12

The Role of Customary International Law in International Investment Law Remedies

The Curious Case of Natural Resources

FILIP BALCERZAK*

1 Introduction

The growing number of investor-State arbitrations shed a light on the role of customary international law in the context of remedies. In virtually every arbitral award based on international investment treaties, when tribunals find that respondent States have violated their obligations, stemming from the underlying treaties, they make explicit reference to the *Chorzów Factory* judgment. They find that the principle that an award should 'wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed' reflects customary international law. Sometimes, additional reference is made to the Draft Articles on Responsibility of States for Internationally Wrongful Acts (ILC Articles) to confirm that the calculations which follow are rooted in customary international law. This is commonly repeated, but often no detailed analysis follows. Instead, tribunals simply proceed to calculate compensation guided by the principle that a methodology should be applied which does not result in a 'speculative' outcome.

This chapter analyses some of the issues which arise in this context. First, what is the real meaning of references to the *Chorzów Factory* judgment in virtually every investment arbitral award? Is customary international law helpful in determining remedies, or is it merely a shortcut which allows the tribunals to proceed to compensation calculations? Second, why are references to remedies other than compensation, which are available under customary international law, so rare in investor-State

* The article is part of the research project number 2018/28/C/HS5/00087 financed by the National Science Centre Poland.

https://doi.org/10.1017/9781009255462.016 Published online by Cambridge University Press

arbitrations?[1] Is there a place for restitution or declaratory awards in international investment law? Third, what are the differences between the consequences of lawful expropriation and the consequences of treaty breaches in the light of customary international law?

The issues discussed in this chapter are particularly visible in disputes concerning renewable energy and early-stage mining projects, both of which fall within a broad definition of the natural resources sector. Therefore, the final part of this chapter concerns the methodologies available for calculations of compensation for treaty breaches, explained by way of examples of disputes concerning the flagged industries.

2 The *Chorzów Factory* Judgment as the Textualisation of Customary International Law

In its judgment, issued on 13 September 1928, the Permanent Court of International Justice (PCIJ) observed as follows:

> The essential principle contained in the actual notion of an illegal act – a principle which seems to be established by international practice and in particular by the decisions of arbitral tribunals – is that reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it – such are the principles which should serve to determine the amount of compensation due for an act contrary to international law.[2]

Even back in 1928, this principle was 'established by international practice'.[3] Thus, the first pre-requisite (*usus*) for considering it as customary international law has been met. In 1987, the US–Iran Claims Tribunal

[1] Traditionally, the term 'compensation' was used in connection with the consequences of a legal act, whereas the term 'damages' in connection with the consequences of an illegal act. At present, that distinction is often blurred in practice. See S Ripinsky & K Williams, *Damages in International Investment Law* (BIICL Law 2008) 4; TW Wälde & B Sabahi, 'Compensation, Damages and Valuation' in P Muchlinski, F Ortino & C Schreuer (eds), *The Oxford Handbook of International Investment Law* (OUP 2008) 1052–3. For the purposes of this chapter, the author decided to avoid the semantic dispute on the use of terminology and uses the term 'compensation' with respect to the consequences of both legal and illegal acts, following the wording of the ILC Articles.

[2] *Case Concerning the Factory at Chorzów (Germany v Poland)* (Merits) [1928] PCIJ Series A No 17, 47.

[3] ibid.

https://doi.org/10.1017/9781009255462.016 Published online by Cambridge University Press

noted that 'in spite of the fact that it is nearly sixty years old, this judgment is widely regarded as the most authoritative exposition of the principles applicable in this field, and is still valid today'.[4] It has been confirmed on uncountable occasions since then.[5] Thus, the second condition, *opinio juris sive necessitatis,* has also been met.[6] In the context of investor-State disputes, States not only commonly adopt this position but also enforce and recognise arbitral awards rendered on this basis as final and binding.

The *Chorzów Factory* principle is reflected in the ILC Articles.[7] Even though the ILC Articles 'seek to formulate, by way of codification and progressive development, the basic rules of international law concerning the responsibility of States for their internationally wrongful acts', their respective provisions codify, not progressively develop, the principle reflected in the *Chorzów Factory* judgment.[8]

[4] *Amoco v Iran* (Partial Award (Award No 310-56-3) of 14 July 1987) IUSCT Case No 56, 15 IUSCT 189 [191].

[5] For example: *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary/Slovakia)* (Judgment) [1997] ICJ Rep 7 [149]; Arrest *Warrant of 11 April 2000 (Congo v Belgium)* (Judgment) [2002] ICJ Rep 3 [76]; *Avena and Other Mexican Nationals (Mexico v USA)* (Judgment) [2004] ICJ Rep 12 [119]; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territories* (Advisory Opinion) [2004] ICJ Rep 136 [152]. In investor-State arbitrations, see, for example: *Unglaube v Costa Rica* (Award of 16 May 2012) ICSID Case No ARB/08/1 & ARB/09/20 [306]; *ADC Affiliate Limited v Hungary* (Award of 2 October 2006) ICSID Case No ARB/03/16 [484–5]. In other fora, see also, for example: *The M/V 'Saiga' (No 2) (Saint Vincent and the Grenadines v Guinea)* (Judgment) [1999] ITLOS Rep 10 [170]; *Papamichalopoulos and Others v Greece (Article 50)* (1995) Series A No 330–B [36].

[6] See, for example, MW Reisman & RD Sloane, 'Indirect Expropriation and its Valuation in the BIT Convention' (2004) 74 BYBIL 115, 133, who describe the *Chorzów Factory* principle as a 'lodestar' for the general principles of international law on compensation. For the two elements of custom see, for example: J Crawford, *Brownlie's Principles of Public International Law* (9th edn, OUP 2019) 22–5.

[7] E De Brabandere, *Investment Treaty Arbitration as Public International Law* (CUP 2014) 177.

[8] J Crawford, 'State Responsibility' [2020] MPEPIL 1093 [31]; N Rubins, V Sinha & B Roberts, 'Approaches to Valuation in Investment Treaty Arbitration' in CL Beharry (ed), *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration* (Brill Nijhoff 2018) 172; De Brabandere (n 7) 178; Ripinsky & Williams (n 1) 32; *Nykomb v Latvia* (Arbitral Award of 16 December 2003) SCC Case No 118/2001, 38; *LG&E v Argentina* (Award of 25 July 2007) ICSID Case No ARB/02/1 [31]; *Siemens AG v Argentina* (Award of 17 January 2007) ICSID Case No ARB/02/8 [350]; *Biwater Gauff v Tanzania* (Award of 24 July 2008) ICSID Case No ARB/05/22 [773]; *Tza Yap Shum v Peru* (Award of 7 July 2011) ICSID Case No ARB/07/6 [253–4]. The Tribunal in *OperaFund v Spain* summarised: 'the relevant principles of customary international law are derived from the PCIJ Judgment in the Chorzów Factory Case and are recorded in Articles 31–38 of the ILC Draft Articles' (*OperaFund v Spain* (Award of 6 September 2019) ICSID Case No ARB/15/36 [609]).

The ILC Articles precisely define that Part Two thereof (which includes remedies) 'does not apply to obligations of reparation to the extent that these arise towards or are invoked by a person or entity other than a State'.[9] This 'is without prejudice to any right, arising from the international responsibility of a State, which may accrue directly to any person or entity other than a State'.[10] Despite that, they have been continuously referred to in investor-State arbitrations.[11] Depending on how one assesses the nature of investors' rights under investment treaties, they are applicable either directly or *mutatis mutandis*. One possible theoretical approach is that investment treaties create investors' own substantive and procedural rights (being States' obligations towards investors, which would allow for Part Two of the ILC Articles being applied only *mutatis mutandis*).[12] Another possible approach is that investment treaties create procedural rights which can be applied to trigger arbitral proceedings related to alleged breaches of obligations owed to the State of the investor's nationality (being obligations owed to the other contracting State, and not to the investors themselves, which would allow for Part Two of the ILC Articles being applied directly).[13]

The *Chorzów Factory* judgment is frequently referred to by arbitral tribunals in cases based on investment treaties.[14] The tribunals consider the *Chorzów Factory* judgment as reflecting customary international law and, therefore, playing a pivotal role in determining remedies available in investor-State arbitrations. Even though the starting point for determining the remedies available in each case is always the text of the applicable

[9] ILC, 'Draft Articles on Responsibility of States for Internationally Wrongful Acts with Commentaries' (23 April–1 June and 2 July–10 August 2001) UN Doc A/56/10, reproduced in [2001/II – Part Two] YBILC 31, 87–8, commentary to Art 28 [3] ('ILC Articles'); in similar vein: ILC Articles, 95, commentary to Art 33 [4].

[10] ILC Articles (n 9) Art 33(2)

[11] PM Protopsaltis, 'Shareholders' Injury and Compensation in Investor-State Arbitration' in P Pazartzis & Panos Merkouris (eds), *Permutations of Responsibility in International Law* (Brill Nijhoff 2019) 188–9. See, for example, *SD Myers v Canada* (Partial Award of 13 November 2000) UNCITRAL [312–15]; *CME Czech Republic BV v Czech Republic* (Partial Award of 13 September 2001) UNCITRAL [583]; *Arif v Moldova* (Award of 8 April 2013) ICSID Case No ARB/11/23 [559]; cases mentioned in (n 8). Only occasionally the tribunals recognise that the ILC Articles do not apply – for example: *Wintershall v Argentina* (Award of 8 December 2008) ICSID Case No ARB/04/14 [113].

[12] De Brabandere explains that 'the rules and principles relating to the forms of reparation are, however, similar when it is a nonstate entity that is entitled to invoke the responsibility of a state' – De Brabandere (n 7) 178, fn 12.

[13] For broader considerations see: F Balcerzak, *Investor–State Arbitration and Human Rights* (Brill Nijhoff 2017) 236–8.

[14] Examples of cases referred to in (n 8) and (n 11).

investment treaty,[15] most treaties remain silent on the issue of remedies for their breach, although a few exceptions exist.[16] Thus, customary international law becomes relevant, as it governs issues that are not regulated in an applicable international treaty.[17]

The *Chorzów Factory* principle 'is precise, strict, and unchangeable as a principle, but flexible and useful in a myriad of different scenarios'.[18] Its biggest advantage sometimes turns out to be its disadvantage – tribunals have frequently failed to sufficiently analyse the application of this customary international law rule. Instead, they often tend to take a 'shortcut' and proceed to calculation of compensation, simply observing that this is 'consistent with the principles set forth' in the *Chorzów Factory* judgment.[19]

3 Restitution as the Primary Remedy

Under the *Chorzów Factory* principle, restitution is the default remedy for violations of a State's international obligations.[20] Only when restitution 'is not possible' should the 'payment of a sum corresponding to the value

15 ILC Articles (n 9) Art 55.

16 By way of an example, see 'The Energy Charter Treaty' (adopted 17 December 1994, entered into force 16 April 1998) 2080 UNTS 95, Art 26(8) ('ECT'); 'Agreement Between the United States of America, the United Mexican States, and Canada ('USMCA')' (adopted 10 December 2019, entered into force 1 July 2020) Art 14.D.13(1)(b), which replaced the North American Free Trade Agreement ('NAFTA') (adopted 17 December 1992, entered into force 1 January 1994) 32 ILM 289, Art 1135, which has a similar wording; see also, 'Convention on the Settlement of Investment Disputes Between States and Nationals of Other States' (adopted 18 March 1965, entered into force 14 October 1966) 575 UNTS 159, Art 54(1), which refers solely to enforcing 'the pecuniary obligations' imposed by arbitral awards.

17 For example, the final sentence of the preamble to the Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 (VCLT), states: 'Affirming that the rules of customary international law will continue to govern questions not regulated by the provisions of the present Convention'.

18 I Marboe, 'Assessing Compensation and Damages in Expropriation Versus Non-Expropriation Cases' in CL Beharry (ed), *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration* (Brill Nijhoff 2018) 134–5. It is 'a double-edged sword in the sense that it not only enables flexibility when responding to the variety of factual situations but also introduces subjectivity and discretion in the application of the legal principles' – Ripinsky & Williams (n 1) 21.

19 *Metalclad v Mexico* (Award of 30 August 2000) ICSID Case No ARB(AF)/97/1 [122]. *Foresight v Spain* can serve as another example, where the Tribunal decided that 'the Claimants are in principle entitled to full compensation for Spain's violation of Article 10(1) ECT. The Tribunal shall now turn to the Parties' respective submissions on quantum' – *Foresight v Spain* (Final Award of 14 November 2018) SCC Case No 2015/150 [438].

20 There is a 'primacy of restitution' – ILC Articles (n 9) 96, commentary to Art 35 [3]; it is a 'first-ranked' remedy – Wälde & Sabahi (n 1) 1057.

which a restitution in kind would bear' be awarded.[21] This is re-affirmed in Article 36(1) of the ILC Articles, according to which a State responsible for an internationally wrongful act 'is under an obligation to compensate for the damage caused thereby, insofar as such damage is not made good by restitution'.

Therefore, under customary international law, the broad concept of 'reparation' is divided into three subcategories: restitution, compensation and satisfaction, each being a different type of remedy. Restitution is a default remedy and a primary obligation of a State which violates an investment treaty.[22] However, sometimes full reparation may only be achieved by combining different forms of reparation.[23]

From a theoretical perspective, the possibility of arbitral tribunals awarding restitution in investor-State disputes has been recognised for many years.[24] This theoretical possibility has been confirmed as available in investor-State arbitrations.[25] In light of the above, it may be surprising that investor-State arbitral awards almost always comprise a compensation payment.[26] Only sometimes does this result from a particular substantive law being applicable to the dispute.[27] Typically, investment treaties do not address remedies at all, so they also do not preclude the possibility of restitution.

[21] *Factory at Chorzów*, 47. This should happen together with 'damages for loss sustained which would not be covered by restitution in kind or payment in place of it', which opens the floor for a discussion of moral damages. However, that issue falls outside the scope of this chapter.

[22] Rubins et al (n 8) 172.

[23] ILC Articles (n 9) 95, commentary to Art 34 [2] 95.

[24] For example: C Schreuer, 'Non-Pecuniary Remedies in ICSID Arbitration' (2004) 20(4) Arbitration International 325, 331–2.

[25] *Pezold v Zimbabwe* (Award of 28 July 2015) ICSID Case No ARB/10/15 [700, 723], in [1020.1] which actually ordered restitution. In other cases, tribunals have confirmed that this is possible, but decided on facts of the case not to order restitution – for example: *Enron v Argentina* (Decision on Jurisdiction of 14 January 2004) ICSID Case No ARB/01/3 [79, 81]; *Micula (I) v Romania* (Final Award of 11 December 2013) ICSID Case No ARB/05/20 [1309–11]; *Micula (I) v Romania* (Decision on Jurisdiction and Admissibility of 24 September 2008) ICSID Case No. ARB/05/20 [166–8]; *Al-Bahloul v Tajikistan* (Final Award of 8 June 2010) SCC Case No V (064/2008) [63]; cases mentioned in (n 32).

[26] C Malinvaud, 'Non-pecuniary Remedies in Investment Treaty and Commercial Arbitration' in AJ van den Berg (ed), *50 Years of the New York Convention: ICCA International Arbitration Conference* (Kluwer Law International 2009) 210. Compensation is 'perhaps the most commonly sought in international practice' in general, not merely in investor-State arbitration. See ILC Articles (n 9) 99, commentary to Art 36 [2].

[27] See examples in (n 16). Even though ECT, NAFTA and USMCA formally allow restitution, they require restitution orders to permit the alternative of paying compensation.

Most probably, the main reason for tribunals paying insufficient attention to restitution is the way in which claims are framed. Claimants have the right to choose which form of remedies they seek.[28] The way in which claims are framed binds the tribunals, which cannot go beyond the remedies sought by the claimants.[29] It is rare in practice for investors to seek remedies other than compensation.[30] It was rightly commented that 'the ultimate goal of the claimant in an investment treaty arbitration is almost always the payment of compensation for the harm it believes it has suffered at a host State's hands'.[31]

Recent awards rendered against Spain suggest that this approach may be revisited in practice. In *Eiser v Spain*, *Masdar v Spain, Antin v Spain, RREEF v Spain, RWE v Spain, PV Investors v Spain* and *Watkins v Spain*, the claimants primarily sought restitution and only asked for compensation if restitution was not awarded.[32] None of the tribunals in these cases declined the theoretical possibility of awarding restitution.[33] However, each tribunal arrived at the conclusion that restitution was inappropriate on the facts of the particular case.

Such an approach seems to be justified in the Spanish saga cases, which concern alleged violations of investment treaties arising due to changes in the general regulatory framework. Restitution can be replaced by

[28] ILC Articles (n 9) 120, commentary to Art 43 [6].

[29] Wälde & Sabahi (n 1) 1059. This principle is expressed in the Latin maxim *non ultra petita.*

[30] Malinvaud (n 26) 221; Schreuer (n 24) 329; Balcerzak (n 13) 221–2. Sometimes, after initially presenting the claim for restitution, it was abandoned in the course of the proceedings – for example: *South American Silver v Bolivia* (Award of 22 November 2018) PCA Case No 2013–15 [797].

[31] Rubins et al (n 8) 171.

[32] *Eiser v Spain* (Final Award of 4 May 2017) ICSID Case No ARB/13/36 [155, 425]; *Masdar Solar v Spain* (Award of 16 May 2018) ICSID Case No ARB/14/1 [554–5]; *Antin v Spain* (Award of 15 June 2018) ICSID Case No ARB/13/31 [631]; *RREEF v Spain* (Decision on Responsibility and on the Principles of Quantum of 30 November 2018) ICSID Case No ARB/13/30 [11, 473]; *RWE v Spain* (Decision on Jurisdiction, Liability and Certain Issues of Quantum of 30 December 2019) ICSID Case No ARB/14/34 [681–3]; *PV Investors v Spain* (Final Award of 28 February 2020) PCA Case No 2012–14 [665] (although the claim for restitution 'was abandoned' in the course of the proceedings); *Watkins Holdings v Spain* (Award of 21 January 2020) ICSID Case No ARB/15/44 [632–4]. Notably, the claimants in all of these cases were represented by the same law firm.

[33] Although the Tribunal in *Cube v Spain* observed that ordering restitution is 'beyond the proper scope of the powers of the Tribunal and is moreover plainly materially impossible and disproportionately burdensome'. The claimant did not request restitution, so this observation was made by the tribunal without having heard the parties' submissions on that issue. See *Cube v Spain* (Decision on Jurisdiction, Liability and Partial Decision on Quantum of 19 February 2019) ICSID Case No ARB/15/20 [460].

compensation not only where restitution is 'not possible' (as expressly stated in the *Chorzów Factory* judgment and recognised in Art 35 of the ILC Articles), but also if restitution is 'unavailable' or 'inadequate'.[34]

It would be either impossible, or at least extremely difficult, to comply with an award which ordered the restitution of previously applicable laws and regulations.[35] Moreover, the Tribunals in *Eiser v Spain, Antin v Spain* and *Watkins v Spain* observed that ordering restitution could give rise to doubts as to the permissibility of limiting State sovereignty.[36] The Tribunal in *Masdar v Spain* concluded that it could 'unduly burden' the respondent's 'legislative and regulatory autonomy'.[37] The Tribunal in *RWE v Spain* observed that the case was 'plainly not an appropriate case for restitution', as it involved regulations 'generally applicable across a very important sector in Spain' and restitution 'would obviously involve a burden to the Respondent out of all proportion'.[38]

The 'sovereignty concern' is well founded in the context of treaty violations caused by changes to generally applicable regulatory frameworks, as happened in the Spanish saga cases. It is less justified in cases concerning treaty breaches targeting a specific, individual investor. In such cases, the approach adopted by Energy Charter Treaty (ECT), North American Free Trade Agreement (NAFTA) and the United States Mexico Canada Agreement (USMCA) provide useful guidance on how to mitigate the sovereignty concern related to restitution by ordering that the respondent 'may pay monetary damages and any applicable interest in lieu of restitution'.[39] This solution is not a deviation from the *Chorzów Factory* principle.[40] Arbitral tribunals have the possibility to adopt a similar approach in investment disputes based on investment treaties other than ECT, NAFTA or USMCA. This is certainly so if the claimant presents an explicit request for such relief. However, even if a claimant's request is framed in

[34] ILC Articles (n 9) 99, commentary to Art 36 [3].
[35] *Masdar v Spain* [563].
[36] *Eiser v Spain* [425]; *Antin v Spain* [636–7] ('disproportional to its interference with the sovereignty of the State compared to monetary compensation'); *Watkins v Spain* [674] (restitution 'is an inappropriate remedy because the Respondent has a sovereign right to take appropriate legislative and regulatory measures to meet public interests').
[37] *Masdar v Spain* [559]. In similar vein *RREEF v Spain* [473].
[38] *RWE v Spain* [685], adding that breaches of the ECT were found only with respect to part of the claimant's plants.
[39] NAFTA, Art 1135(1)(b). The same wording was repeated in USMCA, Art 14.D.13(1)(b), which replaced NAFTA. Similarly, ECT, Art 26(8), provided that the respondent 'may pay monetary damages in lieu of any other remedy granted'.
[40] Marboe (n 18) 117.

a traditional manner – ie, it requests restitution and, only if restitution is impossible, compensation as an alternative – this opens the door for the tribunal to order restitution with the possibility to pay compensation *in lieu* of restitution.

Alternatively, tribunals can award restitution, stipulate a time limit within which it must materialise and proceed to ordering compensation only if the respondent fails to perform the specific obligation imposed upon it. Although no publicly available arbitral award reveals that this theoretical possibility has already been applied in practice, an analogy can be made from some tribunals' approach of deferring a decision on compensation to await both parties' initiative to provide a joint experts' report, whilst at the same time securing an alternative scenario if the parties cannot or do not wish to reach an agreement.[41]

Restitution may occur alongside compensation, not merely as an alternative.[42] With respect to an income-generating business, a return of the asset alone would not fully compensate the investor, as it would not compensate the income lost by that business in the intervening period.[43] In such a case, restitution should take place 'in combination' with compensation, as explicitly stated in Article 34 of the ILC Articles.[44] Only then is the principle of full reparation met.[45] Similarly, restitution should take place 'in combination' with compensation if an expropriated asset has lost its value since it was taken away. Otherwise, the claimant would be in a worse position if the asset were returned to him than if he received compensation.[46]

4 No Place for Declaratory-Only Awards

Satisfaction is a third type of remedy available for the violation of treaty obligations. This remedy comes into play insofar as the injury 'cannot be made good by restitution or compensation'.[47] In this sense, an award itself, which declares the wrongfulness of State actions, can constitute satisfaction – a form of reparation.[48]

[41] For example: *RREEF v Spain* [597]; *Cube v Spain* [532].
[42] *Bernhard von Pezold v Zimbabwe* [925, 1020.2].
[43] Rubins et al (n 8) 172–3.
[44] Marboe (n 18) 117.
[45] ILC Articles (n 9) 95, commentary to Art 34 [2].
[46] Rubins et al (n 8) 172–3.
[47] ILC Articles (n 9) Art 37(1).
[48] ILC Articles (n 9) 106–7, commentary to Art 37 [6]; the Tribunal in *Europe Cement v Turkey* expressly recognised 'the reasoning and conclusions set out in this Award' as 'a

https://doi.org/10.1017/9781009255462.016 Published online by Cambridge University Press

This remedy has little, if any, relevance in investor-State disputes. First, no investor would ever decide to commence costly arbitral proceedings solely to achieve this purpose. Therefore, a declaratory-only award by itself would be considered a 'paper victory' and a *de facto* loss, rather than one which results in meaningful reparation being granted.

Second, the award must be made public if the claimant is to receive satisfaction within the above meaning. Many arbitral awards remain unpublished, notwithstanding a certain tendency towards transparency.[49] The fact that an award will remain confidential would require an arbitral tribunal to order the State to issue 'an acknowledgement of the breach, an expression of regret, a formal apology or another appropriate modality', rather than simply issuing an award which declares that certain treaty provisions were infringed.[50]

Although theoretically possible, there is nothing in the public domain to suggest that a claim has ever been framed in that manner, ie requesting exclusively declaratory relief.[51] Claimants invariably request declaratory relief in conjunction with compensation (and sometimes restitution).[52]

5 Compensation for Lawful Expropriation

When looking at compensation, it is important to differentiate between lawful expropriation and violations of investment treaties, including unlawful expropriation.[53]

Expropriation as such is not prohibited under general international law.[54] On the contrary, States have a right to expropriate alien property.[55]

form of "satisfaction" for the Respondent' (*Europe Cement v Turkey* (Award of 13 August 2009) ICSID Case No ARB(AF)/07/2 [181]).

49 For example: United Nations Convention on Transparency in Treaty-based Investor-State Arbitration (Mauritius Convention on Transparency) (adopted 10 December 2014, entered into force 18 October 2017) No 54749.

50 ILC Articles (n 9) Art 37(2).

51 Which binds tribunals (n 29).

52 For example: *Enkev v Poland* (First Partial Award of 29 April 2014) PCA Case No 2013–01 [121]; *RREEF v Spain* [11].

53 Or, to word it differently, between 'treaty violative' and 'treaty compliant' expropriations. See S Ratner, 'Compensation for Expropriations in a World of Investment Treaties: Beyond the Lawful/Unlawful Distinction' (2017) 111(1) AJIL 7, 16.

54 MN Shaw, *International Law* (8th edn, CUP 2017) 627.

55 R Dolzer & C Schreuer, *Principles of International Investment Law* (2nd edn, OUP 2012) 136; *Siag v Egypt* (Award of 1 June 2009) ICSID Case No ARB/05/15 [428]. On the division between compensable (expropriatory) and non-compensable (non-expropriatory)

Investment treaties do not alter this situation. In fact, most explicitly reaffirm States' right to expropriate. They do, however, define the conditions which must be met by expropriatory action before it will comply with States' international obligations. The standard conditions of lawful expropriation include the existence of a public purpose, non-discrimination, due process and 'prompt, adequate and effective compensation'[56] (or similar wording having the same meaning).[57] The last condition is typically accompanied by a determination of the valuation date and applicable interest rate.[58]

The most essential element in defining compensation – adequate – is linked with the objective value of the expropriated investment, which is equated with its 'fair market value'.[59] The fair market value is understood as reflecting 'the price at which a willing buyer would buy, and a willing seller would sell, no party being under any type of duress and both parties having good information about all relevant circumstances involved in the purchase'.[60] 'Effective' means that compensation must be 'fully realizable', whilst 'prompt' means 'paid without delay'.[61]

The above is not, however, a remedy for an internationally wrongful act.[62] The applicable legal principles differ between compensation, as one

States' actions see, for example: M Żenkiewicz, 'Compensable vs. Non-Compensable States' Measures: Blurred Picture Under Investment Law' (2020) 17(3) MJIEL 362.

[56] For example: art VI of the Agreement Between the Government of Canada and the Government of the Republic of Poland for the Promotion and Reciprocal Protection of Investments (Canada & Poland) (adopted 6 April 1990, entered into force 22 November 1990) ('BIT Poland - Canada (1990)'). This reflects the Hull formula – Wälde, Sabahi (n 1) 1068.

[57] For example, 'genuine' having the same meaning as 'adequate', ie 'fair market value'. See *Rusoro Mining v Venezuela* (Award of 22 August 2016) ICSID Case No ARB(AF)/12/5 [646–7].

[58] For example, the Agreement Between the Government of Canada and the Government of the Republic of Poland for the Promotion and Reciprocal Protection of Investments (Canada & Poland) (adopted 6 April 1990, entered into force 22 November 1990) ('BIT Poland - Canada (1990)') Art VI ('Such compensation shall be based on the real value of the investment at the time of the expropriation, shall be made within two months of the date of expropriation, after which interest at the rate agreed between the investor and the Contracting Party concerned and in no case less than the London Inter Sank Offered Rate (L1S0R) shall accrue until the date of payment […]').

[59] Marboe (n 18) 123; Guideline IV(3) of the World Bank, 'Legal Framework for the Treatment of Foreign Investment, Vol 2: Report to the Development Committee and Guidelines on the Treatment of Foreign Direct Investment' (*World Bank Report*, 25 September 1992) reproduced in (1992) 31 ILM 1363, Guideline IV(3); see also, Poland Business and Economic Relations Treaty (USA & Poland) (adopted 21 March 1990, entered into force 6 August 1994) Art VII(1): 'Compensation shall be equivalent to the fair market value of the expropriated investment […]'.

[60] *Rusoro Mining v Venezuela* [751]; see also, *Khan Resources v Mongolia* (Award on the Merits of 2 March 2015) UNCITRAL [378].

[61] Marboe (n 18) 122.

[62] De Brabandere (n 7) 179; *ADC v Hungary* [481].

of the conditions of lawful expropriation, and compensation, as a remedy for unlawful expropriation.[63]

In this context, a question arises whether a failure to fulfil this condition of lawful expropriation (ie the condition of paying 'prompt, adequate and effective compensation') by itself means that the expropriation becomes unlawful. Many tribunals have ruled in favour of this approach.[64] Others have decided that non-fulfilment of the compensation prerequisite does not, by itself, render the expropriation unlawful.[65] However, the latter cases concerned situations where the respondent States accepted their obligation to pay compensation, but the parties were unable to agree on the amounts due. The Tribunal in *Tidewater v Venezuela* found that this was 'not a case where the State took assets without any offer of compensation. The record does not demonstrate a refusal on the part of the State to pay compensation. Rather, it discloses that the Parties were unable to agree on the basis or the process by which such compensation would be calculated and paid'.[66] Similarly, in *Venezuela Holdings v Venezuela* the negotiations on compensation took place and the respondent State 'made proposals during those negotiations'.[67] This allows the conclusion that expropriation should be considered as legal if all other conditions have been met (aside from the payment of compensation) and the respondent State has made 'a good faith effort to comply with the compensation requirement' (even if unsuccessfully).[68] If, on the other hand, the respondent State declines to pay any compensation at all, the failure to fulfil this condition suffices to consider the expropriation unlawful. In line with the above, any indirect expropriation would always amount to unlawful

[63] Ripinsky & Williams (n 1) 65–6; Marboe (n 18) 132–3; *ADC v Hungary* [499]; *Siemens v Argentina* [352]; *Tza Yap Shum v Peru* [253]; *Quiborax v Bolivia* (Award of 16 September 2015) ICSID Case No ARB/06/2 [326]; *Tidewater v Venezuela* (Award 13 March 2015) ICSID Case No ARB/10/5 [142]; *ConocoPhillips v Venezuela* (Decision on Jurisdiction and Merits of 3 September 2013) ICSID Case No ARB/07/30 [342–3].

[64] For example, *Pezold v Zimbabwe* [497–8]; *Unglaube v Costa Rica* [305]; *Crystallex v Venezuela* (Award of 4 April 2016) ICSID Case No ARB(AF)/11/2 [716].

[65] For example: *Tidewater v Venezuela* [140]; *Venezuela Holdings v Venezuela* (Award of 9 October 2014) ICSID Case No ARB/07/27 [301] (this award was annulled, but not in the part referred to – *Venezuela Holdings v Venezuela* (Decision on Annulment of 9 March 2017) ICSID Case No ARB/07/27 [196(4)]).

[66] *Tidewater v Venezuela* [145].

[67] *Venezuela Holdings v Venezuela* (Award) [306]. Similarly, *ConocoPhillips v Venezuela* [362].

[68] MW Friedman & F Lavaud, 'Damages Principles in Investment Arbitration' in JA Trenor (ed), *The Guide to Damages in International Arbitration* (3rd edn, Global Arbitration Review 2018) 104.

expropriation, as it is not compensated and involves no attempt to negotiate the amount of compensation payable.

6 Remedies Available for Treaty Breaches

As noted above, compensation for lawful expropriation is linked with the 'fair market value' of the expropriated object, typically with the valuation date set immediately prior to expropriation and increased by the applicable interest rate. If an expropriation does not meet the conditions of being lawful, it should not have taken place at all. In such a situation, reparation should 'wipe out' all of its consequences. The principle of full reparation rooted in customary international law does not provide any guidelines on how to determine the financial situation of the victim of a treaty breach.[69]

The aim is to put the claimant in the same situation as it would have been 'but for' the breach. In the first place, this may justify restitution in kind, as noted above. In the context of compensation, there are two vital differences between the compensation calculated as a condition for lawful expropriation and the compensation calculated as a remedy for unlawful expropriation. These relate to: (i) the date of valuation and (ii) the possibility to use *ex post* information during the calculation.[70]

As noted earlier, compensation for lawful expropriation is typically calculated on the basis of the fair market value shortly prior to the time at which the asset was taken. Calculating compensation for unlawful expropriation offers more flexibility. It allows the same date to be chosen as would apply in the case of lawful expropriation (ie immediately prior to the taking), but it offers an alternative – ie the date of the award.[71] This is in line with the principle of putting the claimants in the situation they would have been in 'but for' the breach. The PCIJ itself noted in the *Chorzów Factory* judgment that compensation

> is not necessarily limited to the value of the undertaking at the moment of dispossession, plus interest to the day of payment. This limitation would only be admissible if the Polish Government had had the right to

[69] Marboe (n 18) 126.

[70] In addition, compensation for unlawful expropriation can cover additional harm, beyond the loss of the property. See Ratner (n 53) 21.

[71] For example: *ADC v Hungary* [497, 499]; *Pezold v Zimbabwe* [813]; *Quiborax v Bolivia* [370, 377]; *Siemens v Argentina* [352]; *Kardassopoulos v Georgia* (Award of 3 March 2010) ICSID Case No ARB/05/18 [514]; *El Paso Energy International Company v Argentina* (Award of 31 October 2011) ICSID Case No ARB/03/15 [704, 706].

> expropriate, and if its wrongful act consisted merely in not having paid to the two Companies the just price of what was expropriated.[72]

In the words of the US–Iran Claims Tribunal in *Phillips Petroleum v Iran*, the difference is – apart from restitution – 'whether compensation can be awarded for any increase in the value of the property between the date of the taking and the date of the judicial or arbitral decision awarding compensation'.[73]

Another difference is the possibility to make use of *ex post* information – ie information which became available only after the expropriation took place. In the case of lawful expropriations, calculations are based on data available at the moment just prior to the taking, which reflects 'the price at which a willing buyer would buy, and a willing seller would sell' with the knowledge they would have actually had on the valuation date.[74] Customary international law allows a different approach – ie relying on any available information, including *ex post* knowledge.[75] The 'only subsequent known factors relevant to value which are not to be relied on are those attributable to the illegality itself'.[76]

These differences can result in higher amounts of compensation when compared to compensation for lawful expropriation. As was summarised by the Tribunal in *Quiborax v Bolivia*: 'This is easily explained by a reference to restitution: damages stand in lieu of restitution which would take place just following the award or judgment. It is also easy to understand if one keeps in mind that what must be repaired is the actual harm done, as opposed to the value of the asset when taken.'[77] This may become relevant in practice. For example, with respect to unlawfully taking a mining concession, it would not be surprising if, at the moment of taking, the deposit estimations suggest that a specific amount of mineral resource exists, but subsequently the deposit turns out to be larger, thereby increasing the amount of due compensation.

At the same time, these differences should not result in a lower compensation for unlawful expropriation than for lawful expropriation. It is possible for an expropriated investment to lose its value between the expropriation date and the date of the award. If this occurs, compensation for

[72] *Factory at Chorzów* 47.

[73] *Phillips Petroleum v Iran* (Award of 29 June 1989 (Award No 425-39-2)) Case No 39, 21 IUSCT 79 [110].

[74] See (n 60).

[75] Ripinsky & Williams (n 1) 256; *El Paso Energy v Argentina* [704]; *Quiborax v Bolivia* [370, 379].

[76] *Amco v Indonesia* (Award of 31 May 1990) ICSID Case No ARB/81/8 [186].

[77] *Quiborax v Bolivia* [377].

lawful and unlawful expropriation should be calculated on the same basis, ie based on the value of the asset at the time of expropriation, plus interest.[78] This is in line with customary international law, which provides that restitution – if possible – should be awarded together with compensation for any loss which is not covered by restitution. If compensation is the only remedy available, the claimant is entitled to compensation 'in the amount of the asset's higher value' between the expropriation date and the date of the award. This is because the State which violated international law bears 'the risk of unanticipated events decreasing the value of an expropriated asset over that time period', not the individual who suffered the loss.[79]

An important differentiation in this context arises with respect to a division between unlawful expropriation and other treaty breaches. It goes without saying that the *Chorzów Factory* principle finds application to all violations of investment treaties' provisions, not solely unlawful expropriation.[80]

In this context, restitution could play a more important role in the future.[81] In terms of compensation, if violations of multiple standards are found, typically, tribunals consider it sufficient to calculate compensation for unlawful expropriation as covering the whole loss suffered.[82] This is in line with the *Chorzów Factory* principle, which requires that no

[78] Marboe (n 18) 132–3.

[79] *Hulley Enterprises v Russia* (Final Award of 18 July 2014) PCA Case No AA 226 [1768]; *Yukos Universal Ltd v Russia* (Final Award of 18 July 2014) PCA Case No AA227 [1768]; *Veteran Petroleum v Russia* (Final Award 18 July 2014) PCA Case No AA 228 [1768]. Another scenario is that the value of the expropriated investment initially increased after the expropriation but decreased later. To allow the claimant to choose the most favorable moment between the expropriation date and the date of the award, the claimant would need to satisfy the burden of proof that it would have disposed of the property at the 'peak' of its value, which would rarely be capable of being established.

[80] For example: *Unión Fenosa v Egypt* (Award of 31 August 2018) ICSID Case No ARB/14/4 [10.96]; *Murphy v Ecuador* (Award of 6 May 2016) PCA Case No AA434 [423]; *Lemire v Ukraine* (Award of 28 March 2011) ICSID Case No ARB/06/18 [149]; *White Industries v India* (Final Award of 30 November 2011) UNCITRAL [14.3.3]; *Novenergia II v Spain* (Final Award of 15 February 2018) SCC Case No 2015/063 [807].

[81] The use of non-financial remedies for non-expropriatory treaty violations include examples such as an order to refrain from discriminatory treatment, to re-issue an administrative or judicial decision in full compliance with due process, or to seek other administrative remedies that provide full satisfaction – Wälde & Sabahi (n 1) 1115–16.

[82] For example: *Vivendi (I) v Argentina* (Final Award of 20 August 2007) ICSID Case No ARB/97/3 [8.2.8]; in *BG Group v Argentina* the Tribunal observed that while it was 'disinclined to automatically import' standard of fair market value envisaged for lawful expropriation, 'this standard of compensation is nonetheless available by reference to customary international law' and applied it to breach of the fair and equitable treatment and prohibition of unreasonable measures – *BG Group v Argentina* (Final Award of 24 December

overcompensation takes place.[83] It results from a pragmatic approach: typically, other breaches would result in a compensation award of equal or less value than the compensation due in the case of unlawful expropriation.[84]

7 Methodologies of Calculating Compensation in the Light of the *Chorzów Factory* Principle

Within the legal framework discussed above, when calculating compensation tribunals must decide which methodology to apply. In each case, the choice of methodology is fact dependent. In the words of the Tribunal in *Antin v Spain*: 'there are no right or wrong valuation methods, but different methods that are appropriate depending on the specific circumstances of the case'.[85] Whichever methodology is applied, typically, compensation 'cannot be determined with mechanical precision'.[86] What matters is that the arbitrators are comfortable that the methodology applied is not 'speculative'.[87] Reluctance towards a speculative outcome is one of the key factors which influences arbitrators when choosing the methodology for calculating compensation.

Keeping in mind the above, it is possible to make a few general comments on the methodologies typically available in investor-State arbitrations. From a theoretical perspective, they can be divided into two classifications: (i) backward-looking and (ii) forward-looking.[88]

2007) UNCITRAL [422]. The standard of compensation for expropriation is 'relatively well established' when compared to compensation for breaches of other standards commonly found in investment treaties. See Wälde & Sabahi (n 1) 1082.

83 ILC Articles (n 9) 105, commentary to Art 36 [33].

84 Although, for example, in *Novenergia v Spain*, the value of the claim for expropriation was lower than the claim for violation of other ECT standards – *Novenergia v Spain* [811].

85 *Antin v Spain* [688].

86 *Eiser v Spain* [473]. Tribunal in *Masdar v Spain* rejected test of 'confidence approaching absolute certainty' – *Masdar v Spain* [576]. Tribunal in *Infrared v Spain* observed: 'no model or methodology for assessing damages can determine with absolute precision the loss visited on an investor by a regulatory change, given the many uncertainties and variables inherent in projecting revenues, costs and risk over time. The method used must rather be reasonable in the light of all the circumstances' – *Infrared v Spain* (Award of 2 August 2019) ICSID Case No ARB/14/12 [533].

87 *Novenergia v Spain* [820].

88 Rubins et al (n 8) 185; Ripinsky & Williams (n 1) 193, 214. It remains unclear how to categorise asset-based methodologies, which value investments by summing up their individual assets (Ripinsky & Williams (n 1) 218). This group consists of book value, replacement value and liquidation value methodologies. Whilst book value is clearly a backward-looking methodology (Rubins et al (n 8) 198), classification of the remaining two into this category is more debatable.

Probably the most common backward-looking methodology considers the amounts actually invested ('sunk costs') and seeks to return this amount to the investor. The advantage of this methodology is that the outcome is based on actual figures, which avoids any speculation.[89] The disadvantage is that it does not compensate for lost profits.[90] As such, it does not place the claimant in a situation in which it would have been 'but for' the treaty breach, as required by customary international law. No reasonable investor decides to undertake an investment with the sole purpose of receiving back the amount it originally invested after a period of time.

This shortcoming is partially cured by ordering pre-award interest.[91] This is envisaged by Art. 38 of the ILC Articles, which states that interest may be 'necessary in order to ensure full reparation'.[92] Pre-award interest 'should compensate a claimant for the deprivation of money owed to it between the date of the harm suffered and the award'.[93] The economic rationale behind interest is to reflect the 'cost of money that a lender is willing to be paid to part with his money for a given period of time'.[94] Pre-award interest, therefore, brings 'past losses […] to present value' and compensates for loss stemming from the fact that the investors were not 'in possession of the funds' to which they were entitled and they had 'either to borrow funds at a cost or were deprived of the opportunity of investing these funds at a profit'.[95] As such, it reflects the time value of

89 Wälde & Sabahi (n 1) 1072–3.

90 ibid 1066, in the context of the backward-looking methodologies and the traditional division between *damnum emergens* and *lucrum cessans*. Similarly, on ibid 1073, when they provide an example of investment in petroleum, where most exploration wells are unsuccessful (dry), but they 'get compensated by the few successful results of a drilling campaign. This means that the value of the successful exploration is – often by a multiple – much more than the expenditures incurred. In essence, expenses have either to be multiplied by the exploration risk (historic method) or in this situation (and other comparable situations where a particular high risk is overcome) one needs to look at comparable transactions and forecasts of future income. A combination of historic cost (adjusted by exploration risk), future income, and market-value-based valuations is here called for'.

91 Their object is considered to 'ensure full reparation in accordance with the Chorzów principle' – I Uchkunova & O Temnikov, 'A Procrustean Bed: Pre- and Post-award Interest in ICSID Arbitration' (2014) 29(3) ICSID Rev 648, 651; for example: *Occidental v Ecuador* (Award of 5 October 2012) ICSID Case No ARB/06/11 [834]; *Vivendi (I) v Argentina* [9.2.6].

92 ILC Articles (n 9) 108, commentary to Art 38, [7], *a contrario* 105, commentary to Art 36 [33].

93 CL Beharry, 'Prejudgment Interest Rates in International Investment Arbitration' (2016) 8(1) JIDS 56, 56–7. Gotanda defines interest as compensation 'for the temporary withholding of money' or 'for the loss of the use of money'. See JY Gotanda, 'Compound Interest in International Disputes' (2003) 34(2) Law & PolIntBus 393, 395–6.

94 Beharry (n 93) 61.

95 *Quiborax v Bolivia* [513].

money and the decreasing purchasing power of money over time. It does not compensate investors for the fact that they did not obtain a profit from the investment.[96]

For the above reason, 'sunk costs' can be used as a 'reality check' of the outcome reached by applying other methodologies.[97] They can serve as the primary methodology only if forward-looking ones are unavailable in a particular case. The two most common forward-looking methodologies are: (i) income based and (ii) market based.[98]

Income-based methodology, also known as the Discounted Cash Flow (DCF) method, calculates the present value of an investment's anticipated future cash-flows during its useful life.[99] As such, it provides for a fair market value of a 'going concern'.[100] It aims at compensating lost profits which the investment was supposed to generate, but was unable to because of the treaty breach.[101] Application of this method requires the ability to forecast future earnings.

Market-based methodology determines the value of an investment by comparing it to similar investments traded on the open market. Whilst DCF 'computes the present value of the business's future earnings' directly, the market-based approach does so indirectly 'because it incorporates market values of comparable businesses'.[102] Application of this method requires the existence of comparable transactions (concerning similar projects or companies, if an investment is implemented through a special purpose vehicle having one asset).[103]

[96] This is possible when using forward-looking methodologies. For example, the Tribunal in *Quiborax v Bolivia* included interest accrued on past cash flows in the total value of past cash flows calculated using the Discounted Cash Flow method. See *Quiborax v Bolivia* [515].

[97] For example: *Eiser v Spain* [474].

[98] However, some authors classify the market-based approach as a backward-looking methodology – Wälde & Sabahi (n 1) 1070–1, 1074.

[99] Ripinsky & Williams (n 1) 195; see also G Rush, K Sequeira & M Shopp, 'Valuation Techniques for Early-Stage Businesses in Investor-State Arbitration' in CL Beharry (ed), *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration* (Brill Nijhoff 2018) 273.

[100] This is understood as meaning that a business is in operation and has a track record of cash flows – *Antin v Spain* [689]. This is the prevailing approach in the case law, but from the financial perspective it is not necessarily a pre-condition for applying the DCF method – KF Schumacher & H Klönne, 'Discounted Cash Flow Method' in CL Beharry (ed), *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration* (Brill Nijhoff 2018) 212.

[101] Ripinsky & Williams (n 1) 279, 289.

[102] ibid 212.

[103] 'Market capitalization', calculated based on a price of shares on the stock market would also fall within the category of market-based methodology – Rubins et al (n 8) 190.

Forward-looking methods are commonly applied in business reality, outside the context of litigation.[104] For example, they are recognised in industry standards for valuating mineral properties.[105] They are based on market indicators. Thus, even though they represent a degree of subjectivity and uncertainty, this in itself should not preclude their application.[106]

8 The Curious Case of the Natural Resources Sector

Investor-State arbitration case law reveals the reluctance of arbitral tribunals to apply forward-looking valuation methods to early-stage projects, particularly those which have not yet started to generate any income. With respect to such projects tribunals tend to consider the DCF method as 'too speculative and uncertain',[107] 'unattractive and speculative',[108] requiring 'too many unsubstantiated assumptions' and being 'overly speculative',[109] requiring an investment to be 'a going concern with a proven record of profitability'.[110] The tendency with respect to comparable transactions is to consider them as 'not sufficiently comparable'[111] or to find that they do not 'support a clear conclusion' regarding comparability.[112] Instead, tribunals prefer to look at the amounts actually invested ('sunk costs')[113] or other backward-looking methods, such as offers actually received in the past to acquire the relevant investment.[114]

In cases where tribunals have decided not to apply the DCF method to early-stage mining projects, they did not preclude the use of the method

104 Rush et al (n 99) 262, 288; Schumacher & Klönne (n 100) 207.

105 For example, CIMVAL Standards and Guidelines 2003 provide that an income-based approach may be a suitable method of valuation for any type of mineral property save for an exploration property (CIMVAL, 'Standards and Guidelines for Valuation of Mineral Properties: Special Committee of the Canadian Institute of Mining, Metallurgy and Petroleum on Valuation of Mineral Properties' (*CIMVAL*, 2003) 22 <https://mrmr.cim.org/media/1020/cimval-standards-guidelines.pdf> accessed 1 June 2022). This was confirmed in CIMVAL Code 2019 (CIMVAL, 'The CIMVAL Code for the Valuation of Mineral Properties' (*CIMVAL*, 2019) 16 <https://mrmr.cim.org/media/1135/cimval-code-november2019.pdf> accessed 1 June 2022).

106 Rubins et al (n 8) 200.

107 *Bear Creek Mining Corporation v Peru* (Award of 30 November 2017) ICSID Case No ARB/14/21 [604].

108 *Khan Resources v Mongolia* [392].

109 *Al-Bahloul v Tajikistan* [96].

110 *Caratube v Kazakhstan* (Award of 27 September 2017) ICSID Case No ARB/13/13 [1094].

111 *Khan Resources v Mongolia* [398].

112 *South American Silver v Bolivia* [838]; similarly, *Caratube v Kazakhstan* [1133].

113 *Bear Creek v Peru* [604]; *South American Silver v Bolivia* [866]; *Caratube v Kazakhstan* [1164].

114 *Khan Resources v Mongolia* [410–1].

per se, but merely decided that it was not applicable to the facts of the given case.[115] Rightly so, as the methodology itself is in line with the *Chorzów Factory* principle.

There are examples to show that the DCF method can also be applied in disputes concerning early-stage mining projects. In *Tethyan v Pakistan* case, the Tribunal awarded compensation based on a 'modern DCF'. It observed that, among other matters,

> the question whether a DCF method (or a similar income-based valuation methodology) can be applied to value a project which has not yet become operational depends strongly on the circumstances of the individual case. The first key question is whether, based on the evidence before it, the Tribunal is convinced that in the absence of Respondent's breaches, the project would have become operational and would also have become profitable. The second key question is whether the Tribunal is convinced that it can, with reasonable confidence, determine the amount of these profits based on the inputs provided by the Parties' experts for this calculation […].[116]

Both prerequisites were met in the case. The Tribunal in *Crystallex v Venezuela* observed, in the context of a gold mine project which had not commenced production, that:

> the Claimant has established the fact of future profitability, as it had completed the exploration phase, the size of the deposits had been established, the value can be determined based on market prices, and the costs are well known in the industry and can be estimated with a sufficient degree of certainty. […] In this case only forward-looking methodologies aimed at calculating lost profits are appropriate in order to determine the fair market value of Crystallex's investment.[117]

This is in line with standard industry practices such as CIMVal Standards and Guidelines 2003. Also, the Tribunal in *Gold Reserve v Venezuela*,

[115] For example, the Tribunal *in Khan Resources v Mongolia* [392] observed: 'in this particular case, there are a number of additional factors and uncertainties which, in the Tribunal's view, make the use of the DCF method unattractive and speculative'. The Tribunal in *Al-Bahloul v Tajikistan* [74–6] observed that 'under exceptional circumstances DCF-analysis might be appropriate where the investment project at issue had not started operation', which 'might be justified, inter alia, where the exploration of hydrocarbons is at issue. The determination of the future cash flows from the exploitation of hydrocarbon reserves need not depend on a past record of profitability. There are numerous hydrocarbons reserves around the world and sufficient data allowing for future cash flows projections should be available to allow a DCF-calculation'. The Tribunal did not apply DCF because 'no hydrocarbons have yet been found' in the disputed concessions.

[116] *Tethyan Copper v Pakistan* (Award of 12 July 2019) ICSID Case No ARB/12/1 [330, 335].

[117] *Crystallex v Venezuela* [878, 880, 882–3], relied on estimations of proven and probable reserves and measured and indicated resources in accordance with international standards.

where the experts for both parties used the DCF method, applied it to non-production property.[118]

This case law reveals that the DCF method can indeed be applied to early-stage mining projects.[119] Relevant factors in the fact-assessment include whether a sufficient degree of certainty has been achieved regarding projections of future profitability (such as knowledge of the size of the mineral deposit,[120] predictability of price fluctuations strengthened by resource type[121] and reliable mining cashflow analysis prepared prior to the dispute having arisen),[122] combined with the claimant's standing (such as a historical record of financial performance,[123] whether it has a demonstrated commitment and capacity – both financial and organisational – to progress to the production stage).[124]

These observations find support in the Spanish saga case law, concerning investments in the renewable energy sector (which is considered to fall within the field of natural resources).[125] In most of these cases, when tribunals found that the underlying investment treaty had been infringed, they decided to apply the DCF method.[126] The tribunals did not consider it too speculative. The lifetime of the investments (power plants) was foreseeable. This can be compared to the expected lifetime of a mine and the production period of a particular deposit. The commodity price (electricity)

[118] *Gold Reserve Inc v Venezuela* (Award of 22 September 2014) ICSID Case No ARB(AF)/09/1 [830]: 'Although the Brisas Project was never a functioning mine and therefore did not have a history of cashflow which would lend itself to the DCF model, the Tribunal accepts the explanation of both Dr Burrows (CRA) and Mr Kaczmarek (Navigant) that a DCF method can be reliably used in the instant case because of the commodity nature of the product and detailed mining cashflow analysis previously performed'.

[119] From a financial perspective, the limitations identified by tribunals 'are not impediments per se to applying the DCF method', but rather factors to be included in the DCF models – Schumacher & Klönne (n 100) 211–12.

[120] *Crystallex v Venezuela* [880]; *Khan Resources v Mongolia* [391].

[121] *Crystallex v Venezuela* [879].

[122] *Rusoro Mining v Venezuela* [759].

[123] ibid.

[124] *Khan Resources v Mongolia* [392].

[125] R Caldwell, D Chodorow & F Dorobantu, 'Valuing Natural Resources Investments' in CL Beharry (ed), *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration* (Brill Nijhoff 2018) 293.

[126] *Eiser v Spain* [465]; *Novenergia v Spain* [818, 820]; *Masdar v Spain* [575, 581]; *Antin v Spain* [688–91]; *Foresight v Spain* [474, 530]; *Cube v Spain* [478]; *Infrared v Spain* [521]; *OperaFund v Spain* [621]; *Watkins v Spain* [689]; *PV Investors v Spain* [691, 697]; *SolEs v Spain* (Award of 31 July 2019) ICSID Case No ARB/15/38 [488]; *9REN v Spain* (Award of 31 May 2019) ICSID Case No ARB/15/15 [407]. The ECT was the applicable investment treaty in these cases.

was foreseeable. This can be compared to the commodity price of natural resources such as gold, copper or gas.[127] Developing projects in both fields requires large, upfront investments.[128]

In the renewable energy sector, an important element allowing for DCF calculations was the highly regulated nature of the industry, minimising the expected fluctuations of future cash flows. In the words of the Tribunal in *Novenergia v Spain*, the DCF method 'is considered particularly suitable for valuating income-streams that are regulated (as opposed to unregulated business that is more exposed to market fluctuations)'.[129] Thus, the DCF method was applied not only to 'going concerns', but also to investments which began generating income shortly prior to the respondent's regulatory changes, which violated the investment treaty.[130] This is a major difference between mining and renewable energy disputes. Whereas mining disputes also concern a highly-regulated industry, this factor is not related to State subsidies and, therefore, has limited impact on future cash flows.

9 Conclusions

The *Chorzów Factory* principle reflects customary international law governing remedies for treaty breaches. As such, it applies to violations of international investment treaties. It entitles claimants in investor-State arbitrations to seek restitution prior to compensation or satisfaction.

Claimants have a right to choose the remedy they wish to seek. If claimants seek restitution, tribunals have the power to award it, unless this is explicitly precluded by the underlying treaty or is impossible (or at least inadequate) due to the facts of a particular case. Restitution was considered as inadequate in the Spanish saga cases, which concerned

127 Caldwell et al (n 125) 302–3.

128 ibid 294. The difference is that although the development of a renewable energy power plant is a long process which takes several years, it is still shorter than an investment in developing a mine, which is preceded by exploration activities.

129 *Novenergia v Spain* [820]. See also *Cube v Spain* [478]; *Infrared v Spain* [535].

130 In *Eiser v Spain* [121] the plants began operation in 2012; in *Masdar v Spain* [98–9] – at the end of 2011; in *Infrared v Spain* [57–8] in 2012; in *RREEF v Spain* [169, 173] one of the power plants became operational in 2013, although the other one was operational already in 2008. Contested violations of the ECT concerned a series of measures taken between 2012 and 2014, whereas the respondent 'crossed the line' in June 2014; for example: *Eiser v Spain* 458; see also: Caldwell et al (n 125) 300–1; in *NextEra v Spain*, however, an operational history of less than 1 year was the basis for refusing to apply the DCF method – *NextEra v Spain* (Award of 12 March 2019) ICSID Case No ARB/14/11 [643, 647].

treaty violations resulting from the adoption of new laws and regulations. Ordering restitution in this context was considered as potentially limiting State sovereignty. Tribunals can award restitution with the possibility to pay compensation *in lieu* of restitution, to overcome similar concerns in cases concerning individually applied measures.

A declaratory-only award is considered as a 'paper victory' and the *de facto* loss of the case, rather than as having obtained satisfaction, a meaningful form of reparation. Such an award is disproportionate when compared to the costs of arbitral proceedings and its significance is undermined by the confidentiality of the bulk of investor-State arbitral awards.

In practice, claimants rarely consider any remedy other than compensation. The *Chorzów Factory* principle seems to be used by claimants as a shortcut to proceed to calculating compensation. There is nothing reproachable in this, and the precise manner in which claims are framed is binding on tribunals, which cannot go beyond the remedies sought by the claimants. This explains, however, the reasons why remedies other than compensation – restitution and satisfaction, available under customary international law – are only occasionally considered in investor-State arbitrations.

With respect to compensation, differences exist between compensation for lawful expropriation (compensation is a prerequisite of any lawful expropriation) and compensation as a remedy for unlawful expropriation. The latter can be higher, as it can be calculated as of the date of the award and it can make use of *ex post* information. This understanding of the customary international law governing compensation appears to be already settled in investor-State arbitral case law.

There is no infallible approach to choosing the methodology for calculating compensation for treaty breaches. However, the choice of forward-looking (income-based) methods is generally available in cases concerning all sectors of the economy, including in disputes concerning early-stage mining projects and renewable energy power plants. There are identifiable patterns in the case law, showing that (i) in principle, arbitral tribunals are reluctant to apply forward-looking valuation methods to early-stage projects, particularly those which have not begun to generate any income, but (ii) if a number of factual elements exist, this initial reluctance can be overturned. This U-turn is easier in renewable energy disputes than in mining disputes, because the highly-regulated nature of the renewable energy industry is closely related to State subsidies, which allow the expected fluctuations of future cash flows to be minimised.