ec.europa.eu/enforcement-and-protection/dispute-settlement/investment-disputes/reform-isds-mechanism_en?> accessed 2 November 2024.

¹¹⁷ United Nations document no A/78/168, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment*, David R Boyd, presented at the 78th session of the UN General Assembly, 13 July 2023 <<https://documents.un.org/doc/undoc/gen/n23/205/29/pdf/n2320529.pdf?>> accessed 2 November 2024.

consistency and efficiency of ISDS, they also express satisfaction with certain aspects of the current system.¹¹⁸

In summary, the ISDS mechanism is at a critical crossroads, striving to balance the protection of investors with the sovereign rights of states and the broader public interest. Ongoing reform processes aim to address existing challenges and adapt the system to contemporary global dynamics. However, it seems that so far, no significant shift in a positive direction has been made.

3. Challenges in the existing ISDS mechanism regarding investments aimed at achieving sustainable development

Foreign Direct Investment tends to flow into sectors with high growth potential, profitability, and alignment with global economic trends. Areas where FDI is commonly directed include, among others, technology and telecommunications, manufacturing, financial services, real estate and infrastructure, and energy.¹¹⁹

In the past decades, an emphasis has been put on investment in green and clean energy. Such investments are fundamental to advancing sustainable development, as they promote environmental sustainability, economic growth, and social equity. The transition to renewable energy sources, such as solar, wind, and hydro, plays a critical role in reducing greenhouse gas emissions and mitigating climate change, thereby contributing to the preservation of ecosystems.

¹¹⁸ School of International Arbitration, Queen Mary University of London, 2020 *International Arbitration Survey: Investor-State Dispute Settlement (ISDS)* <<https://www.qmul.ac.uk/arbitration/research/2020-isd/>> accessed 2 November 2024.

¹¹⁹ UNCTAD, *Investment Statistics and Trends* <<https://unctad.org/topic/investment-investment-statistics-and-trends>> accessed 4 November 2024.

Furthermore, such investments stimulate economic growth by fostering the development of green technologies and creating employment opportunities within the renewable energy sector, thus supporting inclusive and long-term economic development.

In addition, green energy investments are essential for enhancing energy access and addressing social inequalities, particularly in remote or underserved regions. Renewable energy solutions, including solar and small-scale wind systems, offer affordable and reliable electricity to communities, thereby alleviating poverty and improving quality of life. These investments promote the sustainable use of natural resources by relying on renewable energy, aligning with principles of responsible consumption and resource conservation. In this way, green energy investments contribute to the overarching goals of sustainable economic growth, social inclusion, and environmental stewardship.

According to research conducted by the International Energy Agency (IEA), investments in clean energy have significantly increased in the last 10 years. As evident from Figure 1, investments in clean energy in 2024 have almost doubled in comparison with such investments in 2015. Additionally, investments in fossil fuels have been decreasing, and consequently, in 2024, investments in clean energy are almost twice as much as investments in fossil fuels.

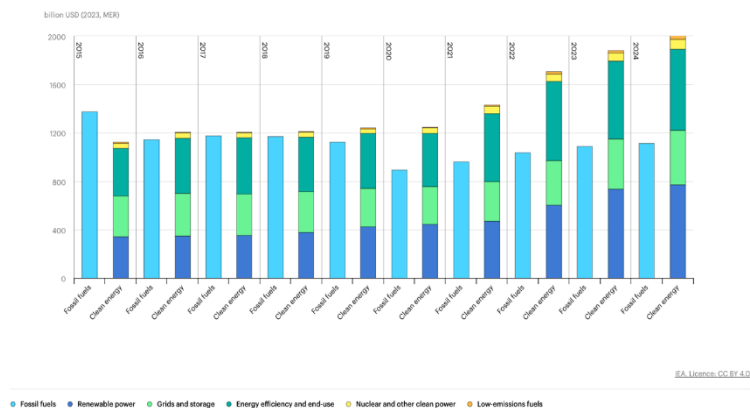


Figure 1: Global investment in clean energy and fossil fuels, 2015-2024¹²⁰

However, while there is an increase in investments in clean energy, there is a disbalance in the investments since Emerging Markets and Developing Economies (EMDE) outside China account for only around 15% of global clean energy spending.¹²¹

The Energy Charter Treaty (1994) and the Paris Agreement (2015) are among the key international instruments for regulating the global energy sector. Nevertheless, in practice, both agreements have not lived up to their potential or fully realized the objectives for which they were created.

The Paris Agreement, while envisaged as a significant step in global climate policy, has faced challenges in achieving its goals. Its reliance on voluntary, non-enforceable Nationally Determined Contributions (NDCs) means countries can set

¹²⁰ International Energy Agency, *World Energy Investment 2024* <<https://www.iea.org/reports/world-energy-investment-2024>> accessed 4 November 2024.

¹²¹ *ibid.*

insufficient targets. Additionally, the agreement struggles with weak carbon market mechanisms, unequal responsibilities between developed and developing countries, and inadequate support for climate adaptation and loss and damage. The failure of major emitters, like the U.S. and China, to take sufficient action further undermines its effectiveness.

The Energy Charter Treaty has faced criticism for being outdated in the context of modern energy challenges. It was designed during a different energy landscape and does not align with current global efforts to combat climate change or transition to renewable energy. The treaty's focus on investment protection and energy trade has also been seen as insufficient in addressing environmental goals and sustainable energy practices, making it difficult to ensure compliance with climate commitments.¹²² Additionally, its provisions are often viewed as outdated, disproportionately benefiting developed countries and large corporations, raising concerns about fairness and sovereignty.¹²³

A major point of contention is the ISDS mechanism, which allows foreign investors to sue governments over policies that

¹²² Nathalie Bernasconi-Osterwalder, 'Energy Charter Treaty Reform: Why Withdrawal is an Option' (2021) *Investment Treaty News, International Institute for Sustainable Development* 24 June 2021 <<https://www.iisd.org/itn/en/2021/06/24/energy-charter-treaty-reform-why-withdrawal-is-an-option/>> accessed 3 November 2024; see also Mattia Colli Vignarelli, 'Making the Energy Charter Treaty Climate-Friendly: An (Almost) Impossible Leap' (2022) 13 *European Yearbook of International Economic Law*.

¹²³ Kyla Tienhaara and Christian Downie, 'Risky Business? The Energy Charter Treaty, Renewable Energy, and Investor-State Disputes' (2024) 24(3) *Global Governance: A Review of Multilateralism and International Organizations* 451, 471; Endrius Cocciolo and Leonie Reins, 'A Critical Review of the Energy Charter Treaty from an Earth System Law Perspective' (2024) *Transnational Environmental Law* 1, 27.

negatively impact their investments.¹²⁴ This has raised fears that governments might hesitate to implement climate-friendly policies, such as phasing out fossil fuels, due to the risk of expensive lawsuits.

While initially signed and ratified by more than 50 parties worldwide, including supranational organizations such as the EU and Euroatom, today, the number of signatories is slowly decreasing.¹²⁵ Efforts to reform the ECT, particularly to address climate concerns and ISDS, have been slow, with countries like France, Germany, Italy, and Poland, among others, withdrawing from the treaty due to its misalignment with environmental goals. As a result, the ECT is increasingly seen as a barrier to achieving global climate objectives.

The European Union (EU) has been actively engaged in reforming the Investor-State Dispute Settlement (ISDS) mechanism, particularly concerning the Energy Charter Treaty (ECT). In 2022, the EU and other ECT contracting parties reached an agreement in principle to modernize the treaty. This modernization aimed to align the ECT with the EU's investment policy reforms, which emphasize sustainable development and climate action. However, the finalization of this agreement faced obstacles. Notably, in November 2022, the Energy Charter Conference failed to adopt the modernized treaty due to a lack of qualified majority support among EU member states.¹²⁶ In response to these challenges and ongoing concerns

¹²⁴ Myriam Gicquello and Emily Webster, 'The Investment Treaty Regime and the Clean Energy Transition' (2022) 13 *European Yearbook of International Economic Law*.

¹²⁵ *International Charter Treaty, Contracting Parties and Signatories of the Energy Charter Treaty* <<https://www.energychartertreaty.org/treaty/contracting-parties-and-signatories/>> accessed 3 November 2024).

¹²⁶ European Parliament resolution of 24 November 2022 on the outcome of the modernisation of the Energy Charter Treaty, Procedure 2022/2934(RSP)

about the ECT's compatibility with EU law and climate objectives, the EU decided to withdraw from the treaty. On June 27, 2024, the EU notified the ECT Secretariat of its withdrawal, marking a significant shift in its approach to international investment agreements.¹²⁷

The EU's departure from the Energy Charter Treaty (ECT) and its push to reform the Investor-State Dispute Settlement (ISDS) mechanism highlight a shift toward investment frameworks that prioritize sustainability and climate action. Traditional ISDS mechanisms, often criticized for limiting governments' ability to regulate in the public interest, are being replaced with alternatives like the Investment Court System (ICS) or proposals for a Multilateral Investment Court (MIC). These changes aim to balance investor protection with the need for states to address pressing environmental, social, and governance (ESG) challenges.

4. Sustainable development issues in BITs

Bilateral Investment Treaties (BITs) reflect the common practice of States. However, the significant variation in the standards set forth in these treaties makes it challenging to assert that they establish a consistent rule of customary international law. At first glance, bilateral investment treaties may appear uniform, prompting some scholars to argue that they contribute to customary international law. But, upon closer scrutiny, it becomes evident that their provisions differ widely, with each treaty representing a carefully negotiated compromise between

<https://www.europarl.europa.eu/doceo/document/TA-9-2022-0421_EN> accessed 5 November 2024.

¹²⁷ European Commission, *Energy Charter*

<https://energy.ec.europa.eu/topics/international-cooperation/international-organisations-and-initiatives/energy-charter_en?> accessed 5 November 2024.

the contracting parties. For example, an analysis of a State like China reveals that its treaties have varied over time, shaped by changing circumstances and differing motivations. Consequently, these treaties are more appropriately viewed as creating *lex specialis* agreements between the parties rather than forming a general principle of customary international law. Nonetheless, the widespread recognition of their significance among international lawyers, coupled with their potential to influence the development of customary international law, underscores the importance of these treaties.¹²⁸

BITs are often concluded between unequal parties, reflecting an inherent asymmetry that has always characterized this area of international law. Typically, these treaties involve a developed capital-exporting country and a developing capital-importing country in race to attract foreign direct investment. BITs commonly include provisions specifying their entry into force, duration, and the legal status of investments after their termination or expiration. They often provide in deep protection for investments over extended periods, sometimes up to thirty years, and may continue to protect investments for an additional 10–20 years after termination (sunset clauses). Most agreements extend this protection to investments made both before and after the treaty's entry into force.

This temporal aspect is crucial when determining whether environmental standards introduced in a BIT apply to investments made before the treaty's effective date. For example, if a new standard is introduced, foreign direct investments may face compliance challenges, particularly when States, in exercising their regulatory powers, impose these standards retroactively. Similarly, questions arise about whether changes in national legislation that heighten environmental

¹²⁸ Muthucumaraswamy Sornarajah, *The International Law on Foreign Investment* (3rd edn, Cambridge University Press 2010) 175.

protection can impact foreign investments protected under a BIT signed years earlier.

Historically, BITs have granted protection primarily to investments made after their entry into force, reflecting their primary purpose of encouraging new investments. However, more recent agreements, such as the Argentina–US BIT, have broadened their scope to include investments existing at the time of entry into force as well as those made subsequently. Case law also support this point of view. For instance, in *Tecnicas Medioambientales Tecmed SA v. Mexico*, the tribunal distinguished between the application of a BIT to investments made before its entry into force and its applicability to violations occurring before that date. While the tribunal acknowledged that the investment qualified for protection under the BIT, it ruled out retroactive application to actions taken by the host State prior to the treaty’s effective date.¹²⁹

In general, BITs are understood to protect investments only from measures enacted by the host State after the treaty’s entry into force. This principle underscores the forward-looking nature of BITs, which primarily aim to promote and safeguard new investments while accommodating evolving standards and legal frameworks.¹³⁰

In earlier generations of Model BITs, national treatment and most-favored-nation treatment were relative standards. Alongside these relative standards, BITs also imposed absolute standards of treatment, such as fair and equitable treatment and full protection and security. These guarantees ensure the

¹²⁹ Nigel Blackaby, Alan Redfern and Martin Hunter, *Redfern and Hunter on International Arbitration* (Oxford University Press 2018) 470.

¹³⁰ Stephan Schill, *The Multilateralization of International Investment Law* (Cambridge University Press 2009) 73.

protection of foreign investors regardless of how the host State treats its own nationals or investors from third countries.

In contrast, new generations of BITs increasingly integrate broader objectives, incorporating provisions that promote sustainable economic development, respect for human rights, and environmental protection. A defining feature of BITs remains the typical dynamic of their conclusion: most are agreements between a developed country and a developing country. Among the thousands of BITs signed to date, only a small number of BITs are concluded between two developed countries. This reflects the reduced need for BITs in developed countries, where stable democratic institutions, robust legal systems, independent judiciaries, and minimal political or non-commercial risks already provide a secure environment for foreign investments.

Despite their variations, the essential structure of BITs has remained consistent. They are designed around five fundamental components: (1) definition of investment and investor, (2) admission of foreign investors, (3) fair and equitable treatment of investors, (4) compensation in cases of expropriation, (5) dispute resolution mechanisms.¹³¹

While the specific terms of a BIT may vary depending on the negotiating States, most treaties follow similar templates derived from established models. Their key objectives are to:

- Provide fair and equitable treatment, full protection and security, most-favored-nation treatment, and national treatment to foreign investors.
- Safeguard investments from expropriation without compensation.
- Protect against adverse or discriminatory treatment.

¹³¹ *ibid.*

- Ensure effective remedies through international arbitration, whether between States or directly between investors and host States, for breaches of the treaty's provisions.

Ultimately, BITs aim to create a stable and predictable legal framework for foreign investments, ensuring both their protection and the opportunity for equitable resolution of disputes.¹³²

The older generation of BITs largely omitted provisions or standards addressing environmental protection. In international investment law, prior to the emergence of the new generation of model BITs, environmental protection, technology transfer and sustainable development standards were primarily addressed through multilateral agreements, rather than bilateral ones. States that concluded BITs typically excluded environmental considerations, leaving such issues outside the scope of substantive protections or dispute resolution mechanisms.

The content of traditional BITs reflected this approach, as they did not accommodate environmental law in investment arbitration. Indeed, international investment agreements often failed to address environmental issues or, in some cases, explicitly excluded them. This created a significant tension: legislative measures necessary to fulfill environmental obligations could potentially expose States to liability under investment treaties, particularly if those measures were perceived as violating investors' rights.

Historically, the absence of environmental provisions in model BITs discouraged States from including such standards in their agreements. However, growing global awareness of environmental challenges, particularly the urgent need to

¹³² Surya Subedi, *International Investment Law, Reconciling Policy and Principle* (2008) 1.

address climate change and reduce greenhouse gas emissions, has shifted the landscape. The increasing adoption of international multilateral environmental agreements has highlighted the limitations of the older BIT models and prompted a reevaluation of treaty priorities.¹³³

As a result, the new generation of BITs places greater emphasis on sustainable development, explicitly incorporating environmental protection standards alongside traditional investment protections. This evolution reflects a broader recognition of the importance of balancing economic development with environmental stewardship, ensuring that investment treaties align with contemporary global priorities.

4.1. The language of the new model BITs

The new generation of Model BITs emerging after 2010, reflects a shift towards sustainable development. These modern agreements go beyond traditional investment protection to place significant emphasis on environmental protection, labor standards, and socially responsible business practices. The language used in these modern BITs reveals diverse approaches to enhance environmental protection obligations, serving various policy objectives. Analyzing the content of environmental provisions in these treaties provides insight into the specific purposes they are designed to achieve. These can be classified into the following seven categories:¹³⁴

¹³³ *Climate Law in Investment Arbitration – Two Sides of the Same Coin* <<https://www.acerislaw.com/climate-law-in-investment-arbitration-two-sides-of-the-same-coin/>> accessed 5 November 2024.

¹³⁴ K Gordon and J Pohl, 'Environmental Concerns in International Investment Agreements: A Survey' (OECD Working Papers on International Investment 2011/01, OECD Publishing 2011).

- (1) General language in preambles: Preambles often include references to environmental issues, underscoring the parties' commitment to environmental protection as a shared concern.
- (2) Reservation of policy space for environmental regulation (broad scope): Clauses that preserve the host State's sovereign right to regulate environmental matters across the entire treaty.
- (3) Reservation of policy space for specific issues: Provisions reserving regulatory authority for targeted matters, such as performance requirements or exceptions to national treatment obligations.
- (4) Indirect expropriation: Language clarifying the distinction between legitimate regulatory actions for environmental protection and measures constituting indirect expropriation.
- (5) Non-lowering of environmental standards: Commitments by States to avoid weakening environmental standards to attract or retain investments.
- (6) Environmental issues in investor-state dispute settlement (ISDS): Provisions addressing how environmental considerations are handled in ISDS, ensuring that environmental protections are not undermined by investor claims.
- (7) General promotion of environmental progress and cooperation: Clauses encouraging collaborative efforts to advance environmental protection and sustainable development practices.

5. Draft Model BIT of North Macedonia

Sustainable Development Investing (SDI) is a concept that involves directing capital in a way that not only seeks financial returns but also makes a positive contribution to sustainable development. This approach uses the Sustainable Development Goals (SDGs) as a guiding framework to assess and measure the outcomes of such investments. By aligning investment strategies with these global goals, SDI aims to address pressing

global challenges, such as environmental degradation, social inequality, and economic disparity, while still generating financial returns for investors. The introduction of the new Draft-Model BIT of North Macedonia marks a notable development, as it includes, for the first time, a dedicated chapter focused on investments that promote sustainable development. The new Draft-Model BIT is based on the EU Model Clauses for BITs (2023).¹³⁵

5.1. Corporate Social Responsibility (CSR)

In the new Draft-Model BIT (2024), the Parties recognize the critical role of corporate social responsibility (CSR) in fostering sustainable development. The Parties emphasize the importance of investors conducting comprehensive due diligence to identify and address negative impacts on various fronts, including environmental and labor conditions. This due diligence is expected to cover not just the operations of investors but also their supply chains and other business relationships. The Parties commit to promoting responsible business practices and encouraging enterprises to adopt CSR strategies that contribute to sustainable development. Furthermore, the treaty encourages the adoption of relevant international instruments that guide responsible business conduct.

Moreover, the Parties agree to facilitate the exchange of information and best practices, fostering an environment where investors and enterprises are better equipped to implement CSR and responsible business practices effectively. By sharing knowledge and practical solutions, the Parties aim to create a more sustainable and responsible investment landscape.

¹³⁵ The full text of the EU Model clause is available at <<https://investmentpolicy.unctad.org/international-investment-agreements/treaty-files/8390/download>> accessed 5 November 2024.

5.2. Health, safety, and environmental measures

Article 14 of the new Draft-Model BIT introduces a crucial provision that prohibits the Contracting Parties from relaxing domestic health, safety, or environmental regulations in order to attract foreign investment. In other words, a Contracting Party should not offer to waive or relax these regulations to encourage the establishment, expansion, or retention of an investment within its territory. The intent behind this provision is to ensure that investment activities do not undermine or compromise essential public regulations designed to protect human health, safety, and the environment. This reflects a growing awareness that sustainable economic development cannot be achieved at the expense of public welfare or environmental protection.

5.3. Labor standards

The Draft-Model BIT places significant emphasis on labor standards, recognizing that the violation of fundamental labor rights cannot be used as a means to attract or retain investments. According to the treaty, the Contracting Parties reaffirm their commitment to respecting, promoting, and implementing core labor standards as embodied in the International Labour Organization (ILO) Conventions that each Party has ratified. These standards include important principles such as the elimination of child labor, forced labor, and discrimination, as well as the right to freely chosen employment and the right to organize and bargain collectively. The Parties also agree to make ongoing and sustained efforts to ratify the fundamental ILO Conventions if they have not yet done so, further emphasizing their commitment to improving labor conditions within their jurisdictions.

5.4. Dialogue and cooperation on investment-related sustainable development issues

The new Draft-Model BIT stipulates that the Parties agree to engage in dialogue and cooperation, as appropriate, on investment-related issues concerning labor, environmental protection, and climate change that are of mutual interest. This cooperation is designed to complement and support the efforts already underway under existing bilateral and multilateral mechanisms. The intention is to enhance collaboration in these critical areas while ensuring alignment with broader international frameworks and agreements.

6. Conclusion

Foreign direct investments remain a crucial driver of economic growth, particularly for developing countries, by providing essential capital and technology. However, these investments can also raise significant challenges related to sustainable development, particularly in terms of environmental protection and human rights. The potential conflict between safeguarding investor rights under investment treaties and enforcing environmental regulations has become more evident in recent arbitration cases. With over 60 investment disputes involving environmental components since 2012, it is clear that such issues are of growing importance. As a result, the latest generations of model bilateral investment protection and promotion treaties increasingly incorporate provisions that balance the protection of foreign direct investment with the need to uphold environmental standards. This evolving approach reflects the growing recognition of the importance of sustainable development in international investment law. In fact, the new generation of Model BITs stipulates that the Parties agree to engage in dialogue and cooperation, as appropriate, on investment-related issues concerning labor,

environmental protection, and climate change that are of mutual interest. This cooperation is designed to complement and support the efforts already underway under existing bilateral and multilateral mechanisms. The intention is to enhance collaboration in these critical areas while ensuring alignment with broader international frameworks and agreements.

References

European Commission, *Reform of the ISDS Mechanism* <https://policy.trade.ec.europa.eu/enforcement-and-protection/dispute-settlement/investment-disputes/reform-isds-mechanism_en?> accessed 2 November 2024.

European Commission, *Energy Charter* <https://energy.ec.europa.eu/topics/international-cooperation/international-organisations-and-initiatives/energy-charter_en?> accessed 5 November 2024.

International Charter Treaty, *Contracting Parties and Signatories of the Energy Charter Treaty* <<https://www.energychartertreaty.org/treaty/contracting-parties-and-signatories/>> accessed 3 November 2024.

International Energy Agency, *World Energy Investment 2024* <<https://www.iea.org/reports/world-energy-investment-2024>> accessed 4 November 2024.

Morin J F and Jinnah S, 'The Untapped Potential of Preferential Trade Agreements for Climate Governance' (2018) 27(3) *Environmental Politics* 541.

OECD, *Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs* (OECD Publishing 2002).

School of International Arbitration, Queen Mary University of London, *2020 International Arbitration Survey: Investor-State Dispute Settlement (ISDS)* <<https://www.qmul.ac.uk/arbitration/research/2020-isds/>> accessed 2 November 2024.

United Nations Commission on International Trade Law (UNCITRAL), *Working Group III: Investor-State Dispute Settlement Reform* <https://uncitral.un.org/en/working_groups/3/investor-state> accessed 2 November 2024.

United Nations document no A/78/168, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment*, David R Boyd, presented at the 78th session of the UN General Assembly, 13 July 2023 <<https://documents.un.org/doc/undoc/gen/n23/205/29/pdf/n2320529.pdf>> accessed 2 November 2024.

Borensztein E et al, 'How Does Foreign Direct Investment Affect Economic Growth?' (1998) 45 *Journal of International Economics* 115.

Audretsch D B et al, *Technology Transfer in a Global Economy* (Springer Publishing 2012) 1.

Audretsch D B et al, 'Technology Transfer in a Global Economy' (2014) 39 *Journal of Technological Transfer* 301.

Tienhaara K and Downie C, 'Risky Business? The Energy Charter Treaty, Renewable Energy, and Investor-State Disputes' (2024) 24(3) *Global Governance: A Review of Multilateralism and International Organizations* 451, 471.

Blomström M and Kokko A, 'The Economics of Foreign Direct Investment Incentives' (2003) Centre for Economic Policy Research, 6.

Gicquello M and Webster E, 'The Investment Treaty Regime and the Clean Energy Transition' (2022) 13 *European Yearbook of International Economic Law*.

Campos N F and Kinoshita Y, 'Foreign Direct Investment as Technology Transferred: Some Panel Evidence from the Transition Economies' (2002) 70 *The Manchester School* 417.

Christoforidis T and Katrakilidis C, 'Does Foreign Direct Investment Matter for Environmental Degradation? Empirical Evidence from Central–Eastern European Countries' (2022) 13(4) *Journal of the Knowledge Economy* 2665;

Tsoy Ly and Heshmati A, 'Is FDI Inflow Bad for Environmental Sustainability?' (2024) 26 *Environment, Development and Sustainability* 28843.

Sornarajah M, *The International Law on Foreign Investment* (3rd edn, Cambridge University Press 2010) 175.

Blackaby N et al, *Redfern and Hunter on International Arbitration* (Oxford University Press 2018) 470.

Schill S, *The Multilateralization of International Investment Law* (Cambridge University Press 2009) 73.

Subedi S, *International Investment Law, Reconciling Policy and Principle* (2008) 1.

Colli Vignarelli M, 'Making the Energy Charter Treaty Climate-Friendly: An (Almost) Impossible Leap' (2022) 13 *European Yearbook of International Economic Law*.

Gordon K and Pohl J, 'Environmental Concerns in International Investment Agreements: A Survey' (OECD Working Papers on International Investment 2011/01, OECD Publishing 2011).

Bernasconi-Osterwalder N, 'Energy Charter Treaty Reform: Why Withdrawal is an Option' (2021) *Investment Treaty News*, International Institute for Sustainable Development 24 June 2021 <<https://www.iisd.org/itn/en/2021/06/24/energy-charter-treaty-reform-why-withdrawal-is-an-option/>> accessed 3 November 2024.

Climate Law in Investment Arbitration – Two Sides of the Same Coin <<https://www.acerislaw.com/climate-law-in-investment-arbitration-two-sides-of-the-same-coin/>> accessed 5 November 2024.

UNCTAD, *Investment Law Navigator* <<https://investmentpolicy.unctad.org/investment-laws>> accessed 1 November 2024.

UNCTAD, *International Investment Agreements Navigator* <<https://investmentpolicy.unctad.org/international-investment-agreements>> accessed 1 November 2024.

UNCTAD, *Investment Dispute Settlement Navigator* <<https://investmentpolicy.unctad.org/investment-dispute-settlement>> accessed 1 November 2024.

EU Model clauses <<https://investmentpolicy.unctad.org/international-investment-agreements/treaty-files/8390/download>> accessed 5 November 2024.