

Do Clarified Indirect Expropriation Clauses in International Investment Treaties Preserve Environmental Regulatory Space?

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The last twenty years have witnessed a number of investor-state disputes in which investors claimed host states' environmental regulations were indirect expropriations of foreign investments, resulting in host states paying large amounts of compensation to foreign investors. To preserve the regulatory space of host states, in the past decade, around 42% of newly concluded international investment treaties have incorporated a clarification on when a state measure that affects foreign investments constitutes indirect expropriation. Such clauses can be called "clarified" indirect expropriation clauses, as distinguished from traditional expropriation clauses. Are these new clauses effective in protecting states' environmental regulatory power? This question is important to states, environmentalists, and foreign investors. However, there is a lack of empirical examination of this question in the literature.

This Article fills this gap through an empirical analysis of whether clarified indirect expropriation clauses are effective in preserving environmental regulatory space of host states. Based on a study of international investment arbitration jurisprudence, it defines three types of environmental regulatory space that should be preserved in investor-state arbitration: (1) general environmental legislation affecting foreign investments; (2) specific environmental regulatory conduct targeting foreign investments; and (3) environmental rezoning regulation affecting land occupied by foreign investments. The Article then examines 118 international investment agreements that clarify indirect expropriation provisions in three different models. A comparison among the three models shows that most of the treaties fail to identify, first, what "character" of an environmental measure should be considered in the determination of indirect expropriation, and second, what kinds of "rare circumstances" can exempt legitimate environmental regulation from constituting indirect expropriation. Such defects make these provisions ineffective in reconciling the tension between environmental regulation and investment protection. To remedy this deficiency, the Article proposes a five-element test to be included in future international investment treaties.

INTRODUCTION

One of the most significant features of the contemporary reform of international investment agreements ("IIA"s) is the clarification of the once broadly worded and open-textured substantive protection obligation clauses, in order to restrict the discretion of arbitral tribunals and to protect states' rights to regulate public interests. As a part of this reform, the last decade has seen an increasing number of IIAs that incorporate "clarified" indirect expropriation clauses, which, unlike traditional expropriation clauses, stipulate when a state measure affecting foreign investments constitutes indirect

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expropriation.¹ These “clarified” indirect expropriation clauses have been adopted by a wide variety of countries, including Canada, China, Japan, Australia, Turkey, and South Korea. It is generally assumed that these newly included clauses will lead to increases in host states’ policy space and will provide more certainty to both host states and foreign investors.²

Driving the increase in clarified indirect expropriation clauses is a number of IIA cases in which a state’s regulation for public interests, including public health and environmental protection, has been claimed by foreign investors as indirect expropriation. In international law, expropriation is the severest form of state interference with foreign properties.³ Although international law does not prohibit states from taking foreign properties for public purposes, it requires such takings to be accompanied by compensation to the infringed property owners. Today, most expropriations are not conducted in a direct way through a formal expropriation decree or abrupt military occupation; rather, they are conducted in an indirect way through legislation or regulatory conduct which deprives foreign investments of economic value without the transfer of title of the interfered properties.⁴ This latter form of expropriation is called “indirect expropriation” or “regulatory takings.” The question is how to draw a dividing line between a state’s indirect expropriatory conduct, which requires compensation, and a state’s legitimate regulation, which is non-compensable.⁵ Since traditional invest-

1. Based on a survey taken by the United Nations Conference on Trade and Development (“UNCTAD”), only 5% of the bilateral investment treaties (“BIT”) signed before 2010 specify the criteria for indirect expropriation. However, 42% of investment treaties concluded during 2011-2016 contain such provisions. See UNCTAD, *World Investment Report 2017*, 122, U.N. Doc. UNCTAD/WIR/2017 (2017), <https://perma.cc/3TNU-5RCS>.

2. See UNCTAD, *World Investment Report 2018*, 122, 96 U.N. Doc. UNCTAD/WIR/2018 (2018), <https://perma.cc/AS26-7VEY> (“*Preservation of regulatory space*. Recent treaties frequently differ from old-generation treaties in other elements that aim more broadly at preserving regulatory space and/or at minimizing exposure to investment arbitration. These elements include clauses that . . . (ii) clarify obligations (e.g. by including more detailed clauses on FET (11 IIAs) and/or indirect expropriation (10 IIAs).”); see generally Caroline Henckels, *Protecting Regulatory Autonomy Through Greater Precision in Investment Treaties: The TPP, CETA, and TTIP*, 19 J. INT’L ECON. L. 27 (2016).

3. See RUDOLF DOLZER & CHRISTOPH SCHREUER, *PRINCIPLES OF INTERNATIONAL INVESTMENT LAW* 98 (2008).

4. See W. Michael Reisman & Robert D. Sloane, *Indirect Expropriation and its Valuation in the BIT Generation*, 75 BRIT. Y.B. INT’L L. 115, 118 (2004).

5. This unsettled question is not new: there has been rich literature exploring this question since the early 20th century. See, e.g., John Fischer Williams, *International Law and the Property of Aliens*, 9 BRIT. Y.B. INT’L L. 1 (1928); John H. Herz, *Expropriation of Foreign Property*, 35 AM. J. INT’L L. 243 (1941); B. A. Wortley, *EXPROPRIATION IN PUBLIC INTERNATIONAL LAW* (1959); Louis B. Sohn and R. R. Baxter, *Responsibility of States for Injuries to the Economic Interests of Aliens*, 55 AM. J. INT’L L. 545 (1961); G. C. Christie, *What Constitutes a Taking of Property under International Law*, 38 BRIT. Y.B. INT’L L. 307 (1962); Burns H. Weston, *Constructive Takings Under International Law: A Modest Foray into the Problem of Creeping Expropriation*, 16 VA. J. INT’L L. 103 (1975); Allahyar Mouri, *THE INTERNATIONAL LAW OF EXPROPRIATION AS REFLECTED IN THE WORK OF THE IRAN–U.S. CLAIMS TRIBUNAL* (1994); Jon A. Stanley, *Keeping Big Brother Out of Our Backyard: Regulatory Takings as Defined in International Law and Compared to American Fifth Amendment Jurisprudence*, 15 EMORY INT’L L. REV. 349 (2001); Barry Appleton, *Regulatory Takings: The International Law Perspective*, 11 N.Y.U. ENVTL. L.J. 35 (2002); Rudolf Dolzer, *Indirect Expropriations: New Developments?* 11 N.Y.U. ENVTL. L.J. 64 (2003); Reisman & Sloane, *supra* note 4; Vicki Been & Joel C. Beauvais, *The Global Fifth Amendment: NAFTA’s Investment Protection and the Misguided Quest for an*

ment treaties do not specify the criteria for indirect expropriation, tribunals have adopted diverse approaches in determining whether an environmental regulation constitutes compensable indirect expropriation.⁶

In order to provide clearer guidelines for tribunals to distinguish legitimate regulatory conduct from compensable expropriatory conduct, some states have incorporated “clarified” indirect expropriation clauses in newly concluded IIAs. For example, the 2013 Austria-Nigeria bilateral investment treaty (“BIT”) provides that:

Except in rare circumstances, such as when a measure or series of measures are so severe in the light of their purpose that they cannot be reasonably viewed as having been adopted and applied in good faith, non-discriminatory measures of a Contracting Party that are designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, do not constitute indirect expropriation.⁷

The question is: Are these “clarified” indirect expropriation clauses effective in preserving states’ environmental regulatory space?

The current literature fails to provide an answer for two reasons. First, there has been no empirical study of a wide variety of clarified indirect expropriation clauses in IIAs. This Article fills this gap by examining 118 IIAs that adopt clarified indirect expropriation clauses (see Table 2). Second, there is no clear definition of what constitutes environmental regulatory space in the literature. Based on an examination of jurisprudence, this Article finds that investment tribunals have adopted different approaches in the assessment of indirect expropriation concerning three branches of environmental regulatory power: general environmental legislation, specific environmental regulatory conduct, and environmental rezoning regulation (see Table 1). By filling both gaps, the Article concludes that most clarified indirect expropriation clauses are not sufficient in preserving states’ environmental regulatory space. To cure this deficiency, the Article proposes a five-element test to be included in future IIAs to distinguish legitimate environmental regulation from compensable indirect expropriation.

International ‘Regulatory Takings’ Doctrine, 78 N.Y.U. L. REV. 30 (2003); L. Yves Fortier & Stephen L. Drymer, *Indirect Expropriation in the Law of International Investment: I Know It When I See It, or Caveat Investor*, 19 ICSID REV-FILJ 293 (2004); Jeswald W. Salacuse & Nicholas P. Sullivan, *Do BITs Really Work: An Evaluation of Bilateral Investment Treaties and Their Grand Bargain*, 46 HARV. INT’L L.J. 67 (2005); Martins Paporinkis, Chapter 13: Regulatory Expropriation and Sustainable Development, in 30 SUSTAINABLE DEVELOPMENT IN WORLD INVESTMENT LAW, GLOBAL TRADE LAW SERIES 1, 299–327 (Marie-Claire Cordonier Segger et al. eds., 2010); Caroline Henckels, *Indirect Expropriation and the Right to Regulate: Revisiting Proportionality Analysis and the Standard of Review in Investor-State Arbitration*, 15 J. INT’L ECON. L. 223 (2012); Matthew C. Porterfield, *State Practice and the (Purported) Obligation under Customary International Law to Provide Compensation for Regulatory Expropriations*, 37 N.C. J. INT’L & COM. REG. 160 (2011).

6. For different approaches adopted by investment tribunals, see discussion *infra* Part II.

7. Agreement for the Promotion and Protection of Investment, Austria-Nigeria, art. 7(4), Apr. 8, 2013 [hereinafter Austria-Nigeria BIT].

The Article proceeds as follows. Part I provides background on clarified indirect expropriation clauses. Part II defines the environmental regulatory space that should be protected in investor-state investment arbitration. Part III examines three models of clarified indirect expropriation clauses in IIAs, arguing that their terms are still too vague to protect host states' environmental regulatory space. Part IV proposes a five-element test to remedy such deficiency in future investment treaties.

I. THE BACKGROUND OF CLARIFIED INDIRECT EXPROPRIATION CLAUSES: THE EVOLVEMENT OF THE "EXPROPRIATION-REGULATION" DIVISION

States have the sovereign right to expropriate foreign property within the boundaries of their territories. International law does not prohibit expropriation of alien property, but sets conditions on what constitutes a lawful expropriation: the expropriation must be of public purposes, conducted non-discriminatorily and in due process, and accompanied by compensation to the property owner.⁸

International law recognizes two types of expropriation: direct and indirect. Direct expropriation concerns a state measure that deprives owners of title to property. The nationalizations of the oil industries by Libya in the 1970s, by Kuwait in the 1980s, and by Venezuela in the 2000s are typical examples of direct expropriation. Today, direct expropriation is relatively rare, since an abrupt taking of property title may jeopardize the state's reputation as an attractive venue for foreign investments.⁹ By contrast, a more common practice is indirect expropriation, which occurs when a state measure renders the foreign investor's business economically useless, and thus, even without a formal taking of title, has the same effect as a direct expropriation.

What are the criteria for determining indirect expropriation? Most investment treaties do not offer a clear answer.¹⁰ Another important source of

8. For example, Article 1110 of the North American Free Trade Agreement provides:

No Party may directly or indirectly nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation of such an investment ("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.

North American Free Trade Agreement, U.S.-Can.-Mex., art. 1110, Dec. 17, 1992, Can T.S. 1994 No. 2, 32 I.L.M. 289 (1993) [hereinafter NAFTA].

9. See Dolzer & Schreuer, *supra* note 3, at 101.

10. Based on a database of over 2,500 IIAs, among the 2,432 BITs signed before 2010, only 5% contain provisions that clarify what does and does not amount to indirect expropriation. However, recent years have seen an opposite trend: among the 110 treaties signed during 2011-2016, 42% of them contain such provisions. UNCTAD, *supra* note 1 at 122.

international investment law—domestic foreign investment legislation—also remains silent on this issue.¹¹ Nonetheless, many analyses have been conducted in international adjudication practice by numerous international tribunals and courts,¹² whose assessments of indirect expropriation are usually conducted in three steps.

The first step in determining an indirect expropriation is to decide which properties are eligible to be expropriated. Not all alien properties are protected from expropriation under international investment law. Most modern investment treaties protect only “investment” in their expropriation clauses.¹³ The definition of “investment” is critical in deciding not only the coverage of substantive protection clauses (such as the expropriation clause), but also the jurisdiction of the arbitral tribunal based on the consent of the parties to arbitration.¹⁴ Many investment treaties define what qualifies as an “investment” at the beginning of the treaty text, typically with a general definition and an illustration of specific examples of investments.¹⁵

The second step is to assess the impact of the measure on the investment. The tribunals will decide whether the host state’s interference of such properties has reached the level of an expropriation, taking into account both the economic impacts of the measure and the duration of such impacts. Most tribunals have considered a mere reduction in profits as falling short of expropriation; there must be a “substantive deprivation” of the property rights or values.¹⁶ As stated in an early award by the Iran-United States Claims Tribunal, the state’s measures can be deemed an expropriation if they

11. Until May 9, 2017, 108 countries adopted a total of 111 domestic laws to promote and regulate foreign investments, among which 82 laws provide protection to foreign investors in case of expropriation. Although most of these expropriation provisions provide the conditions for a lawful expropriation and the amount of compensation and 20 of them explicitly refer to indirect expropriation, “no investment law actually defines indirect expropriation by articulating, for example, the difference between indirect expropriation and non-compensable regulation taken for the public interest.” *Id.* at 104–08.

12. These tribunals include international investment tribunals (formed, *e.g.*, under the International Centre for Settlement of Investment Disputes (“ICSID”), the Stockholm Chamber of Commerce (“SCC”), or the United Nations Commission on International Trade Law (“UNCITRAL”) Rules), the Iran-United States Claims Tribunal (“IUSCT”), and the European Court of Human Rights.

13. *See* Dolzer & Schreuer, *supra* note 3, at 99.

14. *Id.*

15. For example, Article 1(6) of the Energy Charter Treaty provides:

‘Investment’ means every kind of asset, owned or controlled directly or indirectly by an Investor and includes: (a) tangible and intangible, and movable and immovable, property, and any property rights such as leases, mortgages, liens, and pledges; (b) a company or business enterprise, or shares, stock, or other forms of equity participation in a company or business enterprise, and bonds and other debt of a company or business enterprise; (c) claims to money and claims to performance pursuant to contract having an economic value and associated with an Investment; (d) Intellectual Property; (e) Returns; (f) any right conferred by law or contract or by virtue of any licences and permits granted pursuant to law to undertake any Economic Activity in the Energy Sector.

Energy Charter Treaty, art. 1(6), Dec. 17, 1994, 2080 U.N.T.S. 95.

16. *See, e.g.*, *Metalclad Corp. v. United Mexican States*, ICSID Case No. ARB(AF)/97/1, Award of the Tribunal, ¶ 103 (Aug. 30, 2000) [hereinafter *Metalclad v. Mexico*]; *Biwater Gauff (Tanz.), Ltd. v. United Republic of Tanzania*, ICSID Case No. ARB/05/22, Award of the Tribunal, ¶ 463 (July 24, 2008); *Suez*

“interfere with property rights to such an extent that these rights are rendered so useless that they must be deemed to have been expropriated.”¹⁷

The third step, and the most contentious one, is to assess the justifiable grounds for an indirect expropriation. A claim of indirect expropriation is often made against general regulation of host states for the protection of environment, public health, and other public interests. As a result, the protection of foreign investors from indirect expropriation may go against another well-recognized doctrine in international law: a state’s exercise of police powers does not constitute expropriation. Thus, an important distinction should be made between compensable indirect expropriation and non-compensable exercise of police powers by the state. The question is where to draw a line between the two.

In this respect, the tribunals have adopted two general approaches: the “sole effect” and the “police powers” doctrines. The “sole effect” doctrine means a tribunal only takes into account the *effect* of a state measure when examining indirect expropriation, while the “police powers” doctrine means a tribunal also considers the *public interest purpose* of the measure which may justify an otherwise indirect expropriation.

The tribunals adopting the “sole effect” doctrine say that the public interest purposes underlying a state measure do not affect the termination of indirect expropriation. The jurisprudence of the Iran-United States Claims Tribunal (“IUSCT”) is often cited as an example of this approach. The IUSCT was established in the context of the Islamic revolution in Iran and its aftermath.¹⁸ The IUSCT has jurisdiction to decide claims arising out of “expropriations or other measures affecting property rights.”¹⁹ Since 1983, the IUSCT has decided a number of cases involving expropriation claims, most of which relate to indirect expropriations.²⁰ In fact, the case law in the IUSCT has been inconsistent with respect to whether the intent of the governmental measure should be taken into account in a finding of expropriation. In *Sea-Land Service*, the claimant, Sea-Land, argued that a series of conducts by the Iranian Ports and Shipping Organization had amounted to an expropriation of the claimant’s contractual rights.²¹ The tribunal held that a “finding of expropriation would require, at the very least, that the tribunal be satisfied that there was deliberate governmental interference with the conduct of Sea-Land’s operation, the effect of which was to deprive

Societat General de Aguas de Barcelona S.A. and Vivendi Universal S.A. v. Argentine Republic, ICSID Case No. ARB/03/19, Award of the Tribunal, ¶¶ 122–43 (July 30, 2010).

17. *Starrett Housing Corp. v. Iran*, 4 Iran-U.S. Cl. Trib. Rep. 122, 154 (1983).

18. Charles N. Brower, *Current Developments in the Law of Expropriation and Compensation: A Preliminary Survey of Awards of the Iran-United States Claims Tribunal*, 21 INT’L LAW. 639, 642–69 (1987).

19. Declaration of the Government of the Democratic and Popular Republic of Algeria Concerning the Settlement of Claims by the Government of the United States of America and the Government of the Islamic Republic of Iran, 6 Iran-U.S. Cl. Trib. Rep. 149 (1984).

20. Maurizio Brunetti, *The Iran-United States Claims Tribunal, NAFTA Chapter 11, and the Doctrine of Indirect Expropriation*, 2 CHI. J. INT’L L. 203, 205 (2001).

21. *Sea-Land Service Inc. v. The Islamic Republic of Iran*, 6 Iran-U.S. Cl. Trib. Rep. 149 (1984).

Sea-Land of the use and benefit of its investment.”²² However, in *Tippetts*, the tribunal rejected this approach.²³ Regarding the claimant’s argument that a transfer of management qualified as an expropriation, the tribunal agreed in an oft-cited phrase: “[t]he intent of the government is less important than the effects of the measures on the owner, and the form of the measures of control or interference is less important than the reality of their impact.”²⁴

This approach was followed by the IUSCT in *Phelps Dodge Corp. v. Iran*.²⁵ In this case, Iran transferred the management of a factory, which was the principal asset of a company of which the claimant was a shareholder, to two agencies of the Iranian government. As a result, the claimant was blocked from the operation of the factory and received no dividends. Iran argued that the transfer of management was based on a new law to protect industries after the Revolution. However, the tribunal found that “the financial, economic, and social concerns that inspired the law” underlying the challenged actions “cannot relieve the Respondent of the obligation to compensate Phelps Dodge for its loss.”²⁶

Some NAFTA and BIT cases have adopted the same approach. The tribunal in *Santa Elena v. Costa Rica*, when deciding whether an environmental purpose can affect the expropriatory nature of a measure, held:

Expropriatory environmental measures—no matter how laudable and beneficial to society as a whole—are, in this respect, similar to any other expropriatory measures that a state may take in order to implement its policies: where property is expropriated, even for environmental purposes, whether domestic or international, the state’s obligation to pay compensation remains.²⁷

The tribunal in *Azurix v. Argentina* has pointed out the dilemma of the “expropriation-regulation” distinction:

22. *Id.* at 166. However, Christoph Schreuer reads this paragraph in a different way, noting that “[a] closer reading of the passage would suggest that the tribunal did not require intent to expropriate. It is the government interference as such that would have to be deliberate. For the deprivation of the use and benefit of the investment it is the effect that is decisive.” Christoph Schreuer, *The Concept of Expropriation under the ETC and other Investment Protection Treaties*, para. 190 (2005), <https://perma.cc/WGC4-CQNF>.

23. *Tippetts, Abbett, McCarthy, Stratton v. TAMS-AFFA Consulting Engineers of Iran*, 6 Iran-U.S. Cl. Trib. Rep. 219 (1984). In this case, the claimant, TAMS, was a U.S. company who signed an agreement with an Iranian company, AFFA, to create an Iranian entity named TAMS-AFFA for the sole purpose of running an airport project. TAMS and AFFA jointly controlled the TAMS-AFFA company, and each appointed at least one member of the company to make decisions. After the Iranian Revolution, the Iranian government appointed a new manager to AFFA, but this manager assumed the right to make decisions for TAMS-AFFA unilaterally without consulting TAMS.

24. *Id.* at 225–26.

25. *Phelps Dodge Corp. v. Iran*, 10 Iran-U.S. Cl. Trib. Rep. 121 (1986).

26. *Id.* at 130.

27. *Compañía de Desarrollo de Santa Elena, S.A. v. Costa Rica*, ICSID Case No. ARB/96/1, Award of the Tribunal, ¶ 72 (Feb. 17, 2000) [hereinafter *Santa Elena v. Costa Rica*].

According to it, the BIT would require that investments not be expropriated except for a public purpose and that there be compensation if such expropriation takes place and, at the same time, regulatory measures that may be tantamount to expropriation would not give rise to a claim for compensation if taken for a public purpose.²⁸

Judge Rosalyn Higgins also questioned the distinction between compensable takings and non-compensable regulation. She noted:

Is this distinction intellectually viable? Is not the State in both cases (that is, either by a taking for a public purpose, or by regulating) purporting to act in the common good? And in each case has the owner of the property not suffered loss? Under international law standards, a regulation that amounted (by virtue of its scope and effect) to a taking, would need to be 'for a public purpose' (in the sense of a general, rather than for a private, interest). And just compensation would be due.²⁹

Unlike the "sole effect" doctrine, the "police powers" doctrine requires tribunals to take into account the state's police powers in the determination of indirect expropriation. A state's exercise of police powers, even when resulting in a substantial deprivation of the foreign investor's properties, does not qualify as an indirect expropriation.³⁰ This approach can be traced to the IUSCT, which has adopted the police powers doctrine in some cases in which United States was the Respondent. For example, in *Emanuel Too v. Greater Modesto Insurance Associates*, an Iranian claimant argued that its liquor license had been seized by the U.S. Internal Revenue Service. The tribunal

28. *Azurix Corp. v. Argentine Republic*, ICSID Case No. ARB/01/12, Award of the Tribunal, ¶ 311 (July 14, 2006) [hereinafter *Azurix v. Argentina*].

29. Rosalyn Higgins, *The Taking of Property by the State: Recent Developments in International Law*, 176 RECUEIL DES COURS 259, 331 (1982).

30. It is well-recognized by general international law that a state's interference with foreign properties in an exercise of police power is not expropriation. John H. Herz, *Expropriation of Foreign Property*, 35 AM. J. INT'L L. 243, 251 (1941) ("However, even in the era of most radical non-intervention policy there were always certain cases in which state interference with private property was not considered expropriation entailing an obligation to pay compensation but a necessary act to safeguard public welfare: e.g., measures taken for reasons of police, that is, for the protection of public health or security against internal or external danger. The right of the state to interfere with private property in the exercise of its police power has been recognized by general international law as referring to foreign property also: interference with foreign property in the exercise of police power is not considered expropriation."). G. C. Christie, *What Constitutes a Taking of Property under International Law*, 38 BRIT. Y.B. INT'L L. 307, 331-32 (1962) ("The conclusion that a particular interference is an expropriation might also be avoided if the State whose actions are the subject of complaint had a purpose in mind which is recognized in international law as justifying even severe, although by no means complete, restrictions on the use of property. Thus, the operation of a State's tax laws, changes in the value of a State's currency, actions in the interest of the public health and morality, will all serve to justify actions which because of their severity would not otherwise be justifiable; subject to the proviso, of course, that the action in question is not what would be 'commonly' called discriminatory either with respect to aliens or with respect to a certain class of persons, among whom are aliens, residing in the State in question.").

noted that the seizure had resulted from the claimant's failure to pay taxes. Thus, it held that:

[A] State is not responsible for loss of property or for other economic disadvantage resulting from bona fide general taxation or any other action that is commonly accepted as within the police power of States, provided it is not discriminatory and is not designed to cause the alien to abandon the property to the State or to sell it at a distress price.³¹

This approach was also adopted in some subsequent cases. In *Feldman v. Mexico*, the ICSID tribunal noted that:

[G]overnments must be free to act in the broader public interest through protection of the environment, new or modified tax regimes, the granting or withdrawal of governmental subsidies, reductions or increases in tariff levels, imposition of zoning restrictions and the like. Reasonable governmental regulation of this type cannot be achieved if any business that is adversely affected may seek compensation, and it is safe to say that customary international law recognizes this.³²

In *S.D. Myers v. Canada*, the tribunal also ruled, although in a somewhat obscure way, that “[r]egulatory conduct by public authorities is unlikely to be the subject of legitimate complaint under Article 1110 of the NAFTA, though the tribunal does not rule out that possibility.”³³ A clearer formula was provided in *Methanex v. U.S.* The tribunal noted that:

[A]s a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and, which affects, inter alios, a foreign investor or investment is not deemed expropriatory and compensable unless specific commitments had been given by the regulating government to the then putative foreign investor contemplating investment that the government would refrain from such regulation.³⁴

The rationale of the police powers doctrine is that states should not pay compensation for legitimate regulation. Compared to the early 19th century

31. *Emanuel Too v. Greater Modesto Ins. Associates, Iran-U.S. Claims Tribunal*, 23 Iran-U.S. Cl. Trib. Rep. 378, 387-88 (1991).

32. *Marvin Feldman v. Mexico, ICSID Case No. ARB(AF)/99/1, Award of the Tribunal*, ¶ 103 (Dec. 16, 2002).

33. *S. D. Myers Inc. v. Government of Canada*, 40 I.L.M. 1408, Second Partial Award, ¶ 281 (NAFTA Arb. 2002) [hereinafter *S. D. Meyers v. Canada*].

34. *Methanex Corporation v. United States of America, Final Award of the Tribunal on Jurisdiction and Merits, Part IV-D-4*, ¶ 7 (NAFTA Arb. 2005), <https://perma.cc/6KBC-VB3V> [hereinafter *Methanex v. U.S.*].

theory of a *laissez-faire* society, in which the function of the government was merely to protect private property, modern governments serve increasingly broad regulatory purposes, creating “welfare” states by “interfering daily in all imaginable realms of private activities by all imaginable measures and procedures.”³⁵ This expanded regulatory role has generated increasing tension between entrenched property rights and pervasive regulatory power at both domestic and international levels.³⁶ Many commentators worry that an expanded concept of regulatory takings will chill efficient regulation.³⁷ As stated by the U.S. Supreme Court in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, non-distinction between physical takings and regulatory takings “would transform government regulation into a luxury few governments could afford.”³⁸

The question is how to distinguish an exercise of police powers, for which states need not compensate foreign investors, and an exercise of eminent domain, for which compensation is necessary.³⁹ It is not easy to answer this question since both the exercise of police powers and that of eminent domain concern suppression of private property. Williams in 1928 noted that, to this question:

[T]he only line of argument remaining open would seem to be an attempt to base the distinction between the confiscation which legitimately may be carried through without compensation and the confiscation which is illegitimate unless accompanied by compensation, on the nature of the motive which inspires or is thought to inspire the legislating state.⁴⁰

In other words, the foundation for the expropriation-regulation distinction is “whether or not the motive inspiring that intention was to regulate ‘public morals, health and safety’ or to make private interests ‘subservient to the general interests of the community.’”⁴¹ However, it is also not easy to detect the motive underlying a governmental measure. Christie, recognizing the distinction between “the purpose which a State actually gives for its actions” and the unexpressed “real” purpose that motivates the state, noted

35. Herz, *supra* note 5, at 252.

36. Appleton, *supra* note 5, at 46.

37. Been & Beauvais, *supra* note 5, at 132–35; Helen Mountfield, *Regulatory Expropriations in Europe: The Approach of the European Court of Human Rights*, 11 N.Y.U. ENVTL. L.J. 136, 147 (2002) (“No government would be permitted to change or improve regulatory standards unless it could afford to ‘buy out’ any private interest which would be adversely affected.”).

38. *Tahoe-Sierra Pres. Council v. Tahoe Reg’l Planning Agency*, 535 U.S. 302, 324 (2002).

39. Herz, *supra* note 5, at 243–62 (“[I]t is very difficult to draw a sharp line of demarcation between the exercise of the right of eminent domain and that of police power, especially since states have more and more abandoned the *laissez-faire* conception of their functions and become ‘welfare’ states interfering daily in all imaginable realms of private activities by all imaginable measures and procedures.”).

40. Williams, *supra* note 5, at 26.

41. *Id.*

that searching for the “real” purpose is chimerical if the given reasons are plausible.⁴²

The protection of the police powers of states does not mean an unlimited deference to domestic decision, given that most interference with property can be cloaked with some social purpose.⁴³ Thus, it is necessary to maintain the independent power of international tribunals in the adjudication of whether states make decisions within the scope of their police powers.⁴⁴ An abuse of police powers should not be exempted from compensation. States may abuse police powers in two ways: acts in *mala fides* and acts that are discriminatory or lack due process. On the one hand, states might exercise police powers in bad faith. Writing in 1959, Wortley pointed out that a non-compensable regulation must be conducted in good faith and that states must not abuse their right to regulate.⁴⁵ On the other hand, states should not exercise police powers in a way that is discriminatory or lacks due process.⁴⁶

Recent years have seen an attempt to strike a balance between the state’s right to regulate and the investor’s interests through a “proportionality test,” meaning that the state regulation is justifiable if it is proportionate to achieve public welfare goals.⁴⁷ This approach, deriving from the jurisprudence of the European Court of Human Rights, has been followed by some NAFTA and BIT arbitration cases. The tribunal in *Tecmed v. Mexico*, for

42. Christie, *supra* note 5, at 332.

43. *Id.* at 337.

44. As John Fischer Williams wrote almost a century ago:

It is indeed evident that the judgment of the expropriating state itself that the necessity for the sacrifice of private property has arisen, must be accepted as final. . . . But if this proposition be disputed and an international authority is to be invoked, the jurisdiction of that authority cannot be ousted by the mere assertion of the defendant state that it is exercising a ‘police power.’ The international authority must try the issue raised by the defence.

Williams, *supra* note 5, at 26–27.

45. Wortley, *supra* note 5, at 110 (“[E]ven genuine health and planning legislation . . . may be abusively operated, for example, if health or quarantine regulations are imposed not bona fide to protect public health, but with the real, though unavowed, purpose of ruining a foreign trader. . . . A foreigner may not receive any compensation for the indirect loss resulting to him from an act done for the public benefit. But the act must not be done carelessly or abusively, for, as has been shown, the principle of good faith and the doctrine of abuse of rights are becoming of importance in both national and international law.”).

46. Stanley pointed out the danger of according unlimited deference to the police powers of states:

[W]hile states should be afforded a certain amount of discretion, the police power doctrine should not be used as a shroud to mask discriminatory legislation that deprives foreign claimants of their property. This abuse of the police power doctrine now threatens to pose a larger danger than ever in the context of environmental regulations. It appears that all environmental regulations can be justified as furthering ‘public health’ under the current liberal application of the police power doctrine.

Stanley, *supra* note 6, at 389.

47. Alec Stone Sweet & Giacinto Della Cananea, *Proportionality, General Principles of Law, and Investor-State Arbitration: A Response to José Alvarez* (2014), 46 N.Y.U. J. INT’L L. & POL. 911 (2014); Prabhash Ranjan, *Using the Public Law Concept of Proportionality to Balance Investment Protection with Regulation in International Investment Law: A Critical Appraisal*, 3 CAMBRIDGE J. INT’L & COMP. L. 853 (2014).

example, held that “there must be a reasonable relationship of proportionality between the charge of weight imposed to the foreign investor and the aim sought to be realized by an expropriatory measure.”⁴⁸ The same approach was adopted by tribunals in *Azurix v. Argentina*⁴⁹ and *LG&E v. Argentina*.⁵⁰

II. DEFINING ENVIRONMENTAL REGULATORY SPACE: THE “INDIRECT EXPROPRIATION—ENVIRONMENTAL REGULATION” DIVISION IN INTERNATIONAL INVESTMENT ARBITRATION

This Part defines the environmental regulatory space that should be protected from indirect expropriation claims. The past twenty years have witnessed an increasing number of claims that host states’ environmental measures which impair the interests of foreign investments were indirect expropriation. These cases suggest three categories of environmental regulatory space that might be subject to indirect expropriation claims: (1) general environmental legislation affecting foreign investments; (2) specific environmental regulatory conduct targeting foreign investments; and (3) rezoning power concerning the land occupied by foreign investments. An examination of jurisprudence shows that, except in land-use cases, no tribunal has adopted the “sole effects” doctrine to determine the expropriatory nature of an environmental measure; moreover, there has been a trend in the arbitration practice toward providing more discretion to states’ environmental regulatory power (see Table 1).

48. *Técnicas Medioambientales Tecmed, S.A. v. The United Mexican States*, ICSID Case No. ARB (AF)/00/2, Award of the Tribunal, ¶ 122 (May 29, 2003) [hereinafter *Tecmed v. Mexico*].

49. *Azurix v. Argentina*, ICSID Case No. ARB/01/12, Award of the Tribunal, ¶ 311 (July 14, 2006).

50. *LG&E Energy Corp., LG&E Capital Corp., & LG&E International Inc. v. Argentine Republic*, ICSID Case No. ARB/02/01, Decision on Liability, ¶ 195 (Oct. 3, 2006).

Table 1. Jurisprudence on the “Indirect Expropriation–Environmental Regulation” Division

Challenged Measures	Cases	Conditions for Justification
Environmental Legislation	<i>S.D. Myers v. Canada</i>	N/A (the tribunals found no prima facie expropriation)
	<i>Plama v. Bulgaria</i>	
	<i>Windstream v. Canada</i>	
	<i>Methanex v. U.S.</i>	Public Purpose, Non-discriminatory Manner, and Due Process
	<i>Cbentura v. Canada</i>	Public Purpose, Non-discriminatory Manner, and State Organ’s Mandate
Environmental Regulatory Conduct	<i>Metalclad v. Mexico</i>	“Legitimate Expectations” and “A Timely, Orderly or Substantive Basis”
	<i>Tecmed v. Mexico</i>	Public Purpose and a Proportionality Test
	<i>Gold Reserve v. Venezuela</i>	A “Plausible” Ground
	<i>Crystallex v. Venezuela</i>	Freedom of State Regulation
Change of Land Use for Natural Preservation	<i>Metalclad v. Mexico</i>	None (“Sole Effects”)
	<i>Unглаube v. Costa Rica</i>	None (“Sole Effects”)

A. Expropriation Claims Arising From General Environmental Legislation

In *S.D. Myers v. Canada*, *Methanex v. U.S.*, *Plama v. Bulgaria*, *Cbentura v. Canada*, and *Windstream v. Canada*, foreign investors claimed that host states’ environmental legislations were indirect expropriation. However, the tribunals in all five cases have rejected the expropriation claims, for different reasons: the tribunals in *S.D. Myers v. Canada*, *Plama v. Bulgaria*, and *Windstream v. Canada* concluded that there was no prima facie indirect expropriation, either because the foreign investor did not suffer sufficient losses (*S.D. Myers* and *Windstream*), or because there lacked a causal link between the foreign investor’s losses and the challenged measure (*Plama v. Bulgaria*); on the other hand, the tribunals in *Methanex v. U.S.* and *Cbentura v. Canada* concluded that the environmental intent underlying the measure can justify a prima facie indirect expropriation.

1. *S.D. Myers v. Canada, Plama v. Bulgaria, and Windstream v. Canada: No Prima Facie Expropriation*

The *S.D. Myers v. Canada* case concerned a Canadian ban on polychlorinated biphenyl (“PCB”), a toxic chemical compound used in electrical equipment.⁵¹ *S.D. Myers* claimed that the Canadian ban on PCB waste was tantamount to an expropriation under Article 1110 of the NAFTA.⁵² The tribunal noted that the Canadian ban was a regulatory act, and that “[t]he general body of precedent usually does not treat regulatory action as amounting to expropriation. Regulatory conduct by public authorities is unlikely to be the subject of legitimate complaint under Article 1110 of the NAFTA, although the tribunal does not rule out that possibility.”⁵³ In the subsequent paragraphs, the tribunal found that the closure of the border by Canada was temporary and thus did not rise to a level of expropriation.⁵⁴

The *Plama v. Bulgaria* case concerned an amendment of Bulgarian environmental law in terms of the liability of pollution abatement. In this case, the foreign investor *Plama* claimed that Bulgaria had expropriated its assets by imposing a burden to clean up past environmental damages.⁵⁵ *Plama* argued that this change of law led to *Plama*’s inability to secure financing for the refinery and finally forced it to shut the refinery down, which constituted an indirect expropriation under Article 13 of the Energy Charter Treaty (“ECT”).⁵⁶ In the assessment of expropriation, the tribunal observed that, “it is widely acknowledged that expropriation can result from State conduct that does not amount to physical control or loss of title but that adversely affects the economic use, enjoyment and value of the investment.”⁵⁷ Then, the tribunal noted that in this case “the decisive elements in the evaluation of Respondent’s conduct” are:

[T]he assessment of (i) substantially complete deprivation of the economic use and enjoyment of the rights to the investment, or of identifiable, distinct parts thereof (*i.e.*, approaching total impairment); (ii) the irreversibility and permanence of the contested

51. *S.D. Myers v. Canada*, 40 I.L.M. 1408, Second Partial Award, ¶¶ 93–128 (NAFTA Arb. 2002).

52. *Id.* ¶ 279.

53. *Id.* ¶ 281.

54. The tribunal held that: “[e]xpropriations tend to involve the deprivation of ownership rights; regulations a lesser interference. The distinction between expropriation and regulation screens out most potential cases of complaints concerning economic intervention by a state and reduces the risk that governments will be subject to claims as they go about their business of managing public affairs.” *Id.* ¶ 282. The tribunal further noted that “[a]n expropriation usually amounts to a lasting removal of the ability of an owner to make use of its economic rights. . . .” *Id.* at ¶ 283. Given that in this case the closure of the border was temporary, the tribunal found no expropriation. *Id.* at ¶¶ 282–88.

55. *Plama Consortium Ltd. v. Republic of Bulg.*, ICSID Case No. ARB/03/24, Award of the Tribunal, ¶¶ 149–51 (Aug. 27, 2008) [hereinafter *Plama v. Bulgaria*].

56. *Id.* ¶¶ 190–95.

57. *Id.* ¶ 191.

measures (*i.e.*, not ephemeral or temporary); and (iii) the extent of the loss of economic value experienced by the investor.⁵⁸

Given that the tribunal found there was not enough evidence that the harm suffered by Plama was due to the environmental amendments, the tribunal concluded no expropriation.⁵⁹

In the recent *Windstream v. Canada* case, the tribunal assessed whether a Canadian government's moratorium on an off-shore wind power project, enacted because of the scientific uncertainty of the project's environmental impacts, constituted indirect expropriation.⁶⁰ This case concerned a U.S. company, Windstream, which invested in an off-shore wind power project in Ontario, Canada. After Windstream signed a twenty year contract and made the preparatory investments, Canada enacted a moratorium on off-shore wind power development because of the scientific uncertainty surrounding the environmental impacts of off-shore wind power projects. The investor argued that the moratorium constituted an indirect expropriation.⁶¹ The tribunal did not examine the environmental element, but found no expropriation for the reason that the investor had not been substantially deprived of its investments.⁶²

In conclusion, the tribunals in all three above-mentioned cases found no *prima facie* expropriation. None of them had a chance to examine whether an environmental intent can justify a *prima facie* indirect expropriation. By contrast, the *Methanex v. U.S.* and *Chebentura v. Canada* cases did allow tribu-

58. *Id.* ¶ 193.

59. *Id.* ¶ 225–27.

60. See *Windstream Energy LLC v. Government of Canada*, ICSID Case No. 2013-22, Award of the Tribunal (Sept. 27, 2016).

61. The investor claimed that, since the Windstream Wolfe Island Shoals Inc. (“WWIS”) failed to bring the project into commercial operation according to the Feed-in-Tariff (“FIT”) Contract, the project “is no longer financeable and has effectively lost all of its value.” *Id.* ¶ 288. Thus, even if the contract has not been terminated, “the Ontario Government has created such uncertainty around the offshore wind industry in Ontario that no potential investor would be prepared to invest in the Project.” *Id.* However, the respondent argued that “the Project had no value at the time of its alleged taking” and the investor was at most “deprived of an ‘opportunity’ to develop the Project.” *Id.* ¶ 289. Moreover, the moratorium was temporary and did not permanently deprive the investment; the investor’s assets, including its security deposit, remain intact and could be returned upon the termination of the contract. *Id.*

62. The tribunal found no expropriation in this case, since the investor’s “FIT Contract is still formally in force” and is open for reactivation and renegotiation. *Id.* ¶ 290. More importantly, the investor’s security deposit is still in place and will be returned to the investor upon the termination of the contract. The tribunal thus concluded that the investor has not been substantially deprived of its investment. The tribunal has especially considered that the investor’s sunk costs in the project “do not substantially exceed, if at all, the value of the security deposit.” Since “the value of the asset that is still available to the claimant as it has not been taken (*i.e.*, the security deposit) is substantial, in particular when compared to the overall value of the investment,” the tribunal found no substantial deprivation of the value of the investment. *Id.* ¶ 291. Nonetheless, the tribunal held that Canada had violated the Fair and Equitable Treatment (“FET”) standard. Although the tribunal held Canada’s concerns on scientific uncertainty over the wind power were a genuine policy, it found that Canada had failed to complete the scientific studies of the wind power after enacting the moratorium and thus left the foreign investor in a “legal and contractual limbo.” Such regulatory uncertainty led to a violation of FET. *Id.* ¶ 379.

nals to step into the environmental intent justification part under the indirect expropriation clauses.

2. *Methanex v. U.S.: Public Purpose, Non-discriminatory Manner, and Due Process*

The *Methanex v. U.S.* tribunal held that a state measure falls within a legitimate exercise of police powers if it is for public purpose and is conducted in a non-discriminatory manner, with due process.⁶³ This case concerned a Californian ban on the use of petrol containing methyl tertiary-butyl ether ("MTBE"), an oxygenate petrol additive that has health and environmental risks. Methanex is a Canadian-registered company that manufactured methanol, an ingredient for making MTBE. Methanex argued that the Californian ban had deprived it of a substantial portion of its share in the oxygenate markets and thus constituted a measure tantamount to expropriation under Article 1110 of the NAFTA.⁶⁴

The tribunal in this case noted that:

[A]s a matter of general international law, a non-discriminatory regulation for a public purpose, which is enacted in accordance with due process and, which affects, inter alios, a foreign investor or investment is not deemed expropriatory and compensable unless specific commitments had been given by the regulating government to the then putative foreign investor contemplating investment that the government would refrain from such regulation.⁶⁵

The tribunal further stressed that no specific commitments were given to Methanex at the time of investment. Particularly, it noted that Methanex should have been aware of the political economy of the market it entered into:

Methanex entered a political economy in which it was widely known, if not notorious, that governmental environmental and health protection institutions at the federal and state level, operating under the vigilant eyes of the media, interested corporations, non-governmental organizations and a politically active electorate, continuously monitored the use and impact of chemical compounds and commonly prohibited or restricted the use of some of those compounds for environmental and/or health reasons.⁶⁶

Therefore, the tribunal concluded that "the California ban was made for a public purpose, was non-discriminatory, and was accomplished with due

63. *Methanex v. U.S.*, *supra* note 34, ¶ 15.

64. *Id.* ¶ 2.

65. *Id.* ¶ 7.

66. *Id.* ¶ 9.

process,” and thus, “the California ban was a lawful regulation and not an expropriation.”⁶⁷ It can be inferred from the tribunal’s analysis that a state measure does not constitute indirect expropriation if it is made for public purpose, is non-discriminatory, and is with due process.

3. *Chemtura v. Canada: Public Purpose, Non-discriminatory Manner, and State Organ’s Mandate*

In the subsequent *Chemtura v. Canada* case, the tribunal adopted a similar approach. It held that a non-discriminatory measure for the protection of human health and environment taken within the mandate of a state organ is a valid exercise of a state’s police powers.⁶⁸

In this case, the U.S. investor Chemtura claimed that the Canadian ban of lindane, a toxic chemical, constituted an expropriation of its investment. At the outset, the tribunal found that there was no “substantial deprivation” of the investor’s investment because first, the sales of lindane products were only a small part of the investor’s overall sales;⁶⁹ second, the corporation remained operational and its sales continued an ascending trend;⁷⁰ and third, the investor remained in control of its investment.⁷¹ However, the tribunal further noted:

Irrespective of the existence of a contractual deprivation, the Tribunal considers in any event that the measures challenged by the Claimant constituted a valid exercise of the Respondent’s police powers. As discussed in detail in connection with Article 1105 of NAFTA, the PMRA took measures within its mandate, in a non-discriminatory manner, motivated by the increasing awareness of the dangers presented by lindane for human health and the environment. *A measure adopted under such circumstances is a valid exercise of the State’s police powers and, as a result, does not constitute an expropriation.*⁷²

B. *Expropriation Claims Arising from Specific Environmental Regulatory Conduct Targeting at the Foreign Investment*

In addition to general environmental legislation, a host state’s environmental regulatory conduct, such as a denial of permit or a termination of concession for environmental reasons, may also lead to a claim of expropriation. Among the four cases falling within this category, *Metalclad v. Mexico*, *Tecmed v. Mexico*, *Gold Reserve v. Venezuela*, and *Crystallex v. Venezuela*, all the

67. *Id.* ¶ 15.

68. *Chemtura Corp. v. Canada*, Award, (NAFTA Arb. 2010) [hereinafter *Chemtura v. Canada*].

69. *Id.* ¶ 263.

70. *Id.* ¶ 264.

71. *Id.*

72. *Id.* ¶ 266.

tribunals took into account states' police powers in their examination of expropriation, but adopted different approaches with respect to the threshold for a legitimate exercise of states' police powers.

1. *Metalclad v. Mexico: "Legitimate Expectations" and "A Timely, Orderly or Substantive Basis"*

In *Metalclad v. Mexico*, the tribunal took into account the foreign investors' legitimate expectations and the substantive and procedural basis of the state measure in the expropriation assessment.

In this case, the foreign investor Metalclad argued that the municipal government's denial of its construction permit, partly based on environmental concerns, had amounted to an expropriation. Metalclad was a U.S. enterprise investing in a hazardous waste landfill in the municipality of Guadalcazar in Mexico. After federal and state officials had assured Metalclad of attaining all the required permits, Metalclad began the construction of the landfill.⁷³ However, the construction was terminated by the municipal government due to the lack of a municipal construction permit.⁷⁴ After gaining further assurance from the federal officials that "the Municipality would issue the permit as a matter of course,"⁷⁵ Metalclad applied for a municipal permit and simultaneously resumed its construction.⁷⁶ However, upon the construction of the landfill, there appeared strong public opposition against the landfill.⁷⁷ The municipal government finally denied the construction permit for the landfill.⁷⁸

Metalclad claimed that the denial of permit had amounted to an expropriation under Article 1110 of the NAFTA. The tribunal noted that the Municipality had acted outside its authority by denying the construction permit based on concerns over the adverse environmental impact of the landfill.⁷⁹ The tribunal then swiftly concluded that the denial of construction permit, "taken together with the representations of the Mexican federal government, on which Metalclad relied, and the absence of a timely, orderly or substantive basis for the denial by the Municipality of the local construction permit," constituted an indirect expropriation.⁸⁰

2. *Tecmed v. Mexico: Public Purpose and a Proportionality Test*

Unlike *Metalclad v. Mexico*, the tribunal in the subsequent *Tecmed v. Mexico* case adopted a proportionality test in the assessment of indirect expropria-

73. *Metalclad v. Mexico*, *supra* note 16, ¶¶ 30–36.

74. *Id.* ¶ 40.

75. *Id.* ¶ 41.

76. *Id.* ¶ 42.

77. *Id.* ¶ 46.

78. *Id.* ¶ 50.

79. *Metalclad v. Mexico*, *supra* note 16, ¶ 106.

80. *Id.* ¶ 107.

tion. It held that a state's measure for public purpose can only be justified if the measure is *proportional* to achieve such a purpose.

In *Tecmed v. Mexico*, the foreign investor running a hazardous waste landfill claimed that Mexico's denial of its operating permit constituted an expropriation. Mexico contended that the denial of permit was due to fierce community opposition to the landfill. In this case, the tribunal examined whether the challenged measure, "due to its characteristics and considering not only its effects," is expropriatory.⁸¹ In this respect, the tribunal adopted the "police powers" doctrine, holding that a state need not compensate for an "exercise of its sovereign powers within the framework of its police powers," even though such exercise of powers causes economic damages.⁸²

The tribunal further noted that a legitimate exercise of police powers under domestic law does not necessarily mean that it complies with international law.⁸³ The tribunal resorted to the treaty language, concluding that, "we find no principle stating that regulatory administrative actions are per se excluded from the scope of the Agreement, even if they are beneficial to society as a whole—such as environmental protection"⁸⁴ The tribunal also cited the *Santa Elena* award, stating that, "where property is expropriated, even for environmental purposes, whether domestic or international, the state's obligation to pay compensation remains."⁸⁵

Subsequently, the tribunal examined the proportionality of the challenged measure. Citing the jurisprudence of the European Court of Human Rights, the tribunal held that:

[I]n addition to the negative financial impact of such actions or measures, the Arbitral Tribunal will consider, in 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 investments, taking into account that the significance of such impact has a key role upon deciding the proportionality.⁸⁶

The tribunal acknowledged that, in this analysis, due deference should be given to the host state. But it also stressed that such deference does not prevent the tribunal from examining "whether such measures are reasonable with respect to their goals, the deprivation of economic rights and the legitimate expectations of who suffered such deprivation."⁸⁷ The tribunal held that there must be "a reasonable relationship of proportionality" between

81. *Tecmed v. Mexico*, *supra* note 48, ¶ 118.

82. *Id.* ¶ 119.

83. *Id.* ¶¶ 119–20.

84. *Id.* ¶ 121.

85. *Id.* The quote here seems problematic, because, as will be illustrated later, the *Santa Elena* case concerned direct expropriation, rather than indirect expropriation.

86. *Tecmed v. Mexico*, *supra* note 48, ¶ 122.

87. *Id.*

the burden imposed on the foreign investor and the aim of the expropriatory measure.⁸⁸

In the examination of Tecmed's situation, the tribunal assessed the motives underlying the challenged measure and noted that it was not undertaken to remedy harmful environmental impacts but to deal with socio-political difficulties created by community pressure against the investment.⁸⁹ The tribunal concluded that such community pressure could not justify the deprivation of the foreign investment, because there existed no "serious emergency or public hardship" or "wide-ranging and serious consequences" and also because the foreign investor's behavior was not "the determinant of the political pressure."⁹⁰ The tribunal therefore found that the challenged measures amounted to an expropriation.⁹¹

3. Gold Reserve v. Venezuela: A "Plausible" Ground

In *Gold Reserve v. Venezuela*, the tribunal set a relatively low threshold for a justification under the indirect expropriation clause. In the tribunal's view, a government measure does not constitute indirect expropriation as long as the measure has a "plausible" ground.

This case concerned the question: whether the foreign investor's failure to comply with the provisions of the Venezuelan mining law, particularly its failure to exploit the gold mines within the required time framework, had triggered the right of Venezuela to terminate the concession. Although the tribunal concluded that the sudden termination of the concessions had frustrated the investor's legitimate expectations and thus had violated the Fair and Equitable Treatment ("FET") clause, the tribunal found no expropriation in this case.⁹² In particular, the tribunal distinguished the host state acting as a sovereign power from that acting as a regulatory power, noting that, "if the State was acting as a regulatory power enforcing contractual rights, no expropriation would have occurred."⁹³ Nonetheless, the tribunal also noted cautiously that the state's exercise of a contract right may constitute expropriation if "the true nature of the act was one of exercising sovereign authority."⁹⁴ The key issue was to determine whether the reasons underlying the termination of the concessions "were sufficiently well-founded and, if so, the terminations would not be considered expropriation."⁹⁵

88. *Id.*

89. *Id.* ¶¶ 124–32.

90. *Id.* ¶ 147.

91. *Id.* ¶ 151.

92. *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/09/01, Award of the Tribunal, ¶¶ 662, 669, (Sept. 22, 2014) [hereinafter *Gold Reserve v. Venezuela*].

93. *Id.* ¶ 664.

94. *Id.* ¶ 666.

95. *Id.*

The tribunal acknowledged that the examination of sufficiently well-founded reasons were not straightforward, since Venezuela's actions were also motivated by political reasons.⁹⁶ In such a situation, the tribunal adopted a relatively low threshold for determining "sufficiently well-founded reasons": since the termination of concession did have a "plausible" contractual ground (i.e. the investor had failed to exploit the mines within the required timeframe), the termination "could not be said to be merely 'pretextual.'"⁹⁷ Accordingly, the tribunal held that Venezuela's termination of concessions was "sufficiently well founded" and thus "cannot be considered as a form of expropriation under international law."⁹⁸

4. *Crystallex v. Venezuela: Freedom of State Regulation*

The subsequent *Crystallex v. Venezuela* award granted an even wider discretion to state regulation. In this case, the investor claimed that the Venezuelan government's denial of an environmental permit had amounted to an indirect expropriation. Crystallex is a Canadian mining company investing in gold mines in Venezuela. In 2002, Crystallex concluded a Mine Operating Contract ("MOC") with a Venezuelan state-owned enterprise. These two companies worked together to apply for the requisite environmental permit from the Ministry of Environment. After a long process, in 2008 the Ministry denied the permit for environmental reasons and for the protection of indigenous people.

Crystallex claimed that its contractual right to exploit the gold mine under the MOC had been infringed by the denial of permit, the denial of administrative remedies, and the termination of the MOC.⁹⁹ Crystallex argued that these cumulative measures amounted to an indirect expropriation.¹⁰⁰ Venezuela contended that the denial of the environmental permit was a "legitimate application of reasonable environmental regulations"¹⁰¹ and was conducted due to "the Ministry of Environment's concerns regarding water issues, vegetation and biodiversity, indigenous peoples, artisanal miners, as well as other matters"¹⁰² The tribunal found that it does not "consider the Permit denial as *per se* amounting to an act of expropria-

96. *Id.* ¶ 667.

97. *Id.*

98. *Id.*

99. *Crystallex Int'l Corp. v. Venezuela*, ICSID Case No. ARB(AF)/1/2, Award of the Tribunal, ¶¶ 639–44 (Apr. 4, 2016) [hereinafter *Crystallex v. Venezuela*].

100. In addition to an indirect expropriation claim, Crystallex also argued that Venezuela's termination of the MOC constitutes a direct expropriation. *See id.* ¶¶ 645–46. Venezuela argued that Crystallex had no rights capable of being expropriated, partly because Crystallex's right to exploit under the MOC was conditioned upon "its satisfaction of environmental regulations and obtaining the Permit from the Ministry of Environment." *See id.* ¶ 649. The tribunal did not delve into Venezuela's argument, but concluded that Crystallex's contractual right is generally capable of being exploited, since the BIT has a broad definition of investments and "places no limitations on the types or on the nature of the contractual rights which are defined as investments." *See id.* ¶¶ 659–65.

101. *Id.* ¶ 650.

102. *Id.* ¶ 652.

tion.”¹⁰³ The tribunal noted that the investor “had no ‘right’ to a Permit under international law, because a state would always maintain its freedom to deny a permit if it so decides.”¹⁰⁴ The tribunal did not impose specific limitations on such “freedom.”¹⁰⁵

*C. Expropriation Claims Arising From a Change of Land Use
for Natural Preservation*

The third category of environment-related expropriation claims arises when the host state changes land where the foreign investor’s property is to a natural preservation area, such as a national park. Land use regulation has a special status in the regime of indirect expropriation. In the domestic laws of states that recognize regulatory takings, the right to compensation is almost always limited to land use regulations.¹⁰⁶ Particularly, the tension between the protection of private property rights and the natural preservation of land sits at the center of the discourse on environmental takings in the United States.¹⁰⁷

The question for international investment arbitration is: If the host state converts land where the foreign investment resides into a natural reservation area, rendering the operation of the foreign investment impractical, is it a compensable indirect expropriation or a non-compensable regulation? This question was faced by the tribunals in *Metalclad v. Mexico* and *Unghlaube v. Costa Rica*. In both cases, the tribunals adopted the “sole effects” doctrine. They concluded that the states’ actions constituted compensable expropriation without taking into account the intents underlying the states’ actions.

103. *Id.* ¶ 674.

104. *Id.*

105. Nonetheless, the tribunal found that “under the circumstances of this case, the actions surrounding the permit denial should rather be considered as one series of acts which in combination with other actions gave rise to an expropriation.” *Id.* ¶ 674. In the determination of whether or not the expropriation was lawful, the tribunal agreed with Venezuela that “international tribunals afford a large measure of deference to the sovereign determination of a public purpose. In this case, the national interest served by the rational exploitation of a state’s natural resources is protected under international law.” *Id.* ¶¶ 655, 712. The tribunal finally held that the expropriation committed by Venezuela was unlawful because no “prompt, adequate and effective compensation” was offered to Crystallex. *Id.* ¶¶ 717–18.

106. Matthew C. Porterfield, *State Practice and the (Purported) Obligation under Customary International Law to Provide Compensation for Regulatory Expropriations*, 37 N.C.J. INT’L L. & COM. REG. 160, 174 (2011).

107. See, e.g., John D. Echeverria, *Regulating versus Paying Land Owners to Protect the Environment*, 26 J. LAND RESOURCES & ENVTL. L. 1 (2005); Courtney Harrington, *Penn Central to Palazzolo: Regulatory Takings Decisions and Their Implications for the Future of Environmental Regulation*, 15 TUL. ENVTL. L.J. 383 (2002); Daniel H. Cole, *Clearing the Air: Four Propositions about Property Rights and Environmental Protection*, 10 DUKE ENVTL. L. & POL’Y F. 103 (1999); Michael M. Berger, *To Regulate, or Not to Regulate—Is That the Question—Reflections on the Supposed Dilemma between Environmental Protection and Private Property Rights*, 1976 A.B.A. SEC. LOC. GOV’T L. REP. COMM. ON CONDEMNATION & CONDEMNATION PROC. 200 (1976).

1. *Metalclad v. Mexico: “Sole Effects”*

In the above-mentioned *Metalclad v. Mexico* case, after the municipal government denied the construction permit of the landfill,¹⁰⁸ the State Governor issued an Ecological Decree which declared “a Natural Area for the protection of rare cactus” covering the foreign investor’s landfill site.¹⁰⁹ The tribunal found that the Ecological Decree “in and of itself” amounted to a measure tantamount to expropriation.¹¹⁰ The tribunal stated that, by including the landfill site in the ecological preserve, “[t]his Decree had the effect of barring forever the operation of the landfill.”¹¹¹ The tribunal stated that it “need not decide or consider the motivation or intent of the adoption of the Ecological Decree.”¹¹²

2. *Unglaube v. Costa Rica: “Sole Effects”*

In *Unglaube v. Costa Rica*,¹¹³ the tribunals also refused to consider the environmental purpose of a state measure in the determination of indirect expropriation. Before delving into the *Unglaube* case, it is relevant to discuss an earlier case concerning direct expropriation, *Santa Elena v. Costa Rica*, for its influence on later jurisprudence.¹¹⁴ Although with a twelve-year interval, both cases happened in the same province of Costa Rica and both concerned the building of national parks for environmental protection. However, the *Santa Elena* case concerned a straightforward decree expropriating the foreign investor’s properties, which Costa Rica conceded amounted to an expropriation, while the subsequent *Unglaube* case arose from a decree on building a national park, which Costa Rica contended did not constitute an expropriation. The following paragraphs will illustrate both cases one by one.

The *Santa Elena v. Costa Rica* case concerned Costa Rica’s expropriation of the investor’s properties under an expropriation decree in 1978, in order to enlarge a national park for wildlife protection. Although both Parties admit-

108. *Metalclad v. Mexico*, *supra* note 16, ¶ 50.

109. *Id.* ¶ 59.

110. *Id.* ¶ 111.

111. *Id.* ¶ 109.

112. *Id.* ¶ 111. However, this “sole effects” approach is inconsistent with the tribunal’s “police powers” approach in another claim in the same case concerning Mexico’s denial of the investor’s construction permit. With respect to that claim, the tribunal did take into account the intent of the measure (i.e., whether the measure had “a timely, orderly or substantive basis”) in its determination of indirect expropriation. *Id.* ¶ 107. The tribunal did not illustrate the reasons for such differential treatment.

113. *Unglaube v. Costa Rica*, ICSID Case No. ARB/09/2, Final Award (May 16, 2012) [hereinafter *Unglaube v. Costa Rica*].

114. A third relevant case is *Spence v. Costa Rica*, which concerned several U.S. investors’ properties being expropriated by Costa Rica’s plan of building a national park for the protection of leatherback sea turtles. However, the tribunal in this case found no jurisdiction because of the time-bar and non-retroactivity rules. See Aaron C. Berkowitz, Brett E. Berkowitz, and Trevor B. Berkowitz v. Republic of Costa Rica, ICSID Case No. UNCT/13/2, Interim Award (corrected) (May 30, 2017) [hereinafter *Spence v. Costa Rica*].

ted the existence of an expropriation, they were in dispute with regard to the amount of compensation. The tribunal noted that:

While an expropriation or taking for environmental reasons may be classified as a taking for a public purpose, and thus may be legitimate, the fact that the Property was taken for this reason does not affect either the nature or the measure of the compensation to be paid for the taking. That is, the purpose of protecting the environment for which the Property was taken does not alter the legal character of the taking for which adequate compensation must be paid. The international source of the obligation to protect the environment makes no difference. . . . Expropriatory environmental measures—no matter how laudable and beneficial to society as a whole—are, in this respect, similar to any other expropriatory measures that a state may take in order to implement its policies: where property is expropriated, even for environmental purposes, whether domestic or international, the state's obligation to pay compensation remains.¹¹⁵

Citing the *Tippetts* case in the IUSCT, the tribunal further noted that, in the determination of the existence of an expropriation, “[t]he intent of the government is less important than the effects of the measures on the owner, and the form of the measures of control or interference is less important than the reality of their impact.”¹¹⁶ It is not surprising that the tribunal refused to consider the intent of government in this case, considering that the existence of a public purpose does not affect the establishment of a *direct* expropriation.

In the subsequent *Unghlaube v. Costa Rica* case, the tribunal found that Costa Rica had committed a *de facto* expropriation of the foreign investor's properties by creating a national park for the protection of endangered leatherback turtles. It did not take into account the environmental reasons underlying state's actions in the determination of *indirect* expropriation.

In this case, two German investors owned certain properties on a peninsula in Costa Rica. The properties were located on a site where endangered leatherback turtles lay their eggs. To protect their nesting habitat, in 1991, Costa Rica issued a decree to build a national park, whose boundaries clearly include the investors' properties within a “75-Meter Strip.” The tribunal found that those properties, “[o]nce having been identified for expropriation,” “was obviously impacted in terms of salability and use.”¹¹⁷ However, Costa Rica did not begin the expropriation process.¹¹⁸ Four years later, Costa

115. *Santa Elena v. Costa Rica*, ICSID Case No. ARB/96/1, Award of the Tribunal, ¶¶ 71–72 (Feb. 17, 2000) [hereinafter *Santa Elena v. Costa Rica*].

116. *Id.* ¶ 77; see also *Unghlaube v. Costa Rica*, ¶ 218.

117. *Id.* ¶ 211.

118. *Id.*

Rica enacted the National Park Law to implement the plan stated in the 1991 Decree, but it had not taken direct action to expropriate the foreign investors' properties until 2003.¹¹⁹ This "dragged" expropriation was claimed by the foreign investors as an "illegal expropriation."¹²⁰ However, Costa Rica blamed the foreign investors for causing the delay. The tribunal cited the *Santa Elena* case, in which both parties blamed each other for a delay of approximately twenty years in resolving the compensation for expropriation.¹²¹ The *Santa Elena* tribunal determined that:

The issue of blame or fault on the part of one or other of the parties in this regard does not affect the outcome of the case and need not be addressed by the Tribunal. What is relevant is that, from the date of the expropriation until the commencement of the present proceedings, the amount of compensation to be paid for the Property remained unresolved.¹²²

The tribunal found that "it is clear that, perhaps as early as 1991 – but without doubt, by 2003, the rights of the owner of the 75-Meter Strip had been seriously and negatively impacted."¹²³ Accordingly, the tribunal held that Costa Rica had taken the investors' properties by measures tantamount to expropriation without timely and adequate compensation.¹²⁴ However, the tribunal did not consider the environmental purpose in the determination of expropriation.

To sum up, both the *Metalclad* and *Un glaube* tribunals, when assessing the expropriatory nature of the host states' land use regulation for natural preservation, adopted the "sole effects" doctrine, refusing to consider the environmental purpose underlying the land use regulation in determining whether there was an indirect expropriation.

D. Conclusion

The above analysis of jurisprudence shows three types of environmental regulatory power that might be harmed by indirect expropriation claims. Except for land use cases, the tribunals have all adopted the "police powers" doctrine when assessing whether a state's environmental regulation constituted indirect expropriation. However, they have adopted different approaches as to the threshold of states' legitimate exercise of police powers. On one end of the spectrum, the tribunal in *Crystallex v. Venezuela* stressed that a state has the freedom to regulate but did not set any limits to such freedom. On the other end of the spectrum, the tribunal in *Tecmed v. Mexico*

119. *Id.* ¶ 212.

120. *Id.* ¶ 213.

121. *Id.* ¶¶ 214–15.

122. *Id.* ¶ 215 (quoting *Santa Elena v. Costa Rica*, ¶ 20).

123. *Id.* ¶ 220.

124. *Id.* ¶¶ 223, 332.

applied a proportionality test to decide the justifiability of a regulation under the indirect expropriation clause. In the middle of the spectrum lie the cases in which the tribunals require a rational ground and, in some cases, procedural propriety of state regulation. For example, the tribunal in *Gold Reserve v. Venezuela* found that a regulation can be justified under the indirect expropriation clause if it has a “plausible” ground. The tribunal in *Methanex v. U.S.* noted that a justifiable regulation should be not only for public purpose, but also be conducted in a non-discriminatory manner and with due process. A similar approach was adopted in *Chemtura v. Canada*, in which the tribunal justified the measure because it was adopted for public purpose, in a non-discriminatory manner, and within the mandate of the state organ. In *Metalclad v. Mexico*, the tribunal considered not only the policy ground and procedural propriety, but also the legitimate expectations of foreign investors in the assessment of indirect expropriation.

III. EXAMINING CLARIFIED INDIRECT EXPROPRIATION CLAUSES: THREE MODELS

Recent years have seen an increasing number of IIAs that clarify indirect expropriation clauses to provide guidance for the “expropriation-regulation” division. This Part conducts a survey of current treaty practice, finding 118 out of 2,185 IIAs contain such “clarified” indirect expropriation clauses. Table 2 shows three different models: (1) the “Carving Out” model, in which a clause carves out a specific kind of state measure from constituting indirect expropriation; (2) the “Contextualization” model, in which a clause requires a contextual analysis of indirect expropriation; and (3) the “Contextualization + Carving out” model, which is a combination of the first two models. The following sections will examine the IIAs adopting these three models and the diverse approaches within each.

Table 2: Treaty Models of Clarified Indirect Expropriation Clauses

Models	Approaches	Typical Examples	Number of IIAs	Percentage	
Model I: "Carving-out"	Non-discrimination + public welfare objectives	Turkish BITS	12	18%	
	Non-discrimination + public welfare objectives + proportionality	Austrian BITS	5	7%	
Model II: "Contextualization"	A case-by-case, fact-based inquiry that considers multiple factors (economic impacts, investors' expectations, the character of a measure)	The 2014 ASEAN – India Investment Agreement	1	1%	
Model III: "Contextualization" + "Carving-out"	The "Contextualization" Part: Taking into account the "character" of a governmental measure	No reference to "character"	Colombia BITS	4	74%
		Reference to "character" without further illustration	Canadian BITS	21	
		Linking "character" to objectives	The 2016 Iran, Islamic Republic of - Slovakia BIT	6	
		"Character" includes proportionality/ reasonableness to achieve certain objectives	Chinese IIAs	17	
		"Character" includes its non-discrimination nature	Japanese BITS	2	
	The "Carving-out" Part: Non-discrimination + public welfare objectives (except in rare circumstances)	Korean BITS; Indian BITS	50		

A. Model I: "Carving-out"

Some IIAs adopt a "carving out" clause that excludes non-discriminatory public welfare regulation from constituting indirect expropriation. There are two types of "carving out" clauses.

The first type generally provides that regulatory conduct for public purposes does not constitute indirect expropriation. Typical examples are Turkish BITS.¹²⁵ For instance, Article 6(2) of the 2012 Bangladesh–Turkey BIT

125. Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Kuwait, art. 4(2), May 27, 2010; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Mont., art.5(2), Mar. 14, 2012; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Nig., art. 7(2), Feb. 2, 2011; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Pak., art. 6(2), May 22, 2012; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Bangl., art. 6(2), Apr. 12, 2012, [herein-

provides that, “[n]on-discriminatory legal measures designed and applied to protect legitimate public welfare objectives, such as health, safety and environment, do not constitute indirect expropriation.”¹²⁶ Another example is the recent Amendment to the SADC Finance and Investment Protocol, which includes a “carving out” clause stating that, “[a] measure of general application by a State Party that is designed and applied to protect or enhance legitimate public welfare objectives, such as public health, safety and the environment, shall not constitute an indirect expropriation.”¹²⁷

The second type of “carving out” clauses, mostly adopted in Austrian BITs, provide that, to be exempted from indirect expropriation, regulatory conduct should not be “so severe in the light of their purpose that they cannot be reasonably viewed as having been adopted and applied in good faith.”¹²⁸ For example, Article 7(4) of the 2016 Austria–Kyrgyzstan BIT provides that:

Non-discriminatory measures of a Contracting Party that are designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, do not constitute indirect expropriation, except in rare circumstances, such as when a measure or series of measures are so severe in the light of their purpose that they cannot be reasonably viewed as having been adopted and applied in good faith.¹²⁹

B. Model II: “Contextualization”

Some treaties adopt the “Contextualization” Model, providing that the examination of indirect expropriation requires “a case-by-case, fact-based in-

after Bangladesh–Turkey BIT]; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Cameroon, art.(2) Apr. 24, 2012; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Gabon, art. 6(2), July 18, 2012; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Gam., art. 6(2), Mar. 12, 2013; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Rwanda, art. 6(2), Nov. 3, 2016; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Turk.-Tanz. art. 6(2), Mar. 11, 2011; Agreement Concerning the Reciprocal Promotion and Protection of Investments, Trin. & Tobago-Guat. art.8(4), Aug. 13, 2013.

126. Bangladesh–Turkey BIT, *supra* note 125, art. 6(2).

127. Agreement Amending the Treaty of the Southern African Development Community, art. 5(7), Aug. 31, 2016.

128. Agreement for the Promotion and Protection of Investment, Austria-Taj., art. 7(4), Dec. 15, 2010; Agreement for the Promotion and Protection of Investment, Austria-Kyrg., art. 7(4), Apr. 22, 2016 [hereinafter Austria–Kyrgyzstan BIT]; Agreement for the Promotion and Protection of Investment, Austria-Nigeria, art. 7(4), Aug. 4, 2013.

129. Austria–Kyrgyzstan BIT, *supra* note 128. Article 5(4) of the 2009 Republic of Korea–Rwanda BIT has similar wording: “Except in rare circumstances, such as, for example, when an action or a series of actions are extremely severe or disproportionate in light of their purposes or effects, non-discriminatory regulatory actions by a Contracting Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, the environment, and real estate price stabilization, do not constitute indirect expropriations.” Agreement for the Promotion and Protection of Investments, S. Kor.-Rwanda, art.5(4), May 29, 2009 [hereinafter Republic of Korea–Rwanda BIT].

quiry,” with multiple factors taken into account, including the economic impact of the governmental measure on a foreign investment, a foreign investor’s legitimate expectations, and the character of the government measure. For example, Article 8(3) of the 2014 ASEAN–India Investment Agreement provides:

The determination of whether a measure or series of related measures by a Party, in a specific fact situation, constitutes an expropriation of the type referred to in subparagraph 2(b) of this Article requires a case-by-case, fact-based inquiry that considers, among other factors:

- (a) the economic impact of the government measure, although the fact that a measure or series of related measures by a Party has an adverse effect on the economic value of an investment, standing alone, does not establish that such an expropriation has occurred;
- (b) whether the government measure breaches the government’s prior binding written commitment to the investor whether by contract, licence or other legal document; and
- (c) the character of the government measure, including its objectives and whether the measure is disproportionate to the public purpose.¹³⁰

C. *Model III: “Contextualization” + “Carving Out”*

Most IIAs clarifying the indirect expropriation provision combine Models I and II, by requiring a contextual examination of indirect expropriation and at the same time carving out public welfare regulation from the scope of indirect expropriation.¹³¹

130. Agreement on Investment Under the Framework Agreement on Comprehensive Economic Cooperation, ASEAN-India, art. 8(3), Dec. 11, 2014 [hereinafter ASEAN–India Investment Agreement].

131. For example, the 2015 Burkina Faso–Canada BIT provides:

2. [T]he determination of whether a measure or a series of measures of a Party constitutes an indirect expropriation requires a case-by-case, fact-based inquiry that considers, among other factors:

- a. the economic impact of the measure or the series of measures, although the sole fact that a measure or a series of measures of a Party has an adverse effect on the economic value of an investment does not establish that an indirect expropriation has occurred,
 - b. the extent to which the measure or the series of measures interferes with distinct, reasonable investment-backed expectations, and
 - c. the character of the measure or the series of measures;
3. a non-discriminatory measure or series of measures of a Party designed and applied to protect legitimate public welfare objectives, such as health, safety and the environment, does not constitute indirect expropriation, except in rare circumstances, such as when a measure or a series of measures is so severe in the light of its purpose that it cannot be reasonably considered as having been adopted and applied in good faith.

Agreement for the Promotion and Protection of Investments, Burk. Faso-Can., Annex I, Expropriation, Apr. 20, 2015 [hereinafter Burkina Faso–Canada BIT].

1. *The Contextualization Part*

Although almost all IIAs require a case-by-case and fact-based inquiry in assessing indirect expropriation, they employ different approaches as to the factors that are relevant in the assessment, especially concerning whether and to what extent the “character” of a government measure should be taken into account. There are five different approaches.

First, some IIAs do not require tribunals to consider the “character” of state measures in the determination of indirect expropriation. For example, some Colombian BITs, although requiring a contextual analysis of indirect expropriation, do not refer to the “character” of a measure at all.¹³²

Second, some IIAs explicitly provide that the “character” of a measure should be taken into account in the examination of indirect expropriation, but without any further illustration of the meaning of the word “character.” Most Canadian BITs have adopted this approach.¹³³

Third, some IIAs link the “character” of a state measure to the objectives underlying the measure. For instance, a small number of Canadian BITs provide that the character of a measure includes its “purpose and ratio-

132. For example, Belgium-Luxembourg Economic Union (“BLEU”)-Colombia BIT (2009), art. IX, 3(b), which provides that, “the determination of whether a measure or series of measures of a Contracting Party constitute indirect expropriation requires a case-by-case, fact-based inquiry considering, amongst other criteria, the scope of the measure or series of measures and their interference on the reasonable and distinguishable expectations concerning the investment.” Agreement on the Reciprocal Promotion and Protection of Investments, BLEU-Colom., art. IX, 3(b), Apr. 2, 2009 [hereinafter BLEU-Colombia BIT]; *see also* Bilateral Agreement for the Promotion and Protection of Investments, China-Colom., art. 4(2)(b), Nov. 22, 2008; Agreement for the Promotion and Protection of Investments, Colom.-India, art. 6(2)(b), Nov. 10, 2009; Bilateral Agreement for the Promotion and Protection of Investments, Colom.-U.K., art. VI, 2(b), Mar. 17, 2009.

133. Burkina Faso-Canada BIT, *supra* note 131; Agreement for the Promotion and Protection of Investments, Cameroon-Can., art. 10, 6(b)(iii), Mar. 3, 2014; Foreign Investment Promotion and Protection Agreement, Can.-Cote d’Ivoire, Annex B.10, Expropriation, 2(c), Nov. 30, 2014; Agreement for the Promotion and Protection of Investments, Can.-Czech, Annex A, Clarification of Indirect Expropriation, (b)(iii), May 6, 2009; Comprehensive Trade and Economic Agreement, Can.-EU, Annex 8-A, Expropriation, 2(d), Oct. 30, 2016; Agreement for the Promotion and Reciprocal Protection of Investments, Can.-Guinea, Annex B.10, Expropriation, 2(3), May 27, 2015; Free Trade Agreement, Can.-Hond., Annex 10.11, Indirect Expropriation, (b)(iii), Nov. 5, 2013; Agreement for the Promotion and Protection of Investments, Can.-H.K., Annex I, Expropriation, (b) (iii), Feb. 10, 2016; Agreement for the Promotion and Protection of Investments, Can.-Jordan, Annex B. 13(1), Expropriation, (b)(iii), June 28, 2009; Agreement for the Promotion and Protection of Investments, Can.-Kuwait, art. 10, 6(c), Sept. 26, 2011; Agreement for the Promotion and Protection of Investments, Can.-Lat., Annex B, Clarification of Indirect Expropriation, 2(c), May 5, 2009; Agreement for the Promotion and Protection of Investments, Can.-Mali, Annex B.10(b)(iii), Nov. 28, 2014; Agreement for the Promotion and Protection of Investments, Can.-Mong., Annex B.10(2)(3), Sept. 8, 2016; Agreement for the Promotion and Protection of Investments, Can.-Nigeria, Annex B.10, Expropriation, 2(b)(iii), May 6, 2014; Agreement for the Promotion and Protection of Investments, Can.-Peru, Annex B.13(1)(b)(3), Nov. 12, 2006; Agreement for the Promotion and Protection of Investments, Can.-Sen., Annex B.10(b)(3), Nov. 27, 2014; Agreement for the Promotion and Protection of Investments, Can.-Serb., Annex B.10, Expropriation, (b)(iii), Sept. 1, 2014; Agreement for the Promotion and Reciprocal Protection of Investments, Can.-Tanz., art. 10(5)(c), May 17, 2013. In addition to Canadian BITs, other investment treaties that adopt the same approach include: Investment Agreement, Chile-H.K., Annex I, Expropriation, 3(3), Nov. 18, 2016 [hereinafter Chile-Hong Kong BIT]; Agreement for the Promotion and Protection of Investments, India-Lat., art. 5(4)(a)(iii), Feb 18, 2010; and Trans-Pacific Partnership, Annex 9(b) Expropriation, (3)(a)(iii).

nale.”¹³⁴ The 2016 Islamic Republic of Iran–Slovakia BIT provides that the character of a measure includes its “nature, purpose, duration and rationale.”¹³⁵ Some BITs require tribunals to consider “the character of the measure or series of measures in accordance with the legitimate public objectives searched.”¹³⁶

Fourth, some IIAs illustrate that the “character” of a state measure is decided not only by its objectives, but also by its proportionality or reasonableness, with its effects on foreign investments taken into account. As an early example, the 2008 Brunei Darussalam–India BIT provides that the “character” of a measure includes the measure’s objective and the nexus between the measure and the effects that form the basis of an expropriation claim.¹³⁷ The 2014 Canada–Republic of Korea FTA states that the character of a measure includes “its objectives and context,” and that “[r]elevant considerations could include whether the government action imposes a special sacrifice on the particular investor or investment that exceeds what the investor or investment should be expected to endure for the public interest.”¹³⁸ Certain recent Chinese IIAs require tribunals to consider “the character and objectives” of the measure, including whether the measure is “proportionate” or “in appropriation to” its objectives.¹³⁹ Some Korean IIAs also stress the proportional character of a measure.¹⁴⁰ For a different ap-

134. Agreement for the Promotion and Reciprocal Protection of Investments, Rom.-Can., Annex B, Clarification of Indirect Expropriation, (b)(iii), May 8, 2009; Agreement for the Promotion and Protection of Investments, Can.-Slovk., Annex A, Clarification of Indirect Expropriations, (b)(iii), July 20, 2010.

135. Agreement for the Promotion and Reciprocal Protection of Investments, Iran-Slovk., art. 6(2)(c), Jan. 19, 2016.

136. Agreement Concerning the Reciprocal Promotion and Protection of Investments, Colom.-Turk., July 28, 2014; Agreement for the Mutual Promotion and Protection of Investments, Dem. Rep. Congo-India, Annex, 2(b)(iv), Apr. 13, 2010.

137. Agreement for the Reciprocal Promotion and Protection of Investments, India-Myan., Protocol to the Agreement, II, Protocol on art. 5(c)(iii), June 24, 2008 [hereinafter 2008 Brunei Darussalam–India BIT].

138. Free Trade Agreement, Can.-S. Kor., Annex 8-B, Expropriation, (c)(iii) [hereinafter Canada–Republic of Korea FTA].

139. Agreement for the Promotion, Facilitation, and Protection of Investment, China-Japan-S. Kor., Protocol, 2(b)(3), May, 2012 [hereinafter China–Japan–Republic of Korea Trilateral Investment Agreement]; Free Trade Agreement, China-S. Kor., Annex 12-B, Article 3(a)(iii), June 1, 2015 [hereinafter China–Republic of Korea FTA]; Agreement on the Promotion and Protection of Investments, China-Uzb., art. 6 (2)(d), Apr. 19, 2011 [hereinafter China–Uzbekistan BIT].

140. Free Trade Agreement, Colom.-S. Kor., Chapter 8, Annex 8-B, Expropriation, 3(a)(iii), Feb. 21, 2013, [hereinafter Colombia–Republic of Korea FTA]. It provides:

The determination of whether an action or a 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 all relevant factors related to the investment, including: . . . (iii) the character of the government action, including its objectives and context. Relevant considerations could include whether the investor bears a disproportionate burden that exceeds what the investor or investment should be expected to endure for the public interest.

Id. See also Comprehensive Economic Partnership Agreement (“CEPA”), India-S. Kor., Annex 10-A, Expropriation, 3(a)(iii), Aug. 7, 2009, (providing, “[t]he 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-

proach, certain Indian BITs do not require a proportionality test of the measure, but require a reasonableness test. For example, the 2006 India–Jordan BIT provides that an assessment of indirect expropriation should take into account “the character and intent of the measures or series of measures, whether they are for bona fide public interest purposes or not and whether there is a reasonable nexus between them and the intention to expropriate.”¹⁴¹

Fifth, some IIAs also incorporate a non-discrimination test into the assessment of the “character” of a state measure. For example, several Japanese BITs provide that the character of a state measure includes its non-discriminatory nature.¹⁴²

It is also noteworthy that some treaties link expropriation clauses to customary international law. For example, the Protocol to the 2008 Brunei Darussalam–India BIT provides that “Article 5 of the Agreement [expropriation clause] is intended to reflect customary international law concerning the obligations of the Contracting Parties with respect to expropriation.”¹⁴³ The 2008 Rwanda–U.S. BIT also provides that the expropriation clause “is

case, fact-based inquiry that considers all relevant factors relating to the investment, including: . . . (iii) the character of the government action, including its objectives and context. Relevant considerations could include whether the government action imposes a special sacrifice on the particular investor or investment that exceeds what the investor or investment should be expected to endure for the public interest.”); Agreement for the Promotion and Protection of Investments, S. Kor.–Myan., Annex, Expropriation, 3(a)(iii), June 5, 2014 [hereinafter Republic of Korea–Myanmar CEPA]; Agreement on Investment Establishing a Free Trade Area, S. Kor.–Turk., Annex B, Expropriation, 17(c)(i)(C), Feb. 26, 2015, [hereinafter Republic of Korea–Turkey Investment Agreement]; Free Trade Agreement, S. Kor.–Viet., Annex 9-B, Expropriation, c(i)(C), July 29, 2015, n.26.

141. Agreement for the Promotion and Protection of Investments, India–Jordan, Annexure-A Interpretation of “Expropriation” in art. 5, Expropriation, 2(iv), Dec. 1, 2006; Agreement for the Promotion and Protection of Investments, India–Lith., Interpretation of “Expropriation” in art. 5, Expropriation, 2(iv), Mar. 31, 2006 [hereinafter India–Lithuania BIT]; Agreement for the Promotion and Protection of Investments, India–Nepal, art. 5(2)(b)(iv), Oct. 21, 2011 [hereinafter India–Nepal BIT]; Agreement for the Promotion and Protection of Investments, India–Sen., Annexure 5.1 for interpreting with greater certainty art. 5 Expropriation on the clarification of expropriation, 2(iv), July 3, 2008 [hereinafter India–Senegal BIT]; Agreement for the Promotion and Protection of Investments, India–Sey., Annex titled “Interpretation of “Expropriation” in Article 5 (Expropriation),” 2(iv), June 2, 2010; Agreement on the Mutual Promotion and Protection of Investments, India–Slovn., Protocol titled “Interpretation of “Expropriation” in Article 6 (Expropriation),” 2(iv), June 14, 2011 [hereinafter India–Slovenia BIT]; Agreement on the Mutual Promotion and Protection of Investments, India–Syria, Annex titled “Interpretation of “Expropriation” in Article 5 (Expropriation),” 2(iv), Jan. 22, 2008 [hereinafter India–Syrian Arab Republic BIT].

142. Agreement for the Promotion, Protection, and Liberalization of Investment, Japan–Peru, Annex IV, b(3), Nov. 21, 2008 [hereinafter Japan–Peru BIT]. It provides:

The determination of whether a measure or series of measures by a Contracting Party, in a specific fact situation, constitutes an indirect expropriation requires a case-by-case, fact-based inquiry that considers, among other factors: . . . (iii) the characteristic of the measure or series of measures, including whether such measure or series of measures are non-discriminatory.

Id.

143. 2008 Brunei Darussalam–India BIT, *supra* note 137, Protocol to the Agreement: II. Protocol on Article 5(a).

intended to reflect customary international law concerning the obligation of States with respect to expropriation.”¹⁴⁴

In addition to the character of government regulation, another vague factor in the contextualization part is the foreign investors’ “reasonable investment-backed expectations.” How to assess the reasonableness of investors’ expectations? Most treaties do not provide a specific threshold, except that some (mostly concluded by South Korea) include a footnote stating that such a reasonableness test should be based on the regulatory context.¹⁴⁵ For example, the 2014 Canada–Republic of Korea FTA provides that:

For greater certainty, whether an investor’s investment-backed expectations are reasonable depends in part, on the nature and extent of governmental regulation in the relevant sector. For example, an investor’s expectations that regulations will not change are less likely to be reasonable in a heavily regulated sector than in a less heavily regulated sector.¹⁴⁶

2. *The Carving Out Part*

The carving out provisions in these treaties are similar. A typical example of a carving out provision is that, “[e]xcept in rare circumstances non-discriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives including health, safety and environmental concerns, do not constitute expropriation or nationalization.”¹⁴⁷ This provision includes three key terms: “rare circumstances,” “regulatory actions,” and “legitimate public welfare objectives.” However, all of them lack clear definitions.

First, the definition of “rare circumstances” is unclear. Most IIAs do not provide any answers. Some IIAs interpret the “rare circumstances” as including “when a measure or a series of measures is so severe in the light of its purpose that it cannot be reasonably viewed as having been adopted and applied in good faith.”¹⁴⁸ Other IIAs use slightly different language, stating that it falls within the “rare circumstances” if “an action or a series of actions is extremely severe or disproportionate in light of its purpose or ef-

144. Treaty Concerning the Encouragement and Reciprocal Protection of Investment, Rwanda-U.S., Annex B (Expropriation), Feb. 19, 2008, S. Treaty Doc. No. 110-23.

145. Canada–Republic of Korea FTA, *supra* note 138, Annex 8-B, n.13; Chile–Hong Kong BIT, *supra* note 133, Annex I, n.12; Colombia–Republic of Korea, FTA, *supra* note 140, Annex 8-B, n.19; Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation, n.6; Republic of Korea–Turkey Investment Agreement, *supra* note 140, Annex B Expropriation 17, (c)(i)(C), n.18.

146. Canada–Republic of Korea FTA, *supra* note 138, Annex 8-B, n.13.

147. India–Syrian Arab Republic BIT, *supra* note 141, Annex 3.

148. Canada–Republic of Korea FTA, *supra* note 138, Annex 8-B (d); Chile–Hong Kong BIT, *supra* note 133, Annex I (3)(b).

fect.”¹⁴⁹ Third, the 2011 India–Nepal BIT directly equates “rare circumstances” with cases “where those measures are so severe that they cannot be reasonably viewed as having been adopted and applied in good faith for achieving their objectives.”¹⁵⁰

Second, it is uncertain as to what counts as “regulatory actions.” Although most treaties do not provide a definition, some Indian BITs stress that “judicial decisions” for public interests should also be justified under the indirect expropriation clause. For instance, the 2011 India–Lithuania BIT provides that, “[a]ctions and awards by judicial bodies of a Party that are designed, applied or issued in public interest including those designed to address health, safety and environmental concerns, do not constitute expropriation or nationalization.”¹⁵¹

Third, the meaning of “legitimate public welfare objectives” is also unclear. Most IIAs provide some examples of public welfare objectives, such as public health, safety and environmental protection.¹⁵² Some BITs concluded by South Korea point out that “real estate price stabilization” is also a legitimate public welfare objective that can justify an otherwise indirect expropriation.¹⁵³

In conclusion, although states have tried to clarify the concept of indirect expropriation, the terms of these “clarified” clauses are still too vague to achieve the goal of preserving environmental regulatory space. To remedy

149. Colombia–Republic of Korea FTA, *supra* note 140, Annex 8-B (3)(b); India–Republic of Korea CEPA, *supra* note 140, Annex 10-A (3)(b); Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation, 3(b); Republic of Korea–Vietnam FTA, *supra* note 140, Annex 9-B Expropriation, (c)(ii).

150. India–Nepal BIT, *supra* note 141, art. 5(2)(c).

151. India–Lithuania BIT, *supra* note 141, Annex (Interpretation of “Expropriation” in Article 5 (Expropriation)), 2(iv) (4). Similar provisions can be found in India–Nepal BIT, *supra* note 141, art. 5(2) (d); India–Senegal BIT (2008), *supra* note 141 at Annexure 5. ¶ 4; India–Slovenia BIT (2011), *supra* note 141, Protocol (Interpretation of “Expropriation” in Article 6 (Expropriation)), ¶ 4; Agreement Concerning the Encouragement and Reciprocal Protection of Investments, India–Saudi Arabia, art. 4, ¶ 4, Jan. 25, 2006, [hereinafter India–Saudi Arabia BIT]; India–Syrian Arab Republic BIT (2008), *supra* note 141, Annex, Interpretation of “Expropriation” in Article 5 (Expropriation), ¶ 4.

152. Some treaties add a footnote stating that these examples are not exhaustive. *See, e.g.*, Canada–Republic of Korea FTA, *supra* note 138, Annex 8-B Expropriation, n.14; Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation, n.7; Republic of Korea–Turkey Investment Agreement, *supra* note 140, Annex B Expropriations, (c)(i)(C), n.1; Republic of Korea–Vietnam FTA, *supra* note 140, Annex 9-B Expropriation, (c)(i), n.28.

153. For example, the 2014 Republic of Korea–Myanmar BIT provides that:

Except in rare circumstances, such as, for example, when an action or a series of actions is extremely severe or disproportionate in light of its purpose or effect, non-discriminatory regulatory actions by a Contracting Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, the environment, and real estate price stabilization (through, for example, measures to improve the housing conditions for low-income households), do not constitute indirect expropriations.

Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation, 3(b). *See also*, Republic of Korea–Turkey Investment Agreement, *supra* note 140, Annex B Expropriation, (c)(ii); Republic of Korea–Vietnam FTA, *supra* note 140, Annex 9-B Expropriation, n.28; Canada–Republic of Korea FTA, *supra* note 138, Annex 8-B Expropriation, (d); Colombia–Republic of Korea FTA (2013), *supra* note 140, Annex 8-B, (b); India–Republic of Korea CEPA, *supra* note 140, Annex10-A Expropriation, 3(b).

this deficiency, the next Part proposes a five-element test to be included in future treaty clauses.

IV. A FURTHER STEP: SOLVING THE “INDIRECT EXPROPRIATION-ENVIRONMENTAL REGULATION” DIVISION THROUGH A FIVE-ELEMENT TEST

To solve the above-mentioned uncertainties in “clarified” indirect expropriation clauses in IIAs, I propose that these provisions incorporate a five-element test that draws a line between a compensable indirect expropriation and a non-compensable legitimate environmental regulation. I submit that a state measure does not constitute indirect expropriation if such regulation satisfies the following five conditions: (1) the measure is for a genuine environmental purpose; (2) the measure is reasonable to achieve such a purpose; (3) the measure is implemented with due process; (4) the measure has a non-discriminatory nature; and (5) the host state has not made contrary specific commitments to the foreign investor that have caused latter to have legitimate expectations. The following paragraphs will illustrate the specific methods for analyzing each element.

A. *A Genuine Environmental Purpose*

The first condition is that the challenged measure must be for a genuine environmental objective. In other words, it should not be a restriction of foreign investments disguised in the name of environmental protection. This requires tribunals to examine the primary intent underlying the measure through an objective assessment. For example, in the *Gold Reserve v. Venezuela* case. In this case, the tribunal found that Venezuela terminated the foreign investor’s exploitation concession for both environmental reasons (namely, failure to comply with the timeframe required by Venezuelan mining law) and political reasons. The tribunal held that, as long as there exists a plausible non-political ground, the termination of concession “could not be said to merely ‘pretextual.’”¹⁵⁴ This approach is problematic since it fails to examine the primary purpose of the measure. A better approach is to examine the primary objective of the measure based on an analysis of the whole regulatory and factual context. If a measure is adopted primarily for political reasons and only incidentally for environmental benefits, that measure should not be considered as pursuing a “genuine” environmental purpose and thus should not be exempted from an indirect expropriation claim.

154. *Gold Reserve v. Venezuela*, supra note 92, ¶ 667.

B. Reasonableness

The second element is that the measure must be reasonable for achieving its environmental objective. The survey taken by this Article has shown different approaches in the treaty-making practice with respect to the threshold for the reasonableness of a government measure. At one end of the spectrum, some IIAs have adopted a proportionality test requiring that a justifiable measure be proportional to achieve legitimate public interests.¹⁵⁵ At the other end of the spectrum, some IIAs provide that, as long as the measure is not extremely disproportionate in light of its purpose, the measure should be considered reasonable for achieving its objective.¹⁵⁶ In the middle of the spectrum, a majority of IIAs require that there must be a “reasonable” nexus between the measure and its objective, without illustrating the threshold of such reasonableness.¹⁵⁷

Neither does international investment arbitration practice provide a coherent method for assessing the reasonability of an environmental measure. The tribunal in *Tecmed v. Mexico* adopted a proportionality approach, holding that the environmental regulation should be proportional to achieve its aims in order to be justified under the indirect expropriation clause.¹⁵⁸ The tribunals in *Methanex v. U.S.* and *Gold Reserve v. Venezuela* have required that a justifiable measure must be for public purposes, but without specifying any further requirement of the nexus between the measure and its objective.¹⁵⁹ The *Chemtura v. Canada* tribunal considered that the challenged environmental measure was adopted within the mandate of the regulatory authority, but the tribunal did not mention whether this criterion should be a condition under the indirect expropriation clause.¹⁶⁰

I submit that one important criterion in the reasonableness assessment should be the measure’s international scientific credibility. A recent case, *Philip Morris v. Uruguay* (hereinafter *Philip Morris*), has provided an illustrative example in which the tribunal made an objective assessment of the reasonableness of a state’s domestic measures based on their consistency with international scientific standards.

155. Typical examples are some Chinese IIAs and South Korean IIAs. See, e.g., China–Japan–Republic of Korea Trilateral Investment Agreement, *supra* note 139, Protocol, 2(b)(3); China–Republic of Korea FTA, *supra* note 139, Annex 12-B Expropriation, art. 3(a)(iii); China–Uzbekistan BIT, *supra* note 139, art. 6 (2)(d); Colombia–Republic of Korea FTA, *supra* note 140, Annex 8-B Expropriation, 3(a)(iii); India–Republic of Korea CEPA, *supra* note 140, Annex 10-A Expropriation, 3(a)(iii); Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation 3(a)(iii); Republic of Korea–Turkey Investment Agreement, *supra* note 140, Annex B Expropriation, (c)(i)(C); Republic of Korea–Vietnam FTA, *supra* note 140, Annex 9-B Expropriation, c(i)(C), n.26.

156. See, e.g., Colombia–Republic of Korea FTA, *supra* note 140, Annex 8-B (3)(b); India–Korea, Republic of CEPA, *supra* note 140, Annex 10-A (3)(b); Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation, 3(b); Republic of Korea–Vietnam FTA, *supra* note 140, Annex 9-B Expropriation, (c)(ii).

157. See generally Part III of this Article.

158. *Tecmed v. Mexico*, *supra* note 48, ¶ 122.

159. *Methanex v. U.S.*, *supra* note 34, ¶ 7; *Gold Reserve v. Venezuela*, *supra* note 92, ¶¶ 662–67.

160. *Chemtura v. Canada*, *supra* note 68, ¶ 266.

In *Philip Morris*, the foreign investors, registered in Switzerland, invested in the tobacco industry in Uruguay.¹⁶¹ The foreign investors claimed that the tobacco-control measures adopted by Uruguay constituted an indirect expropriation of their investments. In assessing this claim, the tribunal took into account the challenged measures' consistency with relevant international conventions and customary international law.¹⁶² In particular, the tribunal examined whether the challenged measures were "arbitrary and unnecessary" by taking into account the amicus briefs submitted by World Health Organization ("WHO") and Pan American Health Organization ("PAHO").¹⁶³ The tribunal acknowledged the difficulty of testing the effectiveness of a measure, holding that:

It is true that it is difficult and may be impossible to demonstrate the individual impact of measures such as the SPR and the 80/80 Regulation in isolation. Motivational research in relation to tobacco consumption is difficult to carry out (as recognized by the expert witnesses on both sides). Moreover, the Challenged Measures were introduced as part of a larger scheme of tobacco control, the different components of which it is difficult to disentangle.¹⁶⁴

However, the tribunal considered the evidence in the WHO/PAHO submissions, concluding that:

But the fact remains that the incidence of smoking in Uruguay has declined, notably among young smokers, and that these were public health measures which were directed to this end and were capable of contributing to its achievement. In the Tribunal's view, that is sufficient for the purposes of defeating a claim under Article 5(1) of the BIT In light of the foregoing, the Tribunal concludes that the Challenged Measures were a valid exercise by Uruguay of its police powers for the protection of public health.¹⁶⁵

C. *Procedural Propriety*

The third element for justifying a *prima facie* indirect expropriation is that the challenged measure must be implemented with due process. This element ensures procedural justice of states' environmental regulation.

161. *Philip Morris Brands Sàrl Philip Morris Products S.A. and Abal Hermanos S.A. v. Oriental Republic of Uruguay*, ICSID Case No. ARB/10/17, Award of the Tribunal ¶¶ 9–14 (July 8, 2016).

162. *Id.* ¶¶ 287–305.

163. *Id.* ¶ 306.

164. *Id.*

165. *Id.* ¶¶ 306–07.

However, as of now, few IIAs have required tribunals to assess the procedural justice of the challenged measure in indirect expropriation assessments. As shown by the survey of IIAs in this Article, there has been no IIA that explicitly requires tribunals to take account of procedural propriety in the determination of indirect expropriation. Neither is there any IIA that considers the procedural propriety of a measure as a condition to be justified under the “public interests” exemption. The same approach has been adopted by most tribunals adjudicating environment-related investment arbitration cases. For example, in *Chemtura v. Canada*, *Teemed v. Mexico*, *Crystalex v. Venezuela*, and *Gold Reserve v. Venezuela*, the tribunals did not consider procedural propriety in their determination of whether a measure can be justified under the indirect expropriation clause.

By contrast, some tribunals have correctly considered whether the challenged measure is implemented with due process, in order to distinguish legitimate regulation from indirect expropriation. As mentioned above, in *Metalclad v. Mexico*, the tribunal held that Mexico’s denial of permit lacked a “timely, orderly or substantive basis” and thus could not be justified under the indirect expropriation clause.¹⁶⁶ Similarly, in *Methanex v. U.S.*, the tribunal noted that, “the California ban was made for a public purpose, was non-discriminatory and *was accomplished with due process*” and thus was not an indirect expropriation.¹⁶⁷

D. Non-Discrimination

The third condition for a justification under the indirect expropriation clause is that the measure must be implemented in a non-discriminatory manner. In other words, a discriminatory environmental regulation should not be justified under the indirect expropriation clause.

This requirement has been adopted by many IIAs that employ clarified indirect expropriation clauses. As discussed above, some IIAs have incorporated a non-discriminatory test into the public-welfare-exemption part of the indirect expropriation clause.¹⁶⁸ Other IIAs have provided that the non-discriminatory nature of a measure is part of the measure’s “character” that should be considered in the determination of indirect expropriation.¹⁶⁹

166. *Metalclad v. Mexico*, *supra* note 16, ¶ 107.

167. *Methanex v. U.S.*, *supra* note 34, IV.D, ¶ 15 (emphasis added).

168. Bangladesh–Turkey BIT, *supra* note 125, art. 6(2); Austria–Kyrgyzstan BIT, *supra* note 128, art. 7(4); Republic of Korea–Rwanda BIT, *supra* note 129, art. 5(4); Burkina Faso–Canada BIT, *supra* note 131, Annex I, Expropriation; India–Syrian Arab Republic BIT, *supra* note 141, Annex 3; Republic of Korea–Myanmar BIT, *supra* note 140, Annex Expropriation, 3(b); Republic of Korea–Vietnam FTA, *supra* note 140, Annex 9-B, (c)(ii); Republic of Korea–Turkey Investment Agreement, *supra* note 140, Annex B Expropriation, (c)(ii).

169. Typical examples are Japanese BITs. See Japan–Peru BIT, *supra* note 142, Annex IV, b(3). It provides: “The determination of whether a measure or series of measures by a Contracting Party, in a specific fact situation, constitutes an indirect expropriation requires a case-by-case, fact-based inquiry that considers, among other factors: . . . (iii) the characteristic of the measure or series of measures, including whether such measure or series of measures are non-discriminatory.”

Unfortunately, such a non-discrimination requirement has not yet been widely adopted in the arbitration practice. The previous analysis has shown that, except for the tribunals in *Methanex v. U.S.* and *Chemtura v. Canada*, most tribunals did not require that an environmental measure be non-discriminatory to be found a non-compensable legitimate regulation.

E. Reasonable Expectations of Foreign Investors

The last element to be considered in the determination of indirect expropriation is whether the foreign investor has reasonable expectations based on specific commitments made by the host state. If so, the host state's breach of its commitments should not be justified under the indirect expropriation clause.

Although most tribunals have not considered the foreign investor's expectations in the adjudication of indirect expropriation,¹⁷⁰ some recent IIAs have incorporated the consideration of investment-backed expectations into indirect expropriation clauses. For example, Article 8(3) of the 2014 ASEAN–India Investment Agreement provides that, in the determination of whether a government measure constitutes indirect expropriation, the tribunal should consider, *inter alia*, “whether the government measure breaches the government's prior binding written commitment to the investor whether by contract, licence or other legal document.”¹⁷¹ Some other IIAs stress that only “distinct and reasonable” investment-backed expectations ought to be considered in the indirect expropriation assessments.¹⁷²

The assessment of reasonableness of investment-backed expectations should be based on a contextual analysis of the regulatory and factual background of the case. This approach has been adopted by some recent South Korean BITs, which link the reasonableness of foreign investors' expectations to the regulatory contexts. For instance, as previously noted, the 2014 Canada–Republic of Korea FTA provides that:

For greater certainty, whether an investor's investment-backed expectations are reasonable depends in part, on the nature and extent of governmental regulation in the relevant sector. For example, an investor's expectations that regulations will not change are less likely to be reasonable in a heavily regulated sector than in a less heavily regulated sector.¹⁷³

170. The previous analysis of environment-related indirect expropriation cases shows that only the *Metalclad v. Mexico* tribunal considered the foreign investor's legitimate expectations in the determination of whether an environmental regulation could be exempted from indirect expropriation claims. *Metalclad v. Mexico*, *supra* note 16, ¶ 107.

171. ASEAN–India Investment Agreement, *supra* note 130, art. 8(3).

172. Burkina Faso–Canada BIT, *supra* note 131, Annex I, Expropriation; BLEU–Colombia BIT, *supra* note 132, art. IX (3)(b).

173. Canada–Republic of Korea FTA, *supra* note 138, Annex 8-B, n.13; *see also* Chile–Hong Kong BIT, *supra* note 133, Annex I, n.12; Colombia–Republic of Korea FTA, *supra* note 140, Annex 8-B, n.19;

CONCLUSION

The academic debates surrounding the distinction between indirect expropriation and legitimate regulation have lasted for decades, but have recently earned new attention due to an increasing number of investment arbitration cases in which a state's environmental regulation has been claimed as indirect expropriation. In these cases, the tribunals adopted various approaches to determine whether general environmental legislation, specific environmental regulatory conduct and rezoning regulation constituted indirect expropriation. Considering the inconsistent jurisprudence, and responding to concerns that the broadly worded indirect expropriation clauses may jeopardize states' regulatory space to protect public interests, the last decade has seen a trend toward indirect expropriation clauses in newly concluded IIAs. Based on an empirical study of 2,185 IIAs, this research shows that 118 IIAs have incorporated "clarified" indirect expropriation clauses in three different models. The vague terms employed by these models, such as "character of a governmental measure" and "rare circumstances," make it difficult for investment tribunals to draw a clear line between compensable indirect expropriation and legitimate environmental regulation. This article proposes a five-element test to remedy this deficiency. Under this test, a challenged environmental measure does not constitute an indirect expropriation if the measure (1) is for a genuine environmental purpose, (2) is reasonable to achieve such purpose, (3) is implemented with due process, (4) has a non-discriminatory nature, and (5) is not contrary to any specific commitments made by the host state to the foreign investor.