ENVIRONMENTAL PROTECTION OF HOST STATES IN INTERNATIONAL INVESTMENT LAW: TREATY REINTERPRETATION, PROVISION DESIGN AND EXPERIENCE FROM CHINA

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ABSTRACT

This research aims to evaluate the scope of environmental protection in host states against the states' obligations to protect and promote foreign investments, and to identify how the existing international investment treaty practice and dispute settlement practice are insufficient in light of considering the environmental interests of host states in the standards of treatment, including the fair and equitable treatment, national treatment, most-favoured-treatment, and non-expropriation standard. This research argues that the existing regime of international investment law does not provide an appropriate framework for the protection of host states' environmental interests, especially in the countries with economic and social transition (like China) where the domestic need for environmental protection is emerging and growing significantly. In contributing to the means through which host states are able to regulate foreign investments without otherwise violating treaty obligation, this research proposes: (1) interpreting investment treaty provisions by introducing more environmental consideration, and (2) rethinking and reshaping the current pro-investor mechanism of international investment law through embracing the provision of broad environmental exception.

LIST OF ABBREVIATIONS

APEC - Asian Pacific Economic Cooperation

ASEAN - Association of Southeast Asian Nations

BIT - Bilateral Investment Treaty

BP - Balance of Payments

CEPA - Closer Economic Partnership Agreement

CFIUS - Committee on Foreign Investment in the United States

CIB – China, India and Brazil

CNOOC - China National Offshore Oil Corporation

CNPC - China National Petroleum Corporation

DA - Dictionary of Accounting

DE - Dictionary of Economics

ESCAP - Economic and Social Commission for Asia and the Pacific

EC - European Commission

EU - European Union

FA - Framework Agreement

FAT - Free Trade Agreement

FDA - US Federal Drug Administration

FDI - Foreign Direct Investment

FET - Fair and Equitable Treatment

FTA - Free Trade Agreement

FTZ – Free Trade Zone

GATS - General Agreements on Trade in Services

GATT - General Agreement on Tariffs and Trade

GDP - Gross Domestic Product

ICSID - International Centre for Settlement of Investment Disputes

IEA - International Energy Agency

IIA - International Investment Agreement

IIF - International Investment Forum

IIL - International Investment Law

IIP - International Investment Position

IISD - Institute for Sustainable Development

IIT - International Investment Treaty

IM - Imperfect markets

IM - Imperfect markets

IMF - International Monetary Fund

LNS - Liquefied Natural Gas

MAI - Multilateral Agreement on Investment

MFN - Most-Favoured-Nation Treatment

MIT - Multilateral Investment Treaty

MNE - Multinational Enterprise

MOC - Ministry of Commerce of the PRC

NAAEC - North American Agreement on Environmental Co-operation

NAFTA –North American Free Trade Agreement

NGO - Non Government Organization

NPC - National People's Congress of the PRC

NPCSC - Standing Committee of the National People's Congress of the People's Republic of China

NT - National Treatment

OECD - Organization for Economic Co-operation and Development

PI - Portfolio Investment

RIT - Regional Investment Treaty

SC - State Council of the PRC

SDGs - Sustainable Development Goals

SINOPEC - China Petroleum and Chemical Group

SNA - System of National Accounts

SOEs - State Owned Enterprises

TCA - Trade and Economic Cooperation Agreement

TIA - Trilateral Investment Agreement

UNCITRAL - United Nations Commission on International Trade Law

UNCTAD - United Nations Conference on Trade and Development

VAT – Value Added Tax

WENGTP - West to East Natural Gas Transmit Plan

WIR - World Investment Report

WTO - World Trade Organisation

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CHAPTER I
INTRODUCTION

1. Introduction

The origins of international investment law (IIL) are manifested in customary international law theory,[1] but investment treaty laws have developed continuously with substantial changes since 1959, when the Germany-Pakistan investment treaty was concluded.[2] A spin-off of these developments is the need to address the public interests of host states (e.g. the environmental interests) to generate a balanced (between investors and host states) international investment regime.[3] Against such a background, governments, international organizations and researchers have made great efforts to preserve the environmental interests of host states in IIL.[4]

However, the protection and promotion of international investments have been the main features of current IIL and the provisions stipulating host states' obligations dominate international investment treaties (IITs).[5] Notwithstanding the fact that the current IIL has been designed and construed as a

[1] Dolzer R. and Schreuer C., *Principles of International Investment Law* (Oxford University Press 2008) 7; Newcombe A. and Paradell L., *Law and Practice on Investment Treaties: Standards of Treatment* (Kluwer Law International 2009) 38.

[2] Mann H., 'Reconceptualizing International Investment Law: Its Role in Sustainable Development' (2013) 17(2) Lewis and Clark Law Review 521.

[3] UNCTAD, 'Towards a New Generation of International Investment Policies: UNCTAD'S Fresh Approach to Multilateral Investment Policy-Making' (2013) IIA Issues Note (5).

[4] Some recent contribution to environmental protection under the regime of international investment law can be found as follows: Viñuales J. E., 'Foreign Investment and the Environment in International Law: An Ambiguous Relationship' (2009) 80(1) British Yearbook of International Law 244; Romson Å., *Environmental Policy Space and International Investment Law* (Acta Universitatis Stockholmiensis 2012); Segger M. C. and Gehring W. M. and Newcombe A., *Sustainable Development in World Investment Law* (Kluwer Law International 2011); Gordon K. and Pohl J., 'Environmental Concerns in International Investment Agreements' (2011) OECD Working Papers on International Investment, available at http://www.oecd.org/investment/internationalinvestmentagreements/WP-2011_1.pdf, accessed 12 July 2013; for a summary of international investment cases in which the environmental issues are concerned, please see Bernasconi-Osterwalder N. and Johnson L., *International Investment Law and Sustainable Development: Key cases from 2000–2010* (International Institute for Sustainable Development 2011).

[5] Salacuse J. W., 'BIT by BIT: The Growth of Bilateral Investment Treaties and Their Impact on Foreign Investment in Developing Countries' (1990) The International Lawyer 24(3) 661. ('The movement to conclude BITs has been initiated and driven by Western, capital-exporting states. Their primary objective has been to create clear international legal rules and effective enforcement mechanisms to protect investment by their nationals in the territories of foreign states. The essence of this protection is to defend the investment and the investor from exercises of state power by host governments'); Vandevelde K. J., 'Political Economy of A Bilateral Investment Treaty' (1998) 92(4) The American Journal of International Law 630. ('BIT protections apply only to foreign investment, the BIT investment protection provisions actually serve to undermine the principle of investment neutrality'); Douglas Z., 'Property, Investment and the Scope of Investment Protection Obligations' in Douglas Z. and Pauwelyn J. and Vinuales J. (eds), *The Foundations of International Investment Law: Bringing Theory into Practice* (Oxford University Press 2014) 359. ('The substantive obligations of protection in the investment treaty

pro-investment regime, the imbalance between international investors/investments and host states, has received critical attention,[6] partially due to the fact that host states' interests are largely overlooked under this investment regime.[7] Environmental interests have been explored under expropriation and compensation related disputes.[8] Despite that the environmental concerns have been addressed in the IITs' provisions stipulating states' obligation to provide non-discriminatory treatment to foreign investors,[9] underlying questions remain: whether environmental protection of host states can be read widely in the existing IITs' provisions prescribing states' obligations? How will the new generation of IITs coordinate host states' concerns over environmental protection?

Since both IITs and international investment dispute settlement mechanisms, including the mechanism provided by the International Centre for Settlement of Investment Disputes (ICSID),[10] were rooted in the era when the nationalization of foreign investments and the unilateral suspension of exploration permits prevailed, the protection of host states' environment and public interests was hardly presented in IITs, and the environmental concerns were thus not well observed by international tribunals in early arbitral practice, which eventually led to the uncertainty and inconsistency of arbitration practice.[11] Nevertheless, the growing claims for sustainable investments[12] and the increasing environmental

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are formulated in terms of a relationship between the conduct of the state and its impact upon an investment or rights closely connected to an investment. If the host state has breached a substantive obligation of protection … the appropriate reparation due from the host state').

[6] E.g. Barnali argues that if the IITs continue the over-protection of foreign investors, more states will be forced to denounce the current IITs, like what Bolivia and Ecuador have done. Barnali C. 'International Investment Law as A Global Public Good' (2013) 17(2) Lewis and Clark Law Review 520.

[7] Bilateral investment treaties (BITs) favour foreign investment and the inequalities brought will make the application of the BITs difficult. Chung O., 'The Lopsided International Investment Law Regime and Its Effect on the Future of Investor-State Arbitration' (2007) 47 Virginia Journal of International Law 956; Brower C. N. and Schill S. W., "Is Arbitration a Threat or a Boon to the Legitimacy of International Investment Law?' (2009) Chicago Journal of International Law 474-475. ('Criticism assets that investment treaties and investment-treaty arbitration institutionalize a pro-investor bias that casts the legitimacy of the entire system of international investment law and arbitration into doubt').

[8] Wagner J.M., 'International Investment, Expropriation and Environmental Protection' (1999) 29(3) Golden Gate University Law Review 465-538; Waelde T. and Kolo A., 'Environmental Regulation, Investment Protection and 'Regulatory Taking' in International Law' (2001) 50(4) International and Comparative Law Quarterly 811-848; Madalena I., 'Foreign Direct Investment and the Protection of the Environment: the Border between National Environmental Regulation and Expropriation' (2003) 12(3) European Environmental Law Review 70-82; Newcombe A., 'The Boundaries of Regulatory Expropriation in International Law' (2005) 20(1) ICSID Review 24-26; Baughen S., 'Expropriation and Environmental Regulation: The Lessons of NAFTA Chapter Eleven' (2006) 18(2) Journal of Environmental Law 207–228.

[9] Weiler T., 'A First Look at the Interim Merits Award in *S.D. Myers, Inc. v. Canada*: It is Possible to Balance Legitimate Environmental Concerns with Investment Protection' (2001) 24 Hastings International and Comparative Law Review 176-180.

[10] ICSID is the first dispute settlement mechanism exclusively for international investment disputes. Parra A. R., *The History of ICSID* (Oxford University Press 2012) 95-119.

[11] For instance, the *Metalclad* tribunal did not consider the motivation of ecological protection underlying the Ecological Decree and tested expropriation on the basis of economic impact. While the *Methanex* tribunal considered the protection of rare cacti behind governmental measures in the evaluation expropriation. The different approaches to evaluate environmental concerns in investment disputes increased the uncertainty and inconsistency of arbitral practice. *Metalclad Corporation v. The United Mexican States*, Award of 30 August 2000 (ICSID Case No. ARB(AF)/97/1) 111; *Methanex Corporation v. United States of America*, Final Award on Jurisdiction and Merits of August 3 2005 (UNCITRAL) Part IV Chapter D 4-7.

[12] The World Investment Report 2014 (WIR 2014) sets out a comprehensive plan of actions for international

concerns in municipal investment instruments [13] are challenging these roots, on which the environmental preservation was overlooked in the face of investment protection.

Environmental protection is being considered by certain IITs,[14] including some model bilateral investment treaties (BITs),[15] although these treaties remain the minority among the 3,281 IITs[16] concluded until September 2015. It is noteworthy that the number of IITs considering environmental issues continues to increase, especially among the new BITs concluded recently.[17] Nevertheless, the

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investors and the related participants in order to achieve the sustainable development goals. The plan includes setting up a guiding policy for SDGs, creating financial and marketing support for SDGs, establishing incentive and promotion schemes, and enhancing the benefits of SDGs. See UNCTAD, *World Investment Report 2014: Investing in the Sustainable Development Goal*s: *An Action Plan* (2014); Mann H., 'Reconceptualising International Investment Law: Its Role in Sustainable Development' (IISD Publication Centre, 2013) 191-192, available at: http://www.iisd.org/pdf/2013/reconceptualizing_investment_law.pdf, accessed 16 August 2015; The G20 Washington Summit began in 2008 to promote environmental protection in energy development and investment. Green and sustainable economic recovery measures, sustainable guide for global trade and investment and marine environmental protection and clean energy promotion were the themes of the G20 Summits in 2009, 2010 and 2012 respectively, and all the themes were related to environmental protection; additionally, the Non-Governmental Organizations (NGOs) have made efforts to adopt binding environmental standards in investment treaties. See Walter A., 'NGOs, Business, and International Investment: The Multilateral Agreement on Investment, Seattle, and Beyond' (2001) 7 Global Governance 57-58. ('Business lobbies, particularly those from the United States, were keen to push … a "high standard, liberal investment regime" … However, these "high standards," … were seen by NGOs as a direct threat to their goal of raising (or even maintaining) environmental and other standards in developed and developing countries. … NGOs were able to substantially reduce U.S. business support for the negotiations. Ultimately, I argue, this was one important factor in the collapse of the negotiations [of the Multilateral Agreement on Investment]').

[13] The past several years' development of Chinese laws, regulations, rules and policies regarding foreign investment has seen the recognition of environmental protection in China's attraction of foreign investment. Article V, Chapter I of the Foreign Enterprises Law of the PRC (amended 19 February 2014) sets out five situations (including the possible environmental pollutions) in which foreign investment projects cannot be approved in China. See *Enforcement Regulation of Foreign Enterprises Law of the PRC* (Amended on19 February 2014 by the State Department of PRC NO.648) Article 5: The application of the establishment of Foreign-Capital Enterprises will be denied if: … (5) if the foreign enterprise may cause environmental pollutions. Also the Exposure Draft of Foreign Investment Law of the PRC in 2015 (2015 Exposure Draft) has significantly reduced the categories of foreign investments which need entry permission from the Chinese Government. But the investors should still provide the information regarding environmental protection and the Chinese Government reaches decisions on the basis of the review of such information, indicating that foreign investment with environmental pollution might be rejected from China. Ministry of Commerce of the PRC, The Exposure Draft of Foreign Investment Law of the PRC (2015 Exposure Draft), released on 19 January 2015, Article 30 (Application Materials for the Entry Permission Application); What is more, the 2015 Exposure Draft has for the first time in Chinese foreign investment history recognised the need not to infringe eco-environment to promote foreign investment. Chapter VI Investment Promotion Article 104 (Investment Promotes Order) of the 2015 Exposure Draft.

[14] The capital importing countries such as Colombia and Thailand tend to contain environmental concerns in the form of exception clauses in their IITs. See, for instance, Colombia-India BIT (2009) Article 13.5 (General Exceptions) ('Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination … a disguised restriction on investment … nothing in this Agreement shall be construed to prevent the adoption or enforcement by a Contracting Party of measures: … c. relating to the protection of the environment or the conservation of exhaustible natural resources, if such measures are made effective in conjunction with restrictions on domestic production or consumption').

[15] The Model BITs are generally from the countries, including Canada, Japan, Australia, US and New Zealand. See, for instance, the US Model BIT (2012) Article 12 (Investment and Environment).

[16] Treaties referring to environmental concerns take up roughly 6.5% of all the BITs. See Gordon and Pohl (n 4).

[17] Since 2012, more than half of the new IITs concluded each year featured environmental protection through exception provisions. See United Nations Conference on Trade and Development (UNCTAD), *World investment report 2012: Towards a new generation of investment policies* (UNCTAD 2013) 90; *World investment report 2013: Global value chains: Investment and trade for development* (UNCTAD 2014) 102; and *World investment report*

investment tribunals did not award compensation merely because the environmental regulations caused damages to foreign investments.[18] Since host states' environmental concerns are being embraced by the new IITs, the question is no longer limited to whether tribunals should be bound by treaty provisions to address environmental protection in interpreting IITs, but rather expands to how tribunals will read treaty provisions to reflect the environmental interests of the contracting parties, and how the old IITs will develop towards the balanced instruments.

Ironically, the environmental interests, especially in the developing host states, are still being sacrificed to attract foreign capitals.[19] Yet, it remains the leading capital exporting countries, who have designed the old IITs without environmental issues, which are beginning to dominate the proposals of addressing environmental interests in new IITs, although some capital importing countries such as Colombia and Thailand are also the proponents.[20] But countries like China, which are both exporting and importing capitals, should pay more attention to the environmental provisions in IITs because on the one hand,

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2014: Investing in the SDGs: An action plan (UNCTAD 2015) 116; Beharry C. L. and Kuritzky M. E., 'Going Green: Managing the Environment Through International Investment Arbitration' (2015) 30(3) American University International Law Review 389. ('Nearly half of new treaties concluded since 2005 reference the environment in some way [with treaty language relating to environmental concerns]').

[18] Brower C. N. and Blanchard S., "From 'Dealing in Virtue' to 'Profiting from Injustice': The Case Against "Re-Statification" of Investment Dispute Settlement' (2013) 55 Harvard International Law Journal 54.

[19] Environmental standards of host states rely on the efficiency levels (the determinants include the emissions level, pollution absorptive capacity and intensity of environmental preference). But developing countries 'provide "pollution haven" if their environmental standards are below their efficiency levels or if they fail to enforce their standards in order to attract foreign investment.' And this phenomenon is more obvious in mining and energy sectors because 'multinational corporations also at times do take advantage of low environmental standards in the host country.' See Neumayer E., 'Pollution Havens: An Analysis of Policy Options for Dealing with an Elusive Phenomenon' (2001) 10(2) Journal of Environment and Development 149; In the highly polluting industries, foreign capital from ethnically Chinese sources (Taiwan, Hong Kong and Macao) tended to flow into the regions with weak environmental standards in China. See Dean J. M. and Lovely M. E. and Wang H., 'Are Foreign Investors Attracted to Weak Environmental Regulations? Evaluating the Evidence from China' (2009) 90 Journal of Development Economics 11-12; The growth of the multinational affiliate value in the US between 1999 and 2003 was partially attributed to 'declining stringent environmental policy' and the enforcement of the policy is more important than the policy itself in affecting international trade and investment. Kellenberg D. K., 'An Empirical Investigation of the Pollution Haven Effect with Strategic Environment and Trade Policy' (2009) 78 Journal of International Economics 242; Investigations illustrate that not all the sectors with weak environmental policies attract FDI. Research reveals that FDI tends to flow into the sectors such as natural resources extraction and refining if the environmental regulations are weak. But a more stringent environmental framework will attract more FDI in the sectors of transportation and automotive because otherwise the foreign investors will lose the reputation for clean and green business. See Poelhekke S. and Ploeg F. V. D., 'Green Havens and Pollution Havens' (2015) The World Economy 1171; When the fixed cost of FDI is low, foreign investors will tend to invest in a country if the pollution emission standards decrease at a certain level; when the fixed cost of FDI is high, the host country must determine the level of emission standards according to the FDI. Hence, regardless of high or low fix cost, 'attracting FDI may require developing countries' environmental deregulation'. Lee K.-D. and Lee W. and Kang K. 'Pollution Haven with Technological Externalities Arising from Foreign Direct Investment' (2014) 57Environ Resource Economy 17.
Poelhekke S. and Ploeg F. V. D., 'Green Havens and Pollution Havens' (2015) The World Economy 1159.

[20] The capital exporting countries such as US, Australia, Canada and Japan tend to address environmental protection in IITs. And the phenomenon also exists in some capital-importing countries. 'Non-discriminatory measures of a Contracting Party designed and applied ··· with objectives such as public health, safety and environment protection, do not constitute indirect Expropriation'. See Art.4.4 of Colombia-China BIT (2008).

the environmental measures will benefit China's public welfare; and it will restrict China's investors and investments overseas, on the other hand.[21]

This research aims to reveal the inefficiency of the current IITs and arbitration in protecting host states' interests, to examine the ways through which international tribunals can adjust the way to review the governmental measures for environmental protection,[22] so that the environmental interests can be taken into account in the interpretation of the treaty provisions of the Fair and Equitable Treatment (FET), National Treatment (NT), Most-Favoured-Nation Treatment (MFN), and the prohibition of expropriations with no compensation,[23] and to identify the environmental exceptions in the new IITs regime in light of the municipal investment policies in host states.[24] In particular, it evaluates how the current IITs will develop their environmental exception mechanisms in order to integrate with the domestic laws and policies of host states. Therefore, after answering the following questions of 'how inefficient are the IITs in observing host states' environmental interests', 'how the arbitral practice is affected by IITs to overlook the public interests', 'how the arbitral practice can be improved to consider the environmental interests', and 'how will the treaty provisions of environmental exceptions develop', this research will be embedded in the wider context of the ongoing debate about the adoption of exceptions mechanisms in IITs.

With the backdrop that: environmental protection and sustainable investment have been the central theme of the recent national and transnational investment forums,[25] the research on environmental

[21] For instance, the debate over the non-economic issues, including environmental standards and national securities has been the major concern in the negotiation of China-US BIT, which has not been concluded although after seven years' negotiation (with 19 rounds of negotiations). See Xia Tang, 'The Negotiation of the China-US BIT Under the New International Investment Agreement and China's Strategy' (2015) 01 Citizen and Law 28.

[22] It has been argued that investment tribunals should differentiate the governmental measures and consider changing the review standards of the governmental measures for the legitimate public interests. See Burke-White W. W. and Staden von Andreas, 'Private Litigation in a Public Law Sphere: The Standard of Review in Investor-State Arbitrations' (2010) 35 Yale Journal of International Law 285; Moloo R. and Jacinto J., 'Standards of Review and Reviewing Standards: Public Interest Regulation in International Investment Law' in Sauvant K., (eds), *Yearbook of International Investment Law and Policy2011–2012* (Oxford University Press 2012) 540; Petersmann, E. U., *Judicial Standards of Review and Administration of Justice in Trade and Investment Law and Adjudication* (Oxford University Press 2014); Schill S., 'Deference in Investment Treaty Arbitration: Re-Conceptualizing the Standard of Review' (2012) 3 Journal of International Dispute Settlement 606.

[23] Different investment treaties may provide different levels of investment protection, but the fair and equitable treatment, national treatment standard, most-favoured-nation treatment; non-discrimination and prohibition of expropriation without compensation are the main treatments commonly existing in investment treaties. McLachlan C. and Shore L. and Weiniger M., *International Investment Arbitration: Substantive Principles* (Oxford University Press 2007) 207.

[24] This research proposes environmental protection not only in treaty construction, but also in the improvement of tribunals' interpretations of treaty provisions because only when the 'treaty standards, arbitration, and investment policy' are comprehensively reformed, can the current system be 'reoriented' towards the balance of global benefits. See Barnali (n 6) 520.

[25] E.g. 'Investing In the SDGs: An Action Plan' (UNCTAD 2014 World Investment Forum); 'Towards A New Generation of Investment Policies' (UNCTAD 2012 World Investment Forum) (Investment policy framework for sustainable development was proposed as part of the 'new generation of investment policies' in Chapter IV of the World Investment Report for the forum); 'Investing in A Low Carbon Economy' (UNCTAD 2010 World

protection reflects the needs of both the developing and the developed countries for 'greener' investments. Among the IITs concluded by China, the typical IITs embracing the environmental issues include the China-Canada BIT and the China-Japan-Korea Trilateral Investment Agreement (China-Japan-Korea TIA). In addition, the number of the treaties with environmental provisions is expected to rise especially after the predictable conclusion of the IITs between China and the US/EU.[26] However, it is undeniable that the vast majority of IITs do not contain environmental provisions and even the treaties having such provisions are inconsistent, which situation is aggravated by the arbitration practice that features significant imbalance between investors and host states.[27]

The argument of this research is that, achieving environmental protection of host states may not fall within the aim of IIL, but the treaty and arbitration practice should not ignore or indulge the environmental pollution caused by foreign investments. Since environmental protection cannot be achieved by the current investment treaty law, this research further argues that the treaty interpretation should take environmental issues into account to fix the imbalanced treaty practice. This research also identifies that an increasing number of recent IITs concluded are no longer confined to economic issues but expose to a range of social and public interests including environmental protection, national security and human rights. China is generally relaxing the restrictions on the market access of foreign investment,[28] but increasing the intensity to regulate the foreign investments on the environmental ground. Therefore, it argues that IITs' provision covering states' public interests should be designed with broad scope to coordinate with host states' municipal laws and policies, especially in the transitional states, where the municipal environmental and investment policies are adjusting considerably.

Investment Forum); 'Opportunities and Challenges in International Investment in the Transition to a Low-carbon Era' (2011 International Investment Forum (China)).

[26] Song R. C., 'Gaming of States' Interests in the Negotiation of the China-US BIT' (PhD research, the University of Yunnan 2015).

[27] 'The fact of the matter is that a large majority of BITs contain provisions whose plain and ordinary meaning show that preference is to be given to investment protection over regulation.' See Ranjan P., ''Using Public Law Concept of Proportionality to Balance Investment Protection with Regulation in International Investment Law-A Critical Appraisal' (2014) 3(3) Cambridge Journal Of International And Comparative Law 882-883; ('The institution of a BIT or foreign investment law itself is serving neither the interests of developing countries nor the higher policy objectives of the international community'). Subedi S., *International Investment Law: Reconciling Policy and Principle* (Hart Publishing 2008) 2.

[28] Limitations on foreign investments are being diminished in China through new laws and policies such as the revised Industry Category Guide for Foreign Investment 2015 and the National Negative List for Foreign Investment. See The Industry Category Guide for Foreign Investment 2015 '2015 Investment Guide' was released on 10 March 2015, entered into force on 10 April 2015. The 2015 Investment Guide replaces the 2011 Revision of Industry Category Guide for Foreign Investment. Details are available at http://www.mofcom.gov.cn/article/b/f/201503/20150300911747.shtml, accessed 16 March 2015; the National Development and Reform Commission (NDRC) has issued a unified negative list of all the 4 free trade zones in China including Shanghai, Guangdong, Tianjin and Fujian. See Xu H. Y., 'National Negative List will be released soon' (23 March 2015) available at http://www.gov.cn/zhengce/content/2015-04/20/content_9627.htm, accessed 23 August 2015.

2. Contributions

Rather than being concerned with how to implement the existing IITs, this research seeks to contribute to the design and reform of treaty framework from the angle of environmental protection.

This research recognizes the difference in states' ability and concerns over environmental protection. Additionally, it is acknowledged that states retain the authority to exclude or embrace the environmental provision in IITs. Equally, it is recognised that host states may persistently favour the foreign investments over environmental protection, even after they have entered into IITs with explicit provisions of environmental protection. Hence, it gives rise to a question: why does this research remain significant to the states since they may choose to trade the environmental interests.

But this research first of all elaborates what the balanced IITs should be, followed by exploring how environmental protection should be embraced in the balanced IITs. In this regard, 'what the balanced IITs should be', 'to what extent the states are willing to accept the balanced IITs', and 'how the balanced IITs are being implemented' are three different questions. This research focuses on the first one.

Furthermore, a number of countries are beginning to have the dual-identity of both foreign direct investment (FDI) importer and exporter, which demands modification of current IIL to protect the multi-interests of host states, home states and foreign investors. For this purpose, this research is expected to contribute to such modification.

The research contributes to the debates on the impacts of China's globalization. Environmental pollution has been considered as a by-product in the process of China's attraction of FDI inflow,[29] which has been at the centre of debates, particularly when the most severe ocean pollution in China occurred in the Bohai Rim region because of an oil leak from an energy FDI project in 2011 (US oil company ConocoPhillips was the foreign investor involved).[30] While the investment projects in China are being questioned of the environmental problems, this research contributes to the prevention and controls of these problems from the perspective of reconciling the provisions of the IITs.

From the perspective of the foreign investors in China, the research demonstrates the latest environmental laws and policies in China regarding foreign investments, and proposes the way the environmental provisions develop in China's future IITs. Investors rely on the accuracy, stability and

[29] Xia Y. F., 'Pollution, Consequence and Solutions of foreign investment in China's Pollution-Intensive Industries' (1999) 3 Management World 116.
[30] Jiang M. J. and Wang F., 'Oil Leak in Bohai and Marine Ecology Security in China' (2011) Ecology Security Research 4.

predictability of host states' domestic laws, as well as the IITs. In this regard, this research endeavours to delineate a clear picture of domestic instruments on foreign investments in China.

From the perspective of the IITs parties, this research aims to demonstrate the trend of the treaty provisions of environmental protection, through which the treaty parties can negotiate. China is now negotiating with the US and the EU for investment treaties. In November 2014 the China-EU Strategic Plan 2020 was reached and the negotiation for a China-EU investment treaty was initiated accordingly.[31] The 'One Belt and One Road'[32] plan has promoted the interaction of China and EU through, for instance, the construction of the Chongqing (China)-Duisburg (Germany) railway and the expansion of the Rotterdam Port (Netherland) and the Antwerp Port (Belgium) projects.[33] In this regard, the negotiation and design of IITs' provision are decisive to the investments between the parties and this research therefore is expected to contribute to the treaty design from the aspect of environmental protection.

China is experiencing the economic and social transition and its existing IITs need to be adjusted to cater for the transition. This research takes such practical experience as a case study. But not all the states share a similar background with China and the research thus cannot be copied globally. However, it still has the long term implications because the developing states which are currently focusing on attracting investments will inevitably pay attention to the non-economic interests in the long term.

3. Research questions

This research addresses the following questions: What are the drawbacks of the current IITs which lack environmental consideration? How did the international tribunals undermine environmental protection in investment disputes? How can environmental provisions be designed in a new generation of IITs? Through examining the treaty and arbitration practice, this research critically points out the insufficiency of environmental protection and proposes the solutions within the context of treaty provisions so that tribunals are able to include the environmental considerations in treaty interpretation.

[31] Xinhua News, "China-EU Pitch the Coming Ten Years: China-EU Investment will Enter into 'EU Time'" (Xinhua News, 22 November 2013) accessed 18 February 2015.

[32] One Belt and One Road (OBAOR) refers to the Economy Belt along the Silk Road and the Marine Silk Road in the 21st Century, which was raised in 2013 by the Chairman of the PRC Jinping Xi and promoted to enhance the multi-regional economic cooperation among the countries concerned. The EU is at the other end of the Silk Road and the Marine Silk Road. See the 'Vision and Action Plan for the Construction of the OBAOR' (28 March 2015) available at http://www.gov.cn/xinwen/2015-03/28/content_2839723.htm, accessed 29 March 2015.

[33] Xinhua News, 'One Belt and One Road: New Push for the China-EU Cooperation' (Xinhua News, 15 January 2015) available at http://news.xinhuanet.com/2015-06/09/c_1115557192.htm, accessed 18 February 2015.

4. Defining the research scope

Whilst the fundamental issues addressed by this research concern the environmentally friendly international investments, the research focuses on the 'investments' which are relevant to environmental protection. Although portfolio investments[34] have been excluded from some IITs in the definition of 'investment',[35] controversy remains as to whether the intangible assets should be protected under IITs,[36] especially when a substantial number of BITs favour a broad and expansive definition of 'investment' by using 'all assets'.[37] Regardless of the controversy, this research expands discussion on one form of investment: FDI. Although some IITs define investments widely to embrace both FDI and PI, most investment disputes, where environmental issues are concerned, resulted from FDI (see Table 2.1, at p.162), in which the tension of the interests between private investors and the environment of host states originates and develops.[38] It is thus the FDI with tangible assets and control over the investments, rather than portfolio investment that influences the environment of host states.

Focusing on FDI, this research narrows the scope of the research. In order to clarify the concept of FDI with environmental influence, some requirements have to be satisfied. 'Imperfect market' is the first element in the concept of FDI. FDI reshapes its structure from time to time in the imperfect market, in which the environmental regulations take place. International investors have to take the environment, human rights and politics, which exist in the perfect market, into account when they are making investment decisions.

4.1 FDI in the system of foreign investment

[34] Shareholding less than 10%, bonds are regarded as portfolio investment See Krishan D., 'A Notion of ICSID Investment' in Weiler T. J. G. (eds), *Investment Treaty Arbitration: A Debate and Discussion* (Juris Publishing 2008) 16.

[35] Sornarajah M., *The International Law on Foreign Investment* (Cambridge University Press 2010) 227.

[36] Dekastros maintains that the 'conceptualisation of investment and the outer limits should be determined by the marketplace, indicating that portfolio investment should be contained in the definition of 'investment'. See Dekastros M., 'Portfolio Investment: Reconceptualising the Notion of Investment under the ICSID Convention' (2013) 14 The Journal of World Investment and Trade 319.

[37] For instance, the US-Argentina BIT describes 'investment' as 'a company or shares of stock or other interests in a company or interests in the assets thereof'. France model BIT (Article 1 Definitions) stipulates that the term 'investment' means every kind of assets, such as goods, rights and interests of whatever nature. For a comprehensive analysis of the definition of investment in IITs, see OECD, *International Investment Law: Understanding Concepts and Tracking Innovations* (OECD 2008); Malik M., 'Definition of Investment in International Investment Agreements' (The International Institute for Sustainable Development Best Practices Series 2009) available at http://www.iisd.org/pdf/2009/best_practices_bulletin_1.pdf, accessed 16 July 2013.

[38] IIL researchers have made efforts to explore the tension between the environment and foreign investments from various aspects. Generally, research focuses on expropriation with the aim to draw a line between regulatory environmental measures and expropriation. This research will use a chapter to explore this area. In the meanwhile, research also refers to the states' regulatory power under the treaty context of the fair equitable treatment (e.g. Moshe H., 'Between Fair and Equitable Treatment and Stabilization Clause: Stable Legal Environment and Regulatory Change in International Investment Law' (2011) 12(6) Journal of World Investment and Trade 783), through treaty interpretation (e.g. Benedetto S. D., *International Investment Law and the Environment* (Edward Elgar Publisher 2013), and through due process and stability requirements (e.g. Viñuales J. E., *Foreign Investment and the Environment in International Law* (Cambridge University Press 2012) 337).

FDI is regarded as 'direct foreign investment',[39] which refers to either the process of investments or the assets in investments. FDI is defined as an economic concept, but its definition has also been explored in IIL. Both FDI and other types of international investment, for instance, PI are included in and protected widely by some IITs. However, this research explores environmental protection in IIL and the environmental concerns are not related to all forms of investments.

The definition of investment is not unchangeable. Schreuer argues that it is not realistic to reach a world-wide accepted definition of investment because IITs define investment differently.[40] But Schreuer concludes some general features of investment under the ICSID framework. Despite the 'typical features', the ICSID tribunals reach different conclusions according to different cases. For instance, the *Malaysian Historical Salvors SND* tribunal maintained that some 'domain decided cases' such as *Salini, Joy Mining, Jan de Nul, Patrick Mitchell* and *Mihaly* have contributed to the interpretation of investment under ICSID 25 (1) (the definition of investment in ICSID) from different angles.[41] In this regard, the job of defining investment is endless because tribunals will always add or delete some elements to the definition of investment when new cases occur.

The definitions of FDI have been changing. Salacuse holds that 'lawyers, arbitrators, economists, financiers and business executives may define investment in different ways' even though '(most) treaties adopt an asset-based definition of investment'.[42] Starting from the aspect of technology, Graham and Spaulding demonstrate that the definition of FDI has been broadened and is expanding.[43] Looking at the changes over time, for example, FDI mainly referred to the capital movement in the nineteenth century and it began to embrace the technology transfer and service supply in the mid-twentieth century.[44] Campos and Kinoshita maintain that FDI is expanding technology to wider

[39] Colebrook P., *Going International* (McGraw-Hill Book Enterprise Ltd. 1912); Sethi S. P., 'Political Risk Analysis and Direct Foreign Investment: Some Problems of Definition and Measurement' (1986) 28(2) California Management Review 19.
[40] Schreuer C., *The ICSID Convention: A Commentary* (Cambridge University Press 2001) 138-140.
[41] The *Salini* award contributes to the definition of investment by carrying out four criteria; the *Mihaly* award discusses whether pre-contractual expenditure should be involved in defining investment. See *Malaysian Historical Salvors SND, BHD v. Malaysia*, award on Jurisdiction of 17 May 2007 (ICSID Case No. ARB/05/10) 56-64.
[42] Salacuse J. W., *The Law of Investment Treaties* (Oxford University Press 2009) 29.
[43] For instance, with the growth of intellectual property and software technology, fixtures, machinery and buildings, which were the basic elements of FDI in the past, are in less need now. Also, the direct control is loosening because of the emergence of indirect FDI. Graham J. P. and Spaulding R. B., 'Understanding Foreign Direct Investment (FDI)' (2011) available at http://www.going-global.com/articles/understanding_foreign_direct_investment.htm, accessed 24 November 2011.
[44] UNCTAD, *International Investment Agreements 2004: Key Issues* (United Nations Conference on Trade and Development 2005)114-116.

areas and technology transfer is more crucial to FDI.[45] The World Bank Guidelines on the Treatment of Foreign Direct Investment also defines FDI to include the managerial skills and technology.[46]

From a legal and political perspective, the definitions of FDI are changing as well. For instance, the UNCTAD demonstrates that the capital-movement-oriented instruments would define FDI in a way towards removing obstacles to investment, while definitions of FDI in the protection-oriented instruments would focus on the safeguard of investors' interests. In addition, the host countries which need long-term investments are prone to take measures to attract FDI. Consequently, such definitions of FDI would embrace fewer restrictions on foreign investments.

The definitions of FDI change under the comprehensive influence of all the factors including time, economy, legislation and politics, and such a trend is clearly demonstrated in the historical development of FDI. After the era of colonialism, the definition of FDI tended to include the nationalism factors, in which more states' regulatory powers were involved. Indeed, the birth of the doctrine of permanent sovereignty over natural resources illustrated such a trend.[47] The underlying reason could be the need of the newly established states to launch their domestic markets and to improve their domestic economic order. The political needs for state' regulatory power over investments and the economic needs for the recovery from colonialism were therefore the causes promoting nationalism in the definition of FDI.

When it comes to the late twentieth century, with the global promotion of free markets, especially with the fierce competition among the developing countries to attract FDI, the definition of FDI presents a trend of liberalization. For instance, according to the Enterprises Tax Law of China, the general tax rate

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[45] Nauro F. C. and Yuko K., *Foreign Direct Investment and Structural Reforms: Evidence from Eastern Europe and Latin America*, (International Monetary Fund 2008) 3, 18.

[46] In the World Bank Guidelines on the Treatment of Foreign Direct Investment (TFDI), FDI is identified through the aim and impact on economic development. The TFDI evaluates FDI to improve the long term economic efficiency of host states by transferring capital, management skills and technology, by competition and by the enhancement of market access. See World Bank, *World bank Guidelines on the Treatment of Foreign Direct Investment* (World Bank 1999) ('Recognizing that a greater flow of foreign direct investment brings substantial benefits to bear on the world economy and on the economies of developing countries in particular, in terms of improving the long term efficiency of the host country through greater competition, transfer of capital, technology and managerial skills and enhancement of market access and in terms of the expansion of international trade'); furthermore, the TFDI encourages members to advocate FDI from other states in the forms of capital, technology and managerial skill transfer. In this way, technology and managerial skill are included in FDI. Article 2.1 of the *World Bank Guidelines on the Treatment of Foreign Direct Investment* ('Each State will encourage nationals of other States to invest capital, technology and managerial skill in territory and, to that end, is expected to admit such investments in accordance with the following provisions').

[47] Cambou D. and Smis S., 'Permanent Sovereignty Over Natural Resources From A Human Rights Perspective: Natural Resources Exploitation And Indigenous Peoples' Rights In The Arctic' (2013) 22(1) Michigan State International Law Review 347; Miranda L. A., 'The Role of International Law in Intrastate Natural Resource Allocation: Sovereignty, Human Rights, and Peoples-Based Development' (2012) 45 Vanderbilt Journal of Transnational Law 785.

for the domestic enterprises was 25%, while the rate of foreign enterprises was 20%.[48] Although the tax law did not focus on FDI, 5% lower tax rate provided preferential treatment to foreign investors. Sornarajah affirms that the protection towards investment and the liberalization in the entry of investment can usually be found in the BITs at that time.[49] Schill holds the similar opinion and argues that IITs should aim to provide protection to foreign investment, but not to impose too much restriction.[50]

Successive economic crises spread all over the globe and some were caused by the sudden withdrawal of investment.[51] Therefore, both developing and developed countries began to reconsider the role FDI, although the developed countries are reluctant to change their FDI policies because of the existing interests and the influence from the MNEs. In this situation, the definition of FDI changed again to accommodate more restrictions on FDI. For instance, some countries have abandoned the flexible protection mechanisms to regulate the sovereignty wealth funds. As a result, 'the treaties the developed states drafted to protect the foreign investment of their nationals will soon come to haunt them.'[52]

4.2 The 'duration' of FDI and the environmental connections

Duration is a vital feature in the definition of FDI highlighted by both IITs and tribunals. This characteristic is crucial in understanding environmental protection under the regime of IIL because the environmental problems may become feasible only after the investments have been in operation for a period of time. For instance, small oil spill happens frequently in land-oil and offshore-oil exploitation. But it takes years for the pollution to prevent the 'photosynresearch of halobios'.[53] Hence, it is the feature of duration that makes it possible for FDI to cause environmental contaminations.

Duration is firstly, but not only, evaluated by time. In fact, there are both quantitative and qualitative criteria to evaluate duration. The *Salini* tribunal construed duration as one of the elements constituting investment. The tribunal held that:

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[48] Article 4 of The Tax Law for Enterprises of the PRC (issued on 16 March 2007, entered into force on 1 January 2008) ('The resident enterprises are to apply the 25% tax rate according to their income; Non-resident enterprises are to apply the 20% tax rate according to the income which is gain in accordance with the Article3 and Article4 of this Law').

[49] Sornarajah M, *The International Law on Foreign Investment* (3rd edn, Cambridge University Press 2010) 2-4.

[50] Schill S. W., The *Multilateralization of International Investment Law* (Cambridge University Press 2009) 17.

[51] Helleiner A., 'Understanding the 2007–2008 Global Financial Crisis: Lessons for Scholars of International Political Economy' (2011) 14 Annual Review of Political Science 67; Gorton G., 'Some Reflections on the Recent Financial Crisis' in Acharyya R. and Marjit S. (eds), *Trade, Globalization and Development* (Springer India 2014) 161; Thakor A. V., 'The Financial Crisis of 2007–2009: Why Did It Happen and What Did We Learn?' (2015) Review of Corporate Finance Studies 6.

[52] Sornarajah (n 49) 4-5.

[53] Wang B., 'The Contaminations and Harms of Offshore Oil' (1986) Marin Environmental Science 52.

> [T]he investment requirement must be respected as an objective condition of the jurisdiction of the Centre' and the objective condition should include…contributions, a certain duration of performance of the contract and a participation in the risks of the transaction… the contribution to the economic development of the host State.[54]

Abi-Saab supports this opinion by arguing that investment in the ICSID Convention aims to promote the economic development of the host country, which is achieved through the components of 'taking risk' and 'duration in time'.[55] In order to define the duration by using the quantitative method, the tribunal further maintained that the 'minimal length of time upheld by the doctrine (was) from 2 to 5 years'.[56]

When compared with the *Salini* definition of duration, which was reached from a 'quantitative perspective', the identification of duration in the *L.E.S.I.-DIPENTA* case focused on a 'qualitative aspect'.

The *L.E.S.I.-DIPENTA* tribunal firstly acknowledged that duration constitutes a prerequisite of investment by maintaining:

> A contract, in order to be considered an investment within the meaning of the provision, should fulfill the following three conditions: a) The contracting party has made contributions in the host country; b) Those contributions had a certain duration; and c) They involved some risks for the contributor.[57]

Although the tribunal recognized that it is not easy to identify duration because the notion should be understood upon a broad range of elements such as the economy and the background of each case, it proceeded to conclude that:

> In order to speak of an investment in the meaning of the Convention, (duration must be understood from) economic commitments of significant value, sufficient at least that one may agree that the operation is of a nature to promote the economy and development of the country concerned. The Convention provides no

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[54] *Salini Costruttori S.P.A. and Italstrade S.P.A. v. Kingdom of Morocco*, Decision of Jurisdiction on 23 July 2001 (ICSID Case No. ARB/00/4) 42 ILM 609 (2003) 52 (*Salini* case).

[55] *Abaclat and Others v. Argentine Republic* (*Giovanna a Beccara and Others v. The Argentine Republic*), Dissenting Opinion by Georges Abi-Saab on 28 October 2011 (ICSID Case No. ARB/07/5) 50 (*Abaclat* case). ('The investment that the Convention seeks to encourage by providing it with an international procedural guarantee is that which contributes to the economic development of the host country, i.e. to the expansion of its productive capacity, a contribution that presupposes a commitment to this task not only of economic resources, but also in terms of time duration and the taking of risk, with the expectation of reaping profits and/or revenue in return').

[56] *Salini v. Morocco* (n 54) 54.

[57] *Consorzio Groupement L.E.S.I.-DIPENTA v. People's Democratic Republic of Algeria*, Award of 10 January 2005 (ICSID Case No. ARB/03/08) 13 (iv) (*L.E.S.I.-DIPENTA* case).

> objective criterion. For construction contracts, available jurisprudence relies on the duration of the contract, which would seem a good measure in this case, in as much as it concerns a project of real national significance.[58]

Therefore, the *L.E.S.I.-DIPENTA* tribunal concurred that 'sufficient value' and 'contribution to the economy and development' can be used to evaluate duration. Yet, it remains ambiguous as to the meaning of 'value' or 'contribution'. Hence, the tribunal suggested that investment contract and the surrounding content of cases should be observed.

The *L.E.S.I.-DIPENTA* tribunal provided not only a qualitative criterion: 'value' or 'contribution', but also a case-by-case method to explore this criterion. Most importantly, it is indicated that the evaluation of duration should not be constrained by the rigid standard of time. Put another way, 'long-term' refers to the quantitative criteria, while 'significant influence' is to indicate a qualitative criterion.

4.3 The invisible components of FDI

FDI is also defined to embrace some components which do not exist in the wording of the term explicitly. These components cover various aspects of investment such as economy, environment and human rights. More specifically, the invisible components focus on non-economic issues. For instance, an internal component of FDI is that foreign investments are expected to be the environment-friendly investments in the host countries and investors consider the local environment into account when they are making investment decisions.[59] Peterson confirms that human rights can be considered as a factor in arbitration to justify states' measures which failed to protect foreign investments.[60]

The invisible components are not often analysed with the other elements of FDI, such as 'control' and 'territory'. The reason is that the early forms of FDI were mainly examined by the multinational enterprises (MNEs), which aimed to gain economic profits, rather than improving the social welfare of host states. At the same time, the host countries where the early FDI took place were either controlled by colonists or exigent to attract foreign capital inflows. Therefore, they could not and were not willing to consider the non-economic components, which would otherwise impose restrictions on FDI. Until today the arguments remain that the MNEs are expanding FDI merely for the global production and

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[58] Ibid 14 (ii).

[59] Manderson E. and Kneller R., 'Environmental Regulations, Outward FDI and Heterogeneous Firms: Are Countries Used as Pollution Havens?' (2012) 51(3) Environmental and Resource Economics 317; Dong B. M. and Gong J. and Zhao X., 'FDI and Environmental Regulation: Pollution Haven or a Race to the Top?' (2012) 41(2) Journal of Regulatory Economics 216.

[60] Peterson L. E., 'Selected Recent Development in IIA Arbitration and Human Rights' (2009) IIA Monitor No.2, available at http://unctad.org/en/Docs/webdiaeia20097_en.pdf, accessed 10 October 2011.

sales,[61] indicating that the non-economic components in FDI are not the key factors of FDI and therefore they are not mentioned frequently.

However, the circumstances of international investments change and the role of the invisible components is becoming increasingly significant. Sornarajah names these components as the 'new concerns' in FDI.[62] There are two propellants behind the changes: the host governments and the Non-Government Organizations (NGOs). As to the host countries, both developing and developed countries have begun to notice the invisible components in FDI. The situation is more obvious in the developing countries because the environment and human rights, which were not within their concerns in attracting foreign investments before, are causing serious damages to the local development. What is more, the environment pollutions are threatening the human rights of local citizens gradually. For instance, the Bhopal Disaster, in which 25,000 people died directly, 550,000 people died indirectly and 200,000 people were handicapped permanently, demonstrated a terrible warning for not only the Indian but also the other governments in promoting foreign investments. Moreover, from the *Methanex*[63] and *S.D. Myers*[64] cases, it is clear that the developed countries are contributing more to environmental protection through the stringent environmental standards and regulations. Indeed, some investment instruments such as the NAFTA have stipulated such components explicitly in treaty provisions,[65] indicating that the FDI host countries are paying attention to the invisible components of FDI and increasing the regulations on foreign investments in accordance with these components.

The NGOs are promoting the involvement of the invisible implications into FDI through influencing the negotiation of IITs.[66] From 1997 to 1998, the NGOs succeeded in coordinating a campaign against the acceptance of the Multilateral Agreement on Investment (MAI).[67] And one of the main propositions against the MAI is its failure to take the environment and human rights into account.[68]

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[61] McCulloch R., 'New Perspectives on Foreign Direct Investment' in Kenneth F. A. (eds), *National Bureau of Economic Research: Foreign Direct Investment* (University of Chicago Press 2008) p.50.
[62] Sornarajah (n 49) 225.
[63] *Methanex Corporation v. United States of America*, Final Award of 3 August 2005 (UNCITRAL).
[64] *S.D. Myers, Inc. v. Government of Canada*, First Partial Award of 13 November 2000 (UNCITRAL).
[65] See NAFTA Article 1114 (Environmental Measures): '1. Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns. 2. The Parties recognize that it is inappropriate to encourage investment by relaxing domestic health, safety or environmental measures. Accordingly, a Party should not waive or otherwise derogate from, or offer to waive or otherwise derogate from, such measures as an encouragement for the establishment, acquisition, expansion or retention in its territory of an investment of an investor. If a Party considers that another Party has offered such an encouragement, it may request consultations with the other Party and the two Parties shall consult with a view to avoiding any such encouragement'.
[66] Sornarajah (n 49) 225.
[67] O'Brien R., *Contesting Global Governance: Multilateral Economic Institutions and Global Social Movements* (Cambridge University Press 2000) 10.
[68] Geiger R., 'Regulatory Expropriations in International Law: Lessons from the Multilateral Agreement on Investment' (2002) 11(1) New York University Environmental Law Journal 94; Muchlinski P. T., 'The Rise and Fall of the Multilateral Agreement on Investment: Where Now?' (1999) 34(3) International Lawyer 1033; Kurtz J.

Therefore, the NGOs have been acting positively to promote the non-economic components in FDI and their roles will be further enhanced with the global calls for the more sustainable international investments.[69]

Developing on these non-economic components, which constitute the internal features of FDI, this research explores environmental protection from the external perspectives of IIL. Laws and policies of host states, including the IITs concluded by the states, will therefore be considered as the external instruments to ensure that the non-economic considerations are respected in IITs.

To sum up, since this research explores environmental protection in IIL, it seeks to reveal the interrelations between international investment activities and the environmental problems through one particular form of investment: FDI. The element of 'foreign' constitutes the conceptualisation of FDI because it is read not only as a geographic term but also as an economic one. FDI flows between the 'different countries/territories', as well as between the 'different economies'. A quantitative method is introduced to define the element of 'control' in FDI. In practice, most FDI projects are operated by the transnational enterprises and the way how they are integrated with the environment of host states is achieved through the decision making of the enterprises. The last element to understand FDI is the invisible implications, which are usually overlooked. However, the invisible implications include the requirement to comply with the environmental laws and policies of host states. All the elements above define the scope of this research and avoid the efforts of this research to explore the scope of investment being protected under IIL. The 'investment(s)' in below thus refers to FDI only and this concept will not be clarified repeatedly.

5. Research Structure

This research is structured in three main sections: the first section (Chapters 2-4) elaborates the defects of the current IITs and arbitration, which largely overlook environmental protection; the second section (Chapter 5) provides a general understanding of China's environmental protection system in both its domestic law and IITs. It demonstrates the necessity to analyse environmental protection in IIL and the feasibility to promote environmentally friendly IITs in the context of China, as a case study. The third section (Chapter 6) proposes a solution through providing more room for domestic environmental regulations. Throughout the research, the experience of China's IITs and its environmental protection measures are referred to.

'A General Investment Agreement in the WTO? Lessons from Chapter 11 of NAFTA and the OECD Multilateral Agreement on Investment' (2002) 23(4) University of Pennsylvania Journal of International Economic Law 713.

[69] Koenig-Archibugi M., 'Introduction: Civil Society Influence on Global Policy' (2014) 5(2) Global Policy 212; Goldsmith E. and Mander J., The case Against the Global Economy: and for a Turn towards Localization (Earthscan 2001) 189.

Chapter 2 outlines the environmental challenges of host states under the FET standard from the very particular angle of legitimate expectations. International investment tribunals have evaluated legitimate expectations in a number of disputes. This Chapter explores the protection of legitimate expectations in the adjustment of the general legal framework of host states. Investment arbitration practice indicates that the specific governmental promise or commitment tends to give rise to the protection of foreign investors' legitimate expectations. But as to the role of a general legal framework in generating legitimate expectations, tribunals provided inconsistent conclusions: on the one hand, the general framework that changes the specific promise of the government can frustrate investors' legitimate expectations; on the other, the total or substantive change of the legal framework itself may also overturn the legitimate expectations of the foreign investors even though no specific commitment is involved.

However, the arbitration practice potentially risks the states' regulatory power to change the legal or policy framework. China is experiencing social transition, in which the legal and policy frameworks for environmental protection are being adjusted. Under the way of interpreting legitimate expectations by some tribunals, the changed environmental framework constitutes treaty violation of the FET standard, which in turn hinders the practical influence of the new environmental protection regimes in host states.

This Chapter first of all argues that the FET standard and the principle of legitimate expectations have been construed in an investment-protection oriented way. The rights of the foreign investors and the obligations of the host countries have been over-stretched. It further argues that the specificity embodied in the governmental measures is reduced in a general legal/policy framework, which usually applies to the indefinite subjects and in a broad scope. In the situation where a new general environmental framework has replaced the old one or the specific promise the government had made at the time of investment, it is argued that the legitimate expectations should not be formulated.

In order to improve the balance between investors and states in arbitration, this Chapter proposes introducing the duties of foreign investors to observe the general legal/policy framework of the host countries, and to make the relevant decisions on the basis of the framework. A failure to perform the duties may reduce the legitimacy of the expectations that can be protected in IIL. In a transitional China, the fact that the environmental laws and policies are changing drastically and frequently is known widely to the public. Foreign investors in China should take due diligence to understand this fact when investing in China. Under a situation where the investors act regardless of this background, legitimate expectations may not be established.

Fundamentally, this Chapter seeks the means to reduce the legitimacy of investors' expectations through both improving host states' *rights* to change the regulatory framework and increasing the foreign investors' *duties* to observe and act according to the framework. Such a proposed method of balancing states and investors is expected to contribute to the interpretation of the FET standard in arbitration practice.

Chapter 3 evaluates environmental protection of host states under the NT and MFN standards, focusing on the reading of 'like circumstances'. Both the NT and the MFN standards provide non-discriminatory treatment to foreign investors. Nevertheless, non-discrimination is achieved between/among the appropriate comparators, which are defined through the term of 'like circumstances' (or the likeness analysis).

States' measures to protect the public interests have been preserved in the NT/MFN standard in arbitration practice through two means. On the one hand, tribunals interpreted these measures through the justification of the NT/MFN standard by adopting a 3-tier analysis. However, since the mainstream of IITs does not have general exceptions provisions that have general application, tribunals should not have had the treaty support to introduce the justification analysis, as the third tier has included, in the evaluation of the NT/MFN standard.

On the other hand, tribunals have interpreted the likeness through the economic sector, the location where the investments are established, the scale or the capacity of the investment projects, and the methods utilized in investment activities, which demonstrated inconsistency. These inconsistent factors potentially relate to the environment-related measures and indicate that the investments which have different environmental features may not be considered as the appropriate comparators. Therefore, the different treatments accorded to foreign investors would not incur compensation in IIL. This interpretation construed the environmental concerns of host states without exceeding the wording scope of 'like circumstance'. Nonetheless, such practice did not provide the basic rules through which tribunals can adopt generally to explore the public interests that should be preserved.

This Chapter recognizes that different governmental measures can be taken against the investments which generate different environmental pollution/threat and such different treatments do not violate the NT/MFN standards because the investments are not the appropriate comparators. In addition, it proposes the rule of 'screening the internal features of investments by the external features of governmental measures' to define the appropriate comparators. It argues that each investment has the internal features such as sector, location, capacity, output and methods. Two investments can easily find a common feature and establish a likeness. However, not all the likenesses are relevant to the specific dispute. Each governmental measure also has its features, e.g. the purpose and the function.

This Chapter therefore argues that only the internal features of investment, that are relevant to the features of the governmental measures, can be used to examine the likeness in a dispute.

It is admitted that the complexity of each case makes it impossible for international investment tribunals to adopt a set of universal criteria to interpret 'like circumstances'. However, the 'feature based' analysis provides a general principle to define the comparators in which the states' public interests are embodied.

Chapter 4 explores the role of a public purpose to protect host states' environment in the evaluation of expropriation and compensation. The typical expropriation provisions in IITs prescribe the public purpose, coupled with due process, non-discrimination and compensation, as the precondition of expropriation. The role of an environmental purpose was therefore one prerequisite of the 'lawful expropriation'.

However, the new IITs in China, including the China-Uzbekistan BIT included the new expropriation provisions, in which the environmental purpose and non-discrimination were used to preclude indirect expropriation and compensation. Accordingly, this Chapter aims to further clarify the role of a purpose in improving the legitimacy of expropriation and in mitigating compensation. The current investment arbitration pays little consideration to the public purpose and this Chapter therefore develops a critical analysis of the arbitration omitting the environmental purpose in the evaluation of both expropriation and compensation.

This Chapter argues that the role of an environmental purpose in expropriation and compensation should be construed differently. In the typical context of the expropriation provisions, an environmental purpose cannot preclude expropriation. But it argues that compensation should be mitigated under this treaty regime because of the public purpose. In the new provisions of expropriation, an environmental purpose can preclude indirect expropriation as long as the proportionality principle is satisfied. However, this Chapter argues that an environmental purpose should still mitigate compensation even though the expropriation is not precluded. In order to identify how an environmental purpose can mitigate the compensation, this Chapter borrows the rule of proportionality, and uses the 'vehicle-lottery' measure in Beijing as a case study.

Chapter 5 evaluates the sources of environmental laws in China's domestic regime, demonstrating that China is reforming its legal system in which the environmental laws, regulations and rules are turning to be more stringent. Such domestic practice constitutes the internal push for China to regulate FDI environmentally in its IITs' negotiation and design. It also examines the environmental provisions in China's IITs concluded until 2015. It reveals that treaties vary significantly on whether or not to

include the environmental concerns into treaty provisions, although the new IITs concluded after 2010 generally embrace environmental clauses. Furthermore, treaty practice varies in the wording of environmental provisions and the scope of states' regulatory powers to protect the environment is accordingly different.

Chapter 6 analyses environmental protection under the landscape of the environmental exception provision in IITs. The number of IITs incorporating the exceptions provisions (where the states' regulatory powers are usually included) is increasing. In this situation, the tribunals might no longer make use of 'investment protection-oriented interpretation' to narrow the application of the exception provision as they did before.

The scope of the provisions on exceptions varies in IITs from the environment, human health to national security, energy security and international peace. Additionally, a state may adopt different exceptions in different times. The national security in China has expanded to include culture security, IT security and internet security. The variability in exceptions reflects states' domestic interests and needs, politically or economically, and reflects the development of foreign investment in the states.

This Chapter finds that the domestic exceptions on the market access of foreign investments are decreasing to encourage foreign capital inflows into China. However, the domestic exceptions for national security and the environment are strengthened. This Chapter therefore argues that the wider scope of exceptions in IITs can leave space for the flexibility of exceptions in China's domestic instruments. Given these circumstances, it proposes the adoption and interpretation of a broad environmental exception provision in treaty and international arbitration practice so that the environmental measures (especially the changing environmental laws and policies) in China can be accommodated.

To sum up, through the FET standard, NT and MFN standards, and the provision for the prohibition of expropriations without compensation, the research outlines, for each provision, the defects in environmental protection. On the basis of these defects, the preliminary solutions are proposed in each provision. Finally, the research proposes a fundamental solution within the IITs from the angle of environmental exceptions provisions.

Following Chapter 6, the next Chapter reaches the conclusions and the implications of this research. In the construction of a new generation of IITs in China, for both its FDI inflows and outflows, this research promotes the efficiency of environmental protection through IITs. Additionally, it coordinates the domestic protection of the environment in China and environmental protection through IITs, which provides implications for not only China, but also a wide range of host states which are revolving the

domestic instruments for environmental protection, to safeguard the internal governmental measures in the regime of IIL.

6. Methodology

The primary and secondary sources will be assessed to demonstrate the current development of investment treaty practice and arbitration practice, as well as the current research on the controversial topic of environmental protection in IIL. IITs are consulted frequently. The current international investment activities are conducted under the regime of IITs, and therefore the inefficiency of IIL to protect the environment fundamentally results from the treaty practice. Investment arbitration provides the way through which treaty provisions are read and interpreted. The tribunals' attitude towards environmental protection reflects the means through which the environmental issues are incorporated in treaty interpretation.

This research develops on the ground of the primary and secondary sources. IITs concluded by China and the investment instruments from countries including the US, Canada and Germany will be examined. Not only will the main body of the IITs, the BITs, but also the regional FTA will be explored. They are deployed, on the one hand, to examine whether the current treaty interpretations are consistent with the treaty context; on the other hand, to evaluate whether the proposals of this research are consistent with the provisions in IITs. Arbitral awards are critically cited so that the inefficiency of environmental protection is well reflected. The analysis of arbitration awards will leave space for the proposals raised, either through filling the gaps of treaty interpretation, or through improving the method of interpretation. In addition, the proposals regarding the environmental exception in the new generation of IITs are tested under arbitration practice.

A comparative method is adopted not only between China's old and new IITs, and between China's investment treaty and the model investment treaties of other states (e.g. the US, Germany, Canada Model BITs), but also between China's investment treaties and its domestic laws/regulations/rules regarding the foreign investments. The new developments of China's IITs are examined through the comparison of its old and new IITs, while its practice embracing the environmental considerations in IITs is demonstrated through the comparison with the IITs of other states. Through the comparison between the domestic legal instruments of foreign investment in China and its IITs, the different environmental concerns are illustrated, according to which the design and negotiation of the new IITs can proceed.

Furthermore, a historical legal research method is adopted to compare China's old and new investment treaties, and the transitional investment and environmental laws and policies in China. The historical

comparison illustrates the different tendency of China's internal and external instruments on foreign investments, on the basis of which this research develops to coordinate the difference.

In general, this research adopts a method of 'exploring problems-examining causes-proposing solutions'. In this process, some scenarios and practical experience in China will be referred to as case studies, in order to strengthen the empirical implications of this research.

7. Further Observations

A new generation of IITs is expected to reflect a balance between the private investors and host states. Environmental protection constitutes one aspect of achieving the balance and the consideration of the other interests, including the human rights, human health and local culture, requires further research.

Under environmental protection of host states, this research focuses on how the current treaties should be interpreted, and how the new treaties should be drafted, within the treaty provisions of FET, NT, MFN, expropriation and exception. However, this research selects such provisions with the aim to improve environmental protection in these provisions, where the states' main obligations in IITs are prescribed. But further research can be expanded to explore environmental protection in other provisions.

Proposing the way to design the new provisions of IITs differs from the way how the proposals can be achieved in practice. Drafting and concluding IITs can be understood as a process to reach the compromise of the counterbalancing interests between the treaty parties, in which the equilibrium can be established.[70] The proposed environmental protection through IITs may therefore still be sacrificed in treaty negotiations. However, further research needs to be done to explore the circumstances in which states are likely to make the compromises. Put another way, the determinants concluding IITs and embracing the environmental provisions in IITs can be observed further.

[70] Mills A., 'The Balancing (and Unbalancing?) of Interests in International Investment Law and Arbitration' in Douglas Z. and Pauwelyn J. and Viñuales J. E. (eds), *The Foundations of International Investment Law: Bringing Theory into Practice* (Oxford University Press 2014) 440.

CHAPTER II
STATES' REGULATORY POWER, THE GENERAL ENVIRONMENTAL PROTECTION FRAMEWORK, FOREIGN INVESTORS' OBLIGATIONS AND THE PROTECTION FOR INVESTORS' LEGITIMATE EXPECTATIONS

1. Introduction

This Chapter endeavours to build upon the findings that the new environmental laws/policies have been or are being launched in China,[1] by developing them into the specific context of foreign investors' legitimate expectations in international investment law. As legitimate expectations are usually addressed on the grounds of (1) the law/policy at the time investments were established; and (2) the specific representations/promises of host states,[2] this Chapter focuses on the instability of the law/policy. The question examined is whether and how foreign investors' legitimate expectations should be protected under the changing environmental legal/policy framework of host states. Put another way, how can host states' sovereign power to reconcile the domestic environmental framework be preserved against the protection for legitimate expectations? This Chapter will develop a critical analysis of foreign investors' legitimate expectations in IIL. Proposals are made facilitating tribunals to consider the regulatory sovereignty of host states in the interpretations of legitimate expectations.

The protection of legitimate expectations is not an established doctrine in international law, although certain IITs and investment tribunals have recognized and protected such expectations.[3] International tribunals in the cases of *Occidental, TECMED, MTD, CMS, Azurix, LG&E, Enron, National Grid, and*

[1] One of the latest developments in environmental legislation is the amended Environmental Protection Law of the PRC, which was passed on 24 April 2014 and entered into force on 1 January 2015. This amended law is considered as the 'milestone of Chinese environmental legislative history' because of the introduction of the mechanisms, including 'protection priority', 'environmental risk assessment' and 'penalty by the day'. Peng B. L. and Li A. N., 'The Spotlights, Insufficiency and Outlook of the New Environmental Protection Law of the PRC' (2015) 4 Environmental Pollution and Control 3; Cai S. Q., 'The Legislative Purposes of the 2014 Environmental Protection Law' (2014) 6 Journal of China University of Political Science and Law 36; Huang X. S. and Shi Y. C., 'Construction and Improvement of the Environmental Legal Framework in China' (2014) 1 Contemporary Law Review 127-128.

[2] Dolzer R. and Schreuer C., *Principles of International Investment Law* (Oxford University Press 2008) 134; Tudor I., *The Fair and Equitable Treatment Standard in the International Law of Foreign Investment* (Oxford University Press 2008) 163-172.

[3] Zeyl T., 'Charting the Wrong Course: The Doctrine of Legitimate Expectations in Investment Treaty Law' (2011) 49(1) Alberta Law Review 208-211.

EL PASO have all illustrated that a stable and predictable legal and/or administrative framework is demanded by the FET standard to protect investors' legitimate expectations and the lack of such stability may constitute treaty violation.[4] Such arbitration practice, coupled with the ambiguous IITs' provisions, potentially protects a broad scope of investors' expectations.[5]

Without exploring the legitimacy and rationality of the introduction of legitimate expectations into the regime of IIL,[6] this Chapter evaluates host states' interests of environmental protection in the FET standard, a provision prescribing states' obligations[7] for a number of reasons. First of all, the protection for investors' legitimate expectations in the existing international arbitration has restrained host states' authority to amend and issue environmental instruments according to the need for the ecological protection. Secondly, it remains ambiguous in arbitration as what constitutes legitimate expectations in an unstable environmental framework of host states[8] and the future tribunals will find it difficult to refer to the appropriate precedents.[9] In addition, international investors' conducts have been explored in the FET standard by tribunals,[10] but it remains undecided as how the investors'

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[4] *Occidental Exploration and Production Co. v. Ecuador*, Final Award of 1 July 2004 (London Court of International Arbitration Case No. UN 3467) 183 (*Occidental v. Ecuador*); *Tecnicas Medioambientales Tecmed S.A. v. Mexico*, Award of May 29 2003 (ICSID Case No.ARB (AF)/00/2) 173 (*TECMED v. Mexico*); *MTD Equity Sdn. Bhd. and MTD Chile S.A. v Republic of Chile*, *ad hoc* Committee's Decision on the Respondent's Request for a Continued Stay of Execution of 1 June 2005 (ICSID Case No. ARB/01/7) 106 (*MTD v. Chile*); *CMS Gas Transmission Co. v. Argentina*, Award of 12 May 2012 (ICSID Case No. ARB/01/8) 277 (*CMS v. Argentina*); *Azurix Corp. v. The Argentine Republic*, Award of 14 July 2006 (ICSID Case No. ARB/01/12) 392 (*Azurix v. Argentina*); *LG&E Energy Corp, LG&E Capital Corp. and LG&E International, Inc. v. Argentina*, Decision on Liability of 3 October 2006 (ICSID Case No.ARB/02/1) 124-125 (*LG&E v. Argentina*); *Enron and Ponderosa Assets v. Argentina*, Award of 22 May 2007 (ICSID Case No. ARB/01/3) 259 (*Enron v. Argentina*); *National Grid plc v. The Argentine Republic*, Award of 3 November 2008 (UNCTRAL) 170 (*National Grid v. Argentina*); *El Paso Energy International Company v. Argentina*, Award of 31 October 2011 (ICSID Case No. ARB/03/15) 600 (*El Paso v. Argentina*); also see Wälde T.W. and Weiler T., 'Investment Arbitration under the Energy Charter Treaty in the Light of New NAFTA Precedents: Towards a Global Code of Conduct for Economic Regulation' (2004) 1 TDM, available at www.transnational-dispute-management.com, accessed 10 September 2014.

[5] Pandya A. P. and Moody A., 'Legitimate Expectations in Investment Treaty Arbitration: An Unclear Future' (2010) 15(1) Tilburg Law Review 105.

[6] Even though the protection of legitimate expectations is not a universal principle adopted by all the states, it has binding effect on IITs parties, if the contracting parties accept this standard explicitly in the treaties in question.

[7] The obligation to protect investors' legitimate expectations constitutes only one among the many forms of obligations in the FET standard, including non-discrimination, access to justice, transparency and non-arbitrariness. See Stone J., 'Arbitrariness, the Fair and Equitable Treatment Standard, and the International Law of Investment' (2012) 25 Leiden Journal of International Law 77; Paradell L., 'The BIT Experience of the Fair and Equitable Treatment Standard' in Ortino F. and Liberti L. and Sheppard A. (eds.), *Investment Treaty Law, Current Issues II* (British Institute of International and Comparative 2007) 140.

[8] For instance, the *Toto v. Lebanon* tribunal maintains that the changes in the regulatory work would violate treaty obligations only when the changes are *drastic* with *discrimination*. But the *El Paso v. Argentina* tribunal held that the investors can have reasonable expectations only when very *specific* commitments have been made, coupled with the legal framework, or when the extent of the framework change is *total*. See *Toto Construzioni Generali S. A. v. Lebanon*, Award of 7 June 2012 (ICSID Case No. ARB/07/12) 244 (*Toto v. Lebanon*); *El Paso v. Argentina* (n 4) 274.

[9] McLachlan C. and Shore L. and Weiniger M., *International Investment Arbitration: Substantive Principles* (Oxford University Press 2007) 238; Pandya A. and Moody A., 'Legitimate Expectations in Investment Treaty Arbitration: An Unclear Future' (2010–11) 15 Tilburg Law Review 96.

[10] In some arbitral cases, the investors' conduct to continue investment even though they already know that the host state's laws do not permit so is not supported by tribunals to develop legitimate expectations. See *ADF Group v. USA*, Award of 9 January 2003 (ICSID Case No. ARB(AF)/00/1) 189 (*ADF v. USA*); *Metalpar S.A. and Buen Aire S.A. v. Argentina*, Award on the Merits of 6 June 2008 (ICSID Case ARB/03/05) 187 (*Metalpar v. Argentina*).

behaviours influence the legitimacy of legitimate expectations and the protections granted to foreign investors. Put differently, it has focused on states' obligations to protect legitimate expectations, disregarding investors' behaviours, although it has been argued that the protection of legitimate expectations can be achieved only when certain conditions and criteria are observed.[11] This Chapter therefore introduces foreign investors' obligations to observe the changing environmental framework into the evaluation of legitimate expectations. In the scenario in which the environmental legislation of a local city authority in China is changing drastically (e.g. Datong City in China), foreign investors are likely to encounter a more stringent and comprehensive environmental framework and their expectations based on the outmoded environmental laws might be overturned.[12] Given that preserving investors' expectations may hinder the control of environmental pollutions in a host state, this Chapter argues that (1) the general legal framework reduces the legitimacy of investors' expectations because of the low specificity contained in the 'general' instruments; (2) foreign investors' awareness of the transitional environmental framework should be adopted to examine the legitimacy of the expectations.

Section 2 briefly explores legitimate expectations in treaty and arbitration practice. The next two sections (section 3 and section 4) propose a 'two-tier analysis' of legitimate expectations: an analysis of host states' behaviours and an analysis of foreign investors' conducts. FDI projects and foreign investors' legitimate expectations have to develop in a definite environment of a host state, in which laws and policies influence the expectations. The particular context of China's economic and social transition is demonstrated in which the legal and policy framework for environmental protection is changing. The framework modification influences indefinite subjects including both domestic and foreign investors and the specificity of the framework is quite weak. What is more, foreign investors can obtain various expectations, but only when they genuinely rely on the framework can the expectations qualify as 'legitimate' expectations. Section 5 concludes that the principle of legitimate expectations is being recognized by international investment tribunals. In this regard, it is necessary to understand the basis of legitimate expectations, especially in the transition of the legal and policy framework of a host country, which has not been well observed in the current regime of IIL. Through the proposal of this Chapter, states' regulatory flexibility to modify the environmental framework is

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Also, investors' disingenuous conduct to conceal information is not supported by tribunals to create legitimate expectations. See *Chemtura Corporation v. Canada*, Award of 2 August 2010 (UNCITRAL) 179 (*Chemtura v. Canada*); *International Thunderbird Gaming Corporation v. Mexico*, Award of 26 January 2006 (UNCITRAL) 164 (*Thunderbird v. Mexico*); Muchlinski confirms that the tribunals are balancing host states and investors through examining the conducts of investors. Further, he argues that the investors' responsible business practice and good faith should be applied by future jurisprudence under the FET standard. See Muchlinski P., 'Caveat Investor'? The Relevance of the Conduct of the Investor Under the Fair and Equitable Treatment Standard (2006) 55 International and Comparative Law Quarterly 556; Snodgrass also argues that the investors should investigate and understand the legal framework of the host state diligently and the failure to do so will not establish legitimate expectations. See Snodgrass E., 'Protecting Investors' Legitimate Expectations – Recognizing and Delimiting a General Principle (2006) 21(1) ICSID Review: Foreign Investment Law Journal 40.

[11] Téllez, F. M., 'Conditions and Criteria for the Protection of Legitimate Expectations under International Investment Law' (2012) 27(2) ICSID Review: Foreign Investment Law Journal 441-442.

[12] E.g. capital invested in the facilities and equipment for coal-boiler heating supply in Datong in accordance with the old regulations, has lost its value under the new regimes which prohibit all the coal boilers in the city. Further capital is required to replace or upgrade the facilities and some foreign investors even had to abandon investments.

expected to be preserved and the investor-state balance is expected to be improved in treaty interpretation.

2. Treaty and arbitral practice on the protection of foreign investors' legitimate expectations: an overview

2.1. Treaty provisions on legitimate expectations

Although international investment arbitration has recognized the protection of legitimate expectations,[13] the doctrine of legitimate expectations does not come from international law[14] because it is 'borrowed' from the domestic administrative laws of Germany, Netherland, Belgium, Denmark, Greece, Italy, UK, Australia and New Zealand.[15] The doctrine of legitimate expectations requires the protection for the private interests in China's administrative law,[16] from which citizens can seek procedural and substantive remedies against governmental actions.[17]

Putting aside the legitimate rationale in IIL to protect legitimate expectations, IITs have hardly protected such expectations through explicit provisions[18] despite that the latest BITs concluded by the US began to refer to the investment-backed expectations in expropriation provision and in the scope of investment protection (e.g. the 2005 US-Uruguay BIT and the 2008 US-Rwanda BIT).[19] The BITs

[13] Zeyl (n 3) 205.
[14] Snodgrass (n 10) 1.
[15] Vicuna F. O., 'Regulatory Authority and Legitimate expectations' (2003) 5 International Law Forum 192; Thomas R., *Legitimate Expectations and Proportionality in Administrative Law* (Hart Publishing 2000) 17; Nolte G., 'General Principles of German and European Administrative Law: A Comparison in Historical Perspective' (1994) 57 Morden Law Review 191; Brown C., 'The Protection of Legitimate Expectations As A 'General Principle of Law': Some Preliminary Thoughts' (2009) 1 TDM, available at www.transnational-dispute-management.com, accessed 19 May 2015; Schill S. W, *International Investment Law and Comparative Public Law* (Oxford 2010) 417; Schwarze J., *European Administrative Law* (1st edn, Sweet and Maxwell 2006) 79.
[16] Take government administrative permission as an example. According to the *Administrative Permission Law of the PRC* (issued on 27 August 2003, enforced on 1 July 2004), administrative organs have the obligation to protect administrative counterparts' expectation, or compensation will follow. For instance, the Article 8: The legally obtained administrative permission of citizens and legal persons is protected by law; without authorization, administrative organs cannot change the administrative permissions which already have come into force. When the laws, regulations, rules or the objective circumstances, according to which the administrative permission is granted, are amended or abolished or changed, administrative organs can change or withdraw the administrative permission above out of the protection of public interest. The economic losses or damages thereof have to be compensated by the administrative organs.
[17] Wang X X., 'The protection of legitimate expectations in administrative law' (2009) 1 Oriental Law 37.
[18] Vicuna (n 15) 188.
[19] Annex B (Expropriation) of the Treaty between the United States of America and the Oriental Republic of Uruguay Concerning the Encouragement and Reciprocal Protection of Investment: '4 (a) The determination of whether an action or series of actions by a Party, in a specific fact situation, constitutes an indirect expropriation, requires a case-by-case, fact-based inquiry that considers, among other factors: … (ii) the extent to which the government action interferes with distinct, reasonable investment-backed *expectations*'.
Article 1 (Definitions): " 'investment' means every asset that an investor owns or controls, directly or indirectly, that has the characteristics of an investment, including such characteristics as the commitment of capital or other

concluded by China do not contain references to legitimate expectations generally, although the US-China BIT and EU-China investment treaty remain to be seen.

2.2. International arbitration practice of the protection of legitimate expectations

Foreign investors' legitimate expectations are also called 'expectations',[20] 'reasonable and justifiable expectations',[21] 'basic expectations',[22] or 'fair expectations'[23] in international investment arbitration, in which the cases range from the early investment precedents of *Tecmed*,[24] *GAMI*,[25] *Sempra*[26] and *Thunderbird*[27] to the new cases of *Total S.A.*,[28] *Chemtura*,[29] *Toto Construzioni Generali*[30] and *El Paso*.[31]

The terms of 'basic', 'reasonable and legitimate' and 'fair' limit the scope of investors' expectations to the essential and fundamental interests, benefits and rights anticipated by foreign investors. As far as

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resources, the *expectation* of gain or profit, or the assumption of risk. [italics added]. The same practice was adopted by the Treaty between the Government of the United States of America and the Government of the Republic of Rwanda Concerning the Encouragement and Reciprocal Protection of Investment".

[20] The *Metalclad* tribunal construed investors' expectations by 'expectation' rather than 'legitimate expectations'. See *Metalclad Corporation* v. Mexico, Award of 30 August 2000 (ICSID Case No. ARB(AF)/97/1) 89, 99.

[21] *Enron v. Argentina* (n 4) 262; *Saluka Investments BV (The Netherlands) v The Czech Republic*, Partial Award of 17 March 2006 (UNCITRAL) 302 (*Saluka v. Czech*); *Thunderbird v. Mexico* (n 10) 147; *Continental Casualty Company v. Argentina*, Award of 5 September 2008 (ICSID Case No. ARB/03/9) 260 (*Continental v. Argentina*). ("By contrast, there are significant factual and contextual differences with the present case as to the application of the abstract concept of 'reasonable legitimate expectations'"); *Total S.A. v. Argentina*, Decision on Liability of 27 December 2010 (ICSID Case No. ARB/04/01) 333 (*Total v. Argentina*). ('A foreign investor is entitled to expect that a host state will follow those basic principles in administering a public interest sector that it has opened to long term foreign investments. Expectations based on such principles are reasonable and hence legitimate, even in the absence of specific promises by the government').

[22] *Sempra Energy International v Argentina Republic*, Award of 28 September 2007 (ICSID Case No. ARB/02/16) 298 (*Sempra v Argentina*); *Metalpar v. Argentina* (n 10) 183. ('Foreign investment must be treated in a manner such that it will not affect the *basic expectations* that were taken into account by foreign investor to make the investment').

[23] *LG&E v. Argentina* (n 4) 130. ('It can be said that the investor's *fair expectations* have the following characteristics: they are based on the conditions offered by the host State at the time of the investment; they may not be established unilaterally by one of the parties; they must exist and be enforceable by law; in the event of infringement by the host State, a duty to compensate the investor for damages arises, except for those caused in the event of state of necessity; however, the investor's *fair expectations* cannot fail to consider parameters such as business risk or industry's regular patterns').

[24] *TECMED v. Mexico* (n 4).

[25] *GAMI Investments Inc. v. Mexico*, Final Award of 15 November 2004 (UNCITRAL) (*GAMI v. Mexico*).

[26] *Sempra v Argentina* (n 22).

[27] *Thunderbird v. Mexico* (n 10).

[28] *Total v. Argentina* (n 22).

[29] The tribunal maintained that the behaviour taken by the Claimant cannot justify a 'reasonable and legitimate' expectation. See *Chemtura v. Canada* (n 10) 179. The Claimant, Chemtura Corporation, is a US corporation investing in lindane-based pesticide to treat canola seeds in Canada. Lindane (also an environmental contaminant) is a pesticide that was registered on the Canadian market, but the use of lindane on canola was not approved in the United States because of the risks associated. When Canada decided to prohibit lindane later, the Claimant challenged the decision-making procedure but failed. In this regard, *Chemtura* sought international arbitration under the NAFTA framework.

[30] The tribunal held that the post-civil war situation of Lebanon did not justify 'legal expectations' that the custom duties would remain unchanged. See *Toto v. Lebanon* (n 8) 245.

[31] The tribunal concluded that 'legitimate expectations' of a foreign investor can only be examined by having due regard to the general proposition that the State should not unreasonably modify the legal framework. See *El Paso v. Argentina* (n 4) 364.

these terms are concerned, it is clear that not all the expectations of foreign investors deserve protection in IIL.

In investment arbitration, legitimate expectations are not a free standing issue but were discussed mainly under the FET standard, while some cases explored exceptions in expropriations and compensation. The *TECMED* tribunal began to address investors' basic expectations in the FET standard by maintaining:

> (FET) requires the Contracting Parties to provide to international investments treatment that does not affect the basic expectations that were taken into account by the foreign investor to make the investment. The foreign investor expects the host State to act in a consistent manner, free from ambiguity and totally transparently in its relations with the foreign investor.[32]

It seems that the *TECMED* tribunal has left space to modify the legal framework of host states because it adopted the term of 'totally' to describe the 'transparency' requirement, but it did not do so in the requirements of 'consistency' and 'non-ambiguity',[33] implying that old laws can evolve drastically into new ones which are 'inconsistent' with the old laws. But the tribunal further held that '(State) use the legal instruments that govern the actions of foreign investors in conformity with the function usually assigned to such instruments',[34] increasing the obscurity of regulatory space for the legal instruments because 'the function usually assigned to such instruments' may require the legal instruments to stay stable to reflect their old but 'usually assigned' function. For instance, the legal framework for foreign investment was designed to attract international capital and technology from late 1970s in China,[35] and the 'usual function' of legal instruments was 'attracting foreign investment'.[36] According to the conclusion of the *TECMED* tribunal, China might be restricted to continue using the legal instruments in conformity with the 'old function' to attract foreign investments, which will restrain China's ability to reconcile the old legal instruments in order to 'encourage the greener investments' and to 'restrict investments with heavy pollutions'. In this regard, the *TECMED* tribunal impeded the evolvement of the functions of legal instruments and potentially imposed restraint on host states' regulatory space to enact new laws and regulations for environmental protection.

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[32] *TECMED v. Mexico* (n 4) 154.
[33] Ibid. ('The foreign investor expects the host State to act in a consistent manner, free from ambiguity and totally transparently').
[34] Ibid 154.
[35] Jiang X. J., 'Attraction of Foreign Capital and its influence on the Improvement of the Industry Technology and Research Ability in China' (2014) 2 International Economic Review 17.
[36] Chen T. T. and Dang L., 'China's Position in World Foreign Direct Investment Flow and the Development Trends of FDI in China' (2003) 6 International Economic Cooperation 27.

After the *TECMED* case, the *MTD* tribunal,[37] the *Saluka* tribunal,[38] the *CMS* tribunal,[39] the *LG&E* tribunal,[40] the *Azurix* tribunal,[41] the *Metalpar* tribunal,[42] the *Parkerings* tribunal,[43] the *Thunderbird* tribunal,[44] and the *PSEG* tribunal[45] all evaluated legitimate expectations in the examination of a breach of the FET standard, among which the *Azurix* tribunal maintained that 'the issue of whether an expropriation may take place without formally affecting the contract rights has been discussed … in the context of the frustration of the investor's legitimate expectations',[46] reading legitimate expectations in the analysis of expropriation.[47] The *El Paso* tribunal noted that legitimate expectations has been protected in the FET standard as well as in the context of expropriation but the tribunal observed that legitimate expectations are better protected by the FET standard because 'there is not always a clear distinction between indirect expropriation and violation of legitimate expectation'.[48]

Given that IITs' provisions hardly provide instructions in the constitution and breach of legitimate expectations,[49] the role of legitimate expectations has developed from a 'subsidiary interpretative principle' to a 'self-standing subcategory and independent basis for a claim under the FET standard'[50] through investment arbitration. Research of legitimate expectations thus does not lose its significance although arbitration has 'misstated' legitimate expectations and caused the 'legitimacy crises' of IIL.[51]

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[37] *MTD v. Chile*, (n 4) 114. ('FET standard requires host states … to provide to international investments treatment that does not affect the basic expectations that were taken into account by the foreign investor to make the investment').

[38] *Saluka v. Czech* (n 21) 302. (The standard of 'fair and equitable treatment' is therefore closely tied to the notion of legitimate expectations which is the dominant element of that standard).

[39] *CMS v. Argentina* (n 4) 277.

[40] *LG&E v. Argentina* (n 4) 127-139. ('In addition to the State's obligation to provide a stable legal and business environment, the fair and equitable treatment analysis involves consideration of the investor's expectations when making its investment … And that fair and equitable standard consists of the host State's consistent and transparent behaviour, free of ambiguity that involves the obligation to grant and maintain a stable and predictable legal framework necessary to fulfil the justified expectations of the foreign investor').

[41] *Azurix v. Argentine* (n 4) 372. The tribunal maintained that the frustration of expectations that the investor may have legitimately taken into account when it made the investment was an element in the breach of the FET standard.

[42] *Metalpar v. Argentina* (n 10) 183.

[43] *Parkerings-Compagniet AS v. Lithuania*, Award of 11 September 2007 (ICSID Case No. ARB/05/8) 320 (*Parkerings v. Lithuania*).

[44] *Thunderbird v. Mexico* (n 10) 147.

[45] *PSEG Global Inc. and Konya Ilgin Elektrik Uretim ve Ticaret Limited Sirketi v Republic of Turkey*, Award of 19 January 2007 (ICSID Case No. ARB/02/5) 279 (*PSEG v. Turkey*). ('[L]egitimate expectation**s** … requires a treatment that does not "detract from the basic expectations on the basis of which the foreign investor decided to make the investment').

[46] *Azurix v. Argentine* (n 4) 316.

[47] The *Methanex* tribunal also examined the governmental promise and legitimate expectations under the context of expropriation and compensation. ('… is not deemed expropriatory and compensable unless specific commitments had been given by the regulating government'.) *Methanex Corporation v. United States of America*, Final Award of 3 August 2005 (UNCITRAL) Part IV Chapter D 7 (*Methanex v. USA*).

[48] *El Paso v. Argentina* (n 4) 227.

[49] Mollo R. and Jacinto J. M., 'Standards of Review and Reviewing Standards: Public Interest Regulation in International Investment Law' in Sauvant K. P (eds), *Yearbook on International Investment Law and Policy 2011-2012* (Oxford University Press 2013) 557.

[50] *Thunderbird v. Mexico* (n 10) 37.

[51] Zeyl argues that 'recognizing substantive expectations as a part of the general principle of law is at this point premature and amounts to a misstatement of a general principle of law'. General principles of international law should come from the 'common standards to all national legal system', but tribunals have failed to

From the arbitration jurisprudence, it can be summarized that, first of all, legitimate expectations are regarded as foreign investors' rights but host states' obligations, which, if not preserved, might result in treaty violation. Second, international tribunals distinguished between investors' expectations and the expectations deserving protection in IIL, using the concept of 'legitimate'. Last but not least, international tribunals tended to evaluate legitimate expectations in the analysis of the FET standard with the aim to preserve the foreign investors' interests and rights, demonstrating a pro-investor trend.

3. The protection of legitimate expectations in a changing legal framework and states' regulatory space to change the general legal framework

This section argues that the analysis of legitimate expectations is twofold. For host states' side, legitimate expectations are built upon the governmental act or legal framework; for the foreign investors' side, investors should 'genuinely rely on' the 'first fold' to make investment decisions. Foreign investors invest in the legal framework of a host state, from which investors not only benefit, but also they should undertake the obligations to observe and comply with the framework. Beginning from host states' legal framework, this section first of all evaluates the legitimacy and specificity of legitimate expectations in a changing legal framework through a critical analysis of arbitral practice.[52]

Given that the 'specific' governmental behaviours[53] in the forms of promise,[54] commitment,[55] affirmation,[56] assurances,[57] representations,[58] filing,[59] bid, license,[60] permit,[61] contract,[62] and concession[63] have been evaluated as the pre-conditions for legitimate expectations, the role of 'general'

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comprehensively examine the practices of domestic jurisdictions that recognize the doctrine of legitimate expectations in the introduction of legitimate expectations in international investment law. Zeyl, (n 3) 203-205.

[52] No explicit guidelines for the determination of legitimate expectations are provided in IITs, and how to observe the regulatory power to alter or issues environmental laws/policies in the regimes of legitimate expectations thus largely relies on arbitration practice.

[53] The violation of the FET standard will occur when the governmental behaviours is overturned. Tellez F. M., 'Conditions and Criteria for the Protection of Legitimate Expectations under International Investment Law' (2012) 27(2) ICSID Review 441.

[54] *Metalpar v. Argentina* (n 10) 183; *PSEG v. Turkey* (n 45) 241. ('Legitimate expectations by definition require a *promise* of the administration on which the Claimants rely to assert a right that needs to be observed').

[55] *Methanex v. USA* (n 47) Part IV Chapter D 7.

[56] *GAMI v. Mexico* (n 25) 76; The *GAMI* tribunal dismissed the claim of legitimate expectations because there was no 'affirmation'.

[57] *Azurix v. Argentine* (n 4) 319. ('The expectations as shown in that case are … based on … assurances explicit or implicit, made by the State which the investor took into account in making the investment'); *Sempra v Argentina* (n 22) 298. ('[Legitimate expectations] become particularly meaningful when the investment has been attracted and induced by means of assurances').

[58] *Metalclad Corporation v Mexico*, (n 20) 89. ('[The investor] was entitled to rely on the representations of federal officials and to believe that it was entitled to continue its construction of the landfill').

[59] Ibid.

[60] *LG&E v. Argentina* (n 4) 133 ('Argentina was bound by its obligations concerning the investment guarantees vis-à-vis public utility licenses, and in particular, the gas-distribution licenses').

[61] *Metalpar v. Argentina* (n 10) 186.

[62] Ibid 183, 187. ('There were no legitimate expectations entertained by Claimants that were breached by Argentina' as 'there is no contractual situation leading claimants to entertain legitimate expectations').

[63] *Waste Management, Inc. v. United Mexican States*, Award of 2 June 2000 (ICSID Case No. ARB(AF)/98/2) 159 (*Waste v. Mexico*) (the governmental concession prescribed that the city government had the obligation to make the land in question suitable for a disposal site).

legal framework in the constitution of legitimate expectations has not been explored comprehensively.[64] As treaty provisions of the FET standard (where legitimate expectations are embodied) do not prescribe the regulatory space of host states, tribunals' interpretations often entail 'weighing competing interests' between investors and host states.[65] On the basis of tribunals' interpretations of specific governmental behaviours, this Chapter recognizes that the specific behaviours are more likely to be relied on by foreign investors' than the general legal framework because of the strong specificity, accuracy and official trust. However, not all the specific behaviours will ruin investors' legitimate expectations[66] and the mere frustration of contractual expectations, for instance, may not lead to the protection of legitimate expectations in IIL.[67] In addition, if the specific behaviours are consistent with its municipal legal framework, foreign investors' reliability on such behaviours is enhanced. However, if the governmental promise is incongruous with the municipal legal framework, and the investors rely on the promise in making investment decisions, the host state remains responsible for the protection of legitimate expectations. This is due to the logic that a host state itself is in a better position to understand the municipal legal framework, but a governmental promise which is inconsistent with the law/policy might be considered as a deliberate *misfeasor* or *ultra vires* act and the state is thus responsible for its misguiding behaviours.

However, it remains ambiguous as to: (1) whether the general legal framework of host states grants foreign investors the protection of legitimate expectations, like what the governmental behaviours do; (2) whether states' obligation to protect foreign investors' legitimate expectations under a changing legal framework derives from investment treaties; (3) whether the requirements of a changing legal framework in the constitution of legitimate expectations are the same with the requirements in the domestic regime of China.

3.1. Legal framework of environmental protection and the limited judicial review in China

[64] The relationship between a general regime and a stabilization clause has been examined in arbitration. It is suggested that in the situation where no 'fiscal stabilization clause' exists, investors cannot expect that the fiscal regime will not change. See *Sergei Paushok, CJSC Golden East Company and CJSC Vostokneftegaz Company v. The Government of Mongolia*, Award on Jurisdiction and Liability of 28 April 2011 (UNCITRAL) 370.

[65] Kingsbury B. and Schill S., 'Investor-State Arbitration as Governance: Fair and Equitable Treatment, Proportionality and the Emerging Global Administrative Law' in van den Berg A. J. (eds), *50 Years of the New York Convention-ICCA International Arbitration Conference* (Kluwer Law International 2009) 32.

[66] Schreuer C., 'Fair and Equitable Treatment (FET): interactions with other standards', in Coop G. and Ribeiro C. (eds), *Investment Protection and The Energy Charter Treaty* (JurisNet, 2008) 90.

[67] For instance, the *Parkerings* tribunal held that contracts involve intrinsic expectations from each party that do not amount to expectations as understood in international law. *Parkerings .v Lithuania* (n 43) 344; The *Glamis* tribunal also concluded that the mere contract breach will not suffice to establish a breach under the NAFTA framework. *Glamis Gold, Ltd. v. USA*, Award of 8 June 2009 (UNCITRAL) 620.

International law derives from the general principles of law common to all/most national systems[68] and the principle of legitimate expectations in IIL should also be based on the 'broad consensus reflected in the common core content' of domestic legal practice.[69] The examination of whether the legal framework of host states gives rise to legitimate expectations in IIL thus requires an evaluation of the domestic practice.

3.1.1. The environmental legal framework in China

General environmental legal framework in China in this analysis refers to the municipal instruments regulating the indefinite, rather than a/certain specific individual(s) (natural person), enterprise(s) and investment(s). These instruments are usually applied widely with longer validity[70] and are embodied in the forms of (1) environmental law, environmental administrative regulation, local environmental regulation and rules, and environmental rules of governmental organs; (2) amendments and supplements to the law, regulation and rules; (3) environmental judicial interpretations and (4) environmental policy of China.[71]

Environmental laws are narrowly defined as the environmental documents enacted by the National People's Congress of the PRC (NPC) and its Standing Committee (NPCSC), which possess the supreme legislative power. The NPC and NPCSC began to enact environmental laws in 1982 when the Law of Maritime Environmental Protection was issued[72] and more than 30 environmental laws encompassing water protection, noise prevention, wildlife protection, land protection, forest protection, air protection, energy saving, renewable energy, solid waste treatment, and radioactive contamination prevention have been issued till July 2015. The latest amendment of the Law of Environmental Protection of the PRC (the 2014 LEP) was passed on 24 April 2014 and came into force on 1 January 2015.[73] The 2014 LEP prescribed that the foreign investors continuing pollution after the administrative authority requires them to suspend the pollution will be fined on a day-by-day basis.[74] In addition, the investment projects without an environmental assessment[75] before the establishment of the projects had the chance to reapply for a retroactive permit before 2015 but the 2014 LEP abandoned this practice. The new environmental provisions in the 2014 LEP drastically changed the old environmental framework of China.

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[68] Koskenniemi M., 'General Principles: Reflexions on Constructivist Thinking in International Law' in Koskenniemi M. (eds), *Source of International Law* (Ashgate 2000) 363.
[69] Zeyl (n 3) 234.
[70] E.g. the 2014 Law of Environmental Protection of the PRC constitutes the general legal framework and it applied to China widely. But a legal document by the Ministry of Environmental Protection of the PRC on the 'Punishment of PetroChina Regarding Environmental Pollution' ([2015] 70) is a specific governmental behaviour in this Chapter, which applies to PetroChina only.
[71] Huang and Shi (n 1) 123-125.
[72] The currently valid Law of Maritime Environmental Protection was amended in 1999 by the 9th NPCSC and the amendment was enforced from 1 April 2000.
[73] The Law of Environmental Protection in 2014 was the first amendment since it was issued in 1989 and was considered as a historical punch on environmental pollution in China.
[74] Article 59 of the 2014 LEP of the PRC.
[75] Ibid Article 61.

Environmental administrative regulations in China are enacted by the State Council of the PRC (SC). For instance, the Regulation of City Water Drainage and Sewage Disposal (WDSD) has set up a permission mechanism for sewage discharge in which investors will be fined and be withdrew the permit if they violate the requirements in the license granted and cause severe pollutions. What is more, investors' criminal liability may occur when the consequences of the pollution are severe.[76]

Environmental rules are issued by the ministries of the SC or the provincial congress/standing committee. The Notification of Improvement Plan for the Clean Production of the Key Industries and Enterprises in Beijing, Tianjin, Hebei and the Surrounding Areas (the Clean Production Plan) was enacted in 2014 by the Ministry of Industry and Information Technology. The Clean Production Plan proposed the adoption of clean technology and facilities in the sectors of steel, colour metal, Coking and Ptro-chemistry in order to facilitate the air protection in Beijing.[77] The investors in the steel industry, for instance, will have to use 'plaster method', 'magnesium chloride method' and 'fluidized bed method' to improve the decoking efficiency by 70%. Because the haze pollution in the Beijing area is severe, the requirements above imposed extra environmental obligations on the investors in this region.

Environmental judicial interpretations are made by the Supreme Court and the latest interpretation was issued in February 2015 on environmental infringement, which was regarded as a reflection of the 2014 LEP. This judicial interpretation required the polluters to take liability provided that they cause environmental pollution and damage, regardless of their subjective purpose.[78] What is more, the 2014 LEP prohibited the exclusion of international liability even though the polluter has acted in accordance with the local pollution standards.[79]

Environmental policy constitutes a significant part of the environmental legal framework in China, which is usually issued by the ministries of the SC or the provincial governmental organs. In 2014, the Jiangxi province set up a compulsory insurance mechanism in the sectors of colour metal exploration, colour metal smelting and lead storage-battery.[80] The investors in these industries were obliged to purchase the Environmental Pollution Insurance. As a result, the investors will increase costs through paying extra insurance fees, which they were not obliged to pay before 2014. Although such a policy

[76] See Article 50 of the Regulation of City Water Drainage and Sewage Disposal of the PRC, issued by the National Council on 18 September 2013, entered into force on 1 January 2014.
[77] Section 3 of the Notification of Improvement Plan for the Clean Production of the Key Industries and Enterprises in Beijing, Tianjin, Hebei and the Surrounding Areas.
[78] Article 1 of the Interpretations Regarding the Legal Application of Environmental Infringement Liability, published by the Supreme Court of the PRC on 1 June 2015, entered into force on 3 June 2015.
[79] Ibid.
[80] Notification of Pilot Work of Compulsory Insurance for Environmental Pollution in Jiangxi Province, issued on 24 December 2014 by the Department of Environmental Protection of Jiangxi Province.

focused on a limited group of industries within the territory of Jiangxi province only, it remains a general legal document.

These documents above indicate that the environmental legal framework in China contains comprehensive forms of documents apart from the LEP in a narrower perspective. However, some implications can be extracted from these documents. First, the laws, regulations, rules and policies all grant the government the authority to exercise the regulatory power for environmental protection but they have different legal hierarchies. Second, the laws, regulations, rules and policies are not applied to a specific investment or investor. Even the local or sector-based rules are not limited to the specific person or enterprise, which decreases the specificity of these documents in the evaluation of legitimate expectations. Third, the laws, regulations, rules and policies reflect the instability of environmental protection framework in China. 'Being unstable' and 'being stricter towards pollution' are the two main characters of China's current environmental protection framework. In this changeable legal framework, stricter obligations might be imposed on not only domestic but also foreign investors. Foreign investors' legitimate expectations under the old environmental regime may therefore be overturned.

3.1.2. The restricted review of the legal framework in China

Specific governmental behaviours are subject to administrative and judicial review in China and the review therefore provides remedies to foreign investors. However, the general legal framework is precluded from the reviewing system, illustrating that the protection for foreign investors in the face of the general legal framework is limited.

Article 12 of the Administrative Procedural Law prescribes the administrative non-reviewable practice,[81] in which the general legal framework is excluded from the administrative review.

Embracing the legal framework in the administrative non-reviewable system reflects that the legislative authorization and flexibility are respected by administrative law, but such flexibility remains subject to the review of the NPCSC. The NPCSC is empowered to initiate legislative review and to withdraw the administrative environmental laws, regulations, rules and orders.[82] Such a legislative review focuses on the limited legal instruments which are considered as 'contradicting' the fundamental laws in China, as prescribed by Article 37 of the Law of the NPC:

[81] Administrative Procedural Law of the PRC (issued on 4 April 1989, entered into force on 1 October 1990) Article 12 (The followings are precluded from administrative review: (State Acts) Acts of the state dealing with national defence and foreign affairs; (Abstract Acts) Laws, administrative regulations, decisions and orders with general binding force; (Internal Acts) Awards, penalties and appointments to governmental members; (Finality Acts) Specific administrative acts that shall, as provided for by law, be finally decided by administrative organs).
[82] Legislation Law of the PRC (issued on 15 March 2000, entered into force on 1 July 2000) Article 88.

> NPCSC reviews the administrative laws, regulations, decisions and orders deliberated by the SC, the orders, directives and regulations by the ministries of the SC, regulations and decisions by the provincial Congresses and the Standing Committees, which *contradict* the Constitution Law and the laws enacted by the NPC.[83]

The domestic review system in China generally precludes the legal framework from administrative and judicial review, but the limited review focuses on the fact that the law in question contradicts the basic laws in China rather than on the fact that the law has infringed the legitimate expectations of investors. By limiting the review of the environmental legal framework, the review system in China ensures that the legislative bodies can issue, amend and abolish environmental legal instruments with broad compliance, catering to the unstable need for environmental protection in a transitional China. Put another way, the regulatory flexibility of the Chinese government to protect its domestic environment is ensured with a minimum restriction. As a consequence of the review system, whether the legal framework for environmental protection is stable or not, the laws, regulations and rules are given high autonomy. Therefore, it is the legal instruments rather than the stability of these instruments that preclude the procedural review. However, international tribunals have failed to recognize the significance of the instruments and aggrandized the requirement of stability, leaving interpretive space to protect investors' interests in a changing and unstable legal framework of host states.

3.2. The weak specificity in an unstable general framework and the protection of legitimate expectations

Providing a stable legal and business framework has become a 'key element'[84] or 'essential element'[85] in the FET standard in arbitral interpretations and the failure to uphold the stability may result in the frustration of investors' legitimate expectations. However, investment disputes practice is inconsistent regarding how the legitimacy of investors' expectations was formulated under the general legal/policy framework of host states.[86]

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[83] The Law of National People's Congress of the PRC (issued on 10 December 1982, enforced into force on 10 December 1982).

[84] *Enron v. Argentina* (n 4) 260. (A key element of fair and equitable treatment is the requirement of a 'stable framework for the investment').

[85] The *CMS* tribunal evaluated the preamble of the Argentina-US BIT, reaching the conclusion that a stable legal framework is required by the treaty in question by maintaining: 'The Treaty Preamble [Treaty between the United States of America and the Argentine Republic Concerning the Reciprocal Encouragement and Protection of Investment, 1991] makes it clear … that one principal objective of the protection envisaged is that fair and equitable treatment is desirable to maintain a stable framework for investments. The tribunal also concluded that 'There can be no doubt, therefore, that a stable legal and business environment is an essential element of fair and equitable treatment.' *CMS v. Argentina* (n 4) 274.

[86] *Total v. Argentina* (n 22) 114. ("Case law is not uniform as to the preconditions for an investor to claim that its expectations were 'legitimate' concerning the stability of a given legal framework that was applicable to its investment when it was made").

For the promotion of foreign investments, it is undoubted that a stable legal framework is desired, especially with regard to the FDI projects which often have a long-term investment plan.[87] But for the protection of host states' interests, a stable legal framework requirement restrains states' regulatory sovereignty. More than 64% of all the Chinese BITs were concluded before 2000 and the municipal legal framework of China during that period has changed significantly. Moreover, China stepped into a deep transition after 2012,[88] in which further changes of legal and policy framework affecting foreign investments will take place.

3.2.1. The 'stable' or 'unstable' general legal framework?: a requirement of legitimate expectations

The *OEPC* case is the first case discussing the stability of the 'overall legal framework' of the host state.[89] In this case, the Ecuador government changed the tax regime after the Claimant had established its investment,[90] but the new law was not clear as to whether *OEPC* was entitled to continue receiving the Value-Added Tax (VAT) refund as under the previous tax law. According to the preamble of the BIT in question, a 'stable framework for the investment' was prescribed.[91] The tribunal interpreted the stable legal environment as a necessary element in the FET standard and maintained that 'there is not a VAT refund obligation under international law … but there is certainly an obligation not to alter the legal and business environment in which the investment has been made'.[92] The tribunal concluded that the respondent should 'ensure both stability and predictability of the governing legal framework'.[93]

The *TECMED* tribunal also maintained that: the foreign investor expects the host State to act in a consistent manner, free from ambiguity and totally transparently in its relations to the foreign investor.[94] And the change of the environmental instruments should be implied to satisfy the requirements of consistency, non-ambiguity, and transparency. The *TECMED* tribunal reached this conclusion in order that foreign investors 'may know beforehand any and all rules and regulations that will govern its investment'.[95] The stable legal framework requirement was also adopted widely by tribunals in the cases of *Sempra*[96] and *Enron*.[97] Although such a requirement does not completely

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87 One characteristic of FDI is 'long term', which significantly differs from PI.
88 Zhang Z. Y., *Economic Reform and Transition after the 18th CPC National Congress* (China Renmin University Press 2014) 77.
89 Klager R., *'Fair and Equitable Treatment' in International Investment Law* (Cambridge University Press 2011) 167.
90 *Occidental v. Ecuador* (n 4) 119.
91 Ibid 183.
92 Ibid 191.
93 Ibid 192.
94 *TECMED v. Mexico* (n 4) 173.
95 Ibid.
96 FET principle protected investors of the stability and predictability of the legal framework. *Sempra v Argentina* (n 22).
97 Changes in the legal framework may 'turn certainty and stability into ambiguity'. *Enron v. Argentina* (n 4) 266.

freeze the environmental laws/policies of host states, it increases the burden on states[98] and constrains states' regulatory power to change the legal instruments protecting public interests.

Fundamentally, legitimate expectations are generated from the legal framework and the stability requirement calls for a high level of constancy of 'any and all' forms of states' municipal instruments, indicating that an unstable legal framework will violate such an obligation. However, this research argues that the change of the general legal framework should not be regarded as a violation of legitimate expectations.

It is proposed that it is the 'legal framework analysis' rather than the 'stable framework analysis' that determines the examination of legitimate expectations. In the 'legal framework analysis', not only a stable legal environment, but also an unstable legal system can generate an understanding of the legal environment in which foreign investments are established. With such an understanding, foreign investors can be encouraged to make investment decisions more cautiously. For instance, the legal framework of environmental protection in China is experiencing drastic adjustments. On 29 February 2012, China issued a new Air Quality Standard – GB3095-2012, which will be enforced on 1 January 2016 to replace the existing Air Quality Standards GB3095-1996 and GB3095-1996 Amendments.[99] On 1 June 2012, China enforced five new environmental standards detecting the contaminative in soil, water, oil and air.[100] On 7 March 2012, China issued three Technology Policies against the pollutions in lead-zinc smelting industry, oil and gas exploration industry and pharmacy industry.[101] On 19 March 2012, seven new pollution standards were released, in which paper making, refuse-burning and sewage treatment were regulated.[102] On 27 June 2012, China issued eight new standards of environmental protection which focused on the industries of ore dressing, metallurgical sector, steel making, coal coking and steel rolling.[103] Over 100 new environmental standards have been issued during the first half of 2012, indicating a high instability of the legal framework for environmental protection in China. Under the circumstances, foreign investors are obliged to have knowledge of the risks and make investment decisions cautiously. It is true that the environmental legislation has given

[98] Miles K., *The Origins of International Investment Law: Empire, Environment and the Safeguarding of Capital* (Cambridge University Press 2013) 169.
[99] Ministry of Environmental protection of the PRC, 'Government Notice about Releasing New Air Quality Standard' Government Notice No. 2012-07 available at http://www.me gov.cn/gkml/hbb/bgg/201203/t20120302_224145.htm, accessed 26 July 2012.
[100] Ministry of Environmental protection of the PRC, 'Government Notice about Releasing Five new National Environmental Protection Standards' Government Notice No. 2012-16 available at http://www.me gov.cn/gkml/hbb/bgg/201203/t20120307_224386.htm, accessed 26 July 2012.
[101] Ministry of Environmental protection of the PRC, 'Government Notice about Releasing the Technology Policy against Pollution in Lead-Zinc Smelting Industry' Government Notice No. 2012-18 available at http://www.me gov.cn/gkml/hbb/bgg/201203/t20120319_224791.htm, accessed 26 July 2012.
[102] Ministry of Environmental protection of the PRC, 'Government Notice about Releasing Seven new National Environmental Protection Standards' Government Notice No. 2012-21 available at http://www.me gov.cn/gkml/hbb/bgg/201203/t20120330_225545.htm, accessed 26 July 2012.
[103] Ministry of Environmental protection of the PRC, 'Government Notice about Releasing Eight new National Standards for Pollution Emission' Government Notice No. 2012-43 available at http://www.zhb.gov.cn/gkml/hbb/bgg/201208/t20120802_234257.htm, accessed 26 July 2012.

way to foreign capital in China in the early 1980s,[104] which reflected the autonomy in legislative sovereignty. But as demonstrated above, the environmental legislation has developed intensely since 2012 and China has the 'transitional and unstable' environmental legislation.[105]

The 'legal framework'-based analysis is consistent with the legislative sovereignty of host states. Legislative power is a part of host states' sovereignty[106] and a state determines when and how to legislate, to amend the legislation framework and to abolish laws on its own.[107] This principle was also elaborated by the *CMS* tribunal, which maintained that '… (Host states') legal framework … can always evolve and be adapted to changing circumstances'[108] although it found Argentina responsible for changing its laws. The reforms of the environmental framework in China above have indicated that the time when China decides to initiate the reform and the way to reform the framework are within the sovereignty of China. In this regard, the 'stable legal system requirement' would be contrary to the legislative sovereignty.

The 'legal framework'-based analysis promotes foreign investors to observe and understand the laws and regulations of host states. Although the FET standard provides states' obligations, it can also be interpreted to include investors' obligations.[109] Understanding and complying with the municipal legal framework of a host state is an internal obligation of foreign investors. Even the investment risks are embodied in the municipal laws, it is the obligation of the investors to evaluate the risks and made decisions according to the marginal profits.[110] The 'legal framework'-based method encourages foreign investors to form expectations on the basis of states' legal framework and make investment decisions rationally.

Under the 'stable legal framework analysis', a one-sided conclusion is reached that the expectations protected only originate from a stable framework. However, the 'legal framework'-based analysis provides foreign investors with greater flexibility to establish their expectations in different legal frameworks.[111]

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[104] Bai J., 'Environmental Report from the National People's Congress and the Chinese Political Consultative Conference' (2014) 3 Environmental Education 26.
[105] Liu W. X., 'The Supervision System of the Environmental Liability of Foreign Investment Enterprises' (2013) 1 Journal of Ocean University of China 39.
[106] Hannum H., *Autonomy, Sovereignty, and Self-Determination: the Accommodation of Conflicting Rights* (The University of Pennsylvania Press 1990) 77.
[107] Li X. J, and Han D. Y., 'The Achievement of the Reification Function of National Legislation under the Constitutional Law' (2013) 3 Journal of Xiamen University 98.
[108] *CMS v. Argentina* (n 4) 277.
[109] Muchlinski has comprehensively examined the conduct of foreign investors in the FET principle. See Muchlinski (n 10) 527-558.
[110] Harms P., *International Investment, Political Risk, and Growth* (Kluwer Academic Publisher 2000) 57.
[111] The *Metalpar* tribunal indicated that in an unstable investment environment, foreign investors can also generate expectations that 'their investment would subject to the ups and downs country in which they were made'. *Metalpar v. Argentina* (n 10) 187.

To sum up, investors' expectations are different in a stable and an unstable legal framework, but they are both the reasonable exceptions of investors. The arbitral practice, refusing to recognize an unstable legal framework in the creation of investors' expectations, reflects the pro-investment bias.

3.2.2. Specificity, specific expectation and general expectations in a general legal framework

In international investment disputes, investors claimed their legitimate expectations on the basis of the changes of the general legal and policy framework. The general framework in practice can be reconciled either by the specific governmental measures or by the governmental new general framework. The framework did not refer to any specific investor and therefore the main issues faced by arbitral tribunals will be (1) whether the general framework gives rise to investors' legitimate expectations protected by IIL, as what has been addressed by tribunals;[112] and (2) whether the changes caused by the specific measures and by the new general framework generate different legitimacy of expectations.

Whether it is the general legal/policy framework that has changed the specific measures or on the converse, it is firmly established that the framework/specific measures at the time of investments are the preconditions on which expectations are generated.[113] Therefore, an analysis of the frustration of legitimate expectations only requires to examine the framework/specific measures which change the previous ones. In practice, the changes in which the general legal framework involves include the main forms of: (1) new general framework changed the old framework; (2) specific governmental measures were against the legal framework; (3) general legal framework changed specific measures. But a question arises: is IIL protecting the general exceptions created by the general legal framework or the specific exceptions generated by the framework?

As to the first situation where new general framework changes the old one, this research argues that the expectations from the old framework should not be considered as a precondition of legitimate expectations unless the framework contained a specific promise or undertaking. Therefore, the issue of legitimate expectations does not exist in this situation. Investors' expectations grounded in the general legislations, as in force when their investment decisions were made, were changed without specific governmental measures in the *Total* case. The *Total* tribunal maintained that 'such changes in general legislation, in the absence of specific stabilization promises to the foreign investor, reflect a legitimate

[112] E.g. the *Total* tribunal maintained that 'Total did not enter into a contractual relationship with Argentina's authorities' and 'all the laws and regulations Total invokes are instruments of general application'. *Total v. Argentina* (n 22) 100.

[113] *LG&E v. Argentina* (n 4) 130. ('[Legitimate expectations] are based on the conditions offered by the host State at the time of the investment'); *Frontier Petroleum Services Ltd v. Czech Republic*, Final Award of 12 November 2010 (UNCITRAL) 287-288. ('When investments are made through several steps… legitimate expectations must be examined for each stage at which a decisive step is taken towards the creation, expansion, development, or reorganization of the investment'); Dolzer R. and Schreuer C., *Principles of International Investment Law* (Oxford University Press 2008) 135; Schreuer C. and Kriebaum U., 'At What Time Must Legitimate Expectations Exist?' in Werner J. and Ali A. H.r (eds), *A Liber Amicorum: Thomas Wälde. Law Beyond Conventional Thought* (CMP Publishing 2009) 266-270.

exercise of the host state's governmental powers that are not prevented by … the faire and equitable treatment obligation.'[114] In this situation, the general framework is adjusted by general instruments without referring to a specific investor and such an adjustment was left with wide space by the *Total* tribunal, which indicated that the weak specificity in the general legal framework should be treated differently from the stronger specificity in the specific governmental measures in creating legitimate expectations.

Tribunals have demonstrated that general legal framework can change and investors should adjust their investments accordingly,[115] but some tribunals have introduced an extra element: the intensity of the change,[116] to the assessment of legitimate expectations, believing that the entire alternation of a general framework will violated the FET standard.[117] It therefore seems that some tribunals also protected legitimate expectations in the change of the pure legal/policy framework even though no specificity existed. On the contrary, this research argues that the pure legal/policy framework does not generate legitimate expectations however the severity of the changes is. In the transition of a general framework, where the new regime replaces the old one, what foreign investors are subject to is the general modification. Usually not only foreign investors, but also domestic ones will be bound by the modification, which further decreases the specificity. Space should thus be granted to host states for such an adjustment. The legal/policy for preventing $PM_{2.5}$[118] was not included in China's legal framework, although $PM_{2.5}$ pollution has existed in China for long.[119] But the Beijing Government issued the Air Pollution Control Ordinance in 2014 to control $PM_{2.5}$.[120] Investments causing $PM_{2.5}$ will be fined, withdrawn the license or suspended for rectification under the new regime.[121] With the 'severity analysis', the $PM_{2.5}$ prevention mechanism has severely changed the previous environmental legal system and filled the gap of environmental protection regarding $PM_{2.5}$ in China's legal regime.

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[114] *Total v. Argentina* (n 22) 429.

[115] *Parkerings .v Lithuania* (n 43) 333. ('[Foreign investor] must structure its investment in order to adapt it to the potential changes of the legal environment').

[116] *Saluka v. Czech* (n 21) 351. ('No investor may reasonably expect that the circumstances prevailing at the time the investment is made remain *totally* unchanged'). Newcombe and Paradell suggest that (1) only a 'basis level of' stability of the legal framework is required in the protection of legitimate expectations; and (2) foreign investors' legitimate expectations are likely to be infringed only when the change of the legal framework is 'fundamental'. Newcombe A. and Paradell L., *Law and Practice of International Investment Treaties: Standards of Treatment* (Kluwer Law International 2009) 280.

[117] *CMS v. Argentina* (n 4) 266-284; *LG&E v. Argentina* (n 4) 139 ('Argentina *completely* dismantled the very legal framework constructed to attract investors', and eventually constituted the violation of the FET standard.); *Enron v. Argentina* (n 4) 264 ('The measures in question … have beyond any doubt *substantially* changed the legal and business framework').

[118] $PM_{2.5}$ (particulate matter $\leq$2.5) is also known as particulate matter which can enter into the lungs and the human body. The particulate matter can participate in pulmonary gas exchange inside the human body and affect human cardiovascular and nervous system. Tao J. and Zhang L. M. and Ho K. and others, 'Impact of $PM_{2.5}$ Chemical Compositions on Aerosol Light Scattering in Guangzhou-the Largest Megacity in South China' (2014) 135-136 Atmospheric Research 48-50.

[119] Wang S. L. and Yun Y. R. and Gao J., 'Mid and Long Term Strategy Against $PM_{2.5}$ in China' (2013) 4 Environment and Sustainable Development 12.

[120] Beijing Air Pollution Control Ordinance, issued on 22 January 2014 by the 2nd Session of the 14th Beijing People's Congress, enforced from 1 March 2014.

[121] Ibid Articles 90-129.

And a violation of investors' legitimate expectation may occur. However, such a conclusion reached from the 'severity analysis' may restrain China's environmental protection in, particularly in the states where the drastic framework changes are indispensable.

In the second situation where specific measures[122] change a general legal framework, this research argues that (1) if the measures change certain content of the framework through breaching the framework, host states should take the liability for such breach and investors' legitimate expectations should be protected; (2) if the measures adjust the framework according to the principles and procedures prescribed in the framework, this research considers the change as an exercise of states' regulatory power and the expectations should not be preserved. The first point was reflected in the *MTD* case in which expectations were created through a specific contract but the contract changed the general framework through disobeying the laws prohibiting the commercial development of a land.[123] But the *EDF* tribunal maintained that specific measures that generated legitimate expectations should be protected regardless of whether the specific measures had breached or complied with the general legal framework. The *EDF* tribunal maintained that:

> Except where specific promises or representations are made by the State to the investor, the latter may not rely on a bilateral investment treaty as a kind of insurance policy against the risk of any changes in the host State's legal and economic framework. Such expectation would be neither legitimate nor reasonable.[124]

It is indicated from the *EDF* case that the expectations that host states' legal framework does not change is not legitimate. But when 'specific promises or representations are made, investors' expectations are formulated'. Put another way, if the general legal framework is overturned by a specific promise or presentation, investors' legitimate expectations are frustrated. This conclusion did not reflect the necessity to distinguish the measures complying with the legal framework and the ones violating such a framework.

The *Continental* tribunal recognized states' space to amend the legal framework and stated that such power should not be bound by IITs' provisions.[125] However, this tribunal did not clarify whether the legal framework changes can be caused by states' regulatory measures as well as by states' measures

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[122] For instance, Article 41 of Argentinean Gas Decree permitted: a) TGN to calculate tariffs in US dollars and convert to pesos at the prevailing exchange rate; b) TGN to adjust tariffs every six months. Further, the tribunal is of the view that *'*the legal framework and the License … was to guarantee the stability of the tariff structure and the role of the calculation in dollars and the US PPT adjustment.*' CMS v. Argentina* (n 4) 85, 161.

[123] *MTD v. Chile* (n 4) 168.

[124] *EDF (Services) Limited v. Romania*, Award of 8 October 2009 (ICSID Case No. ARB/05/13) 217 (*EDF v. Romania*).

[125] *Continental v. Argentina* (n 21) 258. ('It would be unconscionable for a country to promise not to change its legislation … or even more to tie its hands … such an implication as to stability in the BIT's Preamble would be contrary to an effective interpretation of the Treaty… be misplaced and, indeed, unreasonable').

disobeying the principles of the legal framework, latter of which should be examined as a basis of a violation of the FET standard.

The *CMS* tribunal did not differ whether the changes of the legal framework were changed by general laws or by specific commitments, but it indicated that the changes should not create 'adverse legal effects'.[126] Such an interpretation focused only on 'results' rather than 'reasons' of the legal framework changes. However, a question remains: should the changes of the legal framework caused by specific measures and by general framework be regarded the same?

This research argues that the changes by specific measures should be involved in the 'adverse effects' analysis, while the changes by general framework should not constitute a violation of investment treaties even the legitimate expectations are frustrated. First of all, host states are encouraged by both treaty and arbitration practice to provide a reliable environment for foreign investments and the specific measures are more likely to be relied on through the concrete measures. Second, the changes caused by the specific measures embrace high specificity and a governmental intention is usually reflected manifestly. Third, the specific measures generally apply to the limited investors, while the general laws refer to a broad range of subjects in which domestic investors may be included as well and it will potentially reduce the possibility of being discriminatory and arbitrary.

In the third situation, the changed legal framework nulls the promise incorporated in the specific governmental measures (e.g. contract or license). In this circumstance, the specific commitments had existed before the modifications of the legal framework but such modifications upset investors' legitimate expectations.[127] The *El Paso* tribunal held that the stability requirement of the legal framework in the FET standard allowed the changes of law provided that they were in line with the specific commitment of the host state. The tribunal maintained that:

> In sum, the Tribunal considers that FET is linked to the objective reasonable legitimate expectations of the investors and that these have to be evaluated considering all circumstances. As a consequence, the legitimate expectations of a foreign investor can only be examined by having due regard to the general proposition that the State should not unreasonably modify the legal framework or modify it in contradiction with a specific commitment not to do so.[128]

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[126] *CMS v. Argentina* (n 4) 274 ('It is not a question of whether the legal framework might need to be frozen … but neither is it a question of whether the framework can be dispensed with altogether when specific commitments to the contrary have been made. The law of foreign investment and its protection has been developed with the specific objective of avoiding such adverse legal effects').

[127] The *Parkerings* tribunal maintained that 'any businessman would (be) aware of the risk that changes of laws would probably occur after the conclusion of the Agreement'. *Parkerings v. Lithuania* (n 43) 335.

[128] *El Paso v. Argentina* (n 4) 364.

Therefore, the tribunal indicated that the modification of the legal framework is feasible only if the modification is reasonable or is not in contradiction with a specific commitment by the host state. This conclusion limited the legislative power of the host state. When a specific promise not to change the law has been made, the change of the laws may violate the FET standard even in severe social and economic circumstances.[129] It is noteworthy that the tribunal highlighted the extent of legal changes,[130] which may frustrate investors' legitimate expectations and the drastic change of environmental laws would be challenged by foreign investors. The *EDF* tribunal recognized that the investor's expectations should be balanced with the host state's need to protect the public interests at a time of crisis.[131] The tribunal held that a failure to 'abide by express commitments' will amount to 'inequitable conduct', indicating that it was the obstruction of the specific commitments that resulted in the violation of the FET standard.[132] The tribunal maintained that the FET standard in the treaty context included the duty aiming 'for respect of specific commitments',[133] but the tribunal did not regard the general legal framework as a premise of legitimate expectations. In the *EDF* case, the frustration of the commitments was caused because of the financial emergency in Romania but the tribunal did not evaluate whether the frustration is generated by the change of legal framework or by a specific governmental measure. Instead, the tribunal focused on how to 'repair' the governmental commitments after the emergency.[134]

The role of a general legal framework in generating legitimate expectations is usually construed on the basis that investors obtain general expectations from general framework. It is recognized that specificity also exists in the general framework although it is weaker.[135] The *CJSC* tribunal attempted to strength the specificity of the general framework through stabilizing such a framework by maintaining that investors can stabilize the general framework through a stability agreement and such a specific promise can prevent the change of the general legal framework.[136] This research argues that the stability agreement stabilizes only the specific measures rather than the general framework and it cannot freeze states' power to reconcile their laws and regulations. What is more, the lack of specificity cannot be improved even by a stability agreement because the general framework still applies to

[129] Ibid 274.
[130] Ibid; The Toto tribunal also supported that the changes in the regulatory framework would be considered as breaches of the FET standard only when the changes is drastic or discriminatory. *Toto v. Lebanon* (n 8) 244.
[131] *EDF v. Romania* (n 124) 1005.
[132] Ibid 999.
[133] Ibid 1001.
[134] *EDF v. Romania* (n 124) 1002. ('Even if such specific commitments might be temporarily suspended during a state of emergency, fairness requires the host state to repair the economic balance within a reasonable time after the state of emergency has ended').
[135] The *Continental* tribunal also supported that general legislative statement generates reduced expectations when compared with the contractual undertakings of host states. *Continental v. Argentina* (n 21) 261.
[136] The tribunal maintained that foreign investors usually obtained stability agreement limiting the changes of the tax regime. But in the absence of such an agreement, investors cannot have the expectations that tax regime will not change. *Sergei Paushok, CJSC Golden East Company, CJSC Vostokneftegaz Company v. Mongolia,* Award on Jurisdiction and Liability of 28 April 2011 (UNCITRAL) 302 (*CJSC v. Mongolia*) ('In many instances, they will obtain the appropriate guarantees in that regard in the form of, for example, stability agreements which limit or prohibit the possibility of tax increases … In the absence of such a stability agreement … Claimants have not succeeded in establishing that they had legitimate expectations that they would not be exposed to significant tax increases in the future').

indefinite subjects and it has the weakest specificity.[137] As is illustrated above, the levels of specificity of the Chinese environmental laws, regulations, rules and policies differ and the scope of foreign investors' expectations differs as well although the specificity is reduced when compared with a governmental contract or commitment.

The *Metalpar* tribunal, after analysing the awards from 7 cases of *TECMED* (2003), *ADC*(2006), *PSEG* (2007), *Azuirix* (2006), *Siemens* (2007), *LG&E* (2007) and *Enron* (2007), found that all the disputes resulted from a contractual relation in the forms of contract, license and permit, but it concluded that 'there were no legitimate expectations entertained' by the investors because there was no such contractual relation,[138] indicating that what had created legitimate expectations is the contracts. When such a specificity-oriented analysis is applied in the changing legal/policy framework and specificity is considered as a fundamental pre-condition generating legitimate expectations, it can be implied that specificity should be explored from the general framework. In this regard, it is not the general framework itself, but the specificity included in the framework that formulates legitimate expectations.

It is noteworthy that the *CMS* tribunal supported the investor's legitimate expectations, but the *Metalpar* tribunal did not, even though the background was similar in that the legal and political environment for the investments was unstable. In the *CMS* case, the promise was not enforced because of the economic crisis in Argentina. In the *Metalpar* case, the investor also suffered loss from the economic crisis, which made the environment of the automobile industry in Argentina unstable. The tribunal in the *CMS* case supported the investor's expectations arising from a license and Argentinean law; while the *Metalpar* tribunal did not protect the legitimate expectations of the investor. A key explanation is that the investor in the *CMS* case obtained clear and specific commitments, which generated the expectations. In short, even though the potential risk of an economic crisis existed, the governmental commitment provided guarantees for the investor. In the *Metalpar* case, the host state did not give any specific promise or a commitment and what the investor relied on was a general legal environment. This research supposes that it is necessary to identify a situation in which the general framework changes the general basis of a specific governmental measure. In this regard, the change falls into the first situation above, although the specific promise is involved. In this situation, the change of a general framework does not frustrate legitimate expectations because the states are exercising their regulatory power.

To sum up, the new environmental legal framework in China is emerging during Chinese economic transition. Foreign investors are encountering new environmental restrictions which they have never

[137] *EDF v. Romania* (n 124) 217. ('Except where specific promises or representations are made by the State to the investor, the latter may not … against the risk of any changes in the host State's legal and economic framework'); *EnCana Corporation v. Ecuador*, Award of 3 February 2006 (UNCITRAL) 173. ('In the absence of a specific commitment from the host State, the foreign investor has neither the right nor any legitimate expectation that the tax regime will not change').

[138] *Metalpar v. Argentina* (n 10) 185-186.

experienced before in the Chinese market. The new legal framework can change the old framework as well as the specific measures. This research argues that the change of a general framework does not violate legitimate expectations. Although some tribunals have (1) adopted the 'totality analysis' to suggest that the framework change is possible to overturn legitimate expectation, and (2) held that when specific commitments had taken place against the change of general framework, such changes will frustrate legitimate expectations, this research argues that (1) the totality of general legal framework changes does not deny the fact that the specificity of the framework remains weak and it still refers to indefinite investors, and (2) the specific commitments cannot limit the regulatory space to change the general framework. In this regard, the change of an environmental legal framework does not lead to the frustration of legitimate expectations. In the situation where foreign investors are bound by a changed framework, it is noteworthy that domestic investors are likely to be affected as well. The restriction on states' power to change the general framework constrains states' space to regulate foreign investors and domestic investors. The general legal framework can change in its attribute either slightly or significantly and the conclusion that legitimate expectations are violated by substantive changes unreasonably underestimates this attribute.

4. Observing the general legal framework and developing the genuine reliance: obligations and duties of foreign investors in generating legitimate expectations

Governmental specific measures and general framework are considered by tribunals as the two forms of preconditions of legitimate expectations, but they were both reached from the perspective of host states' obligations. That is, states are obliged to protect foreign investors the way that had been stipulated in the specific measures or general framework. This section, however, evaluates foreign investors' obligations to observe and genuinely rely on the governmental measures or framework. Since protecting investors' expectations safeguards the rights of foreign investors and limits the regulatory flexibility of host states, a genuine 'relying and being relied on' relationship and a due diligence of investors to know and understand the general legal framework of host states should be introduced into the evaluation of legitimate expectations in order to maintain the investor-state balance in investment arbitration.

The *Chemtura* tribunal has indicated that investors were obliged not to provide disingenuous information because otherwise the legitimate expectations cannot be established, suggesting that not only do investors benefit from legitimate expectations, but also they should take obligations.[139]

[139] *Chemtura v. Canada* (n 10) 179 ('In the Tribunal's opinion, the disingenuous position taken by the Claimant with respect to the content of the Withdrawal Agreement cannot justify a "reasonable" or "legitimate" expectation'); also see *Thunderbird v. Mexico* (n 10) 155. (The tribunal examined the information provided by the Claimant, finding that the information was 'incomplete, inaccurate' and not properly disclosed which directed the Respondent 'on the wrong track').

Muchlinski has introduced investors' obligations to the FET standard.[140] Focusing on investors' behaviours which lead the host state to take the measures being claimed of the frustration of legitimate expectations, he points out that investors should act in accordance with the laws and regulations of the host country,[141] which constitutes the obligations of investors before they are protected by the FET principle. This section will build up investors' obligations further in their understanding of host states' legal framework and the genuine reliance on the framework, arguing that the failure of investors to fulfil such obligations should be used to diminish the protection of legitimate expectations in the FET standard.

4.1. Investors' awareness and observation of the legal framework

In evaluating the *OEPC* case, Franck maintains that investors should not be granted the expectation of an unchangeable tax regime because 'when *OECP* entered into the 1999 contract, it knew that the VAT scheme was in the process of being amended'.[142] It is suggested that when the investors realized the negative framework of investment, legitimate expectations may be excluded. This viewpoint was also expressed by the *Metalpar* tribunal,[143] which maintained that the Claimants should have been aware that the circumstances of the automobile industry in Argentina were negative, and in fact, one of the main shareholders of the investment had already noticed that the background situation was not optimistic in Argentina at the time of investing. Taking this view, the tribunal denied the expectations by maintaining:

> [I]t is unlikely that Claimants legitimately expected that their investments would not be subject to the ups and downs of the country in which they were made or that the crisis that could already be foreseen would not make it necessary to issue legal measures to cope with it.[144]

Under the gloomy conditions affecting the auto industry, the Claimants' expectations can be reached through two perspectives. On the one hand, the investment was likely to encounter the 'ups and downs' in Argentina. On the other, the predictable crisis made it possible for the government to 'cope with it' through amending the existing laws or enacting new laws. But the claimants made no effort to avoid or reduce the anticipated risks. So the tribunal concluded that no protection for legitimate expectation was granted to the investor.

What is worse, the investors in the *Thunderbird* case failed to disclose the information about the investment to avoid the legal framework of Mexico, leading to reduced legitimacy and protection of the

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[140] Muchlinski (n 10) 527-558.
[141] Ibid.
[142] Franck S. D., *Occidental Exploration & Production Co. v. Republic of Ecuador*, (2005) 99(3) The American Journal of International Law 679.
[143] *Metalpar v. Argentina* (n 10) 187.
[144] Ibid.

expectations. The *Thunderbird* tribunal found that Thunderbird had known that gambling was illegal under the Mexican law that the operation of similar machines was prohibited by the local authorities.[145] In fact, the Claimant continued its investment without caution even after recognizing the apparent risks of carrying out such investments, which led to investment damages. Hence, the comprehension of the legal framework but with a deliberate action against or avoid the framework can diminish the factors diminishing the legitimacy of expectations.

Introducing foreign investors' obligation to observe the general legal framework of host states and act accordingly in the formulation of legitimate expectations can encourage foreign investors to make investment decisions that are best fitted into the legal framework at the time of the decision and can limit investors' abuse of legitimate expectations. For a country in which the environmental legal/policy framework is experiencing changes when the foreign investors make decisions, the host government can seek the justification by proving that the investors insisted on investing radically regardless of the anticipated risks.

Evaluating legitimate expectations through the mere examination of host states' obligations is not enough for the construction of balanced international investment arbitration in which the interests of both foreign investors and host states are observed. Introducing investors' obligation and duty may restrict them from abusing the protection of legitimate expectations.

4.2. Authentic reliance-relationship between investors' decisions and host states' general legal framework

Understanding the general legal framework of host states constitutes only the first step to generate legitimate expectations. The second step is for investors to rely on the framework genuinely and to make the appropriate investment decisions.

Analysing either specific governmental measures or general legal framework, tribunals have stressed that investors should 'rely on' them. The *Metalclad* tribunal maintained that the Claimant 'was entitled to rely on the representations of federal officials and to believe that it was entitled to continue its construction of the landfill'.[146] The *Metalpar* tribunal held that 'legitimate expectations by definition require a promise … on which the Claimants rely'.[147] The *PSEG* tribunal also maintained that 'legitimate expectations … on which the Claimants rely to assert a right that needs to be observed'.[148] Therefore, foreign investors should establish an appropriate reliance on governmental behaviours not only in investments' decision making, but also in the claims of legitimate expectations in arbitration.

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[145] *Thunderbird v. Mexico* (n 10) 164 (*Thunderbird* have been aware of the potential risk of closure of its gaming facilities and it should have paid its particular caution in pursuing its business venture in Mexico).
[146] *Metalclad Corporation v Mexico* (n 20) 89.
[147] *Metalpar v. Argentina* (n 10) 183.
[148] *PSEG v. Turkey* (n 45) 241.

The genuine reliance requirement proposed by this research refers to the investment decision making on the basis of the proper general legal framework of host states. But the investor in the *Metalpar* case invested on a basis that was different from the genuine legal framework of Argentina that the investment environment of the auto industry was unstable. As a consequence, *Metalpar* invested without considering the 'ups and downs' in the automobile industry and the tribunal did not support the protection of legitimate expectations.[149] Since the environmental legal framework in China is revolving and the potential risks of investments are high, it is unreasonable to expect that the investments with heavy pollution will not be imposed by stricter regulations. As is stated above in section 3.1, $PM_{2.5}$ is regulated and controlled in certain regions in China and the environmental framework for controlling $PM_{2.5}$ is expected to expand to other regions across China. On the contrary, the expectations of foreign investors, which differ from this general legal framework of $PM_{2.5}$, may constitute an inappropriate expectation and reduce the legitimacy of investors' expectations. Foreign investors' who continue promoting the investments with heavy $PM_{2.5}$ emission should not escape from the liability if their investments were damaged because of the enforcement of future laws/policy to control $PM_{2.5}$.

The appropriate reliance-relationship between investors' claims and the grounds of claims in dispute settlement has also been examined in the *ADF* case,[150] in which the tribunal found that the misleading citation of case law was created by the investor's private counsel rather than the U.S. federal government.[151] It is therefore suggested that what investors should rely on is the genuine legal framework, as has been demonstrated in section 4.1 above. The advice of case law from governmental or official resources is more persuasive than the advice from private resources; otherwise legitimate expectations might not be construed.

The private investor in the *MTD* case relied on the governmental contract, although the contract was against the laws prohibiting the land for commercial development.[152] The investor encountered both a general law and some specific governmental measures, but it chose the latter to rely on. The tribunal eventually protected legitimate expectations in this case because it is the government that breached its laws.[153] However, the tribunal also reduced the compensation because the investor did not rely on the legal framework when *MTD* should have done so. This case indicated that investors should take due diligence to invest on the basis of the general legal framework of host states even though the governmental organs are providing specific commitments inconsistent with the framework. Once

[149] *Metalpar v. Argentina* (n 10) 187.
[150] *ADF v. USA* (n 10) 189.
[151] Ibid.
[152] *MTD v. Chile*, (n 4) 187-189.
[153] Ibid 188. ('[T]he Government has to proceed in accordance with its own laws and policies in awarding such permits and approvals'; 'The Tribunal has found that Chile treated unfairly and inequitably the Claimants by authorizing an investment that could not take place for reasons of its urban policy').

investors make investment decisions deliberately according to the misconduct or illegal-conduct of the host government, they have to take partial liability. In the $PM_{2.5}$ example, cities including Beijing have begun to control $PM_{2.5}$ emission through environmental instruments. Although many cities are slow in enacting their $PM_{2.5}$ regulations, the pollution has aroused wide discussion and local governments are facing the tasks to enact new instruments.[154] At this stage, foreign investors can be promised by a local government that their investments will not be bound by the $PM_{2.5}$ framework, but the investors should also be aware that such a promise is likely to be changed because of the request for the control of $PM_{2.5}$. In this unstable situation where the risks are higher, investors do have the choice to expand investment significantly with $PM_{2.5}$ emission, but once the regulations are issued and enforced, the claimed compensation should be diminished because the investors do not take the legal background into account.

It is recognized that the potential changing legal framework is determined by economic, social, political, environmental and cultural elements especially in a social transition. Investing in such a host state, foreign investors should consider these elements comprehensively. For instance, a protest was initiated by the citizens of Nantong City of Jiangsu Province in China against the sewage discharge into Lvsi Bay (and eventually to the East China Sea) of a paper making project[155] by the *OJI Paper Group*, the biggest paper producer in Japan and the 6th biggest one in the world.[156] As a consequence, the Nantong government cancelled the project.[157] Hence, if the local government is considering whether or not to enact an environmental regulation to regulate foreign investments, the contest is advised to be considered by the potential foreign investors. When the legislation is unclear, these circumstances can help infer that the risks are high.

5. Conclusion

Although the concept of legitimate expectations originates from domestic law and the protection of legitimate expectations in international investment arbitration encounters a legitimacy crisis,[158] it is beyond all doubt that international investment tribunals have protected the exceptions substantively through the FET standard,[159] either in the context of the specific governmental promise or in the general legal framework of host states.

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[154] We Y. X. and Cai L., 'Thoughts on the Prevention and Control of $PM_{2.5}$ in the City of Nanchang' (2014) 2 Energy Research and Management 2-4.
[155] News available at http://www.chinareviewnews.com, accessed 6 August 2012.
[156] *OJI Paper Group*, available at http://www.ojipaper.cn, accessed 6 August 2012.
[157] News available at http://www.chinadaily.com.cn/hqgj/jryw/2012-07-30/content_6579239.html and http://cn.ibtimes.com/articles/12460/20120731/55173.htm, accessed 6 August 2012.
[158] Potestà M., 'Legitimate Expectations in investment Treaty Law: Understanding the Roots and the Limits of A Controversial Concept' (2013) 28 ICSID Review 91-95; Zeyl (n 3) 209-217.
[159] Schreuer and Kriebaum (n 113) 226-270.

Legitimate expectations refer to the question that to what extent foreign investors can trust the law, statement and other measures of host governments, which generate expectations for investors. The governmental promise, commitment, contract and concession contain stronger specificity and tribunals therefore tend to protect the expectations arising from these behaviours. However, this research focuses on the general legal framework of host states with the aim to preserve states' regulatory power and to introduce investors' obligations in the evaluation of legitimate expectations.

Critically developing the arbitral practice, this research argues that the changing environmental framework alone is not an appropriate basis of legitimate expectations because the stability requirement restrains environmental protection in this transition. On the basis of the three situations where general legal framework exists: (1) new general legal framework changes the old one; (2) general legal framework changes the ground of specific measures; and (3) specific measures change general legal framework, this research argues that whether the legal framework changes the old framework or the ground on which specific measures were established, it applies to indefinite investors and the specificity is reduced. Since the general environmental regime changes can also affect domestic investors and influence a broader range of activities with instability, host states' regulatory space should be preserved. But when the specific measures overturn certain content of the general legal framework by breaching the framework, host states should take responsibility for such breach and investors' legitimate expectations should be protected.[160] This research argues that investors' legitimate expectations should not be preserved when specific measures adjust general frameworks according to the principles and procedures prescribed in the framework. Moreover, it is argued that it is the weaker specificity of general frameworks that determines the reduced legitimacy of investors' expectations and such legitimacy can be further diminished by investors' failure to observe and act in accordance with the general framework of host states.

According to International Law Commission, a state's international responsibility may occur when international obligation is breached by and attributed to the state.[161] Accordingly, once changing the general environmental legal framework is against the state's obligation to maintain such a framework under IIL, the state's international responsibility will occur although such a change complies with the domestic laws.[162] Since the pre-established obligation in international law is the prerequisite of states'

[160] Boyle A. E., 'State Responsibility and International Liability for Injurious Consequences of Acts not Prohibited by International Law: A Necessary Distinction?'(1990) International and Comparative Law Quarterly 39(1) 9. (States' responsibility may occur when a breach of obligation is involved).

[161] Article 2 of Responsibility of States for Internationally Wrongful Acts 2001 (Elements of an internationally wrongful act of a State): There is an internationally wrongful act of a State when conduct consisting of an action or omission: (a) is attributable to the State under international law; and (b) constitutes a breach of an international obligation of the State.

[162] The wrongful act is determined by international law rather than municipal law. See Article 3 of Responsibility of States for Internationally Wrongful Acts 2001 (Characterization of an act of a State as internationally wrongful): The characterization of an act of a State as internationally wrongful is governed by international law. Such characterization is not affected by the characterization of the same act as lawful by internal law.

responsibilities,[163] it is necessary to identify whether stabilizing the general legal framework of host states constitute a state's obligation to protect investors' legitimate expectations under an IIT. Once the state has agreed to freeze the general legal framework, the change of such a framework tend to incur international responsibility.[164] But when the IITs do not contain such explicit provision, it is arbitrary to conclude international responsibility.

Since pro-investment prevails in current IITs, host states' acts incur states' international responsibilities easily.[165] However, it is not a commonly stipulated obligation to stabilize the general environmental legal framework of host states in order to protect foreign investors in IIL or in international law. In this regard, exploring the specificity behind states' behaviours examining foreign investors' obligations in making investments are helpful to understand the scope of states' obligations, as well as the scope of states' regulatory power to change the domestic legal framework.

The environmental legal framework in China is experiencing drastic change in its economic transition, in which restrictions on investments are increasing to protect the environment. But such a general legal framework covers the indefinite investors and is subject to limited review in China's domestic legal system, through which wide space is left to the design and adjustment of the environmental framework. In order to preserve such space through IIL, tribunals should consider the weaker specificity of the environmental framework. For the FDI investors in China, they should make the appropriate investment decisions on the ground of this changing framework and the failure to perform consistently with the general framework may diminish the protection for their expectations.

[163] Sucharitkul S., 'State Responsibility and International Liability Under International Law' (1996) 18(4) Loyola of Los Angeles International and Comparative Law Journal, 835-838.
[164] Markert L., 'The Crucial Question of Future Investment Treaties: Balancing Investors' Rights and Regulatory Interests of Host States' (2011) European Yearbook of International Economic Law, 145-171.
[165] Newcombe A., 'Sustainable Development and Investment Treaty Law' (2007) 8 Journal of World Investment and Trade, 359.

CHAPTER III

DEFINING THE APPROPRIATE COMPARATORS IN INTERNATIONAL INVESTMENT LAW TO PROTECT AGAINST DISCRIMINATION: CLARIFYING LIKENESS THROUGH THE INHERENT ENVIRONMENTAL FEATURES OF INVESTMENTS AND THE FEATURES OF ENVIRONMENTAL MEASURES

1. Introduction

The national treatment (NT) and the most-favoured-nation treatment (MFN) standards have been construed among the many procedural and substantive protection mechanisms afforded to foreign investments in IITs. The protection to foreign investors in the NT and MFN standards is achieved through providing 'no less favourable' treatment than what have been afforded to another comparative domestic/third country investor; and a violation of the standards is reached only after comparing the treatments to the investors who are described as the 'appropriate comparators'. The ambiguous term of 'like circumstance/situation'[1] to define the comparative investor has given rise to considerable inconsistency as to the standards evaluating the appropriate comparator.[2]

[1] Subedi S. P., *International Investment Law: Reconciling Policy and Principle* (Hart Publishing 2008) 101. ('What are and are not like circumstances is often a matter of controversy'). In fact, IITs generally do not contain the term of 'like circumstance' to define the NT and MFN standards, fundamentally leading to the uncertainty to identify an appropriate comparator. With regard to the few treaties adopting such a term, no explicit guideline is provided to comprehend this term. China-Peru FTA (2009) Article 129 National Treatment ('1. Each Party shall accord to investors of the other Party treatment no less favourable than that it accords, in like circumstances, to its own investors ... Article 131: Most-Favoured-Nation Treatment: 1. Each Party shall accord to investors of the other Party treatment no less favourable than that it accords, in like circumstances, to investors of any third State'). The reasons not defining 'like circumstances' result from the concerns that the express provision may restrict the flexibility to view and apply scope of the NT and MFN standards. What is more, it is difficult to create a set of universal standards to define this term in all the IITs. See *Center for International Environmental Law v. Office of the United States Trade Representative and Ron Kirk, In His Official Capacity As the United States Trade Representative*, Appeal from the United States District Court for the District of Columbia, Decided of 7 June 2013 (No. 1:01-Cv-00498) 5-7.

[2] The *Occidental v. Ecuador* tribunal adopted a broad interpretation of the whole export industry rather than 'competition' as a criterion to evaluate likeness; the *Feldman v. Mexico, Pope & Talbot v. Canada* and the *Parkerings v. Lithuania* tribunals adopted 'sector' to evaluate like circumstances; regulatory purpose and overall legal context were used by the tribunals in the cases of *Pope & Talbot v. Canada* and *SD Myers v. Canada*; location, investment scale and legal context were used by the *Parkerings v. Lithuania* tribunal. See *Occidental*

Although the NT and the MFN standards focus on the states' obligation to provide non-discrimination, interpreting the standards without the consideration of host states' interests has been criticised.[3] In arbitration practice, a '3-tier analysis' has been adopted to evaluate the criteria including: whether the investments are appropriate comparators, whether different treatments exist, and the justification of the differentiation,[4] in which states' interests were considered. The different treatments seem more perceptible and the analysis of the other two other 'tiers' have been elaborated in arbitration as: (1) whether the comparators are in the same economic sector, (2) whether the compared investments are competitive regarding their products or service, and (3) the features of host states' regulatory measures.[5]

Although tribunals had endeavoured to introduce host states' public interests into the NT and MFN standards, which aim to prevent discrimination, through considering the justification (tier-3), such efforts may provide a ground for criticism. First of all, the current IITs generally do not contain exception provisions to justify states' measures. Since tribunals should interpret provisions in pursuant to the treaty context in question, tribunals do not have the explicit treaty basis to introduce the justification in the evaluation of 'like circumstances', especially under the current IIL regime which aims to achieve the promotion and protection of international investment.[6] As a consequence, the 3-tier analysis is considered inconsistent with the principles of IITs.[7] Furthermore, it is unclear whether the

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Exploration & Production Co. (OEPC) v. Republic of Ecuador. Final Award of 1 July 2004 (London Court of International Arbitration Administered Case No. UN 3467) (*Occidental* case); *Marvin Roy Feldman Karpa v. United Mexican States,* Award of 16 December 2002 (ICSID CASE No. ARB(AF)/99/1) (*Feldman* case); *Pope & Talbot v Canada* awards include: Motion to Dismiss of 26 January 2000) (scope and coverage); Interim Award of 6 June 2000) (expropriation issues, merits); Award on the Merits of Phase Two of 10 April 2001) (national treatment and fair and equitable treatment, merits); Damages of 31 May 2002) and Costs of 26 November 2002) (procedural aspects of fair and equitable treatment, costs). The analysis is based on the Interim Award of 26 June 2000 (UNCITRAL) (*Pope* case); *Parkerings-Compagniet AS v. Lithuania*, Award of 11 September 2007 (ICSID Case No. ARB/05/8) (*Parkerings* case); *S.D. Myers, Inc. v. Government of Canada*, First Partial Award of 13 November 2000 (UNCITRAL) (*SD Myers* case); *Methanex Corporation v. USA*, Final Award on Jurisdiction and Merits of 3 August 2005 (UNCITRAL) Part IV Chapter B 17 (*Methanex* case).

[3] Titi C., 'EU Investment Agreements and the Search for a New Balance: A Paradigm Shift from Laissez-Faire Liberalism toward Embedded Liberalism?' (Columbia FDI Perspectives 2013) 86; Roberts A., 'Power and Persuasion in Investment Treaty Interpretation: the Dual Role of States' (2010) 104 The American Journal of International Law 187; Salacuse J. W., *The Law of Investment Treati*es (Oxford University Press 2009) 97; Bernasconi-Osterwalder N. and Cosbey A. and Johnson L. and others, *Investment Treaties and Why They Matter to Sustainable Development: Questions and Answers* (International Institute for Sustainable Development 2012) 56; Muchlinski P., 'Caveat Investor? The Relevance of the Conduct of the Investor under the Fair and Equitable Treatment Standard' (2006) 55(3) International and Comparative Law Quarterly 527.

[4] *Methanex* (n 2) Part IV Chapter B 13.

[5] *Apotex Holdings Inc. and Apotex Inc. v. United States of America,* Award of 25 August 2014 (ICSID Case No. ARB(AF)/12/1) Part VIII 8.15 (*Apotex* case).

[6] Schreuer C., 'Investments: International Protection'(2013) Max Planck Encyclopedia of Public International Law Online 7, available at http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1533?prd=EPIL, accessed 6 June 2015.

[7] It is recognized that in the cases where the exceptions are available in IITs to cover the NT/MFN standard, they can still be used as the grounds of justification. Orellana M., 'Investment Agreements and Sustainable Development' (2011) 11(2) Sustainable Development Law and Policy 5.

wording of the NT and MFN provisions indicates a possibility to take into account of host states' interests, such as environmental protection.[8]

In view of these potential defects, states' environmental measures to control the sewage to the Yangtze River applied to the foreign investors in the scenarios below are likely to be found as violations of the NT or the MFN standard:

1. A foreign investment X and a domestic (or a third country, *sic passim*) investment Y both invest in papermaking, but X is built near and with sewage discharge into the Yangtze River while Y is not;
2. A foreign investment X1 and a domestic investment Y1 both invest in papermaking along the Yangtze River but Y1 uses the clean-processing technology while X1 does not;
3. A foreign investment X2 and a domestic investment Y2 both invest in papermaking along the Yangtze River with the same production process, but X2 discharges 2 million tons' sewage per day while Y2 produces 1 ton per day.

The environmental measures above which regulate the 'Xs' more strictly demonstrate obvious 'different treatments' when compared with the regulations on the corresponding 'Ys'. Therefore, the more stringent measures may encounter the risks of being challenged as a violation of the NT or the MFN standard if the Xs and Ys are regarded as the appropriate comparators. Under the circumstances where no space is allowed to evaluate the justification of the measures, the state may take the liability for treaty violation, which restrains its regulatory power to protect the Yangtze River. Therefore, clarifying the appropriate comparators is the first step before providing the correct treatments.[9] This Chapter focuses on the environmental concerns of host states in the evaluation of 'likeness', without referring to a justification. It argues that the 'appropriate comparators' test can potentially be read to include host states' public interests because the wording of 'like circumstances' contains indefinite elements and elaborating this term with host states' environmental interests complies with the basic rules of treaty interpretation.

For the purpose of this research, section 2 examines the functions of likeness in IIL. This section also reviews the treaty practice of likeness, recognizing that the term of likeness is not stipulated explicitly in treaty law, which gives rise to the unpredictable and inconsistent arbitral practice. Since the WTO jurisprudence on likeness has been cited by some investment tribunals, section 3 evaluates the different analysis of likeness between the trade and investment regimes. It argues that the WTO practice should not be completely 'copied and pasted' but investment tribunals can utilize the analysis when a competitive relationship exists in the dispute. This section does not exclude competition from likeness analysis, but argues that it is insufficient in investment law to explore likeness by adopting competition only, because foreign investments include non-economic factors which cannot be reflected through competition analysis. From the perspective of environmental protection, section 4 evaluates the

[8] Dolzer R. and Schreuer C., *Principles of International Investment Law* (Oxford University Press 2008) 180-183; Kurtz J., 'The Use and Abuse of WTO Law in Investor-State Arbitration: Competition and its Discontents' (2009) 20 (3) The European Journal of International Law 755.

[9] Subedi (n 1) 101. ('Only those investments in like circumstances enjoy the national treatment and the investment without the scope of like circumstances should not be accorded such treatment').

inherent features of investment. This section argues that each investment has its inherent features and the likeness analysis should compare the similar features commonly contained in the investments. However, the features of investment are innumerable and section 5 thus narrows the comparison scope of these features through the particular context of environmental measures. Although different features of investments will lead to different conclusions of likeness analysis, this section seeks to uncover some common features of investments in the situation where the environmental measures are concerned. This section argues that the inherent investment features are relevant only when they are related to the purpose, target and background of the environmental measures. Section 6 reaches the conclusions. It is recognized that the complexity of each case makes it difficult for tribunals to adopt the universal criteria to define likeness. However, environmental measures should be reviewed in the context of the particular investment circumstances in order to link the measures to the appropriate investors and to identify a proper comparator.

2. The function of likeness: preventing discrimination through identifying an appropriate comparator

2.1. Non-discrimination requirement

Discrimination is 'the unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex',[10] or 'treating one or more members of a specific group unfairly as compared with other people'[11] or 'the effect of states laws that favour local interest over out-of-state interest'.[12] In the regime of international economy, discrimination may insulate the 'domestic market from international competition'.[13] Leaving alone whether the prohibition of discrimination in IIL aims to provide equal competition among investors, protectionism behind discrimination is against the aim of IITs. Since the promotion of 'non-discrimination' is one of the fundamental goals of IITs,[14] it has been recognized in practice as a key investment protection obligation of host states.[15]

Non-discrimination in IIL grants foreign investors the right to receive no less favourable treatment than that accorded to local and third country investors under the NT and MFN standards.[16] Discrimination may arise if these standards are breached.[17] In other words, the non-discrimination obligation is

[10] Stevenson A., *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010).
[11] Martin E. A., *Oxford Dictionary of Law* (5th edn, Oxford University Press 2002).
[12] Garner B. A., *Black's Law Dictionary* (9th edn, West 2004).
[13] Ibid.
[14] Non-discrimination here refers to treating foreign investors like domestic investors under like circumstances. See von Moltke K., 'Discrimination and Non-Discrimination in Foreign Direct Investment: Mining Issues' (2002) OECD Global Forum on International Investment: Conference on Foreign Direct Investment and the Environment 3.
[15] Diebold N. F., 'Non-Discrimination and the Pillars of International Economic Law: Comparative Analysis and Building Coherency' (2010) 18 Institute for International Law and Justice Emerging Scholars Papers 2.
[16] UNCTAD, *Identifying Core Elements in Investment Agreements in the APEC Region* (The United Nations Conference on Trade and Development 2008) 33.
[17] Dolzer and Schreuer (n 8)177.

encapsulated in the NT and MFN standards.[18] Specifically, the NT standard is adopted in the context of foreign investors/investments and domestic investors/investments, while the MFN standard presupposes non-discrimination between foreign investors/investments and third country investors/investments.[19] Apart from the NT and the MFN standards, non-discrimination, which is also accompanied by the requirement of non-arbitrary[20] treatment, has also been construed by tribunals as part of the FET standard.[21]

2.2. Likeness: identify an appropriate comparator against discrimination

The NT and MFN standards are comparative standards[22] and the recognition of the appropriate comparators is usually the first step in the evaluation of discrimination,[23] followed by the examination of a discriminatory purpose and different treatments.[24] The treatment accorded to foreign investors only applies to the subject 'belonging to the same subject matter or the same category of subject'.[25] In this regard, it is unreasonable to require, for instance, the oil exploration investors to pay a cloth processing tax, which applies in the fashion industry, because the energy investors and fashion investors are not the appropriate comparators under the cloth tax regime.

Recognizing that 'what are and are not like circumstances is often a matter of controversy', Subedi confirms that the interpretation of 'like circumstance' is significant to identify the comparator.[26] When the treatment of the domestic/third country investment is established, the treatment of the relevant foreign investment can be considered as a 'copied treatment'. Comparison requires the 'copied treatment' to follow an appropriate 'original treatment'. In short, the treatment to a foreign investor depends on the treatment to the treaty-based comparator. Hence, it is the comparative features of the NT and MFN standards that make the likeness analysis concrete in IIL.

2.3.Likeness and like circumstances: practice in treaty law

Many IITs do not include 'like circumstances' explicitly in the NT and MFN provisions.[27] And this is also common in most IITs concluded by China,[28] where less than 10% of all the treaties adopt 'like

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[18] Ibid.
[19] Jackson J.H. and Davey W.J., *Legal Problems of International Economic Relations* (4th edn, West Group 2002) 417.
[20] Salacuse J. W, *The Law of Investment Treaties* (Oxford University Press 2012) 240.
[21] Ibid 238.
[22] Newcombe A. P. and Paradell., *Law and Practice of Investment Treaties: Standards of Treatment* (Kluwer Law International 2009) 159.
[23] Dolzer (n 17) 118.
[24] Dolzer and Schreuer (n 8)177.
[25] Rodriguez A. F., 'The Most-Favoured-Nation Clause in International Investment Agreement: A Tool for Treaty Shopping?' (2008) 25(1) The Journal of International Arbitration 89.
[26] Subedi (n 1) 101.
[27] For instance, the 2008 UK model BIT does not include the term of 'like circumstances' and such to describe the comparator in the NT and MFN standards, leaving even broader space for arbitral interpretation. See Article 3 of the 2008 UK model BIT (Neither Contracting Party shall in its territory subject investments or returns of nationals or companies of the other Contracting Party to treatment less favourable than that which it accords to investments or returns of its own nationals or companies or to investments or returns of nationals or companies of any third State).

circumstances' in treaty context. However, it does not indicate that the analysis of likeness can be overlooked. On the one hand, the NT and MFN standards prohibit the nationality-based differentiation[29] and the purpose is to facilitate foreign investments through ruling out host states from creating unfair advantages for domestic investors. On the other hand, the standards do not require host states to treat all the investments exactly the same in all the aspects and circumstances.[30] Rather, they allow different treatments on the appropriate grounds.[31] Host states' power to impose different regulations on different investments for the environmental reasons is regarded as the appropriate differentiation and host states can accord different treatments to foreign and domestic investors respectively without being accused of treaty violation.

Some IITs use the term of 'like circumstances' explicitly in the NT and MFN standards, while other terms such as 'same circumstances',[32] 'similar situation',[33] and 'like situation'[34] are adopted as well.[35] For instance, the China – Canada BIT (2012),[36] China – Mexico BIT (2008),[37] Mexico-UK BIT

[28] Most BITs signed by China do not use 'like circumstances' in the NT and the MFN provisions. Very few BITs such as the China-Canada BIT (2012), China-Japan-Korea TIT (2012), China-Mexico BIT (2008) and China-Peru BIT (2006) have the term of 'like circumstances'.

[29] Newcombe and Paradell (n 22) 161.

[30] See 1978 Draft Articles on Most-Favoured-Nation Clauses Article 9.1 (Under a most-favoured-nation clause the beneficiary State acquires, for itself or for the benefit of persons or things in a determined relationship with it, only those rights which *fall within the limits of the subject matter* of the clause; Article 10.1 Under a most-favoured-nation clause the beneficiary State acquires the right to most favoured- nation treatment only if the granting State extends to a third State treatment *within the limits of the subject matter of the clause*; 2. The beneficiary State acquires rights under paragraph 1 in respect of persons or things in a determined relationship with it only if they: (*a*) belong to the *same category* of persons or things as those in a determined relationship with a third State which benefit from the treatment extended to them by the granting State).

[31] Rodriguez (n 25) 89.

[32] Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of Belize (concluded on 30 April 1982) Article 3 (1) (Neither Contracting Party shall in its territory subject investment or returns of nationals or companies of the other Contracting Party to treatment less favourable than … in the *same circumstances* to investment or returns of its own nationals or companies … or of any third State).

[33] Agreement between the Republic of Turkey and the Federal Democratic Republic of Ethiopia Concerning the Reciprocal Promotion and Protection of Investments (concluded on 16 November 2000) Article III l. (Each Party shall admit in its territory investments, and activities associated therewith, on a basis no less favorable than that accorded *in similar situations* to investments of investors of any third country, within the framework of its laws and regulations. 2. Once the investment is accepted, each Party shall accord to this investment, treatment no less favorable than that accorded *in similar situations* to investments of its investors or to investments of investors of any third country, whichever is the most favourable).

[34] Treaty between the Government of the United States of America and the Government of the Republic of Honduras Concerning the Encouragement and Reciprocal Protection of Investment (concluded on 1 July 1995) Article II 1. (With respect to … each Party shall accord treatment no less favourable that it accords, *in like situations*, to investment in its territory).

[35] Newcombe and Paradell (n 22) 159.

[36] Foreign Affairs and International Trade Canada, 'Agreement between the Government of Canada and the Government of the People's Republic of China for the Promotion and Reciprocal Protection of Investments' (Article 5.1. Each Contracting Party shall accord to investors of the other Contracting Party treatment no less favourable than that it accords, *in like circumstances*, to investors of a non-Contracting Party; Article 5.2. Each Contracting Party shall accord to covered investments treatment no less favourable than that it accords, *in like circumstances*, to investments of investors of a non-Contracting Party; Article 6.1. Each Contracting Party shall accord to investors of the other Contracting Party treatment no less favourable than that it accords, *in like circumstances*, to its own investors with respect to the expansion, management, conduct, operation and sale or other disposition of investments in its territory; Article 6.2. Each Contracting Party shall accord to covered investments treatment no less favourable than that it accords, *in like circumstances*, to investments of its own investors with respect to the expansion, management, conduct, operation and sale or other disposition of investments in its territory).

[37] Agreement between the Government of the United Mexican States and the Government of The People´s Republic of China on the Promotion and Reciprocal Protection of Investments (concluded on 11 July 2008) Article

(2006),[38] the NAFTA,[39] the US Model BIT 2004, Canada Model BIT 2004 and the International Institute for Sustainable Development (IISD) model BIT 2005[40] all prescribed 'like circumstances' in the NT and MFN provisions.

It is common that IITs hardly provide guideline to read the terms above and thus leave interpretive space for arbitral tribunals, which results in the inconsistency of arbitral jurisprudence.[41] For instance, in the evaluation of the MFN provision under the Norway-Lithuania BIT, the *Parkerings* tribunal analysed whether the investor was in 'like circumstances' with the businesses that received a more favourable treatment even though the BIT did not include such a term.[42] The tribunal held that:

> [T]he essential condition of the violation of a MFN clause is the existence of a different treatment accorded to another foreign investor in a similar situation … (and) a comparison is necessary with an investor in like circumstances.[43]

A similar approached was adopted in the case of *Consortium R.F.C.C.*[44] in which the tribunal

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4.1 (Each Contracting Party shall accord to investors of the other Contracting Party treatment no less favourable than that it accords, *in like circumstances*, to investors of any third State with respect to the operation, management, maintenance, use, enjoyment or disposal of investments).

[38] Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the United Mexican States for the Promotion and Reciprocal Protection of Investments (concluded on 12 May 2006) Article 4.1 (Neither Contracting Party shall in its territory subject investments or returns of investors of the other Contracting Party to treatment less favourable than that which it accords, *in like circumstances*, to investments or returns of its own investors or to investments or returns of investors of any third State).

[39] North America Free Trade Agreement Article 1102(2) (Each Party shall accord to investments of investors of another Party treatment no less favourable than that it accords, *in like circumstances*, to investments of its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments); the Agreement between Japan and the United Mexican States for the Strengthening of the Economic Partnership Uniform Regulations Note 3 (Each Party shall in its Area accord to investors of the other Party treatment no less favourable than the treatment which it accords, *in like circumstances*, to its own investors or investors of a non-Party with respect to access to the courts of justice and administrative tribunals and agencies in all degrees of jurisdiction, both in pursuit and in defence of such investor's rights).

[40] The US 2004 Model BIT Article 3.1 ('Each Party shall accord to investors of the other Party treatment no less favourable than that it accords, *in like circumstances*, to its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments in its territory); Canada 2004 Model BIT Article 4.1. ('Each Party shall accord to investors of the other Party treatment no less favourable than that it accords, *in like circumstances*, to investors of a non-Party with respect to the establishment, acquisition, expansion, management, conduct, operation and sale or other disposition of investments in its territory); the IISD Model BIT: International Agreement on Investment for Sustainable Development (2005) Article 5 (A) (Each Party shall accord to investors of another Party treatment no less favourable than that it accords, *in like circumstances*, to its own investors with respect to the management, conduct, operation, expansion and sale or other disposition of investments); it is noteworthy that the US treaties applied 'like situations' and then changed to 'like circumstances'.

[41] Some treaties do provide somehow instructions on how to analyse likeness. For instance, the Model BIT of Norway (2007) Article 4: Most-Favoured-Nation Treatment (the Parties agree/are of the understanding that a measure applied by a government in pursuance of legitimate policy objectives of public interest such as the protection of public health, safety and the environment, although having a different effect on an investment or investor of another Party, is not inconsistent with national treatment and most favoured nation treatment when justified by showing that it bears a reasonable relationship to rational policies not motivated by preference of domestic over foreign owned investment).

[42] *Parkerings* (n 2) 362, 381-382. (Investments made by investors of one contracting party in the territory of the other contracting party, as also the returns thereof, shall be accorded treatment no less favorable than that accorded to investments made by investors of any third state).

[43] Ibid 369.

[44] *Consortium R.F.C.C. v. Kingdom of Morocco,* Award of 22 December 2003 (ICSID Case No. ARB/00/6)

examined the 'identical situation', although the Italy-Morocco BIT did not prescribe such terms expressly.[45] However, the 1996 Austria-Ukraine BIT did not stipulate 'like circumstances' in the treaty context[46] and the *Alpha Projektholding Gmbh* tribunal thus concluded that:

> [U]nlike national treatment provisions in many other investment agreements, the UABIT does not expressly state that discrimination must be between investors that are "like" or otherwise similarly situated.[47]

What is more, the *Occidental* tribunal adopted a broad interpretation of like circumstances,[48] while the *Parkerings* tribunal used specific criteria including 'location' in its interpretation,[49] indicating that tribunals do not have consistent criteria to identify likeness.

3. Likeness in international investment regime and the 'competition analysis' in international trade law

The international trade disputes settlement practice has developed a set of methods to identify the comparator by using the term of 'like products'. GATT Article III.2 prescribed the NT standard that:

> [T]he products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject … to internal taxes or other internal charges of any kind in excess of those applied … to like domestic products.[50]

The *Japan-Alcoholic Beverages* Appellate Body,[51] *Canada Periodicals* Panel Body,[52] and *Canada Periodicals* Appellate Body[53] all enunciated that the violation of the NT standard should be established on the analysis of: (1) whether the products share likeness, and (2) whether the treatments differ (subject to different tax). As to the first question, a 'case-by-case analysis' has been adopted and like

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[45] Newcombe and Paradell (n 22) 160.
[46] Agreement for the Promotion and Reciprocal Protection of Investments between the Republic of Austria and Ukraine.
[47] *Alpha Projektholding Gmbh v. Ukraine*, Award of 8 November 2010 (ICSID Case No. ARB/07/16) (*Alpha* case); The *Alpha* case concerns a dispute between the Claimant Alpha Projektholding GmbH (an Austrian company invested in Hotel in Ukraine) and Ukraine. The Claimant initiated the arbitration because the Ukraine government interfered with the private investment in this case, which was against Ukraine domestic law. However, the tribunal did not find different treatments to domestic and foreign investors in Ukraine by concluding 'Claimant has not established that Ukrainian law entitles Ukrainian investors to any different treatment than investors from Austria, nor has it pointed to any instance where Ukrainian investors were, in fact, treated differently. Consequently, there is no basis to support that Ukraine breached its obligations under Article 3(1) of the UABIT'. (Ibid. para.248) Besides, the Tribunal need not resolve the question of whether Article 3(1) of the UABIT should be interpreted to include such a limitation, as Claimant has not proven a national treatment violation of any sort, whether limited to investors in "like circumstances" or not so limited. Ibid 428.
[48] *Parkerings* (n 2) 168.
[49] Ibid 381, 382.
[50] General Agreement on Tariffs and Trade 1994, Article III.2
[51] *Japan - Alcoholic Beverages*, WTO Appellate Body Report, adopted 1 November 1996 (WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R) 19-20.
[52] *Canada - Certain Measures Concerning Periodicals*, WTO Panel Report, adopted 14 March 1997 (WT/DS31/R) 5.21.
[53] *Canada - Certain Measures Concerning Periodicals*, WTO Appellate Body Report, adopted 30 June 1997 (WT/DS31/AB/R) 20.

products have been read as the 'competitive products' or 'substitutable products'[54] in which (1) product's end-uses in a market; (2) consumers' tastes; and (3) product's properties and characters are used to define the like products.[55] The *Canada Periodicals* Appellate Body concluded that the products in dispute were like products on the basis of a competitive relationship by maintaining:

> [I]mported split-run periodicals and domestic non-split-run periodicals are "directly competitive or substitutable" … the *competitive* relationship of imported split-run periodicals destined for the Canadian market is even closer to domestic non-split-run periodicals than the *competitive* relationship between imported non-split-run periodicals and domestic non-split-run periodicals.[56]

IITs tribunals, including the *Methanex* tribunal, have provided an instructive evaluation of the WTO jurisprudence and maintained that the likeness analysis in the two regimes is different:[57]

> [I]f the drafters of NAFTA had wanted to incorporate trade criteria in its investment chapter by engrafting a GATT-type formula, they could have produced a version of Article 1102 stating "Each Party shall accord to investors [or investments] of another Party treatment no less favourable than it accords its own investors, in like circumstances with respect to any like, directly competitive or substitutable goods".[58]

Although WTO law usually provides instructions for investment arbitration,[59] *Methanex* suggested that the WTO precedents cannot be duplicated into the investment regime. The 'copy-paste' method cannot be adopted by investment regime in the analysis of likeness because of some differences of the functions of the NT standard in trade and investment regimes including: (1) goods and service are covered in WTO law with the purpose of trade liberalization and free market access, while international investment law aims to achieve the protection and promotion of foreign investment;[60] (2) WTO law is designed to ensure that the commitments of the Member state are not overturned by discriminatory measures in which a fair competitive environment is established; while investment law is designed to prevent the discriminatory measures against foreign investment; (3) the violation of the NT standard can be justified by exception provisions in trade regime but investment regime does not embrace exception provisions generally;[61] (4) WTO law examines likeness on the basis of competition

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[54] *Japan - Alcoholic Beverages* (n 51) 25.
[55] Ibid 20; *Canada - Certain Measures Concerning Periodicals* (n 52) 5.23.
[56] *Canada - Certain Measures Concerning Periodicals* (n 53) 28.
[57] *Methanex* (n 2) Part IV Chapter B 34; however, the *Occidental* tribunal did not accept the WTO's interpretation of 'like products'. *Occidental* (n 2) 176.
[58] *Methanex* (n 2) Part IV Chapter B 34.
[59] It remains unsettled as to how the WTO precedents are influencing the investment laws and arbitration. See Howse R. and Chalamish E., 'The Use and Abuse of WTO Law in Investor-State Arbitration: A Reply to Jiirgen Kurtz' (2010) 20(4) The European Journal of International Law 1087; Kurtz J., 'The Use and Abuse of WTO Law in Investor-State Arbitration: Competition and its Discontents' (2009) 20(3) The European Journal of International Law 749; Tereposky G. and Maguire M., 'Utilizing WTO Law in Investor State Dispute Settlement' in Rovine A. W. (eds), *Contemporary Issues In International Arbitration And Mediation: The Fordham Papers 2010* (Martinus Nijhoff Publishers 2011) 247; Desierto D. A., 'Public Policy in International Investment and Trade Law: Community Expectations and Functional Decision-Making' (2014) 26(1) Florida Journal of International Law 52.
[60] Nicholas D. and Pauwelyn J., 'Non-Discrimination in Trade and Investment Treaties: Worlds Apart or Two Sides of the Same Coin?' (2008) 102 American Journal of International Law 57.
[61] Ibid.

between the compared products through a set of criteria of physical characters, tariff classification, consumers taste and end-use, but investment law has not developed a set of specific standards to define likeness; (5) WTO law leans the analysis of likeness on a group of products while investment law relies on an individual investor or investment;[62] (6) the exporter, as a member state, takes the burden of proof for the damages[63] caused by the imported state in the WTO regime but the private foreign investors should prove the nexus between the damages and the host state' measures. These findings provide certain hints to explore the similarities and differences of likeness-analysis of international trade and investment framework, but some of them need to be explored and restated.

3.1. Trade liberalization and investment protection/promotion

The purposes of WTO law and IIL can be expressed as for the 'free trade and barrier-free market access' and 'investment promotion and protection' respectively, but it is not clear how and to what extent does the difference affect the interpretation of likeness. This research argues that since international trade and investment are two means through which a foreign enterprise can enter into a foreign market,[64] trade involves the free movement of products and service in the importing country but investment includes the construction and operation of the investment projects with the possible outputs of products and services. Therefore, the aim of IITs originates from the protection of foreign investors' property against expropriations in host states.[65] The WTO law ensures the free barrier in the movement of products and service, but IIL protects a wider range of establishment, operation, and adjustment of foreign investment. In this regard, the analysis of likeness in investment regimes should take more criteria into account.

3.2. Competition and sector-based analysis: included or excluded in investment law?

The non-discrimination requirement in WTO law is interpreted to ensure the equal competition for the imported products via domestic tax measures or other regulatory measures.[66] The competition-based objective in non-discrimination requirement has been emphasized by WTO Panels and Appellate Bodies.[67] The economic competitive opportunity is therefore closely related to the analysis of like

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[62] Ibid.

[63] The *UPS* tribunal maintained that it is the claimant who takes the burden of proving that the foreign investor or investments must be in like circumstances with local investors or investment. But the *Apotex* tribunal noted two forms of proof burden and considered the difference between the legal burden of proof which does not shift and the evidential burden of proof which shifts. The tribunal held that 'whether the evidential burden of proof shifts' is relevant to the likeness analysis in the case and eventually the tribunal decided that the evidential burden of proof shifted to the Respondent of the US. *United Parcel Service of America Inc. v. Government of Canada*, Award of 24 May 2007 on the Merits (UNCITRAL) 83. (*UPS* case); *Apotex* (n 5) Part VIII 8.8-8.10.

[64] Caves R. E., 'International Trade, International Investment, and Imperfect Markets' (1974) Special Papers in International Economics 17-19.

[65] Subedi (n 1) 108.

[66] *Japan - Alcoholic Beverages* (n 51) 5.5(b).

[67] For instance, the Appellate Body in *Korea — Alcoholic Beverages* case maintained that 'the objectives of avoiding protectionism' are to ensure 'equality of competitive conditions' and to safeguard 'equal competitive relationships'. *Korea - Taxes on Alcoholic Beverages*, WTO Appellate Body Report circulated 18 January 1999 (WT/DS75/R) 120.

products in trade regime.[68] The evaluation of likeness for like products can be achieved through the features of the concrete products and the potential competition can be comprehended through the physical characteristics of the products, tariff classification, consumers taste and end-use, as stated above. Unlike the WTO law, it has not been agreed that the non-discrimination requirement in IIL focuses on the equal competitive environment for foreign investors. When compared with the concrete products, 'circumstance' is abstract and the criteria to define this term are obscure.

A number of investment tribunals have maintained that the claims under the NT and MFN standards should be examined through comparing the treatments in the same economic sector in which the investments compete with each other.[69] The likeness analysis is therefore understood as whether a disputed measure affords a foreign investor the treatment less favourable than that received by other investors operating in the same business or economic sector. This method was used by the *Pope* tribunal[70] and the *Feldman* tribunal,[71] in which the latter tribunal interpreted likeness under the NAFTA Article 1102 by maintaining:

> The 'universe' of firms in like circumstances are those foreign-owned and domestic-owned firms that are in the business of reselling/exporting cigarettes. Other Mexican firms that may also export cigarettes, such as Mexican cigarette producers, are not in like circumstances.[72]

The *Feldman* tribunal adopted the 'same business' approach, holding that only the firms in the business of exporting or reselling cigarettes should be regarded as the comparator.[73] The *Methanex* tribunal reviewed the *Asbestos* award and the *SD Myers* award that "the most accurate and widely recognized test of 'likeness' is competition" and that '… if two or more investors … or investments compete for the same business, they are in like circumstances'.[74] But the *Methanex* tribunal adopted a narrower analysis of comparator only within the methanol manufactures, although the ethanol manufacturers also had competition with the Claimant. International and domestic investors in the same business or sector normally conduct their activities in the same market mechanism. The requirement of non-discrimination in the same sector can prevent the political or other unreasonable factors from intervening in the market, which can eventually help different investors compete in a level-playing investment environment.

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[68] The NT standard is concerned with the 'economic impact on the competitive opportunities of imported and like domestic product'. *Argentina - Measures Affecting the Export of Bovine Hides and the Import of Finished Leather* WTO Panel Report circulated 16 December 2000 (WT/DS155/R) 182.

[69] Newcombe and Paradell (n 22) 164.

[70] *Pope* (n 2) 78.

[71] *Feldman* (n 2) 171.

[72] Ibid.

[73] However, the wording of 'businesses' and 'sector' are slightly different, which does not change the analysis in this part. 'Business' refers to 'work in buying, selling or doing other things to make a profit' or 'the work of buying or selling'. 'Economic sector' is defined as 'a part of the economy of a country' and 'business sector' means 'a part of the business of a country'. When compared with 'business sector', 'businesses' is a broader category in terms of its scope. But when compared with 'economic sector', 'businesses' is narrower because the former includes more activities than buying and selling. See Collin P. H., *Dictionary of Law* (4th edn, A & C Black 2007).

[74] *Methanex* (n 2) Part IV Chapter B 5.

The OECD used the term of 'sector' as a category from which a comparator should be chosen. The sector is not only used to evaluate likeness, but also to highlight that such an evaluation is valid 'only if' the comparison was reached under the same sector.[75] According to the OECD, most states' exceptions to the NT standard are analysed on the basis of different sectors. For instance, Korea's exceptions to the NT standard in the energy sector were prescribed:

> In electric power generation sector, foreign investment ratio must not exceed 30 per cent of the total domestic power generation facilities. In power transmission, distribution and sales *sector*, foreign investment ratio must be less than 50 per cent, and the number of shares with voting rights owned by foreign nationals must not exceed those owned by the largest domestic shareholder.[76]

In this Korean exception provision, the scope of the NT standard is delimited within a particular sector. The evaluation of the treatment received by investors will thus be limited to the comparators in the same 'electronic power generation sector', 'power distribution sector', or 'power transmission sector', or 'power sales sector'.

When operating in the same sector, foreign and domestic investments may have a competitive relationship,[77] which might be sufficient to establish like circumstances in some cases.[78] In general, the competing interests can be used as one standard to examine the similarities of investments.[79] This research agrees with the argument that the NT standard prevents 'blind preference of domestic investors'[80] but the standard is not only to provide competitive equality. This research accepts the argument of equal competition, but it does not acknowledge the equality on the basis of competition in all the investment disputes. First of all, IITs do not have provisions expressly stipulating that the NT and MFN standards are concluded to protect the equal competition for foreign investments. In addition, not all host states' measures are relevant to the competitive relations between foreign and home/third country investors. Furthermore, it is quite possible that a foreign investor may not have a comparative competitor in a host state because it is the only investor in the particular sector and it would be impossible to find the sector-based competitor. What is more, competition is an economic concept in which the individuals pursue the maximum gains,[81] but host states' measures are not always driven by the economic elements and foreign investors might be restricted by host states for political

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[75] As regards to the term of 'in like situations', the comparison between foreign-controlled enterprises … and domestic enterprises … is valid only if it is made between firms operating in the same sector. OECD, *National Treatment for Foreign-Controlled Enterprise*s (Organisation for Economic Co-operation and Development 2005) 106.

[76] OECD, *National Treatment for Foreign-Controlled Enterprises: List of Exceptions to National Treatment by Country* (Organisation for Economic Co-operation and Development 2013) 61-63.

[77] Newcombe and Paradell (n 22) 164.

[78] Ibid 165.

[79] Ibid 164.

[80] Franck S. D., *Occidental Exploration and Production Co. v. Republic of Ecuador* (2005) 99(3)The American Journal of International Law 679.

[81] Competition stands for the notion of two or more economic agents engaged in strategic interaction and pursuing individual gain. Black J. and Hashimzade N. and Myles G., *A Dictionary of Economics* (3rd edn, Oxford University Press 2009).

considerations as well. Last but not least, a host state may charge investors environmental protection fees because of the sewage into the Yangtze River. A foreign investor in paper making would expect the other investors discharging sewage into the Yangtze River to be charged in the same way, regardless of whether the other investors are investing in the same sector.

From the perspective of investment disputes arising in connection with environmental measures, it is reasonable to pay attention to the fact that sectors can be read differently under different context. In the *United Parcel Service* case, the tribunal maintained that two investments can be in 'like circumstances' in one economic sector, but simultaneously can be regarded as in 'unlike circumstances' in another economic sector.[82] According to the Sector Classification of National Economy of China, the national economic system is divided into three General Sectors as the First Sector, Second Sector and Third Sector.[83] The First Sector includes the sub-sectors of agricultural, forestry, animal husbandry and fishery.[84] Under the sub-sectors, there are a variety of further sub-divisions/branch-sectors. For example, the sub-sector of mining contains coal, oil and gas, ferrous metal, non-ferrous metal and nonmetal industries.[85] Hence, even 'sector' has different classifications such as 'General Sector', 'Sub-Sector' and 'Branch-Sector'.[86] Host states may offer the same treatment to the investments in the agricultural sector, in which seeding, fishing, forestry and animal husbandry industries are included. However, foreign investors in the fishing industry of the host state might regard the fishing sector different from the forest sector. In this situation, foreign investors might require different treatment from what the state is offering. Host states and the foreign investors may arrive at different conclusions because of the divergent understandings of the sector in different context. Such a difference partially results from the ambiguous treaty practice of 'like circumstances'.

Further examples can be evaluated from Table 4.1 that the coal and architecture ornament are in a different sub-sector and branch-sector but they belong to the same General Sector B. However, a coal investment project generally causes more air pollution through the emission of sulphur dioxide than an architecture ornament investment. Once the tribunals consider the investments in coal and architecture ornament as appropriate comparators only from the perspective of the General Sector, the host state's power to treat them differently would be delimited.

To sum up, the sector-based interpretation of 'like circumstances' narrows the scope of comparators into the same economic field, but sector or economic sector is insufficient to define an appropriate comparator. This research does not suggest that that the likeness analysis in WTO regime is irrelevant

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[82] *United Parcel Service of America* (n 63) (It is possible for two investors or enterprises to be in the same sector or to be in competition and nonetheless be quite unlike in respect of some characteristic critical to a particular treatment).

[83] Bureau of Statistics of People's Republic of China, Regulation on Sector Classification of National Economy of China GB/T4754—2002, issued on 14 May 2003.

[84] The Second Sector comprises the sub-sectors of mining, manufacture, electricity, gas and water supply and produce, and building. The Third Sector consists of sub-sectors of transportation, mail service, computer, software, wholesale and retail, accommodation, catering, finance, real estate, commercial service, scientific research, education, sports and so forth. See Ibid.

[85] Ibid.

[86] Table 4.1, at p.167

to the evaluation of likeness in investment law. The 3-tire analysis from the WTO jurisprudences can still be invoked by investment tribunals, especially when the disputes involve the investments with competitive characters. But once the disputed investments are not in a competitive relation, tribunals should not be limited by the competition-based analysis.

3.3. Exceptions and the influence on the analysis of likeness in trade and investment law

Although the general exception provision constitutes a main difference between WTO law and IIL because the mainstream of IIL has no exception,[87] it is uncertain whether the interpretation of likeness is determined by such a difference. In the presence of an exception provision, the evaluation of the NT and MFN standards can be achieved by the 3-tier analysis and the last tier refers to the exception analysis.[88] But it is questionable whether investment tribunals can use the 3-tier test in the absence of the exception provision because the tribunals have no treaty basis to read exceptions.

This research argues that in WTO law, the examination of likeness (first tier) does not require the consideration of the justifications because they will be examined in the third tier, which has an explicit treaty basis of the exception provisions. However, as the major IITs do not have exceptions,[89] no explicit treaty obligation binds international tribunals to consider these issues.

For the vast majority of IITs without any environmental exception provision, the justification analysis will not be achieved and environmental interests will not be reflected in investment regimes. Therefore, it argues that the consideration of the environmental issues should be involved into the first tier of likeness analysis in IIL. As the wording of 'circumstances' contains a broad range of elements, tribunals should explore this term comprehensively so that host states' interests and the justifications for public interests can be taken into account.[90] In this regard, the evaluation of the NT or MFN

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[87] Kurtz (n 8) 767-769.

[88] *Methanex* (n 2) Part IV Chapter B 13.

[89] Treaties referring to environmental concerns take up roughly 6.5% of all the BITs. See Gordon K. and Pohl J., 'Environmental Concerns in International Investment Agreements' (2011) OECD Working Papers on International Investment; also see UNCTAD, International Investment Agreement Database, available at http://investmentpolicyhub.unctad.org/IIA, accessed 1 September 2015. It is noteworthy that although an increasing proportion of the investment treaties concluded after 2010 began including general exceptions, it is undeniable that currently the investment treaties with general exceptions remain the minority among the nearly 3500 investment treaties signed. What is more, the Canada-EU Comprehensive Trade and Investment Agreement (CETA) only applied exceptions within limited sections of investment chapter, which is narrower than the provision in Canada's 2012 model Foreign Investment Promotion and Protection Agreement (FIPA). UNCTAD, *World investment report 2014: Investing in the SDGs: An action plan* (United Nations Conference on Trade and Development 2014) 114, 116; *Canada-EU Comprehensive Trade and Investment Agreement* (CETA), available at http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf accessed 1 September 2015.

[90] It is acknowledged that some IITs have expressly stipulate exceptions from limited perspectives such as environment, public health and public safety in the context of like circumstances. For instance, the Model BIT (2007) of The Kingdom of Norway, Article 4 ('Most-Favoured-Nation Treatment 1. Each Party shall accord to investors of the other Party and to their investments, treatment no less favourable than the treatment it accords in like circumstances to investors and their investments of any other State … in relation to the establishment, acquisition, expansion, management, conduct, operation and disposal of investments. The Parties agree/ are of the understanding that a measure applied by a government in pursuance of legitimate policy objectives of public interest such as the protection of public health, safety and the environment, although having a different effect on an investment or investor of another Party, is not inconsistent with national treatment and most favoured nation treatment when justified by showing that it bears a reasonable relationship to rational policies not motivated by preference of domestic over foreign owned investment').

standard in IIL can ignore the third tier but host states' environmental interests have already been considered in the first tier.

In the scenario in which host states prohibit all the investments discharging sewage into the Yangtze River, the likeness refers to the similarity in the level of contamination to the River. The pollution level in this scenario is therefore a feature of investments both in oil extraction and paper manufacturing. If the pollution levels from the investments differ, they might not be the like investment under the NT and MFN standards.

The difference in likeness analysis in WTO law and IIL does not only result from the difference of the wordings in and between (1) 'products' and 'circumstances'[91] and (2) 'goods' and 'investment',[92] but also results from the unique development background of IIL. The NT and MFN provisions in IITs are considered as the 'marginal strategy' given that IIL was to provide 'strong and absolute protection, and guarantees of full compensation' to the capital exporting states.[93] The proliferation of investment activities in the subsequent years (compared with the early days of the regime) necessitated more nuanced approaches determining whether one investment is like another in the capital importing countries but expropriations had always been a concern to the investors. Therefore, likeness in the NT and MFN standards was ambiguous while the compensation against expropriation was elaborate. The 'minimalist structure of NT standard' and the absence of exceptions in many IITs are both the reflections of the unique background of IIL.[94] Understanding the background facilitates the evaluation of the reasons why the likeness analysis in IIL is difficult, especially in the view of IITs.[95]

To sum up, the WTO jurisprudence of reading 'like products' through end-users, consumer' tastes and product's properties cannot be completely copied into IIL because on the one hand, the language of

[91] From the wordings of the terms, the scope of 'circumstances' is broader than 'products' and the reference to likeness necessitates an evaluation of a 'wider range of factors' in IIL than in the WTO regime. Nicholas and Pauwelyn (n 60) 68. For a detailed comparison of 'likeness' tests in WTO and investment law, see Kurtz (n 8) 749.

[92] Furthermore, investment tribunals such as the *Occidental* tribunal suggested a broad test about the interpretation of comparator. *Occidental* (n 2) 176-180.

[93] Kurtz (n 8) 755.

[94] Ibid.

[95] The new development of IIL is being pushed partially by the fact that capital exporting giants who are the designer of the rule of the international investment regime have been replaced by new countries. (For instance, US (336 943 Millions of dollars), China (including Hong Kong 258 700 Millions of dollars), Japan (113 629 Millions of dollars) and Germany (112 227 Millions of dollars) dominated the Top four for the FDI outflows country in 2014; but US (45 640 Millions of dollars), UK (25 137 Millions of dollars) and France (22 860 Millions of dollars) were the countries with the most FDI outflows in 1994) Being the capital-exporting countries, the old giants dominated treaty design with the trend to protect its foreign investors abroad and therefore the NT and MFN standard did not concern host states' interests. But in the new development of international investment, the old capital-exporting countries may have become the capital-importing countries as well and their need to protect themselves as sovereign country is raised. In this regard, treaty provisions such as the NF and the MFN standards should be developed to cater for this need. Although old investment treaties are being terminated or renegotiated, many remain in valid (in China, 12/46 BITs concluded between 1982 and 1992 have been terminated) and the old treaty practice of likeness would still constrain the consideration of host states' interests in the NT and the MFN standards. See UNCTAD, *World Investment Report 2015* and *World Investment Report 1995.*

'circumstances' and 'products' are different; and on the other, once an investment law was applied the same way as trade law, there would be no need to have trade law and investment law separately.[96]

4. Likeness analysis: inherent environmental features of investments

4.1. Environmental location and investment scale

In a scenario where the investors in provinces A and B both invest in the boiler room in the sector of heating, but the investor in province A is located in an ecologically vulnerable area while the investor in B province is not, even though the exhaust emission from both investments is similar. From the perspective of contamination control, the investments may not be in like circumstances because they differ in locations and they impose different threat to ecological systems.

All the FDI projects have a geographical location and choosing the location is crucial for investments, especially for the FDI projects in energy, paper making and chemical plants because of the sensitive environmental concerns involved.

Location has been explored by the *Parkerings* tribunal.[97] The dispute concerns the construction of a parking project in the Old Town of Lithuania capital city. According to the Claimant, the Respondent rejected its construction of a parking project while permitted another domestic company (Pinus Proprius) to build a parking project in the same place.[98] However, the Respondent argued that Pinus Proprius's parking project's location did not cover the Odiminiu Square in the Old Town, which is a cultural heritage site. The location was a vital determinant in this case which placed the domestic investor's investment and the Claimant's investment in 'clearly different' circumstances.[99] The tribunal recognized that the two investments were in the same sector by maintaining:

> BP and Pinus Proprius were engaged in similar activities. Both Pinus Proprius and BP were companies acting in the construction and management of parking garages. Both were competitors for the same MSCP project in Gedimino. Thus, the Arbitral Tribunal found that Pinus Proprius and BP were in a similar economic and business sector' … 'Pinus Proprius MSCP and BP's MSCP project in Gedimino show obvious similarities'.[100]

Evaluating the general location of the two investments, the tribunal held that they were similar because both of them located in the Old Town and 'they are located in the Old Town district of the City of Vilnius as defined by the Administrative borders…the Old Town …is a protected area which requires

[96] If so, the treaty drafter would have changed the current IITs. See *Methanex* (n 2) Part IV Chapter B 34; Newcombe and Paradell (n 22) 173. (The methodology used to examine like goods can also 'refer to the experience from the GATT although such experience cannot be transported without any adjustment).
[97] *Parkerings* (n 2) 363.
[98] Ibid.
[99] Ibid 353.
[100] Ibid 380, 381.

the approval of various administrative Commissions in order, notably, to make any construction'.[101] But the tribunal concluded that the two investments were in 'unlike circumstances' because the specific locations were different. Although both the investments were in the Old Town, the Claimant's construction was closer to a cathedral and required the trees near the cathedral to be cleared. But these problems did not exist in the investment of the domestic investor.[102] Hence, it is the locations of the two investments that generate different environmental threats to the host state. It is also such locations that supported the tribunal's conclusion that the investments were in 'unlike circumstances'.[103]

It is noteworthy that location in this research refers to the environmental rather than the administrative location.[104] Put another way, the location is defined as an environmental concept. In this regard, investments in the same environmental location may locate in different administrative regions. Datong city in Shanxi Province of China, which is rich in coal reserves, has the biggest coal mine in China. Apart from supplying coal to other provinces in China and other countries, local residents, government organizations, and businesses in Datong city also used coal as the main source of heating before 2008, which led to the lower air quality in the city. The coal-powered boiler rooms were widely built in the city before 2008 to supply hot water and heating to the city. However, the Datong Government began to dismantle all the coal-powered boiler rooms from 2008 in order to improve its air quality. In 2011, the government issued an administrative announcement to turn all the land where the coal-powered boiler rooms were located into the public green space.[105] At the same time, all the coal-powered facilities had to be replaced by clean energy-powered ones. The government measures brought significant environmental improvement to Datong City. In 2007, Datong ranked No.110 among the 113 cities in China's 'Annual City Environmental Rank', but it ranked No.30 in 2012 and Datong was granted 'the Model City for Environmental Protection' in 2011 by the Shanxi provincial government.[106] In 2012, Datong initiated the application for the 'Top 10 National Clean City' in China with the obvious environmental improvement of 347 Second Class days and 123 First Class days in 2011.[107] Although all the coal-powered boiler rooms have been banned in Datong, they are still in operation in other regions in China and even in other cities in the Shanxi province. When a comparator is examined

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[101] Ibid 381, 382.
[102] Ibid 385, 386.
[103] Similarly, Newcombe and Paradell suggest that a firm subject to different pollution emission standards because it is located in an environmental sensitive area is not necessarily in like circumstances to an otherwise similar firm located in a different area. Newcombe and Paradell (n 22) 176.
[104] With regard to the Yellow-River protection in China, certain investments in the cities of Lanzhou (in Gansu Province), Yinchuan (in Ningxia Province), Zhengzhou (in Henan Province) and Jinan (in Shandong Province) might be classified as investments with the same regional factor because they all locate next to the Yellow-River. However, all of them belong to different administrative regions.
[105] Datong Government, Announcement for Turning the Land for the Coal-Powered Boil Rooms into City Green Land, released 10 May 2011, available at http://www.dt.gov.cn/zwgk/zfwj/szfwj/201107/5690.asp, accessed 16 January 2013.
[106] Oriental News, 'Five Years' Development of Datong: Environmental and GDP Ranking' (28 February 2013) available at http://env.people.com.cn/n/2013/0228/c1010-20630987.html, accessed 26th June 2013.
[107] Xinhua News, 'Three cities in Shanxi Province Get Rid of Pollution' (17 November 2012) available at http://news.xinhuanet.com/local/2012-11/17/c_113711614.htm, accessed 16 January 2013; First Class day and Second Class day here refer to air quality. In China, evaluation of air quality includes the detection of pollution materials of CO, CO_2 and SO_2. Based on the collected data, air quality is divided as first class with CO, CO_2 and SO_2 air pollution index (API) lower than 50; the second class day is of API lower than 100; the third class day's API is more than 100; the fourth class day (also called the severe polluted day) with API of more than 200; the fifth class day's API (also named as the extremely severe polluted day) is more than 300.

merely by reference to the economic sector, the investors in the sector of coal-powered boiler rooms should be treated the same regardless of their different locations. The violation of the NT standard is therefore easily established because the investments in Datong and the investments in any other city belong to the same sector, but they are accorded different treatments. In this regard, the Datong government's action to protect the environment could be claimed as a violation of IITs'provision. However, this conclusion is harmful to the recovery of the contaminated ecosystem.

A careful assessment of the environmental location is therefore necessary in order to protect the environment while not to impede the foreign investments unreasonably. But what criteria can be used to evaluate the environmental location? The same environmental location can be the understood as the same desert area, or river basin, or the regions with the same $PM_{2.5}$ index, but not all of the locations are relevant in the context of an investment dispute. This research argues that whether the environmental location is relevant to the analysis of likeness in a particular case should depend on the scope and features of the regulatory measures, which will be explored in section 5.

The scale of investment in this research on the one hand, refers to the entity scale of investment, such as the occupation of a piece of land. On the other hand, it refers to the production scale, including the scope of investment output.

In the *Parkerings* case,[108] the investments of the Claimant and the domestic investor were in the same sector of car park construction but they had different investment scales. According to the Respondent, the scale of the Claimant's proposed investment was too broad, expanding to the Odminiu Square, which is:

> [A] supposed site of the defensive installations of Vilnius Castle … the site of the square is very important in the formation of the area of Cathedral Square ... this site … the purpose of better formation of the area of Cathedral Square and creation of a site of particular public significance'.[109]

The entity scale of the Claimant's investment project was so broad that the cultural heritage would be affected significantly. The tribunal concluded that the Claimant's investment 'extended significantly more into the Old Town'[110] and this situation was 'decisive'[111] in the tribunal's interpretation of 'like circumstances'.

The production scale or capacity of an investment influences both the investment input and output. A foreign investment in oil field with an output of 5 million gallon oil per year generally produces more pollution than an oil investment project with an annual output of 10,000 gallon oil. In the *Parkerings* case, the Claimant's parking project comprised 500 parking slots and the domestic investor's project

[108] *Parkerings* (n 2) 386.
[109] Ibid.
[110] Ibid 391.
[111] Ibid.

included only 233 slots, demonstrating different investment scale.[112] The Respondent stated that the Claimant's investment scale was too broad that:

> Projects of such type and scale ... would change the character of the Old Town of global value; destroy large areas of unexplored cultural layer … the intensity of traffic and air pollution in the Old Town is likely to increase. The Old Town might become less attractive in terms of tourism and to the residents and visitor.[113]

Hence, the scale of the Claimant's investment would not only affect the value of the Old Town as a tourist attraction, but also affect the environment around the project. In this regard, the tribunal concluded that the Claimant's investment was not in similar circumstances to the domestic investment and 'the potential negative impact of the BP (the Claimant) project in the Old Town was increased by its considerable size and its proximity to the culturally sensitive area of the Cathedral'.[114] The tribunal thus reached the conclusion that 'BP's (investment) was not similar to the (investment) by Pinus Proprius'.[115]

The *RDC* tribunal also rejected the Claimant's allegation of a breach of the NT standard because of the 'investment scale'.[116] The Claimant alleged that its investment (RDC) and the domestic investor's investments (Ramón Campollo) were both in the sector of railroad construction, and were competing.[117] The Claimant claimed that Guatemala suspended its investment contract to favour Ramón Campollo's railway construction for sugar business.[118] The Claimant focused on 'railway sector' and 'direct competition' to support the argument that its investment and Ramón Campollo's investment are in 'like circumstances'. Despite that the two investments were in the same economic sector with competing interests, the tribunal maintained that Ramón Campollo's railway investment

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[112] Ibid 380.
[113] Ibid 385.
[114] Ibid 392.
[115] Ibid.
[116] *Railroad Development Corporation (RDC) v. Republic of Guatemala*, Award of 29 June 2012 (ICSID Case NO. ARB/07/23) (*RDC* case); The *RDC* case concerned a dispute between RDC, a private owned company investing in railroad and railway service in Guatemala, and the state of Guatemala. The Claimant planned to rebuild a railway system, which was abandoned after 1996. In order to reconstruct the railroad, the Claimant also undertook the 'rehabilitation plan for the rolling stock that would be required for the operation of the railroad'. However, the usufruct for the Claimant did not include the rolling stock. In November 1997, Ferrovías Guatemala ("FVG"), which is controlled by the Claimant, signed the Usufruct Contract with a Guatemala stated-owned company FEGUA. Under the Contract, FEGUA was obliged to construct the railroad and to develop pipelines, electricity, and transmission and so on. In return, the Claimant paid FEGUA through FVG. But this contract was not approved by Guatemala without any explanation given by the government. (Ibid 32) Later in 2003, FVG and FEGUA entered into another contract. In 2006, the Guatemala government declared that the usufruct of the rolling stock in the contract injured the States' interest, thus suspending the contract. The Claimant, before the ICSID tribunal, claiming the state's violation of the national treatment, minimum standard treatment, and expropriation pursuant to the Dominican Republic – Central America – United States of America Free Trade Agreement (CAFTA).
[117] Ibid 52. ('According to Claimant, RDC and Ramón Campollo are foreign and domestic investors in "like circumstances": both are competitors in the same economic sector since they have been competing to invest and operate the railroad and in leasing and developing the railroad's assets').
[118] Ibid 52, 53. ('According to Claimant: "… Campollo demanded that he be allowed, without compensating FVG, to take over the Usufruct in whole or in part and be granted the exclusive right to use, develop and exploit the Usufruct assets … where Campollo's sugar business … Direct competition could hardly be clearer … one of the principal motivations of Respondent in issuing the resolution was to help facilitate the takeover of the FVG's usufruct by Mr. Campollo … Guatemala discriminated against RDC … in favour of 'other [interested] investors).

was purely for sugar transportation and thus the investment scale was small.[119] The tribunal took the scale of investments as an 'obvious difference' in the examination of likeness and it was the scale that led the tribunal making the conclusion that the investments were not the appropriate comparators.

The conclusion from the *RDC* case and the *Parkerings* case can answer the question raised in a scenario in which an investment in the sector of coal heating supply with 500 million Joule outputs and an investment in the same sector but with only 1 million Joule outputs. In this scenario, the investments differ in their scale and eventually in the heating outputs and pollution emissions. Likeness is thus not established between the two investments and host states are justified to treat them differently without violating the NT standard.

As a whole, both investment scale and environmental location concern a safe distance between the investment and the protected areas. The distance should be beyond what the pollution can reach in order that the investments are environmentally established. Environmental location indicates that the investment should locate in the safe distance;[120] while investment scale implies that the investment should not expand to exceed the safe distance. For instance, the Hubei provincial government issued the rules on Non-Coal Mining Investment in which the mining projects with a border of less than 300 metres to residential areas will be prohibited.[121] Also, the government will prohibit the tailing pond investment projects with the distance of less than 1000 metres to water resources, education institute and large residential area.[122] According to this rule, the investment scale and location requirement are both embodied and the government is thus justified to take different measures to regulate the investments within and beyond the distance respectively.

4.2. Materials and methods of investment

The WTO jurisprudence has explored that a full set of criteria should be considered in likeness analysis. The *European Communities — Measures Affecting Asbestos and Products Containing Asbestos* Appellate Body[123] maintained that the Dispute Panel had concluded that the products were 'like' only

[119] Ibid 153. ('According to Claimant, both are competitors in the same economic sector since they have been competing to invest and operate the railroad and in leasing and developing the railroad's assets. Claimant supports this statement by citing the fact that Mr. Campollo has certain interests in the sugar industry in the Dominican Republic, and operates a railroad there purely for the transportation of the produce of his estate. In the Tribunal's view, the obvious difference in scale between the railroad for the exclusive exploitation of the sugar plantation of Mr. Campollo in the Dominican Republic and the railway operation of Claimant in Guatemala defeats the "like circumstances" argument').

[120] Safe distance is arrived at through scientific simulation model on the basis of the factors, including the pollution from the investment, the dispersion speed, the meteorological condition, etc. See Li N. and Zhang Z. and Leng F., 'Theory and Case Study of Environmental Safe Distance of Production Facilities in Oil Fields' (2012) 22(6) Environmental Protection of Oil and Gas Fields 77-78.

[121] The Government of Hu Bei province, Governmental Opinions on Strengthening the Non-Coal Mining Security, issued of 22 July 2015, Article 2.5.4.

[122] Ibid Article 2.5.6.

[123] *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WTO Panel Report (WT/DS135/R/) circulated of 18 September 2000*; European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WTO Appellate Body Report, (WT/DS135/AB/R) circulated of 12 March 2001, 113-129.

through examining one criterion of end-user, without evaluating other criteria.[124] Although the analysis of 'like goods' is subject to different criteria from what applies to 'like circumstances' under IIL, it is clear that all the four criteria determining the likeness of goods have to be examined. For the same reason, the criteria to define the term of 'like circumstances' should also be elaborated comprehensively. As the criteria for goods are defined by four elements, while the criteria for circumstances include indefinite components, it is reasonable to expect that all the components relevant to environmental protection should be elaborated by investment tribunals. Investments include several stages such as establishment, management, production and transaction, but not all these stages have a substantial environmental influence. 'Materials' and 'methods' are generally the factors having close environmental connections, especially in energy FDI projects.

Generating plant investments may use coal, nuclear or solar power. Recently, waste (for garbage power) and biological energy were also recycled to generate electricity in China.[125] As the materials (e.g. coal, nuclear and garbage) used in electricity generation are different, the pollution emission differs significantly. FDI projects in heating supply may take the forms of coal-powered projects and natural gas-powered projects. From the aspect of environmental protection, the coal-powered FDI produces more pollution because of the coal used. The different levels of pollution caused by the different materials eventually determine that the two investments are in 'unlike circumstances'.

Investment 'method' refers to the ways of operating investment projects which may impose significant impacts on the environment. For instance, FDI in coal mining may adopt the methods of 'wall mining' and 'pillar mining'.[126] Coal mining by the 'wall mining' method supports a working area of 100-200 m^2 where large mining equipment can be fixed. Mine exploring can be conducted efficiently by this method and the resource waste can be reduced significantly. However, the 'pillar mining' uses a work area of 6-30 m^2 and the work platform can generally collapse after use, which makes the further explorations difficult.[127] For energy conservation, 'wall mining' can maximize the resource utilization when compared with the 'pillar mining'. In this scenario, different methods of coal investments cause different environmental pollution, which makes the investments 'unlike'.

Some investment tribunals have adopted investment methods in evaluating 'like circumstances'. The *Pope* tribunal suggested that 'circumstances' should cover the 'entire fact setting surrounding' of each

[124] The similar chemical materials used in the Environmental Regulation on Hazardous Chemical can be considered as the criterion of the physical characteristics. See Ministry of Environmental Protection of PRC, Environmental Regulation on Hazardous Chemical (issued on 10 October 2012, entered into enforced on 1 March 2013) available at http://www.mep.gov.cn/gkml/hbb/bl/201210/t20121016_238481.htm, accessed 20th June 2013.
[125] China New Energy, 'The Establishment of 5 Garbage Power Stations in Yunnan Province' (China New Energy 19 September 2012) available at http://www.newenergy.org.cn/html/0129/9191249127.html, accessed 26 June 2013.
[126] Qu J. W., *Blue Book of Coal Market: Annual Report on Coal Market Development of China* (Social Science Academic Publish 2012) 136.
[127] Wang S. M. and Huang Q. X. and Fan L. M. and others, *Coal Mining and Ecological Water Level Protection in Ecologically Fragile Areas* (Science Publish 2010) 36.

case.[128] When examining 'circumstances' from the perspective of the environment protection, methods or materials can be appropriately regarded as one component of the 'entire fact' because they directly affect the environment. Although no uniform standard exists to clarify the 'entire fact', the conclusion above from the *Pope* tribunal preserved space for the 'methods' and 'materials' to be included in the interpretation of likeness.

Investment method was also explored in the *UPS* case where the tribunal examined the goods imported by mail (investment) and by courier (investment).[129] In this case, the Claimant claimed that its courier investment was in like circumstances with the Canadian enterprise (Canada Post Corporation) because 'they compete in the same market and for the same market share'.[130] The tribunal firstly examined the governmental custom measures such as the Courier Low Value Shipment Program and the Customs International Mail Processing System, finding that the measures in question concerned the manner 'in which Canada Customs processes goods imported as mail' and the manner 'in which Canada Customs processes goods imported by couriers' respectively.[131] As the methods were different (one used postal traffic and the other used courier shipment), the tribunal maintained that different custom measures should be applied by concluding:

> Canada, like all member countries of the UPU and the World Customs Organization, distinguishes between courier and postal traffic on the basis that postal administrations and expert consignment operators have different objects, mandates and transport and deliver goods in different ways and under different 'circumstances' and 'the importation of goods as mail and the importation of goods by courier require different customs treatments because of their different characteristics'.[132]

The introduction of investment materials and methods can answer the question raised in a scenario in which an investment uses coal in heating supply and an investment uses wind power in heating supply because the investments differ in production materials and the difference eventually causes the different severity of pollutions. In practice, the argument that the investments with different materials and methods should be treated differently has been reflected in the domestic investment instruments in China. The Directory of Guidance for Foreign Investment of the PRC (2015) stipulated that the power generation investments using the materials of clean coal, coal gangue, coal slime, new energy[133] and nuclear energy; and the power generation investments, adopting the methods of 'integrated coal

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[128] 'Circumstances' are context dependent and have no unalterable meaning across the spectrum of fact situations… the application of the like circumstances standard will require evaluation of the entire fact setting surrounding, in this case, the genesis and application of the Regime. *Pope* (n 2) 75.
[129] *United Parcel Service of America* (n 63) 83, 84,117.
[130] Ibid 87.
[131] Ibid 90.
[132] Ibid 98, 117.
[133] New energy includes solar power, wind, geothermal energy, tide energy, ocean wave energy and bio-energy. See Section I (encouraged investments), 4.294 of the Directory of Guidance for Foreign Investment of PRC, promulgated on 24 December 2011 by the Ministry of Commerce and the National Development and Reform Committee of the PRC.

gasification with combined circle' and 'vulcanization' are encouraged and promoted in China,[134] while the power generation investments using coal are restricted or prohibited.[135]

5. Likeness analysis: the features of environmental measures

5.1. The broad analysis of likeness: negative to environmental protection

Likeness and an appropriate comparator were read broadly by the *Occidental* tribunal,[136] where the claimant alleged likeness from within the exporters even if the investments are encompassing different sectors (e.g. fruit exporting and oil exporting).[137] The *Occidental* tribunal accepted this argument by maintaining:

> 'In like situations' cannot be interpreted in the narrow sense … as the purpose of national treatment is to protect investors as compared to local producers, and this cannot be done by addressing exclusively the sector in which that particular activity is undertaken.[138]

Such a conclusion identified the comparators as all the exporters in the host state, regardless of sector, region, method and material. It is noteworthy that the tribunal considered that the purpose of the NT standard in this dispute is 'to avoid exporters being placed at a disadvantage'.[139] Hence, the tribunal made a purpose-based examination of investment treaty provision. It is undoubted that the NT standard prevents the non-favourable treatment of foreign investment when compared with domestic investment. But it remains ambiguous whether the non-favourable treatment is avoided within a limited scope or with no border. Recognizing this point, Franck criticizes that the *Occidental* decision makes it 'easier for investors to establish a BIT violation'.[140] Franck asserts that the *Occidental*'s broad interpretation of like circumstances departs from the plain meaning of the term[141] and deviates from the purpose of the treaty standard of the NT, which is to provide competitive equality between the national and foreign investors, and to prevent blind preference of domestic investors'.[142]

For the purpose of this research to introduce the environmental concerns into the analysis of an appropriate comparator, the defects in the interpretations of *Occidental*'s tribunal on 'like circumstances' were evident, which can be seen as the warning to the ignorance of the environmental considerations in investment arbitration. First of all, interpreting likeness regardless of its plain meaning hampers the states' capacity to enact and enforce the measures aimed at the protection of the public interests. For instance, if an investment project in petrochemicals is regarded in like

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134 Ibid Section I, 4.290-4.294.
135 Whether the power generation investment using the material of coal will be restricted or prohibited depends on whether it is used in the large (prohibited) or small (restricted) power grid. Ibid Section II (restricted investments) 4.14 and Section III (prohibited investments) 4.14.
136 *Occidental* (n 2) 173.
137 Ibid.
138 Ibid.
139 Ibid.
140 Franck (n 80) 679.
141 Ibid.
142 Ibid.

circumstances with an investment project in the agricultural sector, host states will need to treat the two projects alike in all the aspects of a regulatory measure. However, given that the two projects have different environment pollution, the oil chemistry project, especially when it refers to the conventional energy, would call for a different but more stringent environmental regime. If the NT standard, and in particular, the likeness test is construed to require the states to treat the investment projects alike, states would be prevented from adopting and enforcing national policies on foreign investments for the environment protection.

The shortcomings above are also against the laws and policies of the environment protection in China. For instance, the Shanxi province in China issued the Notification on the Pollution Charge Standard for Coke Investment in Four Cities of Shanxi Province (2007 Notification hereafter).[143] Shanxi has 11 cities, but the 2007 Notification was applied to the coal investments only in 4 cities because the coal industry in the 4 cities grew faster and pollution was more severe. If the broad interpretation of likeness in the *Occidental* case were adopted, the law should have covered all the 11 cities, otherwise it was discriminatory. In 2013 spring, serious haze affected many cities in China, including Beijing, Shanghai and Tianjin.[144] In order to control the severe haze pollution, the Chinese government is considering amending laws and the local governments are required to enact local regulations as well.[145] It is likely that the energy investments which may cause the haze pollution encounter stricter laws and regulations. However, the investments in different provinces may experience different regulations because of the different pollutions in each province. If the broad interpretation of likeness were adopted widely, the local governmental regulations would again amount to discrimination. In this regard, the broad interpretation requires the same treatment of investments broadly and the stricter environmental rules in certain heavily polluting FDI projects would breach such a requirement. In this situation, host states would encounter more obstacles in formulating and carrying out the stringent environmental regulations.

Apart from the hindrance of host states to enact and enforce stricter measures for environmental protection, the *Occidental*'s approach may also encourage the investment projects with higher levels of pollution. For instance, an unconventional energy investment project (oil) is likely to be granted preferential tax regime.[146] However, host states have to provide tax preference to the conventional energy investments because otherwise treaty violation would occur according to the broad

[143] Bureau of Environmental Protection of Shanxi Province, Notification on the Pollution Charge Standard for Coke Investment in Four Cities of Shanxi Province (issued on 10 July 2007) available at http://www.sxhb.gov.cn, accessed 16 March 2013.

[144] BBC News, Smog and Sandstorm Engulf China's Capital (28 February 2013) available at http://www.bbc.co.uk/news/world-asia-china-21612150, accessed 26 March 2013.

[145] Government Departments in China are Seeking Solutions to treat Haze Pollution from Law and Policy, (Xinhua News 15 April 2013) Available at http://news.xinhuanet.com/politics/2013-04/15/c_124579285.htm, accessed 16 April 2013.

[146] This practice actually exists in countries such as China. For instance, China released government announcement to encourage clean energy development. See the Ministry of Finance, Ministry of Industry and Information, and the General Ministry of Customs and Excise Office of People's Republic of China, The Announcement of Adjusting the Tax Regime Policy Regarding the Importation of Key Equipment with High Technology (issued on 12 March 2012) available at http://gss.mof.gov.cn/zhengwuxinxi/zhengcefabu/201203/P020120312521597633422.pdf, accessed 6 January 2013.

interpretation. Obviously, such a situation would encourage the establishment of the conventional investments which generally impose a threat to environmental protection. Accordingly, the clean energy investments in China[147] and the tax exemptions[148] may be challenged under IIL. The investment in a coal condensate gas thermal power station with a unit capacity of less than 30 million kilowatts is now prohibited in China.[149] If the reasoning of the *Occidental* tribunal were followed, foreign investors would be encouraged to construct thermal power plants with small capacity but with high air pollution. Such a situation clearly undermines the goals of environmental protection.

Currently, clean energy investment projects such as the wind power generation and shale gas exploration are developing rapidly, partially driven by the global efforts to promote sustainable investments. The broad interpretation of likeness above threatens the development of global clean energy investment.[150]

5.2. Narrow the likeness analysis: under the context of host states' environmental measures

The wording of 'like circumstances' contains more components beyond 'sector, location, scale, method and material'. But it is difficult for tribunals to examine all the features of an investment in a case and the similarity test must be built on the basis of 'relevant features' in the context of a dispute. This research thus argues that the regulatory purpose and features of the governmental measures narrow the scope of the features in investments that need to be observed in the analysis of likeness.

The *Pope* tribunal used the regulatory purpose of the Canadian measures to define 'likeness' under the NAFTA regime.[151] The tribunal firstly confirmed that 'economic sector' or 'business' should be used to evaluate 'like circumstances' by maintaining:

> In evaluating the implications of the legal context, the Tribunal believes that … the treatment accorded a foreign owned investment protected by Article 1102(2) should be compared with that accorded to domestic investments in the same business or economic sector.[152]

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[147] According to the 2011 Catalogue of Guidance for Foreign Investment of People's Republic of China promulgated on 24 December 2011 by the Ministry of Commerce and the National Development and Reform Committee of People's Republic of China, there are Encouraged, Restricted and Prohibited industries for foreign investors. Investment in clean energy is an encouraged industry according to the Catalogue. See 2011 Catalogue of Guidance for Foreign Investment of People's Republic of China, available at http://www.gov.cn/flfg/2011-12/29/content_2033089.htm, accessed 9 January 2013.

[148] Ministry of Finance, Ministry of Industry and Information, and the General Ministry of Customs and Excise Office of People's Republic of China (n 146).

[149] The 2011 Catalogue of Guidance for Foreign Investment of People's Republic of China (n 147).

[150] Sattorova M., 'International Investment Law and Renewable Energy: Enabling National Policymaking?' in Bjorkland A. (eds), *Yearbook of International Investment Law and Policy 2012-2013* (Oxford University Press 2014) 415-450.

[151] The *Pope* tribunal firstly believed that it was necessary to make comparisons in order to analyse the NT standard because the relevant provision in NAFTA Article 1102 includes the term 'in like circumstances. *Pope* (n 2). This practice differs from the practice in the *Alpha* case, in which case the tribunal did not analyse 'like circumstances' partially because the NT provision of the 1996 Austria and Ukraine BIT did not contain 'like circumstances'. See *Alpha* (n 47) 73.

[152] Ibid 78.

The tribunal thus observed the different treatments in the same sector of softwood lumber among different provinces of British Columbia, Alberta and Ontario and even within the same province in Canada.[153] But the tribunal did not regard it as a breach of the NT standard because the investments in the three provinces and other provinces are not in like circumstances. The tribunal reasoned that:

> [T]he decision to implement the SIA … against exports … from covered provinces was reasonably related to the rational policy of removing the threat of CVD (countervailing duty) actions … at the time the SLA was negotiated, B.C., Alberta, Ontario and Quebec accounted for 95% of Canada's softwood lumber exports to the United States, and only those provinces faced a real threat of countervailing duty.[154]

The tribunal assumed that the purpose of the Softwood Lumber Agreement was to eliminate countervailing duty, which phenomenon prevailed in British Columbia, Alberta and Ontario. Hence, the regulatory purpose to reduce the countervailing duty was one of the reasons for the different treatments. The specific context of lumber production and the regulatory purpose of the measures adopted made the investments in these provinces different from the investments in other provinces.[155] It is thus clear that the tribunal reached its awards from the perspective of a regulatory purpose and the meaning of likeness may change from case to case, having no unalterable meaning across the spectrum of factual situations.[156]

The *SD Myers* tribunal also analysed likeness from the legal context of the governmental measures. The tribunal maintained that:

> The word "sector" has a wide connotation that includes the concepts of "economic sector" and "business sector" and that … the phrase "like circumstances" is open to a wide variety of interpretations in the abstract and in the context of a particular dispute … in considering the meaning of "like circumstances" under Article 1102 of the NAFTA, it is necessary to keep in mind the overall legal context in which the phrase appears.[157]

By 'opening to a wide variety of interpretations',[158] the tribunal concluded that the meaning of 'like circumstances' is diverse because the case fact, which determines the reading of 'like circumstances',

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153 Ibid 84-103.
154 Ibid 86, 87.
155 It is worth noticing that in this case, the tribunal held that even in the same province of Columbia, even in the same sector of softwood lumber production, investors in the coastal region and the interior region were treated differently. The reduced fee for the former was 8.10 US dollars per cubic meter, while the reduction was 3.50 US dollars for the later. The province of British Columbia's act (not Canada's act) was based on the situation that there was more timber in the interior and the different fees reduced between the coastal and the interior region can 'divide the total dollar amount budgeted for stumpage reduction evenly between the two regions'. (Ibid 98.) Although this situation was not the disputed matter before the *Pope* tribunal, it is suggested that British Columbia once took measures (creating different treatments thereafter) not based on 'sector' or even 'region' but based on the regulatory purpose behind the measures.
156 Ibid 75.
157 *S.D. Myers* (n 2) 243, 245.
158 Ibid 243.

differs. In order to examine the 'overall legal context', the tribunal evaluated the Article 1102 of NAFTA,[159] other provisions of NAFTA,[160] general principles of NAFTA[161] and NAFTA's 'companion agreement'[162] of the NAAEC (The North American Agreement on Environmental Co-operation). From the entire legal context above, the tribunal concluded that the interpretation of likeness can and should take environmental protection into account.

The tribunal also searched for the legal context in the OECD documents because 'all three NAFTA partners belong to the OECD'.[163] It pointed to OECD's National Treatment for Foreign-Controlled Enterprises (2005) which explicitly prescribed that 'more general considerations, such as the policy objectives of adhering governments, could be taken into account to define the circumstances'.[164] Citing the OECD's guideline, the tribunal confirmed that the term 'more considerations' left room for the factors such as environmental protection to be involved to evaluate likeness.

The *SD Myers* tribunal further discussed the overall legal context from the Canadian domestic precedent.[165] The tribunal reviewed the *Andrews* judgment by the Supreme Court of Canada,[166] in which the Court maintained that:

> The question of whether or not discrimination exists cannot be determined by applying a purely mechanical test whether similarly situated individuals are treated in the same manner. Whether individuals are "similarly situated"… depends on an examination of the context in which a measure is established and applied and the specific circumstances of each case.[167]

The tribunal thus confirmed its conclusion that the likeness should be read with regard to the specific situations of each case. Among the situations, factors such as host states' efforts to 'protect the public interest' should to be observed.[168]

From the judicial practice of the respondent country, tribunals can identify whether the measures are consistent or inconsistent with the states' domestic practice. Also, it can be inferred from the domestic jurisprudence to identify likeness. If a host state had inconsistent standards to evaluate likeness: using 'sector' in domestic precedents while citing other methods in international investment arbitration, the state would be suspected for behaving in a discriminatory manner and would be found in a breach of the investment treaty.

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159 Ibid 247.
160 Ibid.
161 Ibid 250.
162 Ibid 247.
163 Ibid 248.
164 OECD (n 75)106.
165 *S.D. Myers* (n 2) 249.
166 Ibid.
167 Ibid.
168 Ibid 250.

The *SD Myers* tribunal did not provide a mechanical formula to evaluate likeness. Instead, it focused on the whole legal context and on the judicial practice in the host country. The reading of the entire investment legal instruments can enhance the understanding of treaty purpose, which can eventually neither narrow nor widen 'like circumstances'. Host states' power to establish high levels of environmental protection can be respected as well.[169]

The *Grand River* tribunal maintained that the facts in each case are different, but the like comparators in the NT and MFN standards of the NAFTA regime have been well analysed on the basis of 'like legal requirements'.[170] A recent case in which likeness was evaluated comprehensively concerned an Import Alert of US Federal Drug Administration (FDA) which prohibited the importation of certain drugs manufactured by *Apotex*'s facilities in Canada because the drugs were identified of non-compliance with the US pharmacy regulation.[171] The *Apotex* tribunal tested the regulatory measures through which the relevant features of investment were selected for comparison. The tribunal identified that the likeness analysis includes like sector, competition and like regulatory measures, but the 'like regulatory measures' is disputed by the Claimant and Respondent.[172]

The Claimants selected three USA-based comparators of Baxter, Perrigo and Hospira. But the Respondent submitted that the three US comparators are not in like circumstance with the Claimants because the regulatory measures of the Import Alert of FDA regulated the drugs produced out of but imported to the US. In this regard, the three criteria of (1) being a drug manufacturer; (2) having facilities out of the US; and (3) importation into the US market,173 are the determinant of likeness insisted by the Respondent. However, the three US-based comparators selected by the Claimant are not in like circumstances because they are within the US. Put another way, the Respondent identified likeness for the purpose of the regulatory measures: protecting the US consumers from foreign adulterated products',[174] which determined the three criteria above.

The *Apotex* tribunal maintained that the three US investments are not the appropriate comparators although they are in the same sector and sell similar products to the Claimants because they are not subject to the import alerts, indicating that it is the regulatory measures that became the 'potential differentiator'.[175] It is noteworthy that the function of the authority which took the regulatory measures was also used to identify likeness by the tribunal. The FDA, which issued the Importation Act, has been empowered to refuse admission of drugs if they appear adulterated and misbranded.[176] And the

[169] Ibid 247.
[170] The tribunal held that while each case involved its own facts, tribunals have assigned an important weight to "like legal requirements" in determining whether there were in 'like circumstances'. *Grand River Enterprises Six Nations, Ltd., Et Al. v. United States of America,* award of 12 January 2011 (UNCITRAL) 166.
[171] *Apotex* (n 5).
[172] Ibid Part VIII 8.15-8.16.
[173] Ibid Part VIII 8.31.
[174] Ibid Part VIII 8.32.
[175] Ibid Part VIII 8.43.
[176] Ibid Part VIII 8.49.

tribunal explicitly concluded that the regulatory regime in this case and FDA's ability to inspect and deny the importation of drugs determine the likeness analysis by maintaining:

> To the Tribunal's mind, the differences in the FDA's ability to deny access to the US market as between foreign and domestically manufactured drugs are substantial; and that these constitute a material distinction between the legal and regulatory regimes applicable to foreign and domestic manufacturing facilities. These differences go to "like circumstances".[177]

The power granted by the US domestic law again reinforced the conclusion that the FDA and the measures taken are to regulate the imported drugs, but the other three US investments are not the appropriate comparator within the regulatory regime.[178]

China in September 2012 issued the Temporary Provision on Investment by Foreign Investment Enterprises[179] (2012 Provision) which regulated the foreign investment activities in China. According to the 2012 Provision, 'existing foreign investors who are to establish a new enterprise in China', 'the existing foreign investors whose capital increase are to change the existing non-foreign enterprise into foreign enterprise' and 'the existing foreign investors who are to increase capital in foreign enterprises to change shareholder structure' are all the investors in 'like circumstances'.[180] Hence, although the three types of investors are in the different economic sectors, different location and with no competition, they are still the 'like investors' under the 2012 Provision. From 1 March 2013, a new environmental regulation Environmental Regulation on Hazardous Chemicals was enforced in China,[181] which aimed to prevent the contaminations caused by the hazardous chemicals. In respect to this Regulation, the investments producing hazardous chemicals, the investments using hazardous chemical and the investments exporting and importing hazardous chemical are the investments in like circumstances.[182] Hence, it is possible that the investments in hazardous chemical exporting and the investments using hazardous chemical in pesticide are both considered to be in 'like circumstances'.

Different environmental regulations focus on different aspects of investment projects. From a geographical aspect, some regulations aim to protect desert areas and others tend to protect river and forest areas. From the sources of contamination, some environmental laws prohibit gas emission and others ban sewage discharge. Hence the air or water impact might be the key factor determining the likeness. In the 2013 Environmental Regulation on Hazardous Chemical above, hazardous chemical

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[177] Ibid Part VIII 8.53.

[178] As to the regulatory purpose based analysis, also see Newcombe and Paradell (n 22) 176. ('Whether two investors investments are in like circumstances will necessarily change in light of the regulatory purpose of the measure … even if firms are in a competitive relationship and are in the same business or economic sector, they may not be in like circumstances because of a legitimate policy basis for distinguishing between them').

[179] Ministry of Commerce of PRC, Temporary Provision of Investment by Foreign Investment Enterprises (issued on 21 September 2012, entered into force on 22 October 2012) available at http://www.mofcom.gov.cn/article/swfg/swfgbl/gz/201304/20130400104584.shtml, accessed 20 June 2013.

[180] Ibid Article 2.

[181] Environmental Regulation on Hazardous Chemical (n 124).

[182] Ibid Article 2.

would be important to examine an appropriate comparator.[183] Hence, the different purposes and functions of the different environmental regulations would be illustrative to define the likeness from different angles.

The environmental differentiations commonly exist in China and environmental regulations are enacted in accordance with these differentiations. Only when the differentiations are covered by the environmental regulations/measures can they be used to examine 'like circumstances'. For instance, on 14 January 2013, China issued a Precautionary Announcement to control the atmospheric haze in Beijing, Hunan, Hebei and Liaoning.[184] Areas with serious haze pollution were required to consider taking measures to reduce emissions or to control the traffic.[185] But at the same time, the haze level in the regions such as Yunnan and Qinghai is at a low level. As the purpose and function of the Precautionary Announcement were to control the haze pollution in the regions where the severity of the contamination is high, the areas where do not have such pollution are not regarded as the 'similar region' in relation to the Announcement. In this scenario, it is clear that the purpose of the regulatory measures and the environmental location may appear in the same case. Newcombe and Paradell also notice such a link between the regulatory measures and the location. They maintain that when a governmental regulation aims to prevent pollution in the urban areas, the appropriate comparator should be the investors from the urban regions rather than investors in other regions,[186] suggesting that it is the regional difference embodied in the governmental measures that eventually determines the appropriate comparator.

To sum up, the identification of an appropriate comparator comes from the common features of the investments which are in comparison. Since the environmental features of the investments can be interpreted widely to include investment sector, environmental location, investment method and materials, it is necessary to observe the content of the legal measures to narrow the scope of the features that are relevant to the measures for the purpose of comparison. Fundamentally, it is the governmental measures that determine the scope of the investment features, and affect the conclusion of an appropriate comparator.

6. Conclusion

Environmental protection has a significant role in IIL because environmental problems affect the globe rather than a single country. Distinct treatments to different investors with the purpose of protecting the domestic industry can be in the interests of host states only. However, distinct treatments aiming to protect the environment benefit the foreign investors and their home country as well. As the domestic

[183] Ibid.
[184] The Central People's Government of the People's Republic of China, 'Haze Will Continue, Measures Should Focus on End Gas, Fire Coal and Floating Dust' (16 January 2013) available at http://www.gov.cn/jrzg/2013-01/14/content_2311124.htm, accessed 16 January 2013.
[185] National Meteorological Centre of CMA, 'Precaution against Atmospheric Haze' (24 January 2013) available at http://www.nmc.gov.cn/publish/severeweather/fog.htm, accessed 25th January 2013.
[186] Newcombe and Paradell (n 22) 163.

environmental problems are also a worldwide problem and are likely to cause a global reaction,[187] the measures for environmental protection should be considered differently from other governmental measures. In this regard, it is sound to give the environmental issues a comprehensive analysis in investment disputes settlement.

In the current IIL regime, the NT and the MFN standards do not give rise to foreign investors' obligations. This research argues that the NT and MFN standards should not provide only obligations to host states, but the states' environmental interests should also be taken into account. The IITs leave the term of 'like circumstances' undefined, making space for research and arbitration to introduce the environmental concerns of host states.

Since IITs commonly do not stipulate the general exception or standalone exception provisions, it is unreasonable to interpret the environmental exception in the NT and the MFN standards as justifications of environmental measures, like what the WTO jurisprudence has done. However, the wording of 'like circumstances' includes broad content and the inclusion of the environmental considerations thus complies with the basic rules of treaty interpretation. Since the 'justification analysis' has exceeded the scope of treaty context of the NT and MFN standards in IITs, the introduction of the environmental concerns remains within the scope of 'like circumstances'.

Investments are in the same circumstances only when they share similar features, which are described as the internal features. Such features constitute the preconditions of 'likeness', without which the similarities cannot be construed. However, these features can be explored easily between two investments because of the diversity of the internal features. An investment in fishery and an investment in farming can be the 'like investments' because of the common feature that they are both in the sector of agriculture; an investment in papermaking and an investment in coal washing can be the 'like investments' because of the feature that they both discharge sewage into the Yangtze River; an investment in Tianjin and an investment in Beijing can be the 'like investments' because of the feature of $PM_{2.5}$ emission. However, the 'like investments' in IIL do not include all the features otherwise nearly all the investments are in like circumstances. In the view of an environmental measure, this research argues that the purpose and function of the measures determine what features should be tailored to evaluate the 'like investments' (see Figure 4.1).

The proposal to address the environmental considerations in the analysis of 'likeness' in the NT and MFN standards not only promote the investor-state balance, through leaving space for host states to take environmental measures without otherwise violating the treaty provisions, but also achieve environmental protection within the treaty context of the NT and MFN standards.

[187] E.g. the explosion of a petrochemical plant of China Petrochemical Corporation in Jilin province happened on 13 November 2005. An estimated 100 tons of noxious materials were spilled and the pollution entered into the Hei Longjiang River, causing pollution to Russian. Heileman L. and Shao X. M. and Zhao W. and others, *The Songhua River Spill: Field Mission Report* (United Nations Environment Programme 2005), available at http://www.unep.org/PDF/China_Songhua_River_Spill_draft_7_301205.pdf, accessed 9 July 2012.

However, this research is not proposing a set of universal criteria to interpret the likeness in all the investment disputes. It is recognized that the complexity of each case makes it impossible to develop the universal standards to examine likeness. It aims to identify the general principles to introduce host states' environmental interests into the NT and the MFN provisions, but the 'feature-based' analysis still relies on a case-by-case study. The 'inherent' features of investments and the 'external' features of environmental measures have to be construed in accordance with the specific cases.

According to the proposal of this research, preliminary similarities can be established on the basis of the inherent features of the investments compared, but final similarities are narrowed down by the environmental measures of host states (see Figure 4.1). In other words, 'like investments' have the same inherent features which are eventually refined by the features of environmental measures. Such a proposal may grant host states too much power to 'design' an environmental measure only outlining the features of foreign investments but domestic investments are excluded. As a result, the disguised protectionism may occur and how to prevent host states' abuse of the regulatory power will be the other side of the coin. Further research will be needed to explore the prevention of the potential protectionism.

CHAPTER IV

ENVIRONMENTAL PURPOSE, LEGITIMACY OF EXPROPRIATION AND MITIGATION OF COMPENSATION: UNDER THE NEW EXPROPRIATION PROVISIONS IN CHINA'S IITS AND THE NEW ENVIRONMENTAL MEASURES IN CHINA

1. Introduction

IITs protect foreign investments from being expropriated by host states without compensation. Nevertheless, the endeavours of IITs and tribunals to clarify the meaning of expropriation and to delineate the boundaries between expropriation and the regulatory measures for public interests do not lack inconsistency and ambiguity.[1] In treaty practice, IITs' provisions of expropriation are inconsistent as to the role of a public purpose.[2] In arbitration practice, tribunals have awarded compensation for the damages caused by host states' measures, regardless of public purposes involved, which is fortified by

[1] The boundaries among indirect expropriation, regulatory expropriation, legitimate expropriation, etc. have not been clearly outlined. See Isakoff P. D., 'Defining the Scope of Indirect Expropriation for International Investments' (2013) 3(2) Global Business Law Review 200. ('Tribunals have taken a wide array of approaches to identify instances of indirect expropriation … this provides a flexible approach, it also creates a great deal of uncertainty and may inappropriately categorize some legitimate state actions as indirect expropriation'.'); Fortier L. Y. and Drymer S. L., 'Indirect Expropriation in the Law of International Investment: I know it When I See It, or Caveat Investor' (2005) 13 Asia Pacific Law Review 297. (Even if a group of terms are created to understand expropriation and the relevant terms, it 'offers little assistance in understanding the practical meaning of indirect expropriation'.); Siqueiros J. L., 'An Overview of Arbitration Mechanisms between States and Investors-The Mexican Experience' (2001) 2 Journal of World Environment 249; Dalhuisen J. H. H. and Guzman A. T., 'Expropriatory and Non-Expropriatory Takings under International Investment Law' (2012) Berkeley Public Law Research Paper; Nikièma S. H., *Best Practices Indirect Expropriation* (The International Institute for Sustainable Development 2012) 81.

[2] E.g. Bilateral Agreement for the Promotion and Protection of the Investments between the Government of the Republic of the Colombia and the Government of the People's Republic of China (concluded 22 November 2008, entered into force 2 July 2013) Article 4 Expropriation and Compensation ('Neither Contracting Party shall expropriate …unless the following conditions are met a) for the public interests, public purpose or social interests; … d) against compensation'); Agreement between the Government of the People's Republic of China and the Government of the Republic of Uzbekistan on the Promotion and Protection of Investments (concluded 19 April 2011, entered into force 1 September 2011) Article 6.3 ('Except in exceptional circumstances … non-discriminatory regulatory measures adopted … for the purpose of legitimate public welfare, such as public health, safety and environment, do not constitute indirect expropriation'). The public purpose, coupled with compensation, constitutes the prerequisite of expropriation in the former BIT, but the purpose precludes expropriation and compensation in the latter BIT.

the 'sole-effect doctrine';[3] while other tribunals have paid attention to public purpose in the evaluation of expropriation and compensation.

Within the theme of this research concerns environmental protection, this Chapter explores the role of an environmental purpose in expropriation and compensation, respectively. By evaluating the conventional provisions of expropriation in which public purpose constitutes a prerequisite to generate expropriation, this Chapter critically analyses the arbitration awards by arguing that a legitimate public purpose should be adopted to mitigate compensation even though an expropriation is construed. Because otherwise, host states pay the costs of the environment protection (where the investors stay and benefit from) while the profits are exclusively shared by the private investors.[4]

Under the new treaty regime of expropriation where a public purpose is used to preclude indirect expropriation, this Chapter scrutinizes the expropriation provisions in China's IITs, in particular, the China-Uzbekistan BIT, by referring to some new environmental measures adopted in some cities in China. It reveals, under the China-Uzbekistan BIT, that the role of an environmental purpose in an *expropriation* has been elaborated in treaty context. But it remains uncertain as to the role of the purpose in *compensation*, in the situation where the purpose fails the 'proportionality test' of the provision.[5]

Section 2 critically evaluates the arbitration practice regarding the examination of expropriation and compensation in which tribunals often did not refer to a public purpose. Section 3, under the new IITs' expropriation provisions, analyses how an environmental purpose can be invoked to improve the legitimacy of the environmental measures, and to mitigate and preclude the compensation. Recognizing that the environmental purpose can *eliminate* the compensations under the new treaty provisions of expropriation if an indirect expropriation is ruled out, this section also utilizes the principle of proportionality to explore the possibility to *alleviate* the compensation in the cases where the environmental measures are construed as expropriation. Section 4 reaches the conclusion with an aim to improve the legitimacy of certain environmental measures in China.

2. Omitting a public purpose in the evaluation of expropriation and compensation: a critical overview

[3] According to the sole effect doctrine, the objective severity and impact on the investors' ability to use and enjoy the property is the only and exclusive criterion in expropriation. Newcombe A., 'The Boundaries of Regulatory Expropriation in International Law' in Kahn P. and Wälde T. W. (eds), *New Aspects of International Investment Law* (Martinus Nijhoff Publishers 2007) 391; Dolzer R., 'Indirect Expropriation: New Developments?' (2002) 11(1) New York University Environmental Law Journal 79-86; Aldrich G. H., 'What Constitutes a Compensable Taking of Property? The Decisions of the Iran-United States Claims Tribunal' (1994) 88 America Journal of International Law 588; Nikièma (n 1) 13-20. ('the sole effect doctrine has been criticized by states, investment law specialists and civil society for a number of years now as insufficient to establish the existence of indirect expropriation when legitimate public regulations are at issue').

[4] Wilske S. and Raible M., 'The Arbitrator as Guardian of International Public Policy?' in Rogers C. and Alford R. (eds), *Future of Investment Arbitration* (Oxford University Press 2009) 223.

[5] China-Uzbekistan BIT (n 2) Article 6.3 ('in exceptional circumstances, such as the measures adopted severely surpassing the necessity of maintaining corresponding reasonable public welfare').

The host governments can regulate and restrict the foreign investments for a number of reasons including the protection of domestic investors and the establishment of monopoly by the state owned enterprises (SOEs).[6] A legitimate public purpose is accepted widely in international law as a requirement before restricting foreign properties. However, the acceptance of a public purpose in IIL differs because the public purpose has not been well identified in IITs and the arbitration practice therefore is developed with inconsistency.[7]

2.1. Public purpose: a prerequisite of expropriation?

A public purpose in expropriation has been widely accepted in both customary international law[8] and IITs although the term is substituted by 'public interest' (China-Benin BIT),[9] 'public purpose related to the internal needs of that Contracting Party' (China-UK BIT),[10] 'public benefit' (China-Germany BIT),[11] and other similar terms with no substantial difference.[12]

Host states have the rights acknowledged by international law to expropriate foreign investments,[13] but most IITs' expropriation provisions prescribe the non-discrimination, public interests, due process and compensation to delineate the boundaries to expropriate.[14] The public purpose, coupled with the other three components,[15] therefore gives rise to the legitimacy of expropriation.[16]

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[6] OECD, *International Investment Perspectives 2003* (Economic Co-operation and Development 2003) 64; Duan P. J. and Saich T., 'Reforming China's Monopolies' (2013) Harvard Kennedy School Faculty Research Working Paper, available at http://ash.harvard.edu/files/reforming_chinas_monopolies.pdf, accessed 1 May 2014.

[7] Shen W., 'Expropriation in Transition: Evolving Chinese Investment Treaty Practices in Local and Global Contexts' (2015) 28(3) Leiden Journal of International Law 588.

[8] Miles K., *The Origins of International Investment Law: Empire, Environment and the Safeguarding of Capital* (Cambridge University Press 2013) 155.

[9] Agreement between the Government of the People's Republic of China and the Government of the Republic of Benin Concerning the Promotion and Reciprocal Protection of Investments (concluded 18 February 2004) Article 4.1.

[10] Agreement between the Government of the Kingdom of Great Britain and Northern Ireland and the Government of the People's Republic of China concerning the Promotion and Reciprocal Protection of Investments with Exchanges of Notes (concluded 15 May 1986, entered into force 15 May 1986) Article 5.

[11] Agreement between the People's Republic of China and the Federal Republic of Germany on the Encouragement and Reciprocal Protection of Investments (concluded 1 December 2003, entered into force 11 November 2005) Article 4.

[12] It is noteworthy that the expression such as 'for the purpose of legitimate public welfare, such as public health, safety and environment, do not constitute indirect expropriation' adopted in the China-Uzbekistan BIT (n 2) indicates a more detailed approach than 'public purpose' because the latter has a wide but ambiguous scope.

[13] Subedi S. P., *International Investment Law: Reconciling Policy and Principle* (Hart Publishing 2008) 121. ('International tribunals have not challenged the rights of states to expropriate the assets of foreign companies, rather it is the question of compensation that has been expounded by such tribunals').

[14] *ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary*, Award of 2 October 2006 (ICSID Case No. ARB/03/16) 423 (*ADC* case) ('It is the Tribunal's understanding of the basic international law principles that while a sovereign State possesses the inherent right to regulate its domestic affairs, the exercise of such rights is not unlimited and must have its boundaries … treaty obligations, provides such boundaries'); constraining the boundaries of host states' regulatory power through the preconditions is also considered as private investors' intervention in host states' domestic policy-making. Soloway J. A., 'Environmental Regulation as Expropriation: The Case of NAFTA's Chapter 11' (2000) 33(1) Canadian Business Law Journal 119.

[15] Marlles J. R., 'Public Purpose, Private Losses: Regulatory Expropriation and Environmental Regulation in International Investment Law' (2007) 16(2) Journal of Transnational Law and Policy 308. ('The public purpose element has been the subject of the most heated debate').

[16] The expropriations are known as the lawful expropriation, or legitimate expropriation.

It has been elaborated that direct expropriation features the outright taking of the physical property, while indirect expropriation involves the deprivation of the use, interests or benefits of the investments.[17] The measures for environmental protection (if diagnosed as expropriatory) may thus either amount to indirect or direct expropriation because theoretically, a host state can either fully expropriate a foreign investment project for environmental reasons, or restrict the use and benefit of the project for the same reason. Similarly, expropriations for environmental reasons are likely to include the forms of lawful expropriation, unlawful expropriation, and creeping expropriation.[18]

The mainstream of China's IITs contains expropriation provisions which focus on the formulation of lawful expropriation through the '4-preconditions' test. However, the IITs do not address the difference between lawful expropriation and unlawful expropriation; neither do they address the difference between lawful expropriation that requires compensation and states' regulatory measures without the obligation to compensate. The recent development of China's IITs, including the China-Japan-Korea TIA, embraced a public purpose explicitly in the expropriation provision,[19] in which the environmental purpose is prescribed as a parallel component with compensation, non-discrimination and due process, to generate expropriation. Once at least one of the components has not been met by host states, restitution may incur.[20] Put another way, a public purpose is only used to constitute the preconditions of expropriation in this IIT,[21] but it is uncertain whether these preconditions can also justify expropriation by, for instance, mitigating the compensation. Therefore, the expropriation provisions in China's IITs practice only provide the expropriation which must be accorded with compensation, and the way to identify this type of expropriation. Such treaty practice of expropriation leaves the lawful expropriation and the governmental measures that are excluded from compensation untouched.[22]

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[17] Fortier and Drymer (n 1) 293; Weston B. H., 'Constructive Takings under International Law: A Modest Foray into the Problem of Creeping Expropriation' (1975) 16(1) Virginia Journal of International Law 103; Dolzer, (n 3) 64; Waelde T. and Kolo A., "Environmental Regulation, Investment Protection and 'Regulatory Taking' in International Law" (2001) 50(4) International and Comparative Law Quarterly 811; Newcombe, (n 3) 1; Subedi (n 13) 120; Sornarajah M., *The International Law on Foreign Investment* (3rd edn, Cambridge University Press 2010) 368-369; Christie G. C., 'What Constitutes a Taking of Property under International Law?' (1962) 38 British Yearbook of International Law 309; Been and Beauvais (n 75) 54.

[18] Newcombe A. and Paradell L., *Law and Practice of International Investment Treaties: Standards of Treatment* (Kluwer Law International 2009) 369.

[19] (China-Japan-Korea TIA) Agreement among the Government of Japan, the Government of the Republic of Korea and the Government of the People's Republic of China for the Promotion, Facilitation and Protection of Investment (concluded 13 May 2012, entered into force 15 May 2014) Article 11 Expropriation and Compensation ('1. No Contracting Party shall expropriate or nationalize investments in its territory of investors of another Contracting Party or take any measure equivalent to expropriation or nationalization (hereinafter referred to in this Agreement as "expropriation") except: (a) for a public purpose; (b) on a non-discriminatory basis; (c) in accordance with its laws and international standard of due process of law; and (d) upon compensation pursuant to paragraph 2, 3 and 4').

[20] Subedi (n 13) 120.

[21] Marlles (n 15) 308. ('[R]egulatory actions resulting in expropriation must be taken for the public good').

[22] Subedi has provided an illustrative analysis that the unlawful compensation gives rise to the loss of future profits while the lawful compensation does not. He defines the lawful expropriation as those 'carried out against compensation, in accordance with international foreign investment law and the provision of a BIT'. It is indicated that the public purpose, possibly contained in the lawful expropriation, can preclude the compensation for the loss of future profit. Subedi (n 13) 121, 126. However, it remains uncertain in treaty provisions whether the public purpose can play a role in the mitigation of the compensation for the loss of assets and interests.

Furthermore, the treaties did not provide hints to understand the role of the 4-preconditions in the evaluation of compensation. It is reasonable to imagine a scenario in which a governmental measure, to restrict a land development for ecological preservation, has been taken but without following the due process. But in another scenario, the governmental measure is to exclude the foreign investor, in order that a domestic investor can develop the land. The measures in both scenarios are likely not to be construed as the lawful expropriations in pursuant to the expropriation provisions above. In this regard, it is uncertain whether the former measure can give rise to the mitigated compensation due to the public purpose involved.

2.2. Evaluating *expropriation* without a public purpose: a brief review of the arbitrations

The public purpose has been excluded from the analysis of expropriation, particularly in the cases where the tribunals only evaluated the objective damages to determine whether a taking has occurred.[23]

The *Metalclad* tribunal concluded that a significant deprivation of the use and benefit of foreign investments constitutes an expropriation under the NAFTA framework regardless of whether the host state has benefited from the deprivation.[24] The non-expropriation requirement in IITs is designed to prevent arbitrary and discriminatory governmental measures,[25] but the *Metalclad*'s conclusions indicated that, whatever purposes the measures have, they always constitute expropriation and necessitate compensation. The *Compañia* tribunal pointed out that a public purpose can 'cloak expropriatory conduct with a veneer of legitimacy', but the tribunal did not support that the purpose constitutes a prerequisite to an expropriation in that case.[26]

The exclusion of the public purpose and public interests has dismissed the 'good intention' behind the governmental measures, but they reflect what these measures pursue. Recognizing that numerous investment tribunals excluded any public purpose from the analysis of expropriation, this research argues that the public purpose can be used to mitigate the compensation for expropriation.

The conventional treaty provisions of expropriation are clear that a public purpose only constitutes, but does not exclude expropriation. The tribunals' practice that excludes an environmental purpose from

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[23] Dolzer (n 3) 65; Newcombe (n 3) 391.

[24] *Metalclad Corp. v. United Mexican States*, Award of 30 August 2000 (ICSID Case No. ARB/(AF)/97/1) 103 (*Metalclad* case) ('expropriation under NAFTA includes not only open, deliberate takings of property … in favour of the host State, but also … interference … which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of property even if not necessarily to the obvious benefit of the host State').

[25] Soloway (n 14) 115-117; Dougherty K., 'Methanex v. United States: The Realignment of NAFTA Chapter 11 with Environmental Regulation' (2007) 27 Northwestern Journal of International Law and Business 742-473. ('The original intention of NAFTA Chapter 11 was to protect against arbitrary and capricious discrimination'); Mann H and Moltke K. V., 'NAFTA's Chapter 11 and the Environment: Addressing the Impacts of the Investor-State Process on the Environment' (1999) International Institute for Sustainable Development, available at http://www.iisd.org/trade/ilsdworkshop/pdf/background_en.pdf, accessed 6 June 2012.

[26] *Compañia de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. the Argentine Republic*, Award of 20 August 2007 (ICSID Case No.ARB/97/3) 7.5.20. (*Compañia* case).

expropriation complies with such treaty practice. Although treaties usually prescribe that once an expropriation is construed, compensation has to be paid, they do not elaborate whether the public purpose can alleviate the payment. In the situation where the purpose eliminates an *expropriation*, the *compensation* is precluded. But in the situation where the purpose does not exclude expropriation, it remains unclear whether and how the legitimacy of the public interests should be taken into account.

Therefore, this research argues that analysing the role of a public purpose in compensation seems more practical than distinguishing the indirect expropriation, regulatory expropriation, and legitimate expropriation. This argument was well supported by the *Azurix* tribunal which maintained that 'the issue is not so much whether the measure concerned serves a public concern, but whether it is a measure … should give rise to a compensation claim'.[27]

2.3. Evaluating *compensation* without a public purpose

It has been argued that, as long as the damages had been caused by host states' measures and an expropriation has been established, the government should pay the compensation regardless of the public purpose. This position has been firmly adopted by the tribunals in the cases including *Santa Elena,*[28] *Pope*,[29] *Metalclad,*[30] *Feldman*,[31] *Azurix*[32] and *Inmaris.*[33]

The *Inmaris* tribunal accepted that the Respondent's travel ban was to protect the government's interests of 'public fisc', which has been proven to be a genuine motivation.[34] However, the tribunal maintained that 'once a measure has been found to be expropriatory, a State must pay compensation, even if the measure is taken for a public purpose'.[35] This conclusion explicitly demonstrated that the public purpose does not *preclude* compensation.

In order to answer the question whether a purpose for environmental protection can *mitigate* the compensation for expropriation, the *Santa Elena* tribunal presented its lucid position that the 'adequate compensation' constitutes the 'legal character' of property taking and this character must not be

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[27] *Azurix Corp. v. Argentine Republic,* Award of 14 July 2006 (ICSID Case No. ARB/01/12) 310. (*Azurix* case).
[28] C*ompahia del Desarrollo de Santa Elena, SA. v. Costa Rica,* Final Award of 17February 2000 (ICSID Case No. ARB/96/1) 71. (*Santa Elena* case).
[29] *Pope & Talbot, Inc. v. Canada,* Interim Award of 26 June 2000 (UNCITRAL) 99. (*Pope* case).
[30] *Metalclad* (n 24) 111.
[31] *Marvin Roy Feldman Karpa v. United Mexican States*, Award of 16 December 2002 (ICSID Case No. ARB(AF)/99/1) 98. (*Feldman* case).
[32] *Azurix* (n 27) 278. Although the investment arbitration precedents do not have binding effect on the future jurisprudence, a survey has demonstrated that the investment tribunals are more willing to consider the previous awards by 3%. Since substantial awards have precluded public purpose in the evaluation of expropriation and compensation, the future tribunals might have to be influenced significantly. In this regard, it is likely that the environmental purpose still cannot be given the due attention in the future arbitration. See Commission J. P., 'Precedent in Investment Treaty Arbitration: A Citation Analysis of a Developing Jurisprudence' (2007) 24 Journal of International Arbitration 131; Kauffman-Kohler G., 'Arbitral Precedent: Dream, Necessity or Excuse—The 2006 Freshfields Lecture' (2007) 23(3) Arbitration International 368; Yackee J. W., 'Controlling the International Investment Law Agency' (2012) 53 Harvard International Law Journal 427.
[33] *Inmaris Perestroika Sailing Maritime Services GmbH and Others v. Ukraine Excerpts*, Award of 1 March 2012 (ICSID Case No. ARB/08/8) (*Inmaris* case).
[34] Ibid 303.
[35] Ibid 305.

overturned by the 'purpose of protecting the environment'.[36] It is therefore concluded that 'where property is expropriated, even for environmental purposes, the state's obligation to pay compensation remains'.[37] This tribunal expounded the internal nature of property taking under a firm obligation to pay 'adequate compensation', which indicated that the environmental purpose cannot preclude compensation, nor can it alleviate such compensation.

2.4. The ignorance of the public purpose in expropriation and compensation: a critical evaluation

Awarding expropriation and rendering compensation regardless of the environmental purpose, as has been demonstrated by the tribunals above, will preclude host states from exercising regulatory powers for environmental protection in the long term.[38] Additionally, the internal and external defects of such practice can be explored from the following perspectives.

First of all, it illustrates a clear trend in IIL that the protection of investors has transcended the preservation of host states' environmental interests. It has been observed that IITs are designed to protect investors rather than to achieve the balance between investors and states.[39] Arbitral practice overlooking the public purpose in the examination of expropriation is in part attributed to the fact that the expropriation provisions do not provide space for host states' environmental concerns.[40]

However, new IITs have increasingly strengthened the provisions preserving the states' public interests[41] and some IITs which are in negotiation are also considering the possibility to embrace the

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[36] *Santa Elena* (n 28) 71.
[37] Ibid 72.
[38] Been V., 'NAFTA's Investment Protections and the Division of Authority for Land Use and Environmental Controls (2002) 20(1) Pace Environmental Law Review 21.
[39] Newcombe (n 3) 44; Waelde and Kolo (n 17) 847; Soloway (n 14) 123-126.
[40] Newcombe holds that the rule of expropriation in IIL is not to balance public interests and private investors and compensation awards should be 'left to states'. Newcombe, (n 3) 44; Waelde and Kolo also indicate that national experience of regulating investments for public purposes without compensation cannot be directly taken into international investment arbitration because the aims and principles of the IITs are not favourable for host states' public interests. Waelde and Kolo (n 17) 847; Wagner suggests that IITs should expressly prescribe that environmental measures are excluded from expropriation or from compensation. Wagner J M., 'International Investment, Expropriation and Environmental Protection' (1999) 29 Golden Gate University Law Review 537; In elaborating the legitimacy of the NAFTA framework, Soloway finds that the NAFTA Chapter 11 'did not intend to' embrace the appropriate balancing tests to consider environmental interests and 'more public participation, more accountability and more transparency in the Chapter 11' should be involved and economic interests and social benefits 'must be balanced'. Soloway (n 14) 123-126.
[41] For instance, 7 IITs out of the 47 text available IITs concluded in 2011 contained general exception provisions to preserve host states' regulatory power and public interests (the rate was 14.9%). And the rate became even higher in 2012 (10/17-58.8%) and 2013 (15/18-83.3%). United Nations Conference on Trade and Development, *World Investment Report 2014: Investing in the SDGs: An Action Plan* 116. ('A review of the 18 IIAs concluded in 2013 for which texts are available … 15 have general exceptions …protection of human, animal or plant life or health, or the conservation of exhaustible natural resources'); United Nations Conference on Trade and Development, *World Investment Report 2013: Global Value Chains: Investment and Trade for Development* 102. ('A perusal of the content of the 17 IIAs concluded in 2012 for which texts are available shows that … 12 refer to the protection of health and safety, labour rights, environment or sustainable development in their preamble; 10 have general exceptions … protection of human, animal or plant life or health, or the conservation of exhaustible natural resources').

public interests in a broader scope of treaty substantive and procedural provisions.[42] For example, IITs concluded after 2010 began to increase the context preserving the states' interests considerably through, for example, the exception clauses. Over 50% new IITs after 2010 have included exceptions to preserve the environment, human health and human rights.[43] For the procedural provisions, states are considering to reform the current investor-state dispute settlement (ISDS) mechanism to 'not only protect investors but also preserve host states' interests'.[44] The number of the provisions containing environmental protection has increased significantly among China's IITs concluded especially after 2010 and all the IITs after 2012 (text available) including the China-Canada BIT, China-Uzbekistan BIT, China-Japan-Korea TIA and 5 other FTAs embraced the provisions of environmental concerns.[45] Such a tendency demonstrates that public interests are increasing in China's IITs and investor-state balance is being promoted in China's treaty negotiation and conclusion.

What is more, the China-Uzbekistan BIT and the China-Canada BIT have excluded the environmental measures from indirect expropriation in which the legitimate purpose of environmental protection was preserved.[46] In addition, the China-Uzbekistan BIT identified the specific content of public purpose, in which the environmental interests were included.[47] In particular, the China-Uzbekistan BIT explicitly prescribed that:

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[42] For instance, the EU commission has proposed for the Transatlantic Trade and Investment Partnership (TTIP) 'a new system for resolving disputes between investors and states … where private interests cannot undermine public policy objectives' and the proposal 'would replace the existing ISDS mechanism in all ongoing and future EU investment negotiations'.
See Agricultural and Rural Convention, 'TTIP: Parliament Plenary to Vote on ISDS Lite', (2 July 2015) available at http://www.arc2020.eu/2015/07/ttip-parliament-plenary-to-vote-on-isds-lite/, accessed 30 July 2015; European Commission, 'Commission proposes new Investment Court System for TTIP and other EU trade and investment negotiations' (Brussels, 16 September 2015), available at http://europa.eu/rapid/press-release_IP-15-5651_en.htm, accessed 18 September 2015.

[43] United Nations Conference on Trade and Development (n 41).

[44] European Commission (n 42).

[45] For instance, China-Canada BIT Article 18 Consultations (The Contracting Parties recognize that it is inappropriate to encourage investment by waiving, relaxing, or otherwise derogating from domestic health, safety or environmental measures.); China-Japan-Korea TIA (n 19) Article 23 Environmental Measures (Each Contracting Party recognizes that it is inappropriate to encourage investment by investors of another Contracting Party by relaxing its environmental measures. To this effect each Contracting Party should not waive or otherwise derogate from such environmental measures as an encouragement for the establishment, acquisition or expansion of investments in its territory.); (China-Korea FTA) Free Trade Agreement between the Government of the People's Republic of China and the Government of the Republic of Korea (concluded 1 June 2015) Article 12.16 Environmental Measures (Each Party recognizes that it is inappropriate to encourage investment by investors of the other Party by relaxing its environmental measures. To this effect each Party should not waive or otherwise derogate from such environmental measures as an encouragement for the establishment, acquisition or expansion of investments in its territory); (China-Australia FTA) Free Trade Agreement between the Government of Australia and the Government of the People's Republic of China (concluded 17 June 2015) Article 9.8 General Exceptions (1. For the purposes of this Chapter and subject to the requirement that such measures are not applied in a manner which would constitute arbitrary or unjustifiable discrimination between investments or between investors, or a disguised restriction on international trade or investment, nothing in this Agreement shall be construed to prevent a Party from adopting or enforcing measures … necessary to protect human, animal or plant life or health).

[46] (China-Canada BIT) Agreement Between the Government of Canada and the Government of the People's Republic of China for the Promotion and Reciprocal Protection of Investments (concluded 9 September 2012, entered into force 1 October 2014) Annex B.10 Expropriation ('Except in rare circumstances, such as if a measure or series of measures is so severe in light of its purpose that it cannot be reasonably viewed as having been adopted and applied in good faith, a non-discriminatory measure or series of measures of a Contracting Party that is designed and applied to protect the legitimate public objectives for the well-being of citizens, such as health, safety and the environment, does not constitute indirect expropriation'); also see China-Uzbekistan BIT (n 2) Article 6.3.

[47] The determination of indirect expropriation was prescribed to be on the basis of case-by-case and fact-based analysis in which the economic influence, discrimination, investors' expectation and the character and purpose of a

> The determination of whether a measure or a series of measures … constitutes indirect expropriation … requires a case-by-case, fact-based inquiry that considers, among other factors: (a) the economic influence … although … has an adverse effect on the economic value of investments, standing alone, does not establish that indirect expropriation occurred; (b) the extent to which the measure or the series of measures grant discrimination; (c) the extent to which the measure or the series of measures cause damage to reasonable investment expectation of investors; (d) the character and purpose of a measure and a series of measures, whether it is adopted for the purpose of public interest in good faith, and whether it is in appropriation to the purpose of expropriation.[48]

Such a provision first of all recognizes that the evaluation of expropriation should be based on the conditions of each case and no universal standard can be applied. But it provides the binding requirement for the tribunals that the public purpose should be involved in treaty interpretations. As to the role of the purpose in the examination of expropriation, it stipulates that:

> Except in exceptional circumstances, such as the measures adopted severely surpassing the necessity of maintaining corresponding reasonable public welfare, non-discriminatory regulatory measures adopted by one Contracting Party for the purpose of legitimate public welfare, such as public health, safety and environment, do not constitute indirect expropriation.[49]

Hence, the public purpose, coupled with non-discrimination, is adopted to exclude the measures from constituting indirect expropriation as is demonstrated above in China's IITs practice. It reflects the rule under customary international law that the governmental measures do not necessitate compensation provided the measures were taken for the public purpose.[50] Indeed, this provision provides the regulatory flexibility to a broad scope of governmental measures not merely confined to the environment, but for all the measures preserving the public welfares. What is more, it abandons the 'sole-effect' doctrine in expropriation and adopts the 'intention-based' criterion to justify the

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measure should be taken into consideration. See China-Uzbekistan BIT (n 2) Article 6.2.

[48] Ibid.

[49] It is noteworthy that the US Model BITs have adopted the similar provision. See Annex B.4.(b) of the US Model BIT 2012 and the US Model BIT 2004 ('Except in rare circumstances, non-discriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriations'); The US Model BITs did not elaborate what the 'rare circumstances' are, but the China-Uzbekistan BIT defined the 'exceptional circumstances' as the situation where 'the measures adopted severely surpassing the necessity of maintaining corresponding reasonable public welfare'. It seems that the China's practice included only one circumstance regarding the proportionality, while the US Model BITs can include more situations. It is thus indicated that the regulatory space left to the host state is wider in the China-Uzbekistan BIT.

[50] Marlles (n 15) 308; *Too v. Greater Modesto Insurance Associates*, Award of 29 December 29 1989 (Iran-United States Claims Tribunal) 23 Iran-United States Cl. Trib. Rep.378 in OECD, 'Working Papers on International Investment, Number: Indirect Expropriation and The Right to Regulate in International Investment Law' (2004) 19. Available at http://www.oecd.org/dataoecd/22/54/33776546.pdf. ('A State is not responsible for loss of property … resulting from bona fide general taxation or any other action … within the police power of States, provided it is not discriminatory'); *Tecnicas Medioambientales Tecmed S.A, v. the United Mexican States*, Award of 29 May 2003 (CSID Case No. ARB (AF)/00/2) 119. ('State's exercise of its sovereign power within the framework of its police power may cause economic damage … without entitling them to any compensation whatsoever is undisputable') (*TECMED* case).

governmental measures because all the measures 'for the purpose' of the legitimate public welfare can be included.

The China-Uzbekistan BIT differs from China's conventional IITs in the way to design the expropriation provision which uses the public purpose and non-discrimination to exclude expropriation. Therefore, the treaty basis on which the ignorance of public purpose develops is changing towards more considerations for host states' public concerns in China and the current practice of examining expropriation and compensation solely on the ground of the objective effects brought by the environmental measures will have to be changed under the new IITs regime.

Second, the strict enforcement of the imbalanced IIL may cause states' violation of international environmental obligations. Paying considerable compensation on the basis of full market value for the expropriated investments without any alleviation or mitigation, states may be financially constrained from preventing pollution and improving the environmental conditions, which might have been committed as states' obligations in international environmental law.[51] China has joined 22 environmental conventions, 7 environmental protocols, and 5 environmental amendments by 2015 and its international obligation preserving the environment covers the air, hazardous waste, ocean, biotic resources and coastlines.[52] In order to fulfil the international environmental obligation as well as to conserve energy and protect its domestic environment, China spent 20 billion US dollars in 2014 within the governmental budget in order to preserve the environment.[53]

However, the 20 billion budgets were allocated to 34 provincial-level governments with 57 million US dollars for each government on average. In the view of the huge compensation for expropriation awarded by investment arbitration,[54] the funds used for environmental protection might be insufficient even to pay the compensation and no further funds would be available to maintain environmental protection obligation either internationally or nationally.

What is more, states may increase the international liability if they are further restrained from controlling the environmental pollution by the compensation awarded in the regime of IIL because the environmental contamination from a host state is likely to spread widely to other states, causing international pollution. Environmental problems, especially the air pollution, have never been only a

[51] Sands P., 'Searching for Balance: Concluding Remarks; Colloquium on Regulatory Expropriations in International Law' (2002) 11 New York University Environmental Law Journal 204.
[52] Wang Z. F. and Zhang H. B. and Qu Y. H., 'Review the Multi-Environmental Conventions and Enhance China's Participation' (2014) 23 Environmental Protection 36.
[53] Lu H. Y. and Tian D. and Ye Z. Z., 'Governmental Budget for Environmental Protection in China and the US: Management System and Information Pattern' (2014) 1 Modernization of Management 8.
[54] For instance, the compensation for investors can range widely from 1.77 billion (*Occidental v. Ecuador*) to 136 million (*EDF v. Argentina*) and 11 million (*RDC v. Guatemala*). In 2014, combined compensation of 50 billion in three cases against Russian was awarded. See *Hulley Enterprises Limited (Cyprus) v. The Russian Federation*, Award of 18 July 2014 (PCA Case No. AA 226 UNCITRAL); *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, Award of 18 July 2014 (PCA Case No. AA 227 UNCITRAL); *Veteran Petroleum Limited (Cyprus) v. The Russian Federation*, Award of 18 July 2014 (PCA Case No. AA 228 UNCITRAL).

domestic issue because it expands fast globally.[55] It has been claimed that the haze pollution of $PM_{2.5}$ (the hazardous particulate matter smaller than 2.5 microns) from China drifted to Japan, Korea and the US, affecting the environment and human health in these countries.[56] In order to control the haze, China has taken measures including restricting traffic, closing down factories and relocating investment projects.

These measures are theoretically challengeable by foreign investors under the rules of expropriation in IIL. In this regard, China would confront with compensation regardless of how the measures are beneficial to the domestic and global environmental protection, which would restrict the implement of haze-control measures. For the long term, the hazardous $PM_{2.5}$ would continue spreading world widely and China may encounter further international liability for the air contamination if the evidence is confirmed.

Third, the 'polluters pay' principle of environmental law is likely to be frustrated. The most recent Environmental Protection Law of the PRC granted the local governments to terminate the investments which produce serious pollution exceeding the stipulated standards.[57] This provision reflects the firmly established 'polluters pay' principle[58] because the investors who have generated serious contamination are prohibited to use and benefit from the investments. It has been recognized that differentiating environmental measures and expropriation is not a matter whether the environment should be protected, but rather it is a matter 'who should pay the cost of environmental protection'.[59] Therefore, the government's decision to terminate the investments in pursuant to the Environmental Protection Law is likely to constitute expropriation under IIL and incurs compensation. The compensation requirement therefore transfers the cost of controlling the pollution from the polluters/investors to host states.

From the perspective of 'pollution', the protection of the environment can be divided into diminishing the existing environmental contamination caused by the investors, and imposing higher environmental requirements on the investors to prevent the possible pollution and improve the existing air condition.

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[55] Waye V., 'International Trade Law, Climate Change and Carbon Footprinting' in Wells G. (eds), Sustainable Business: Theory and Practice of Business under Sustainability (Edward Elgar Publishing 2013) 257.

[56] Julian R., 'Japan, South Korea Concerned that China's Smog Will Affect Them' (South China Morning Post: Tokyo, 6 November 2013), available at http://www.scmp.com/news/china/article/1348605/japan-south-korea-concerned-chinas-smog-will-affect-them, accessed 9 July 2014;
Japan for Sustainability, 'Trans boundary Air Pollution from China: Possibilities for Cooperation with Japan' (Tokyo, 8 October 2013), available at http://www.japanfs.org/en/news/archives/news_id034262.html, accessed at 9 July 2014; on the contrary, it is also argued that evidence is insufficient as to whether the haze pollution in Japan, Korea and the US were directly cause by China because the acid rain in Canada was proved as a result of the US air pollution only after ten years' scientific research and it is too early to conclude that China is the source of the haze pollution in Japan, Korea and the US. See Topal C. and Chung Y., 'China's Off-the-Chart Air Pollution: Why It Matters' (The National Bureau of Asian Research, 27 January 2014) available at http://www.nbr.org/research/activity.aspx?id=397, accessed 9 July 2014; Drifte R., 'Trans boundary Pollution as an Issue in Northeast Asian Regional Politics' (2005) Asia Research Centre Working Paper 12; Ma X. P., 'China's Haze Shifted to Alaska?' (China Environmental Newspaper 9 May 2014) A6.

[57] Article 60 of Environmental Protection Law of the PRC (entered into force 1 November 2015).

[58] Gaines S. E., 'The Polluter Pays Principle: From Economic Equity to Environmental Ethos' (1991) 26(3) Texas International Law Journal 467-487; Ploeg F. and Zeeuw A. J., 'International Aspects of Pollution Control' (1992) 2(2) Environmental and Resource Economics 117.

[59] Dolzer (n 3) 192.

From the perspective of the environmental measures, an environmental purpose can be regarded as a purpose to repair current environmental problems, or a purpose to prevent further problems.

For the first situation, investors are the polluters and they should pay the pollutions and take the negative consequences and liabilities of their misconducts, which is also consistent with the principle of 'polluters pay'. Requiring host states to pay the compensation regardless of any public interests ignores the environment pollutions caused by foreign investors. What is more, the consequence that the environmental costs have all been taken by host states cannot be used as a warning for the future investors not to cause damage to the environment.[60]

The 'polluters pay' principle has been firmed established in the domestic practice in China and the practice in IIL above will be inconsistent with the domestic practice. The example regarding the coal-powered water-boiler-room in Datong city illustrates that the emission of the sulphur dioxide, nitrogen dioxide and $PM_{2.5}$ had significantly demoted Datong's environmental ranking in China.[61] The governmental measures to dismantle all the coal-powered water-boiler-room, therefore, did not necessitate the compensation[62] because all the investors should pay the cost of shutting down the water-boiling-room as a mean to perform their liabilities because of the environmental pollution they have caused. The water-boiler-room policy has been widely adopted across China. For instance, Beijing removed the last water-boiler-room in the central city region in June 2015, without any compensation.[63] Currently, China has 620,000 water-boiler-rooms powered by coal and it is predicted that the further wave of prohibition of these facilities will remain without compensation and foreign investors involved will have to bear the damages, like all the domestic investors.[64]

But this research also recognizes that not all environmental protection costs should be paid by private investors. For the latter situation above, the environmental measures are for the improvement of the social welfares of China, but the investors have not produced pollution in the society. The host governments, on behalf of the citizens, should also take partial costs, and the remaining costs can be allocated to investors in the form of 'social responsibility', or 'enterprise responsibility'.[65] Waelde and Kolo support that it is a fair outcome because 'the community should pay the individual if it compels

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[60] Merrill (n 98) 135.
[61] Before 2008, it ranked among the top three most polluted cities in China. See Xuancheng, 'The Mayor of Datong Apologized to the Citizens for its Air Quality of Bottom Third Ranking' (Xuancheng, 9 July 2005) available at http://www.xuancheng.org/thread-44859-1-1.html?_dsign=b71d3fc3 accessed 8 July 2013.
[62] Datong Government, 'The Special Measures for Controlling the Water-boiling-room' (Datong, 8 June 2013) available at http://www.dt.gov.cn:8080/contents.php?webkey=jkldfdfdf24df4er4fgrtere32kk565655kjk3l4j34ytytv5jkl65jkl4j43l343l4j3l4j3jkl4j3l4j3l4j4jerkl4jklkjkld&id=5427, accessed 8 July 2013.
[63] Beijing Municipal Environmental Protection Bureau, 'The Last Water-boiler-room in the Central City District is Removed with the Reduced SO_2 Emission of 54 Tons' (Beijing, 2 June 2015) available at http://www.bjepb.gov.cn/bjepb/413526/331443/331937/333896/431908/index.html, accessed 7 August 2015.
[64] Huang H. Y. and Yao L. Y., *The Proposed Air Emission Standard of Boling-Room* (Tianjin Science and Research Institute of Environmental Protection 2013) 17.
[65] Zerk J. A., *Multinationals and Corporate Social Responsibility: Limitations and Opportunities in International Law* (Cambridge University Press 2006) 5, 6.

the individual to bear a special and exorbitant sacrifice for the community's preferences'.[66] Requiring investors to pay certain of the costs of environmental improvement is also acceptable because the investors invest in and benefit from this environment.[67] Awarding compensation without a consideration of the environmental interests therefore overlooks the social responsibilities of the private investors.

Fourth, the environmental measures should not be examined through the objective effect only; rather, the subjective purpose and the background of the measures should be evaluated comprehensively in order to explore the environmental interests involved. However, the expropriation and compensation assessment by the tribunals above was not based on a complete analysis of the environmental measures. This is also expressed as one of the limitations of the 'sole effect doctrine' that it 'leaves no room for an argument that the environmental purpose of a governmental action and the concern for the environmental values to be protected by the measure should enter into the legal process of deciding whether or not a taking has occurred'.[68]

China has its system of nationalizing and expropriating private, state-owned and collective-owned properties for public interests either through taking the properties or restricting/depriving the use and profits of the properties. For the protection of the environment, China is strengthening the new environmental measures nationally and regionally, in which the use and profits of foreign investments are likely to be constrained. It is therefore necessary to explore not only the negative effect of the measures on foreign investment, but also their impact in the promotion of social and public interests, in the face of an expropriation claim.

Fifth, 'investment-priority' illustrated through the evaluation of the environmental measures without considering the public purpose is inconsistent with the domestic practice of 'society-priority' in host states.[69] It is suggested that whether the public purpose can be used as a component to evaluate compensation should be based on an analysis of domestic practice[70] and the 'society-priority' in domestic regimes should also be reflected in the examination of property takings under IIL. The Constitutional Law of the PRC prescribed the State's power to expropriate the private properties for public interests and an 'appropriate', rather than 'full' compensation is required.[71] In balancing private interests and public welfares, a public purpose therefore not only determines the legitimacy of

[66] Waelde and Kolo (n 17) 846.
[67] Liu L. T., 'The Redemption by Jurisprudence: The Application of the Reciprocity Rationale to Regulatory Imposition Cases' (2015) 4 Modern Law Science 37.
[68] Dolzer (n 3) l 92.
[69] Ibid l 93.
[70] Ibid; Charter of Economic Rights and Duties of States, Resolution adopted on 12 December 1974 by the General Assembly (A/RES/29/3281) 3281 (XXIX) Article 2 ('To nationalize, expropriate … in which case appropriate compensation should be paid .. taking into account its relevant laws and regulations and all circumstances …In any case where the question of compensation gives rise to a controversy, it shall be settled under the domestic law of the nationalizing State and by its tribunals').
[71] Article 13 of the Constitutional Law of the PRC. Note: expropriation was introduced in the Constitutional Law in the 2004 Constitutional Amendment.

expropriation but also affects the amount of compensation.[72] As the 'society-priority' is rooted in the domestic legal system, mitigating the compensation for social benefits has been the legal culture in China's domestic expropriation practice.[73] Under the tribunals' conclusions above, such domestic practice has been constrained and the 'society-priority' has not been reflected.

3. Using a public purpose to legitimize expropriation and mitigate compensation: towards environmental protection

It is unreasonable to freeze states' regulatory power to protect public interests through IIL and even the pro-investor provisions in IITs prevent only states' arbitrary behaviours and measures causing unfairness to foreign investors.[74] Since other IITs mechanisms, including the NT and MFN are used to protect investors and expropriation provision constitutes only one mechanism among the many, the conclusion of expropriation should not be awarded arbitrarily and thoughtlessly without an extensive analysis of public purpose.

3.1. Public purpose: increase the legitimacy of expropriation

The unsettled definition of expropriation and its classification[75] increase the ambiguity of the role of a public purpose in the evaluation of expropriation. The *SD Myers* tribunal maintained that the purpose, coupled with the effect of the governmental measures and the 'real interests involved' should be looked at in the evaluation of expropriation.[76] The tribunal held that 'the general body of precedent usually does not treat regulatory action as amounting to expropriation',[77] indicating that the governmental measures for the public interests, including environmental protection, are possible not to be subject to the claims of expropriation. However, it did not clarify 'how likely' the measures can be precluded from such claims, even the non-expropriation measures are 'not liable to pay compensation'.[78] The *Saluka* tribunal held that 'it is now established in international law that States are not liable to pay compensation… in the normal exercise of their regulatory powers, … in a non-discriminatory manner ... aimed at the general welfare'.[79] The tribunal suggested that it is necessary to identify whether the governmental measures are the 'exercise of regulatory powers' as accepted by customary international law. But it has been widely accepted that measures for environmental purpose constitute regulatory measures both nationally and internationally.

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[72] Huang D. D., 'Exploring the Expropriation for Public Interests' (2002) 5 Modern Law Science 120.
[73] Huang Z. H. and Wang H., 'Land Expropriation for a Non-public Purpose and Compensation for Its Development Right' (2002) 2 Economic Research Journal 36.
[74] Ibid 163.
[75] Been V. and Beauvais J. C., "The Global Fifth Amendment? NAFTA's Investment Protections and the Misguided Quest for an International 'Regulatory Takings' Doctrine" (2003) 78 New York University Law Review 54; Marlles (n 15) 280; Newcombe A., 'Regulatory Expropriation, Investment Protection and International Law: When Is Government Regulation Expropriatory and When Should Compensation Be Paid?' (1999) available at http://www.italaw.com/documents/RegulatoryExpropriation.pdf, accessed 6 March 2015 73-75.
[76] *S.D. Myers, Inc. v. Government of Canada,* Partial Award of 13 November 2000 (UNCITRAL) 285 (*S.D. Myers* case).
[77] Ibid 281.
[78] *Saluka Investments BV (The Netherlands) v. the Czech Republic*, Partial Award of 17 March 2006 (UNCITRAL) 262 (*Saluka* case).
[79] Ibid 255.

The *Methanex* tribunal maintained that a discriminatory purpose is a 'key requirement' to constitute expropriation[80] and the tribunal excluded states' measures from expropriation and compensation when the measures are non-discriminatory, for public purpose, and in due process.[81] Given that the expropriation provision under the NAFTA framework contains a typical expression,[82] the *Methanex* tribunal interpreted the scope of this expropriation narrowly and stepped into the 'right direction' limiting the challenges to host states' environmental regulation.[83] The *Firemans* tribunal presented a set of 12 criteria to define the ambiguous concept of expropriation,[84] in which a public purpose was included. The tribunal rejected the claims of expropriation[85] and one of the reasons was that the measures taken by Mexico were for the purpose of 'rescuing FFIS's (the Claimant) investment, rather than taking it away from FFID'.[86] The *Chemtura* tribunal, reading the police power doctrine, concluded that the governmental measures, restraining the use of harmful chemical, were for the purpose of public health and did not amount to expropriation.[87] Such a conclusion was also held by the *Suez InterAgua* tribunal, which maintained that in the evaluation of expropriation in investment arbitration, it is important not to confuse the 'exercise of states' police power in the interests of public welfare' with expropriation.[88]

On the basis of the arbitral practice, it is feasible to infer that damages to foreign investments by the environmental measures do not result from the environmental intention but rather a consequence of the measures. Put another way, the measures are not designed to infringe private properties and the damages are the spin-offs of the environmental measures. Therefore, the legitimacy of the measures increases, which in turn limits the liability of the host state to compensate. Although the role of a public purpose has been recognized to justify expropriation, such justifications are meaningful only when the compensation can be mitigated or precluded.

3.2. Public purpose in the preclusion and mitigation of compensation

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[80] *Methanex Corporation v. United States of America,* Final award of 3 August 2005 (UNCITRAL) Part IV Chapter D 7. ('In the Tribunal's view, Methanex is correct that an intentionally discriminatory regulation against a foreign investor fulfils a key requirement for establishing expropriation') (*Methanex* case).

[81] Ibid. ('As a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process … is not deemed expropriatory and compensable').

[82] North American Free Trade Agreement, Article 1110 ('No Party may directly or indirectly nationalize or expropriate an investment … or take a measure tantamount to nationalization or expropriation … except: (a) for a public purpose; (b) on a non-discriminatory basis; (c) in accordance with due process of law and Article 1105(1); and (d) on payment of compensation in accordance with paragraphs 2 through 6').

[83] Bernasconi-Osterwalder N. and Weiss E. B., 'International Investment Rules and Water: Learning from the NAFTA Experience' in Weiss E. B. and Chazournes L.de B. and Bernasconi-Osterwalder N. (eds), *Fresh Water and International Economic Law* (Oxford University Press 2005) 288.

[84] *Fireman's Fund Insurance Company v. the United Mexican States*, Award of 17 July 2006 (ICSID Case No. ARB(AF)/02/01) 176. ('NAFTA does not give a definition for the word expropriation. In some ten cases … the definitions appear to vary'). (*Fireman's* case).

[85] Ibid 217.

[86] Ibid 189.

[87] *Chemtura Corp. ((formerly Crompton Corporation)) v. Canada,* Award of 2 August 2010 (UNCITRAL) 238-267 (*Chemtura* case).

[88] *Suez, Sociedad General de Aguas de Barcelona S.A., and InterAgua Servicios Integrales del Agua S.A. v. Argentina*, Award of 30 July 2010 (ICSID Case No. ARB/03/17) 128 (*Suez InterAgua* case).

States have the rights recognized by international law to expropriate foreign investments on the ground of compensation. It is therefore not the right to expropriate itself, but rather the amount of compensation, that gives rise to disputes.[89] No universal standard has been formulated to calculate compensation, although the 'prompt, adequate and effective compensation' (known as the Hull formula) and 'appropriate expropriation' (influenced by the New International Economic Order)[90] have been adopted as the general principles of compensation. The difference of the two approaches does not indicate what the determinants are that affect the different amount of compensation. Therefore, it remains ambiguous whether a purpose for the protection of public interests contributes to the difference between the Hull formula and the appropriate compensation.

The *ADC* tribunal maintained that the standard of compensation (the Hull forum or the New Order forum) should only apply in the case of 'a lawful expropriation', indicating that a possible public purpose in expropriation cannot influence the amount of compensation because the role of the purpose focuses on the lawful expropriation rather than the compensation.[91] In addition, it is clear that the compensation standard for the 'unlawful expropriation' was not stipulated in the treaty provision of expropriation.

In evaluating the determinants of the amount of compensation, some tribunals have expounded the possibility to take the public purpose into account, especially in the Iran-US Claims arbitrations.[92] In international investment arbitrations, the *Feldman* tribunal argued that the governmental protection for the public interests of environment, taxation, tariff-levels and zoning restrictions cannot be achieved if compensation is required, which has been recognized by customary international law.[93] The tribunal indicated that the 'reasonable' governmental regulations for the public interests may not necessitate compensation. The *TECMED* tribunal supported the exclusion of compensation by maintaining: 'state's exercise of its sovereign powers within the framework of its police power may cause economic damage … without entitling them to any compensation'.[94] The *Methanex* tribunal excluded both expropriation and compensation because the general international law has accepted that 'a

[89] Subedi (n 13) 121. ('International tribunals have not challenged the rights of states to expropriate the assets of foreign companies, rather it is the question of compensation that has been expounded by such tribunals').
[90] Waelde and Kolo (n 17) 811. The 'compensation on the ground of the fair market value' can be considered as a form of the appropriate compensation. For instance, the China-Mexico BIT prescribed that the fair market value refers to the value 'before the expropriation occurred' and excludes the increase in the value following the expropriation. Such compensation focuses on the damages of the pre-expropriation stage, but includes the interests as well. However, the damage of the future profits is excluded from the compensation; also see the Agreement between the Government of the United Mexican States and the Government of the People´s Republic of China on the Promotion and Reciprocal Protection of Investments (concluded on 11 July 2008, entered into force on 6 June 2009) Article 7 Expropriation and Compensation ('Compensation shall: (a) be equivalent to the fair market value of the expropriated investment immediately before the expropriation occurred. The fair market value shall not reflect any change in value because the intended expropriation had become publicly known earlier; (b) be paid without delay; (c) include interest at a commercially reasonable rate, from the date of expropriation until the date of actual payment; and (d) be fully realizable and freely transferable').
[91] *ADC* (n 14) 481.
[92] *The Government of the State of Kuwait v The American Independent Oil Company*, Award of 24 March 1982, 21 International Legal Materials 143, 144. ('The determination of the amount of an award of appropriate compensation is better carried out by means of an enquiry into all circumstances').
[93] *Feldman* (n 31) 59.
[94] *TECMED* (n 50) 119.

non-discriminatory regulation for a public purpose, enacted in accordance with due process is not deemed expropriatory and compensable'.[95]

Christie holds that the existence of a public purpose excludes a property taking,[96] while Sornarajah argues that the public purpose, coupled with non-discrimination, constitutes the preconditions of takings, but such takings are non-compensable because they are 'essential to the functioning of the state'.[97] Merrill holds a 'halfway' argument of the incomplete compensation. Comparing the American domestic practice and international investment practice, Merrill argues that if a regulatory taking takes places, the incomplete compensation would be applicable, indicating that the role of a public purpose in compensation is to mitigate the compensation.[98]

The recent development of China's IITs also demonstrates that a public purpose can preclude expropriation (e.g., the China-Uzbekistan BIT).[99] The interpretations of such a provision are twofold: when the measures are not causing the consequences outweighing the need to protect public welfares, the public purpose constitutes one element precluding expropriation and compensation; however, when the severity of the measures exceeds the necessity to protect the public benefits, expropriation can still occur and the public purpose will not preclude any compensation.

This research argues that such treaty practice reflects a new development in China's IITs toward the investor-state balance. This provision first of all recognizes the role of purpose in the determination of expropriation and compensation explicitly. What is more, this provision does not constitute a tendentious instrument favouring the states only. Through 'except in exceptional circumstances, such as the measures adopted severely surpassing the necessity of maintaining corresponding reasonable public welfare', this provision indicates that it is the proportionality between the damages caused by the measures, and the purpose to be achieved, that determines expropriation and compensation. The task differentiating these measures will then focus on the identification of the proportionality between the purpose and the measures. In this circumstance, even an environmental measure for the genuine purpose of protecting the environment of a city, but in fact restricts all the investments across the province where the city locates, may still cause higher liability to compensate. In this regard, the proportionality not only evaluates the compensation, but also prevents states from the abuse of a public purpose.

Given the increasing number of the new IITs concluded and the growing IITs being negotiated globally, tribunals have to invoke the new treaty provisions to expound the public interests in treaty

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[95] *Methanex* (n 80) Part IV Ch. D 7.
[96] Christie (n 17) 338.
[97] A theory identifying whether a taking is compensable has not been successful. Sornarajah (n 17) 283; Nikièma maintains that it is possible to '… identify a set of criteria governing indirect expropriation that enable the State to regulate without having to pay compensation for every single investment harmed by its actions'. Nikièma (n 1) 77.
[98] Merrill T. W., 'Incomplete Compensation for Takings' (2002) 11(1) New York University Environmental Law Journal 134.
[99] China-Uzbekistan BIT (n 2) Article 6.3.

interpretations in the long term. In the new treaty regime, the evaluation of the role of an environmental purpose in compensation has transformed from 'whether it excludes compensation, or mitigates compensation, or has no influence on compensation' to 'how the mitigation is affected by the purpose'. The proportionality test is therefore used to answer this question.

3.3. Using the proportionality test to mitigate compensation and prevent the abuse of an environmental purpose: evidence from some environmental measures in China

This research first of all recognizes that it is not the environmental purpose alone that determines the mitigation of compensation. Instead, non-discrimination and due process and the context of each specific case are all the elements influencing the compensation. In fact, these elements are usually adopted in the examination of the legitimacy of the governmental measures.

The principle of proportionality aims to obtain a balance between the private and public interests. This principle, with a more specific purpose to minimize the damages to the private interests, has been accepted by international law.[100] Whether an alternative measure exists with lower sacrifice to the private interests is one of the main criteria to examine whether the governmental measure is proportionate or not. Accordingly, if the measures intrude on the private interests and incur more damages, more compelling public benefits should be required.

The proportionality principle and the test for the alternative measures are used to justify the governmental measures which are otherwise prohibited[101] in investment arbitration. The *TECMED* tribunal indicated that it is the proportionality between the measures and the public purpose that works as a 'key role' in the examination of compensation, by maintaining:

> [I]n order to determine if they are to be characterized as expropriatory, whether such actions or measures are proportional to the public interest presumably protected thereby and to the protection legally granted to investment.[102]

The *TECMED* tribunal examined whether a public purpose existed behind the governmental measure not renewing the license for a hazardous waste treatment investment, as well as whether the measure was the least harmful choice. The tribunal found that the government had more options to safeguard the environment and the residential health, for instance, through relocating the investment, which was considered as an appropriate alternative solution to the refusal to renew the license.[103] In this regard, the proportionality test in this case failed to exclude expropriation.

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[100] Krommendijk J. and Morijn J., 'Proportional' by What Measure(s)? Balancing Investor Interests and Human Rights by Way of Applying the Proportionality Principle in Investor-State Arbitration', in Dupuy P.-M. and Petersmann E.-U. and Francioni F. (eds), *Human Rights in International Investment Law and Arbitration* (Oxford University Press 2009) 423; Kingsbury B. and Schill S. W., 'Public Law Concepts to Balance Investors' Rights with State Regulatory Actions in the Public Interest–The Concept of Proportionality', in Schill S. W. (eds), *International Investment Law and Comparative Public Law* (Oxford University Press 2010) 76.
[101] Franck T., 'Rights, Balancing and Proportionality' (2010) 4 Law and Ethics of Human Rights 233.
[102] *Tecmed* (n 94) 122.
[103] Ibid 151.

The Beijing government has taken traffic control measures, including the 'vehicle-lottery' system to cut the pollution emission by traffic since 2011.[104] Accordingly, the Beijing government is entitled to restrict the purchase of cars (excluding the cars using the cleaner energy) through issuing new licence plates by lottery.

The sales of the automobiles used to increase by more than 12% on average in China, but the policy in Beijing alone has dropped down the national increase rate by 3%-4%.[105] What is more, Guangzhou, Tianjin, Guiyang and other 8 cities are considering adopting the similar policies, which will further cut the vehicle sales in China.[106] Since the reduced sales have affected the investors in vehicle manufacturing and some investors have withdrawn the sales branches,[107] it is estimated that more investors, including both the domestic and foreign investors, will suffer the decrease of the sales and profits accordingly.

In a scenario where a foreign investor in the car manufacturing in Beijing has constructed a production line of the capacity of 5,000 cars per year, but has to cut the production scale to 1,000 cars because of the car purchasing policy, the investor may suffer from a substantial loss regarding the use and benefit from the production line for the other 4,000 cars. On the assumption that the test of substantial damages has been established,[108] the 'vehicle-lottery' measure taken by the Beijing government may amount to an indirect expropriation. But under a treaty regime (China-Uzbekistan BIT) that excludes the governmental measures for public welfare from indirect expropriation, the 'vehicle-lottery' measure is likely to be exempt from compensation.

However, environmental protection purpose and the 'vehicle-lottery' policy do not completely comply with the proportionality test. A full exemption from the obligation to compensate would increase the financial burden of the foreign investor unreasonably. First of all, other environmental protection measures have been used to protect the environment effectively in Beijing, including: (1) increasing the frequency of street sweeping; (2) prohibiting the vehicles not meeting the Euro 1 of the car emission standard; and (3) restricting the traffic according to the odd-even-licence-plate, during the Asian Pacific Economic Cooperation (APEC) meeting in November 2014. These measures have created the very rare but high air quality called the 'APEC blue'.[109] Since environmental protection was achieved

[104] Zhuang S. S., 'The Vehicle Purchase Restriction Policy and the Enlightenment to Enterprises' (Beijing, 24 October 2013), available at http://www.sic.gov.cn/News/457/1420.htm, accessed 7 July 2015.
[105] Yang J. and Liu Y. and Qin P. and Liu A. A., 'A Review of Beijing's Vehicle Lottery Short Term Effects on Vehicle Growth, Congestion, and Fuel Consumption' (2014) Swedish International Development Cooperation, Agency Environment for Development Centres, available at http://www.rff.org/files/sharepoint/WorkImages/Download/EfD-DP-14-01.pdf, accessed 12 July 2014.
[106] Hangzhou Xiaoshan Commerce Bureau, The Influence of the Vehicle Purchase Restriction Policy on the Auto Industry in China, (Zhejiang, 7 February 2014), available at http://xsswj.gov.cn/detail.asp?id=8291, accessed 7 July 2015.
[107] For instance, the sale has reduced from 12,000 cars in December 2014 to 2,700 cars in July 2015.
[108] Isakoff (n 1) 189. ('Arbitral tribunals should only find that indirect expropriation occurs when a state takes actions that substantially deprive the foreign investor of the profitability of its investment').
[109] 'Enlightenment from the APEC Blue', (Beijing, 14 November 2014), available at http://www.acca21.org.cn/luntan/2014/L1102.htm, accessed 6 June 2015.

without taking the measures to further restrict the car purchase, it is clear that the lottery system is not the only way to protect the air quality.

Second, research has revealed the alternatives to improve the air condition of Beijing, including eliminating the cars not being able to meet the Chinese National 1/National 2 emission standards, improving the quality of petroleum, and promoting the clean energy vehicles.[110] It is clear that although the 'vehicle-lottery' policy is for the purpose of environmental protection, it has imposed the excessive restrictions on investors in the auto industry and such side effects could have been avoided by other alternative measures. In the view of the 'vehicle-lottery' policy, it is thus arbitrary to exclude expropriation just due to the fact that its purpose is for the public interests.

The 'vehicle-lottery' policy in China indirectly reduces the profits of auto investors in the cities where the policy is adopted through restricting the consumer markets. The environmental purpose behind the policy is clear. It is therefore clear that it is not appropriate to exclude the 'vehicle-lottery' measure from indirect expropriation. However, it is not appropriate to conclude that the measures constitute expropriation and give rise to full compensation because otherwise environmental protection in Beijing will be constrained considerably. In this regard, this research argues that the obligation to compensate is inevitable because the expropriation is construed, but the amount of compensation should be reduced because of the public purpose involved. That is, it is not merely a question whether an environmental purpose *excludes* compensation. Rather, it is a question whether such a purpose *mitigates* compensation and to what extent the mitigation is achieved. The proportionality test, which has been used in the evaluation of expropriation, can therefore be used again in the analysis of compensation. What Beijing had done in the period 2008-2009 can provide some implications as how to mitigate compensation for the private interests.

The Beijing government issued the traffic control policy during the 2008 Beijing Olympic and Paralympic Games. Vehicles were not allowed to enter into the inner-fifth-ring regions according to the odd/even numbers of the plate license during the Games. After the Games, cars were restricted on the basis of the last digit number of the license plate. Around 2.7 million cars were influenced by the policy, which involved substantial private interests. The Beijing government announced to return the road toll to the car owners, with a total amount of 1.5 billion RMB.[111] This is a case where the governmental power intruded on the private interests for the purpose of public benefits but the government compensated the private appropriately. This case illustrated the situation where an expropriation does not exist but compensation incurs. Also, it is reasonable to imagine that an expropriation exists, but compensation is mitigated because the public and private interests make compromise to each other. In the case of returning the road toll, the government recognized the

[110] Xie Y. and Chen J. and Li W., 'An Assessment of $PM_{2.5}$ Related Health Risks and Impaired Values of Beijing Residents in a Consecutive High-Level Exposure during Heavy Haze Day' (2014) 35(1) Environmental Science 3-6.

[111] Beijing Government, The Announcement of Beijing Transportation Committee and Beijing Bureau of Finance Regarding Returning the Road Tolls (Beijing, 16 March 2009) available at http://zhengwu.beijing.gov.cn/gzdt/gggs/t1030441.htm, accessed 12 May 2012.

sacrifice of the private interests for public purposes but focused on remedying the private interests. In the latter case where the 'vehicle lottery' may constitute a potential expropriation, the public interests protected should be given due attention in the face of compensation for the private interests.

What is more, under the *expropriation* analysis, both the measures for environmental protection and for non-public interests are the same but the different purposes cannot be reflected properly. However, the proposed *compensation* analysis on the basis of proportionality can demonstrate that the measures for environmental protection can be mitigated in terms of the compensation. The different amount of compensation will reflect the different purposes behind the measures.

In addition, the proportionality test can help lower down the possibility to abuse the regulatory power to protect the environment of host states. In the situation where host states have the genuine purpose to protect the environment, but do not pay due diligence to lower down the further damages to foreign investors, the exceeding damages can be considered as 'disproportionate' to the purpose, which eventually gives rise to a higher compensation. Keeping such an assumption in mind, host states will act with more caution to prevent the abuse of regulatory power.

But it is unfeasible to conclude a set of specific rules to evaluate the mitigation and the public purpose universally because the relationship between the purpose and the damages changes a lot in different cases and the proportionality in each case differs. What can be proposed is a general rule that the public purpose contained in the proportionality analysis should also be used in the evaluation of compensation to protect the states' public welfare.

To sum up, in view of the domestic 'vehicle-lottery' policy for environmental protection under the new IITs regimes, where the examination of expropriation contains a public purpose, the purpose is first of all used to balance with the damages to foreign investors. Once the proportionality test finds that the damage exceeds the purpose to protect the environment or other alternatives exist to preserve the environment with less damages to the foreign investments, an expropriation may incur. Secondly, once the environmental measure constitutes an expropriation, the purpose should be further used to mitigate the compensation. The extent to which the compensation should be alleviated depends on the specific proportionality test in each case.

It is noteworthy that this research recognizes that the scientific evidence has been advised to prevent the abuse of the 'fake' public purpose and the lack of scientific support may lower the legitimacy of environmental measures, leading these measures into a suspected discrimination.[112] But this research

[112] Private investor challenged Canada's regulatory power to legislate against the harm caused by manganese-based fuel additives (MMT) in the *Ethyl* case. Scientific results played a crucial role in this case because Canada, through private agreement with Ethyl, paid certain compensation, repealed the MMT ban and stated that *evidence was insufficien*t that MMT in low amounts was detrimental. The Law firm for Ethyl illustrated that 'as part of the settlement, the Government of Canada removed the measure …, issued a statement … clarifying that it had no evidence of harm caused by the product, and paid the company approximately CAD$20 million'. See Appleton & Associates, http://www.appletonlaw.com/experience.html, accessed 20 June 2013.

does not adopt it as a main argument because taking environmental measures without full scientific support is justified by the Rio Declaration that when the government is taking precautionary measures, compensation will not occur, even if the scientific evidence is insufficient.[113] The high requirement of scientific evidence in the regime of IIL is therefore weakened in environmental protection regime.

4. Conclusion

The investment arbitration undermining the role of a public purpose in expropriation attributed to the IITs which favour investors and do not provide space for public purpose in the provisions of expropriation. However, this research argues, under the changing regime of China's IITs, that the purpose to protect the environment should be construed to improve the legitimacy of the environmental measures and mitigate the compensation through the proportionality test. It also recognizes the risks to abuse a public purpose for the disguised protectionism, but it proposes that the proportionality principle, as has been involved in China's new IITs (e.g. China-Uzbekistan BIT), can screen the 'unqualified' purpose.

The expropriation provision in the new IITs practice seems to adopt the proportionality principle to preclude indirect expropriation. Without concluding 'either expropriation with full compensation or non-expropriation without compensation', this research 'borrows' the concept of proportionality in the new treaty practice to propose 'expropriation but with mitigated compensation'. The role of a public purpose is expected to be reflected in the mitigation of compensation.

After 2010, the IITs' provisions in China are improving the states' public interests. The China-US BIT is also in negotiations, in which states' public welfares will be an inevitable part. Furthermore, numerous IITs concluded before 2000 need to be updated or renegotiated.[114] This research focuses on the role of the environmental purpose in the evaluation of expropriation and compensation, with the aim to contribute to the investor-state balanced IIL. But it does not suggest that the analysis of a purpose alone can preclude or constitute expropriation. Instead, non-discrimination, due process and

[113] Principle 15 (In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation); Also see Cameron and Abouchar, 'The Status of the Precautionary Principle in International Law' in Freestone and Hey (eds), *The Precautionary Principle and International law: The Challenge of Implementation* (Kluwer 1996) 29.

[114] For instance, China concluded a BIT with Australia in 1988 but in 2015 the two countries signed the China-Australia FTA, which prescribed that 'the parties shall commence negotiations on a comprehensive Investment Chapter … including Articles addressing Expropriation'. China-Australia FTA Article 9.9 Further Work Program. Such an article suggests that the key provisions regarding the trans-border investments between the states should be negotiated to replace the old China-Australia BIT. It remains unknown how the new expropriation provision will develop, but the relevant provisions in China's recent IITs can be analysed as reference. Since the China-Uzbekistan BIT (n 2) is illustrated as an example to include public purpose into the exclusion of expropriation, it is likely that the China-Australia instrument will adopt the similar practice because preserving public concerns are highlighted by both countries. See W. Dodge, 'Investor-State Dispute Settlement between Developed Countries: Reflections on the Australia-United States Free Trade Agreement' (2006) 39 Vanderbilt Journal of Transnational Law 6 ('Australia refused to adopt the traditional state-investor arbitration in the Australia-US FTA in order to preserve its public interests on tobacco control').

even investors' expectations have been analyzed comprehensively before reaching the conclusion of expropriation.[115] Against the background that the public interests of host states are overlooked in IIL and the fact that IITs do not provide enough provisions for tribunals to interpret treaties towards a balanced award, this research assumes that the environmental interests will be used widely in the future IITs to justify the governmental measures against expropriation. However, it does not advocate environmentalism in which foreign investments may be inhibited unjustly. In order to exclude the 'unqualified environmental measures', it questions the vehicle-lottery policy. With the recent environmental pollution (e.g. haze) in China, substantial laws and measures have been taken which are likely to influence not only the domestic but also the foreign investors. This research is also expected to provide some hints as how to evaluate these measures under the rule of expropriation in IIL.

[115] Waelde and Kolo (n 17) 848.

CHAPTER V
FOREIGN DIRECT INVESTMENT AND ENVIRONMENTAL CONCERNS IN CHINA: AN OVERVIEW

1. Introduction

China is emerging as a superpower in global FDI inflow and outflow markets, and such a trend is expected to continue. While substantial studies have explored China's FDI in the fields of economic research and financial research,[1] the legal analysis seems to be relatively unexplored. In promoting FDI, China is improving its environmental standards in order to achieve the sustained, stable and coordinated development. Foreign investors who have generated environmental pollution will therefore be confronted with more stringent environmental rules. The FDI strategy in China is changing in accordance with its economic and social transition. The environmental problems, towards which China used to be relatively silent, are being paid substantive attention gradually.

It is the domestic or international law that transforms environmental pollutions into environmental liabilities and the extent to which environmental protection can be achieved largely depends on how the environmental laws and regulations are enacted and enforced. China is reforming its domestic legal system to preserve the environment, while it is also negotiating IITs which are expected to embrace environmental provisions. The domestic legal regime, coupled with the international treaties, demonstrates that FDI in China is transforming 'quantity-orientation into 'quality-orientation, in which sustainable FDI leads the future of China's 'bring-in' strategy.

2. FDI in China and the sources of environmental law regulating FDI in China

China is a rising power in FDI market, while the environmental threats caused by the FDI activities are increasing. In order to control the environmental pollution caused by FDI and prevent the potential contaminations, China is reforming and improving its domestic environmental legal system. Although it stays only in the early stage of reforms, some foreign investors have confronted with increased environmental liabilities (e.g. the ConocoPhillips[2]). The comprehensive environmental legal system provides the internal mechanisms for China to negotiate and draft the IITs in which the environmental considerations are involved.

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[1] Gu J., 'China's Private Enterprises in Africa and the Implications for African Development' (2009) 21 European Journal of Development Research 570; Zhang K. H., 'What Drives Export Competitiveness? The Role of FDI in Chinese Manufacturing' (2015) 33(3) Contemporary Economic Policy 499; Zhang K. H. and Song S., 'Promoting Exports: The Role of Inward FDI in China' (2001) 11(4) China Economic Review 385; Han S. and Wang W., 'WTO Accession, Impediments to FDI, and the Market Opening of Basic Telecom Services in China' (2014) 29 China Economic Review 68; Sharma S. and Wang M. and Wong M. C. S., 'FDI Location and the Relevance of Spatial Linkages: Evidence from Provincial and Industry FDI in China' (2014) 22(1) Review of International Economics 86.

[2] Details see Section 3.2 below regarding the liability to compensate due to the oil spills in Bohai Bay, caused by ConocoPhillips.

2.1. China's FDI inflows and the necessity to regulate foreign investment

China's FDI market has been growing fast and FDI is the main form of foreign capital inflows into China.[3] The FDI inflows in China increased from 3,487 million US dollars in 1990 to 128,500 million US dollars in 2014, presenting a sharp increase of 256.08% per year on average; while the global annual increase was 35.68% during the 15 years. China became the biggest FDI inflow country in 2014 (the data exclude the FDI flows between China mainland and Hong Kong, Macao and Taiwan) with 128,500 million US dollars, while Hong Kong and the US ranked in the second and third places with 103,254 million and 92,397 million US dollars respectively.[4] The FDI inflows demonstrate some unique features in China because it has kept increasing while it experienced ups and downs in other major FDI recipients such the US, UK, Singapore and Canada.[5] In receiving FDI, China is utilizing the legal and policy instruments to regulate the foreign investment activities within its territory. Given the increasing investment projects and capitals, China is also concluding IITs, including BITs, multilateral investment treaties (MITs), regional investment treaties (RITs), and free trade agreements (FTAs) to protect foreign investments, as well as to delineate the scope of its state regulatory powers to ensure that foreign investments are operated in a way to harmonize the social welfare of China.[6] Environmental protection thus constitutes a significant aspect to promote the social welfare and public interests in China.

FDI inflows in China have contributed to the global FDI inflow by 9% per year on average since 1998, but it is unknown how China has contributed to the development of IIL. Brazil and India are rising as the new powers in attracting FDI inflows, following China. This research regards them as the 'CIB' (China-India-Brazil), which stands for the three major developing countries receiving FDI. In 2014, they took 3 places out of the global top-10 FDI recipients, in which China acted as a leading role. This research argues that the way in which China is developing its FDI and the way to regulate FDI are likely to provide hints to the other developing countries. The analysis of environmental protection through IIL under the Chinese context is also likely to provide some constructive implications for these countries. In this regard, China not only contributes to the global FDI from the economic perspective, but also contributes to the regulating of FDI from the perspective of law.

2.2 China's environmental concerns regarding FDI

It is true that countries, especially the developing countries, have been competing fiercely to attract FDI. In order to attract both capital and technology, states are prone to provide fiscal and financial incentives for international investors, and even to sacrifice the states' public interests.[7] However, both the

[3] Dees S., 'Foreign Direct Investment in China: Determinants and Effects' (1998) 31 Economics of Planning 175.
[4] Data is collected from the World Investment Reports from 1990 to 2015. See UNCTAD, *World Investment Report* (the Reports are issued annually).
[5] UNCTAD, *World Investment Report 2011: Non-Equity Modes of International Production and Development* (United Nations Conference on Trade and Development 2011) 5.
[6] Pan J. H., 'Regulate and Instruct Foreign Investment and Trade with the Ecological Civilization' (2013) 3 Jiang Huai Forum 5.
[7] Olney W. W., 'A Race to the Bottom? Employment Protection and Foreign Direct Investment' (2013) 91 Journal of International Economics 191; Sweeney R. J., 'The International Competition for Investment' in Oxelhelm L., *The Global Race for Foreign Direct Investment: Prospects for the Future* (Springer-Verlag 1993) 71; Erdogan A.

developing and developed countries have been implementing more cautious FDI policies in recent years.[8] For instance, the US and the EU are imposing increased scrutiny on sovereign wealth funds,[9] indicating that not all the international investments receive the same treatment. Besides, some host countries such as Bolivia and Ecuador are more cautious about FDI in the energy industry and they are reluctant to share too much energy exploitation with foreign investors.[10] Host states' attitudes towards FDI have changed out of the considerations of energy security, environmental protection and human rights. Without exception, China has also begun to increase its environmental concerns in its FDI policy.

The Ministry of Commerce (MOC), which focuses on promoting international trade, is beginning to take environmental issues into account in the national strategy to enlarge China's international economic activities. In November 2011, the 7th International Investment Forum was held in Nanchang, which clarified the interplay between the environment and international investment in several ways. First of all, the forum provided a theme of promoting international investment in the economic transition towards low-carbon. Through the forum, the UNCTAD and the MOC introduced low-carbon into the investment strategy in the economic recovery plan after the international economic recession of 2008-2009, demonstrating that environmental protection has been considered as a national development target.[11] Therefore, it can be concluded that China has realized the necessity of addressing the environmental issues within the foreign investment regime.

Furthermore, both the foreign investors and the Chinese government are involved in the promotion of clean FDI. On the one hand, the forum advocated that carbon reduction should be involved in the investors' investment plans. On the other, the government was required to issue new environmental regulations to exclude the market access of certain foreign investments.[12] In addition, as China is planning to set up its carbon trading market, more low-carbon FDI projects will develop in the long term.

2.3 The sources of environmental protection law in China

Goldenman holds that developed countries have set up effective legal structures for investors in relation to environment protection.[13] By contrast, it is suggested that the legal systems in developing countries are not satisfactory. As is mentioned above, it was not until 1978 that FDI witnessed

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M., 'Foreign Direct Investment and Environmental Regulations: A Survey' (2014) 28(5) Journal of Economic Surveys 943. Vadi V., *Public Health in International Investment Law and Arbitration* (Routledge 2013) 127.

[8] UNCTAD, 'Countries Continue To Compete For FDI, But Not unconditionally' (2008) No.3 UNCTAD Investment Brief available at http://www.unctad.org/en/docs/webiteiia20083, accessed 12 December 2011.

[9] Salacuse (n 42).

[10] UNCTAD (n 8).

[11] Yang B. J. and Gao J. X. and Zou C. X., 'The Strategic Significance to Sketch the Contours of the Red Line for the Ecological Protection' (2014) 14(1) China Development 1.

[12] Zhan J., 'Opening Paper for the 7th International Investment Forum' (2011) available at http://www.unctad.org, accessed 1 January 2012.

[13] Goldenman G., 'The Environmental Implications of Foreign Direct Investment: Policy and Institutional Issues' in OECD, *Foreign Direct Investment and the Environment* (Organization for Economic Co-operation and Development 1999)77.

significant development in China. It was only in 1979 that the 5th National People's Congress (NPC) enacted the first Sino-Foreign Joint Venture Law,[14] which initiated the construction of the legal system on foreign investment in China. Most rules and regulations in China's early investment laws focused on investment promotion, in which the environmental issues were not paid due attention.

However, from the perspective of the national legal system of environmental protection, China enacted the first environmental protection law (tentative) in 1979, closely following the reform and open-up policy in 1978.[15] Although it was not designed to regulate FDI, foreign investors have to comply with this law, the same as domestic investors. Till 2015, the tentative law has been replaced by the 1989 Environmental Protection Law of the PRC (EPL), which was amended by the 2014 EPL. The EPL constitutes the foundation of the sources of environmental protection law in China, along with the pollution regulation, nature-resources regulation, ecology regulation, cyclic utilization regulation, energy saving regulation, natural disasters regulation, environmental-administrative regulation, and environmental liability regulation. In addition, nearly 700 local environmental rules and 900 national environmental standards[16] have been adopted in China to facilitate environmental protection and the enforcement of the laws and regulations.

2.3.1 The laws for environmental protection in China

The 2014 EPL, which was the first amendment of the 1989 EPL in China, constitutes the fundamental law in environmental protection legal system. It granted the environmental administrative organs more powers in regulating and punishing the environmental pollutions. What is more, the 'social organizations registered in the governments above the city levels' and the 'social organizations operating the environmental charities for five consecutive years without any injuria' are entitled to initiate environmental litigations for public interests. It is the first time in China's environmental law to enlarge the scope of the subjects who can start the environmental lawsuit, as a result of which the environmental pollutions are monitored by more organizations. On 29 October 2015, China witnessed its first environmental litigation for public interests, in which the plaintiff won.[17]

The 2014 EPL is potentially expanding the domestic courts' jurisdiction over the environmental disputes, indicating that the cases that had been rejected jurisdiction are being accepted by the courts. Such a situation has caught attention from not only Chinese investors, but also the foreign investors,

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[14] On 13 April 1988, the 5th People's Congress enacted the Sino-Foreign Joint Venture Law. The existing Sino-Foreign Joint Venture Law was revised on the 31st October 2000. (Government of China, Beijing, 31 August 2005) available at http://www.gov.cn/banshi/2005-08/31/content_69772.htm, accessed 10 February 2012.

[15] Ross L., 'China: Environmental Protection, Domestic Policy Trends, Patterns of Participation in Regimes and Compliance with International Norms' (1998) 156 The China Quarterly 809.

[16] Li L. and Tian H. and Lv Y. B., *Blue Book of Rule of Law: Annual Report of China's Rule of Law 2015* (Chinese Academy of Social Sciences 2015) 78.

[17] The Defendants operated in the quarry in Fujian during 2008-2011, which caused serious vegetation deterioration to the ecosystem of the mountain regions in Nanping, Fujian. The defendants were judged to compensate 1.27 million RMB for the ecological deteriorations. Additionally, they were judged to recover the ecological system in the mountain region within five months from 29 October 2015, otherwise another 1.11 million RMB compensation will be due. See Nanping People's Court of the PRC, *Friend of Nature and Fujian Green Family v. Xie, Ni, Zheng and Li*, court judgment of 29 October 2015, available at http://www.npfy.gov.cn/, accessed 2 December 2015.

especially when the ConocoPhillips oil spill dispute was accepted by the Tianjin Marine Court on 22 July 2015.[18] The oil spill accident occurred during June-July 2011 from an oil field owned by China National Offshore Oil Corporation (CNOOC) and ConocoPhillips, a US investor. The spilled oil has contaminated the Bohai Bay, which is a region with low self-clean ability. As a result, not only the ecosystem of the region for marine lives, including fish, clam and crab, but also the economy of the fishery and sea-culture has been damaged severely.[19] Although ConocoPhillips has compensated 1 billion RMB in 2012, the damages from the coastal areas of Shan Dong and Tianjin were not covered yet. The affected citizens have been seeking judicial remedies since 2011, but the cases were accepted only after the issue of the 2014 EPL. What is more, the 20 plaintiffs were awarded compensation of 1.68 million RMB on 30 October 2015.[20] It is therefore indicated that the new EPL increased the possibility for the environmental pollutions to be translated into the environmental litigations. The international energy companies including Chevron, BP, Total, Halliburton, Woodward, ExxonMobil Chemical and GS Caltex have all established FDI projects in the energy sector in China and the 2014 EPL will regulate them more stringently.

2.3.2 Environmental regulations against pollution

The regulations against pollutions are the main forms of environmental regulations in China, which cover comprehensive sources of contaminations including noise, radiation, solid waste, hazardous chemicals, marine oil exploration, coastal construction and new clear materials.[21] The regulations for the protection of natural resources have expanded to 7 forms of resources of land, water, forest, grassland, fishery, minerals, and wild lives.[22] In general, these regulations have imposed higher environmental standards and heavier liability on the investors who generate pollutions. For instance,

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[18] Tianjin Hai Shi Court, *Luan Shuhai and Others v. ConocoPhillips (China) and China National Offshore Oil Corporation*, award of 30 October 2015, available at http://tjhsfy.chinacourt.org/index.shtml, accessed 2 November 2015.

[19] Yuan X. and Li N. and Hao J., 'On the Compensation Subjects of China's Marine Oil Spill Ecological Damage: From the Perspective of the Event of ConocoPhillips Oil Spill' (2013) 6 Theory and Modernization 37.

[20] Wang Q. and Liu L., 'The Judgment of the ConocoPhillips was Reached, the Plaintiffs were Awarded Compensation of 1683464 RMB' (Beijing, 30 October 2015) available at http://www.gov.cn/xinwen/2015-10/30/content_2956079.htm, accessed 2 November 2015.

[21] The 6 main regulations against pollutions are the Law of Prevention and Treatment of Water Pollutions (issued on 28 February 2008 by the Standing Committee of the NPC, entered into force on 1 June 2008); the Law of Prevention and Treatment of Air Pollutions (issued on 29 April 2000 by the Standing Committee of the NPC, entered into force on 1 September 2000, amended on 29 August 2015, the amendment will be entered into force on 1 January 2016); the Law of the Marine Environmental Protection (issued on 25 December 1999 by the Standing Committee of the NPC, entered into force on 1 April 2000, amended on 28 December 2013 and 1 March 2014); the Law of the Prevention and Control of Environmental Noise Pollution (issued on 29 October 1996 by the Standing Committee of the NPC, entered into force on 1 March 1997); the Law of the Prevention and Control of the Radioactive Pollution (issued on 28 June 2003 by the Standing Committee of the NPC, entered into force on 1 October 2003); the Law of the Prevention and Control of the Solid Waste Pollution (issued on 30 October 1995 by the Standing Committee of the NPC, entered into force on 1 April 1996, amended on 29 June 2013).

[22] The 7 main regulations for the protection of natural resources include the Law of Land Management (issued on 25 June 1986 by the Standing Committee of the NPC, entered into force on 1 July 1987, amended on 28 April 2004); the Law of Water (issued on 29 August 2002 by the Standing Committee of the NPC, entered into force on 1 October 2002); the Law of Forest (issued on 20 September 1984 by the Standing Committee of the NPC, entered into force on 1 January 1985); the Law of Grassland (issued on 29 June 1985 by the Standing Committee of the NPC, entered into force on 1 October 1985, amended on 28 April 2013); the Law of Fishery (issued on 20 January 1986 by the Standing Committee of the NPC, entered into force on 1 July 1986, amended on 28 December 2013); the Law of Mineral Resources (issued on 19 March 1986 by the Standing Committee of the NPC, entered into force on 1 October 1986); the Law of the Protection of Wildlife (issued on 8 November 1988 by the Standing Committee of the NPC, entered into force on 1 March 1989, amended on 28 August 2004 and 27 August 2009).

the amendment of the Law of Prevention and Treatment of Air Pollutions abandoned the 'maximum 500,000 RMB compensation' in the old law. Instead, the new compensation can reach '5 times of the damages caused by the pollution'.[23] Once the new amendment enters into force in 2016, foreign investors may encounter higher compensations. In a scenario where the ConocoPhillips pollution happens after 2016, the 1 billion RMB pollution treatment fees will be far from the '5 times damages' because the direct economic losses of holothurian culture in Leting town alone has reached 0.14 billion. Yet Leting is only a small town among the large number of cities and towns in Shan Dong, He Bei and Liao Ning provinces, which have been affected directly by the oil spill pollution.

It is noteworthy that the air pollution has been considered as a major concern in China, partially due to the serious haze pollution. The legal instruments are being enacted to control and prevent this pollution. On 29 February 2012, the Executive Meeting of the State Council of China was organized by the Primer.[24] The newly revised 'Ambient Air Quality Standard' was passed at the meeting, which was a signal showing that the Chinese Government began carrying out stricter environmental regulations. According to the new standard, more environmental index, such as $PM_{2.5}$ and O_3, are used now to detect air pollution, especially in the cities near the Beijing-Tianjin-Tangshan Area, Yangtze River Delta Area and Pearl River Delta Area. As a consequence, 113 more cities were regulated by the standards in 2013 and the standards have been adopted across all the prefecture-level cities in 2015.[25]

The new measures preventing the environmental pollutions will influence FDI projects in China, especially the projects in the heavy-pollution sectors, such as energy, mining and petro-chemistry, from the following perspectives.[26] First, the lagging technologies in the industries such as electricity, steel, building material, nonferrous metal and petrochemical engineering will be abandoned gradually. Second, China is improving the market access requirements of FDI through setting stricter environmental regulations. For instance, the traditional coal fire-powered plants, steel factories and cement plants are excluded from China. Third, the emission reduction of SO_2 in the industries of electricity, steel and petrol chemistry has been adopted; at the same time, the denitrifying equipment in coal production and the equipment reducing nitrogen oxide in cement production are encouraged. As a result, the existing foreign investors in these industries will confront with more stringent scrutiny. To the investors who plan to set up FDI projects in these sectors, they have to bring environment-friendly technology or equipment (e.g., denitrifying equipment and nitrogen oxide reduction equipment).

2.3.3 Environmental regulations regarding the ecology and energy utilization

[23] The Law of Prevention and Treatment of Air Pollutions (amendments) Ibid Article 122.
[24] Ministry of Environmental Protection of the People's Republic of China, 'Executive Meeting of the State Council of China' (Beijing, 29 February 2012) available at http://zfs.mep.gov.cn/fg/gwyw/, accessed 3 March 2012.
[25] Cao Y. F., 'Analysis of the $PM_{2.5}$, PM_{10}, NO_2 and SO_2 in Beijing' (2015) 5 Environment and Sustainable Development 169.
[26] The analysis below will develop from 'The Executive Meeting of the State Council of China Agrees to Enhance the Prevention and Control of Air Pollution' (Beijing, 29 February 2012) available at http://www.gov.cn/ldhd/2012-02/29/content_2079351.htm, accessed 3 March 2012.

The regulations for the protection of the ecology constitute another source of environmental regulations in China. The regulations enacted by the standing committee of the NPC and the administrative organs have included wild animal, land, soil and land, sand, wild plant, natural reservation region and genetically modified agriculture.

The regulations in the sectors of energy cyclic-utilization and energy saving and emission reduction are another two sources of environmental laws in China focusing on the efficiency of energy. The main forms of regulations are the Regulation on the Promotion of Clean Production,[27] Regulation of the Promotion of Cyclic Economy,[28] Regulation of Energy Saving,[29] Regulation of Renewable Energy,[30] Regulation of Electricity[31] and Regulation of Coal.[32]

Apart from the main regulations above, the sources of environmental law in China also include the rule of environmental influence assessment, environmental rule of projects construction, rule of for public participation and rule of environmental information disclosure. Moreover, the administrative regulations and rules are adopted to facilitate the governmental organs to exercise the environmental powers in environmental assessment, environmental supervision, environmental permission, pollution charges, pollution control and pollution review.

2.3.4 Laws and regulations on environmental liabilities

Last but not least, the sources of environmental laws in China include the legal instruments stipulating environmental liabilities in administrative law, civil law, and criminal law. The administrative regulation of environmental pollution[33] aims to delineate the contours of the governmental behaviours to punish the natural person, legal entities and organizations. For instance, it stipulates the procedure of punishment disclosure, inspection of the punishment decision from the higher governmental organs and punishment appeal and review mechanisms,[34] so that the administrative power does not exceed the need to protect the environment.

The civil liabilities for the environmental pollution are basically stipulated in the Tort Law,[35] in which the environmental liability is prescribed explicitly in Chapter 8.[36] The principles of ‘polluters pay’ and

[27] Issued on 29 June 2002 by the Standing Committee of the NPC, entered into force on 1 January 2003, amended on 29 February 2012.
[28] Issued on 29 August 2008 by the Standing Committee of the NPC, entered into force on 1 January 2009.
[29] Issued on 1 November 1997 by the Standing Committee of the NPC, entered into force on 1 January 1998, amended on 28 October 2007.
[30] Issued on 28 February 2005 by the Standing Committee of the NPC, entered into force on 1 January 2006, amended on 26 December 2009.
[31] Issued on 28 December 1995 by the Standing Committee of the NPC, entered into force on 1 April 1996, amended on 24 April 2015.
[32] Issued on 29 August 1996 by the Standing Committee of the NPC, entered into force on 1 December 1996, amended on 29 June 2013.
[33] The Administrative Regulation on the Punishment of Environmental Pollutions (issued on 30 December 2009 by the Ministry of Environmental Protection, entered into force on 1 March 2010).
[34] Ibid Articles 71-75.
[35] Tort Law of the PRC (issued on 26 December 2009, entered into force on 1 July2010).
[36] Ibid Chapter 8 (Articles 65-68).

'different liabilities for different pollutions' are restated in civil liabilities.[37] Additionally, the polluters need to take the burden to prove the circumstances which exclude or mitigate the liability, and to prove that no relation exists between the environmental pollutions and the behaviours.[38] In China, most environmental disputes are settled through civil procedure, including the disputes where foreign investors are involved.[39] The Tort Law thus provides the basic principles to instruct the environmental jurisprudence in China.

Some major environmental pollution incidents can incur the criminal environmental liability, which is stipulated in the Criminal Law of the PRC.[40] The amendments of the Criminal Law have expanded the liability of environmental pollutions. For instance, the 8th amendment stipulated the 'major environmental pollution' in which the 'significant damages to the public or private properties' and 'casualty' are the prerequisites of the 'major environmental pollution'.[41] Put another way, before the 8th amendment, the court reached the conclusion of 'major environmental pollution' only when the significant property damages or casualties were found. However, the environmental damages should not be constrained by only these factors and the damages to the ecological function of the environment can be still severe enough to be read as 'major environmental pollution'. Therefore, the 8th amendment left broader space for the court to interpret the significant environmental pollution. In this regard, an increasing number of environmental incidents, in which no properties and human health and safety are involved, can lead to criminal liabilities.

What is more, the 'prevention of future pollution', rather than the 'control of the existing pollution' was highlighted in the 8th amendment. The illegitimate mineral exploration was construed only when the 'significantly severe consequences' had occurred before the 8th amendment. However, the new amendment abandoned the precondition of 'severe consequences'. Instead, as long as the illegal exploration is found, the criminal liability may incur.[42] Such a change substantially prevents the illegal exploration causing serious environmental contaminations.

2.3.5 Environmental protection in the legal instruments regulating foreign investments

Apart from the environmental laws, regulations and rules above, which regulate not only foreign but also domestic investments, the sources of environmental law in China can also be understood to include the environmental provisions and clauses in the legal instruments on foreign investments. The Regulation of Foreign Enterprise (RFE),[43] the Regulation of Sino-foreign Joint Venture (RSFJV)[44]

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[37] Ibid Articles 65, 67.
[38] Ibid Article 66.
[39] Zhou K. and Yu L. P., 'The Theoretical Construction of Environmental Jurisprudence System' (2014) 9 Journal of Law Application 97.
[40] Criminal Law of the PRC was issued on 14 March 1997 by the NPC and entered into force on 1 October 1997. Nine amendments were issued (in 1999, 2001(2), 2002, 2005, 2006, 2009(2), 2011 and 2015) until 29 August 2015 to improve or adjust the Law.
[41] The 8th Amendment of the Criminal Law of the PRC (issued on 25 February 2011, entered into force on 1 May 2011) Article 338.
[42] Ibid Article 343.
[43] Issued on 31 October 2000 by the Standing Committee of the NPC, entered into force on 31 October 2000.
[44] Issued on 1 July 1979 by the NPC, second amendment issued and entered into force on 15 March 2001.

and the Regulation of Chinese-foreign Cooperative Enterprise (RCFCE)[45] constitute the major legal instruments regulating foreign investments in China. However, environmental protection was only stipulated in the RFE, which denied the governmental permission to establish foreign enterprises if the environmental pollutions are likely to be produced.[46] In order to be consistent with the environmental provisions in the RFE, the Enforcement Rules of the RSFJV and the RCFCE both later embraced a provision prescribing that the enterprises with possible environmental pollutions are not permitted to set up.[47]

The latest development of foreign investment instruments in China is the Exposure Draft of Foreign Investment Law,[48] which embraced environmental considerations from the following perspectives. First of all, for the foreign investments which should apply for the governmental permit, the application documents must contain the environmental assessment report.[49] In addition, the governmental review of foreign investments includes an assessment of the environmental influence of foreign investments, indicating that the investments may not pass the assessment if negative environmental effects exist.[50] Finally, the Exposure Draft proposed the establishment of the national wide institutes to facilitate and promote foreign investments, in which the national environmental assessment mechanism is included.[51] Once the mechanism is set up widely in China, the consistency will be improved for the measures taken against foreign investments out of the environmental considerations.

To sum up, the sources of the environmental laws in China are demonstrated through both the environmental instruments applying to all the activities nationally, and the instruments only for foreign investments. These environmental instruments or provisions constitute the domestic and internal mechanisms for developing the green and sustainable international investments, which in turn facilitate environmental protection in the regime of IIL.

3. Environmental issues in China's IITs: obligations or powers to regulate foreign investments?

China initiated its negotiation and conclusion of IITs in 1982, with the aim to deepen the open-up policy. After experiencing the stage of attracting foreign capitals and technologies through the protection-oriented IITs with very infrequent environmental considerations before 2010, China stepped into the 'investor-state balanced' stage from 2011 when the majority of its IITs began to embrace the environmental provisions.

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45 Issued on 13 April 1988 by the NPC, amended and entered into force on 31 October 2000.
46 The Regulation of Foreign Enterprise of the PRC (n 43), Article 6.
47 The Enforcement Rule of the Regulation of Sino-foreign Joint Venture (issued on 20 September 1983, fourth amendment issued and entered into force on 8 January 2011) Article 4; The Enforcement Rule of Chinese-foreign Cooperative Enterprise (issued and entered into force on 4 September 1995) Article 9.
48 Released on 19 January 2015 by the Ministry of Commerce of the PRC.
49 Ibid Article 30.
50 Ibid Article 32.
51 Ibid Article 105.

3.1 A general review of the environmental considerations in China's IITs

After a careful evaluation of all the IITs concluded by China, including the 146 BITs and 19 other forms of IITs (FTA, CEPA, TCA, APTA and TIA),[52] this research observes that the environmental considerations are generally not embraced in treaty provisions. This phenomenon is more obvious among the instruments which focused on investment protection (not trade), while the treaties relating to trade tend to refer to environmental protection. (See Table 2.2) More specifically, all the trade-related FTAs and the China-EU (EC) TCA were designed to include environmental protection. (See Table 2.2) It is noteworthy that although the China-EU (EC) TCA[53] was concluded in the very early stage of China's international investment, it recognized the necessity to strengthen environmental protection.[54] At the same time, the BITs concluded during this period hardly referred to environmental considerations, although exceptions existed (e.g. China-Singapore BIT).[55]

In a survey conducted by Gordon and Pohl, it is demonstrated that around 50% new IITs concluded after 2005 began to include the environmental provisions.[56] Focusing on the 28 BITs concluded by China after 2005, only 5 BITs including the China-Canada BIT (2012), China-Uzbekistan BIT (2011), China-Switzerland BIT (2009), China-Madagascar BIT (2005) and China-Portugal BIT (2005) referred to the environment or health issues. It therefore seems that the majority of China's BITs began to embrace the environmental concerns after 2011, later than 2005. China has concluded 5 BITs after 2011 and is negotiating BITs with the US and the EU, which are expected to contain comprehensive environmental provisions. In this regard, at least[57] 4 out of the 7 BITs after 2011 have referred to or will refer to environmental protection, with a proportion of 57%, which is close to the figure of 50% among the global IITs concluded by Gordon and Pohl.[58]

It is therefore indicated that when the global IITs are increasing the environmental considerations, China responded late, but caught up quickly. However, it cannot be assumed that China will continue

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[52] Other IITs include Free Trade Agreement, Framework Agreement (FA), Closer Economic Partnership Agreement (CEPA), Trade and Cooperation Agreement (TCA) and Trilateral Investment Agreement (TIA). See China-Taiwan Framework Agreement (concluded on 29 June 2010, entered into force on 1 September 2010); China-Hong Kong Closer Economic Partnership Arrangement (concluded on 29 June 2003, entered into force on 29 June 2003); China-Japan-Korea Trilateral Investment Agreement (concluded on 13 May 2012, entered into force on 17 May 2014).

[53] Agreement on Trade and Economic Cooperation between the European Economic Community and the People's Republic of China – 1985 (concluded on 21 May 1985, entered into force on 22 September 1985).

[54] Ibid Article 10 ('Within the limits of their respective competence, and with the main aims of encouraging the development of industry and agriculture in the European Economic Community and in the People's Republic of China, of diversifying their economic links, encouraging scientific and technological progress, opening up new sources of supply and new markets, helping to develop their economies and raise their respective standards of living, the two Contracting Parties agree to develop economic cooperation in all the spheres subject to common accord, and in particular: … environmental protection').

[55] Agreement between the Government of the People's Republic of China and the Government of the Republic of Singapore on the Promotion and Protection of Investments（concluded on 21 November 1985, entered into force on 7 February 1986）('Article 11 Prohibitions and Restrictions: The provisions of this Agreement shall not in any way limit the right of either Contracting Party to apply prohibitions or restrictions of any kind or take any other action which is directed to the protection of its essential security interests, or to the protection of public health or the prevention of diseases and pests in animals or plants').

[56] Gordon and Pohl (n 4).

[57] The context of the other three BITs (China-Congo Democratic BIT 2011, China-Tanzania BIT 2013 and China-Turkey BIT 2015) is currently inaccessible.

[58] Gordon and Pohl (n 4)

this tendency in all the future IITs because the contracting parties of the existing environment-concerned IITs focused on the US, Canada and Japan. These countries have the tradition to address environmental protection in their IITs[59] and the 'environmental friendly' IITs concluded by China have been significantly influenced by these countries.

3.2 Environmental concerns in the preambles of China's IITs

China's environmental concerns in IITs exist in different forms of treaty provisions. Generally, some environmental issues are within the treaty preambles, providing the instructive context for the contracting parties. For instance, the China-Japan-Korea TIA provided that:

> Recognizing that these objectives can be achieved without relaxing health, safety and environmental measures … Recognizing the importance of investors' complying with the laws and regulations of a Contracting Party … which contribute to the economic, social and environmental progress.[60]

This preamble not only prescribed the obligations of both contracting parties not to relax the environmental measures, but also the obligations of the private investors to act consistently with the environmental regulations of host states. However, the China-Korea FTA preamble only recognized the mutual influence of economic interests and environmental protection, without exploring the detailed obligations of investors or host states to protect the environment:

> MINDFUL that economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development and that closer economic partnership can play an important role in promoting sustainable development.[61]

The China-Guyana BIT also provided the states' obligation not to relax the environmental standards as one of the treaty objectives, which is quite unusual in China's BITs:

> Agreeing that these objectives can be achieved without relaxing health, safety and environmental measures of general application.[62]

The preambles of IITs usually prescribe the general principles and background of the treaties, but they do not provide the specific treaty obligations for either states or investors. However, the function of the preambles has been confirmed by the Vienna Convention on the Law of Treaties, that reading the

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[59] Gordon and Pohl (n 4).
[60] Agreement among the Government of Japan, the Government of the Republic of Korea and the Government of the People's Republic of China for the Promotion, Facilitation and Protection of Investment (concluded on 13 May 2012, entered into force on 17 May 2014).
[61] Free Trade Agreement between the Government of the People's Republic of China and the Government of the Republic of Korea (concluded on 1 June 2015).
[62] Agreement between the Government of the People's Republic of China and the Government of the Republic of Guyana on the Promotion and Protection of Investments (concluded on 27 March 2003, entered into force on 26 October 2004).

preambles in the treaty context constitutes the general rule of treaty interpretations through which the treaty's purpose can be examined.[63]

3.3 Environmental protection: rights and obligations of China in IITs

In the meanwhile, other environmental considerations are prescribed in the substantive treaty provisions of China's IITs, in which the contracting states are either obliged to or entitled to preserve the environmental interests. For instance, the China-Singapore BIT explicitly prescribed the contracting parties' regulatory powers to protect the environment, through Article 11 of Prohibitions and Restrictions:

> The provisions of this Agreement shall not in any way limit the right of either Contracting Party to apply prohibitions or restrictions of any kind or take any other action which is directed to the protection of its essential security interests, or to the protection of public health or the prevention of diseases and pests in animals or plants.[64]

This BIT defined the environmental issues narrowly by 'public health', but it provided wide space for the contracting parties to prohibit or restrict foreign investments without otherwise violating the BIT. Such a right-oriented provision was designed to preserve the public health-related environment through providing rights of host states, although the major provisions of the BIT focused on the states' obligations. Among the many BITs concluded by China without leaving space for environmental protection, such a provision reflected the signatory intention of the contracting parties that the 'public health' and the 'prevention of diseases and pests in animals or plants' should be highlighted and the investment tribunals should accordingly pay substantial attention to this treaty intention in arbitration practice.

Once a host country proves that the prohibition or restriction of the foreign investments are for the public health and it has acted consistently with all the criteria to invoke this provision, the state's behaviour would not amount to treaty breach and compensation would not occur.[65]

Environmental protection was also established in some BITs to exclude indirect expropriation. For instance, the China-Uzbekistan BIT confirmed that the regulatory measures of the contracting parties for environmental protection did not constitute the ground for the claim of expropriation and

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[63] Vienna Convention on the Law of Treaties (concluded on 23 May 1969) Article 31 General Rule of Interpretation ('2.The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes: (a) Any agreement relating to the treaty which was made between all the parties in connexion with the conclusion of the treaty; (b) Any instrument which was made by one or more parties in connexion with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty').

[64] China-Singapore BIT (n 55) Article 11.

[65] Newcombe A., 'General Exceptions in International Investment Agreements' in Segger M.-C. C. and Gehring M. W. and Newcombe W. A. (eds), *Sustainable Development in World Investment Law* (Kluwer Law International, 2011) 363.

compensation.[66] In fact, the environmental measures are embodied generally in expropriation provisions in most IITs concluded by China. However, these treaties stipulate the environmental provision by referring to the 'public purpose', as one prerequisite of indirect expropriation. For instance, the typical expropriation provision is prescribed as:

> Neither Contracting Party may expropriate or nationalize an investment either directly or indirectly through measures tantamount to expropriation or nationalization ("expropriation"), except: (a) for a public purpose; (b) on a non-discriminatory basis; (c) in accordance with due process of law; and (d) on payment of compensation.[67]

The environmental measures can still amount to indirect expropriation under such a treaty provision. However, states' environmental policy space has been broadly widened in the China-Uzbekistan BIT and such practice would have far-reaching implications for the preservation of the states' regulatory powers in IITs.

In certain IITs concluded by China, the protection of host states' environment has been regarded as the obligations of the contracting counties. The China-Japan-Korea TIA illustrates an example:

> Each Contracting Party recognizes that it is inappropriate to encourage investment … by relaxing its environmental measures. To this effect each Contracting Party should not waive or otherwise derogate from such environmental measures as an encouragement for the establishment, acquisition or expansion of investments in its territory.[68]

Although it is ambiguous whether the states' measures relaxing the environmental standards will incur a treaty violation, this provision potentially curbs the 'race to the bottom'[69] and diminishes the 'pollution heaven'.[70]

4. Conclusion

Despite that the IITs and IITs' arbitration protect a broad range of international investments, it is the FDI that is significantly arousing the environmental concerns and investment disputes. While the number of investment disputes, where the environmental considerations are contained, is increasing, and the global IITs are embracing more environmental provisions substantially, China is making an

[66] Agreement between the Government of the People's Republic of China and the Government of the Republic of Uzbekistan on the Promotion and Protection of Investments (concluded on 19 April 2011, entered into force on 1 September 2011) ('Article 6 Expropriations 3. Except in exceptional circumstances … non-discriminatory regulatory measures adopted by one Contracting Party for the purpose of legitimate public welfare, such as public health, safety and environment, do not constitute indirect expropriation').

[67] Agreement between the Government of the United Mexican States and the Government of the People´s Republic of China on the Promotion and Reciprocal Protection of Investments (concluded on 11 July 2008, entered into force on 6 June 2009) Article 7 Expropriation and Compensation.

[68] China-Japan-Korea Trilateral Investment Agreement (n 53) Article 23 Environmental Measures.

[69] Wheeler D., 'Racing to the Bottom? Foreign Investment and Air Pollution in Developing Countries' (2001) 10(3) The Journal of Environment Development 225.

[70] Gonzalez C. G., 'Bridging the North-South Divide: International Environmental Law in the Anthropocene' (2015) 32(2) Pace Environmental Law Review 407.

effort to keep up with such an international trend. Currently, China is on the one hand reforming its domestic environmental legal system and improving the environmental standards; and on the other hand, it has negotiated new IITs in which the content of environmental issues has been strengthened considerably. Both the internal and external environmental concerns above demonstrate that China is determined to promote sustainable foreign investments, in order to achieve the national targets of 'stable, sustainable and coordinated development'.

Against the background that: (1) FDI generates environmental problems in host states; (2) IITs and arbitration are being advocated to improve the regulatory flexibilities of host states; and (3) the social and economic transition in China calls for reforming the legal system fundamentally, it is the appropriate time for China to consider constructing its 'environment friendly' IITs. Despite the external push from the countries such as Canada and Japan to introduce the environmental provisions into China's latest IITs, the internal environmental needs of China allow for more environmental considerations to be involved in its future IITs practice. Given this changing regime of investment treaty law and the unstable arbitration jurisprudence, China is expected to contribute to the construction of the new IIL regime through promoting environmental protection.

Chapter VI

Design a Broad Scope of Environmental Exception in International Investment Treaties: Domestic Need, Arbitral Implications and New Treaty Development in China

1. Introduction

While scholars are concerned about the ineffective protection of host states' public interest under international economic law,[1] public interests (e.g. the environmental interests) have been worried that they may impede investors under the international investment regime.[2] Declarative exceptions in treaty preamble,[3] general exceptions provisions,[4] treaty carve-outs,[5] exclusions, and free-standing exception provision[6] (they are named as broad 'exceptions' in this chapter) are rarely included in the current

[1] Granting investors the rights to seek procedural and substantive protections, IITs may limit the states' regulatory power to protect the public interests, or cause the 'chilling effect'. See Petersmann E., "International Economic Law, 'Public Reason', and Multilevel Governance of Interdependent Public Goods" (2011) 14(1) Journal of International Economic Law 23-24; Mann H. and von Moltke K., 'NAFTA's Chapter 11 and the Environment: Addressing the Impacts of the Investor-State Process on the Environment' (International Institute for Sustainable Development 1999) available at http://www.iisd.org/pdf/nafta.pdf, accessed 10 June 2012.

[2] Waelde T. and Dow S., 'Treaties and Regulatory Risk in Infrastructure Investment: the Effectiveness of International Law Disciplines versus Sanctions by Global Markets in Reducing the Political and Regulatory Risk for Private Infrastructure Investment' (2000) 34(2) Journal of World Trade 12 ('At the moment international treaties by themselves only have a limited effect, … treaty accession operates to indicate a lowered political risk, but does not by itself lower such a risk.'); Subedi S. P., *International Investment Law: Reconciling Policy and Principle* (Hart Publishing 2008) 165. ('Compliance with such measures [states' environmental measures] involves additional costs and such costs may undermine the profitability of a foreign company doing business in the country concerned').

[3] E.g. the preamble in the China-Guyana BIT (concluded on 27 March 2003, entered into force on 26 October 2004) ('Agreeing that these objectives can be achieved without relaxing health, safety and environmental measures of general application.') Preambles and the exception issues involved generally do not prescribe treaty obligations but only to identify the objects of the treaty in question. Although the Vienna Convention on the Law of Treaties, Article 31 stipulated that 'the context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes', investment tribunals overlooked preambles by maintaining that 'preamble does not materially advance analysis … the reference in the Preamble . . . appears too general'. See Vienna Convention on the Law of Treaties, Article 31(2); *Philip Morris Brands SARL v. Oriental Republic of Uruguay*, Decision on Jurisdiction of 2 July 2013 (ICSID Case No. ARB/10/7) 201.

[4] E.g. Article 33 General Exceptions of the China-Canada BIT (concluded on 9 September 2012, entered into force on 1 October 2014).

[5] E.g. Article III (l) of Annex I of the Canada-Costa Rica BIT (concluded on 18 March 1998, entered into force on 29 September 1999) ('Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns'); also see Article 6.1 of the China-Uzbekistan (concluded on 19 April 2011, entered into force on 1 September 2011) ('Neither Contracting Party shall expropriate, nationalize … investments of the investors of the other Contracting Party in its territory … unless the following conditions are met: (a) for the public interests; (b) in accordance with domestic legal procedure and relevant due process; (c) without discrimination; (d) against compensation').

[6] E.g. China-Japan-Korea Trilateral Investment Agreement (China-Japan-Korea TIA, concluded on 13 May 2012, entered into force on 17 May 2014) The China-Japan-Korea TIA is the first trilateral investment arrangement in China, which is estimated to enhance the free trade and investment among the parties and to provide transparency and a stable environment for investments. Xinhua News, 'China, Japan and Korea formally signed investment treaties' *Xinhua News* (Beijing: 13 May 2012) http://news.xinhuanet.com/world/2012-05/13/c_111940332.htm, accessed 16 November 2012; Article 23 Environmental Measures ('Each Contracting Party recognizes that it is inappropriate to encourage investment by investors of another Contracting Party by relaxing its environmental measures. To this effect each Contracting Party should not waive or otherwise derogate from such environmental measures as an encouragement for the establishment, acquisition or expansion of investments in its territory'); Such exceptions are usually used to 'avoid a regulatory race to the bottom by States'. See Beharry C. L. and

treaty regime of international investment law,[7] although they are increasing significantly among the recently concluded IITs[8] including the 2012 China-Canada BIT, 2012 China-Japan-Korea trilateral investment agreement (China-Japan-Korea TIA), 2014 China-Iceland free trade agreement (FTA) and 2014 China-Switzerland FTA.[9] Putting the substantive exceptions aside, the procedural mechanism of the Investor State Dispute Settlement (ISDS) is also being adjusted to strengthen the regulatory flexibility of host states, and the proposals to exclude the ISDS from IITs are discussed by states.[10]

The scope of exceptions varies from the environment,[11] human health to national security, energy security and international peace. This variability in exceptions, not only reflects states' different political and economic interests, but also reveals the development of states' internal policies regarding

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Kuritzky M. E., 'Going Green: Managing the Environment through International Investment Arbitration' (2015) 30(3) American University International Law Review 394.

[7] Gordon and Pohl have led a survey on the environmental concerns in investment treaties, finding that only 6.5% of all the 1623 IITs contain environmental provisions but the figure is higher among the investment chapters of FTA. Gordon K. and Pohl J., 'Environmental Concerns in International Investment Agreements: A Survey' (OECD Working Papers on International Investment, Working Paper No. 2011/01, 2011); this lack of consideration for public interests has been criticized, along with the ambiguous treaty provisions on public interests. See Sornarajah M., *The International Law of Foreign Investment* (3rd edn, Cambridge University Press 2010) 224; Sheffer M. W., 'Bilateral Investment Treaties: A Friend or Foe to Human Rights?' (2011) 39 Denver Journal of International Law and Policy 501; Radi Y., 'Balancing the Public and the Private in International Investment Law' in Watt H. M. and Arroyo D. P. F. (eds), *Private International Law and Global Governance* (Oxford University Press 2015) 157. ('While international law is often conceived as favouring investors' interests at the expense of public interest, public … interest is likely to play an increasing role in the future').

[8] E.g. environmental exception concerns were formulated in the 1985 China-Singapore BIT but such provisions increased by 50% among BITs until 2005. See Gordon and Pohl, Ibid.; for a detailed statistics on the new IITs with general exceptions, see Sabanogullari L., 'The Merits and Limitations of General Exception Clauses in Contemporary Investment Treaty Practice' (IISD Investment Treaty News, 21May 2015) available at http://www.iisd.org/itn/2015/05/21/the-merits-and-limitations-of-general-exception-clauses-in-contemporary-investment-treaty-practice/, accessed 16 July 2015 ('15 of the 18 IITs concluded in 2013 for which texts are available feature general exceptions. [The number is] 10 out of 17 in 2012, 7 out of 47 in 2011').

[9] Since 2012 two BITs, one TIA and two FTA were concluded by China, all of which contained exceptions (the China-Tanzania BIT was concluded on 24 March 2013 but the text is unavailable until 20 December 2014). The IITs include: China-Canada BIT (n 4); China-Japan-Korea TIA (n 6); China-Iceland FTA was signed on 15 April 2013, entered into force on 1 July 2014; China-Switzerland FTA was signed on 6 July 2013, entered into force on 1 July 2014.

[10] Anti-ISDS has emerged in the process of the Transatlantic Trade and Investment Partnership (TTIP). The EU commission has proposed 'a new system for resolving disputes between investors and states subject to democratic principles … cases are treated in a transparent manner by publicly appointed, independent professional judges … includes an appellate mechanism, where consistency of judicial decisions is ensured, the jurisdiction of the courts of the EU and of the Member States is respected and where private interests cannot undermine public policy objectives'. The proposal has been approved and it 'would replace the existing investor-state dispute settlement (ISDS) mechanism in all ongoing and future EU investment negotiations, including the EU-US talks on a TTIP'; see Agricultural and Rural Convention, 'TTIP: Parliament Plenary to Vote on ISDS Lite', (2 July 2015) available at http://www.arc2020.eu/2015/07/ttip-parliament-plenary-to-vote-on-isds-lite/ accessed 30 July 2015; European Commission, 'Commission proposes new Investment Court System for TTIP and other EU trade and investment negotiations' (Brussels, 16 September 2015), available at http://europa.eu/rapid/press-release_IP-15-5651_en.htm, accessed 18 September 2015; putting the TTIP aside, anti-ISDS atmosphere also exists in the Trans-Pacific Partnership (TTP) text. Australia has announced that the new ISDS adopted in the TTP will provide more safeguards of legitimate governmental regulation in health, environment and tobacco.
See 'Trans-Pacific Partnership (TPP) pact to drive jobs, growth and innovation for Australia' (Sydney: 6 October 2015), available at http://trademinister.gov.au/releases/Pages/2015/ar_mr_151006.aspx, accessed 6 October 2015.

[11] Environmental issues can be included in different treaty provisions (e.g. the expropriation provision). Nevertheless, protecting the environment through the exception provisions is regarded as a more 'powerful' solution to address the environmental concerns of host states. Benedetto S. D., *International Investment Law and the Environment* (Edward Elgar Publisher 2013) 214.

foreign investments.[12] In view of the expanding exceptions in IITs[13] to cater to the regulatory power, the market access exceptions for foreign investments are instead being reduced significantly in China.[14] Given these circumstances, a question will arise: will conflicts occur between the treaty practice to increase the exceptions and the domestic practice to reduce the exceptions on the market access of foreign investments?

Putting aside the relaxed investment-entry exceptions, exceptions in the post-investment are instead strengthened in China through, for instance, regulating foreign investments more stringently for the environmental and security reasons. Bearing in mind that the current development of exceptions provisions in China's IITs keeps the same pace with the domestic regulations on foreign investments for environmental and security reasons but goes into the opposite direction in the aspect of the regulations concerning the market access of foreign investments, how will the exceptions in China's IITs look at the increased regulations on foreign investments over environmental and security concerns on the one hand, and the decreased regulations on investment entry on the other? How will the environmental exception in IITs develop towards a better protection of host states' environmental interests?

In the post-China-Canada BIT/China-Japan-Korea TIA era, it is noteworthy to examine whether the new IITs will carry on expanding exceptions and whether the expectations practice in China's future IITs will develop narrowly or widely. However, how the IITs preserve the internal regulatory space for environmental protection, and improve the efficiency of market access for foreign investment simultaneously, constitute another spiny question. And the answers to these questions may provide some hints for the negotiations of China's future IITs.

For the protection of host states' environmental interests in IIL, this Chapter aims to explore the construction of broad environmental exception provisions in IITs. More specifically, it examines the necessity to introduce a broad environmental exception in China's future IITs from the aspects of domestic needs, international investment arbitration and the new IITs that have been concluded by China. Part 2 clarifies exceptions in this Chapter into general and individual exceptions, procedural and substantive exceptions, and pre-establishment and post-establishment exceptions. Additionally, this Part reviews the role of environmental exception in IITs. Part 3 examines the scope of exceptions in IITs and how the scope is determined in IIL. Part 4 evaluates the adoption of a broad environmental exception in IITs and the external and internal determinants from international arbitration, as well as from China's IITs and domestic laws/policies.

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[12] Vandevelde K. J., 'A Comparison of the 2004 and 1994 U.S. Model BITs: Rebalancing Investor and Host Country Interests' in Sauvant K. P. (eds), *Yearbook on International Investment Law and Policy 2008-2009* (Oxford University Press 2009) 283-286.

[13] The 'expanding exceptions' refer to both the number of IITs including exceptions and the scope of the exceptions.

[14] From the 2011 Directory of Guidance for Foreign Investment of PRC, to the 2013 Special Regulatory Measures on the Entry of Foreign Investment in Shanghai Free Trade Zone, to the 2015 Directory of Guidance for Foreign Investment of PRC, and to the 2015 Special Regulatory Measures on the Entry of Foreign Investment in Pilot Free Trade Zone by the General Office of State Council of the PRC, the number of measures regarding foreign investments entry exceptions has been cut from 17 main types to 8.

2. Exceptions and the role of environmental exception in IIL

Exceptions are used as treaty strategy to enhance host states' regulatory power in order to maintain the invest-states balance. Such function is achieved through excluding the application of IITs' provision(s) or the entire IIT. Through carving out IITs obligations from these matters, states' measures are subject to minimum review by international tribunals. The public interests pursued by host states are thus achieved without IITs violation.

2.1. Clarify exceptions in international investment law

IITs grant foreign investors full protection and promotion, but both rights and obligations of investors should be balanced, otherwise the treaty will encounter a legitimacy crisis.[15] The failure of the MAI (Multilateral Agreement of Investment) negotiation partially resulted from the high standard of investor protection and the ignorance of the protection of host states' interests of environment, labour and culture.[16]

Since IITs aim to protect and promote foreign investments, a broad exception can be understood as any form of exclusions or derogation from such protection and promotion. On the basis of the application scope, an exception applying to an entire IIA is considered as the general exception[17] while an exception which applies to an IIA's provision is an individual exception in this Chapter. The 2012 China-Canada BIT provided for 'general exceptions' referring to the environmental and security matters:

> [P]rovided that such measures are … arbitrary… or do not constitute a disguised restriction …, nothing in this Agreement shall be construed to prevent a Contracting Party from adopting or maintaining measures,

[15] See Stern B., 'The Future of International Investment Law: A Balance Between the Protection of Investors and the States' Capacity to Regulate' in Alvarez J. E. and Sauvant K. P. and Ahmed K. G. and others (eds), *The Evolving International Investment Regime: Expectations, Realities, Options* (Oxford University Press 2011) 176 (Against the background where the global investment system calls for a sustainable development, the treaties which only protect investors but ignore the environmental interests of host states, may encounter the legitimacy crisis. In the absence of any provisions for the sustainable development of international investment, the tribunals can only 'play a very marginal, or even a nonexistent role' in arbitration practice. Such a situation will also bring the legitimacy crisis in the arbitration system); Kleinheisterkamp J. 'Investment Treaty Law and the Fear for Sovereignty: Transnational Challenges and Solutions' (2015) 78(5) Modern Law Review 824. ('Interpretation of IIA provisions cannot provide foreign investors with more protection than they could legitimately expect in a properly regulated market … any higher level of protection and over-compensation … would undermine the legitimacy of the current investment treaty regime'); Roberts A., 'The Next Battleground: Standards of Review in Investment Treaty Arbitration' (2011) 16 International Council for Commercial Arbitration Congress Series 173. ('The failure of some arbitral tribunals to recognize the public nature of investment treaty arbitration … has contributed to the legitimacy crisis in which the investment treaty system currently finds itself').

[16] Picciotto S., 'Linkages in International Investment Regulation: the Antinomies of the Draft Multilateral Agreement on Investment' (1998) 19 University of Pennsylvania Journal of International Economic Law 766.

[17] It has been argued that the general exceptions remain insufficient to protect public interests because they are either 'unsuited for the national treatment or most favoured nation treatment', or 'unnecessary due to the congruence with the fair and equitable treatment'. The limited role of general exceptions is therefore reflected in the expropriation. See Chaisse J., 'Exploring the Confines of International Investment and Domestic Health Protections-Is a General Exceptions Clause a Forced Perspective?' (2013) 39 American Journal of Law and Medicine 359.

> including environmental measures: … necessary to protect human, animal or plant life or health; or relating to the conservation of living or non-living exhaustible natural resources.[18]

Exceptions regarding the protection of the environment, life and health, and natural resources covered in this Article apply to the entire BIT because 'nothing in this agreement' shall be understood to prevent the adoption of the measures on the grounds above. The 2012 US Model BIT incorporated articles of 'investment and environment' and 'essential security' as standalone exceptions,[19] applying across the BIT. Security matters were prescribed in the China-Japan-Korea TIA standalone provision of 'security exception' with a wide application across the entire treaty.[20] On the contrary, the specific exception is usually incorporated to form a part of other substantive treaty obligations, with limited application within the specific provision. For instance, public interests matters are incorporated in the expropriation provision designating states' liability for expropriatory measures in the China-Japan-Korea TIA.[21] The fields of the 'existing bilateral agreement', 'free trade', 'customs union', 'aviation, fisheries', and 'salvage' apply to the limited scope of the MFN standard.[22]

On the basis of the stages establishing investments, exceptions in this Chapter are also classified as pre-establishment and post-establishment exceptions. Protection and promotion of foreign investments necessitate the free market access of foreign investments but the restrictions on the access constitute pre-establishment exceptions. Negative list constitutes such exceptions through precluding certain investments entering into host states or limiting the foreign shareholding to a certain proportion in investments. China and the US have formally swapped their negative lists outlining the sectors they will close to the investors from each party.[23] The exchange of the sector-based negative lists indicated that the China-US BIT negotiation has achieved significant progress[24] and the treaty will apply to all the investment sectors except for the ones stipulated in the negative list. The post-establishment exceptions widely incorporated the derogations to investment protection and promotion after the foreign investments enter into host states, including environmental exception, national security exception, financial exception, etc.

After the foreign investments are established in host states, governmental measures might be examined under the regime of IIL in order to find out whether the measures are discriminatory or arbitrary, but

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[18] Article 33 of China-Canada BIT (n 4).
[19] Article 12 and Article 18 of the US Model BIT 2012.
[20] China-Japan-Korea TIA (n 6) Article 18.1('notwithstanding any other provisions in this Agreement … may take any measure: (a) which it considers necessary for the protection of its essential security interests').
[21] Ibid Article 11 Expropriation and Compensation ('1. No Contracting Party shall expropriate or nationalize investments … except: (a) for a public purpose; (b) on a non-discriminatory basis; (c) in accordance with its laws and international standard of due process of law; and (d) upon compensation pursuant to paragraph 2, 3 and 4').
[22] Ibid Article 8.1. ('Article 5 does not apply to: (a) treatment by a Contracting Party pursuant to any existing or future bilateral or multilateral agreement: (i) establishing, strengthening or expanding a free trade area or customs union; or (ii) relating to aviation, fisheries, or maritime matters including salvage; (b) treatment accorded under any bilateral or multilateral international agreement in force prior to 1 January 1994').
[23] The US-China Business Council, 'Summery of US Negative Lists in Bilateral Investment Treaties' (2015) available at https://www.uschina.org/sites/default/files/Negative%20list%20summary.pdf, accessed 8 September 2015.
[24] Ministry of Commerce of the PRC, China-US BIT Negotiation has Stepped into Crunch' (19 June 2015), available at http://trb.mofcom.gov.cn/article/zuixindt/201506/20150601018377.shtml, accessed 9 September 2015

IIL restrains such reviews in certain circumstances, which constitutes another form of exception. For instance, the China-ASEAN investment agreement prescribed that:

> This Agreement shall not apply to: subsidies or grants provided by a Party or to any conditions attached to the receipt or the continued receipt of such subsidies or grants, whether or not such subsidies or grants are offered exclusively to domestic investors and investments.[25]

Such a provision is also regarded as 'treaty carve-out' excluding the specific subsidy measures from the entire treaty.[26] States are able to take subsidy measures without the concern of violating the FET, NT and MFN standards under this provision. Tax measures are also prescribed in this form of exception in the China-Uganda BIT.[27] The exclusion of these measures differs from the exclusion of foreign investments from obtaining access to the market (pre-establishment exceptions) because the former occurs after foreign investments are established in host states.

Exceptions can also be divided into procedural and substantive exceptions. For instance, the Canada Model BIT 2004 precluded the governmental procurement from being subject to the substantive standards of NT and MFN.[28] In the meanwhile, it is also proposed that the environmental exception, national security exception and human rights exception be excluded from the ISDS procedure in order to constrain the challenges to the states' regulatory powers,[29] demonstrating a wider space of exceptions through impeding the arbitration review of these matters. Since the ISDS provides the procedural protection of foreign investments, the exclusion of the ISDS from IITs[30] can be regarded as procedural exception.

To sum up, a broad appraisal of exceptions in IIL can be concreted into different categories on the basis of application scope, investment proceedings, and substantive/procedural matters. Since these categories overlap with each other, environmental exception can possibly constitute the general exception, specific exception, post-establishment exception, as well as substantive exception.

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[25] Agreement on Investment of the Framework Agreement on Comprehensive Economic Cooperation between the People's Republic of China and the Association of Southeast Asian Nations Article 3 Scope of Application 4(c).

[26] United Nations Conference for Trade and Development and APEC Committee on Trade and Investment, *International Investment Agreements Negotiators Handbook* (UNCTAD 2012) available at http://investmentpolicyhub.unctad.org/Upload/Documents/UNCTAD_APEC%20Handbook.pdf, accessed 7 October 2015.

[27] Agreement between the Government of the People's Republic of China and the Government of the Republic of Uganda on the Reciprocal Promotion and Protection of Investments, Article 3 Treatment of Investment (5. The provisions of this Agreement shall not apply to matters of taxation in the territory of either Contracting Party. Such matters shall be governed by the Double Taxation Treaty between the two Contracting Parties and the domestic laws of each Contracting Party).

[28] Canada Model BIT (2004) (The provisions of National treatment, MFN treatment and senior management, boards of directors of this Agreement shall not apply to: (a) procurement by a Party or state enterprise).

[29] Liang Y., 'Indirect Expropriation Risks and Solutions for China's Overseas Investments: A perspective from the Pingan v. Belgium Case' (2010) 1 Research of Law and Commerce 39.

[30] For instance, the eighth European Commission textual proposal for the TTIP has proposed government-to-government dispute settlement (GGDS) to replace the ISDS in IITs. See European Commission, 'European Commission Publishes TTIP Legal Texts as Part of Transparency Initiative' (Brussels, 07 January 2015), available at http://europa.eu/rapid/press-release_IP-15-2980_en.htm, accessed 8 September 2015.

2.2. The role of environmental exception in international investment law

Introducing environmental exception in IITs explicitly indicates the treaty drafters' signatory intention to keep a balance between the economic and non-economic goals. The exceptions provisions in IITs preserve the states' regulatory power to achieve their objectives of environmental protection, human rights protection and the preservation of national security. When compared with the old model BITs, the 2012 US model BIT increased the protection of host states' public interests including labour and environment.[31] Without an express environmental exception provision, it is ambiguous to comprehend whether the balance between states' environmental concerns and private interests is incorporated in IITs.

Environmental exception in IITs instructs international investment tribunals towards the balanced treaty interpretation. The *El Paso* tribunal held that the need to balance between state sovereignty and investment protection should be given attention in arbitration practice.[32] States like China are in social transition, where the new environmental laws and policies are adopted to balance both economic growth and social welfares, but in the absence of the environmental exception in IITs, it is difficult for international tribunals to determine whether states' environmental measures should be justified in investment arbitration and it is also challenging for these tribunals to strike such a balance in treaty interpretation.

Environmental exception facilitates the domestic legal framework of environmental protection in host states through providing support from the international regimes. In a scenario where a host country has weak legal and policy framework of environmental protection, environmental protection through the internal mechanisms is difficult to achieve. The absence of environmental exception in current IITs can be criticised that the national environmental policies may 'lie outside of the regulatory competency of investment protection' in the investment-protection-oriented IITs.[33] But an environmental exception in IITs prescribing that 'environmental measures shall not be prevented by investment treaty from adoption' indicates that the weak legal system in the host state is encouraged by IITs to improve. Although the environmental exception does not directly grant the states the right to legislate or design policy for the environment concerns, such an implication clears the external obstacles for the state to strengthen the environmental legal system from the perspective of IIL.

Environmental exception in IITs potentially reduces the conflicts of international obligations between IIL and international environmental law. In a scenario where a state has concluded international environmental agreements (IEA) before signing IITs, the state has to observe its environmental obligations in order not to constitute IEA violation. The absence of environmental concerns in IITs may indicate that the state has determined to 'abandon' its environmental obligations in the face of the

[31] US Model BIT (n 19) Article 13.2 ('The Parties recognize that it is inappropriate to encourage investment by weakening or reducing the protections afforded in domestic labour laws').
[32] *El Paso Energy International Co. v. Argentina*, Decision on Jurisdiction of April 2006 (ICSID Case No ARB/03/15 27) 70.
[33] Diepeveen R. and Levashova Y. and Lambooy T., 'Bridging the Gap between International Investment Law and the Environment' (2014) 30(78) Utrecht Journal of International and European Law 147.

obligations in an IIT.[34] In this circumstance, investment interests override environmental interests and the state may undermine its IEA obligations. An environmental exception in the IIT can potentially preserve space for the obligations in the IEA and the environmental measures out of such obligations can be precluded from the IITs violation.[35] In this regard, the enforcement of the IEA will not amount to the violation of the IIT and the conflicts of obligations can be diminished.

An environmental exception in IITs preserves a fair environment benefiting foreign investors. On the one hand, the cleaner environment improves the health of the staffs operating the foreign investments and increases the efficiency and profitability of the investments in the long term.[36] On the other hand, an environmental exception illustrates that the treaty aims to create a fair investment environment in which investors are protected but they have to also fairly comply with the environmental laws/policies of the host state. Accordingly, states' obligations and rights are both reflected in IITs and so are the investors' obligations and rights.

3. The scope of exceptions in IITs

The scope of exceptions determines what matters are recognized by IITs to defeat the obligations to protect foreign investments. The scope of exceptions can be understood from the following perspectives.

3.1. The scope of IITs: recognizing exceptions and the content of the specific exception

First of all, the scope refers to the *main categories* of interests including the environment, human rights, cultural, human health and life. IITs practice illustrates that the exclusion and the limitation of exceptions are widely accepted in IITs. Colombia adopted 'essential security interests', 'duty to keep international peace' and 'public order' in the 2007 Colombian Model BIT,[37] but the Canada Model BIT and the US Model BITs did not include 'public order' into their security exceptions. The Colombia practice illustrated a broader scope of exceptions in the *main categories* of exceptions. The wordings of 'security issues' differ from 'essential security' and 'national security' because public security refers to the interests enjoyed by a relatively large number of citizens otherwise it would fall outside of 'public'. However, essential security covers both public and non-public interests theoretically, which vests the provision with a wider scope.

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[34] The states' intention of concluding treaty and designing provisions can be reflected through the way how the conflicted interests are set in the treaty. Therefore, states' intention to abandon environmental interests is clear through a reading of IITs'provisions. See Pauwelyn J., *Conflict of Norms in Public International Law* (Cambridge University Press 2005) 328.

[35] Liang (n 29) 39.

[36] Similarly, the protection of human rights through IITs attracts labour with high competence and improves the profits of investments. Blanton S. L. and Blanton R. G., 'What Attracts Foreign Investors? An Examination of Human Rights and Foreign Direct Investment' (2007) 69(1) Journal of Politics 143.

[37] Colombian Model BIT (2007) Article 11 Scope of Application ('3. Nothing contained in this Agreement shall bind either Contracting Party to protect investments made with capital or assets derived from illegal activities, and it shall not be construed so as to prevent a Party from adopting or maintaining measures intended to preserve public order, the fulfilment of its duties for the keeping or restoration of international peace and security; or the protection of its own essential security interests').

Second, the scope of exceptions also refers to the detailed content of each main category. Put another way, it reveals what sub-matters can be accepted by the treaty parties to abrogate the states' obligations in IITs. For instance, the 2004 Canada Model BIT stipulated that 'essential security interests' include military, war, emergence, nuclear weapons and nuclear explosive devices,[38] as well as states' obligations under the UN to maintain international peace and security.[39] However, the 2012 US Model BIT preserved the state more flexibility to determine the sub-matters in the preservation of international peace or security through using the expression that 'it considers necessary for the fulfilment of its obligations … of international peace'.[40] The wordings of 'it considers necessary' indicates a broader scope of exceptions regarding the international peace in the US Model BIT because the state party can involve all the security matters on the condition that 'it considers necessary', while the Canada Model BIT did not accept such a broad description.[41] Adopting a strategy toward eclecticism, the IISD 2005 Model BIT stipulated national security exception, in which essential security interests and the obligation to maintain international peace were incorporated.[42] But the IISD Model BIT defined the obligation regarding international peace under the UN Charter, although states can also determine the necessity. Being eclectic between the Canadian Model BIT which leaves the content of maintaining international peace in the hands of the UN, and the US Model BIT which leaves more flexibility to the host state, the IISD Model BIT seems to absorb both the American and Canadian practice. This chapter argues that the Canadian, the US and the IISD methods reflected the different levels of regulatory flexibility of the states recognized by the IITs. In a wider scope of treaty provisions, it is suggested that different flexibility should apply in different national regimes. For the countries where the municipal laws for environmental protection are changing and unstable, the US practice will leave more space for such instability, as well as reduce the conflicts between the municipal and

[38] Ibid.

[39] Canada Model BIT (n 28) Article X ('Nothing in this Agreement shall be construed: (a) to require any Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; (b) to prevent any Party from taking any actions that it considers necessary for the protection of its essential security interests (i) relating to the traffic in arms, ammunition and implements of war and to such traffic and transactions in other goods, materials, services and technology undertaken directly or indirectly for the purpose of supplying a military or other security establishment, (ii) taken in time of war or other emergency in international relations, or (iii) relating to the implementation of national policies or international agreements respecting the non-proliferation of nuclear weapons or other nuclear explosive devices; or (c) to prevent any Party from taking action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security').

[40] US Model BIT (n 19) Article 18 Essential Security ('Nothing in this Treaty shall be construed: 1. to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or 2. to preclude a Party from applying measures that it considers necessary for the fulfilment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests').

[41] Johnson L, 'The 2012 US Model BIT and What the Changes (or Lack Thereof) Suggest about Future Investment Treaties' (2012) 8(2) Political Risk Insurance Newsletter ('the US Government believes its current investment treaties ('with their self-judging essential security exceptions) reserve to it sufficient authority to regulate'), available at http://ccsi.columbia.edu/files/2014/01/johnson_2012usmodelBIT.pdf, accessed 7 September 2013.

[42] 2005 IISD Model International Agreement on Investment for Sustainable Development PART 10: General Exceptions Article 49 National Security ('Nothing in this Agreement shall be construed: i) to require a Party to furnish or allow access to any information the disclosure of which it determines to be contrary to its essential security interests; or ii) to preclude a Party from applying measures that it considers necessary for the fulfillment of its obligations under the United Nations Charter with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests').

international instruments. For host states seeking environmental protection through IITs, the states can take the environmental measures against foreign investors without breaching treaty obligations as long as: (1) the protected environmental issues fall into the IIT's provisions regarding the exception (determined by the state); (2) the environmental measures are necessary (determined by the state). In this regard, a high level of flexibility is provided to host states to exercise the environmental regulatory power.

3.2. The determinants of the scope of exceptions matters

The evolution of security exception provision illustrates that the scope of a specific exception clause changes in the different frameworks. The conventional scope of security covers military, national and territorial defence, but it was expanded to terrorism after the 9/11 attack and even to the economy,[43] energy,[44] key technology and infrastructure[45] with the development of IIL. National security was understood as the 'ability to preserve the nation's physical integrity and territory', 'to maintain its economic relations with the rest of the world', 'to protect its nature, institutions and governance' and 'to control its borders'.[46] According to this view, the scope of national security is wide, including territorial security and border security, which are usually seen as the traditional security, and economic security which began to emerge in the 1980s when the dependence on oil and petroleum increased sharply.[47] Apart from the territorial, environmental and military matters, plague threat surfaced as a new security interest when the SARS and the H5N1 outbreaks occurred in 2005.[48] In addition, information and internet security have emerged among the top security concerns as a result of the development of IT-technology.[49] Generally, security matters in IITs are sensitive with strategic significance to the states. Theoretically, IITs can explicitly stipulate a security exception provision broadly, including all the security matters above; also, IITs can only recognize certain security matters, depending on the negotiations of the treaty parties; additionally, IITs can adopt national security or essential security without any concrete description but only stipulate that states can define these matters when they assume it to be necessary. All these circumstances reflect the extent to which IITs parties consent to protect the security interests. The first and second practice of an explicit definition of security exception may limit the scope of the application even though the first practice includes very

[43] Lalonde C., 'Dubai or Not Dubai?: A Review of Foreign Investment and Acquisition Laws in the US and Canada' (2008) 41 Vanderbilt Journal of Transnational Law 1478-1480.
[44] Sattorova M., 'International Investment Law, Renewable Energy, and National Policy-making: on `Green Discrimination, Double Regulatory Squeeze, and the Law of Exceptions' in Bjorkland A. and Litwin D. and others (eds), *Yearbook of International Investment Law & Policy* (Oxford University Press 2014) 41-44; UN State Council, "Security Council, in Statement, Says 'Contextual Information' on Possible Security Implications of Climate Change Important When Climate Impacts Drive Conflict" (UN Security Council, 20 July 2011) available at http://www.un.org/News/Press/docs/2011/sc10332.doc.htm, accessed 18 July 2014.
[45] Larson A. P. and Marchick D. M., *Foreign Investment and National Security: Getting the Balance Right* (Council Special Report, 2006) 26.
[46] Vasan M. and Watson C., *US National Secu*rity (2nd edn, ABC-CLIO 2002) 5.
[47] Mijalković S. and Milošević G., 'Correlation between Economic, Corporate and National Security' (2011) 8(2) Megatrend Review 437-454.
[48] Vasan and Watson (n 46) 8; Miller R. and Dowell S. F., 'Investing in a Safer United States: What is Global Health Security and Why Does It Matter?' (A Report of the CSIS Global Health Policy and Center 2012) 2.
[49] Reveron and Derek S, *Cyberspace and National Security: Threats, Opportunities, and Power in a Virtual World* (Washington: Georgetown University Press 2012) 36; Chad W., *Networks and National Security: Dynamics, Effectiveness and Organisation* (Farnham: Ashgate Publishing Ltd 2012) 46.

broad securities because the new interests outside of the listed scope may not be supported by investment tribunals. On the contrary, the last practice with no concrete explanation of security matters indicates a broader application of security which may further arouse the question of self-judging.[50]

In spite of the fact that states embrace different exception issues in domestic legislations and policies,[51] protecting and promoting foreign investments are the main reasons of states to conclude IITs and the protection of state interests through exceptions does not constitute the 'mainstream' of IITs.[52] As is discussed above, states' treaty practice varies towards whether exceptions are part of IITs, and towards how exceptions are formulated in IITs.

3.2.1. The scope of exceptions in IITs and the internal policies of host states

Different countries have different concerns that need to be preserved through exception provisions. In drafting the MAI, France and Germany tended to introduce the cultural exception to protect the domestic cultural industry, while the US proposed including the national security, governmental subsidy, governmental procurement, and the support of the ethnic minority into exceptions. The discrepancy of the content of exceptions constituted the key determinant accelerating the failure of the MAI negotiation.[53]

Although each state's regulatory space can be preserved at a maximum level through leaving the scope of exceptions to the hands of the states, different parties may have different explanations according to their own needs. For instance, measures protecting 'public infrastructure' constitute a form of security exception in both the US and the UK treaties, but it is comprehended as 'property, service and system' in the UK practice and 'property and system' in the US practice.[54] Environmental security became a new form of national security in the US when the country suffered from pollution in the Northeast region, water shortage in the West, drought, forest fires and hurricanes in the coastal regions since 2009.[55] But such situations may not exist in the other IITs party. In addition, each governmental organ in the US has a definition of national security subject to its own objectives[56] and national security encompasses a wide scope, including the security of the US citizens abroad, the security of obtaining

[50] The self-judging security exception suggests that it is the state, rather than any external court or tribunal that determines the elements of security. And states themselves decide how to preclude IIT's obligation and justify the governmental measures derogating IITs framework. Schill S. and Briese R., "'If the State Considers': Self-Judging Clauses in International Dispute Settlement" in Bogdandy A. V. and Wolfrum R. (eds), *Max Planck Yearbook of United Nation Law* (Koninklijke Brill 2009) 67-68.

[51] The OECD initiated a survey and found that 'public order in five national legal contexts (France, Germany, Italy, Switzerland and the United States) suggests that the term is well established within national legal settings. However, the meaning … varies widely among the five countries.' Organisation for Economic Co-operation and Development, *Security-Related Terms in International Investment Law and in National Security Strategies* (OECD 2009) 8-10.

[52] Organisation for Economic Co-operation and Development, *International Investment Perspectives: Freedom of Investment in a Changing World* (OECD 2007) 105.

[53] Liu S., 'Dilemma and the Way Out: Multilateral Framework for International Investment and the MAI' (2001) 5 China Legal Science 76; Picciotto (n 16) 766.

[54] OECD (n 51) 11.

[55] Vasan and Watson (n 46) 7.

[56] Ibid.

resources and even the security of other allied governments.[57] The national security practice in China demonstrates another picture. The measures arising from national security accommodate the politic, economy, foreign affairs, technology and education which are relevant to the military.[58] Unlike the US's practice, China's national security basically refers to the traditional national security issues, but the concerns over the environmental and plague matters have not been widely recognized as the national security matters in China.[59]

Given an IIT with exceptions provisions, the contracting parties' respective needs for exceptions can comprise either the reciprocal IIT exceptions involving both parties' interests or the IIT exceptions that only consider the concerns of one party. The China-Canada BIT 2012 stipulated a procedural exception to exclude the governmental review of foreign investments from the jurisdiction of investment arbitration.[60] For Canada, the scope of governmental review is limited to the Investment Canada Act (ICA), while the scope of governmental reviewing measures for China is broadly stipulated by the Law, Regulations and Rules. The regulatory flexibility included in the latter are clearly wider than what the ICA can embrace. Because the ICA granted only the federal government the reviewing power, what can be precluded from the review of international arbitration are the measures of this level of government.[61] However, the Law, Regulations and Rules of China are issued by both the National People's Congress and the People's central and provincial governments.[62] As a result, the reviewing measures by all these levels of governments will not be subject to the China-Canada BIT even though the measures prohibit or frustrate the Canadian investors. In the view of the different explanations of the same exception, the parties of an IIT would have to accept the 'uniqueness and non-reciprocity'.[63]

States' internal developments and demands influence the content of exceptions in their IITs. For instance, security exception has been changing to cater to states' commitments to prevent terrorism,[64] which constitutes an unconventional factor emerging only at the time when the global political/social/economic relation hastened the tension among nations or countries. Under the regime of IIL, the severity of terrorism in certain countries has developed to the level urging the states to embrace

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[57] Ibid 6.

[58] Article 2 of the National Defence Law of the PRC (issued on 14 August 1997 at the 5th Meeting of the 8th National People's Congress, entered into force on 14 August 1997).

[59] Zhou J. M. and Wang H. L., 'National Strategy, National Security and National Interests' (2002) World Economy and Politics 39.

[60] China-Canada BIT (n 4), Annex D.34. (1. A decision by Canada following a review under the Investment Canada Act, an Act respecting investment in Canada, with respect to whether or not to: (a) initially approve an investment that is subject to review; or (b) permit an investment that is subject to national security review; shall not be subject to the dispute settlement provisions under Article 15 and Part C of this Agreement. 2. A decision by China following a review under the Laws, Regulations and Rules relating to the regulation of foreign investment, with respect to whether or not to: (a) initially approve an investment that is subject to review; or (b) permit an investment that is subject to national security review; shall not be subject to the dispute settlement provisions under Article 15 and Part C of this Agreement).

[61] Harten G. V., 'The Canada-China FIPPA: Its Uniqueness and Non-reciprocity' (2014) 51 Canadian Yearbook of International Law 22.

[62] Wang Y. Q., *Basic Theories and System of Chinese Legislation* (China Legal Pressing House 1998) 79.

[63] Gaukrodger D. and Gordon K., 'Investor-state Dispute Settlement: A Scoping Paper for the Investment Policy Community' (2012) Organization for Economic Co-operation and Development Working Paper on International Investment No. 2012/3, available at http://www.oecd.org/investment/investment-policy/WP-2012_3.pdf, accessed 6 June 2013.

[64] OECD (n 51) 11.

security exceptions in IITs. Environmental and energy issues are becoming increasingly significant and they may fall within IITs exceptions as well. Since the National Security Law of the PRC was passed in July 2015, it is likely that the national security exception will be frequently prescribed in China's future IITs.[65] Therefore, the scope of exceptions varies not only in different states, but also in the same country in different periods.

States' international strategies vary, which also makes the practice on exceptions different in IITs. Policy makers of host states establish security policies that best reflect the political concerns of the governmental regime at that time, but such policies may change under a new regime.[66] Since some states can determine on their own whether and when it is necessary to take measures for the exceptions, the diversity may emerge easily. For instance, the transfer of technology is not included in all the states' security issues, especially in the countries demanding huge technology importation, but the situation may change in a technology importing state.

3.2.2. The scope of exceptions and the structure of investments

Different foreign investors impose different security threats on host states, which can also determine the scope of exceptions in IITs. A host state attracts foreign investors globally, especially in the process of the capital internationalization, but the increasing threat caused by the investments may lead to a broad exception provision in IITs. For instance, investors from one country may invest mainly in the form of state owned enterprises (SOEs)[67] and the fear of political influence from the SOEs is likely to turn into security concerns.[68] A typical example in practice is the sovereignty wealth fund (SWF),[69] which has attracted international attention because the way the investments are constructed incorporates the governmental and political considerations,[70] although the governmental background behind hardly has connection with the environmental exception in IITs. In a scenario in which most of the foreign investments in a state produce pollution, an environmental exception provision in IITs is likely to be adopted and such exception practice is therefore motivated directly by the foreign investments. The sectors in which foreign investors invest also determine the scope of exceptions in

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[65] Ministry of National Defence of the PRC, Law of National Security of the PRC, passed on 1 July 2015, entered into force on 1 July 2015, accessed http://www.mod.gov.cn/auth/2015-07/02/content_4592636.htm, accessed 1 September 2015.

[66] Jackson J. K., 'Foreign Investment and National Security: Economic Considerations' (2014) CRS Report for Congress (RL34561) 19.

[67] The leading power of SOEs in state capitalism is considered as a distinguishing characteristic in China because the SOEs have been dominating China's top 500 companies, but the capitalism in the countries such as Japan and Korea is led by private companies. See Huang Y., *Capitalism with Chinese Characteristics: Entrepreneurship and the State* (Cambridge University Press 2008) 280.

[68] SOEs develop generally depending on the political relations between the two countries and the reliance of the host state on the home market. See Duanmu J., 'State-owned MNCs and Host Country Expropriation Risk: The Role of Home State Soft Power and Economic Gunboat Diplomacy' (2014) 45 Journal of International Business 1057-1060.

[69] China Investment Corporation, a SWF, was established in 2007 to finance the large SOEs in China in order to expand the investment scale in international markets particularly in the sectors of finance and natural resource. The combination of SOE and SWF enhance the state's participation in international investment and intensify the fears of host states. See Chen W., 'Institutional Arbitrage: China's Economic Power Projection and International Capital Markets' (2013) 26(2) Columbia Journal of Asian Law 5.

[70] UNCTAD, *World Investment Report* (United Nation Conference on Trade and Development 2007)14.

IITs. The security concern may increase when the major foreign capital in a host state enters into the politically sensitive sectors of mining, oil and gas.[71]

3.3. The scope of the application of exceptions

The scope of exceptions also denotes the extent to which a specific exception applies in IITs. The 2008 German Model BIT did not have an individual provision on exceptions and it prescribed exceptions in the provisions of investment treatment.[72] Like the Germany Model, the 2013 Italy Model BIT did not provide a standalone provision for exceptions, but stipulated these matters in the expropriation provision in the forms of 'public purpose' and 'national interest'.[73] Such practice delineated a narrow application scope of security exception within the limited treaty provision(s), bringing the implications for tribunals that states' regulatory power should be read narrowly.

The inconsistency of exceptions' scope not only reflects the states' choice of treaty context, but also indicates the attitudes of treaty designers as to how a state is willing to exercise its regulatory power overriding its obligations in IITs. But this Chapter argues that the narrower scope of exceptions does not enhance the environmental considerations in IITs, neither does it improve environmental protection of the host state significantly, because tribunals are likely to adopt the narrowed interpretation of environmental-related provisions and restrict the protection of the environment. The majority of Chinese IITs consider no environmental factors and the only case of exceptions on public interests can be explored through the 'public benefits' in the typical expropriation provisions.[74] Such practice in the overwhelming Chinese IITs may lead tribunals to read environmental protection only when the dispute concerns expropriation. However, the disputes regarding the FET, NT and MFN treatments do not give rights to any consideration of host states' environmental interests and the legitimacy of environmental measures are not likely to be taken into account in arbitration.

This Chapter proposes that environmental exception be prescribed either in 'general exceptions' or as a stand-alone 'environmental exception' in IITs in order to extend the scope of its application. It is acknowledged that states can choose to narrow environmental issues within a limited scope, or to

[71] A survey has illustrated that in the countries where energy import dependence is high, energy security is severe but they have lower levels of concern for the environment, efficiency and social-welfare. But for the states with low energy import dependence, strong concern for environment tends to be encouraged. Knox-Hayes J. and others, 'Understanding Attitudes toward Energy Security: Results of a Cross-national Survey' (2013) 23 Global Environmental Change 620; Hence, an energy security exception seems to develop with different paces from environmental exception in states' regimes. Accordingly, where energy security is uncritical, the concerns over foreign investment in the energy sector are lowered, but countries like China, which has a heavy reliance on energy imports, pay more attention to energy security and impose more restrictions on foreign investment in energy.

[72] Germany Model BIT (2008) Article 3 National and most-favoured-nation treatment ('Measures that have to be taken for reasons of public security and order shall not be deemed treatment less favourable within the meaning of this Article').

[73] Ibid., Article 5.2 (Investments and the activities connected with an investment of investors … shall not be, *de jure* or *de facto*, directly or indirectly, nationalized, expropriated, requisitioned or subjected to any measures having an equivalent effect, … except for public purpose or national interest).

[74] E,g., China-Germany BIT 2003 Article 4 (Investments by investors of either Contracting Party shall not directly or indirectly be expropriated, nationalized or subjected to any other measure the effects of which would be tantamount to expropriation or nationalization in the territory of the other Contracting Party … except for the public benefit and against compensation).

exclude such matters in order to attract foreign capital through the 'race to bottom',[75] but sustainable international investments will not be achieved. Environmental exception is not widely used as a standalone exception, but the security exception has been formulated as a parallel exception with IITs' general exceptions and it has been explored by arbitrations.[76] In order to propose a way in which an environmental exception is demonstrated in IIL, the experience of security exception can be referred to.

4. A broad environmental exception provision in IITs for host states' environmental protection

In order to maximize the environmental benefits and improve the significance of environmental considerations in IITs arbitration, this Chapter proposes the establishment of a broad environmental exception provision in IITs. As the treaty practice lacking the clause for public interests constitutes a main ground causing the imbalance of IIL, it is a fundamental way to build the balance through treaty-making.

The wider environmental exception provision in IITs reflects the intention of exceptions in treaty-making to confine the protection for foreign investors and to embrace more regulatory space of host states. The experience of security exception is used in this Chapter to provide illustrative hints as to how this form of exception has been expanded in arbitration. One function of an environmental exception provision is to exclude the governmental measures from being claimed of treaty violation. A narrow environmental exception cannot justify the new forms of environmental measures, especially in the states where the environmental regime performs with frequent adjustments. From China's recent unstable practice of the exceptions in market access of foreign investments, it demonstrates the necessity of broad exception provisions, so that the domestic needs for environmental protection can be accommodated in IITs without otherwise violating treaty obligations. This part examines the environmental exception practice in recently concluded IITs by China, revealing the latest development of the scope of environmental exception provisions and proposing the future direction of these provisions.

4.1. Expanding the scope of environmental exception: referring to the experience of security exception in arbitration

The security exception issue constitutes one of the main challenges Chinese overseas investors have confronted with especially in the US. National security issues have frustrated Chinese investors,

[75] Johnson L. and Sachs L., 'International Investment Agreements, 2013: A Review of Trends and New Approaches' in Bjorklund A. K. (eds), *Yearbook on International Investment Law and Policy, 2013-2014* (Oxford University Press 2015) 41. ('Competition for investment spawning race to the bottom … may give rise to increased use of non-derogation provisions such as theses that broaden their focus beyond merely environmental and labour policy').

[76] Romson Å., *Environmental Policy Space and International Investment Law* (Acta Universitatis Stockholmiensis 2012) 303. ('There are no examples where the whole area of environmental policies is excluded from the investment protections obligations in the same way as culture or national security').

including the CNOOC, CATIC, Huawei and Sany.[77] During 2010 and 2013, more than 60 Chinese investment projects had suffered from security review in the US, which significantly changed the investment strategy of Chinese investors.[78]

4.1.1. Security concerns and the *Ralls* case

The claimant *Ralls* is a corporation registered in Delaware, USA, the owners of which are Duan Dawei and Wu Jialiang (the Chief Financial Official and Vice Manager respectively of a Chinese private enterprise, Sany Group).[79] Hence, *Ralls* can be considered as an affiliated company with the Sany Group. Investing in wind farms in the US, *Ralls* promoted the wind power generators produced by the Group. In 2012, *Ralls* attempted to acquire four wind farms in the US from a Greek owner Terna Company.[80] The acquisition plan was expected to come into force at the end of 2012 with an estimated revenue of 6 million US dollars and 8 million US dollars in the first two years.[81] However, some windmills were located in a military restricted area in the US, although the windmills from the German, Indian and Danish investors were also constructed within the same area.[82]

On 25 July 2012 and 2 August 2012, the CFIUS (Committee on Foreign Investment in the United States) initiated two orders to prohibit *Ralls'* acquisition because of the threat to national security. According to the orders, the four Greek companies, Ralls, and its subsidiaries, Sany, Duan and Wu were required to:

> Immediately cease all construction and operations at the Butter Creek project sites; Remove all stockpiled or stored items from the sites no later than July 30, 2012, and not deposit, stockpile, or store any new items at the project sites, any "lay down site," or any location closer to the restricted airspace than the furthest "lay down site"; Immediately cease all access to the project sites, except that US citizens contracted by the companies and approved by CFIUS may access the site solely for purposes of removing items in compliance with the order; Refrain from "sell[ing] or otherwise transfer[ring] or propos[ing], or otherwise facilitate[ing] the sale or transfer" of any items produced by Sany to any third party for use or installation at the project sites; Refrain from completing a sale or transfer of the Butter Creek project companies or their assets to any third party until all items on the properties have been removed, the companies notify CFIUS of the intended recipient or buyer, and the companies do not receive an objection from CFIUS within 10 business days of notification.[83]

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[77] For the details of the failure of the investors in the US because of security issues, see Chen X. F. and Liu Q. J., 'Chinese Investments and US National Security Review: Dilemma and Breakthrough' (2013) 17 Commercial Economy Research 73.
[78] Jiang Q. L. and Bi J. S., 'CFIUS Review, the Uncertainty and the Influence on Chinese Investors' (2013) 12 International Petroleum Economics Monthly 39.
[79] *Ralls Corporation v. Committee on Foreign Investment in the United States, et al.*, Amended Memorandum Opinion of 26 February 2013, United States District Court for the District of Columbia, Civil Action No. 12-1513 (ABJ) 5 (*Ralls* thereafter).
[80] Ibid 5-6.
[81] Time Weekly, Ralls sued Obama, 25 October 2012, available at http://time-weekly.com/story/2012-10-25/127525.html, accessed 10 November 2013.
[82] *Ralls* (n 79) 6.
[83] Ibid 7, 8.

Further on 28 September 2012, President Obama issued a Presidential Order revoking CFIUS' orders above. At the same time, the Presidential Order confirmed that:

> [T]here is credible evidence that leads the President to believe that Ralls and its subsidiaries, the Sany Group, Duan, and Wu, through exercising control of the four Butter Creek project companies 'might take action that threatens to impair the national security of the United States'. However, without further elaboration on more findings, the Presidential Order decreed: The Terna-Ralls transaction is prohibited, and ownership of the Butter Creek project companies by Ralls, its subsidiaries, Sany (collectively, 'the companies'), Duan, or Wu is prohibited, whether directly or indirectly through owners, subsidiaries, or affiliates; In order to effectuate this order, within ninety days, Ralls shall divest all interests in the Butter Creek project companies, their assets, and any operations developed, held, or controlled by them; Within fourteen calendar days of the order, the companies are required to remove all structures or other physical objects or installations from the project sites and any alternate sites.[84]

Ralls' investment plan were not implemented because of the Order and therefore it initiated a lawsuit against the CFIUS and Obama in the United States District Court of Columbia. *Ralls'* claims included:

> The Defendants' measures constitute the Violation of the Administrative Procedure Act through Exceeding Statutory Authority by Prohibiting Transaction and Regulating Foreign Trade; the Defendants' measures amount to the Violation of the Administrative Procedure Act through Arbitrary and Capricious Agency Action; the Defendants' measures amount to the Unconstitutional Deprivation of Property Without Due Process.[85]

On 26 February 2013, the Court reached a decision that *Ralls'* claims are 'moot' and therefore granted the defendants' motion to dismiss most of Ralls's claims. However, the Court accepted the claim that the Presidential Order violates the due process requirement by depriving *Ralls* of property without providing adequate opportunity to be heard and adequate explanation.[86] It is therefore considered as the first case in history of Chinese investors suing the CFIUS, in which a US court accepted some motion of Chinese investors. This case also provides experience for other Chinese investors as how to protect their rights in the US.[87] Winning or not, the *Ralls* company has already made a benchmark progress from which future Chinese investors can learn and benefit.[88]

In October 2013, the Claimant was dismissed by the Court for the reasons that:

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[84] Ibid.
[85] *Ralls* (n 79) 9-21.
[86] Ibid 42, 43.
[87] Xin Hua News, 'The case of *Ralls v. US President and the CFIUS* Received Significant Progress', news of 2nd March 2013, available at http://news.xinhuanet.com/, accessed 6 June 2014.
[88] Sun B. Y., 'The Legal Case of Sany Group v. US is Accepted by US Court' (People's News, 2 March 2013) available at http://finance.people.com.cn/n/2013/0302/c153180-20654139.html, accessed 16 July 2013; Finance Global, 'Sany Group Raised a Lawsuit against Obama' (Finance Global, 19 October 2012) available at http://finance.huanqiu.com/special/sy/, accessed 19 July 2013.

> [T]he Court concludes that … do not require the President to provide to Ralls the "credible evidence" on which his determination was based. Before any alleged deprivation of its property interests, Ralls received all of the fundamental requirements of due process: notice of the impending action and an opportunity to be heard, appropriate to the nature of its case. … Ralls's contention that it was entitled to be informed of the specific grounds for the President's decision is not supported.[89]

In the *Ralls* case, the Chinese investor lost the possibility to redress its investments in front of the US Presidential Order. And it is noteworthy that the findings and evidence behind the national security assessment were not reviewed by the court because the Order is immune from judicial review in the domestic jurisprudence.

4.1.2. Redress Ralls of national security challenges by a future China-US BIT security exception provision

Although the *Ralls* case has been identified as the first case initiated by foreign investors against the CFIUS since its establishment in 1950,[90] such a 'historical victory' came to naught because of the Amended Memorandum Opinion[91] by the district court of Columbia, causing the premise of *Ralls* to be unsuccessful in the US domestic court.

FDI outflow growth from China has accelerated and the US is one of the main destinations.[92] When stepping into a new market, Chinese investors face higher risks due to the national security review, which in turn calls for further protection from international law. However, no valid BIT is available between the countries, and the decision-making in domestic court will continue creating risks for Chinese investors.[93]

A China-USA BIT is being negotiated and some breakthrough has been reached in the form of 'negative list'.[94] If and when the treaty enters into force, transnational investments between China and the US will be subject not only to the municipal instruments but also to the treaty. In this regard, it remains to be seen how the tribunals will examine the municipal security matters under the treaty regime. The forthcoming China-US BIT may confront the conflicts of the domestic security in China and in the US. In addition, the BIT is expected to coordinate such conflicts through a security exception provision. The following questions will thus emerge: how will the internal security issues be reviewed in the future BIT? Is it possible that a 'finality act' such as a Presidential Order is adopted as a disguised tool to achieve discrimination? Answers to these questions rely on the scope of security

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[89] *Ralls* (n 79) 28-29.
[90] Chen Yuming, 'Sany Group Won Significant Development in the Lawsuit of Ralls Corporation v. Committee on Foreign Investment in the United States' (Xinhua News, 2 March 2013) available at ahttp://news.xinhuanet.com/world/2013-03/02/c_114863294.htm, accessed 26 July 2013.
[91] *Ralls* (n 79) 28-29.
[92] Cheng L. K. and Ma Z. H., 'China's Outward Foreign Direct Investment' in Feenstra R. C. and Wei S. J. (eds), *China's Growing Role in World Trade* (University of Chicago Press 2010) 546.
[93] E.g. the fears of national security threats from Chinese investors remain among the US Congress since the CNOOC's failure to purchase Unocal. As a result, the role of the CIFUS is enhanced in scrutinizing the foreign investments, especially those from China. Graham E. M. and Marchick D. M., *US National Security and Foreign Direct Investment* (Institute for International Economics 2006) 95-121.
[94] The US-China Business Council, Briefing on Bilateral Investment Treaty Negotiations with China, available at http://www.uschina.org/events/briefing-bilateral-investment-treaty-negotiations-china, accessed 26 June 2014.

exceptions in the BIT because the 'negotiation compromise' in the form of security exception provisions determines the space of the states to protect their security interests beyond the protection of foreign investors. In this respect, what regulatory space is left for China and the US respectively for security reasons, will be reflected and the national security challenges encountered by *Ralls* may have a chance to be reviewed. However in the current judgment, the US domestic Court in the *Ralls* case has not provided answers to: (1) what is the national security concern in this case; (2) How did Ralls threaten the national security. But the Chinese investor may have the chance to know these answers under the future BIT regime.

Chinese investors have to know the answers to the questions above before investing in the US to minimize their risks. As a treaty party, China should also comprehend the above questions to ensure that an investment treaty is not simply a copy of the Model BIT from other states. Furthermore, it is important for the US to identify the problems arising from the questions so that the FDI outflows from China can reach a maximum effect on the US economy and society.

4.1.3. Expanding the scope of the security exception: arbitration evidence

The tribunals in the cases of *CMS v. Argentine, Enron v. Argentine and LG&E v. Argentine* and *Continental v. Argentine*[95] focused on essential security interest and all the tribunals confronted with the question under the similar background of Argentina economic crisis from 2001 to 2002: whether the economic issues can be construed as a form of security exception?[96] Put another way, it is necessary for the tribunals to determine whether the scope of security exception should be expanded broadly to include the economic crisis. The answers to this question have implications to reveal tribunals' attitude towards the scope of exceptions.

Argentina refused to accept liability in the disputes because of the severe economic and social crisis, based on Article XI of the US-Argentina BIT[97] which stipulated that: this BIT shall not preclude the application by either Party of measures necessary for the maintenance of public order, the fulfilment of its obligations with respect to the maintenance or restoration of international peace or security, or the Protection of its own essential security interests.[98] However, different tribunals reached different conclusions, coupled with diverse reasoning.

4.1.3.1.CMS v. Argentina

[95] See *CMS Gas Transmission Company v. Argentine Republic*, Award of 12 May 2005 (ICSID Case No.ARB/01/8) (*CMS*); *LG&E Energy Corp., L&E Capital Corp., LG&E International Inc v. Argentine Republic*, Decision on Liability of 3 October 2006 (ICSID Case No.ARB/02/1) (*LG&E*); *Enron Corporation Ponderosa Assets, L.P. v. Argentine Republic*, Award of 22 May 2007 (ICSID Case No.ARB/01/3) (*Enron*); *Continental Casualty Co. v. Argentine Republic*, Award of 5 September 2008 (ICSID Case No.ARB/03/9) (*Continental*).

[96] The financial crisis and the security exception issues emerging from the cases were hardly explored under IIL. Kurtz J., 'Adjudging the Exceptional at International Law: Security, Public Order and Financial Crisis' (2010) 59(2) International and Comparative Law Quarterly 326.

[97] Treaty between United States of America and the Argentine Republic Concerning the Reciprocal Encouragement and Protection of Investment, concluded on 14 November 1991, entered into force on 20 October 1994.

[98] Ibid Article XI, available at http://unctad.org/sections/dite/iia/docs/bits/argentina_us.pdf, accessed 18 April 2014.

The *CMS v. Argentine* case was brought to the ICSID in 2001 but the Enforcement Decision by the US Court of Appeals was not reached until 2013.[99] This dispute occurred between the US Claimant, CMS Gas Transmission Company, and Argentina.[100] Against the economic crisis, Argentina terminated the Claimant's right to calculate tariffs in US dollars and the right to make inflation adjustments, which right had been granted to the Claimant by Argentinean law before the crisis.[101]

Relying on Article 25 of the International Law Commission Articles on State Responsibility and Article 11 of the US-Argentina BIT, Argentina asserted that the governmental measures terminating the Claimant's rights were to safeguard the 'essential security interests' of Argentina, thus should be precluded from state liability.[102] However, the tribunal rejected Argentina's defences.

The tribunal firstly examined the object and purpose of the treaty, concluding that some treaties are designed to include an emergency precisely, but the US-Argentina BIT was designed to protect international investment even when economic crisis occurs[103] and 'this particular kind of treaty is also of interest to investors as they are specific beneficiaries and for investors the matter is indeed essential'.[104] That is, an explicit intention of protecting foreign investments against the emergency should be embodied in the investment treaties before tribunals can protect investments over the emergencies.

Furthermore, the tribunal concluded that the economic crisis was not severe enough to equal 'a situation of total collapse' and only the 'total breakdown of the economy' can lead to 'a different meaning'.[105] The tribunal suggested that a state is able to safeguard its interests beyond foreign investment under emergency, but the key issue is how severe the emergency is.

As a result, the tribunal maintained that:

> [A]s stated above, the Tribunal is convinced that the Argentine crisis was severe but did not result in total economic and social collapse. When the Argentine crisis is compared to other contemporary crises affecting countries in different regions of the world it may be noted that such other crises have not led to the derogation of international contractual or treaty obligations. Renegotiation, adaptation and postponement have occurred but the essence of the international obligations has been kept intact.[106]

The *CMS* tribunal rejected Argentina's argument that the disputed measures were necessary to safeguard the essential economic security, not because the economic issues are not contained in the

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[99] See the *Blue Ridge Investments, L.L.C., v. Republic of Argentina*, decided by the United States Court of Appeals for the Second Circuit of 19 August 2013 (Docket No. 12-4139-cv).
[100] *CMS* (n 95) 10-59.
[101] Ibid 60-66.
[102] Ibid 332-360.
[103] Ibid 353,354.
[104] Ibid 358.
[105] Ibid 354.
[106] Ibid 355.

treaty context of security exceptions, but because the economic crisis in question did not meet the requirements of necessity[107] from both international customary law and the treaty in question.[108]

4.1.3.2.Enron v. Argentina

The *Enron v. Argentine* case was brought to the ICSID in 2001 with an award rendered in 2007. This case concerned two claimants, the *Enron Corporation* and the *Ponderosa Assets L.P.*, both of whom were the US investors investing in gas transportation in Argentina in the early 1990s.[109] Against the economic crisis from 2001 to 2002, Argentina eliminated the Claimants' right to calculate tariffs in US dollars and the right to receive semi-annual adjustments of tariffs according to the US Producer Price Index, which rights had been expected to last until 2027.[110] In view of the diminished value and earnings of the company, the Claimants claimed under the 1991 US-Argentina BIT that Argentina had violated the FET standard, full protection and security and umbrella clause.

Pleading exemptions from state liability, Argentina adopted the severe economic crisis as a defence from the perspectives of domestic law, customary international law and the BIT in question.[111] Argentina demonstrated the severity of the crisis from the GDP, consumption, investment, unemployment and even the health and social policies of the country, concluding that Argentina was in such an emergency that the government's measures were reasonable.[112]

Applying the Articles on State Responsibility in the context of customary international law, the tribunal denied the severity of the crisis, concluding that:

> The argument that such a situation compromised the very existence of the State and its independence so as to qualify as involving an essential interest of the State is not convincing' because 'the government had the duty to prevent the worsening of the situation and … there is no convincing evidence that the events were out of control or had become unmanageable.[113]

Furthermore, the tribunal found 'there are always many approaches to address and correct such critical events, and it is difficult to justify that none of them were available in the Argentine case'.[114] According to these findings, the tribunal maintained that the emergency was not established.[115]

To sum up, the *Enron* tribunal rejected Argentina's defence of economic crisis under essential security exceptions, but not for the reason that 'economic crisis is excluded from the scope of essential security'. Indeed, the tribunal recognized the expert opinion of Professor Alvarez that ''essential security/public

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[107] Ibid.
[108] Ibid 359, 360. ('While the text of the Article does not refer to economic crises or difficulties of that particular kind, … there is nothing in the context of customary international law or the object and purpose of the Treaty that could on its own exclude major economic crises from the scope of Article XI) because otherwise it would 'well result in an unbalanced understanding of Article XI').
[109] *Enron* (n 95) 42, 43.
[110] Ibid 71-79.
[111] Ibid 288.
[112] Ibid 289, 290.
[113] Ibid 306, 307.
[114] Ibid 308.
[115] Ibid 313.

order clause does not apply to 'economic crisis', except in the most extraordinary and so far unprecedented circumstances''.[116] However, the tribunal upheld that nothing would prevent an interpretation, allowing for the inclusion of economic emergency in the context of Article XI, even though it did not support the self-judging character of the security exception.[117] It is thus inferred from the *Enron* case that essential security exception was expanded to include economic issues, although they were not prescribed explicitly in the US-Argentina BIT.[118]

4.1.3.3.LG&E v. Argentina

Although the tribunals in the *CMS* and *Enron* cases did not exclude economic issues from essential security exceptions, they did not exempt Argentina's liability. On the contrary, the *LG&E* tribunal justified Argentinean measures under the essential security exceptions.[119]

The *LG&E v. Argentine* case was brought to the ICSID by three US investors investing in gas distribution in Argentina. Similar to the background in the *CMS* and *Enron* cases, the claimants in the *LG&E* case underwent the 2001 Argentina economic crisis and were deprived of the right to receive tariffs calculated in US dollars and the right to adjust tariffs semi-annually.

The Respondent defended itself by invoking the Article XI of the US-Argentina BIT.[120] Argentina realized the shift of the US position on 'who should determine … if the measures to maintain essential security interest are necessary'.[121] In the US 1987 Model BIT, the US did not clarify its position, but after the 1991 US-Argentina BIT, in 1992 US stated that the provisions are self-judging. However, the tribunal concluded that the security issues are not self-judging because:

> [T]he provisions included in the international treaty are to be interpreted in conformity with the interpretation given and agreed upon by both parties at the time of its signature, unless both parties agreed to its modification.[122]

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[116] Ibid 328.
[117] Ibid 332.
[118] It is noteworthy that the inclusion of new issues into essential security must meet with strict procedural requirements, as emphasized in the *Enron* case. For instance, the tribunal realized an expert opinion by Dean Slaughter: 'the position of the United States has been gradually evolving towards the support of self-judging clauses in respect of national security interests and some bilateral investment treaties reflect this change, albeit not all of them. Yet, this does not necessarily result in the conclusion that such was the intention of the parties in respect of the Treaty here relevant. Truly exceptional and extraordinary clauses such as a self-judging provision normally must be expressly drafted to reflect that intent'. Upon this conclusion, the tribunal further pointed out that 'what is relevant is the intention the parties had in signing the Treaty and this does not confirm the self-judging interpretation. Even if this interpretation were shared today by both parties to the Treaty, it would still not result in a change of its terms. States are of course free to amend the Treaty by consenting to another text, but this would not affect the rights acquired under the Treaty by investors or other beneficiaries.' Hence, on the one hand, the intention to add new issues into essential security should be clear; on the other, even the contemporary mutual intention of the BIT parties cannot affect the agreement signed by the same parties in the past. Ibid 335, 337.
[119] *LG&E* (n 95); Waibel M., 'Two Worlds of Necessity in ICSID Arbitration: *CMS and LG&E'* (2007) 20 Leiden Journal of International Law 637–639; Christine M., *States of Necessity as an Exemption from State Responsibility for Investment* (Max Plank UNYB 2009) 460.
[120] *LG&E* (n 95) 203-208.
[121] Ibid 209.
[122] Ibid 213.

In that case, the date to be considered is November 1991 but it is not until 1992 that the US began to recognize the self-judging character of essential security.[123]

Although the *LG&E* tribunal denied the character of self-judging of security exceptions in the 1991 US-Argentina BIT, the new development of the positions of the US towards self-judging presents the significance to this Chapter. In view of the self-judging character of the security exceptions in the later BITs (e.g. after 1992), the US owns more space to decide the content of security exceptions according to the economic, social, political and military needs. In this regard, it is reasonable to imagine a scenario where, for instance, energy security is to be involved with security exceptions when a host state considers energy as part of its national strategic development.[124] In this situation, foreign investments would encounter more risks and uncertainties on the one hand, and the balance among different states is difficult to maintain on the other. For instance, under a BIT signed by country A and country B, A might add energy safety into essential security because it considers it necessary; while B does not. Then, the 'exceptions basket' of country A may outweigh the 'exceptions basket' of country B because the margin of appreciation for the scope of exceptions differs in the two states. The 'non-reciprocity' would then be created, like the China-Canada BIT.[125]

Argentina held that the economic stability 'falls within a State's essential security interests' because '… during the crisis period, the health, safety and security of the Argentine State and its people were threatened, and that the economic melt-down had the potential to cause catastrophic state failure'. Hence, Argentina argued that 'financial arrangements were necessary to protect the State's essential security interests'.[126] After examining all the evidence, the tribunal reached the conclusion: '[E]xtremely severe crises in the economic, political and social sectors reached their apex and converged in December 2001, threatening total collapse of the Government and the Argentine State' from Argentina's Gross Domestic Product (GDP), private consumption, capital flow, unemployment, poverty and indigency rates.[127] With such findings the tribunal reached the conclusion that 'it was necessary to enact measures to maintain public order and protect its essential security interests'.[128]

Like the analysis of the *CMS* and *Enron* cases, economic issues in the *LG&E* case were not explicitly embodied in the US-Argentina BIT essential security exceptions. However, the *LG&E* tribunal's positions differed as follows:

> The Tribunal rejects the notion that Article XI is only applicable in circumstances amounting to military action and war. Certainly, the conditions in Argentina in December 2001 called for immediate, decisive action to restore civil order and stop the economic decline. To conclude that such a severe economic crisis could not constitute an essential security interest is to diminish the havoc that the economy can wreak on the

[123] Ibid.
[124] Sattorova (n 44).
[125] China-Canada BIT (n 4), Annex D.34.1.
[126] *LG&E* (n 95) 219.
[127] Ibid 226-242.
[128] Ibid 226.

> lives of an entire population and the ability of the Government to lead. When a State's economic foundation is under siege, the severity of the problem can equal that of any military invasion.[129]

It is reaffirmed that the pivotal element in essential security exception is the severity, rather than the content of security matters. And more situations than economic crisis can be introduced into security exceptions, given that the severity requirement is met.

4.1.3.4.Continental v. Argentine

The *Continental* case was another case expressly supporting the inclusion of economic crisis into essential security exceptions. The disputes in this case arose between an insurance company and Argentina in which the free transfer of capital and the rights to adjust the exchange rate between peso and US dollars were involved.

The tribunal focused on the severity of the economic crisis, but first of all confirmed that the economic emergencies constitute an essential security in the BIT in question. In order to introduce economic crisis into the content of security exception, the tribunal recalled the international law that 'states should be able to exercise the sovereignty in the interest of their population free from internal as well as external threats to their security and the maintenance of a peaceful domestic order'.[130] Further, the tribunal referred to a speech of US President ('it is well known' that in the international new order after the World War II, international security 'was intended' to include political, military and economic securities), the UN Charter (purposes of UN 'to achieve international co-operation in solving international problems of economic, social, cultural, or humanitarian character), Agreement of International Monetary Fund and the commentary by the International Law Commission, which all upheld the inclusion of economic emergency in national security.

The tribunal did not support the Claimant's 'restrictive view' of security exception[131] but adopted a broad description instead. Recognizing that the previous tribunals had differing attitudes towards the severity of the Argentina's economic crisis, the *Continental* tribunal restated the arbitration precedents that 'there is nothing in the context of customary international law or the object and purpose of the treaty that could on its own exclude major economic crises from the scope of Article XI'.[132]

Since environmental exception constitutes a form of exception, the scope of such an exception should also be widely explored by the future tribunals because the arbitration practice on security exception above has supported the expansion of the scope and content of exceptions. Economic crisis became one member of security exceptions not long ago, indicating that the scope of security exceptions is not frozen. It is thus rational to indicate that more space should be provided in arbitration for a broader scope and application of the environmental exception.

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[129] Ibid 238.
[130] *Continental* (n 95) 175.
[131] Ibid 177.
[132] Ibid 178.

On the basis of the investment cases above, this Chapter argues that IITs should introduce an environmental exception provision, to widely apply across the entire treaty. Not only should the application scope be broadly adopted to exclude all the treaty obligations, but also the content of the environmental issues should be interpreted broadly to include the new environmental concerns. The tribunals above have demonstrated their positions that it is possible to expand exceptions even when the IITs do not leave such space explicitly. This position is positive to both the future IITs-making and the reform of the municipal policies on foreign investments. For the IIL, appropriate space can be left for tribunals for the expansion of exceptions; for the domestic law-making, new emergencies can be included without the worries that the emergencies will fall out of treaty exceptions. For the states in transition (such as China), the policies on foreign investment are particularly changeable[133] and the current and emerging exception practice will change as well in order to complete the social and economic reforms. The broad interpretation of exceptions to some extent accepts the domestic instabilities and improves the efficiency of domestic reforms. Based on the existing domestic practice of exceptions on foreign investments, the next section will explore how the domestic practice in China is facilitating the needs for broad exception provisions in IITs.

4.2. The internal need for a broad environmental exception in IITs: China's domestic practice of regulating foreign investments

Domestic instruments in China focus on the entry requirements through the Directory of Guidance for Foreign Investment (DGFI), which has been revised with 6 versions until 2015. The DGFI stipulated the encouraged, restricted and prohibited sectors for foreign investments through which China controls the capital flows and the structure of foreign investments in certain sectors.[134] With the establishment of the Free Trade Zones (FTAs) in China since 2013, the control over investment entry in these regions has been achieved in the form of Negative List (NL), in which foreign investments are excluded from China. Both the DGFI and the NL can be considered as a form of exception at the pre-establishment stage and they are experiencing drastic changes, so that the government can find an appropriate way to regulate foreign investments while at the same time preserve the states' interests.[135] Although the number of such pre-establishment exceptions is reducing in general,[136] it reflects China's domestic

[133] E.g. the Negative Lists for foreign investment in Shanghai FTZ have undergone the 2013 version and 2014 version. The 2015 version has been issued by the State Council of the PRC, applying in all the FTZs in China including Shanghai FTZ. A 2018 version has been planned at the 16th Meeting of China Leading Group for Comprehensively Deepen Reforms on 21 September 2015. That is, from 2013 to 2018, at least 4 versions of negative lists will be amended. See 'China will Promote and Enforce Negative List for Market Entry' (Beijing, 22 September 2015), available at http://www.sccwto.org/webpages/WebMessageAction_viewIndex1.action?menuid=8d5c96d912c643df834c0c09fa1fba22&id=dd51f46c-4429-4cd0-97b3-c72bcd775fe6, accessed 28 September 2015.

[134] E.g. the prohibited sector excludes foreign investments while the restricted sector requires that foreign capital in the investment structure should not exceed certain levels. The 'exploration and extraction of rare coal require Chinese capital to reach a minimum 51% of the investment share.

[135] The negative list in Shanghai FTZ seeks to find a balance between attracting foreign investment and protecting China's benefits and such practice is also considered as the preparation and pilot-test for China's pre-establishment exception in its future IITs. Huang J., 'Challenges and Solutions for the China-US BIT Negotiations: Insights from the Recent Development of FTZs in China' (2015) 18 Journal of International Economic Law 337-339.

[136] The 2011 DGFI covered eleven main sectors with 38 sub-sectors. Section one, prohibited industries of the *2011* Catalogue of Guidance for Foreign Investment of People's Republic of China (promulgated on 24th December 2011 by the Ministry of Commerce and the National Development and Reform Committee of People's Republic of China (available at http://www.gov.cn/flfg/2011-12/29/content_2033089.htm); focusing on the foreign investments out of the FTZs in China, the 2011 DGFI was amended in 2015 and the new DGFI reduced

need to screen foreign investments. In order to leave space for the internal needs, this Chapter argues that the broad exception provisions in IITs should also cover the pre-establishment stage.

4.2.1. Pre-establishment exceptions in the DGFI

With regard to the energy industry, foreign investments in the exploration and extraction of rare earth[137] and radioactive ore, foreign investment in the exploration and extraction of wolfram, molybdenum, tin, antimony and fluorite are prohibited in the 2011 DGFI.[138] These entry exceptions excluded the possibility to establish any form of foreign investments in these sectors. In addition, foreign investments in the exploration and extraction of scarce coal are restricted and Chinese capital should suffice to control the company established for the purpose of such investments.[139]

In the sector of mining, the prohibited investments were the same in the 2011 and 2015 DGFI. However, the number of restricted investments decreased and the restriction was cancelled in the exploration and extraction of barite, diamond, high-alumina refractory clay, wollastonite, phosphate rock, sulfur iron, salt brine, szaibelyite, boron magnesium ore, lapis lazuli, sea manganese nodules, and sea sand.[140] The most important development of the 2015 DGFI was that only the People's Congress and the State Council are granted the authority to construe the scope of the prohibited and restricted foreign investments.[141]

The changes in the two versions of DGFI reflect that China is seeking to minimize the pre-establishment exceptions while retaining the regulatory power in certain sectors. The reduced authority of the local governments to preclude foreign investments demonstrated that China is balancing not only investors and state, but also the IITs and the domestic instruments.[142] In the meanwhile, China introduced certain new exceptions in the 2015 DGFI, illustrating that the pre-establishment exceptions are not stable in China's exploration for an appropriate practice to regulate foreign investments. Such a practice also reflects that attracting foreign capital is not the only aim of domestic investment laws and policies in China. Instead, China's interests are increasingly reflected in its investment policies. For the consideration of the changing exceptions through the DGFI

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restrictions in 41 sub-sectors and prohibitions in 2 sub-sectors for the entry of foreign investment. National Commission of Development and Reform of the PRC, Ministry of Commerce of the PRC, 2015 Directory of Guidance for Foreign Investment of PRC (2015 DGFI), issued on 10 March 2015, entered into force on 10 April 2015.

[137] Rare earth, or 'industrial gold', is used in missile, war craft, tank and other military equipment. A state's military security and defence might be affected when the exploration and extraction of rare earth are predominately controlled by foreign investment.

[138] The 2007 version has been replaced by the 2011 version.

[139] 2011 Catalogue of Guidance for Foreign Investment of People's Republic of China (promulgated on 24th December 2011 by the Ministry of Commerce and the National Development and Reform Committee of People's Republic of China) available at http://www.gov.cn/flfg/2011-12/29/content_2033089.htm, accessed 12 September 2014.

[140] See Chapter II, Article 2 of the 2015 DGFI.

[141] In the 2011 DGFI, the 'special rules or industrial policies of the State Council' can increase or cut restrictions and prohibitions on the entry of foreign investments. But such a provision was deleted in the 2015 DGFI.

[142] It remains unclear as how to coordinate the inconsistency in IITs and domestic instruments. For instance, the China-Canada BIT granted Chinese Central and Provincial Governments the right to exclude foreign investments at the pre-establishment stage. But the new 2015 DGFI cut part of this regulatory power. Such inconsistency is a result of China's effort to reduce governmental restrictions on foreign investment. Once a provincial government bans an investment, it will be justified by the exception in the IIT while it does not comply with the domestic investment regulation.

and the NL, the design of IITs exceptions has to be farseeing. This Chapter therefore argues that broader exceptions can accommodate such ups and downs in domestic regime because otherwise the newly added exceptions in domestic instruments will fall out of the narrow exceptions in IITs and may not be reflected under international regimes.

4.2.2. Pre-establishment exceptions in the NL of China[143]

Unlike the 2011 DGFI which categorised the encouraged investment, restricted investment and prohibited investment, the 2013 NL for Shanghai FTZ only prescribed the restricted and prohibited sectors,[144] indicating that all the other sectors out of this list accept foreign capitals. The 2013 NL for Shanghai FTZ initiated the exclusion of foreign investments in the form of NL in China, which widened the international investment and fundamentally changed the way to regulate foreign investments.[145] With regard to the prohibited industries, the most obvious progress in the 2013 NL for Shanghai FTZ is to open the exploration of rare earth, radioactive ore, wolfram, molybdenum, tin, antimony, fluorite and radioactive ores to foreign investments, which areas were closed to foreign capitals in the 2011 DGFI. A purpose to restrict China's regulatory power on the pre-establishment exception matters is thus clearly demonstrated in order to promote the development of the Shanghai FTZ.

In order to strengthen the consistency with China's IITs and to clarify the boundary of the NL provisions, the 2014 NL for Shanghai FTZ was adopted. The new NL opened 14 new sectors to foreign investments, including the shipping trade, infrastructures construction, energy[146] and manufacturing,[147] which further confined China's regulatory space to exclude foreign investments. In 2015, the State Council issued the 2015 National NL[148] to replace all the regional NLs and it covered the FTZs of Shanghai, Guangdong, Fujian and Tianjin. The 2015 NL is the first regulatory measure on the market access of foreign investments applying across the country and is expected to be adopted in all the regions outside the FTZs after 2018.[149] Being more open than the 2014 Shanghai NL, the 2015 National NL reduced further 17 restrictions on the market access of foreign investments, keeping only the sub-sectors 'vital to national well-being and people's livelihood'.[150] Currently, the DGFI applies to

[143] Negative list is formally named in governmental documents as 'Special Regulatory Measures on the Entry of Foreign Investment in Certain Free Trade Zone'.
[144] See the 2013 Special Regulatory Measures on the Entry of Foreign Investment in Shanghai Free Trade Zone released by the government of Shanghai of the P.R.C on 29 September 2013.
[145] Shanghai Government, 'Orientation Meeting of the 2014 Version of Negative List for China (Shanghai) Free Trade Zone' (Shanghai, 21 August 2014), available at http://www.shanghai.gov.cn/nw2/nw2314/nw32419/nw32510/nw32513/u21aw924647.html, accessed 12 December 2014.
[146] In the 2013 version, the transmission, transportation and wholesale of crude oil and processed oil by foreign investors were restricted. But the 2014 version cancelled this restriction.
[147] In total, only 139 measures were contained in the 2014 version, 51 measures less than the 2013 version.
[148] 2015 Special Regulatory Measures on the Entry of Foreign Investment in Pilot Free Trade Zone by the General Office of State Council of the PRC.
[149] Xu J. Z., 'The Time of 2.0 of the Free Trade Zones in China' (MIC Research Report, 29 April 2015), available at https://mic.iii.org.tw/aisp/reports/reportdetail_register.asp?docid=3051&rtype=freereport, accessed 29 August 2015.
[150] Foreign investments in the exploration and development of oil and natural gas are permitted on the condition that the investments are in the form of cooperation or joint venture.

the non-FTZs in China while the NL is adopted in the pilot FTZs only, although the NL may replace the DGFI in the future.[151]

Promotion and protection of foreign investments is a principle of China's domestic policy of international investment,[152] but the NL and the DGFI constitute a crucial form of exceptions excluding investments from entering into the Chinese market. When compared with the pre-establishment exceptions in IITs, the domestic NL practice above can be considered as a form of internal exceptions[153] through which China exercises the power to review and screen foreign investments before they are formally established in the territory of China. As an important instrument to preserve China's governmental regulatory flexibility, the NL in China is instead developing with substantial considerations of investors' interests to improve the market access and free movement of foreign capital.[154] Such practice does not indicate that China will abandon its regulatory power of foreign investment. Instead, the way to regulate foreign investment will be optimized to leave more autonomy for private investors and retain the authority over the limited areas to improve the efficiency of regulation. Bearing this in mind, the broad exceptions in IITs do not indicate that the treaty will focus on how to exclude and squeeze foreign investments because China remains enthusiastic to attract foreign capitals. The NL practice in China sends a signal that it is liberalizing the investment market and the internal/external exceptions are for the necessary safeguard of China's interests. In this regard, the broad exceptions are needed in IITs to protect China from being challenged in international regime.

4.2.3. A need for broad exceptions in IITs from the perspectives of environmental and national security concerns in China

Despite of the latest NL delineating China's regulatory space in the market access of foreign investments; the scope of the investments excluded by the NL is generally shrinking. On the contrary, China's reviewing power over the foreign investments for the environmental and security reasons is not weakened but rather strengthened. The National Security Mechanism (NSM) of foreign investments was introduced in 2011 within the limited scope of mergers and acquisitions.[155] A National Security Review Joint Conference (NSRJC) was established to preserve the national defence security, economic security, social order security and key technology security.[156] But in 2013 China established the National Security Council (NSC) for the first time since the establishment of the People's Republic of China in 1949.[157] The NSC set out comprehensive working mechanisms to maintain the stability of

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[151] State Council of the PRC, Opinions of the State Council on the Adoption of Negative List Regarding Market Access, enacted 19 October 2015, entered into force 1 December 2015.

[152] Yang Y. R., 'The Ascending Trend of Utilizing Foreign Investment Will Continue in China with Potential Opportunities for Innovation' (1 April 2014) available at http://www.cinic.org.cn/site951/sdbd/2014-04-01/729825.shtml, accessed 6 April 2014.

[153] Gong B. H., 'The Jurisprudence of the Negative List in Shanghai Free Trade Zone' (2013) 6 Oriental Law 126-127; Shang S., 'China Shanghai Free Trade Pilot Zone and the Negative List on the Market Access of Foreign Investments' (2014) 1 Law Science 30-33.

[154] Wang L. M., 'The Negative List and the Autonomy of Private Law' (2014) 5 China Legal Science 30.

[155] Article 1.1 of the Notification of the State Council of the PRC on the National Security Review of Mergers and Acquisitions of Foreign Investors (National Council Code [2011] 6) issued by the National Council on 3 February 2011, entered into force on 5 March 2011.

[156] Ibid Article 2.

[157] National People's Congress of the PRC, 'The Establishment of National Security Committee' (Beijing: 27 November 2013), available at

China.[158] In accordance with the NSC and the development of international investments, the State Council issued the Code of National Security Review for the FTZs in 2015 (the Code).[159] China's review power for national security matters was widely expanded by the Code from mergers and acquisitions to trust and re-investment.[160] Furthermore, the scope of national security in the Code was also widened to include national culture security, public moral security, national internet security and important IT information and service,[161] among which the cultural security and IT-service security have not been included in the latest IITs concluded by China. It is thus clear that the scope of security matters in China's domestic investment instruments is broadening, demonstrating a similar tendency of the international arbitration practice above.

Apart from the internal security exception, environmental exception also increases its scope in China's domestic instruments. According to the Enforcement Rules of the Foreign Enterprise Law, foreign enterprises are required to submit the prevention plans for the environmental pollution, as the necessary documents submitted in order to get a permit from the government to set up an enterprise.[162] But the foreign enterprises with the possible environmental pollutions are not permitted and the government will not grant the licences.[163] Without relaxing the environmental requirements, the Exposure Draft of Foreign Investment Law of the PRC (the Exposure Draft)[164] retained the environmental impact of foreign investments as one criterion to review foreign investments.[165] What is more, the Exposure Draft proposed the establishment of the National Environmental Evaluation System,[166] in order to introduce a third party to appraise the environmental impact of foreign investments.

The implications of China's domestic exceptions of environmental and national security for the construction of IITs' exceptions are twofold. First of all, environmental and national security interests are among the many national interests that China will not sacrifice for foreign investments. As these security matters can both restrict foreign investments in pre-establishment and post-establishment stages, the exceptions practice in IITs should be broadened enough to cover all the stages of investments in order to accommodate the domestic preservation of these interests. Second, the scope of the domestic environment and security interests is expanding and China's space to regulate foreign investments is enhanced as well. Therefore, the wide exceptions in IITs should not have a finite list.

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http://www.npc.gov.cn/npc/xinzhuanti/xxgcsbjszqhjs/2013-11/27/content_1814739.htm, accessed 7 February 2014.

158 Sun N. S. and Hu D., 'Legislative Improvement and Suggestions on the National Security Review Mechanism: Perspective from the Exposure Draft of the Foreign Investment Law of the PRC' (2015) 4 Journal of Shanghai University of Finance and Economics 83-84.

159 Notification of the State Council of the PRC of the Trail Code on the National Security Review of Foreign Investments in the Pilot Free Trade Zones (National Council Code [2015] 24) issued by the National Council on 8 April 2015, entered into force on 9 May 2015.

160 Ibid Article 1.2.

161 Ibid Article 2.

162 Article 14.10 of the Enforcement Rules of the Foreign Enterprise Law of the PRC, issued by the Ministry of External Economy and Trade on 12 December 1990, amended by the State Council of the PRC on 19 February, entered into force on 1 March 2014.

163 Ibid Article 5.5.

164 Exposure Draft of the Foreign Investment Law of the PRC, released by the Ministry of Commerce on 19 January 2015.

165 Ibid Article 30.1.4, Article 32.1.

166 Ibid Article 105.2.

Instead, a broad space should be reserved for the emerging new issues which otherwise will fall out of the IITs exceptions and constitute a treaty violation.

From a procedural perspective, the People's Court of China can generally review the governmental measures for the environmental and security grounds,[167] from which foreign investors can seek domestic judicial remedy. However, once the measures are made by the State Council, or the Central Committee of the Military Commission, or the Ministry of Foreign Affairs out of national defence issues,[168] they are regarded as the judicially non-reviewable measures and investors will lose the opportunity to seek local judicial remedies.[169] For the governmental environmental measures above, once they constitute the Administrative Re-Examination Measures by the State Council, they are regarded as the final decision and cannot be subject to judicial review in China.[170] In a scenario where a provincial governmental prohibited a foreign investment because of the potential environmental pollution in pursuant to Article 5.5 of the Enforcement Rules of the Foreign Enterprise Law (Enforcement Rules),[171] the government's refusal of an investment licence is first of all justified by the Enforcement Rules. But the investor still obtains the right to apply for a review of the refusal through the State Council or seek judicial remedy from the domestic court in China. However, when the review decision is reached by the Council, it will not give rise to further judicial review. Such a domestic practice illustrates that the provincial government's refusal of an investment licence usually has involved the experts' demonstration, draft making and public hearing before it is made to the investor;[172] what is more, the refusal is reviewed by the highest hierarchy of the central government and the defects in the refusal are potentially reduced.[173] From this perspective, the reduced judicial review can be assumed as a form of procedural exception for foreign investors in China. The broad exceptions in IITs can therefore be designed to accommodate such domestic practice through excluding the judicial non-reviewable measures from the ISDS.

4.3. Good news for a broad environmental exception provision in IITs?: the new development of China's BITs

4.3.1. Exceptions in Chinese BITs before 2012

Exceptions can hardly be found in the preamble and in the substantive provisions of the BITs concluded by China since 1982, when the first Chinese BIT was signed. Until 2015, China has signed

[167] Foreigners are included. See Article 70 of the Administrative Procedural Law of the People's Republic of China (issued on 4 April 1989, enacted on 1 October 1990).
[168] The government organs involved are only authorized by the Constitution Law of China and the legislations by the National People's Congress or the Standing Committee of the National People's Congress Article 2 of the Legal Interpretation for the enforcement of the Administrative Procedural Law, the Supreme Court of China, issued on 8 March 2000, implemented on 10 March 2000 (e.g. the act of declaring a state of emergency; the act of executing martial; the act of initiating general mobilization).
[169] Sun N. S. and Hu D., 'Legislative Improvement and Suggestions on the National Security Review Mechanism：Perspective from the Exposure Draft of the Foreign Investment Law of the PRC' (2015) 4 Journal of Shanghai University of Finance and Economics 89.
[170] Ibid.
[171] Enforcement Rules of the Foreign Enterprise Law of the PRC (n 162) Article 14.10.
[172] Zhan Z. L., 'The Law of Administrative Review of the PRC and the Amendments' (2013) 1 Administrative Legal Research 76.
[173] Zhang Z. Y., 'Rethinking the Interaction between The Administrative Review and Administrative Litigation Procedural' (2005) 4 Morden Law Science 79-83.

145 BITs including the ones having not entered into force.[174] Among the 142 BITs before 2012, less than 5 BITs prescribed environmental matters. The China-Guyana BIT 2003 provided in its preamble that: 'agreeing that these objectives can be achieved without relaxing health, safety and environmental measures of general application … respecting the sovereignty and laws of the Contracting Party within whose jurisdiction the investment falls'.[175] A similar expression was adopted by the China-Uzbekistan BIT that 'desiring to intensify the cooperation of both States, to promote a healthy, stable and sustainable development of economy, and to improve welfare of the peoples of the Contracting Parties'.[176]

The China-Belgian-Luxembourg BIT 1984 and the China-Philippines BIT 1992 included security and public interest issues in the provision on expropriations carve-out.[177] It has been a common practice for the expropriation provisions to embrace the public interests space of host states, although the role of these interests remains ambiguous, as has been discussed by Chapter V of this research.

The China-Japan BIT 1988 and the China-Korea BIT 1992 used the terms of 'public order', 'national security', and 'sound development of national economy' (Japan) and 'public purpose', 'national security', and 'sound development of national economy' (Korea) respectively to derogate the NT obligation.[178] The China-Japan BIT also prescribed that these exception issues within the specific NT standard should be 'really necessary',[179] in order to prevent the abuse of the host state's regulatory flexibility. This practice is described as an 'individual exception' in this Chapter,[180] but overriding the standalone treaty obligation of NT standard by 'public order' and 'national security' was quite rare in China's early BITs.

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[174] E.g. China-Turkey BIT was concluded on 29 July 2015 but has not entered into force. Also, China is negotiating investment instruments with the US and the EU and the China-Australia FTA has proposed negotiating new investment instruments between the two countries. Therefore more new IITs are expected in the future and these IITs will refer to huge capital flows. See Free Trade Agreement between the Government of Australia and the Government of the People's Republic of China (17 June 2015) Article 9.9 Future Work Program 3. ('[T]he Parties shall commence negotiations on a comprehensive Investment Chapter… immediately after such review is completed').

[175] China-Guyana BIT (n 3).

[176] E.g. China-Uzbekistan BIT (n 5).

[177] Belgian-Luxembourg economic union – China BIT (1984) Article 4.1 ('Neither Contracting Party shall in its territory take the measure of expropriation, nationalization or other similar measures on the investment of the investor of the other Contracting Party except for the necessity of security and public interest under the following conditions; China-Philippines BIT (1992) Article 4.1 Either Contracting Party may, for reasons of national security and public interest, expropriate, nationalize or take similar measures (hereinafter referred to as ―expropriation‖) against investments of investors of the other Contracting Party in its territory, but the following conditions shall be met: a) under domestic legal procedure; b) without discrimination; c) upon payment of fair and reasonable compensation').

[178] Japan – China BIT (1988) Protocol ('3. For the purpose of the provisions of paragraph 2 of Article 3 of the Agreement, it shall not be deemed ―treatment less favourable‖ for either Contracting Party to accord discriminatory treatment, in accordance with its applicable laws and regulations, to nationals and companies of the other Contracting Party, in case it is really necessary for the reason of public order, national security or sound development of national economy'); Korea – China BIT (1992) Protocol ('2. For the purpose of the provisions of paragraph 2 of Article 3 and (2) of Article 13 of the Agreement, it shall not be deemed "treatment less favourable" …, in case it is indispensable for the reason of a public purpose, national security or sound development of national economy').

[179] Ibid.

[180] Ibid Section 2.1.

The New Zealand – China BIT (1988) introduced exceptions to embrace states' 'essential security interests', 'public health' and 'disease and pests in animals or plants'.[181] This practice excluded the application of the entire BIT and reflected the high level protection of non-economic issues in New Zealand in late 1980s, when Chinese investors poured into New Zealand after the issue of a new immigration act in 1987 encouraging investment,[182] and when the trade between the two states entered into the second stage of rapid expansion.[183]

The exceptions in China's IITs before 2012 can be summarised by the following features. First of all, the general treaty practice did not prescribe and define exceptions, which illustrated the 'investment-protection focused' trend among the pre-2012 IITs. As investment tribunals have jurisdiction over the disputed matters which have been agreed by the contracting parties and been stipulated in investment treaties or contracts,[184] the absence of the environment, human rights and security issues in IITs may potentially exclude tribunals from evaluating these matters in arbitration. In the existing few BITs containing exceptions, the provision of expropriation is commonly used and the individual exceptions are the main forms. Additionally, the scope of national security, public interests and environmental protection has not been clearly defined in the treaty context.

Although the pre-2012 IITs in China did not provide much consideration for the exceptions, it is undeniable that such a situation is now changing, which can be demonstrated through the newly concluded China-Canada BIT 2012[185] and China-Japan-Korea TIA.[186]

4.3.2. Preliminary preparation for a broad exception provision in China's IITs: Security exception in the China-Japan-Korea TIA

There are a number of treaty-based exceptions to preserve the regulatory space of host states against the breach of treaty obligations in the China-Japan-Korea TIA. The China-Japan-Korea TIA comprises 27 articles and 1 protocol[187] covering the provisions of the definition, scope, most-favoured-nation treatment, national treatment, expropriation, transfer, subrogation, taxation, general exception, and dispute settlement.

In the China-Japan-Korea TIA, 'security exceptions' were formulated:

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[181] China-New Zealand BIT 1988 (concluded on 22 November 1988, entered into force on 25 March 1989) Article 11 ('The provisions of this Agreement shall not in any way limit the right of either Contracting Party to apply prohibitions or restrictions of any kind or take any other action directed to security interests, or to the protection of its essential public health or the prevention of disease and pests in animals or plants').

[182] Hairong Li, 'Research of New Chinese Immigrants in New Zealand' (2011) 1Oversee Chinese History Studies 21.

[183] The second stage began from the late 1980s to 2000 with the trend of rapid economic growth and capital flow increase. Wang J., 'External Trade and Economic Relations: After the Establishment of Diplomatic Relations between China and New Zealand' (2010) 3 World History of Xu Zhou Normal University 26.

[184] Radi Y., 'Realizing Human Rights in Investment Treaty Obligation: A Perspective from within the International Investment Law Toolbox' (2012) 37(4) North Carolina Journal of International Law and Commercial Regulation (2012) 1112.

[185] China-Canada BIT (n 4).

[186] China-Japan-Korea TIA (n 6).

[187] Ministry of Commerce of People's Republic of China, 'Investment Treaty was concluded by China, Japan and Korea' http://yzs.mofcom.gov.cn/aarticle/cbw/201205/20120508125318.html, accessed 16 November 2012.

> 1. Notwithstanding any other provisions in this Agreement other than the provisions on Article 12 (Compensation for Losses or Damages), each Contracting Party may take any measure: (a) which *it considers necessary* for the protection of its essential security interests; (i) taken in time of war, or armed conflict, or other emergency in that Contracting Party or in international relations; or (ii) relating to the implementation of national policies or international agreements respecting the non-proliferation of weapons; (b) in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security. 2. In cases where a Contracting Party takes any measure, pursuant to paragraph 1, that does not conform with the obligations of the provisions on this Agreement other than the provisions on Article 12, that Contracting Party shall not use such measure as a means of avoiding its obligations.[188]

This provision adopted the expression of 'it considers necessary*',* which term is used in IITs to leave more discretion for states.[189] Depending on 'it considers necessary', states can determine the content of security exceptions under the purpose[190] of the China-Japan-Korea TIA and in light of the specific circumstance of each case. For instance, in order to release the traffic congestion and reduce environmental pollution, the Beijing government introduced a policy to restrict the cars entering into the road space on the basis of the last digit of the license plate on the car on certain days.[191] At the same time, Beijing announced its 'Vehicle Purchasing Restriction' policy in order to further maintain or slow down the current air pollution and traffic congestion.[192] In pursuant to the provision above and in the context of 'it considers necessary', China can reasonably adopt the policies without treaty violation, although they have caused the reduced vehicles selling and reduced profits in the vehicle industry.[193]

Although the adoption of the security exception provision above is not new among the global IITs, it constitutes a novel development in China's IITs. It is indicated that China is beginning to consider introducing exceptions into its IITs strategy. The novel development in the China-Japan-Korea TIA can be used as the preparations for the broader exceptions in China's future IITs.

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[188] China-Japan-Korea TIA (n 6) Article 18.

[189] Nolan M. D. and Sourgens F. G., 'Self-judging Emergency Clauses in International Investment Agreements' in Karl P. Sauvant (eds), *Yearbook on International Investment Law & Policy 2010-2011* (Oxford University Press 2012) 404.

[190] Barbieri M., 'Sovereign Wealth Fund as Protected Investors' in Sacerdoti G. and Acconci P. and Valenti M. and Luca A. D. (eds), *General Interests of Host States in International Investment Law* (Cambridge University Press 2014) 152.

[191] From 11 October 2008, automobiles in Beijing inner 5th Ring Road areas are prohibited to enter into public roads for one day each week. The automobiles are divided into five groups by the last digit number of the license plates: 1/6, 2/7, 3/8, 4/9, 5/0. Each group will be chosen per day in the weekday. On this day from 7 am to 8 pm, the relevant cars are not allowed to enter into the 5th Ring Road areas. Details see Wang L. H., 'Measures against Heavy Air Pollution and the Effects on the Reduction of $PM_{2.5}$ in Beijing' (2015) 8 China Environmental Science 56.

[192] The Beijing government has set limits on the number of new cars annually registered since 1 January 2012. According to the policy, Beijing car purchasers cannot have had a car already registered and must hold Beijing resident certificates or have been living in Beijing. A quota for purchasing a car is given to the purchaser until all the conditions are met. With the quota, the purchasers will have to attend the lottery for licence plate each month and random quota are selected. This complicated method of car purchasing reduces the chance buying a new car significantly. See Wu S. Q. and Zhang D. M., 'Research on the Restriction of Automobile Purchasing of the Local Governments' (2013) Auto Industry Research 4-6.

[193] Yuan J. T., 'The Influence of Car Purchasing Restriction on Automobile Market and Oil Products Consuming' (2012) 6 Petroleum and Petrochemical Today 19.

4.3.3. A step forward, but not 'brave' enough?: The environmental exception in the China-Japan-Korea TIA

Unlike the general exception clause modelled on Article XX of the GATT, the China-Japan-Korea TIA did not establish general exception provision covering the protection of 'human, animal or plant life or health', 'exhaustible natural resources' and 'compliance with laws and regulations'. Instead, exceptions were dispersed into both substantive obligations provisions and the provisions on the exercise of states' regulatory power.

The China-Japan-Korea TIA recognized the sensitivity of the environment issues by providing that:

> Each Contracting Party recognizes that it is inappropriate to encourage investment by investors of another Contracting Party by relaxing its environmental measures. To this effect each Contracting Party should not waive or otherwise derogate from such environmental measures as an encouragement for the establishment, acquisition or expansion of investments in its territory.[194]

Unlike the environmental provisions in the NAFTA framework which granted states the right to 'adopt measures to ensure that foreign investments are operated in a manner sensitive to environmental concerns',[195] the environmental measures in the China-Japan-Korea TIA stipulated states' obligation not to relax or waive the environmental measures. In response to the environmental concerns, the NAFTA adopted a means of 'encouraging positive actions' while the China-Japan-Korea TIA adopted 'prohibiting negative actions' of the states. While both the agreements provide explicit provisions in relation to environmental protection, this Chapter argues that the provisions balancing investment protection with the need to preserve the environmental policy space under the China-Japan-Korea TIA are weaker. On the one hand, it focused on what the states cannot do for environmental concerns; it is thus not clear whether the states can only resort to the ordinary environmental rules or to higher ones as well. Following the ordinary rules and applying stricter new rules are both consistent with the environmental provisions of 'prohibiting negative actions', but it is certain that they impose different influences on the environment. On the other hand, the China-Japan-Korea TIA did not indicate whether the states can take stricter environmental measures within the treaty context, leaving narrower space for the states' regulatory power when compared with the NAFTA practice.

Despite the fact that the environmental exceptions in the China-Japan-Korea TIA were prescribed in such a manner to open a 'window' rather than a 'door' towards the environmental concerns, it is undeniable that such practice constitutes a progress since the 1988 China-Japan BIT (the first Chinese IIT embracing environmental consideration in the standalone provision of NT)[196] and among the

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[194] China-Japan-Korea TIA (n 6) Article 23.

[195] NAFTA Chapter Eleven: Investment Section A –Investment Article 1114 Environmental Measures (1. Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns).

[196] See the China-Japan BIT (concluded on 27 August 1988, entered into force on 14 May 1989).

majority of China's BITs. This practice in China's IITs can be used as a preliminary test for introducing a broad environmental exception in the negotiations of new IITs or the new amendments of the old IITs.

To sum up, the environmental and security exceptions outlined above have expanded states' regulatory space through IITs. On the one hand, the environmental and security interests were included and prescribed explicitly in the China-Japan-Korea TIA in the standalone exception provisions, which was not achieved by the majority of China's BITs since 1982. On the other, states' discretion was expanded by 'it considers necessary' under the security exception clause, although the treaty context and the object (promotion and protection of investment) have to be observed. As a whole, the China-Japan-Korea TIA steps forward on the way to a broader scope of exception provisions although this step is 'not brave' enough.

5. Conclusion

Given that the IITs exceptions, either in the form of general or individual exceptions, have not been paid due attention in the mainstream of current IITs, it has become a universal trend that the new IITs are beginning to alter this situation through introducing exceptions provisions. Likewise, the majority of China's IITs were concluded before 2012 without exceptions and a huge number of these treaties need to be amended or updated.[197] It thus becomes urgent to clarify to what extent the exceptions are needed in future IITs and whether the exceptions should have an open or definite scope.

From the perspective of environmental protection, this Chapter seeks to explore the determinants for the adoption of a broad environmental exception in China's IITs. The determinants first of all come from the domestic needs regulating foreign investments. The *Ralls* case illustrated the increasing appraisal of foreign investments through domestic instruments. Likewise, the domestic regulations on foreign investors prove to be increasing in China, particularly in relation to the national security and environmental matters. Given that the new forms of security exceptions, including the culture, IT-service and internet concerns have been included in China's domestic instruments regulating foreign investments, these matters need to be recognized and preserved in the regime of IIL.

Therefore, not only exceptions, but also broad exceptions are necessary to accommodate the domestic interests of host states. The domestic determinants in China also incorporated the situation that China has stepped into the comprehensive social and economic transition in which the law and policies regulating foreign investments are variable and changeable.[198] The facts that: (1) the pre-establishment exceptions of NL are reducing in general, but with a slight increase in certain areas; and (2) the environmental and security exceptions have been enhanced substantively, have indicated that the

[197] One of the reasons for the upgrade is that the current dispute settlement clauses in the old BITs concluded by China are too narrow and they cannot provide sufficient protection for Chinese investors in both the developing countries (to fill the gap of the weak protection provided by the legal system of host states) and developed countries (to win the opportunity of claims before international settlements). See Shen W., 'The Interpretation and Application of the Restrictive Investment Dispute Settlement Provisions in China's BITs' (2012) 24(5) Peking University Law Journal 1068.

[198] Yan S. P., 'Pluralism of Legal Governance Mechanisms in Social Transition' (2015) 2 Law Review 169.

regulations on foreign investments are relaxed generally but certain sensitive sectors and matters remain to be regulated rigorously. Currently, the new forms of environmental measures have been taken in Beijing, but more environmental measures may emerge for either environmental or security reasons. This Chapter therefore argues that if the future IITs practice contains no exception, these domestic regulations will not be observed in international law, and the tribunals may take the side of the private investors even if the public welfare of host states are infringed; if the future IITs include only narrow exceptions, the new emerging regulatory matters will not be preserved by international investment arbitration. As a result, the proposed adoption of broad exceptions in China's upcoming IITs can potentially accommodate these domestic regulations, and safeguard China's regulatory space particularly in the transitional phase.

What is more, from the perspective of the domestic needs to regulate foreign investments, broad exceptions in IITs can accommodate the internal interests of different country parties in order to lower the interests-conflicts between them. The policy makers of each host state establish the policies regarding the safeguard of the environment, security, culture and internet that can best fit into the state priorities at that time, but such policies may change under a new regime.[199] In addition, a state's interests may be constrained by its ability to diminish the negative effect of foreign investments, which would ultimately be reflected in exceptions in IITs.[200] Therefore, broad exceptions in IITs can accommodate as much as possible the different interests between and among the different IITs parties.

The broad exceptions in IITs can further be observed through both the existing international investment arbitration and the new IITs concluded by China, which support the adoption of broad exception provisions. Certain investment tribunals have construed to expand the scope of security exception, on the basis of which environmental exception provisions can also be expanded for the protection of states' ecological interests. The new development of China's IITs directly demonstrates that the broad exceptions practice is commencing in China, which also mirrors the global inclusion of broad exceptions in new IITs. The proposal of a broad environmental exception in China's future IITs will thus be consistent with such a tendency.

The protection of foreign investments provided by IIL catalyses international capital flows, but restricts the application of states' environmental measures. The tension between the private investors and the environmental interests of states stimulates the development of IIL and creates new conflicts, which demands the reform of current IITs towards the enhanced obligations of foreign investors and the increased protection of states' environmental interests.[201] Environmental exception constitutes such a mechanism striking the balance between the private investors and host states' environmental concerns. But differing from the culture or military exception and such, protecting the environment through environmental exception in IITs benefits not only host states' public interests, but also the foreign

[199] Jackson (n 66) 19.
[200] Ibid 21.
[201] Liu S., 'Citizen-oriented Trend of International Law and the Reform of International Investment Law' (2011) 4 Legal Science Research 37.

investors because the environmental measures in turn provide foreign investors with a better investment environment.[202]

The flexibility of a broad environmental exception and states' environmental interests are expected to facilitate China's evolution from the mere economic growth to the overall social development. China is transiting into a capital recipient as well as a capital exporter, in which both China's investors abroad and China, as a host state, need protection under the regime of IIL. China's IITs therefore have to strike an investor-state balance, which is also the goal of the regional investment agreements in which the states usually have diverse interests-requirements and a balance is arduous to keep.[203]

[202] Choudhury B., 'Exception Provision As A Gateway to Incorporate Human Rights Issues into International Investment Agreements' (2011) 49 Columbia Journal of Transnational Law 683.

[203] For instance, the regional IIT: Trans-Pacific Partnership (TPP) was concluded by12 negotiating parties of Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. Both capital exporting giants such as the US, Japan and Australia, and capital importing countries (e.g. Peru had only 83.8 million US dollar FDI outflow in 2014 and it is generally a capital recipient) are parties to the TPP and the interests of these countries have to be balanced. Such balance can be reflected from the Australian government's induction of the TP that [the TPP] provides 'greater certainty to Australian investors in TPP countries' as well as grants states 'the ability to regulate legitimately on social, environmental or other similar public policy matters'.
Australian Government, 'An Introduction of Trans-Pacific Partnership Agreement' (2015) available at https://dfat.gov.au/trade/agreements/tpp/Documents/tppoverview.pdf, accessed 11 November 2015.

CHAPTER VII
CONCLUSION

This research is designed to delineate the insufficiency of environmental protection in international investment treaty law and arbitration practice, and to evaluate the design of new investment treaty provisions to augment host states' environmental regulatory space by referring to some practice of China, one leading state in the global investment market. It is demonstrated that IITs were designed for investment protection and promotion. Such an intrinsic investment-favoured characteristic of treaty practice potentially builds and accepts the tension between the protection afforded to private investors and the preservation of host states' public interests such as environmental protection. What is more, the international investment arbitration practice has been extensively influenced by IITs to adopt a 'investment-protection oriented' interpretation, which further confines or rules out the environmental concerns of host states.

For the purpose of this research, foreign direct investment rather than portfolio investment is selected not only because it has developed into the most important type of international investment, but also because the tension between environmental protection and foreign investment predominantly refers to foreign direct investment. The practice of China is used as a case study in order to reveal how the environmental measures in the world's largest capital flow country are likely to be constrained by the current investment treaty and arbitration practice and how its domestic environmental protection will promote the construction of China's 'greener' IITs.

IITs have revealed that the FET, NT, MFN standards and the rule of expropriation are deployed as the major treaty mechanisms protecting foreign investment and they also constitute the main foundations of investors' claims in disputes settlement. As is illustrated in Chapter III, the protection for foreign investors' legitimate expectations in the FET principle failed to provide a clear and consistent answer for deciding whether the modifications of host states' general environmental framework amount to the frustration of investors' legitimate expectations, and eventually to a violation of the FET standard. The arbitration practice establishing the disappointment of investors' exceptions on the grounds of the severity of the adjustment of the general legal framework, and on the grounds that such changes have upset the specific commitments host states have made, enables foreign investors to easily challenge states' sovereignty rights to reform the legal framework. However, the framework change usually embraces ambiguous specificity and does not provide an explicit promise for investors. What is more, the general legal framework influences indefinite foreign and domestic investors. Protecting foreign investors' expectations can potentially cause unfairness to domestic investors and chill states' regulatory authorities to reconcile the national instruments. The fact that states' interests in the evaluation of legitimate expectation are not well preserved results from its focus on the states' obligation to uphold the domestic legal framework. But as the damages caused by the framework

change partially originate from investors' ignorance of host states' legal framework, investors' obligation to establish the 'genuine reliance on states' legal framework' and the 'pre-awareness of the changing framework' should also be included in the evaluation of legitimate expectations.

The legal framework for environmental protection in China is changing significantly and the 2014 Environmental Protection Law launched a new framework amplifying foreign investors' liability, which has not been accomplished in the old environmental regime. Foreign investors were able to carry out the environmental assessment procedure after the pollution was identified by administrative organs (late assessment) was accepted but administrative fines and the prohibition of investments will be due in the new environmental framework instantly after the pollution is detected. As the general environmental framework has not been excluded from the protection for legitimate expectation in investment arbitration, the termination of the 'late assessment' above may encounter the risks of being challenged under the FET standard. The proposal that the lack of specificity of general framework, coupled with investors' ignorance of the changing framework, diminish the legitimacy of investors' expectations may prevent the withdrawal of the 'late assessment' from incurring state's liability.

As is examined with Chapter IV, the analysis of an appropriate comparator in the NT and MFN standards based on competition between the investments only focuses on the economic competition of investors, but fails to evaluate the non-economic aspects of the term 'like circumstances'. The fact that the wording of like circumstances in investment treaty context is not defined explicitly leaves space for investment tribunals to read this term through a competition-based approach. Host states' different environmental measures imposed on foreign and domestic investors that are in competition can be claimed as discrimination and states' discretion to take diverse measures for the ecological purposes according to the specific environmental threats from each investment will be constrained. Under the proposed way of reading like circumstances, the proper comparators in the face of an environmental measure should refer to the investments having the same environmental features even though they are not in competition.

In order to explore the role of an environmental purpose behind the governmental measures, Chapter V connects the subject intention to the analysis of expropriation and compensation. The sole effect doctrine allows for a conclusion of expropriation on the ground of the mere objective effect of governmental measures, from which the legitimacy of the states' measures for public interests cannot be embodied. The IITs have long been prescribing the public interests, non-discrimination, due process and compensation as the pre-conditions before states can expropriate. But it remains ambiguous as to the role of public interests because compensation is always due as one of the other three pre-conditions. As is argued by this Chapter, an environmental purpose of host states' environmental measures constitutes one element justifying the measures in the event of expropriation and such justification should be reflected through the reduced amount of compensation. An environmental purpose can of course be argued to disguise the protectionism behind the environmental measures. Examining the air quality control policies of vehicle-licence-plate-number scheme and vehicle-purchase-restriction

scheme in Beijing, this Chapter concludes that not all the public purposes can potentially reduce the compensation, but it is the proportionality between the purpose and the effect that determines whether the environmental measures can be justified and how the justification affects the assessment of compensation. Therefore, this Chapter does not argue that an environmental purpose alone can affect compensation because the due process, non-discrimination and the effect of environmental measures should all be referred to comprehensively before compensation is reached. In this process, the disguised protectionism can be excluded.

The inefficiency of environmental protection in investment treaty and arbitration practice attributes to the imbalanced and unsustainable IITs because the treaties that were drafted with little environmental concern,[1] eventually lead to the tribunals' interpretations which display an apparent pro-investment tendency. Since adopting a set of universal standards for arbitration and improving the consistency of arbitration precedents are unfeasible, treaties should be reformed to include the provisions in favour of host states' public interests through which the imbalance is restrained fundamentally. Chapter VI examines the necessity to introduce a broad environmental exception provision to the construction of a new generation of IITs. Since the very recent developments of IITs including the TTP and TTIP negotiations have shown a movement to curtail the scope of the substantive provisions stipulating states' obligations and the scope of the procedural provisions for investor-state dispute settlements, it is not late to evaluate the scope of environmental protection provisions. Introducing environmental exception without clarifying its scope will cause inconsistency in interpretation and tribunals may still narrow the application of these provisions, which is in opposition to the function of such provisions.

Chapter VI proposes the broad environmental exception provisions in treat-making in order to establish the balanced and sustainable international instruments for investments. Such a proposal is feasible in practice. Pursuant to the argument of Chapter VI, the domestic regulations on foreign investments in China have been increasing, particularly in certain areas such as environment, citizen health and national security. The negative list and the exposure draft of the Foreign Investment Law have demonstrated the latest development of the domestic instruments regulating foreign investments in China. In particular, the security concerns have expanded to include culture security, IT-service security and internet security. The design of a broad environmental exception provision in China's IITs will thus have the internal driving force and will in turn benefit the inclusion of the emerging environmental interests. Put another way, the narrow scope of environmental exception in IITs may otherwise hinder the domestic protection of the increasing environmental interests and lower the effectiveness of states' environmental measures. The latest investment agreement concluded by China, Japan and Korea has demonstrated the desire to embrace environmental protection, on the basis of which the future environmental provisions can be designed with broader application and content.

[1] The 'one-side' IITs have been criticized that such a treaty regime cannot stay stable unless changes are introduced to improve foreign investors' obligations and host states' rights. See Muchlinski P.T., 'Regulating Multinationals: Foreign Investment, Development, and the Balance of Corporate and Home Country Rights and Responsibilities in a Globalizing World' in Alvarez J. E. and Sauvant K. P. and Ahmed K. G. and others (eds), *The Evolving International Investment Regime: Expectations, Realities, Options* (Oxford University Press 2011) 31.

With respect to this research, revealing the inefficiency of environmental protection in the three main principles of investment protection and introducing environmental considerations in the interpretation of the principles, and more broadly in the treaty design of exceptions provisions, would not address the lack of public concerns sufficiently. Even host states suffering from severe environmental contamination may opt to sacrifice their environmental interests for capital and technology, which had occurred in China until the late 2000s. Hence, how the states are willing to adopt the broad environmental exception provisions in IITs turns into a practical problem.

The proposal to introduce environmental considerations in tribunals' interpretations of the FET, NT, MFN standards and the expropriation provisions might be difficult to achieve because tribunals have to refer to the explicit treaty provisions. However, the blank environmental concerns in most IITs do not indicate that public concerns should be excluded from treaty interpretation, which leaves space for tribunals to contribute to environmental protection in the regime of IIL.

The proposal to establish a broad environmental exception provision in IITs may seem too early, particularly to the majority of capital importing states. Over 90% of China's IITs remain the same as what they were twenty years ago. But from the perspective of good law, the pro-investment treaties do not demonstrate fairness and equality. Regulating the relationship between foreign investors and states, the imbalanced provisions in investment treaties do not constitute ideal legal instruments. Whether states are reluctant or willing to abandon environmental exception in treaty negotiations, the lack of environmental consideration will change in the long run. For instance, the new investment treaties concluded after 2010 have substantially contained explicit exceptions provisions. Since environmental protection benefits not only host states, but also foreign investors and home states, the ignorance of environmental concerns in investment treaty and arbitration should be abandoned, in the global call for sustainable investment and sustainable investment treaties. In this regard, the involvement of environmental exception will constitute a significant development of IIL.

From an empirical perspective, this research provides solutions to environmental protection of not only China, but also the countries which will experience transition. The practical implications of this research emerge significantly only under a particular economic and social background. That is, states are willing to accept the environmental friendly provisions only when the economic and social development requires so. For instance, the background of China twenty or thirty years ago did not provide the feasibility for China to sacrifice its economic and social development for environmental protection. Therefore, this research has very limited contributions to 'that' China. But the background changes substantively in current transition. It is thus noteworthy that the most important empirical implication of this research is to protect China's environmental protection and to establish China's environmental friendly IITs under the unique background that China is in its economic and social transition comprehensively.

However, the practical contributions of this research are not limited within the context of current China. China has chosen the way to preserve environment slowly after promoting its economic capacity, a method which can be followed by many other countries as well. For instance, the majority of the developing countries remain FDI recipients, while Brazil is becoming a promising FDI exporter in the global FDI outflows market. Such FDI outflows performance is what China has experienced but China seems successfully transferred from a capital-importing state to both an FDI-importing and FDI-exporting state. In this process, China has promoted its domestic development, which constitutes one of the main factors leading China to preserve its environmental interests over economic issues. This research therefore assumes that the empirical implications will apply to these countries when their FDI outflows and their national economy have finished the stage of ‘transition’. In other words, it is possible that this research contributes to environmental protection and ‘green IITs’ of other countries, although such implications are not obvious in the near future.

TABLES AND FIGURES

Table 2.1 The FDI projects in the selected international investment cases in which the environmental considerations were involved

Case	Environmental measures/concerns	FDI projects
1. Ethyl v. Canada Award on Jurisdiction of 24 June 1998	Prohibiting the authorization for additions to unleaded gasoline	Manufacturing and distributing rnethylcyclopcntadtenyl manganese added to unleaded gasoline
2. Sun Belt Water v. Canada Notice of Arbitration of 1998	Prohibiting the exports of fresh water	Bulk water exportation
3. Santa Elena v. Costa Rica Award of 17 February 2000	Ecological protection of a beach	Resort construction
4. S.D. Myers v. Canada Second partial award of 21 October 2002	Prohibiting the transportation of the PCB-contaminated waste material	Recycle and transport the PCB-contaminated waste material
5. TECMED v. Mexico Award of 29 May 2003	Refusing landfill renewal	Hazardous waste landfill
6. Metalclad v. Mexico Award of 30 August 2003	Rejecting construction permit	Landfill
7. Methanex v. United States Final award of 3 August 2005	Prohibiting the methanol-additive gasoline	Methanol production, transportation and sale
8. Parkerings v. Lithuania Award of 11 September 2007	Terminating a car parking construction agreement partially due to the protection of a World Heritage	Construction
9. Chevron v. Ecuador	Judicial actions shifting the environmental responsibility to the	Oil exploration and production

Notice of arbitration of 23 September 2009	Claimant	
10. Glamis v. United States Final Award of 8 June 2009	Regulating the way to undertake the mining	Mining
11. Dow AgroSciences v. Canada Notice of Arbitration of 31 March 2009	Prohibiting the sale and use of pesticides	Speciality chemical products manufacturing and sale
12. Chemtura v. Canada Award of 2 August 2010	Terminating lindane products	Flowable lindane manufacturing
13. Gallo v. Canada Award of 15 September 2011	Revoking environmental approvals	Mining, waste disposal site
14. Pac Rim Cayman v. El Salvador Decision on the Respondent's Jurisdictional Objections of 1 June 2012	Refusing mining license and environmental permits for water supply concerns	Gold mining
15. Unglaube v. Costa Rica Award of 16 May 2012	Measures establishing wildlife protection park	Owning properties
16. ***Vattenfall v. Germany*** Decision Pursuant to ICSID Arbitration Rules 41(5) of 2 July 2013	Prohibiting nuclear energy	Nuclear power plants construction
17. Windstream Energy v. Canada Notice Of Arbitration of 28 January 2013	Opposing the feed-in-tariff measures for environmental considerations of offshore energy development	Renewable energy
18. Lone Pine Resources v. Canada Notice of Arbitration of 6 September 2013	Revoking the permits to develop oil and gas beneath the St. Lawrence River	Mining for oil and gas
19. Gold Reserve v. Venezuela Award of 22 September 2014	Terminating the mining concessions in an environmentally fragile Imataca Forest Reserve	Mining

20. Clayton v. Canada Award of 17 March 2015	Environmental assessment of a quarry	Construction and operation of quarries and docks

Case source: available at https://icsid.worldbank.org and http://www.italaw.com.

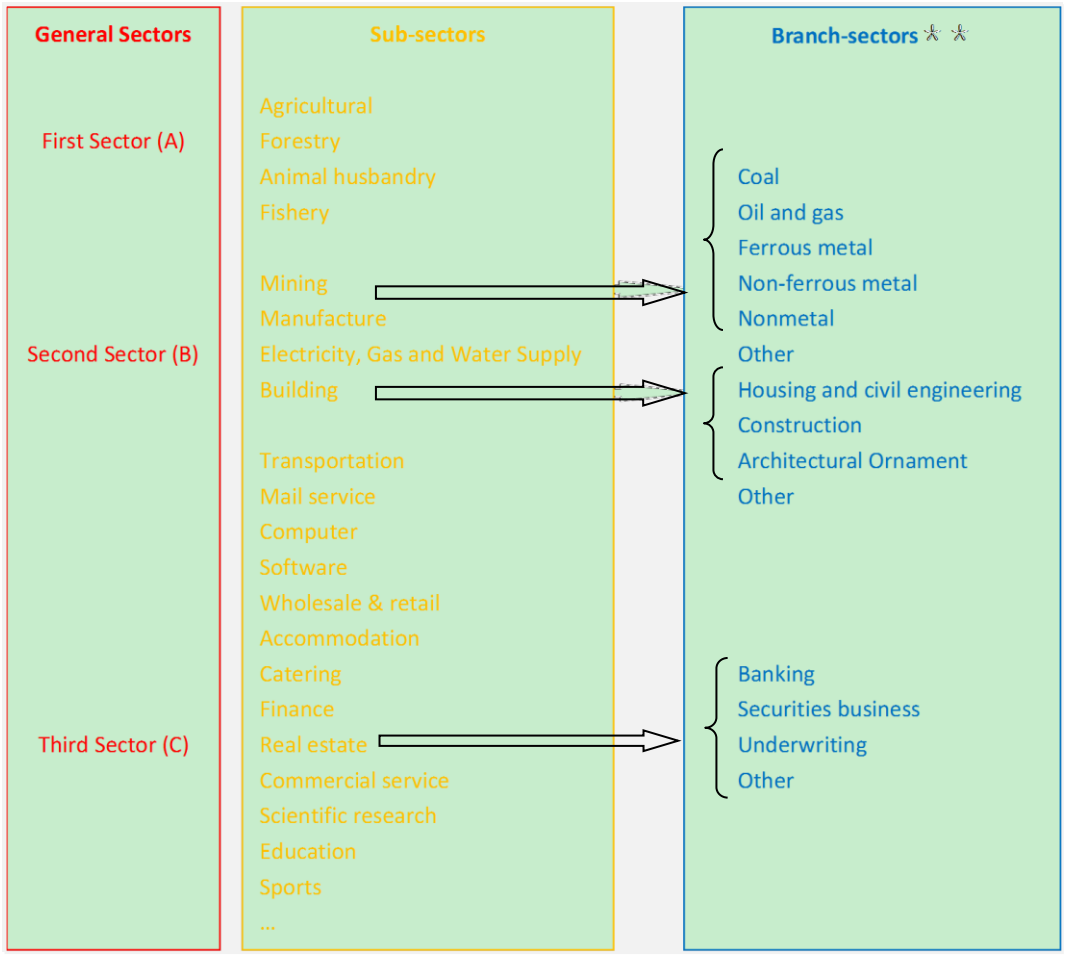
Table 2.2 FTA, FA, CEPA, TCA, APTA and TIA Concluded by China (1985-2015)

	IITs	Environmental provisions
FTA	1. China-Switzerland FTA	Chapter 12 Environmental Issues
	2. China-Iceland FTA	Article 96 Labour and Environment Co-operation
	3. China-Australia FTA	Article 9.8 General Exceptions
	4. China- Korea FTA	Article 12.16: Environmental Measures
	5. China- Chile FTA	Article 108 Labour, Social Security and Environmental Cooperation
	6. China- Peru FTA	Article 162: Cooperation on Forestry Matters and Environmental Protection
	7. China-Pakistan FTA	Preamble: Recognizing consistency with environmental protection;
	8. China-Costa Rica FTA	Chapter 15 Exceptions
	9. China-Singapore FTA	Article 57 Preservation of Regulatory Authority
	10. China-New Zealand FTA	Article 96 Regulatory Cooperation; Article 177 Labour and Environmental Cooperation; Chapter 17 Exceptions
FA	11. China-Taiwan Framework Agreement (FA)	N/A
	12. China-Australia FA	Paragraph 2

CEPA	13. China-Hong Kong Closer Economic Partnership Arrangement (CEPA)	N/A
	14. China-Macao CEPA	N/A
Other	15. China-EU Trade and Cooperation Agreement (TCA)	Chapter II Economic cooperation Article 10
	16. Asia-Pacific Trade Agreement (APTA) Investment	N/A
	17. China-ASEAN Investment Agreement	N/A
	18. China-Japan-Korea Trilateral Investment Agreement (TIA)	Article 23 Environmental Measures

Data source: UNCTAD Investment Policy Hub at http://investmentpolicyhub.unctad.org, and Ministry of Commerce of the PRC at http://tfs.mofcom.gov.cn.

Table 4.1 'Sectors' in the Regulation on Sector Classification of National Economy of China by Bureau of Statistics of People's Republic of China*

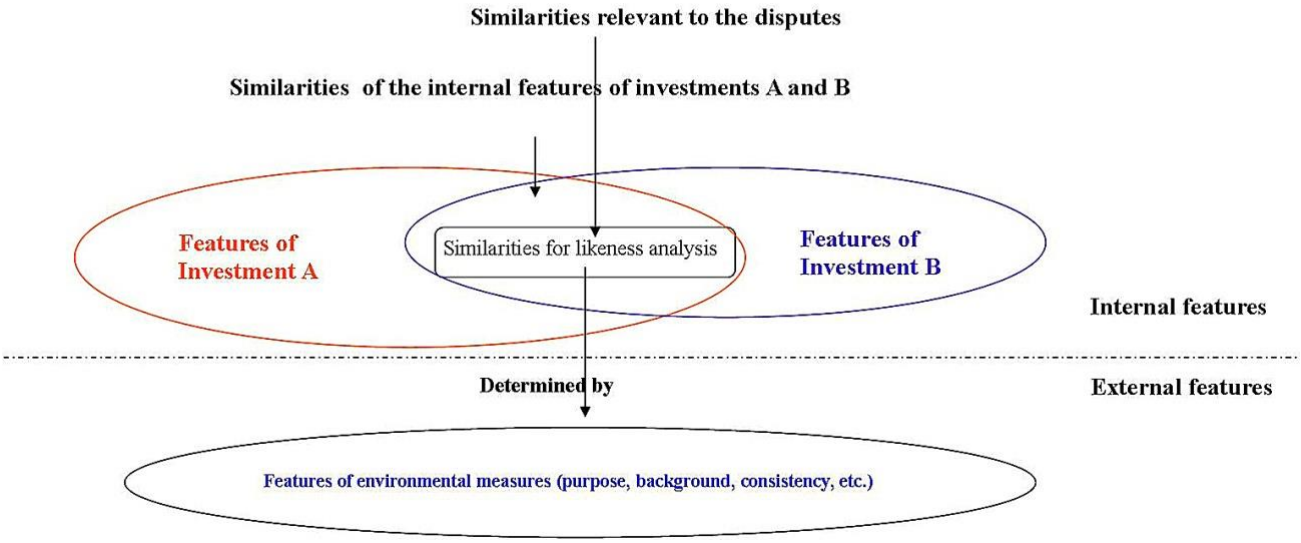


* According to this Regulation, currently China has three general sectors, 20 sub-sectors and 98 branch-sectors.

** This part lists some branch-sectors from the sub-sectors of mining, building and finance. They are just examples of branch-sectors and it does not mean that only these sub-sectors have branch-sectors.

All the information is collected from the Regulation on Sector Classification of National Economy of China issued by the Bureau of Statistics of People's Republic of China on 14th May 2003 Document No. GB/T4754—2002.

Figure 4.1 Identify likeness through the features of investment and environmental



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