



# Compensation Under Investment Treaties

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### **Compensation Under Investment Treaties**

October 2019

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# 1.0 Introduction

The vast majority of investment treaties allow foreign investors to bring claims that the host state has breached the treaty to international arbitration. If the arbitral tribunal concludes that the host state has breached the treaty, it will invariably order the host state to compensate the foreign investor. The legal principles governing compensation—and the way tribunals have interpreted and applied these principles—then determine the amount the host state must pay. In this way, the principles governing compensation have direct, practical implications for states, investors and other participants in the investment treaty regime.

## 1.1 Why the Issue of Compensation Deserves the Attention of Policy-Makers

Arbitral jurisprudence on compensation has developed over the past two decades, driven by the rapid growth of investment treaty arbitration. In other areas where arbitral jurisprudence has evolved in unexpected directions—for example, in the case of expansive interpretations of fair and equitable treatment provisions—states have responded by reconsidering the drafting and inclusion of such provisions in their treaties. However, the issue of compensation has not received the same attention. Because arbitral jurisprudence on compensation can be technical, an impression seems to have developed that questions of compensation are best left to arbitrators.

The principles governing compensation are too important to be left to arbitrators. Billions of dollars are often at stake. States should consider whether existing jurisprudence governing compensation reflects the way they intended the investment treaty system to function. If it does not, they should consider options for reform. For several reasons, we suggest that existing jurisprudence governing compensation may not reflect what state parties to investment treaties intended.

### 1.1.1 The Amounts of Compensation Being Awarded Are Large—and Are Increasing

In the early 2000s, awards of compensation in the tens of millions of USD were considered large. These sums seem quaint in retrospect. Today, the largest award of compensation in investment treaty arbitration is the USD 40 billion awarded in *Hulley v. Russia*. (This was the largest of several related claims arising out of the nationalization of Yukos, in which a total of USD 50 billion was awarded.) There are now 46 known cases in which a tribunal has awarded compensation in excess of USD 100 million. These cases are listed in Appendix A.

Large awards pose serious challenges for developing countries. For example, the USD 4 billion compensation award in the *Tethyan Copper v. Pakistan* in July 2019 was almost as large as the International Monetary Fund's (IMF's) bailout that had been agreed two months earlier with the intention of saving the Pakistani economy from collapse.<sup>1</sup>

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<sup>1</sup> Masood, S. (2019, May 12,). Pakistan to accept \$6 billion bailout from I.M.F. *The New York Times*. Retrieved from <https://www.nytimes.com/2019/05/12/world/asia/pakistan-imf-bailout.html>



The possibility of large compensation awards has systemic implications. Investors with long-shot claims are more likely to proceed to arbitration if they expect to receive a large payout should their case succeed. The possibility of a large award also encourages third-party funding.

### 1.1.2 Large Amounts of Compensation Are Being Awarded in a Wide Variety of Fact Scenarios

Existing jurisprudence on compensation has its roots in the controversies of the 1960s and 1970s. This was the era of decolonization. At that time, the assumption was that investment disputes normally involved the seizure of foreign-owned assets by the host state. With such disputes in mind, developed countries took the view that compensation should equal the fair market value of an expropriated investment, while developing countries argued for a lower standard of compensation. Developed countries sought to resolve this controversy by embedding the fair market value standard in investment treaties, at least insofar as compensation for expropriation was concerned.<sup>2</sup> Investment treaties failed to specify the relevant standard of compensation in regulatory disputes or other forms of mistreatment falling short of expropriation. The possibility of investors invoking the treaties in such disputes was not foreseen at the time.

Although existing principles governing compensation were developed with disputes about direct expropriation in mind, these principles are now being applied in a much wider array of disputes. For example, in *Tethyan Copper v. Pakistan*, a foreign investor was awarded USD 4 billion plus interest for Pakistan's failure to grant the necessary approvals for an investor to build and operate a mine, even though the mine was never built. In *Unión Fenosa Gas v. Egypt*, a foreign investor was awarded USD 2 billion plus interest for Egypt's failure to supply an agreed volume of gas to the investor's liquified natural gas terminal for export. Egypt had argued that the gas was needed for domestic consumption.

### 1.1.3 Tribunals' Practice Departs from Previously Accepted Principles of International Law

Although several factors are responsible for the increase in the amount of compensation being awarded in investment treaty arbitrations, the most significant factor is probably tribunals' increasing

#### Text box 1. "Compensation" or "damages": A word on terminology

Investment treaty tribunals use sometimes use the term "damages" rather than the term "compensation." In some cases, the choice of terminology is used to distinguish the principles governing payment of *compensation* for expropriation, which are explicitly enumerated in the treaties, from arbitral jurisprudence governing *damages* for the breach of other provisions of investment treaties, such as the guarantee of fair and equitable treatment. In Section 2 we explore this distinction and argue that it is of little consequence in practice.

Other tribunals appear to use the terms "compensation" and "damages" interchangeably. In this paper, we use the term "compensation" generally to describe any order by a tribunal that the host state pay money to the investor, aside from orders that relate to reimbursement of the costs of the litigation proceedings themselves.

<sup>2</sup> Bonnitcha, J., Poulsen, L. N. S., & Waibel, M. (2017). *The political economy of the investment treaty regime*. Oxford University Press, 199.





willingness to use projections of an investment's expected future income across its entire life cycle as a basis for awarding compensation. The most common valuation technique used to calculate compensation on this basis is the discounted cash flow (DCF) method, which is discussed in more detail in Section 3.2 of this paper.

Tribunal practice in this regard departs from previously accepted principles of international law. In 2001, the International Law Commission's Draft Articles on State Responsibility purported to restate the principles of customary international law on compensation. The Draft Articles note that DCF models are based on "a wider range of inherently speculative elements, some of which have a significant impact upon the outcome." They caution that the use of DCF models is only appropriate in a narrow range of circumstances, such as when an investor has a contractual entitlement to defined income stream.<sup>3</sup>

### 1.1.4 Tribunals' Practice Differs from the Practice of Other National and International Courts

Arbitral practice also differs from comparable practice of other international courts and tribunals. It is well known that the WTO dispute settlement system does not ordinarily lead to compensation for successful claimants. A state that has breached the WTO agreements must first bring its laws and policies into compliance with its obligations under those agreements under a "reasonable period of time," though non-compliance can eventually lead either to a negotiated agreement on compensation or to the Dispute Settlement Body eventually authorizing a state to "suspend [...] concessions or other obligations under the covered agreements" for the other party, up to an approved level.<sup>4,5</sup> The European Court of Human Rights (ECtHR) is an example of an international legal regime which, like the investment treaty regime, does allow

#### Text box 2. Compensation under German law vs. compensation under investment treaties

In the case brought by Swedish nuclear energy company Vattenfall to the German Constitutional Court, the court found violations of constitutional property rights and left it to the legislature to remediate those violations by passing a law providing for compensation. In May 2018, news outlets reported that the German cabinet had approved a law providing for compensation not exceeding hundreds of millions of euros – a figure that would not be calculated and awarded until 2023. By contrast, in the ISDS proceedings it launched in 2012, Vattenfall is claiming over USD 5 billion in damages.

Sources:

German Federal Constitutional Court. (Dec. 6, 2016). The thirteenth amendment to the Atomic Energy Act is for the most part compatible with the basic law. *Press Release No. 88/2016*. Retrieved from <https://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2016/bvgr16-088.html>, Graupner, H. (May 23, 2018).

German government approves nuclear phase-out compensation. *Deutsche Welle*. Retrieved from <https://www.dw.com/en/german-government-approves-nuclear-phaseout-compensation/a-43692394>, Chambers, M. (May 23, 2018). German cabinet agrees compensation for utilities due to nuclear exit. *Reuters Business News*. Retrieved from <https://www.reuters.com/article/us-germany-utilities-compensation/german-cabinet-agrees-compensation-for-utilities-due-to-nuclear-exit-idUSKCN11011H>, *Vattenfall AB and others v. Federal Republic of Germany*, ICSID Case No. ARB/12/12, <https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/467/vattenfall-v-germany-ii>

<sup>3</sup> Text of the Draft Articles on the Responsibility of States for Internationally Wrongful Acts, [2001] 2 Y.B. Int'l L. Comm'n 2, UN Doc. A/56/10, art. 36, cmt. 26 [Hereinafter 2001 ILC Draft Articles].

<sup>4</sup> Trebilcock, M., Howse, R., & Eliason, A. (4th Ed., 2012). *The regulation of international trade*. Routledge, 217.

<sup>5</sup> World Trade Organization. (1994). *Dispute Settlement Understanding*. Retrieved from [https://www.wto.org/english/tratop\\_e/dispu\\_e/dsu\\_e.htm](https://www.wto.org/english/tratop_e/dispu_e/dsu_e.htm).



private actors to sue states for monetary compensation. Nevertheless, the principles governing compensation in such disputes are far less generous to claimants than those applied under investment treaties.<sup>6</sup> For example, in 2004, the shareholders of Yukos brought a case against Russia to the ECtHR.<sup>7</sup> The case arose out of the events surrounding the nationalization of Yukos that gave rise to *Hulley v. Russia* and involved essentially the same legal claims. In the ECtHR, they were awarded EUR 1.87 billion (USD 2.3 billion), in what remains the largest award of compensation ever made by the ECtHR. In parallel, the Yukos shareholders were awarded a total of USD 50 billion in compensation in the investment treaty claims.

Research by the Organisation for Economic Co-operation and Development (OECD) also shows that the principles governing compensation under investment treaties differ from those that are commonly applied in similar disputes concerning state interference with private property rights in national legal systems.<sup>8</sup>

### 1.1.5 Arbitral Jurisprudence Is Inconsistent

Arbitral jurisprudence on compensation is also inconsistent, particularly insofar as it concerns:

- The circumstances in which it is appropriate to calculate compensation based on an investment's expected future income.
- The quality of evidence required to substantiate the multi-year future business projections that underpin any calculation of compensation based on expected future income.
- The way in which tribunals account for various foreseeable and unforeseeable risks to an investment's expected income stream across its entire life cycle.

Although these debates can be technical, there can be billions of dollars at stake in the choice of one approach over another.

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<sup>6</sup> Shelton, D. (2015). *Remedies in international human rights law*. Oxford University Press, USA, 338; Allen, T. (2006). Compensation for property under the European Convention on Human Rights. *Mich. J. Int'l L.*, 28, 330.

<sup>7</sup> OAO Neftyanaya Kompaniya Yukos v. Russia, Eur. Ct. H.R., Application no. 14902/04, Judgment, Just Satisfaction, (July 31, 2014). Retrieved from <http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-145730>

<sup>8</sup> Gaukrodger, D., & Gordon, K. (2012/03). Investor-state dispute settlement: A scoping paper for the investment policy community. *OECD Working Papers on International Investment*. Retrieved from [https://www.oecd.org/daf/inv/investment-policy/WP-2012\\_3.pdf](https://www.oecd.org/daf/inv/investment-policy/WP-2012_3.pdf)



### Text box 3. An example of inconsistency: *Bear Creek v. Peru vs Tethyan Copper v. Pakistan*

- Both cases involve mining projects in the exploration/approval stage.
- Both tribunals found indirect expropriation:
  - In *Bear Creek*, the state had cancelled the investor's approval.
  - In *Tethyan Copper*, the state had failed to issue a mining lease required for the project.
- In both cases the mines were never built.
- In both cases, there were genuine questions about whether the mines would have been viable if they had been built.
- In both cases, the tribunal held that damages should reflect the "fair market value" of the expropriated investment, but
  - The *Tethyan Copper* tribunal used a novel variant of the discounted cash flow (DCF) method to arrive at a figure of USD 4.087 billion compensation.
  - The *Bear Creek* tribunal held that the DCF method was inappropriate and awarded compensation of USD 18 million, reflecting the investor's actual expenditure in making the investment. The investor had claimed that it was entitled to USD 500 million compensation, based on the DCF method.

## 1.2 Structure of This Paper

This paper is divided into four further sections. Section 2 provides a review of the basic principles governing compensation under investment treaties. This section considers treaty provisions that explicitly deal with compensation for expropriation, as well as the basic principles that tribunals apply in circumstances where the treaty is silent about the appropriate level of compensation. Section 3 provides an overview of the various valuation techniques that tribunals use to quantify the amount of compensation that a host state must pay to a successful foreign investor. In light of this review, Section 4 identifies some further policy concerns with existing arbitral jurisprudence. Section 5 presents various options for reform.





## 2.0 Basic Principles Governing Compensation Under Investment Treaties

Section 2.1 explores the principles governing compensation for expropriation. Almost all investment treaties specify that compensation for an expropriation should equal the fair market value of the expropriated investment. Investment treaties do not, however, specify the amount of compensation required for breaches of other provisions of the treaty. In the absence of textual guidance, arbitral tribunals have applied the principle of “full reparation” for other treaty breaches. Section 2.2 examines this principle. Section 2.3 considers whether there is any difference in practice between the “fair market value” and “full reparation” principle. It suggests that there will be no practical difference between the two principles in most circumstances. Section 2.4 briefly reviews additional principles that might be invoked to reduce compensation, such as the principle of contributory negligence on the part of the foreign investor.

### 2.1 Principles Governing Compensation for Expropriation

Investment treaties deal explicitly with compensation for expropriation<sup>9</sup>. Such provisions either specify that compensation must equal the fair market value of the expropriated investment or use terminology that has been interpreted as equivalent to the fair market value standard. Most treaties also deal with the date on which the fair market value of the investment is to be ascertained, the timeliness of the payment of compensation and the requirement that interest be paid for any delay in compensation. Article 5(1) of the UK-Tanzania BIT of 1994 is illustrative (emphasis added):

Investments of nationals or companies of either Contracting Party shall not be nationalised, expropriated or subjected to measures having effect equivalent to nationalisation or expropriation (hereinafter referred to as “expropriation”) in the territory of the other Contracting Party except for a public purpose related to the internal needs of that Party on a non-discriminatory basis and **against prompt, adequate and effective compensation. Such compensation shall amount to the genuine value of the investment expropriated immediately before the expropriation or before the impending expropriation became public knowledge, whichever is the earlier, shall include interest at a normal commercial rate until the date of payment, shall be made without delay, be effectively realizable and be freely transferable.** The national or company affected shall have a right, under the law of the Contracting Party making the expropriation, to prompt review, by a judicial or other independent authority of that Party, of his or its case and of the valuation of his or its investment in accordance with the principles set out in this paragraph

Such provisions are notable in their relative lack of variation from treaty to treaty, and their relatively minimal evolution over time, with some exceptions highlighted below.

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<sup>9</sup> See Nikiéma, S. (2013). Compensation for expropriation. Winnipeg: IISD. Retrieved from [https://www.iisd.org/pdf/2013/best\\_practice\\_compensation\\_expropriation\\_en.pdf](https://www.iisd.org/pdf/2013/best_practice_compensation_expropriation_en.pdf)



## 2.1.1 Standard of Compensation

Typical treaty language requires the payment of compensation that is “prompt, adequate and effective.” This is the Hull formula, which has its roots in US diplomatic correspondence with Mexico in the 1930s. This formulation is widely understood as referring to the fair market value of the expropriated property.<sup>10</sup> There are older treaties that deviate somewhat from this formula, requiring, for example, compensation that is “just and immediate”<sup>11</sup> or simply “full.”<sup>12</sup> From the late 1970s, however, the “prompt, adequate and effective” standard came into widespread usage.<sup>13</sup> Where investment treaties use other formulations—such as “value,”<sup>14</sup> “market value,”<sup>15</sup> “genuine value”<sup>16</sup> or “real value”<sup>17</sup>—these have also been interpreted as referring to the fair market value of the expropriated investment.<sup>18</sup>

Although most investment treaties do not provide a definition of “fair market value” the standard is widely understood as reference to “the price that a willing buyer would pay a willing seller” for the expropriated investment in an arm’s-length transaction.<sup>19</sup>

Most investment treaties also fail to specify how the fair market value of an investment is to be ascertained, as a practical matter. (This is the question of the appropriate valuation technique, and is addressed in more detail in Section 3 of this paper.) A notable exception is the language found in the investment chapter of the North American Free Trade Agreement (NAFTA) and in Canadian BITs, that “valuation criteria must include going concern value, asset value including the declared tax value of tangible property, and other criteria, as appropriate, to determine fair market value.” The Argentina–Philippines BIT of 1999 provides for compensation at “market value,” and provides further guidance that “Where that value cannot be readily ascertained, the compensation may be

<sup>10</sup> Sornarajah, M. (2010). *The international law on foreign investment* (3rd Ed). Cambridge University Press, 209.

<sup>11</sup> Protocol between the Governments of the State of Kuwait and the Republic of Iraq on the Promotion of the Movement of Capital and Investments between the two countries, Kuwait–Iraq, art. 4, (Feb. 4, 1964). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bits/2060/iraq---kuwait-bit-1964->

<sup>12</sup> Agreement between the Republic of Korea, on the one hand, and the Belgium–Luxembourg Economic Union, on the other hand, on the Encouragement and Reciprocal Protection of Investments, BLEU–S. Kor., art. 5, para. c, (Dec. 20, 1974). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bit/497/bleu-belgium-luxembourg-economic-union---korea-republic-of-bit-1974->

<sup>13</sup> See, for example, Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Singapore on the Promotion and Mutual Protection of Investments, Kaz.–Sing., art. 6, para. 2, (Nov. 21, 2018). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3834/kazakhstan---singapore-bit-2018->

<sup>14</sup> Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Hashemite Kingdom of Jordan for the Promotion and Protection of Investments, U.K.–Jordan, art. 4, para. 2, (Oct. 10, 1979). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2193/jordan---united-kingdom-bit-1979->

<sup>15</sup> Agreement between the Government of the Republic of Korea and the Government of the Polish People’s Republic for the Promotion and Reciprocal Protection of Investments, S. Kor.–Pol., art. 6, para. 1, (Nov. 1, 1989). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2263/korea-republic-of---poland-bit-1989->

<sup>16</sup> Agreement between the Kingdom of the Netherlands and the Democratic Socialist Republic of Sri Lanka for the promotion and protection of investments, Neth.–Sri Lanka, art. 6, para. 1, (April 24, 1984). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2653/netherlands---sri-lanka-bit-1984->

<sup>17</sup> Agreement between the Republic of Turkey and the Republic of the Sudan concerning the Reciprocal Promotion and Protection of Investments, Sudan–Tur., art III, para. 2, (Dec. 19, 1999). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3632/sudan---turkey-bit-1999->

<sup>18</sup> Ripinsky, S., & Williams, K. (2008). *Damages in international investment law*. BIICL, 79

<sup>19</sup> Sloane, R. D., & Reisman, W. M. (2004). Indirect expropriation and its valuation in the BIT generation. *British Yearbook of International Law*, 75, 138; CMS Gas Transmission Company v. Republic of Argentina, ICSID Case No. ARB/01/8, Final Award, para. 402 (May 12, 2005).



determined in accordance with generally recognised equitable principles of valuation taking into account the capital invested, depreciation, capital already repatriated, replacement value and other relevant factors.”

A significant deviation from the “fair market value” standard is that found in the South African Development Community (SADC) Model BIT, which provides instead for “fair and adequate” compensation, with three different options for how this is to be determined. Two of those three options provide for a “balancing approach.” This requires compensation to reflect “an equitable balance between the public interest and interest of those affected, having regard for all relevant circumstances and taking into account the current and past use of the property, the history of its acquisition, the fair market value of the property, the purpose of the expropriation, the extent of previous profit made by the foreign investor through the investment, and the duration of the investment.”<sup>20</sup>

## 2.1.2 Date of Valuation

Most investment treaties stipulate the date at which the value of the expropriated investment should be determined. The basic principle, common to almost all investment treaties, is that the investment should be valued at the date of the expropriation.<sup>21</sup> The date of valuation is important in practice because the value of investments fluctuates over time due to changing market conditions, among other factors.

Around the mid-1980s, treaty language began to add the clarification that the date of valuation should be “immediately before the expropriation,” or before the impending expropriation “became public knowledge”<sup>22</sup> or before the expropriation was “publicly announced.”<sup>23</sup> In each case, the purpose of the clarification was to prevent compensation reflecting reductions in the market value of an investment resulting from public knowledge that the investment was about to be expropriated (and, therefore, about to become significantly less valuable from the perspective of potential buyer).<sup>24</sup> This purpose is made explicit in recent treaties providing that the valuation of the investment shall “not reflect any change in value occurring because the expropriation had become publicly known earlier.”<sup>25</sup>

<sup>20</sup> SADC Model Bilateral Investment Treaty, art. 6.2, (2012).

<sup>21</sup> See, e.g., *Traité entre la République Gabonaise et la République Fédérale d'Allemagne relatif à l'encouragement et à la protection mutuelle des investissements de capitaux*, Ger.–Gabon, art. 3, para. 2, May 16, 1969. Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/1631/gabon---germany-bit-1969->

<sup>22</sup> See, e.g., Agreement between the Kingdom of the Netherlands and the Democratic Socialist Republic of Sri Lanka for the Promotion and Protection of Investments, Neth.–Sri Lanka, art. 6, para. 1, (March 26, 1984). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2653/netherlands---sri-lanka-bit-1984->; Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Islamic Republic of Pakistan for the Promotion and Protection of Investments, U.K.–Pak., art. 5, para. 1, (Nov. 30, 1994). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2730/pakistan---united-kingdom-bit-1994->.

<sup>23</sup> See, e.g., Agreement on Investment under the Framework Agreement on Comprehensive Economic Cooperation between the Association of Southeast Asian Nations and the Republic of India, ASEAN–India, art. 8, para. 4(b), (Nov. 12, 2014). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/treaties-with-investment-provisions/3503/asean---india-investment-agreement-2014->;

Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Singapore on the Promotion and Mutual Protection of Investments, Kaz.–Sing., art. 6, para. 2, (Nov. 21, 2018). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3834/kazakhstan---singapore-bit-2018->

<sup>24</sup> This principle is discussed in *Renta 4 S.V.S.A., Ahorro Corporacion emergentes F.I., Quasar de Valores SICAV S.A., Orgor de Valores SICAV S.A., GBI 9000 SICAV S.A., ALOS 34 S.L. v. the Russian Federation*, SCC No. 24/2007, Award, para. 199 (July 20, 2012).

<sup>25</sup> See, e.g., Agreement between the Government of Canada and the Government of the Republic of Côte d'Ivoire for the Promotion and Protection of Foreign Investment, Can.–Côte d'Ivoire, art. 10, para. 2, (Nov. 30, 2014). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3539/canada---c-te-d-ivoire-bit-2014->



### 2.1.3 Timeliness of Compensation

Treaty language typically requires that compensation be paid “without delay,” with some treaties tempering this requirement by stipulating that there shall not be “unreasonable delay”<sup>26</sup> or “undue delay.”<sup>27</sup> The use of the word “prompt” in the Hull formula also indicates that compensation should be paid without unreasonable delay. The BIT between the Association of Southeast Asian Nations (ASEAN) and India from 2014 contains an explanatory note on the words “without delay,” clarifying that “there may be legal and administrative processes that need to be observed before payment can be made.”

### 2.1.4 Interest

Since around the mid-1980s, treaty provisions on compensation began including provisions requiring the payment of interest where there is a delay between the date of expropriation and the date of compensation. Language as to the applicable interest rate continues to vary, including the “normal commercial rate,”<sup>28</sup> “current international rates,”<sup>29</sup> simply “interest,”<sup>30</sup> “appropriate market rate,”<sup>31</sup> “usual bank interest,”<sup>32</sup> “normal commercial banking rate,”<sup>33</sup> and “commercially reasonable rate.”<sup>34</sup>

The ASEAN–India BIT of 2014 provides for “appropriate interest at the prevailing commercial rate,” but provides in an explanatory note that for Cambodia, Malaysia, Myanmar, Philippines, Thailand and Viet Nam, “in the event of delay, the rate and payment of interest of compensation for

<sup>26</sup> See, e.g., Agreement between the Government of the People’s Republic of China and the Government of the Republic of Ghana concerning the Encouragement and Reciprocal Protection of Investment, China–Ghana, art. 4, para. 2, (Oct. 12, 1989). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/906/china---ghana-bit-1989->

<sup>27</sup> See, e.g., Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Singapore on the Promotion and Mutual Protection of Investments, Kaz.–Sing., art. 6, para. 2, (Nov. 21, 2018). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3834/kazakhstan---singapore-bit-2018->

<sup>28</sup> See, e.g., Agreement between the Kingdom of the Netherlands and the Democratic Socialist Republic of Sri Lanka for the Promotion and Protection of Investments, Neth.–Sri Lanka, art. 6, para. 1, (March 26, 1984). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2653/netherlands---sri-lanka-bit-1984->; Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Islamic Republic of Pakistan for the Promotion and Protection of Investments, U.K.–Pak., art. 5, para. 1, (Nov. 30, 1994), retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/2730/pakistan---united-kingdom-bit-1994->

<sup>29</sup> See, e.g., The Treaty between the United States of America and the Republic of Zaire concerning the Reciprocal Encouragement and Protection of Investment, U.S.A.–D.R.C., art. III, para. 1(e), (Aug. 3, 1984), retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/1041/congo-democratic-republic-of-the---united-states-of-america-bit-1984->

<sup>30</sup> The Agreement between the Government of Romania and the Government of the Arab Republic of Egypt on the Promotion and Reciprocal Protection of Investments, Rom.–Egypt, art. 5, para. 1, (Nov. 24, 1994). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/1388/egypt---romania-bit-1994->

<sup>31</sup> See, e.g., Agreement between the government of the Republic of the Philippines and the Government of the Argentina Republic on the Promotion and Reciprocal Protection of Investment, Arg.–Phil., art. IV, para. 2, (Sept. 20, 1999), retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/147/argentina---philippines-bit-1999->

<sup>32</sup> See, e.g., Agreement between the Federal Republic of Germany and the Socialist People’s Libyan Arab Jamahiriya concerning the Encouragement and Reciprocal Protection of Investments, Libya–Ger., art. 4, para. 2, (Oct. 15, 2004). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/1708/germany---libya-bit-2004->

<sup>33</sup> See, e.g., Agreement between the Government of the Federal Democratic Republic of Ethiopia and the Government of the Kingdom of Sweden on the Promotion and Reciprocal Protection of Investments, Eth.–Swed., art. IV, para. 3 (Dec. 10, 2004). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/1491/ethiopia---sweden-bit-2004->

<sup>34</sup> See, e.g., Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Singapore on the Promotion and Mutual Protection of Investments, Kaz.–Sing., art. 6, para. 2, (Nov. 21, 2018). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3834/kazakhstan---singapore-bit-2018->; Agreement between the Government of Canada and the Government of the Republic of Côte d’Ivoire for the Promotion and Protection of Foreign Investment, Can.–Côte d’Ivoire, art. 10, para. 3, (Nov. 30, 2014). Retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3539/canada---c-te-d-ivoire-bit-2014->



expropriation of investments of investors of another Party shall be determined in accordance with their laws, regulations and policies provided that such laws, regulations and policies are applied on a non-discriminatory basis.”

## 2.2 Principles Governing Compensation for Breach of Investment Treaties’ Other Provisions

Aside from a few exceptions of limited practical relevance,<sup>35</sup> investment treaties do not contain provisions dealing with compensation for breaches of the treaties’ other provisions. In the absence of textual guidance from the treaties themselves, tribunals initially struggled to articulate a consistent approach to compensation. Some took a conservative approach, limiting compensation to expenditure actually incurred by the foreign investor, and implying that compensation for interferences falling short of outright expropriation should logically be less than the compensation required for expropriation.<sup>36</sup> Others took the view that the principles governing compensation for expropriation should be extended to the breach of other treaty provisions.<sup>37</sup>

Over the past decade, a consensus has emerged that tribunals should apply principles of international law governing reparation for internationally wrongful acts to determine the amount of compensation owed for breach of an investment treaty.<sup>38</sup> The basic principle is that “the responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act.”<sup>39</sup> In other words, the responsible State must endeavour to “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.”

In practical terms, this means that tribunals will:

ask what the financial position of the injured [investor] would in all probability be like if the unlawful act or omission by the state had not been committed. The difference between [this] hypothetical [position] and the actual financial situation [in which the investor finds itself following the breach of the treaty] is equal to the damage caused which, according to the principle of full reparation, has to be compensated in its entirety.<sup>40</sup>

<sup>35</sup> Many investment treaties contain provisions requiring compensation for damage resulting from war, armed conflict or national emergencies, e.g., Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the United Republic of Tanzania for the Promotion and Protection of Investments, U.K.–Tanz., art. 4, (Jan. 7, 1994), retrieved from <https://investmentpolicy.unctad.org/international-investment-agreements/treaties/bilateral-investment-treaties/3024/united-republic-of-tanzania---united-kingdom-bit-1994>. Such provisions play little role in investment disputes in practice. It should be noted, however, that they generally require foreign investors to be compensated on a non-discriminatory basis, which could entail compensation well below ‘full reparation’ or the fair market value of a damaged investment.

<sup>36</sup> Marvin Roy Feldman Karpa v. United Mexican States, ICSID Case No. ARB(AF)/99/1, Award, paras. 194-198 (Dec. 16, 2002). Retrieved from <https://www.italaw.com/cases/435>; Pope & Talbot Inc. v. Government of Canada, UNCITRAL, Award in Respect of Damages, para. 85 (May 31, 2002). Retrieved from <https://www.italaw.com/cases/863>.

<sup>37</sup> CMS Gas Transmission Company v. Republic of Argentina, ICSID Case No. ARB/01/8, Final Award, para. 410 (May 12, 2005). Retrieved from <https://www.italaw.com/cases/288>.

<sup>38</sup> See, e.g., S.D. Myers, Inc. v. Government of Canada, UNCITRAL, Partial Award, para. 310 (Nov. 13, 2000). Retrieved from <https://www.italaw.com/cases/969>; ADC Affiliate and ADC & ADMC Management Ltd v. Republic of Hungary, ICSID Case No. ARB/03/16, Award, para. 521 (Oct. 2, 2006). Retrieved from <https://www.italaw.com/cases/41>.

<sup>39</sup> 2001 ILC Draft Articles, art 31(1); similarly, Case concerning certain German interests in Polish Upper Silesia (Germany v. Poland), PCIJ Rep Series A No. 17, Claim for Indemnity, p. 47 (July 26, 1927).

<sup>40</sup> Marboe, I. (2017). *Calculation of compensation and damages in international investment law* (2nd Ed.). Oxford University Press, 87.





The “full reparation” principle differs from the more conservative view that compensation should be limited to expenditures actually incurred by the investor in making the investment, which had been endorsed by some early tribunals.

## 2.3 Is There Any Difference Between the “Fair Market Value” Principle and the “Full Reparation” Principle?

We have seen that current arbitral jurisprudence on compensation is organized according to two basic principles: the principle of fair market value compensation for expropriation and the principle of “full reparation” for the breach of investment treaties’ other provisions. In theory, the choice between the two principles could lead to different outcomes based on the same facts.

One situation in which a tribunal could be faced with a choice between the two principles is in the event of an “unlawful” expropriation.<sup>41</sup> Under one view, the fair market value principle should be used to calculate compensation for all expropriations. However, under another view, the fair market value standard applies only if an expropriation is carried out in conformity with treaty requirements. U.S. BITs, for example, require expropriations to be carried out:

- (a) for a public purpose;
- (b) on a non-discriminatory basis; ... and
- (d) in accordance with due process of law ...<sup>42</sup>

According to the second view, an expropriation that was not carried out in accordance with due process of law should be characterized as an “unlawful” expropriation in breach of the treaty, triggering an entitlement to compensation according to the principle of full reparation. The debate between these views has fascinated lawyers and legal academics, distracting attention from more important questions about the principles that should govern compensation under investment treaties.

In practice, tribunals have repeatedly emphasized that application of either principle—the fair market value principle or the full reparation principle—will lead to similar, even identical, outcomes based on the same facts.<sup>43</sup> The reasons for the similarity are easy to understand. If a state’s breach of the treaty leads to the destruction of an investment, then the principle of “full reparation” requires compensation equal to the financial value of the investor’s loss—i.e., compensation equal to the fair market value of the investment that was destroyed. This has led many tribunals to treat the two sets of principles as essentially interchangeable, thereby avoiding the need to resolve theoretical debates about which set of principles applies.<sup>44</sup>

This section briefly considers situations in which the choice between the fair market value principle and the full reparation principle could have practical consequences. This discussion is somewhat

<sup>41</sup> Ratner, S. R. (2017). Compensation for expropriations in a world of investment treaties: beyond the lawful/unlawful distinction. *American Journal of International Law*, 111(1), 7-56.

<sup>42</sup> United States of America Model Bilateral Investment Treaty, art. 6, (2012).

<sup>43</sup> Sabahi, B. (2011). *Compensation and restitution in Investor-State arbitration: Principles and practice*. Oxford: University Press, , 102; *Waguieh Elie George Siag and Clorinda Vecchi v. The Arab Republic of Egypt*, ICSID Case No. ARB/05/15, Award, para. 542 (May 11, 2009). Retrieved from <https://www.italaw.com/cases/1022>.

<sup>44</sup> *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, para. 278 (July 12, 2019). Retrieved from <https://www.italaw.com/cases/1631>; *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No. ARB/14/21, Award, para. 596 (Nov 30, 2019). Retrieved from <https://www.italaw.com/cases/2848>.





technical, as is Section 2.4. Readers who are interested in the key policy-relevant insights of this paper can safely skip ahead to Section 3.

### 2.3.1 Situations in Which the Investment Continues to Operate

The most obvious situation in which the two principles diverge is where the foreign investor continues to own and operate the investment, notwithstanding the host state's breach of the investment treaty. In these situations, the award of compensation equal to the full market value of the investment would be obviously unfair—the investor would receive compensation for the full value of the investment, while still possessing ownership of the investment and the benefit of any residual value that it retains.<sup>45</sup>

### 2.3.2 Situations in Which the Breach of the Treaty Is Procedural in Character

Tribunals have recognized that the “full reparation” principle provides a more flexible basis for determining compensation in cases where the host state's breach of the investment treaty was procedural in character, as opposed to a concrete action or decision. For example, in *Bilcon v. Canada* the tribunal held that the environmental assessment process of the investor's proposed gravel quarry was conducted in a way that was unfair to the investor, thereby breaching NAFTA's fair and equitable treatment provision in its investment chapter. In its award on compensation, the tribunal emphasized that that the investment would not necessarily have been approved even if the environmental assessment process had been conducted fairly. Instead, the tribunal explained that the investor had lost the opportunity to have the investment assessed fairly and the associated possibility that the investment *might* be approved. On this basis, it calculated compensation by determining the “value of the opportunity to have the environmental impact of the [investment] assessed in a fair and non-arbitrary manner.”<sup>46</sup>

### 2.3.3 Date of Valuation

In cases of expropriation, the date of valuation is the date of the expropriation.<sup>47</sup> In contrast, tribunals have held that date of valuation under the principle of full reparation is the date of the arbitral award.<sup>48</sup> One potential consequence of this difference is that determination of compensation under the principle of “full reparation” reflects new information and changes in circumstances that occur between the date that the treaty was breached and the date of the award. In principle, taking new information and changed circumstances into account up to the date of the award could work in favour of either the host state or the foreign investor. In practice, arbitral tribunals seem much more willing to take account of changes that occur after the date on which the treaty is breached when their effect is to increase the compensation owed to the investor.<sup>49</sup>

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<sup>45</sup> Tribunals have occasionally dealt with this problem by awarding compensation on a “full market value” basis in combination with an order that the investor transfer the ownership of the investment to the state, see e.g., *CMS Gas Transmission Company v. Republic of Argentina*, ICSID Case No. ARB/01/8, Final Award, para. 469 (May 12, 2005). Retrieved from <https://www.italaw.com/cases/288>.

<sup>46</sup> *Bilcon of Delaware et al v. Government of Canada*, PCA Case No. 2009-04, Award on Damages, para. 280 (Jan. 10, 2019). Retrieved from <https://www.italaw.com/cases/1588>.

<sup>47</sup> See above Section 2.1.

<sup>48</sup> *Marboe*, *supra* note 40, para. 148; *ADC*, *supra* note 38, 499.

<sup>49</sup> See, e.g., *ADC*, *supra* note 38, paras. 496–497.



### 2.3.4 Consequential Losses

Under the “full market value” principle, compensation is limited to the value of the *investment* that was expropriated. In theory, the principle of “full reparation” provides greater scope for an investor to recover “incidental” or “consequential” losses over and above the value of the investment itself.<sup>50</sup> For example, if a state’s breach of an investment treaty causes an investor to incur additional liability to a subcontractor, that loss could be recoverable.<sup>51</sup>

In *Funnekotter v. Zimbabwe*, the tribunal held that Zimbabwe had unlawfully seized and forcibly expelled foreign investors from their farms. In addition to the value of the farms themselves, the tribunal awarded compensation to the investors “for the disturbances resulting from the taking over of their farms and for the necessity for them to start a new life often in another country.”<sup>52</sup>

## 2.4 Doctrines Applied to Reduce Compensation

In addition to the basic principles governing compensation under investment treaties, there are principles that can be invoked by a host state to reduce compensation. This section reviews two such principles:

- Contributory negligence on the part of the investor
- Breach of a legal obligation owed to the host state by the investor which can, in limited circumstances, form the basis of a counterclaim by the host state.

It is important to emphasize that these doctrines play a peripheral role in arbitral practice. They have been applied in only a handful of cases and supplement, rather than displace, the basic principles outlined above.

### 2.4.1 Contributory Negligence?

The principle of contributory negligence (also known as contributory fault) has been applied by investment tribunals to reduce the amount of damages awarded to a claimant, where the claimant’s own conduct contributed to the loss suffered. In applying this principle, tribunals have typically been guided by the International Law Commission’s Draft Articles on State Responsibility and have used a two-pronged test, requiring the conduct of the claimant to have been “wilful or negligent,”<sup>53</sup> and to have caused a “material and significant”<sup>54</sup> contribution to their own loss. Tribunals have recognised that the application of this principle is highly discretionary.<sup>55</sup>

<sup>50</sup> Ripinsky & Williams, *supra* note 18, 299.

<sup>51</sup> Siemens A.G. v. The Argentine Republic, ICSID Case No. ARB/02/8, Award, para. 387 (Feb. 6, 2007). Retrieved from <https://www.italaw.com/cases/1026>

<sup>52</sup> Bernardus Henricus Funnekotter and others v. Republic of Zimbabwe, ICSID Case No. ARB/05/6, Award, para. 138, (April 22, 2009). Retrieved from <https://www.italaw.com/cases/467>

<sup>53</sup> This is inspired by art 39 of the 2001 ILC Draft Articles: “*In the determination of reparation, account shall be taken of the contribution to the injury by wilful or negligent action or omission of the injured State or any person or entity in relation to whom reparation is sought.*”

<sup>54</sup> From the commentary to 2001 ILC Draft Articles, art 39, as cited in Occidental Petroleum Corporation and Occidental Exploration and Production Company v. The Republic of Ecuador, ICSID Case No. ARB/06/11, para. 670 (Award, Oct. 5, 2012). Retrieved from <https://www.italaw.com/cases/767>

<sup>55</sup> Occidental Petroleum Corporation and Occidental Exploration and Production Company v. The Republic of Ecuador, ICSID Case No. ARB/06/11, Award, para. 670, (Oct. 5, 2012). Retrieved from <https://www.italaw.com/cases/767>



In *MTD v. Chile*, the tribunal made a 50 per cent deduction to the compensation owed by Chile due to the investor's failure to investigate adequately pre-existing regulations in the country that prevented the investor from using its land the way it had hoped.<sup>56</sup> In *Occidental v. Ecuador*, the tribunal reduced compensation by 25 per cent on account of Occidental's contributory fault in transferring its rights in a concession contract to a third party, in breach of an explicit prohibition on such transfer of rights without Ecuador's consent.<sup>57</sup> In *Yukos v. Russia* (and in related cases arising out of the Yukos nationalization, including *Hulley v. Russia*), the tribunal reduced the compensation by 25 per cent due to the claimant's aggressive tax avoidance strategies which were found to be abusive and unlawful.<sup>58</sup>

Paradoxically, the possibility of adjusting compensation downwards on account of investors' negligence may make tribunals more likely to find that the treaty has been breached in the first place. This is because the doctrine of contributory negligence encourages tribunals to see the investor's conduct as an issue relating to the assessment of compensation, rather than an issue relating to the claim's merits. For example, in *MTD v. Chile* the tribunal held that Chile had breached the investment treaty by failing to act consistently with the investor's expectation that its proposed housing development was viable from a regulatory perspective. It is difficult to understand how the investor could have legitimately held such an expectation, given that pre-existing land-use regulations in Chile precluded the development. Nevertheless, in characterizing the investor's lack of diligence as an issue relating to compensation, the tribunal was able to avoid grappling with the question of whether the investor could legitimately have expected a host state to allow a housing development that was clearly not permitted under pre-existing land-use regulations in its assessment of the merits of the case.

## 2.4.2 Counterclaims?

A host state may also counterclaim that the investor has breached the legal obligations owed to the host state. For example, in *Burlington v. Ecuador*,<sup>59</sup> Ecuador raised counterclaims for harm to the environment and failure to maintain investment-related infrastructure, in breach of Ecuadorian law. The tribunal ordered Burlington to pay USD 41 million in compensation to Ecuador for the environmental and infrastructure damage. For Ecuador's breach of the investment treaty, Burlington was separately awarded damages of USD 380 million.

Under the majority of existing investment treaties, the right of the state to bring a counterclaim is not assured. In several cases, tribunals have declined jurisdiction on the grounds that the state's counterclaim was outside the scope of the parties' consent to jurisdiction.<sup>60</sup> Even once this jurisdictional hurdle is surmounted, there are other grounds on which states' counterclaims have failed. First, tribunals have differed in their views as to how significant the degree of connection between the investor's primary claim and the basis for the counterclaim must be. Some tribunals have required the counterclaim to be closely connected to the investor's allegations of breach of the treaty,

<sup>56</sup> *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile*, ICSID Case No. ARB/01/7, Award, paras. 243–246 (May 25, 2004). Retrieved from <https://www.italaw.com/cases/717>

<sup>57</sup> *Occidental Petroleum Corporation and Occidental Exploration and Production Company v. The Republic of Ecuador*, ICSID Case No. ARB/06/11, Award, para. 687, (Oct. 5, 2012). Retrieved from <https://www.italaw.com/cases/767>

<sup>58</sup> *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, UNCITRAL, PCA Case No. AA 227, Award, paras. 1633–1637 (July 18, 2004). Retrieved from <https://www.italaw.com/cases/1175>

<sup>59</sup> *Burlington Resources Inc. v. Republic of Ecuador*, ICSID Case No. ARB/08/5, Decision on Ecuador's counterclaims, para. 1075 (Feb. 7, 2017). Retrieved from <https://www.italaw.com/cases/181>

<sup>60</sup> See, e.g., *Spyridon Roussalis v. Romania*, ICSID Case No ARB/06/1, Award, para. 864 (7 December 2011).



such as in *Saluka Investments B.V. v. Czech Republic*, thus greatly limiting the scope for counterclaims.<sup>61</sup> Second, in the context of most BITs which do not directly impose investor obligations, there is also the question of whether the state can raise a substantive right or obligation on which it can rely as a legal basis under the BIT. This was critical in the tribunal's dismissal of Argentina's counterclaim in *Teinver v. Argentina*.<sup>62</sup>

The right of states to bring counterclaims is currently an important topic in the context of ongoing reform processes designed to rebalance asymmetries in the investment treaty regime. However, as with the principle of contributory negligence, the possibility of counterclaims against foreign investors does not resolve more fundamental concerns with the basic principles governing compensation under investment treaties.

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<sup>61</sup> *Saluka Investments B.V. v. The Czech Republic*, UNCITRAL, Decision on Jurisdiction over the Czech Republic's Counterclaim, paras. 37-39 (May 7, 2004). Retrieved from <https://www.italaw.com/cases/961>

<sup>62</sup> *Teinver S.A., Transportes de Cercanías S.A. and Autobuses Urbanos del Sur S.A. v. The Argentine Republic*, ICSID Case No. ARB/09/1, Award, paras. 1059-1067 (July 21, 2017). Retrieved from <https://www.italaw.com/cases/1648>



## 3.0 Valuation Techniques

The basic principles governing compensation under investment treaties do not, in themselves, determine the precise amount of compensation owed by the host state in any given dispute. In the case of the principle of full reparation, there is still the challenge of determining the financial position that the investor would have been in if the state had not breached the investment treaty—i.e., valuing the loss caused by the breach of the treaty. In the case of the principle of fair market value compensation for expropriation, there is still the challenge of determining what the fair market value of the investment was immediately prior to the expropriation. Neither task is straightforward. Tribunals rely on a variety of valuation techniques to perform these tasks.

The many possible valuation techniques that tribunals could use can be divided into three main categories:

- Market-based valuation techniques
- Income-based valuation techniques
- Asset-based valuation techniques.<sup>63</sup>

Investment treaties almost never instruct tribunals to use a particular technique. As such, the choice of an appropriate valuation technique—and the various assumptions and adjustments made in the application of any given valuation technique—is left to the discretion of arbitral tribunals. This discretion is not completely unconstrained. The way tribunals use particular techniques is shaped by their interpretation of basic principles governing compensation. For example, the consensus among tribunals that the principle of full reparation requires a tribunal to re-establish the situation that would have existed if the investment treaty had not been breached has contributed to the growing use of income-based valuation techniques.

Trends in tribunals' choice of valuation technique are a key factor driving the increase in compensation in investment treaty disputes over the past two decades. Tribunals' increasing willingness to use income-based valuation techniques (and, to a lesser extent, market-based valuation techniques) in preference to asset-based techniques has led to much larger awards of compensation. But the choice of an income-based technique does not *necessarily* lead to greater compensation than would be case under an asset-based technique. The case of *Biwater v. Tanzania* is an example. In that case, the tribunal endorsed the use of the DCF method—an income-based valuation technique—and concluded that the claimant's water concession had no realistic prospect of operating at a profit, even if it had not been terminated prematurely by the host state. On this basis, the compensation owed by the host state was nil.<sup>64</sup> In contrast, if the tribunal had calculated compensation on the basis of actual expenditure incurred by the claimant, some compensation would have been required.

With these caveats in mind, this section briefly reviews the use of the three main types of valuation techniques by arbitral tribunals. Tribunals sometimes use more than one valuation technique to cross-check the reliability of a figure reached by another technique. Multiple valuation techniques should

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<sup>63</sup> Marboe, *supra* note 40, 148.

<sup>64</sup> *Biwater Gauff (Tanzania) Ltd. v. United Republic of Tanzania*, ICSID Case No. ARB/05/22, Award, paras. 788-799 (July 24, 2008). Retrieved from <https://www.italaw.com/cases/157>



not, however, be used cumulatively, as this leads to double-counting of the same loss.<sup>65</sup> In particular, it is now widely accepted that the practice of some early tribunals of awarding compensation for both past expenditure and lost future profits is untenable.<sup>66</sup> This is because, if an investment had continued to operate commercially, the future income stream would have been the only source of revenue available to recover the past expenditure the investor incurred in making the investment.<sup>67</sup>

### 3.1 Market-based Valuation

Market-based valuation techniques refer to the use of actual prices or transaction data to determine compensation. Consider the principle of fair market value compensation. This principle requires compensation equal to the price that a willing buyer would pay a willing seller for the expropriated investment in an arm's length transaction. The best possible evidence of this hypothetical value is the price a willing buyer *has actually paid* a willing seller for the investment in an arm's length transaction on or around the valuation date (assuming that this price was not affected by a perceived risk of expropriation). For the same reason, the actual purchase price of an investment prior to a breach of the investment treaty provides a benchmark for calculating compensation according to the principle of full reparation. However, it is rare that such evidence will exist, unless an investment has changed hands on the open market immediately prior to an unanticipated breach of the treaty.

In the absence of direct evidence of this sort, some tribunals have used other market-based techniques to infer an investment's value. For example, in *Crystallex v. Venezuela*, shares in the claimant were widely traded on a public stock exchange prior to the expropriation.<sup>68</sup> The claimant company did not own any significant assets aside from its investment in Venezuela. On this basis, the tribunal held that the price at which the shares were being traded reflected market participants' perceptions of the value of its investment in Venezuela.

In *Yukos v. Russia*, the claimant presented data on the value of Russian and international oil companies aside from Yukos. It used this data to infer:

ratios between the ... value of these companies and relevant operating or financial metrics [Earnings before interest, tax, depreciation and amortization, EBITDA], [oil and gas] reserves and [oil and gas] production), and then applie[d] these ratios to the relevant metrics of Yukos in order to estimate the latter's enterprise value.<sup>69</sup>

In other words, information on the value of other companies, adjusted for relevant differences between the companies, was used to estimate the value of Yukos. The tribunal held that this was the most reliable technique for valuing the investment.

<sup>65</sup> Marboe, *supra* note 40, 298.

<sup>66</sup> One exception is the case of Mohamed Abdulmohsen Al-Kharafi & Sons Co. v. Libya and others, Final Arbitral Award, 365, 392 (March 22, 2013), in which the tribunal awarded compensation for both past expenditure and lost future profits. The case is unusual in several respects, including that the tribunal applied Libyan law, rather than international law, to determine the amount of compensation. The case is also remarkable for the discrepancy between the claimant's past expenditure of USD 5 million and the tribunal's award of USD 900 million compensation for lost future profits.

<sup>67</sup> Wells, L. T. (2003). Double dipping in arbitration awards? An economist questions damages awarded to Karaha Bodas Company in Indonesia. *Arbitration International*, 19(4), 477.

<sup>68</sup> *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award, para. 890 (April 4, 2016). Retrieved from <https://www.italaw.com/cases/1530>

<sup>69</sup> *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, UNCITRAL, PCA Case No. AA 227, Award, paras. 1715 (July 18, 2004). Retrieved from <https://www.italaw.com/cases/1175>





These two examples illustrate a growing willingness of tribunals to use market-based techniques to determine compensation. However, the challenge of finding comparable assets or transactions means that the use of market-based techniques is still confined to a minority of cases.

### 3.2 Income-based Valuation

Income-based valuation techniques use the expected future income of an investment as a basis for determining its current value. Income-based valuation techniques are forward-looking, in the sense that the value of the investment is determined solely on the basis of assumptions about the future, not on the basis of historical data about how the investment was created or acquired. The use of income-based techniques reflects the “full reparation” principle, which requires a tribunal to determine the financial position a foreign investor would be in if the investment treaty had not been breached. Income-based techniques are also consistent with the fair market value principle, because the amount a commercial buyer would pay for an investment depends largely on expectations about the stream of future profits that the investment would be capable of generating.<sup>70</sup>

International tribunals were traditionally very cautious in using income-based valuation techniques to calculate compensation. However, these techniques are now widely used in investment treaty arbitrations, especially in cases where the investment was already in operation prior to the breach of the investment treaty.<sup>71</sup> By far the most common method for valuing an investment on the basis of expectations about future income is the DCF method.

The DCF method requires a set of forecasts of the net cash flow—i.e., expected revenue minus expected costs—for every year into the future that the investment would have continued to exist if the treaty had not been breached. (It is more precise to say “net cash flow” than “profits” because past expenditures do not enter into the calculation.) The predicted cash flow for each year is then discounted using a “discount rate” to arrive at a present value. The discount rate is based on allowances for the time value of money and for the various risks associated with the business.<sup>72</sup> It reflects the fact that an expected return on investment of USD 1 in 10 years time is worth less than USD 1 now. The total present value of an investment is the sum of the present values of the risk-adjusted predicted cash flows for each year of operation in the future.

Beyond these basic parameters, there is disagreement among tribunals about how to account for the range of risks facing an investment when using the DCF method. Some tribunals review multiple DCF calculations, with the objective of understanding the sensitivity of the implied valuation of an investment to plausible variations in predicted future cash flows and in the discount rate. Others, however, appear to accept the figures proposed by the investor’s experts at face value, subject only to minor ad hoc adjustments.<sup>73</sup>

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<sup>70</sup> Lieblich, W.C. (1990). Determinations by International Tribunals of the Economic Value of Expropriated Enterprises. *J. Int'l Arb.*, 7, 47.

<sup>71</sup> Marboe, *supra* note 40, 234–239.

<sup>72</sup> Ripinsky & Williams, *supra* note 18, 197.

<sup>73</sup> In *Tethyan Copper v. Pakistan*, the tribunal went a step further and argued that there was no need to consider the implications of uncertainty about predicted future cash flows, as these risks had been fully accounted for in the cash flow predictions themselves on which the valuation was based. No other investment treaty tribunal has endorsed this so-called “modern” DCF approach. The use of this approach raises issues that go beyond the scope of this paper. *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, para. 361 (July 12, 2019). Retrieved from <https://www.italaw.com/cases/1631>



As will be clear from this explanation, the DCF method relies on a complex series of interlocking assumptions about the future of an investment. Valuations arrived at through the DCF method are highly sensitive to variations in these assumptions. Such valuations are sensitive to assumptions about the discount rate, as the effects of marginal changes to the discount rate compound over each additional year into the future. Unsurprisingly, they are also sensitive to the assumptions about the future cash flows that provide the foundation for DCF valuation, as the discussion of *Tethyan Copper v. Pakistan* in the text box below illustrates. Based on the claimant's set of assumptions about future commodity prices, the implied value of the investment was USD 8.5 billion; based on the respondent's set of assumptions, the implied value of the investment was less than zero.

#### **Text box 4. The sensitivity of the valuation of an investment obtained via the DCF method to variation in the underlying assumptions: The example of *Tethyan Copper v. Pakistan***

The dispute in *Tethyan Copper v. Pakistan* concerned a proposed copper mine in the Balochistan province in Pakistan. Pakistan failed to issue a mining lease required for the project to go ahead, a decision that breached the investment treaty, according to the tribunal. The tribunal agreed with the claimant that it was appropriate to use the DCF method to determine the value the mine would have had if it had been allowed to go ahead, and to award compensation equal to this value.

The tribunal's decision on compensation is over 600 pages long and summarizes several points of disagreement between the investor and the host state. One point of disagreement concerned the expected future trajectory of the prices for copper, gold and oil, which formed the basis for assumptions about the future revenues and ongoing operating costs of the mine. The tribunal was faced with a choice between using the following two sources of information to estimate these prices:

- The price of futures contracts in copper, gold and oil
- An average of the forecasts made by various commercial and academic institutions for the future trajectory of the price of copper, gold and oil.

Using the former set of assumptions, the DCF method valued the investment at USD 8.5 billion; using the latter set of assumptions, the DCF method valued the investment at less than zero—i.e., it implied that the investment would not be able to operate profitably.

The tribunal relied primarily on the former set of assumptions, subject to an ad hoc 25 per cent reduction, reflecting the risk that these assumptions might prove optimistic.

Source: *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, para. 1520 (July 12, 2019). Retrieved from <https://www.italaw.com/cases/1631>

Overall, the DCF method is more reliable in valuing investments with shorter expected lifespans and relatively certain streams of future revenues and costs; it is less reliable in valuing investment with longer expected lifespans, investments with uncertain future revenue and cost streams, and investments that are subject to risks that are difficult to quantify, such as geopolitical risks or vulnerability to technological obsolescence. Partly for these reasons, investment tribunals in the



early 2000s consistently rejected the use of the DCF method in cases in which an investment had no established record of profitability.<sup>74</sup> In 2007, the tribunal in *Vivendi v. Argentina (II)* explained:

the net present value provided by a DCF analysis is not always appropriate and becomes less so as the assumptions and projections become increasingly speculative. And, as Respondent points out, many international tribunals have stated that an award based on future profits is not appropriate unless the relevant enterprise is profitable and has operated for a sufficient period to establish its performance record.<sup>75</sup>

One of the biggest changes in arbitral practice over the past decade has been tribunals' willingness to use the DCF method to value investments like the proposed mine in *Tethyan Copper* that have no record of profitability and that have never proceeded beyond the planning stage.

### 3.3 Asset-based Valuation

Asset-based valuation techniques are backward-looking approaches that value an investment on the basis of historical data, rather than information about contemporaneous market value or expected future earnings. One historically common asset-based valuation technique adopts the accounting concept of book value.<sup>76</sup> The book value of an individual asset is generally its purchase price, adjusted for inflation and depreciation. The book value of more complex investments is determined by individually valuing the assets and liabilities of which the investment is comprised.

In contemporary arbitral practice, the most widely used asset-based valuation technique simply values the investment on the basis of the investor's actual expenditure in making the investment, without writing down the value of assets for depreciation.<sup>77</sup> This technique has the advantage that evidence of the investor's actual expenditure in the past is relatively uncontroversial and easy to obtain. The disadvantage of this technique is that it does not align well with existing principles governing compensation under investment treaties, as interpreted by arbitral tribunals. For example, the "full reparation" principle requires tribunals to award compensation that puts the investor in *the hypothetical future position the investor would be in if the treaty had not been breached*. In contrast, reimbursing the investor's sunk investment and wasted costs restores the investor to *the hypothetical position the investor would be in if the investment had not been made*. For this reason, tribunals tend to use asset-based valuation techniques as a last resort, in situations where the use of market-based or income-based techniques is impractical or unreliable.

Two recent cases are illustrative. In *Bear Creek v. Peru*, the host state cancelled the investor's approval to proceed with the development of silver mine due to opposition from the local Indigenous community. The mine was never built. The tribunal rejected the investor's argument that compensation should be determined via the DCF method, on the grounds that the investor had not obtained other regulatory approvals required to proceed with the project and that the local community continued to oppose the mine. These factors created real doubts about whether the

<sup>74</sup> Ripinsky & Williams, *supra* note 18, paras. 206-207; PSEG Global, Inc., The North American Coal Corporation, and Konya Ingin Elektrik Üretim ve Ticaret Limited Sirketi v. Republic of Turkey, ICSID Case No. ARB/02/5, Award, para. 313 (Jan. 19, 2007). Retrieved from <https://www.italaw.com/cases/880>

<sup>75</sup> Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic (Vivendi II), ICSID Case No. ARB/97/3, Award, para. 8.3.3 (Aug. 20, 2007). Retrieved from <https://www.italaw.com/cases/309>

<sup>76</sup> Sabahi, *supra* note 43, 130.

<sup>77</sup> Marboe, *supra* note 40, 283.



investment would have been profitable.<sup>78</sup> In these circumstances, the tribunal held that the actual amounts invested by the investor provided the best evidence of the project's value.<sup>79</sup>

In *Bilcon v. Canada* the tribunal held that the environmental assessment of the investor's proposed gravel quarry was unfair. In determining compensation, the tribunal emphasized that it could not be sure that the quarry would have been approved if the environmental assessment process had been conducted fairly and that, even if the quarry had been approved, the tribunal could not be sure it would have been profitable. For both reasons, it declined to use the DCF method to calculate compensation.<sup>80</sup> Instead, it held that the amounts invested by the investor were the best available evidence of the value of the lost opportunity to have the investment's environmental impact assessed fairly.<sup>81</sup>

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<sup>78</sup> Bear Creek Mining Corporation v. Republic of Peru, ICSID Case No. ARB/14/21, Award, paras. 599–600 (Nov 30, 2019). Retrieved from <https://www.italaw.com/cases/2848>

<sup>79</sup> Ibid, para. 605.

<sup>80</sup> Bilcon of Delaware et al. v. Government of Canada, PCA Case No. 2009-04, Award on Damages, paras. 276–279 (Jan. 10, 2019). Retrieved from <https://www.italaw.com/cases/1588>

<sup>81</sup> Ibid, para. 281.



## 4.0 Key Policy Concerns With the Status Quo

In Section 1, we identified several general concerns with the status quo. These included the large sums of compensation being awarded in investment treaty arbitration and the inconsistency of arbitral jurisprudence. The review of the principles governing compensation under investment treaties and tribunals' use of valuation techniques in Sections 2 and 3 allows us to identify some more specific concerns with existing jurisprudence.

### 4.1 Discrepancy Between the Amounts Invested and the Amounts Awarded in Compensation

Sections 2 and 3 show that tribunals have regularly awarded compensation that vastly exceeds the expenditure of the investor in making the investment. For example, in *Tethyan Copper v. Pakistan*, the investor was awarded over USD 4 billion in compensation, despite having spent only USD 200–300 million making its investment. In *Crystallex v. Venezuela* the investor had spent somewhere between USD 200 million and USD 645 million in making the investment (the tribunal held that the exact amount was irrelevant) and was awarded USD 1.2 billion in compensation.<sup>82</sup> Section 2 shows that this discrepancy is rooted in the basic principles governing compensation under existing investment treaties, which require a tribunal to award compensation that puts the investor in the financial position it would have been in if the host state had not breached the investment treaty. Section 3 shows that this discrepancy has been exacerbated by shifts in the way that arbitral tribunals are using valuation techniques in practice, particularly the growing use of income-based valuations techniques to value investments that have no demonstrated record of profitability.

A closely related concern is the discrepancy between the benefit the host state has received from the investment and the amount being awarded in compensation. Consider the example of an investor that has acquired a concession contract from the host state for a small fraction of its fair market value—perhaps because the investor was politically well-connected, or just because the state lacked the bureaucratic capacity to negotiate the terms of a complex contract. Under existing jurisprudence, such an investor is entitled to fair market value compensation if that investment is subsequently renationalized, notwithstanding the terms on which the investment was acquired.

One case that raises such concerns is *Unión Fenosa Gas v. Egypt*. In that case, the investor entered into a contract for the purchase of gas from an Egyptian state-owned entity without a competitive tender process.<sup>83</sup> Although the majority and the dissenting arbitrator disagreed on whether they should infer that the transaction was corrupt,<sup>84</sup> the majority conceded that a representative of the investor had, at least, exercised non-corrupt forms of “influence ... over senior decision-makers at the Ministry of Petroleum and EGPC [the Egyptian General Petroleum Company]” in procuring the contract.<sup>85</sup> These facts raise questions about whether Egypt had obtained any benefit from entering into this key

<sup>82</sup> *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, Award, paras. 912–913 (April 4, 2016). Retrieved from <https://www.italaw.com/cases/1530>

<sup>83</sup> *Unión Fenosa Gas, S.A. v. Arab Republic of Egypt*, ICSID Case No. ARB/14/4, Award, paras. 7.15, 7.39 (Aug. 31, 2018). Retrieved from <https://www.italaw.com/cases/2456>

<sup>84</sup> *Ibid*, Dissenting Opinion, para 5.

<sup>85</sup> *Ibid*, Award, para. 7.109.



contract. Nevertheless, when Egypt failed to meet its obligations under the contract, the tribunal held that Egypt had thereby failed to comply with its treaty obligations and awarded compensation of USD 2 billion. This amount was calculated to reflect the loss of income that the investor would have earned from the on-sale of the gas that Egypt had failed to supply.<sup>86</sup>

## 4.2 The Complexity of the System

The discussion in Section 3 also illustrates the complexity of existing jurisprudence. Complexity increases litigation costs, and puts developing countries that lack the in-house capacity to engage in detailed arguments about the intricacies of particular valuation methods at a disadvantage.

Income-based valuation is especially complex. As we have seen, the DCF method relies on a complex set of interlocking forecasts and assumptions about the future of the investment for its entire lifespan. Foreign investors almost always argue for the use of this method, as it tends to lead to larger compensation awards. They ordinarily rely on specialized financial consultancies to provide expert evidence in support of their proposed valuations. Host states then retain financial experts of their own, in order to rebut the valuation evidence of the investor. The complexity of the DCF method and the parties' reliance on expert witnesses drive up litigation costs. In *Tethyan Copper v. Pakistan* the claimant spent USD 4.5 million on financial experts and USD 17.5 million on legal fees for the compensation phase of proceedings alone.<sup>87</sup> Pakistan spent almost USD 10 million defending the compensation phase, including both financial experts and legal fees.<sup>88</sup> Note that the expenses associated with arguing about the application of highly complex valuation techniques, such as the DCF method, are incurred even if a tribunal ultimately decides to rely on some other valuation technique as the basis for compensation.

## 4.3 Irrelevance of Contextual Factors Under Existing Jurisprudence

Existing principles governing compensation under investment treaties have an “all or nothing” character. If a tribunal concludes that a host state's change in the regulatory arrangements governing investment does not breach an investment treaty, the investor receives no compensation. If the tribunal concludes that the change does breach the investment treaty, the investor is awarded compensation for all the loss it has suffered as a result of the change under the principle of “full reparation.” Aside from a few minor exceptions discussed in Section 2.4, other contextual factors are not relevant in the determination of compensation.

Specifically, existing jurisprudence fails to take into the following contextual factors:

- The strength of the public interest justifying interference with the investment. For example, it has been reported that a German company is planning to use an investment treaty to sue the Netherlands for its decision to shut down all coal power plants by 2030. The Netherlands

<sup>86</sup> Ibid, para. 10.41–10.42; 10.106.

<sup>87</sup> *Tethyan Copper Company Pty Limited v. Islamic Republic of Pakistan*, ICSID Case No. ARB/12/1, Award, para. 1824 (July 12, 2019). Retrieved from <https://www.italaw.com/cases/1631>

<sup>88</sup> Ibid, para. 1831





has justified its decision on environmental grounds.<sup>89</sup> If the tribunal ruled that the shutdown breached the investment treaty, the environmental justification for the measure would not be relevant to the determination of compensation under existing jurisprudence.

- The host state’s ability to pay. For example, Egypt’s combined state budget for health and education in the 2018/2019 period was at EGP 257.7 billion, or USD 15.82 billion at today’s exchange rate—just over 12 per cent of the level of the award in *Unión Fenosa Gas v. Egypt*, which was at USD 2.013 billion, plus interest.<sup>90</sup> The country’s population, meanwhile, numbers at over 98.4 million, according to World Bank figures.<sup>91</sup>
- Investor misconduct, with the exception of the limited circumstances discussed in Section 2.4. For example, the fact that the foreign investor in *Unión Fenosa Gas v. Egypt* had obtained its gas supply contract through “influence ... over senior decision-makers at the Ministry of Petroleum and EGPC [the Egyptian General Petroleum Company]” was not taken into consideration in the calculation of compensation.

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<sup>89</sup> Charlotin, D. (Sept. 7, 2019). Netherlands poised to face its first investment treaty claim over closure of coal plants. *Investment Arbitration Reporter*. Retrieved from <https://www.iareporter.com/articles/netherlands-poised-to-face-its-first-investment-treaty-claim-over-closure-of-coal-plants/>

<sup>90</sup> Ahram Online. (July 1, 2018). Egypt implements 2018/19 budget with more expenditures on health, education. *Ahram Online*. Retrieved from <http://english.ahram.org.eg/NewsContent/3/12/305965/Business/Economy/Egypt-implements--budget-with-more-expenditures-on.aspx>.

<sup>91</sup> World Bank. (2019). Population, total - Egypt, Arab Rep. World Development Indicators. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=EG>



## 5.0 Options for Reform

States should consider whether existing jurisprudence governing compensation reflects the way they intended the investment treaty system to function. If it does not, they should consider options of reform. In our view, three general considerations should inform any attempt at reform:

- First, any revised treaty text should be as clear and explicit as possible. This will reduce the risk of tribunals interpreting the new text in ways that were not intended by the state parties.
- Second, any attempt at reform should address both the amount of compensation required for expropriation and the amount of compensation required for other breaches of investment treaties. Redrafting provisions governing compensation for expropriation would not be sufficient if jurisprudence regarding compensation for other breaches of investment treaties is left unchanged.
- Third, the principles governing compensation under investment treaties should not be more generous than what is common under national legal systems. This is for two related reasons.
  - i) Many of the rationales that justify compensation in national legal systems—for example, the fact that seizure of a subsistence farmer’s land destroys that farmer’s livelihood—are not relevant to the protection of commercial investments. Foreign investors knowingly incur risks in the pursuit of financial returns.
  - ii) Many other instruments are available to foreign investors to manage financial risks, including investment insurance, investor–state contracts and project structuring techniques. Such instruments are not normally available to individual households in national legal systems, for example.

With these considerations in mind, this section reviews three possible options for reform. These options are not intended to be exhaustive; other options are also possible. Rather, they are intended to encourage new thinking around the issue of compensation.

### 5.1 Balancing Rules for Compensation

One option is for compensation to reflect a balance between a range of competing factors, rather than being determined solely by the value of the investor’s loss. An example of this approach is found in the SADC Model BIT. Article 6 requires “fair and adequate” compensation for expropriation, and then provides three alternative clarifications of the meaning of this formulation. The first of these clarifications embodies the basic principle that compensation should be determined by balancing a range of contextual factors. It reads as follows:

The assessment of fair and adequate compensation shall be based on an equitable balance between the public interest and interest of those affected, having regard for all relevant circumstances and taking into account the current and past use of the property, the history of its acquisition, the fair market value of the property, the purpose of the expropriation, the extent of previous profit made by the foreign investor through the investment, and the duration of the investment.

If this option were adopted, further clarification would be needed to ensure that this approach was applied in cases involving breaches of treaties’ other provisions, aside from the expropriation provision.



This would be straightforward. For example, the following language could be added to the dispute settlement clause: “a tribunal shall award fair and adequate compensation to the investor for any breach of this treaty.”

This approach seeks to guide the development of new jurisprudence on compensation in a way that is more sensitive to a diverse range of interests. The key advantage of this approach is that it allows tribunals to take into account a range of contextual factors that are ignored in existing jurisprudence. Another advantage is that it does not require states to agree and articulate in advance a single principle governing compensation that is appropriate for all disputes. A corresponding disadvantage is that it leaves wide discretion to arbitral tribunals, both in identifying the “relevant circumstances” in any given dispute and in striking an “equitable balance” between them. It is difficult to predict how tribunals might exercise this discretion.

## 5.2 Capping Compensation at the Amount Actually Invested by the Investor

A second option is to cap compensation at the amount actually invested by the investor. For example, the following text could be inserted into existing treaties or adopted by way of a joint interpretation:

The compensation awarded by a tribunal, whether for expropriation of an investor’s investment or for any other breach of this treaty, shall in no case exceed the total expenditure (adjusted for inflation) actually incurred by the investor in making its investment.<sup>92</sup>

As formulated above, the approach implies that existing principles governing compensation continue to operate insofar as they lead to compensation below the cap set by the investor’s total expenditure.

This approach has several advantages. First, it is relatively simple and clear. Second, the evidence necessary to determine the amount of money actually invested by an investor is much easier to obtain than the evidence required to calculate compensation by forward-looking valuation techniques, such as the DCF method. The effect would be to reduce the complexity of litigation proceedings and of jurisprudence. Third, as Section 3.3 has shown, some tribunals already award compensation on the basis of expenditure actually incurred by the foreign investor, so there is at least some precedent for this approach in existing jurisprudence. Fourth, such a cap would dramatically reduce the amount of compensation in the multi-billion disputes discussed in this paper, such as the Yukos claims, *Tethyan Copper v. Pakistan* and *Unión Fenosa Gas v. Egypt*.

This approach also has potential disadvantages. One concern is that, if compensation is limited to the amount actually invested, the host state could have an incentive to expropriate investments after they have been made.<sup>93</sup> But this concern is overstated. It assumes that investment treaty disputes entail the nationalization of investments that then continue to operate under state control. In contrast, most investment treaty disputes involve regulatory interactions in which the state does not acquire ownership of the investment as a going concern. Moreover, there are other constraints outside the investment treaty system—notably, reputation effects—that discourage states from opportunistically

<sup>92</sup> Southern African Development Community (SADC). (2012). *SADC Model Bilateral Investment Treaty Template with Commentary*. Retrieved from <https://www.iisd.org/itn/wp-content/uploads/2012/10/sadc-model-bit-template-final.pdf>

<sup>93</sup> This argument is made by supporters of the status quo – e.g., Marboe, *supra* note 40, 275.



seizing investors' assets.<sup>94</sup> Put simply, states are very aware that seizing investors' assets discourages future investment.

### 5.3 Integrating Gain-Based Considerations Into the Calculation of Compensation

A third option is that advocated by Aisbett and Bonnitcha in a recent paper.<sup>95</sup> Their proposal is similar to the second option, in that compensation cannot exceed the amount an investor has actually expended in making an investment. But it differs from the second option in that it also requires consideration of whether the host state has obtained any benefit from allowing the investment to proceed and then subsequently breaching its obligations under the investment treaty. They propose an approach that integrates these two elements.

The basic logic of the approach is that compensation should be determined by considering what would have happened if the investment had not been made in the first place. In their view, compensation should generally be the lesser of the amount the investor has lost and the amount the host state has gained compared to this scenario. So, if the host state has not gained anything by allowing the investment to proceed and then subsequently interfering with that investment, no compensation should be required. The basic rationale for this approach is to constrain opportunistic conduct by the host state, while still allowing the host state to respond to changing circumstances.

To adopt this approach, the following text could be inserted into existing treaties or adopted by way of a joint interpretation:

Compensation for the expropriation of an investor's investment, or for any other measure that breaches this treaty, shall equal the lesser of the following two amounts:

- i) The loss that the investor has incurred relative to the situation that would have existed if the measure constituting a breach of this treaty was already in place immediately prior to the time at which the investor made its initial investment.
- ii) The gain that the host state has obtained relative to the situation that would have existed if the measure constituting a breach of this treaty was already in place immediately prior to the time at which the investor made its initial investment.

When one or other of these amounts is zero, compensation shall be zero.

This third option shares many of the advantages of the second option. A key additional advantage is that it is grounded in an analysis of the underlying policy problem that, in Aisbett and Bonnitcha's view, investment treaties are intended to solve. For this reason, the third option is formulated more precisely than the second option and clarifies the amount of compensation that should be awarded in more complex fact scenarios, including those involving changes to permit conditions and tariff regimes in regulated industries. (These scenarios are not worked through here, but are worked through in their papers.)

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<sup>94</sup> Bonnitcha, Poulsen and Waibel, *supra* note 2, 132-135.

<sup>95</sup> Aisbett, E., & Bonnitcha, J. (2018). Compensation under investment treaties – As if host interests mattered. *UNSW Law Research Paper*, 18–80. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3281334](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3281334)



A simpler case that illustrates the difference between the second and third options is *Metalclad v. Mexico*. Metalclad had purchased a site in Mexico on which to build a hazardous waste landfill. It obtained the permits to operate the landfill from both state and federal agencies and had been told by federal officials that it did not need any additional authorizations. When construction was well underway, the municipality issued a stop work order, claiming that a municipal construction permit was also required. The municipality ultimately refused to grant the permit and, despite having been completed in the interim, the landfill could not begin operation.

Under the second option, compensation would entail reimbursement of the investor's expenses, which is in fact what the tribunal ordered in that case.<sup>96</sup> Under the third option, however, compensation would equal zero. This is because there was no benefit to Mexico from the investment. Metalclad had retained ownership of its assets, including the landfill site.<sup>97</sup> It had not made any payment to Mexican government entities in the course of making the investment, or contributed to the provision of any public infrastructure subsequently repurposed by Mexico. This was not a case involving opportunistic conduct by the host state, because there was no benefit to Mexico from allowing construction of the landfill to commence and then subsequently refusing to issue the necessary permits.

One of the disadvantages of the third option is that it requires a more fundamental reorientation of existing jurisprudence. Investment lawyers are not used to valuing the amount that a host state has gained from allowing an investment to take place. The third option is also more complex than the second option, because it will sometimes require two valuation calculations. That said, because both calculations rely on historical data, the third option is almost certainly less complex than existing valuation techniques that depend on forecasts of future income, like the DCF method.

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<sup>96</sup> *Metalclad Corp. v. United Mexican States*, ICSID Case No. ARB(AF)/97/1, Award, para. 122 (August 30, 2000).

<sup>97</sup> *Ibid.*, para. 127.



## Appendix A. Largest Awards in Investment Treaty Arbitration<sup>98</sup>

All awards over USD 100 million shown, in order from largest to smallest

| Short case name                                     | Amount claimed (USD) | Amount awarded (or settled for) (USD) | Year of award |
|---|----------------------|---------------------------------------|---------------|
| Hulley Enterprises v. Russia                        | 91,200 million       | 40,000 million                        | 2014          |
| ConocoPhillips v. Venezuela                         | 30,305 million       | 8,446 million                         | 2019          |
| Veteran Petroleum v. Russia                         | 18,700 million       | 8,203 million                         | 2014          |
| Tethyan Copper v. Pakistan                          | 8,500 million        | 4,087 million                         | 2019          |
| Unión Fenosa Gas v. Egypt                           | 3,219 million        | 2,013 million                         | 2018          |
| Yukos Universal v. Russia                           | 4,100 million        | 1,846 million                         | 2014          |
| Occidental v. Ecuador (II)                          | 1,000 million        | 1,769 million                         | 2012          |
| Mobil and others v. Venezuela                       | 14,679 million       | 1,600 million                         | 2014          |
| Crystallex v. Venezuela                             | 3,160 million        | 1,202 million                         | 2016          |
| Oschadbank v. Russia                                | 680 million          | 1,111 million                         | 2018          |
| Rusoro Mining v. Venezuela                          | 2,318 million        | 967 million                           | 2016          |
| Al-Kharafi v. Libya and others                      | 1,144 million        | 935 million                           | 2013          |
| CSOB. v. Slovakia                                   | 1,132 million        | 867 million                           | 2004          |
| Gold Reserve v. Venezuela                           | 1,735 million        | 713 million                           | 2014          |
| Stati and others v. Kazakhstan                      | 2,631 million        | 497 million                           | 2013          |
| Karkey Karadeniz v. Pakistan                        | 2,000 million        | 490 million                           | 2017          |
| Sorelec v. Libya                                    | Data not available   | 452 million                           | 2018          |
| Valores Mundiales and Consorcio Andino v. Venezuela | Data not available   | 430 million                           | 2017          |

<sup>98</sup> These figures were drawn from [Italaw.com](http://italaw.com), UNCTAD's Investment Policy Hub, and IA Reporter, as appropriate. Please note that, to have round figures without decimal points, figures were rounded downward, rather than upward. This was also done to avoid overstating the level of the award.





| Short case name                     | Amount claimed (USD) | Amount awarded (or settled for) (USD) | Year of award                                       |
|-------------------------------------|----------------------|---------------------------------------|---|
| Perenco v. Ecuador                  | 440 million          | 394 million                           | 2019  |
| Suez and Vivendi v. Argentina (II)  | 834 million          | 383 million                           | 2015  |
| Burlington v. Ecuador               | 1,515 million        | 379 million                           | 2017  |
| OIEG v. Venezuela                   | 929 million          | 372 million                           | 2015  |
| Koch Minerals v. Venezuela          | 672 million          | 325 million                           | 2017  |
| Teinver and others v. Argentina     | 1,590 million        | 320 million                           | 2017  |
| CME v. Czech Republic               | 495 million          | 270 million                           | 2003  |
| Total v. Argentina                  | 940 million          | 269 million                           | 2013  |
| France Telecom v. Lebanon           | 952 million          | 266 million                           | 2005  |
| Siemens v. Argentina                | 462 million          | 237 million                           | 2007  |
| Suez and Interagua v. Argentina     | 257 million          | 225 million                           | 2016 (rectification; award originally in Dec. 2015) |
| PL Holdings v. Poland               | 479 million          | 178 million                           | 2017  |
| BG v. Argentina                     | 238 million          | 185 million                           | 2007  |
| Azurix v. Argentina (I)             | 685 million          | 165 million                           | 2006  |
| Eiser and Energía Solar v. Spain    | 279 million          | 139 million                           | 2017  |
| Tenaris and Talta v. Venezuela (II) | Data not available   | 137 million                           | 2016  |
| EDF and others v. Argentina         | 270 million          | 136 million                           | 2012  |
| CMS v. Argentina                    | 261 million          | 133 million                           | 2005  |
| EDF v. Hungary                      | 100 million          | 132 million                           | 2014  |
| Antin v. Spain                      | 229 million          | 115 million                           | 2019 (rectification; award originally in 2018)      |



| <b>Short case name</b>         | <b>Amount claimed (USD)</b> | <b>Amount awarded (or settled for) (USD)</b> | <b>Year of award</b> |
|--------------------------------|-----------------------------|--|----------------------|
| Everest and others v. Russia   | 220 million                 | 130 million                                  | 2018                 |
| Sempra v. Argentina            | 209 million                 | 128 million                                  | 2007                 |
| Rumeli v. Kazakhstan           | 458 million                 | 125 million                                  | 2008                 |
| Stans Energy v. Kyrgyzstan (I) | 117 million                 | 117 million                                  | 2014                 |
| Micula v. Romania (I)          | 832 million                 | 116 million                                  | 2013                 |
| Tatneft v. Ukraine             | 2,400 million               | 112 million                                  | 2014                 |
| Enron v. Argentina             | 582 million                 | 106 million                                  | 2007                 |
| Vivendi v. Argentina (I)       | 317 million                 | 105 million                                  | 2000                 |

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