



Climbing up the Ladder: Technology Transfer-Related Policies in the Context of the Belt and Road Initiative

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ARTICLE

ABSTRACT

The grand Chinese endeavour, the Belt and Road Initiative (BRI), is a Chinese attempt to carve out its own economic development model. Technology transfer is essential to economic development and therefore it plays a central role in the BRI. While the World Trade Organization (WTO) envisages a liberal trade model for development including transfer of technology, does the BRI offer a different/alternative technology transfer model? This article deals with this question by analysing Chinese technology transfer-related policies, namely Intellectual Property (IP) and Foreign Direct Investment (FDI) policies in the context of the BRI. This article contrasts inbound/outbound Chinese technology transfer-related policies/practices and tries to forecast the impact of integrating these policies in the BRI.

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In the influential work, 'Kicking Away the Ladder',¹ it was argued that developed countries are imposing neoliberal policies on developing countries, especially in the context of the World Trade Organization (WTO), that they themselves did not adopt until they had become developed.² Yet, it was contended that China has defied this path by carving out its own development model.³

There is no doubt that China has emerged from being a developing country into a global economic power, accounting for 19.1% of global gross domestic product (GDP) trade value in the period from 2015–2017. China also became one of the largest trading partners for every country.⁴

Furthermore, China's ambitions have surpassed its national borders, seeking to forge new trade relations not only with its neighbours but also with other trading partners across the globe. *Time* magazine's foreign news editor, and present Goldman Sachs employee in Beijing, Joshua Cooper Ramo, suggested the term 'Beijing consensus', which was envisaged as an alternative to the neoliberal 'Washington Consensus', to refer to these developments.⁵

The 'Belt and Road Initiative' (BRI) is the hallmark of China's endeavours to assert itself as a global economic power. In today's knowledge-based economy, building a strong technological infrastructure is a key ingredient for development. In fact, it has been observed that technology transfer has long been deeply entrenched in Chinese Foreign Direct Investment (FDI) policy and that it remains essential if China is to reach the state of an innovative economy.⁶ It is clear that Intellectual Property (IP) also plays a great role in transfer of technology. In particular, technology transfer usually occurs through trade, FDI, movement of people and IP licensing.⁷ In this work, special attention will be given to the role of IP and FDI policies in promoting technology transfer.

So far, most of the literature covering the BRI has emphasized the geopolitical aspects of the BRI. The focus of the BRI has been mainly in the fields of infrastructure and extracting industries.⁸ Other aspects of the BRI, such as transfer of technology, have not received much attention in the academic literature.⁹ Accordingly, it is interesting to highlight the issue of transfer of technology in the BRI. In fact, the ultimate goal of the BRI, as stated in the Chinese National Development and Reform Commission's formal documents on the BRI, is to promote a large number of collaborations, including international trade, technology co-development, environmental protection, cultural exchange, and education.¹⁰

This article aims to examine the BRI as a peculiar development model. Since transfer of technology is the cornerstone of economic development, it is important to examine technology transfer-related policies in the context of the BRI. Furthermore, the US-China trade war has been increasingly described as a 'tech war' where the two economies seek to lead global innovation

1 HJ Chang, *Kicking Away the Ladder: Development Strategy in Historical Perspective*. Anthem Press (2003). Kindle Edition (2003); For a more recent account of this thesis see: HJ Chang, 'Kicking Away the Ladder: Neoliberalism and the 'Real' History of Capitalism' in Kyung-Sup, C et al. (eds), *Developmental Politics in Transition, Developmental Politics in Transition. International Political Economy Series*. (Palgrave Macmillan, London 2012). https://doi.org/10.1057/9781137028303_3, 43–50.

2 Chang, 'Kicking Away the Ladder: Neoliberalism and the 'Real' History of Capitalism', supra note 1.

3 Mark Wu, 'The "China, Inc." Challenge to Global Trade Governance' (2016) 57 *Harv. Int'l L.J.* 261.

4 H-W Liu and S-W Lu, 'The Future of China's Trade Pact and Intellectual Property Rights' in K-C. Liu, and J. Chaisse (eds.), *The Future of Asian Trade Deals and IP* (1st ed., Hart Publishing 2019) 61–84. <https://doi.org/10.5040/9781509922802.ch-004>, 63.

5 A Dirlik, 'Global South: Predicament and Promise' (2007) 1(1) *The Global South* 12, 17.

6 W Zhou et al., 'Technology Transfer under China's Foreign Investment Regime: Does the WTO Provide a Solution?' (2020) 54 *J World Trade* 455, 456.

7 UNCTAD, 'Transfer of Technology and Knowledge-Sharing for Development, Science, Technology and Innovation Issues for Developing Countries' UNCTAD/DTL/STICT/2013/8, 15–20 (2013).

8 PK Yu, 'Building Intellectual Property Infrastructure Along China's Belt and Road' (2019) 14 *U. Pa. Asian L. Rev.* 275, 286.

9 *ibid.*

10 Y Li, 'Impacts of the Belt and Road Initiative on Regional Outward FDI from China based on Evidence from 2000 to 2015' (2023) 67(1) *ZFW – Advances in Economic Geography* 20–32, 20.

and to set the norms and standards of the future international economic legal order.¹¹ The WTO is one of the main international fora where this ‘tech war’ is taking place. The issue of transfer of technology in the context of the BRI is also significant since it is likely to emerge as a new battle ground in this ‘tech war’.

Accordingly, it is important to address the following questions: What are the main policies/practices adopted by China in respect of technology transfer in the context of the BRI? What is the outlook for these policies? How do these policies interact with existing trade rules especially the WTO trade rules? How will these policies/practices factor in the China-West conflict on technology transfer?

We are aware that these questions are very complex and that it is probably too early to provide exhaustive answers to these questions. Accordingly, we will limit our analysis to providing an outline of technology transfer-related policies in the context of the BRI, namely IP and FDI policies, and provide an account of the initial reactions of the West in respect of these policies. We will also highlight the tension between the BRI policies/practices and WTO trade rules.

First, we lay the foundation of our study in Section Two by introducing the BRI and its origins followed by a brief outline of the tension between the BRI and the WTO. Section Three addresses the complexities of the Chinese IP policies and how they may impact transfer of technology in the context of the BRI. Section Four looks at the role of Chinese FDI policies in promoting technology transfer focusing on the dichotomy between out-bound and in-bound Chinese technology transfer FDI-related policies. Finally, we provide some concluding remarks in Section Five.

2. THE BELT AND ROAD INITIATIVE: ORIGINS AND CLASSIFICATION

Before discussing transfer of technology in the context of the BRI it is important to understand the origins of the BRI and its legal classification. This section starts by outlining the development of the BRI and then proceeds to contrast the BRI with the WTO, outlining the challenges that the BRI poses to the WTO and briefly highlighting the sources of this tension.

2.1 THE BELT AND ROAD INITIATIVE: THE ORIGINS

China launched a massive initiative, the BRI, to further its economic interests globally. The BRI was launched by President Xi Jinping in 2013.¹² The BRI includes two major components: the land-based ‘Silk Road Economic Belt’ connecting China and Europe through Central Asia and the Russian Federation; and the ‘Maritime Silk Road’ connecting China with Southeast Asia, East Africa, and the Middle East and going to the heart of the Mediterranean.¹³

The BRI routes have an extensive geographical coverage running through Asia, Europe and the Middle East, encompassing more than 60 countries with a population of about 4.4 billion (63% of the world population), accounting for some 30% of global GDP and more than 35% of the world’s merchandise trade.¹⁴

¹¹ Zhou et al., *supra* note 6, 479.

¹² N Rolland, ‘A Concise Guide To The Belt And Road Initiative’ (April 11, 2019) < <https://www.nbr.org/publication/a-guide-to-the-belt-and-road-initiative/> > accessed 19 January 2023; see Also M Ahmad Et AL., ‘One Belt One Road Initiative (“OBOR”): Editorial’ (2017) 3 *Transnational Dispute Management*, www.transnational-dispute-management.com < www.transnational-dispute-management.com/article.asp?key=2469 > accessed 19 January 2023.

¹³ MX Chen & C Lin, ‘Foreign Investment Across The Belt And Road: Patterns, Determinants, and Effects’ (2018) *World Bank Group Policy Research Working Paper*, No. Wps 8607, 2; B Hofman, ‘One Belt One Road Initiative: What we Know thus far (4 December 2015)’ < <https://blogs.worldbank.org/eastasiapacific/china-one-belt-one-road-initiative-what-we-know-thus-far> > accessed 20 January 2023.

¹⁴ ISTA, Knowledge Transfer Management Forum Series Organized by International Strategic Technology Alliance(ISTA), Hosted by: The Hong Kong Polytechnic University, ‘Knowledge Transfer under the Belt and Road Initiative’ (2017), 1 < http://www.ista-net.net/files/ISTA-AGM_KT_Forum_Programme_2017_ENG_.pdf > accessed 20 January 2023 and see Chen and Lin (n 13); According to Chinese official sources the number of BRI countries was 152 countries by the end of June 2023, Embassy of the People’s Republic of China in Grenada, ‘10 Years On, the Belt and Road Initiative Is Not Only Fruitful, but Also Promising’, 2023-08-26 03:14 < http://gd.china-embassy.gov.cn/eng/zxhd_1/202308/t20230826_11133075.htm > accessed 8 March 2024. In 2023, the trade value between China and BRI countries amounted to 19.47 trillion yuan (US\$2.74 trillion) which is 46.6% of the total trade volume, The State Council Information Office of the People’s Republic of China, ‘China’s trade with BRI countries booms in 2023’, January 12, 2024 < http://english.scio.gov.cn/m/pressroom/2024-01/12/content_116937407.htm > accessed 8 March 2024.

The BRI aims to contribute 80% of global GDP growth as well as to push about 3 billion people into the middle class by 2050.¹⁵ It has also been asserted that the BRI's significance is not primarily its effect on the Asia-Pacific area but its potential of connecting the region to Africa and Europe through bilateral relations.¹⁶

Already, by late July 2019, China had concluded 195 inter-governmental cooperation agreements with 136 states and 30 international organizations. From 2013–2018, China's trade value with countries of the BRI amounted to 6 trillion USD, while direct investment was 90 billion USD.¹⁷ In fact, the BRI finds its historical roots in the old 'Silk Road' (Seidenstrasse), a term coined by the German geographer, Ferdinand von Richthofen in 1877.¹⁸

The BRI seeks to revive the ancient trade routes. Nevertheless, it has been demonstrated that Chinese exports, in particular infrastructure related goods, had flourished in BRI countries for a decade before the establishment of the BRI. Nevertheless, the BRI further enhanced the impact of China in BRI countries.¹⁹

Classic capitalist economies usually put pressure on less developed trading partners to adopt policies and institutions similar to the most advanced policies and institutions in classical capitalist economies,²⁰ the 'one size fits all' approach. Yet, the promoters of the BRI present it as a global development model that accommodates the economic structure of different trading partners. Indeed, the BRI presents itself as a model that aims for creating a win-win situation by creating a 'prosperous and peaceful community with shared future'.²¹ In contrast to the traditional policies of developed countries, the BRI purports to respect national sovereignty and values by not imposing norms or conditions on other trading partners.²² Chinese officials refer to the BRI as 'a community with a shared future for mankind'.²³

As David Shambaugh maintained, the BRI is a Chinese attempt to provide an alternative to the postwar economic system. He stated that 'China is meticulously constructing an alternative and parallel global institutional architecture to the postwar western order'.²⁴ In fact, many commentators have started contrasting the BRI with the post-war Western economic regime and institutions. The WTO is one of the most important institutions of the post-war global economic system. Therefore, the contrast between the BRI and the WTO needs to be highlighted. We do not purport to give a full account of this issue; rather, we will deal with the aspects of this issue which are related to our analysis.

Although the BRI is often contrasted with the WTO, we believe that this comparison needs to be carefully considered. The WTO is an intergovernmental organization which is largely rule-based with its own autonomous dispute settlement system. The WTO draws on a rich body of jurisprudence dating back to 1947. However, the BRI has not yet emerged as a distinct normative legal system with its own legal infrastructure. Indeed, Wolff contends that there is

¹⁵ ISTA, *supra* note 14, 1.

¹⁶ *ibid*; Chen & Lin, *supra* note 13.

¹⁷ X Tian, 'On China's Strategy in Belt and Road International Intellectual Property Cooperation', in G Martinico & X Wu (eds), *A Legal Analysis of The Belt and Road Initiative: Towards A New Silk Road?* (Palgrave Macmillan 2020) 171.

¹⁸ Berkely Library, University of California, Central Asia: The Silk Road, < <https://guides.lib.berkeley.edu/centralasia/silkroad> > accessed 19 October 2020.

¹⁹ C Constantinescu & M Ruta, 'How Old is the Belt and Road Initiative (Long Term Patterns of Chinese Exports to BRI Economies)' (2018) *World Bank Group MTI Practice Notes*, No. 6 (December 2018) 1.

²⁰ Chang *Kicking Away the Ladder: Development Strategy in Historical Perspective* (n 1).

²¹ Chen and Lin, *supra* note 13, 2.

²² National Development and Reform Commission, Ministry of Foreign Affairs, and Ministry of Commerce of the People's Republic of China (with State Council authorization), 'Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road', 28 March 2015 < https://www.fmprc.gov.cn/eng/topics_665678/2015zt/xjpcxbayzlt2015nnh/201503/t20150328_705553.html > accessed 24 March 2023; C Dong and S Yu, 'One Belt One Road—China's new outbound trade initiative', *DLA Piper, Belt and Road* (4 March 2016 < <https://beltandroad.hktdc.com/index.php/en/insights/one-belt-one-road-chinas-new-outbound-trade-initiative-0> > accessed 24 March 2023).

²³ The State Council Information Office, People's Republic Of China, 'Belt And Road Initiative A Platform To Build A Community With A Shared Future For Mankind', < http://english.scio.gov.cn/beltandroad/2022-06/21/content_78282317.htm > (updated 21 June 2022) accessed 19 November 2022.

²⁴ D Shambaugh, *China's Future* (Cambridge, UK, and Malden, MA: Polity, 2016) 163.

no specific BRI law or rules; instead, the BRI's goals are mainly achieved through bilateral and regional agreements.²⁵

Wang states that the BRI is a kind of a 'megaregional arrangement'.²⁶ BRI practice is based on a huge network of understandings with varying degrees of legal weight ranging from memorandums of understanding (MOUs) to project contracts.²⁷ Indeed, 'BRI agreements are a hallmark of BRI practice, and carry profound implications for the future international economic order'.²⁸ Furthermore, it is observed that BRI projects are usually conducted under the ambit of MOUs between China and the receiving country. Public and private contracts are then made to complement this structure. The projects include different forms of public-private partnerships between the state, state owned enterprises (SOEs) and private companies. State owned banks typically finance these projects.²⁹

In particular, the BRI is based on a decentralized management structure. No single government entity oversees the BRI investments. Instead, the Ministry of Commerce (MOFCOM), the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs (MFA), and the State Council each issue action plans, guiding principles, joint communiques, declarations, and other normative documents. Currently, the BRI proceeds on the basis of many Bilateral Investment Treaties (BITs) and Free Trade Agreements (FTAs) with member states. No standard-form BRI contracts and companies (whether SOEs or private) exist.³⁰ The State Council established 'leading groups' to provide oversight in 2015. Yet, there is very little public information about their managerial and enforcement powers.³¹

Accordingly, academic literature on the BRI is mainly based on policy documents issued by these bodies, MOFCOM, NDRC, MFA and the State Council. The Chinese approach exhibits the following characteristics: '(1) pragmatism and flexibility, (2) soft law over hard law, (3) integration of Chinese norms into existing international organizations, (4) bilateralism over multilateral agreements, and (5) dispute resolution'.³² By way of illustration, taking Djibouti as an example of a BRI host state, most of the transactional substance of the BRI consists of 'government to government' deals that are implemented mainly by SOEs. The BRI model emphasizes political negotiation over formal law.³³ The BRI, thus, takes a different approach than the WTO, we discuss this in the next section.

2.2 THE BELT AND ROAD INITIATIVE: BRI V WTO

We argue that the uncertainty about the status and legal classification of the Chinese economy has a major impact on the China-US tech war. Indeed, WTO negotiators struggled to find a classification of the Chinese economy that fits within one of the WTO's classic categories. This ambiguity has persisted in the WTO system and caused many problems that continue to haunt the multilateral trading system right up to the present time.

In fact, before the Chinese accession to the WTO, WTO negotiators were aware of the peculiar status of the Chinese economy and thus China was subjected to special accession rules in order to be admitted to the WTO. The peculiar status of the Chinese economy caused many problems under the WTO rules. Notions such as a 'Public Body' under the WTO Agreement on Subsidies and Countervailing Measures (SCM) Agreement and whether to treat China as a 'Non-Market Economy' (NME) under WTO law saw a great controversy between China and the West, in particular, the US. In addition, legal academics have also struggled to categorize the Chinese

²⁵ LC Wolff, 'Legal Responses to China's "Belt and Road" Initiative: Necessary, Possible or Pointless Exercise?' (2020) 29 *Transnat'l L. & Contemp. Probs.* 249.

²⁶ H Wang, 'The Belt and Road Initiative Agreements: Characteristics, Rationale, and Challenges' (2021) 20 *World Trade Review* 282.

²⁷ *ibid.*

²⁸ *ibid.*

²⁹ G Shaffer & H Gao, 'A New Chinese Economic Order?' (2020) 23 *J Int'l Econ L* 607, 616–618.

³⁰ MS Erie, 'Chinese Law and Development' (2021) 62 *Harv. Int'l L.J.* 51, 76–77.

³¹ *ibid.*

³² *ibid.*, 64–65.

³³ *ibid.*, 58.

economy due to the opaque relationship between the Chinese government and private Chinese firms. We will highlight these issues consecutively:

The Chinese WTO Accession Protocol (Accession Protocol)³⁴ granted other WTO Members greater rights vis-à-vis China and applied more stringent rules on China which exceed standard WTO rules³⁵ (WTO-Plus rules).³⁶ Qin contends that the transition economies that acceded to the WTO before China were granted more lenient treatment than China; for instance, they were treated more generously than China in terms of using subsidies to facilitate privatization and transition to a market economy.³⁷

According to Qin, the China Accession Protocol is:

a unique agreement within the WTO legal framework. Unlike any other WTO protocol of accession, the China Protocol is not a standardized document. Instead, it contains a large number of special provisions that elaborate, expand, modify or deviate from the existing WTO agreements. As a result, the Protocol has significantly revised WTO rules of conduct when applied to China trade.³⁸

Qin attributes this differential treatment of China to apprehension about the size of China and Chinese SOEs.³⁹ However, the question that was barely anticipated in the Chinese accession process is: what if China reached a high degree of economic and technological progress to the extent that WTO rules, especially the TRIPS Agreement, favour China?⁴⁰ Indeed, China, during its accession phase, made assurances concerning WTO compliance regarding inter alia transfer of technology-related measures:

The representative of China confirmed that China would only impose, apply or enforce laws, regulations or measures relating to the transfer of technology, production processes, or other proprietary knowledge to an individual or enterprise in its territory that were not inconsistent with the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights ('TRIPS Agreement') and the Agreement on Trade-Related Investment Measures ('TRIMs Agreement'). He confirmed that the terms and conditions of technology transfer, production processes or other proprietary knowledge, particularly in the context of an investment, would only require agreement between the parties to the investment. The Working Party took note of these commitments.⁴¹

Yet, despite the stringent rules that were imposed on China during its accession process, the Chinese development model still poses many challenges to the multilateral trading system. Indeed, commentators have struggled to categorize the Chinese development model. Some commentators are ambivalent about whether one can refer to the Chinese development model as 'socialist with Chinese characteristics' or 'capitalist with Chinese characteristics'.⁴² At the time of Chinese accession to the WTO, it was hard to designate China as a developed country, but with a GDP that surpassed 1,000 USD per person in 2001 as well as being the sixth largest economy globally at that time, it was also hard to treat China as a developing country. The socialist origins of the Chinese economy further exacerbated the problem.⁴³

³⁴ WTO, *Protocol on the Accession of the People's Republic of China* (10 November 2001) WT/L/432.

³⁵ GC Shaffer and HS Gao, 'China's Rise: How It Took on The U.S. at The WTO' (2018) 2018 *U. Ill. L. Rev.* 115, 125.

³⁶ J Qin, 'WTO-Plus' Obligations and Their Implications for the World Trade Organization Legal System – An Appraisal of the China Accession Protocol' (2003) 37 (3) *Journal of World Trade* 483.

³⁷ See, in general, J Qin, 'WTO Regulation of Subsidies to State-Owned Enterprises (SOEs) – A Critical Appraisal of the China Accession Protocol' (2004) 7 *J Int'l Econ L* 863.

³⁸ Qin, *supra* note 36, 483.

³⁹ Qin, *supra* note 37.

⁴⁰ PK Yu, 'Symposium: China's Role in Regulating The Global Information Economy: The Middle Kingdom and The Intellectual Property World' (2011) 13 *Or. Rev. Int'l L.* 209.

⁴¹ WTO, *Report of the Working Party on the Accession of China* (1 October 2001) WT/ACC/CHN/49, para 49.

⁴² GC Shaffer & HS Gao, *supra* note 35, 127.

⁴³ PI Levy, 'The Treatment of Chinese SOEs in China's WTO Protocol of Accession' (2017) 16(4) *World Trade Review* 635, 637.

Professor Wu has referred to the current Chinese economic structure as ‘China Inc.’.⁴⁴ According to Professor Wu, the Chinese economy is marred by contradictions. While it can fairly be held that the Chinese economy is state dominated, Chinese economic growth can be mainly attributed to private enterprises. Also, while the Chinese economy adopts market-oriented policies, it is not a free-market capitalist system.⁴⁵

As a result, there is a controversy surrounding whether China should be treated as an NME under WTO law. The issue of the treatment of NMEs was a no-issue under the original General Agreement on Tariffs and Trade (GATT) due to the homogeneity of GATT participants. In fact, GATT did not differentiate between economies on grounds of ownership basis in the domestic market. Yet, the accession of NMEs was a complex issue in the era of the WTO. Although Keynes advocated that government involvement in economic planning was required to achieve full employment after World War 2, his views were not adopted by the US government which adopted a liberal economic policy in international trade that emphasized a privately led economy rather than a government planned economy.⁴⁶

Article 15 of the China Accession protocol sets up the NME status of China. The China Accession Protocol provides that the NME status of China is to lapse after 15 years from the date of China’s accession to the WTO.⁴⁷ Despite the fact that China thus would not be legally treated as an NME as of December 2016, particularly for the purposes of antidumping proceedings, the treatment of China after this deadline is still a controversial issue.⁴⁸ The WTO rules do not contain a definition of the term NME.⁴⁹ Thus, Member states have different approaches to this issue. At the present time, more than 80 countries acknowledge the market economy status of China, including Australia, New Zealand and the ASEAN countries.⁵⁰ However, the US and the EU are still refusing to treat China as a market economy. China has tried to resolve this issue sometimes through diplomacy and sometimes through WTO dispute settlement.⁵¹

The controversial status of the Chinese economy is reflected in the BRI. Although the BRI provides that it is based on market values,⁵² the market model envisaged by the BRI may be different from that of the WTO. The WTO is based on a neo-liberal free-market model that WTO Members should strive to reach. Non-Market Economies and Economies in Transition should ultimately transform themselves into this neo-liberal market model. Antidumping WTO Rules, for instance, use this market model in determining the conformity of a WTO Member with these rules.⁵³ As Qin argues, despite being ownership neutral, the WTO’s norms and rules actually contemplate a market-economy model that is commonly dominated by private ownership.⁵⁴

Moreover, it is argued that the diversified privatization programmes in developing countries have further exacerbated this issue.⁵⁵ However, we believe that it is up to each WTO Member to choose its privatization policy and economic model, provided it does not circumvent its obligations under the multilateral trading system.

We believe that the WTO trade rules should not impose a certain development model on WTO Members as long as this does not lead to the circumvention of WTO trade rules. Indeed, in

⁴⁴ Wu, *supra* note 3.

⁴⁵ *ibid.*, 264–265.

⁴⁶ D Irwin et al., *The Genesis of the GATT*, (Cambridge University Press: New York City, New York. 2008) 15–16. See also PC Mavroidis & ME Janow, ‘Free Markets, State Involvement, and the WTO: Chinese State Owned Enterprises (SOEs) in the Ring’ (2017) *EUI Working Papers*, No. RSCAS 2017/13, 2.

⁴⁷ WTO, ‘Protocol on the Accession of the People’s Republic of China’, *supra* note 34.

⁴⁸ Mavroidis and Janow, *supra* note 46, 4.

⁴⁹ MT Hošman, ‘China’s NME status at the WTO: analysis of the debate’ (2021) 20(1) *Journal of International Trade Law and Policy* 1, DOI: [10.1108/JITLP-09-2020-0054](https://doi.org/10.1108/JITLP-09-2020-0054), 5–6.

⁵⁰ *ibid.*

⁵¹ *ibid.*; WTO, *European Union – Measures Related to Price Comparison Methodologies Request for Consultations By China* (15 December 2016) WT/DS516/1.

⁵² Vision and Actions Plan, *supra* note 22, II. Principles.

⁵³ The US and the EU employ the rubric of ‘non-market economy’ as a justification for using third-country prices in the course of antidumping investigations. See Shaffer and Gao (n 35) 177–178.

⁵⁴ Qin, *supra* note 37, 915.

⁵⁵ X Tan, ‘The “public body” enquiry in WTO disputes: implications for partial privatization’ (2022) 21(2) *Journal of International Trade Law and Policy* 140, DOI: [10.1108/JITLP-08-2021-0047](https://doi.org/10.1108/JITLP-08-2021-0047), 141.

Canada-Wheat Exports and Grain Imports, the Appellate body decided that non-discrimination was the overreaching obligation, holding ‘the obligations to “act in accordance with commercial consideration”, and to “afford adequate opportunities to compete” as mere expressions of the obligations to not discriminate, and not as distinct legal obligations’.⁵⁶

Moreover, the Chinese development model has had a great impact on international economic law. Some scholars view the Chinese development model as a Chinese attempt to construct its own transnational law regime based on a combination of private contracts and international investment agreements. They believe that the Chinese BRI Model is changing the architecture of international economic law.⁵⁷

Indeed, before its accession to the WTO, China had certainly done its homework. China invested heavily in transforming its trade-related laws, instigating legal and institutional reform as well as investing in human capital.⁵⁸ This has enabled China to challenge the major industrial powers, especially the US and the EU, before the WTO Dispute Settlement Body (DSB).⁵⁹ This rivalry was especially acute in respect of Chinese IP and FDI policies. Nevertheless, it is contended that in areas other than IP, industrial subsidization and data governance, the Chinese approach, to a large extent, is not in conflict with existing international law norms.⁶⁰

Some scholars contend that ‘neither does China offer a completely new model of finance, trade, and investment law norms and institutions since it borrows heavily from Western models. China’s model mimics and repurposes Western laws and institutions’.⁶¹ These scholars further contend that China is building new institutions and structures which build from and interact with existing institutions including the WTO, the International Centre for Settlement of Investment Disputes (ICSID), the World Bank, the London Commercial Court as well as other Western IP institutions.⁶² However, in this process, China is repurposing these institutions to achieve its own interests.⁶³ China seeks to achieve leading roles in the WTO and other Bretton Woods institutions as well as the UN’s institutions related to economic law.⁶⁴

In short, ‘China’s initiatives dynamically form part of a complex ecology of international economic institutions that coexist, complement, cooperate, and compete to shape norms and normative ties. They complement existing international institutions in which China aims to play a leading role, while building parallel Chinese-led institutions that interact with existing ones’.⁶⁵

Indeed, some scholars maintain that ‘China is actively shaping international legal norms and practices by repurposing international organizations, building new ones, selectively using international legal mechanisms, promoting the regional harmonization of law, and onshoring international disputes’.⁶⁶ Consequently, China has evolved into a norm-maker in a number of international economic law fields, including trade law, investment law and cyber law.⁶⁷

To sum up, it is important to note that the BRI is not a normative system.⁶⁸ Rulemaking under the BRI is not centralized and there is no BRI-wide treaty. Instead, the BRI is based on a network of investment treaties that are often insufficient to address investment issues.⁶⁹ The BRI emphasizes trade liberation and facilitation. In fact, the only WTO Agreement specifically

⁵⁶ Mavroidis and Janow, *supra* note 46, n4.

⁵⁷ Erie, *supra* note 30, 57–58.

⁵⁸ Shaffer & Gao, *supra* note 35, 118.

⁵⁹ *ibid.*

⁶⁰ Erie, *supra* note 30, 66.

⁶¹ Shaffer & Gao, *supra* note 29, 609.

⁶² *ibid.*

⁶³ *ibid.*

⁶⁴ *ibid.*, 610.

⁶⁵ *ibid.*, 612. See also Erie, *supra* note 30, 65–66.

⁶⁶ Erie, *supra* note 30, 57.

⁶⁷ *ibid.*

⁶⁸ See in general Wolff, *supra* note 25.

⁶⁹ H Wang, ‘Divergence, Convergence or Crossvergence of Chinese and US Approaches to Regional Integration: Evolving Trajectories and Their Implications’ (2018) 10 (2) *Tsinghua China Law Review* 149, 156.

mentioned in the BRI Action Plan is the WTO Agreement on Trade Facilitation.⁷⁰ The BRI, according to Wang, appears to impact transnational legal orders, which involve 'legal rules and norms that have effects across borders without any binding agreement among states, whether they are created by international organizations, intergovernmental networks, or private actors, and whether they are of a hard or soft law nature'.⁷¹

Thus, we argue that the contrast between the economic development model envisaged by the WTO and the BRI has important ramifications on the issue of transfer of technology in the BRI. While the WTO envisages a normative market-based privately led transfer of technology regime, the economic development model underlying the BRI is likely to have a great impact on technology transfer-related policies/practices in the context of the BRI. Before we proceed with our analysis, we must point out that, due to the fact that the Chinese approach to international economic law order is of a fragmented nature,⁷² this will influence our analysis. This analysis does not aim to provide an exhaustive account of the BRI. Since the BRI is still evolving, we aim to preliminarily examine the current Chinese technology transfer-related policies, namely IP and FDI policies, and to forecast the development of these policies in the context of the BRI.

3. IP POLICY IN THE CONTEXT OF THE BRI: 'IN-BOUND IP' V. 'OUT-BOUND IP'

Intellectual Property Rights (IPRs) are one of the major areas that were overlooked in the context of the BRI.⁷³ This issue has gained more significance in recent times where China is shifting from being an IP importer to an IP exporter. In fact, China is turning into a global player in the IP global legal regime. China is ranked as the world's second patent applicant under the Patent Cooperation Treaty (PCT).⁷⁴

In addition, Chinese major enterprises, in particular, Huawei Technologies and ZTE Corporation, ranked as the first and the second international patent applicants respectively.⁷⁵ In the realm of trademarks, China is the third country in the world in international trademark applications under the Madrid Agreement Concerning the International Registration of Marks and its related protocol.⁷⁶ In 2019 China overtook the USA as the top patent applications filer with World Intellectual Property Organization (WIPO).⁷⁷ Thus, the rise of China as a global IP player merits consideration.

3.1 CHINESE OUT-BOUND IP POLICIES

As a result of China's rise as a global IP exporter, China has sought to enhance its IP law, judicial system and policy to protect the IPRs of its domestic firms.⁷⁸ In pursuit of this objective, in 2016 the Chinese government co-organized with WIPO a High-Level Conference on Intellectual Property for Countries along the 'Belt and Road' in Beijing.⁷⁹

Furthermore, in 2017, China and WIPO entered into an Agreement on Enhancing 'Belt and Road' Intellectual Property Cooperation. In addition, China signed memorandums of understanding

⁷⁰ *ibid.*

⁷¹ *ibid.*, 160–161; G Shaffer, 'Transnational Legal Process and State Change' (2012) 37(2) *Law & Soc. Inquiry* 229, 232–233.

⁷² Shaffer & Gao, *supra* note 29, 613.

⁷³ Yu, *supra* note 8, 286.

⁷⁴ PK Yu, 'A Half-Century of Scholarship on the Chinese Intellectual Property System' (2018) 67 *American University Law Review* 1045, 1047–1048.

⁷⁵ *ibid.*

⁷⁶ *ibid.*

⁷⁷ WIPO, 'China Becomes Top Filer of International Patents In 2019 Amid Robust Growth For WIPO's IP Services, Treaties and Finances' (April 7, 2020) Press Release PR/2020/848.

⁷⁸ Justice T Kaiyuan, 'China's Commitment To Strengthening IP Judicial Protection And Creating A Bright Future for IP Rights', WIPO Magazine, June 2019, < https://www.wipo.int/wipo_magazine/en/2019/03/article_0004.html > accessed 24 March 2023.

⁷⁹ Yu (n 8) 320. See also, WIPO Director General Visits China for Series of High Level Meetings and Participates in Belt and Road Summit (April 30, 2019), < https://www.wipo.int/about-wipo/en/offices/china/news/2019/news_0002.html > accessed 24 March 2023.

on IP cooperation with many countries. China has also provided technical assistance to BRI countries including IP education and exchange of knowledge. 2018 witnessed a second high-level conference which focused on the prospects and challenges of the BRI, particularly in the IP area.⁸⁰ China's endeavours in the BRI regime in respect of IP occurred simultaneously with China's rise as a major player in the field of technology transfer.⁸¹

Building on the BRI, in 2015 the National Development and Reform Commission (NDRC) of China, Ministry of Foreign Affairs and Ministry of Commerce jointly issued the 'Visions and Actions on Jointly Building Silk Road Economic Belt and 21st Century Maritime Silk Road' (Visions and Actions Plan) for the BRI. In the Visions and Actions Plan, the Chinese government proposed building international technology transfer centres jointly with other BRI participants.⁸²

This reflects the policy goal established in the 'Outline of the National Intellectual Property Strategy' (ONIPS) released by the Chinese State Council in 2008, which held that China should: '[r]aise the proportion of exportation of the goods rich in intellectual property step by step [and] [p]romote fundamental changes in the trade growth pattern and optimize trade structure'.⁸³ Thus, China is seeking to use IP as a major element in its external trade policy. We will refer to this policy as 'Out-Bound IP Policies'.

It has been suggested that the BRI will accelerate the pace of transition of China from an IP importer to an IP exporter.⁸⁴ Francis Gurray, the former WIPO Director General, asserted in the Belt and Road Forum 2019 that 'There is an expectation that the Belt and Road Initiative will also help strengthen global innovation networks, with an increase in technological innovation and economic development across the globe'.⁸⁵

China has cooperated with countries in the BRI region in the field of IP, signing 28 cooperation agreements out of 65 core countries involved in the BRI in addition to trilateral and regional cooperation endeavours. In fact, the number of Chinese patent applications grew by 16% to reach 5,608 in BRI countries in 2017, while patent applicants from BRI countries applied for 4,319 patents in China in 2017.⁸⁶ It is true that China does not seek to impose TRIPS-Plus IP norms on other trading partners, but it could be that the North has already raised the bar in the sense that strictly harmonized IP norms are already employed among WTO Members.

Another overlooked issue in this context is the use of standards especially in Chinese Out-Bound trade. Chinese firms such as Huawei often use Chinese standards rather than international standards when conducting telecommunication and infrastructure projects. China may be able to enhance the use of Chinese standards over international standards in the course of time which would increase its market share.⁸⁷ Network effects would allow Chinese firms not only to gain first-mover advantage in international markets but also to reap huge royalties from their competitors in respect of standards that contain an IP component.⁸⁸

In addition, the BRI is complemented by major Chinese investments in developing international standards through both domestic and international bodies. China launched an ambitious initiative in 2013, 'China Standards 2035'. The 'China Standards 2035' initiative is overseen by the Standards Administration of China under guidance from the Chinese party-state. China has also managed to secure leadership positions on international standard setting bodies.⁸⁹

⁸⁰ Yu, *supra* note 8, 287–288.

⁸¹ *ibid.*

⁸² Visions and Actions Plan, *supra* note 22.

⁸³ The State Council, 'Outline of the National Intellectual Property Strategy (ONIPS)' (Issued by the Chinese State Council on June 25, 2008), English translation, WIPO, III 2(11), < <https://wipolex.wipo.int/en/text/125982> > accessed 24 March 2023; JA Lee, 'The New Silk Road To Global IP Landscape', *Faculty of Law – The Chinese University of Hong Kong, Research Paper No. 2016-30*, 419–420 (2016).

⁸⁴ Lee, *supra* note 83, 421.

⁸⁵ WIPO, 'WIPO Director General Visits China for Series of High Level Meetings and Participates in Belt and Road Summit' (n 79).

⁸⁶ Tian, *supra* note 17, 171–172.

⁸⁷ Shaffer & Gao, *supra* note 29, 618.

⁸⁸ *ibid.*

⁸⁹ *ibid.*, 619.

In particular, China seems to have the lead in developing 5G wireless technology standards where Huawei aims to dominate this field.⁹⁰ The US is extremely worried about this issue. In fact, in April 2019 the US Defense Innovation Board issued a study which warns that '[t]he country that owns 5G will own many of these innovations and set the standards for the rest of the world. ...That country is currently not likely to be the United States'.⁹¹ 5G technology is essential for many hi-tech fields, such as artificial intelligence, robotics and the Internet of Things which involves sensors and data collection.⁹²

Accordingly, when assessing Chinese Out-Bound IP policies/practices, we deduce that China is liberalizing its IP system and is taking steps to get its laws in conformity with international standards. China is also actively engaging with International IP bodies. In addition, China is aligning its Out-Bound IP policy with its Out-Bound FDI policy by focusing on acquiring high-tech through Out-Bound investments in jurisdictions with lucrative technological assets, which are mainly Western jurisdictions. We will highlight the link between Chinese Out-Bound IP policy and its Out-Bound FDI policy in Section 4.1.

Finally, it is clear that the BRI has greatly influenced the Chinese IP Agenda.⁹³ As an illustration of this, Xinhua News Agency and China International Intellectual Corporation established a data base to alert Chinese exporters to seven IP risks in BRI states.⁹⁴ However, it remains to be seen whether Chinese IP Policy, in the context of the BRI, will allow China to reap disproportionate benefits by following a liberal Out-Bound IP Policy to enhance its IP-related exports while following a restrictive In-Bound IP Policy which allows it to gain leverage over IP-related imports.

Moreover, it has been observed that technology transfer laws and policies adopt a technology ladder. A vast number of middle-income countries started by utilizing an imitation policy in the hope of absorbing free or cheap technologies, particularly in labour-intensive industries. These policies are geared towards increasing the value added by local firms and support export activities.⁹⁵ We will refer to these policies as 'In-Bound IP Policies', a point that we discuss in the following section.

3.2 CHINESE IN-BOUND IP POLICIES

Although hard infrastructure projects are a dominant element in the BRI, electronic commerce is a key component of the BRI. As an illustration of this, Alibaba Cloud has a faster growth rate than Amazon outside their home markets. Alibaba's position is enhanced by its dominance in the Chinese internal market which is the largest e-commerce market in the world.⁹⁶ Moreover, Alibaba, in the hope of leveraging its BRI-induced economic growth, promotes an expansive approach which is referred to as a 'One Belt, One Road, One Cloud'.⁹⁷

Alibaba is also actively promoting its electronic World Trade Platform (eWTP) concept and launched its 'Enabling E-commerce' initiative, together with the WTO and the World Economic Forum (WEF), in 2017. Alibaba allows China not only to coordinate with existing public and private institutions but also to build from institutions such as the WTO and the WEF.⁹⁸

In addition, in 2016 China launched a masterplan entitled 'Made in China 2025' which aspires to transform the country into a 'manufacturing superpower'. This plan is deemed to present a challenge to the current economic powers, particularly since this plan targets all high-tech

⁹⁰ *ibid*, 618.

⁹¹ M Medin & G Louie, *The 5G Ecosystem: Risks & Opportunities for DoD – United States Defense Innovation Board Study* (2019), 7.

⁹² *ibid*; Shaffer & Gao, *supra* note 29, 618.

⁹³ JM Cooper, 'Games Without Frontiers: The Increasing Importance of Intellectual Property Rights in The People's Republic of China' (2021) 22 (1) *Wake Forest J. Bus. & Intell. Prop. L.* 43, 55–56.

⁹⁴ *ibid*.

⁹⁵ BM Hoekman et al., 'Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options' (2004) *World Bank Policy Research Working Papers*, No. WPS 3332, 19.

⁹⁶ Shaffer & Gao, *supra* note 29, 616.

⁹⁷ *ibid*.

⁹⁸ *ibid*.

industries.⁹⁹ However, some scholars look at ‘Made in China 2025’ with skepticism claiming that the Chinese state is highly involved in the domestic market and that it uses practices that disfavour and discriminate against foreign competitors. There is a concern that China is seeking to substitute foreign technology for Chinese technology, thereby also offering a strong base for Chinese technology companies to compete in foreign markets.¹⁰⁰

China is also accused of achieving its innovation success through massive subsidization of domestic innovation, encouraging acquisitions of foreign firms and technology and using illegitimate means to acquire foreign technology, such as sourcing open-source materials and outright theft.¹⁰¹

To elaborate, the main aim of TRIPS in the WTO system was meant to enhance market access under the justification that strong protection of IPRs would encourage international trade. The BRI appears to be in harmony with the TRIPS Agreement’s objectives in the context of its Out-Bound IP Policy. However, in respect of the Chinese In-Bound IP Policies, China is accused of using protectionist measures to further its IP interests, allegedly, in ways that are not consistent with its WTO commitments. There is apprehension among the Western countries that the BRI may be used to further entrench the divide between China’s Out-Bound IP Policy and its In-Bound IP Policy. As Yu puts it, ‘it remains unclear how the [BRI] initiative will affect the country and the world at large in the intellectual property area’.¹⁰² Accordingly, it is interesting to highlight the current tension between the West and China in relation to the WTO’s IP Norms and to try to forecast the impact of the BRI on this tension.

In fact, China’s ‘In Bound-IP Policy’ is under attack from leading IP jurisdictions, in particular, the EU, the US and Japan. The issue of ‘forced technology transfer’ has emerged as a battleground between traditional IP superpowers and the newcomer, China. Specifically, the pending case, China – Certain Measures on the Transfer of Technology,¹⁰³ might represent the first major WTO dispute concerning transfer of technology adjudicated at the multilateral level.

The dispute is based on the concept of ‘forced technology transfer’, a concept that loosely refers to allegedly coercive measures undertaken by some WTO Members in order to coerce foreign investors to transfer technology to host countries in return for market access,¹⁰⁴ a practice that can be described as ‘the ‘market for technology’ barter’.¹⁰⁵ The issue of ‘forced technology transfer’ was one of the main concerns of leading industrial countries, the US, the EU and Japan.¹⁰⁶

It has been said that while China may be pursuing legitimate interests by securing transfer of technology to its home industry, these Chinese policies may infringe China’s WTO obligations.¹⁰⁷

⁹⁹ J Wübbke et al., ‘Made In China 2025 – The Making of a High-Tech Superpower and Consequences for Industrial Countries’ (2016) *Mercator Institute for China Studies – MERICS Papers on China* no. 2, 6.

¹⁰⁰ *ibid.*, 7.

¹⁰¹ Shaffer & Gao, *supra* note 29, 629.

¹⁰² Yu, *supra* note 8, 286.

¹⁰³ WTO, *China – Certain Measures On The Transfer Of Technology* (1 June 2018) DS549. Until the present time, no dispute settlement panel was established, no withdrawal or mutually agreed settlement was notified to the DSB. WTO < https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds549_e.htm > accessed 10 March 2024.

¹⁰⁴ JY Qin, ‘Forced Technology Transfer and the US-China Trade War: Implications for International Economic Law’ (2019) 22 *J Int’l Econ L* 743, 745.

The issue of ‘forced technology transfer’ was one of the main concerns of leading industrial countries, the US, the EU and Japan. The contemplated EU-China Comprehensive Agreement on Investment (CAI) does address issues related to transfer of technology, in particular it refers explicitly to the issue of ‘forced technology transfer’. For more details see W Hu, ‘The EU-China Comprehensive Agreement on Investment An in-depth reading’ (2021) *CEPS Policy Insights*, No. PI2021-07.

¹⁰⁵ Hu, *supra* note 104, 10.

¹⁰⁶ Joint Statement on Trilateral Meeting of the Trade Ministers of the United States, Japan and the European Union, Annexed Statement 2: Joint Statement on Technology Transfer Policies and Practices, (May 31, 2018) < <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/may/joint-statement-trilateral-meeting> > accessed 20 January 2023.

¹⁰⁷ H Jiang et al., ‘Technology Transfer Under China’s Foreign Investment Regime: Does the WTO Provide a Solution?’ (2020) 54 (3) *Journal Of World Trade* 455.

Accordingly, both the EU¹⁰⁸ and the US¹⁰⁹ engaged in negotiations with China to ensure the abolition of ‘forced technology transfer’ practices. However, developed countries, particularly the EU, are calling for an overhaul of the present WTO multilateral system by providing for ‘new market access rules’.¹¹⁰

To address the concerns of the North, China issued a new investment law, the Foreign Investment Law of the People’s Republic of China (FIL), enacted on 15 March 2019, which took effect on 1 January 2020.¹¹¹ The primary focus of the law is to prohibit Chinese authorities and officials forcing technology transfer through the implementation of administrative measures thereby effectively eliminating discrimination between national licensees and foreign investors.¹¹² Specifically, Article 22 of the FIL provides that:

The State shall protect the intellectual property rights of foreign investors and foreign-funded enterprises, and protect the legitimate rights and interests of holders of intellectual property rights and relevant right holders; in case of any infringement of intellectual property right, legal liability shall be investigated strictly the legal liability in accordance with the law[sic].

During the process of foreign investment, the State shall encourage technology cooperation on the basis of free will and business rules. Conditions for technology cooperation shall be determined by all investment parties upon negotiation under the principle of equity. No administrative department or its staff member shall force any transfer of technology by administrative means.¹¹³

The FIL is a significant step in respect of curbing forced technology transfer since this is the first time that China has incorporated the concept of forced technology transfer in its legislation.¹¹⁴ In addition, the FIL Implementing Regulations, as well as other domestic Chinese legislation such as the 2019 Administrative Licensing Law and the 2019 Administrative Regulations of Technology Import and Export, support this reform.¹¹⁵ However, there is still concern that these reforms are inadequate since the FIL and supporting legislation are focused on preventing forced technology transfer primarily through administrative coercion.¹¹⁶

It is worth mentioning that the Economic and Trade Agreement signed by China and the United States in 2020 goes further than the FIL in combating forced technology transfer as it requires technology transfer to follow market rules. The Agreement prohibits strategic investments or acquisitions that have the hidden aim of acquiring technology overseas. The Agreement further explicitly lists actions that may amount to forced technology transfer, such as: requiring foreign enterprises to give access to their technology in exchange for administrative authorization and preconditioning the receipt or perpetuation of treatment on transfer of technology.¹¹⁷

¹⁰⁸ European Commission, EU-China Comprehensive Agreement on Investment (22 January 2021) < <https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbd0e/library/6b4e0ec7-5ff0-4872-a4cf-54717b881d90/details> > accessed 20 January 2023.

¹⁰⁹ Economic And Trade Agreement Between The Government Of The United States Of America And The Government Of The People’s Republic Of China < <https://ustr.gov/countries-regions/china-mongolia-taiwan/peoples-republic-china/phase-one-trade-agreement/text> > accessed 20 January 2023.

¹¹⁰ WTO – EU’s proposals on WTO modernisation 5 July 2018, WK 8329/2018 INIT; European Commission, European Commission presents comprehensive approach for the modernisation of the World Trade Organisation, 18 September 2018 < https://ec.europa.eu/commission/presscorner/detail/en/IP_18_5786 > accessed 10 March 2024.

¹¹¹ National Development and Reform Commission (NDRC), People’s Republic of China, Foreign Investment Law of the People’s Republic of China, 24 February 2021 < https://en.ndrc.gov.cn/policies/202105/t20210527_1281403.html > accessed 10 March 2024; Baker & McKenzie, ‘China’s Foreign Investment Law and Related Regulations Mark a New Era for Foreign Investment in China’, (30 January 2020) < <https://www.lexology.com/library/detail.aspx?g=466b766b-9237-467f-b8d4-1bcdfedee1a> > accessed 10 March 2024.

¹¹² G Grieger, ‘EU-China Comprehensive Agreement on Investment: Levelling the playing field with China’ (2021) *International Agreements in Progress – European Parliamentary Research Service*, No. PE 679.103, 2.

¹¹³ Foreign Investment Law of the People’s Republic of China, *supra* note 111.

¹¹⁴ X Feng & C Wang, ‘China’s Foreign Investment Law: Moving Toward Greater Liberalization?’ (2022) 10 *Penn. St. J.L. & Int’l Aff.* 115, 172.

¹¹⁵ *ibid.*, 172–173.

¹¹⁶ *ibid.*, 174.

¹¹⁷ *ibid.*, 175.

In respect of the protection of IPRs, the FIL Implementing Regulations have added an ‘equal’ requirement to foreign intellectual property protection and specifically provide that standards applicable to patents of foreign enterprises shall be based on relevant domestic governing regulations.¹¹⁸ However, there are several legal ambiguities in the application of these amendments that need to be addressed.¹¹⁹

Furthermore, regarding IP protection and enforcement, China is continuing to reform its IP laws. We do not aim to provide an exhaustive account of IP law reform in China, although we will refer to some examples of these reforms:

- (1) regarding patent law, China has abolished certain IP measures such as the Regulations on the Administration of Import and Export of Technologies. The action was taken as a settlement to a WTO dispute brought by the US in 2018. The measures related to measures that had the effect of denying foreign patent holders the ability to enforce patent rights against a Joint Venture (JV) Chinese partner after a technology transfer contract had ended. In addition, some measures that imposed mandatory adverse contract terms on foreign patent holders which discriminated between foreign technology and Chinese technology were also addressed.¹²⁰
- (2) regarding trade secrets, the disclosure of trade secrets and confidential business information by government officials is a huge concern for investors. Although China is instituting reforms in respect of this issue, the problem has not yet been fully resolved. China introduced the draft Guiding Opinions on Strengthening the Protection of Trade Secrets and Confidential Business Information in Administrative Licensing which were published for public comment in August 2020 by the Ministry of Justice, but the issue has not moved on any further.¹²¹
- (3) regarding industrial design, China acceded to the Hague Agreement Concerning the International Registration of Industrial Designs in 2022.¹²²

Furthermore, China has been active in bringing its IP laws up to international standards. China has cooperated with WIPO and has held four sessions of a series of high-level roundtables.¹²³ In addition, high-ranking Chinese officials have confirmed China’s commitment to strengthening IP protection and enforcement¹²⁴ based on free-market rules.¹²⁵ The Supreme People’s Court is committed to fully implementing the *Memorandum of Understanding on Judicial Exchanges and Cooperation* signed with WIPO.¹²⁶

In particular, China changed its IP rules to comply with the decision of *China-Intellectual Property Rights*.¹²⁷ The former Deputy Director-General MOFCOM’s Treaty & Law Department remarked that it “was unprecedented in [China’s] legislative history in the sense of amending its laws according to international rules” following an international court ruling’.¹²⁸

In fact, in respect of IPRs, China joined 15 of the 24 WIPO administered treaties which is two more than the United States.¹²⁹ Efforts to make IP-related reforms to promote international trade preceded China’s accession to the WTO. In 1979 China and the US signed the Agreement

¹¹⁸ *ibid*, 168.

¹¹⁹ *ibid*, 168–169.

¹²⁰ Office of the US Trade Representative (“USTR”), 2023 Special 301 Report on Intellectual Property Protection and Enforcement, < [https://ustr.gov/sites/default/files/2023-04/2023 Special 301 Report.pdf](https://ustr.gov/sites/default/files/2023-04/2023%20Special%20301%20Report.pdf) > accessed 3 March 2023, 46.

¹²¹ *ibid*, 46–47.

¹²² WIPO, WIPO Administered Agreement, The Hague Agreement, Contracting Parties < https://www.wipo.int/wipolex/en/treaties/ShowResults?search_what=C&treaty_id=9 > accessed 22 September 2023.

¹²³ WIPO Office in China, ‘WIPO China: Series of High-Level Roundtables 2021 – Fourth Session with the Government’ (31 March 2021) < https://www.wipo.int/about-wipo/en/offices/china/news/2021/news_0006.html > accessed 20 January 2023.

¹²⁴ See Justice T Kaiyuan, *supra* note 78, WIPO, *supra* note 123.

¹²⁵ Vision and Actions Plan, *supra* note 22, II. Principles. See also Justice T Kaiyuan, *supra* note 78.

¹²⁶ Justice T Kaiyuan, *supra* note 78.

¹²⁷ Shaffer and Gao, *supra* note 35, 171.

¹²⁸ *ibid*.

¹²⁹ Yu, *supra* note 40, 222–23.

on Trade Relations Between the United States of America and the People's Republic of China which called for reciprocal protection of copyrights, patents and trademarks, marking the beginning of Western intellectual property protection in post-Mao China. Article VI (5) further stipulated that 'each Party shall take appropriate measures, under its laws and regulations and with due regard to international practice, to ensure to legal or natural persons of the other Party protection of copyrights equivalent to the copyright protection correspondingly accorded by the other Party'.¹³⁰ In 1989 China and the United States signed their first ever memorandum of understanding (MOU) concerning the protection of intellectual property rights.¹³¹ China amended its copyright and patent laws pursuant to the MOU. This trend has persisted through recent years, as it was noted that:

As IP rights are intangible, it is necessary to establish a corresponding set of rules governing evidence. The modern IP system is a product of the market economy. It therefore follows that compensation for IP infringement must be based on market values. It is our firm belief that IP rights create value and right holders should be entitled to adequate return for such value. *In light of this, and with a view to building greater respect for IP rights, we are establishing a more rigorous system of punitive damages to curb trademark counterfeiting and trade secret misappropriation. This is an unprecedented and historic step in the transformation of China's IP landscape* (emphasis added).¹³²

Nevertheless, the dichotomy between 'In-Bound IP Policies' and 'Out-Bound IP Policies' reflects the uncertainties accompanying the changing role of China from an IP-Importer to an IP-Exporter. However, whether China will also follow this policy concerning its 'In-Bound IP Policy' is an issue that has raised great controversy.

In fact, China is accused of massive subsidization of technological innovation to reduce dependence on Western technology, while at the same time incentivizing Chinese SOEs and private companies to acquire advanced technology abroad and expanding the role of IP.¹³³

Accordingly, we turn to discuss another important factor in technology transfer, namely FDI. The next section examines Chinese Out-Bound FDI policy and its impact on transfer of technology in the BRI.

4. CHINESE FDI TECHNOLOGY TRANSFER-RELATED POLICIES: 'OUT-BOUND FDI' V. 'IN-BOUND FDI'

It has been observed that technology transfer is unlikely to happen without adequate financial support. Financial support may be provided by the private sector (e.g. venture capital) or through government incentives to promote investment in sectors of essential significance.¹³⁴ Therefore, the role of FDI on promoting transfer of technology must be examined.¹³⁵ It is contended that technology transfer has been closely tied in with Chinese FDI policy past and present and that it is essential to secure its transition into an innovative economy.¹³⁶

There are many definitions of FDI, but the most relevant definition to our analysis is the OECD's definition which defines a foreign direct investor as:

an entity (an institutional unit) resident in one economy that has acquired, either directly or indirectly, at least 10% of the voting power of a corporation (enterprise), or equivalent for an unincorporated enterprise, resident in another economy. A direct

¹³⁰ *Agreement on Trade Relations Between the United States of America and the People's Republic of China, U.S.-China*, July 7, 1979, 31 U.S.T. 4652, VI; *ibid*, 216–21.

¹³¹ *Memorandum of Understanding Between the People's Republic of China and the United States, U.S.-China*, May 19, 1989, reprinted in *PRC Agrees to Push for Copyright Law that Will Protect Computer Software*, *WORLD INTELL. PROP. REP.*, July 1989, 151 reported in Yu, *supra* note 40, n54.

¹³² Justice T Kaiyuan, *supra* note 78.

¹³³ Shaffer & Gao, *supra* note 29, 608.

¹³⁴ UNCTAD, *supra* note 7, 3.

¹³⁵ *ibid*, 15.

¹³⁶ Zhou et al., *supra* note 6, 455.

investor could be classified to any sector of the economy and could be any of the following:

- i) an individual;
- ii) a group of related individuals;
- iii) an incorporated or unincorporated enterprise;
- iv) a public or private enterprise;
- v) a group of related enterprises;
- vi) a government body;
- vii) an estate, trust or other societal organisation; or
- viii) any combination of the above.¹³⁷

Notable in the OECD's definition is the contemplation that FDI can be carried out by a public enterprise or a government body.

In the next section, we discuss Chinese Out-Bound and In-Bound FDI policies and the nexus between these policies and transfer of technology with an emphasis on the impact of BRI on these policies.

4.1 OUT-BOUND TECHNOLOGY TRANSFER RELATED FDI

In this section, we turn to a very important factor in transfer of technology, namely FDI. China, allegedly, leverages Chinese enterprises, particularly State-Owned Enterprises (SOEs), to invest in foreign companies with significant IP portfolios, then IP, as well as proprietary information, is transferred to Chinese companies.¹³⁸

Chinese FDI policy was challenged by the North because of, inter alia, the fact that these policies are mainly conducted through SOEs which gives Chinese investors a competitive edge in the international investment scene.¹³⁹ However, issues raised by SOEs are still very controversial under WTO law. Indeed, state ownership is suspected by some WTO Members of causing an enterprise to behave in a manner that is not based on a commercial basis and which might distort trade.¹⁴⁰ The main issues raised by SOEs are the difficulty of providing a definition of SOEs as well as a lack of transparency regarding the connections between a given firm and the government.¹⁴¹ Some commentators attribute the failure of WTO adjudicative bodies to find a definite legal standard to determine the existence of meaningful government control to the fact that SOEs' privatization programmes in developing countries are diversified and usually SOEs in developing countries are only partially privatized.¹⁴²

Chinese SOEs are a major concern of the world trading powers given their massive size and the difficulty of detecting their relationship with the government. This issue was perceived when China joined the WTO;¹⁴³ however, we argue, it was dealt with inadequately. Before the rise of Chinese SOEs, SOEs were barely viewed as a WTO problem.¹⁴⁴ In fact, the early history of the GATT regime did not comprehensively deal with the issue of state trading.¹⁴⁵

However, following the Chinese WTO accession, Chinese SOEs have grown massively. To illustrate, in 2005 there was no single Chinese SOE among the Fortune Global 500 yet, in 2013, three Chinese SOEs were among the top ten Global 500 ranking.¹⁴⁶ These three SOEs ranked

¹³⁷ OECD, *Bench Mark Definition of Foreign Direct Investment* (2008) 49–50.

¹³⁸ There are concerns that the issue of forced technology transfers may place the US at a permanent technological disadvantage. A Severin, 'Keeping Up With China: CFIUS and The Need to Secure Material Nonpublic Technical Knowledge Of AI/ML' (2021) 19 *Duke L. & Tech. Rev.* 59, 60–61.

¹³⁹ Joint Statement, *supra* note 106.

¹⁴⁰ WTO, Technical information on State Trading Enterprises, < https://www.wto.org/english/tratop_e/statra_e/statra_info_e.htm > accessed 4 September 2022.

¹⁴¹ *ibid.*

¹⁴² Tan, *supra* note 55, 141.

¹⁴³ Qin, *supra* note 37.

¹⁴⁴ L Borlini, 'When the Leviathan goes to the market: A critical evaluation of the rules governing state-owned enterprises in trade agreements' (2020) 33(2) *Leiden Journal of International Law* 313, 315.

¹⁴⁵ Mavroidis & Janow, *supra* note 46, 3.

¹⁴⁶ CNN, money.cnn.com/magazines/fortune/global500/2013/full_list/ < https://money.cnn.com/magazines/fortune/global500/2013/full_list/ > accessed 10 March 2024.

second, third and fourth in 2018.¹⁴⁷ A particular ground of concern relating to Chinese SOEs is their role in the massive increase in Out-Bound Chinese FDI.¹⁴⁸ In the context of the BRI, Chinese SOEs remain the main investors.¹⁴⁹

Nevertheless, *the only WTO provision that explicitly refers to SOEs which are engaged in trade is GATT Article XVII, State Trading Enterprises (STEs) and, in particular, Article XVII 1(a), which is essentially a non-discrimination provision.*¹⁵⁰ It is important to note in this respect that the China Protocol of Accession, paras. 5, 6 and 9, includes rules specific to China's state trading regime and price controls. In particular, it extends the provisions of Article XVII GATT to cover all 'state-owned enterprises' and 'state-invested enterprises'.¹⁵¹

In addition, the WTO does not prohibit or seek to dissolve STEs; after all both developed and developing countries have STEs which also pursue social functions in the given jurisdiction, in particular STEs can also be used for developmental policies.¹⁵² Instead, the main substantive obligations of WTO Members in relation to STEs can be summarized as follows:

- (1) non-discrimination, commonly referred to as 'most favoured nation' or 'MFN' treatment;
- (2) no quantitative restrictions;
- (3) preservation of the value of tariff concessions; and
- (4) transparency.¹⁵³

Furthermore, it is noted that the current WTO disciplines, in particular the subsidies discipline as well as the Agreement on Trade Related Investment Measures (TRIMs), fall short of addressing the problems raised by Chinese SOEs.¹⁵⁴ One significant shortfall in the TRIMs Agreement is that it is mainly focused on host country measures,¹⁵⁵ thus much of the Out-Bound FDI by Chinese SOEs is not captured by the TRIMs Agreement.

Indeed, it is observed that the Out-Bound Chinese FDI is state-led.¹⁵⁶ In the context of the BRI, BRI financing has been mainly affected by Chinese SOEs and state-owned banks. Examples of state-owned banks include: the China Development Bank which is the world's largest development finance bank and which is a joint stock company owned mainly by the Chinese state funds, the Export-Import Bank of China, the Agricultural Development Bank of China, and the Asian Infrastructure Investment Bank (the AIIB).¹⁵⁷ In addition, a special fund, the USD 40 billion Silk Road Fund, is dedicated to financing BRI projects.¹⁵⁸

Chinese official sources have shown that Chinese state-owned enterprises (SOEs) were in charge of over 3,100 BRI Projects.¹⁵⁹ However, some studies show that BRI investments in 2022 were unusually dominated by private sector enterprises, including CATL and Alibaba, while

¹⁴⁷ CNN, money.cnn.com/magazines/fortune/global500/2013/full_list/) (see fortune.com/global500/) reported in Borlini, *supra* note 144, n 3; see also M Kim, 'Regulating the Visible Hands: Development of Rules on State-Owned Enterprises in Trade Agreements' (2017) 58 *Harv. Int'l L.J.* 225., 231.

¹⁴⁸ Kim, *supra* note 147, 231–232.

¹⁴⁹ Wolff, *supra* note 25, 289.

¹⁵⁰ Borlini, *supra* note 144, 316; WTO, Technical information on State Trading Enterprises, < https://www.wto.org/english/tratop_e/statra_e/statra_info_e.htm > accessed 4 September 2022.

¹⁵¹ WTO, *Protocol on the Accession of the People's Republic of China*, paras 5–6, 9; Borlini, *supra* note 144, n 46.

¹⁵² Borlini, *supra* note 144.

¹⁵³ WTO, 'The regulation of state trading under the WTO system', < https://www.wto.org/english/tratop_e/statra_e/statrad.htm > accessed 24 September 2022. For more details on STEs see B Hoekman & J Trachtman, 'Canada-Wheat: discrimination, non-commercial considerations, and the right to regulate through state trading enterprises' (2008) 7 (1) *World Trade Review* 45.

¹⁵⁴ Levy, *supra* note 43, 642.

¹⁵⁵ *ibid.*

¹⁵⁶ Wolff, *supra* note 25, 289.

¹⁵⁷ C Bayari, 'The Neoliberal Globalization Link to the Belt and Road Initiative: The State and State-Owned Enterprises in China' [*alternative title: 'Bilateral and Multilateral Dualities of the Chinese State in the Construction of the Belt and Road Initiative'*], MPRA Paper No. 104471 (May 1, 2020) (posted 03 Dec 2020 07:25 UTC), <https://mpra.ub.uni-muenchen.de/104471/>, 8.

¹⁵⁸ OECD, *OECD Business and Finance Outlook, 'China's Belt and Road Initiative in the Global Trade, Investment and Finance Landscape'* (2018).

¹⁵⁹ Rolland, *supra* note 12.

construction contracts were dominated by state-owned enterprises.¹⁶⁰ But one must bear in mind that at the present time there is not enough data to examine the differences between the motivations of SOEs and those of the private enterprises.¹⁶¹

Moreover, it is observed by Garcia-Herrero et al that Chinese ‘Out-Bound Investments’ have increased sharply in the last decade; a 2014 OECD study revealed that China ranked as the third largest FDI investor in the world after the US and Japan.¹⁶² In 2016 China was ranked as the second largest holder of FDI assets globally (behind the USA) which is a remarkable increase since the previous years.¹⁶³ In 2014 the Chinese Ministry of Commerce declared that Chinese Out-Bound FDI might have exceeded In-Bound FDI for the first time.¹⁶⁴ The period 1984–91 witnessed the emphasis of the Chinese state on Out-Bound FDI in order to enhance technology transfer of foreign technology, enhance control over resources, and promote market access and the generation of foreign currency.¹⁶⁵

In fact, some commentators warn that Chinese high-tech investments rely systematically on acquired technology and induce technology transfer. The aim is to acquire control over the most lucrative fields of high-tech in global supply chains and production networks. Accordingly, the success of ‘Made in China 2025’ may pose a serious threat to the dominance of industrial countries in the field of high-tech.¹⁶⁶ The fact that Chinese Out-Bound FDI is directed and supported by the Chinese state is of particular concern to the US.¹⁶⁷ Chinese-US Out-Bound FDI is problematic due to the fact that it represents Chinese government-backed industrial policy which aims to target certain technology sectors and create national winners while utilizing the massive financial resources of the Chinese government which are not usually available to private firms.¹⁶⁸

In particular, the Notice on ‘Made in China 2025’ refers explicitly to these goals, as Out-Bound Chinese FDI should aim to explore: ‘the use of industrial funds, state-owned capital dividends, and other channels to support the “Going Out” of advantageous manufacturing capacity including high-speed rail, power generation equipment, automobiles, and engineering, so as to implement overseas investment acquisitions’.¹⁶⁹

The problematic nature of Chinese FDI is documented in the USTR Report, ‘Findings of the Investigation into China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Under Section 301 of the Trade Act of 1974: Executive Summary (22 March 2018)’.¹⁷⁰

The notice of initiation of the USTR investigation identified specific elements of Chinese technology transfer policies/practices, including: ‘... 3) governmental direction and unfair facilitation of outbound Chinese investment targeting U.S. companies and assets in key industry sectors’.¹⁷¹

¹⁶⁰ C Nedopil (January 2023): ‘China Belt and Road Initiative (BRI) Investment Report 2022’, Green Finance & Development Center, FISF Fudan University, Shanghai, 3; Li, *supra* note 10, 30. Also, A rise in strong technology manufacturing engagement was reported during the said period such as a USD 7.6 billion investment in a Gigafactory (Nedopil, 3).

¹⁶¹ L Chang et al., ‘Can Existing Theories Explain China’s Outward Foreign Direct Investment in Belt and Road Countries?’ (2021) 13 (3) *Sustainability* 1389, DOI: 10.3390/su13031389, 14.

¹⁶² A Garcia-Herrero et al., ‘China’s outbound foreign direct investment: How much goes where after round-tripping and offshoring?’ (2015) *BBVA Research – Working Paper*, No. 15/17, 3.

¹⁶³ CR McCaffrey, ‘How Chinese FDI Will Transform the Global Economy’, *The Diplomat* (December 16, 2017) < <https://thediplomat.com/2017/12/how-chinese-fdi-will-transform-the-global-economy/> > accessed 24 March 2023; AO Sykes, ‘The Law and Economics of “Forced” Technology Transfer and its Implications for Trade and Investment Policy (And The U.S.–China Trade War)’ (2021) 13 *Journal Of Legal Analysis* 127, 164.

¹⁶⁴ Garcia-Herrero et al., *supra* note 162, 3.

¹⁶⁵ *ibid*, 15; McCaffrey, *supra* note 163.

¹⁶⁶ Wübbcke et al., *supra* note 99, 8.

¹⁶⁷ Office of the United States Trade Representative, ‘Findings of The Investigation into China’s Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Under Section 301 of The Trade Act Of 1974, Executive Summary’, (22 March 2018) < <https://ustr.gov/sites/default/files/enforcement/301Investigations/301%20Draft%20Exec%20Summary%203.22.ustrfinal.pdf> > accessed 22 September 2023.

¹⁶⁸ *ibid*.

¹⁶⁹ *ibid*, viii.

¹⁷⁰ *ibid*.

¹⁷¹ *ibid*, i.

The US reacted to Chinese FDI policies with a number of measures. The most notable of these measures was the enactment of the Foreign Investment Risk Review Modernization Act (FIRRMA) which expanded the authority of the Committee on Foreign Investment in the United States (CFIUS)¹⁷² to block certain foreign investment in the US.¹⁷³ In particular, FIRRMA has broadened the scope of CFIUS review to include, inter alia:

‘(2) “other investments” in certain U.S. businesses that afford a foreign person access to material nonpublic technical information in the possession of the U.S. business, membership on the board of directors, or other decision-making rights, other than through voting of shares’;¹⁷⁴

Nevertheless, although FIRRMA does not single out a specific country¹⁷⁵, the main catalyst for CFIUS reforms was China.¹⁷⁶

Furthermore, although the major trading partners of China are Western developed countries, in particular the US, Germany, Japan, South Korea and the UK,¹⁷⁷ there is currently a wave of rising protectionism in the West which has culminated in the China-US Tech Conflict. To illustrate, Chinese firms such as Huawei and ZTE have usually been subject to scrutiny by the US authorities and this situation has caused China to look for an alternative investment venue. It is argued that the BRI offers long-term alternative investment opportunities for Chinese businesses.¹⁷⁸

Turning to the impact of the BRI on Chinese Out-Bound FDI in BRI countries, it has been observed that infrastructure investments by Chinese enterprises in BRI countries would improve and facilitate Chinese investments in those countries. Indeed, it has been documented that Chinese Out-Bound investment, in particular Mergers and Acquisitions (M&A) activity, rose significantly after the announcement of the BRI.¹⁷⁹ In addition, the involvement of the Chinese government in the BRI through the conclusion of various investment treaties and instruments (which is referred to by some authors as ‘Economic Diplomacy’),¹⁸⁰ has reduced the risks of host country policy uncertainty and political instability, further encouraging Chinese firms, particularly non-SOEs, to invest in BRI countries.¹⁸¹

Chinese enterprises are in fact seeking knowledge in other BRI countries. In Singapore, which is a BRI state, China made strategic investments in the pharmaceutical, medical devices, computer hardware and software, automobile and machinery development industries. China is also investing in heavy duty machinery, such as mining machinery, in Russia and in India, China is targeting the software sector.¹⁸² Thus, BRI diplomacy has allowed Chinese business to go global.¹⁸³

In fact, Chinese MNEs have been interested in BRI countries since the early 1990s, according to the Statistical Bulletin of China’s Outward Foreign Direct Investment. East Asian regions, which are now included in the BRI, were the primary recipients of Chinese efficiency seeking and trade supportive investments.¹⁸⁴ To illustrate, in respect of Chinese Out-Bound FDI in the BRI

¹⁷² For more details on FIRRMA and related amendments see, in general: Severin, *supra* note 138, 61–63.

¹⁷³ *ibid.*, 60–61.

¹⁷⁴ US Department of Treasury, CFIUS Laws and Guidance, Summary of the Foreign Investment Risk Review Modernization Act of 2018 < <https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius/cfius-laws-and-guidance> > accessed 12 March 2024.

¹⁷⁵ *ibid.*

¹⁷⁶ Z (J) Wang, ‘CFIUS Reforms: CFIUS Reforms in Context: China In The Crosshairs Of CFIUS’ (2019) 30 *Am. Rev. Int’l Arb.* 145, 145.

¹⁷⁷ Li, *supra* note 10, 21.

¹⁷⁸ *ibid.*

¹⁷⁹ J Du & Y Zhang, ‘Does One Belt One Road initiative promote Chinese overseas direct investment?’ (2018) 47 *China Economic Review* 189, 204–205.

¹⁸⁰ *ibid.*, 192. Political coordination has played a central role in the BRI, utilizing existing organizations such as the Shanghai Cooperation Organization for Central Asia, ASEAN for Southeast Asia, the China-Arab States Cooperation Forum for the Middle East, the Forum on China-African Cooperation for Africa, and, to a much lesser extent, the BRICS (Brazil, Russia, India, China, and South Africa) and has built on them incorporating the BRI in relations with other trading partners such as the 2015 EU-China Summit. *ibid.*

¹⁸¹ See *ibid.*

¹⁸² Li, *supra* note 10, 23.

¹⁸³ *ibid.*, 22.

¹⁸⁴ *ibid.*, 30.

region, East Asia holds half of the investment projects, while Central and Eastern Europe (CEE) is host to the lowest number of Chinese Out-Bound FDI despite having the largest number of BRI countries.¹⁸⁵

It is observed that currently Chinese Out-Bound FDI is shifting its focus from natural resources to inter alia high technology.¹⁸⁶ In fact, Chinese Out-Bound FDI in the BRI countries reached a peak level in 2019, mostly due to a new battery plant for electric investment in 147 countries. The driving force for this surge of Chinese Out-Bound FDI was China's Contemporary Amperex Technology Co. and Mercedes-Benz Group AG investment plans of more than \$7 billion in a plant in Hungary which is the biggest single project in any BRI country since it started in 2013.¹⁸⁷

In fact, the BRI had a great impact on the investment sectors targeted by Chinese Outbound M&A investments. In the period of 2012–13, the high-tech sector was not among the top 5 investment sectors of the Chinese Outbound M&A investments. However, after the launch of the BRI, the high tech sector featured among the top five sectors in Chinese Outbound M&A investments in 2014–15.¹⁸⁸

In respect of less developed BRI countries, it is suggested that the Chinese Out-Bound FDI development model in these countries resembles the 'North-South Model' where China is acting as a developed country entering less-developed BRI countries' markets, looking for their huge markets, natural resources and cheap labour (since labour costs are increasing in China).¹⁸⁹

Finally, it is important to note that Chinese investors may face many risks when investing in BRI countries for two reasons:

- (1) BRI countries are very heterogeneous with different political and economic development systems. In addition, many BRI countries suffer from poor governance and corruption which can present many hazards for Chinese investors.¹⁹⁰
- (2) There is no single comprehensive BRI treaty covering all BRI countries. Instead, the BRI is based on many memoranda of understanding and declarations that are neither binding nor enforceable. Thus, Chinese investors must seek protection under investment agreements that are mostly obsolete or offer limited protection.

In fact, a systemic assessment of legal disputes of Chinese investors in BRI countries, in order to assess key elements that provide legal protection to these investors, has been conducted.¹⁹¹ It was found that the regime of Chinese International Investment Agreements (IIAs) can be divided into three main groups based on when they were negotiated and the type of investment protection provided. The development of these agreements is a reflection of the development of the Chinese economy where China has evolved as one of the main sources of FDI:

- (1) The first generation of these IIAs was negotiated between 1982 and 1989, before China joined the ICSID Convention, and they offer weak substantive protection and limited access to investment arbitration.
- (2) The second generation of these IIAs was negotiated between 1990 and 1998 and, whilst still providing only weak substantive protection, they did include limited access to arbitration.
- (3) The third generation of IIAs was negotiated from 1998 onwards, including inter alia IIAs signed with the ASEAN states and Uzbekistan. These treaties do provide substantial protection for investors including national treatment and most-favoured nation provisions and they also include ICSID dispute resolution provisions.¹⁹²

¹⁸⁵ *ibid*, 26.

¹⁸⁶ Du & Zhang, *supra* note 179, 190.

¹⁸⁷ 'Chinese Investment in Belt and Road Nations Jumps on Tech Deals', *Bloomberg*, 3 February 2023.

¹⁸⁸ Du & Zhang, *supra* note 179, 196.

¹⁸⁹ L Chang et al., *supra* note 161, 13.

¹⁹⁰ D Sejko, 'Protecting Foreign Direct Investment in the Belt and Road Countries' (2019) *Thought Leadership Briefs – HKUST IEMS*, No. 33, 1.

¹⁹¹ *ibid*, 3.

¹⁹² *ibid*, 2.

In respect of the treaties conducted between China and the BRI countries, they mostly fall into the first or second category, thus offering limited protection to Chinese investors (undermining standard protection to investors such as national treatment, most-favoured nation status, fair and equitable treatment) and limited access to investor-state dispute resolution and enforcement. They are also expressed in mostly encouragement provisions rather than enforceable obligations.¹⁹³

However, there are a number of BRI countries that are not covered by IIAs between China and their respective governments, such as Afghanistan, Bhutan, Iraq, Montenegro, Nepal, and Palestine, all of which are Chinese Out-Bound FDI recipients.¹⁹⁴

In addition, earlier Chinese IIAs usually did not clarify that SOEs should be treated as an 'investor' under IIAs. China has paid attention to this issue in more recent IIAs. In addition, recent cases have indicated that Chinese SOEs can qualify as 'investors'.¹⁹⁵

These results might suggest that the BRI has offered Chinese enterprises the chance to build a strong base in BRI countries thereby giving China leverage in expanding its FDI activities to the West. In fact, President Trump denounced, in his view, 'unfair' Chinese policies, stating that such policies 'champion Chinese firms and make it impossible for many United States firms to compete on a level playing field'.¹⁹⁶ In the next section we turn to Chinese In-Bound FDI policy, highlighting its role in the context of the BRI.

4.2 IN-BOUND TECHNOLOGY TRANSFER RELATED FDI

It is argued that Chinese globalization policies underlying the BRI are not stand-alone policy occurrences but follow a classical development path (Dunning's Investment Development Path) in which In-Bound FDI is accumulated first and then is followed by a surge of Out-Bound FDI.¹⁹⁷

Indeed, China has long been a favourite destination for FDI. As an example of this, FDI allocated to China surpassed that directed to the US in 2020.¹⁹⁸ In addition China has preserved its seat as the 'World Factory' which has further enhanced its economic position.¹⁹⁹ However, starting from the 2010s, China's major trading partners started to raise concerns about China's state-led economic policies that allegedly infringed WTO rules by discriminating between domestic and foreign investors operating in its domestic market.²⁰⁰

In fact, the Chinese foreign investment regulatory regime has been ranked by the OECD as one of the world's most restrictive investment regimes.²⁰¹ The USTR initiation notice²⁰² pointed out specific issues of Chinese technology transfer-related policies/practices, namely:

...1) the government's use of opaque and discretionary administrative approval processes, joint venture (JV) requirements, foreign equity limitations, procurements, and other mechanisms to require or pressure the transfer of valuable U.S. technology and IP to China; 2) government acts, policies and practices that deprive U.S. companies of the ability to set market based terms in technology-related negotiations;...²⁰³

¹⁹³ *ibid.*, 2.

¹⁹⁴ *ibid.*, 3.

¹⁹⁵ *ibid.* In the Beijing Shougang case, the tribunal found that a group of SOEs that invested in Mongolia are economic entities and can be qualified as 'investor' under the China-Mongolia BIT (1991). This ruling is positive to protect Chinese SOEs investments in BRI countries.

¹⁹⁶ President Donald J. Trump Is Confronting China's Unfair Trade Policies, WHITE HOUSE (May 29, 2018), < <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-confronting-chinas-unfair-trade-policies/> > accessed 20 September 2023.

¹⁹⁷ Li, *supra* note 10, 20.

¹⁹⁸ P Hannon & EY Jeong, 'China Overtakes U.S. as World's Leading Destination for Foreign Direct Investment, Flows into America nearly halved as COVID19 dragged on the economy in 2020', *Wall Street Journal*, 24 January 2021 7:40 pm ET).

¹⁹⁹ *ibid.*

²⁰⁰ Bayari, *supra* note 157, 2.

²⁰¹ Office of the United States Trade Representative, 'Findings of The Investigation into China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation Under Section 301 of The Trade Act Of 1974 (n 167) v.

²⁰² *ibid.*

²⁰³ *ibid.* i.

We will highlight some aspects of the Chinese, allegedly unfair, In-Bound FDI policies. We do not purport to give a full account of the In-Bound FDI Chinese regulatory system; rather we will only give some examples of the allegedly unfair In-Bound FDI Chinese regulation. Before we proceed, it is important to note that, allegedly, foreign MNEs resorted to practices that were detrimental to Chinese firms in respect of technology transfer, including a number of issues such as turnaround time, delivery standards, pricing, and technology standards that do not favour local firms.²⁰⁴ Thus, there is always a tension between the interests of local Chinese firms in acquiring technology and the interests of foreign MNEs in protecting their cutting-edge technologies especially in jurisdictions that they deem to be not very supportive to IPRs.²⁰⁵

Indeed, China has introduced many legal reforms in response to these US concerns, including: lifting foreign ownership restrictions, enacting the Foreign Investment Law (FIL) which abolished forced technology transfer, amending the Trademark Law as well as the Anti-Unfair Competition Law.²⁰⁶ The main reforms introduced by the FIL, besides abolishing forced technology transfer, include:

- (1) introducing a holistic framework for foreign investment regulation which replaced the former foreign investment regime that was based on three laws (The Three Laws);²⁰⁷
- (2) Emphasizing pre-establishment national treatment and Negative List as key parts of a nationwide foreign investment regulation regime in China;²⁰⁸
- (3) adopting the concept of ‘competitive neutrality’, which emphasises national treatment for foreign investors. This is expected to provide foreign businesses with the chance of competition with inter alia Chinese SOEs except in sectors outlined in the Negative List (which outlines business sectors that are restricted or prohibited to foreign investors);²⁰⁹

Nevertheless, the West is still skeptical as to whether these reforms will eliminate the perceived unfair practices in this context.²¹⁰ In particular, there are concerns that the FIL is based on rhetorical language rather than specific enforceable obligations. To address these concerns China issued the Implementing Regulation of Foreign Investment Law (FIL Implementing Regulation) in December 2019.²¹¹

Furthermore, one of the most controversial items of Chinese legislation in that respect is the Chinese Cybersecurity Law which entered into force in 2017. This Law requires certain businesses investing in China to keep specified data on local Chinese-based servers and to allow specific Chinese government officials full access. Foreign investors were seriously concerned that the application of this Law might result in forcing them to give source codes or other IP to Chinese government officials which might allow illicit access to this information particularly by Chinese SOEs.²¹²

The WTO trade rules are inadequate for resolving all the allegedly unfair issues relating to Chinese In-Bound FDI policies and regulation. It is noted that, in general, WTO rules applicable to Member state policies concerning In-Bound Investment and associated technology transfer are ‘limited and indirect’.²¹³ Although the Chinese WTO Accession Protocol places more restraints on China regarding these issues,²¹⁴ these constraints were not enough, in the view of many developed countries, to capture Chinese allegedly trade-distorting practices especially in

²⁰⁴ Li, *supra* note 10, 22.

²⁰⁵ Li, *supra* note 10, 23.

²⁰⁶ J-A Lee, ‘Shifting IP Battlegrounds in the U.S.-China Trade War’ (2020) 43 Colum. J.L. & Arts 147, 151. Indeed, mergers and acquisitions are ‘the most important FDI mode in China, and foreign investors preferably enter the Chinese market by acquiring leading domestic companies’: S Marco Colino, ‘The Internationalization of China’s Foreign Direct Investment Laws’ (2021) 45 *Fordham Int’l L.J.* 275, 282; D Wong & A Chipman Koty, ‘The US-China Trade War: A Timeline’, *China Briefing*, 25 August 2020.

²⁰⁷ Feng & Wang, *supra* note 114, 118.

²⁰⁸ Feng & Wang, *supra* note 114, 118–119; 142.

²⁰⁹ *ibid.*, 118–119; 143.

²¹⁰ J-A Lee, *supra* note 206, 151.

²¹¹ Feng & Wang, *supra* note 114, 120–121.

²¹² Severin, *supra* note 138, 62.

²¹³ Sykes, *supra* note 163, 134.

²¹⁴ WTO, *Protocol on the Accession of the People’s Republic of China* (10 November 2001) WT/L/432.

the area of transfer of technology.²¹⁵ Indeed, despite the recent promising reforms, there are usually many stories in the Western press about China's hostility toward foreign businesses.²¹⁶

In an attempt to resolve this deadlock, both the US and the EU entered into negotiations with China to deal with these issues. In respect of the US, the Phase One Deal was signed between the US and China on 15 January 2020. The Phase One Deal provided inter alia for renewed commitments on IP and technology transfer.²¹⁷ The EU together with the European leaders entered into negotiations with China with a view to concluding a Comprehensive Agreement on Investment (CAI) which also included technology transfer and STEs.²¹⁸ However, developed countries, particularly those in the EU, are calling for an overhaul of the present WTO multilateral system by providing for 'new market access rules'.²¹⁹

Turning to In-Bound Chinese FDI in the context of the BRI, it is noted that, so far, FDI in the context of the BRI has been one-directional: Out-Bound Chinese FDI to BRI states.²²⁰ In 2018, 40% of Chinese Out-Bound FDI went to BRI states which was double the amount of Chinese Out-Bound FDI in 2017.²²¹ Nevertheless, recent studies have reported a 58.2% rise in China In-Bound FDI from BRI countries.²²² China was a recipient of US\$46.7 billion of FDI during the first three months of 2021, according to the Chinese Ministry of Commerce, surpassing the US to become the world's largest FDI recipient.²²³

It is observed that the majority of Western media has given a negative account of the Chinese Foreign Investment Regulation. This may have negatively impacted China In-Bound FDI. To illustrate, during Q1 of 2021, China In-Bound FDI from the EU had a mere 7% increase. Thus, there is currently an economic de-coupling by the West.²²⁴ The question then is: will China In-Bound FDI by BRI countries provide an alternative to Western FDI?

Some experts believe that the international treaties concluded between China and its trading partners, particularly from BRI countries, as well as the legal and policy reform of FDI regulation in China are likely to lure more FDI into China, especially now that China is expected to become the largest importer and consumer market by 2025.²²⁵ However, it will be interesting to monitor how this issue will develop in the future.

5. CONCLUDING REMARKS: THE BRI: AN ALTERNATIVE GROWTH MODEL?

China's success in utilizing the WTO rules, in particular the Dispute Settlement Body (DSB), has ignited sharp reactions from the West, especially in the US.²²⁶ In addition, the structure of the Chinese economy, where it is not at all easy to determine the role of the state in the economy, has made it extremely difficult to address trade barriers within China.²²⁷ This resulted in a 'loss of faith' in the WTO multi-trading system, particularly by the US.²²⁸

²¹⁵ See *ibid.* Section 7(3); see Sykes, *supra* note 163.

²¹⁶ Colino, *supra* note 206, 278.

²¹⁷ Wong & Chipman Koty, *supra* note 206; Sykes, *supra* note 163, 137–139.

²¹⁸ European Commission, *EU-China Comprehensive Agreement on Investment* (22 January 2021) < https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/china/eu-china-agreement/eu-china-agreement-principle_en > accessed 15 March 2023.

²¹⁹ WTO – *EU's proposals on WTO modernization*, *supra* note 110.

²²⁰ Wolff, *supra* note 25, 258.

²²¹ *ibid.*, 261.

²²² C Devonshire-Ellis, 'Inbound FDI into China from BRI Countries Rises 58.2% How and Why Did This Happen?'; Apr 20, 2021 Posted by Silk Road Briefing < <http://silkroad2021.org/index-1352.html> > accessed Sept. 18, 2023.

²²³ *ibid.*

²²⁴ *ibid.*

²²⁵ *ibid.*

²²⁶ USTR, '2021 Report to Congress On China's WTO Compliance', Feb. 2022, < <https://ustr.gov/sites/default/files/enforcement/WTO/2021%20USTR%20Report%20to%20Congress%20on%20China's%20WTO%20Compliance.pdf> > accessed 21 September 2023.

²²⁷ *ibid.*

²²⁸ *ibid.*

Consequently, this led to attempts to solve this impasse outside the WTO, through bilateral and plurilateral agreements. The US proposed two regional initiatives, namely the Transpacific Partnership (TPP) with Asia and the Transatlantic Trade and Investment Partnership (TTIP) with Europe. These initiatives were made with China in mind. For instance, the TPP sought to overcome the pitfalls in the treatment of SOEs in the WTO by defining SOEs according to their ownership rather than to their 'exercise of government functions'. The TTP explicitly prohibits SOEs from giving or receiving subsidies in relation to their commercial activities. Furthermore, in respect of Ecommerce, the TPP prohibits forced localization requirements and transfers of source codes.²²⁹

China countered by making many regional initiatives, including the Regional Comprehensive Economic Partnership (RCEP) with the Association of Southeast Asian Nations' ten members and five other Asian countries and the BRI. Chinese leaders were keen to 'reassure the world that [China would] pursue a different development path than did Germany and Japan in the late nineteenth and early twentieth centuries--a path based not on aggressive changes to the international order, but instead on benevolent principles of mutual benefit'.²³⁰

Indeed, China took considerable strides in the process of integrating itself in the WTO. China made significant tariff commitments for imports and largely liberalized its services sector. It committed to: the principle of non-discrimination between foreign and domestic trade, transparency rules confirmative to international standards, adherence to strict IP rules, and independent judicial review of trade-related administrative actions.²³¹

Nevertheless, it has been contended that China pursues a 'Dual-Track Policy' by using neoliberal Washington-Consensus policies in its 'Out-Bound Trade' while continuing to protect its market in respect of 'In-Bound Trade'.²³² It has also been argued that the Chinese Dual-Track Policy allowed China to acquire foreign technology without having to liberalize its own market.²³³

Specifically, it has been asserted that 'China has used the neoliberal globalization to enhance its existing state-driven economic model'.²³⁴ It is argued that the BRI, is the embodiment of the Chinese advantages gained from abusing the neoliberal globalization system by integrating its economy in the neoliberal system while not neo-liberalizing its own market.²³⁵ In particular:

The Chinese state has integrated its economy into the neoliberal globalization of trade and investment, without neoliberalizing its own financial markets, and to ensure stability, the state applies strict controls on interest rates, capital movement and the value of RMB. The Chinese state is not likely to create its own neoliberalizing model with a free floating RMB, deregulated capital controls, large scale privatization of strategic SOEs. Nor it is likely to move from the export-based GDP growth to a domestic consumption-led model.²³⁶

Indeed, it has been deduced that, while in the wake of China's accession to the WTO, China embarked on some deregulatory moves and privatization programmes, China still introduces protectionist regulatory measures, with more stringent regulation of the value of RMB, capital flows and the finance and banking sector.²³⁷

Nevertheless, as shown in this article, China's approach in respect of its international trade endeavours has attempted so far to work with the current international economic trading system. However, China also seeks to build on the current system and to actively engage with

²²⁹ USTR, TPP Chapter Summary E-Commerce < <https://ustr.gov/sites/default/files/TPP-Chapter-Summary-Electronic-Commerce.pdf> > accessed 27 September 2022.

²³⁰ Yu, *supra* note 40, 231.

²³¹ Shaffer and HS Gao, *supra* note 35, 130.

²³² See for instance: Bayari, *supra* note 157.

²³³ *ibid*, 9–10.

²³⁴ *ibid*, 2.

²³⁵ *ibid*.

²³⁶ *ibid*, 10.

²³⁷ *ibid*, 4.

the current system to become a 'norm maker' rather than a 'norm taker'. The BRI, in our view, exemplifies this particular Chinese international trade policy.

To conclude, technology transfer is at the heart of the BRI. IP and FDI policies are the main tools utilized to promote technology transfer. Indeed, IP and state-led FDI policies were the main concerns of the US, EU and Japan in their 'Joint Statement'. There is great controversy surrounding whether Chinese laws and policies are in conformity with international trade rules, in particular, the WTO. The question then is, how will the BRI fare in this dispute? Will the BRI evolve into a distinct/alternative growth model? These are all open questions that are probably hard to answer at the present time but they also provide plentiful subjects for future research.

COMPETING INTERESTS

The author has no competing interests to declare.

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