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Possible reform of investor-State dispute settlement (ISDS)

Draft guidelines on the calculation of damages and compensation in investor-State dispute settlement

Note by the Secretariat

1. During its earlier deliberations, concerns identified by the Working Group included the inconsistency and unpredictability of awards on damages,[1] high amounts of compensation awarded by investor-State dispute settlement (ISDS) tribunals affecting the ability of States to regulate and provide public goods and services,[2] complexity in calculation of damages which contributed to higher cost and delays,[3] and the vast difference between the amount invested and the amount awarded as compensation.[4]

2. At the thirty-eighth session in October 2019, the Secretariat was requested to consider how possible work on damages and compensation could be undertaken.[5] Accordingly, the Secretariat prepared a note on assessment of damages and compensation.[6] At the forty-third session, there was support to continue work on the assessment of damages and compensation, and the Secretariat was requested to draft text comprising draft provisions and guidelines that could address concerns about correctness and consistency, as well as cost and duration, that damages and compensation presented.[7]

3. At its forty-ninth session in September 2024, it was reiterated that guidelines could be prepared to assist tribunals in deciding on damages and compensation, and it was suggested that such guidelines could be developed in parallel with the draft provision on the assessment of damages and compensation.[8]

[1] A/CN.9/930/Add.1/Rev.1, para. 30.
[2] A/CN.9/970, paras. 36–38. A/CN.9/1160, para. 99.
[3] A/CN.9/1124, para. 91.
[4] A/CN.9/WG.III/WP.220, para. 5.
[5] A/CN.9/1004*, para. 104.
[6] A/CN.9/WG.III/WP.220, para. 10.
[7] A/CN.9/1124, para. 100.
[8] A/CN.9/1194, para. 104.

4. Accordingly, the annex to this Note provides a draft of the guidelines on the calculation of damages and compensation in ISDS.

5. The Working Group may wish to note that a revised version of the draft provision on the assessment of damages and compensation (draft provision 20) is contained in document A/CN.9/WG.III/WP.253. A number of other draft provisions on procedural and cross-cutting issues are relevant to the calculation of damages including on evidence, bifurcation, security for costs, allocation of costs, counterclaims, third-party funding, and shareholder claims.

Annex

Draft guidelines on the calculation of damages and compensation in investor-State dispute settlement

1. The assessment and calculation of damages and compensation entails procedural, legal, and quantitative dimensions. As an inherently economic exercise, this process relies heavily on expert analysis, making it essential to consider procedural tools for shaping the role and use of experts. Legally, damages are subject to principles and arbitral practice governing the entitlement to reparation, evidentiary standards, and limits on compensation. From a valuation perspective, while the computation of damages is guided by industry norms and practices, it remains bound by the applicable legal framework. The guidelines seek to assist tribunals in considering these elements.

2. The guidelines begin by taking stock of the analytical framework and developments in law. In addition, the guidelines highlight key issues to be addressed by adjudicators and indicates best practices that have emerged from arbitration cases. They also identify potential areas of reforms and examine the form of such reforms to the extent that they depart from or go beyond applicable principles and arbitral practice.

3. Discussions on this topic are taking place simultaneously in other fora at the international level. One important initiative is being led by the United Nations Conference on Trade and Development (UNCTAD). In September 2024, UNCTAD released an international investment agreement (IIA) issues note on policy options for compensation and damages in IIAs.[9] The IIA Issues Note outlines several approaches States can take to address concerns about large damages awards and gaps in the rules on compensation in IIAs, such as clarifying causation and mitigation factors, prescribing guidance on valuation techniques, and disincentivizing excessive claims. Another development is occurring in the International Law Commission (ILC), which has adopted the topic of compensation for the damage caused by internationally wrongful acts in its programme of work.[10] The possible scope of topics includes the conditions for compensation, types of damages, causation, the financial condition of the responsible State, the relevance of equity and general principles of law, interest, contributory fault, and the practices of different courts and tribunals in determining compensation.[11] Coordination of these ongoing initiatives could avoid fragmentation of approaches.

4. Each section of the guidelines is followed by a set of recommendations intended to support the effective and efficient conduct of proceedings. These recommendations aim to assist tribunals in managing the process more efficiently, to streamline the process where possible, to raise the parties' awareness of issues likely to be of particular interest to the tribunal, and to encourage the use of procedural tools available. They are designed to promote clarity and predictability through the establishment of clear procedural standards – ideally discussed and agreed upon with the parties – while also enhancing judicial economy. Given the prevailing arbitral jurisprudence and the divergences in the application of certain approaches – including with respect to disbursement procedures and the calculation and award of interest – the recommendations also seek to promote greater consistency and harmonization in practice to foster more coherent and transparent outcomes.

[9] UNCTAD, "IIA Issues Note: Compensation and Damages in Investor-State Dispute Settlement Proceedings", available at https://unctad.org/system/files/official-document/diaepcbinf2024d3_en.pdf.
[10] A/80/10, paras. 23, 437.
[11] A/79/10, annex I.

A. Organization of the arbitral proceedings

5. After making a finding of liability, a tribunal normally focuses on causation and damages. Although this happens toward the end of the proceedings, there are certain steps that the parties and tribunal can take at an earlier stage to facilitate the tribunal's determination of these issues.

6. Initial procedural meeting and case management conferences: Parties normally set out the rules of the proceeding at the first procedural meeting. Even at this juncture, the parties and the tribunal should consider what procedures would be best suited to elicit damages experts' evidence, narrow the issues in dispute, and address preliminary matters. The International Institute for Conflict Prevention & Resolution (CPR) suggests that factual and legal issues relevant to damages could be previewed with the parties during this meeting by discussing the evidence on liability, the linkage to damages, and the theory of harm.[12] This exercise could help refine and narrow the issues and facilitate the tribunal's understanding and ability to administer the case. However, it may be practically difficult to engage in meaningful discussions at such an early stage before the nature and substance of the damages claim are fully devised by the parties. Therefore, this could be complemented with subsequent case management meetings when the specifics of the case are clearer, allowing the tribunal to address key issues in dispute, including on the quantification of damages. Case management meetings could be scheduled at key milestones such as between written phases and before the hearing.

7. Bifurcated damages phase: In some cases, it may be appropriate to divide the proceedings, allowing the tribunal to first decide issues that could be dispositive or would assist it to move to the next stage. Although bifurcation of jurisdictional issues has been more common in practice, some tribunals have bifurcated the assessment of damages.[13] A number of arbitration rules allow for bifurcation of proceedings. Similarly, the International Bar Association Rules on the Taking of Evidence (IBA Rules) encourage tribunals in article 2(3)(b) to "identify to the Parties, as soon as it considers it to be appropriate any issues … for which a preliminary determination may be appropriate." One of the main advantages of bifurcation is efficiency. By addressing jurisdiction and/or the merits at the outset, parties can save time and costs by dispensing with briefing on quantum if the claim fails,[14] narrowing the scope of the dispute for the quantum phase, and reaching early settlement.

8. Bifurcation may however not always achieve the intended effectiveness. Indeed, it is likely to be less suitable in cases where questions of liability are intertwined with issues such as causation, mitigation, or the existence of a breach-like expropriation. In such cases, there may be duplication of the analysis of evidence and testimony of fact witnesses, undermining the cost and time savings. Furthermore, investors normally engage quantum and technical experts at an early stage to support their claims and estimate quantum for purposes of deciding whether to pursue the claim and/or to obtain funding. The decision whether to bifurcate should be determined on a case-by-case basis, depending on: (i) timing and cost considerations; (ii) the tribunal's perception of the efficiency of the proceedings going forward; and (iii) the utility of the quantum expert reports after the tribunal's finding on liability.[15] If the

[12] CPR International Committee on Arbitration, "Protocol on Determination of Damages in Arbitration" (2010), available at https://static.cpradr.org/docs/CPR-Protocol-on-Determination-of-Damages-in-Arbitration-fnl.pdf, p. 3.

[13] *Suez, Sociedad General de Aguas de Barcelona S.A. and Vivendi Universal S.A. v. Argentina*, ICSID Case No. ARB/03/19, Decision on Liability, 30 July 2010, paras. 272–275; *Electrabel SA v. Hungary*, ICSID Case No. ARB/07/19, Procedural Order No. 3, 27 March 2009, para. 3; *Glencore Finance (Bermuda) Ltd. v. Plurinational State of Bolivia*, PCA Case No. 2016-39 (Glencore Finance v. Plurinational State of Bolivia), Procedural Order No. 2 (Decision on Bifurcation), 31 January 2018, para. 56.

[14] *Methanex Corporation v. United States of America*, UNCITRAL, Final Award, 3 August 2005, para. 32.

[15] *Coropi Holdings Limited, Kalemegdan Investments Limited and Erinn Bernard Broshkov v. Republic of Serbia*, ICSID Case No. ARB/22/14, Procedural Order No. 4, 21 August 2023, para. 21.

quantification of damages is deferred, the tribunal may wish to provide a set of non-binding parameters in the absence of a partial award based on the earlier phases of the case. This should not, however, preclude a party from also putting forward its full affirmative case to safeguard its due process rights.

9. Written submissions: Parties play a crucial role in ensuring that the tribunal has the necessary evidence and understanding to decide the case, including on the existence and quantification of damages. Certain tools and techniques can assist the tribunal in identifying the main issues in dispute, obtaining relevant evidence, and evaluating the impact of the experts' assumptions on quantum.

10. First, an organizing document can be used to identify and particularize the damages sought to the breaches alleged. Counsel in investment arbitrations are accustomed to using schedules in document production. For example, the adoption of a device such as a "Scott Schedule" can be usefully deployed to describe each claim, the amount sought, and the parties' position on each issue.[16] The use of structured frameworks can compel a systematic and step-by-step reasoning on quantum.

11. Second, document production is the usual means by which information relevant to the case is obtained. While the exchange of documents normally occurs after the first round of written pleadings, some issues might only become apparent later in the process. It may therefore be worthwhile for the first procedural order to allow the tribunal to revisit decisions on production requests related to damages or to permit a subsequent phase for collecting additional evidence on quantum. Any requests should be well-justified to avoid undue burdens and unnecessary delays.

12. Third, joint expert reports are often used to narrow areas of dispute though they may be ineffective when experts hold fundamentally divergent views. Instead, the tribunal may be more usefully assisted by the experts disclosing their instructions and key assumptions (see article 5(2)(b) IBA Rules) as well as preparing a sensitivity analysis showing the impact of those instructions and assumptions on the valuation result.[17] The differences in valuation often arise from the instructions and assumptions experts receive from instructing counsel rather than a true difference in their views. If, however, the tribunal decides that adjustments to the financial model are warranted or considers another valuation methodology to be more appropriate, the parties should be given the opportunity to make submissions to address any issues that have not yet been briefed to avoid awarding a remedy that the parties have not asked for.

13. Organization of hearing: The tribunal, in conjunction with the parties, may establish procedural rules in advance of the hearing to maximize the value of expert testimony. One option is to require the experts to meet and confer in advance of the hearing. In some cases, tribunals have instructed the parties' experts to prepare a written report together on areas of agreement and disagreement.[18] This can help narrow the issues for the tribunal's determination. A second option focuses on the rules governing the presentation of expert evidence. For example, the parties with the assistance of the tribunal may devise rules governing expert presentations, the scope and duration of cross-examination, the order of witness and expert examinations, the examination of co-experts, the use and prior exchange of demonstratives and visual aids, the handling of confidential information, and the admissibility of new evidence. A third option that the tribunal may wish to consider is witness conferencing (also referred to as "hot-tubbing"; see article 8(4)(f) of the IBA Rules). This process essentially allows the tribunal to jointly examine the opposing experts, while allowing for some follow-up questioning by the parties. Hot-tubbing is intended to reveal areas

[16] ADR Institute of Canada, "Using a 'Scott Schedule' in Arbitration" (6 December 2018), available at https://adric.ca/using-a-scott-schedule-in-arbitration/.

[17] The Chartered Institute of Arbitrators, article 6.1(a), Protocol for the Use of Party-Appointed Expert Witnesses in International Arbitration takes a different approach.

[18] *S.D. Myers Inc v. Canada*, UNCITRAL, Procedural Order No. 17, 26 February 2001, para. 12; *Achemea BV v. Slovak Republic*, UNCITRAL PCA Case No. 2008-12, Final Award, 7 December 2012, paras. 61–65; *Anatolie Stati et al. v. Kazakhstan*, SCC Case No. V 116/2010 (Stati et al. v. Kazakhstan), Award, 19 December 2013, para. 118.

of agreement and disagreement, test the evidence, clarify technical issues, dispel weak arguments, and stimulate debate. It is good practice to agree before the hearing on the time to be allocated to this procedure, the extent of party participation, and the topics to be covered to ensure a level playing field.

14. Post-Hearing: After the hearing, the tribunal may require additional assistance with assessing quantum issues. The tribunal may also request additional information or analyses from the parties and their experts.

15. Alternatively, the tribunal can undertake its own analysis of the parties' models or appoint its own expert. The tribunal may engage an expert under most arbitration rules and some IIAs. However, tribunals should consider appointing an expert at an earlier stage in the process (particularly where one party has not chosen an expert) or in complex cases to better understand the underlying assumptions or methods.[19] Although arbitration rules vary, it is good practice for the tribunal to establish with the parties the extent of the expert's participation, the form of its assistance, and the cost of the procedure. In addition, the parties should also be entitled to review and comment on the expert's report and question the tribunal-appointed expert at a hearing.

16. Despite these measures, there is often a perceived risk that the tribunal-appointed expert could become a de facto arbitrator. To allay such concerns, the expert's role can be limited to that of a technical advisor (see the UNCITRAL Model Clause on Technical Advisers). For example, the expert can be confined to advising the tribunal on the model's conformity with the tribunal's findings[20] or serving as a facilitator by helping the tribunal understand the underlying forces driving the party-appointed experts' divergent views on quantum.[21]

17. Tribunals have a range of tools and techniques at their disposal to address issues on causation and quantum. Throughout the proceedings, the tribunal in consultation with the parties can design a procedure that not only fosters a greater comprehension of the theoretical and methodological aspects of the case but also improves the efficiency of the process, thereby minimizing delays and costs. Experts play a key role in the assessment of damages and therefore specific consideration should be given to their use in the proceedings. In addition, tribunals may wish to consider novel techniques to reduce anchoring bias, for example, the use of blind damages assessments. The parties could be required to prepare and exchange their damages analyses, including the methodology, assumptions, and underlying rationale but withholding the final quantum figure from the tribunal. This would allow the tribunal to evaluate the legal and economic reasoning behind the claim without being influenced by a specific figure. Blind assessments could also ensure robust debate on the underlying methodology while minimizing cognitive bias in the tribunal's assessment of quantum.

Recommendations

Tribunals should schedule the initial procedural meeting and subsequent case management meetings to preview the theory of the harm, discuss the evidence, and narrow the issues relating to damages.

Tribunals should consider bifurcation of the damages phase by taking into account: (i) timing and cost considerations, (ii) considerations of efficiency of the proceedings, and (iii) the utility of the expert quantum reports after a finding on liability.

[19] *CMS Gas Transmission Company v. The Republic of Argentina*, ICSID Case No. ARB/01/8 (CMS v. Argentina), Award, 12 May 2005, para. 418.

[20] J.A. Trenor, "Strategic Issues in Employing and Deploying Damages Experts", in *The Guide to Damages in International Arbitration*, 3rd edition, Trenor (ed.) (2018), p. 169.

[21] A. Douglas, "Procedural Tools to Facilitate the Quantification of Damages in Investor-State Arbitration", in *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration*, Beharry (ed.) (2018), p. 20.

Tribunals should use a structured framework to compel a systematic reasoning process on quantum.

Tribunals could consider revisiting decisions on document production requests relating to damages or establishing a separate document production phase on quantum.

Tribunals should require experts to disclose their instructions and key assumptions and to prepare a sensitivity analysis showing the impact of those instructions and assumptions on the valuation.

Tribunal should tailor the proceedings for expert testimony, such as requiring experts to identify areas of dispute, setting specific rules for presenting expert evidence at the hearing, and delineating a procedure for witness conferencing.

Tribunals should consider engaging their own experts or technical advisors at an early stage of the proceedings to better understand the underlying methods, data, and assumptions in line with the approach set out in the UNCITRAL Model Clause on Technical Advisors.

B. Burden and standard of proof

18. In international adjudication, the party who asserts a fact bears the burden of proving it.[22] Some IIAs also expressly stipulate that it is the claimant's burden to establish proof of ownership or control of the investment, nationality of investor, breaches of the IIA, and damages resulting therefrom. Accordingly, the claimant investor bears the burden of proving its claims, whereas the respondent State must prove any defences or counter-claims it raises.[23] With respect to damages, the investor must establish "the fact of its loss or damage, its quantification in monetary terms and the necessary causal link between the loss or damage and the treaty breach."[24] In other words, the investor must show: (i) the existence of injury, (ii) the causal nexus between its harm and the State's conduct, and (iii) the amount of loss. The State, on the other hand, bears the burden of proving any defences it puts forward, such as alternate causes of the harm, or compensation-reducing circumstances,[25] or defects in the claimant's valuation. Where a party is unable to proffer evidence, for example, due to the loss of access to documents, the tribunal may shift the burden of proof depending on the circumstances of the case.[26]

19. As for the standard of proof, tribunals have not adopted a uniform approach. When assessing damages, tribunals have adopted various standards, including "balance of probabilities", [27] "sufficient certainty", [28] "reasonable degree of

[22] D. Sandifer, *Evidence Before International Tribunals* (University Press of Virginia) (1939), pp. 92–93; *Temple of Preah Vihear* (Cambodia v. Thailand), Judgment (Merits), 15 June 1962, p. 16.

[23] *Glencore Finance v. the Plurinational State of Bolivia*, Award, 8 September 2023, para. 268.

[24] *The Rompetrol Group N.V. v. Romania*, ICSID Case No. ARB/06/3, Award, 6 May 2013, para. 190.

[25] T. Wälde and B. Sabahi, "Compensation, Damages, and Valuation", in *Oxford Handbook of International Investment Law*, Muchlinski et al. (eds.) (2008), p. 1111.

[26] *Muhammet Çap & Sehil Inşaat Endustri ve Ticaret Ltd. Sti. v. Turkmenistan*, ICSID Case No. ARB/12/6, Award, 4 May 2021, para. 722.

[27] *Khan Resources Inc., Khan Resources B.V., and Cauc Holding Company Ltd. v. The Government of Mongolia*, PCA Case No. 2011-09 (Khan Resources v. Mongolia), Award, 2 March 2015, para. 375; *Eco Oro Minerals Corp. v. Republic of Colombia*, ICSID Case No. ARB/16/41 (Eco Oro v. Colombia), Award on Damages, 15 July 2024, para. 292; *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, ICSID Case No ARB(AF)/09/1 (Gold Reserve v. Bolivarian Republic of Venezuela), Award, 22 September 2014, para. 685.

[28] *Autopista Concesionada de Venezuela, C.A. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/00/5, Award, 23 September 2003, para. 351.

certainty",[29] "in all probability",[30] "some level of certainty",[31] and "probable and not merely possible".[32] While the variation in terminology may trigger debate on the required level of evidentiary support, the identified standards suggest that tribunals should, at a minimum, ascertain that a fact is more likely than not.[33]

20. Jurisprudence also varies on whether a different standard of proof applies to the existence of damage as compared to the quantification of that damage.[34] Even where tribunals have applied a lower standard of proof to the quantification of damages, they have held that it must not be based on a "conjecture or speculation",[35] but on "reasonable probabilities"[36] and a "persuasive factual basis".[37] Disputes over the sufficiency of proof typically arise in relation to lost-profit claims. The Commentary to the ILC's Draft Articles on the Responsibility of States for Internationally Wrongful Acts (ILC Commentary) clarifies that lost profits are generally awarded where "an anticipated income stream has attained sufficient attributes to be considered a legally protected interest of sufficient certainty to be compensable", for example "by virtue of contractual arrangements" or where there is "a well-established history of dealings".[38] Given the divergence in views, tribunals should exercise caution, recognizing that there is no single approach and that the standard of proof may vary depending on the nature of the claim. Parties, in turn, should be mindful of these uncertainties in their submissions.

21. As a practical matter, tribunals should be careful to ensure that, when evaluating evidence of a claim, there is internal coherence among: the investment defined for jurisdictional purposes, any violations alleged to have been inflicted on that investment, and the economic harm alleged to have been caused by those violations on the investment. *Pey Casado I* is an example where the compensation awarded was not specially tied to the breach established by the tribunal. The award was annulled because the tribunal had granted damages for a fair and equitable treatment (FET) breach based on a calculation that assumed expropriation.[39] A subsequently reconstituted tribunal rejected the same valuation approach, holding that claimants had not shown "what particular injury and damage could be proved to have been caused to them by the breach of the guarantee of fair and equitable treatment".[40] Similarly, the *Eco Oro* tribunal rejected the claimant's comparable transactions methodology premised on a total loss of value, holding that it was not an appropriate method to value the harm resulting from Colombia's minimum standard of treatment violation related to the opportunity to apply for environmental licenses.[41]

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[29] *Rudloff Case*, Mixed Claims Commission, 9 U.N.R.I.A.A. 225 (United States v. Bolivarian Republic of Venezuela), Decision (Merits), 17 February 1903, p. 258.

[30] *Bilcon of Delaware Inc. v. Canada*, PCA Case No. 2009-04, Award on Damages, 10 January 2019, para. 168; *Factory at Chorzów,* PCIJ Series A. No. 17 (Germany v. Poland), Judgment (Merits), 13 September 1928, p. 47.

[31] *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic (I)*, ICSID Case No. ARB/97/3 (Vivendi v. Argentina I), Award II, 20 August 2007, para. 8.3.3.

[32] *Asian Agricultural Products LTD (AAPL) v. Republic of Sri Lanka*, ICSID Case No. ARB/87/3 (AAPL v. Sri Lanka), Final Award, 27 June 1990, para. 104.

[33] S. Ripinsky and K. Williams, *Damages in International Investment Law* (2008) (Ripinsky/Williams), p. 165.

[34] *Watkins Holdings S.à r.l. and others v. Kingdom of Spain*, ICSID Case No. ARB/15/44, Award, 21 January 2020, paras. 684–685. Cf. *Eco Oro Minerals Corp. v. Republic of Colombia*, ICSID Case No. ARB/16/41 (Eco Oro v. Colombia), Award on Damages, 5 July 2024, para. 292.

[35] *Mohammad Ammar Al-Bahloul v. The Republic of Tajikistan*, SCC Case No. V064/2008 (Al-Bahloul v. Tajikistan), Final Award, 8 June 2010, para. 39.

[36] *Impregilo S.p.A. v. Argentine Republic*, ICSID Case No. ARB/07/17, Award, 21 June 2011, para. 371.

[37] *Al-Bahloul v. Tajikistan*, para. 39.

[38] ILC Commentary, article 36, comment 27.

[39] *Victor Pey Casado and President Allende Foundation v. Republic of Chile (I)*, ICSID Case No. ARB/98/2 (Pey Casado v. Chile), Decision on the Application for Annulment, 18 December 2012, paras. 261, 285.

[40] *Pey Casado v. Chile*, Award, 13 September 2016, para. 244.

[41] *Eco Oro v. Colombia*, paras. 292, 302–305.

22. In sum, while there is jurisprudence on the burden of proof, no consistent practice on the standard of proof exists beyond the requirement that damages must be reasonably certain and not speculative. The determination of whether the quantification of damages meets this standard will depend on the nature of the claim, the availability and sufficiency of evidence, and the valuation methodology applied. Given its relevance to State defences and valuation, this topic is also discussed in Sections E and F.

Recommendations

Tribunals should require that claimants bear the burden of proof in relation to its claims, including the existence of damage, its quantification, and the causal link between the breach and the damage.

Tribunals should require claimants to establish damages with clarity. Specifically, they must demonstrate: (i) the existence of injury; (ii) the causal link between the harm and the State's conduct; and (iii) the amount of loss. Where applicable, States should be required to prove mitigating circumstances or other factors reducing compensation.

Tribunals should consider applying a high evidentiary threshold when assessing claims for damages. In doing so, tribunals should take into account the potential broader public interest implications and the need for rigorous scrutiny of claims presented.

Tribunals should adopt at a minimum a "balance of probabilities" standard of proof when determining the existence of injury and causation (i.e. facts must be found to be more likely than not, regardless of the variation in terminology used across cases).

Tribunals should consider applying the same standard of proof for the existence of damages and their quantification. Even where a lower standard is applied for quantification, tribunals should ensure that valuations are not based on speculations and require a persuasive factual basis grounded in reasonable probabilities.

Tribunals should only award lost profits where there is sufficient certainty of an income stream that constitutes a legally protected interest.

C. Causation

23. A claimant investor must prove a causal link between its losses and the State's breach for damages to be recoverable.[42] There are differing views on whether causation is an inherent part of assessing liability, a consideration in the quantum analysis,[43] or a distinct analytical step bridging liability and harm.[44] While this distinction may be inconsequential in some cases, treating causation as a separate element has proven significant, particularly where tribunals have found liability but denied compensation due to the claimant's failure to establish a causal link between the breach and the alleged damages.[45]

24. In essence, the causation analysis determines which injuries are compensable by identifying those losses that are attributable to the State's breach. This reflects a

[42] *Blusun S.A., et al. v. Italy*, ICSID Case No. ARB/14/3, Award, 27 December 2016, para. 394.

[43] *Biwater Gauff (Tanzania) Limited v. United Republic of Tanzania*, ICSID Case No. ARB/05/22 (Biwater v. Tanzania), Concurring and Dissenting Opinion of Gary Born, paras. 16–29; *Khan Resources v. Mongolia*, paras. 376–378.

[44] P. Pearsall, "Causation and the Draft Articles on State Responsibility", *ICSID Review*, volume 37, issue 1–2 (2022), pp. 193–194.

[45] *Nordzucker AG v. The Republic of Poland*, UNCITRAL (Nordzucker v. Poland), Third Partial and Final Award (Damages and Costs), 23 November 2009, para. 64; *Cervin Investissements S.A. and Rhone Investissements S.A. v. Republic of Costa Rica*, ICSID Case No. ARB/13/2, Award, 7 March 2017, paras. 664, 703.

general principle of law[46] and is embodied in the Articles on the Responsibility of States for Internationally Wrongful Acts (ARSIWA), which calls for a State to make full reparation for injury caused by its wrongful act.[47] "Injury" includes material or moral damages caused by the State's wrongful act. However, both ARSIWA and the ILC Commentary provide limited guidance on how to apply the causal link requirement as the requisite standard "is not necessarily the same in relation to every breach of an international obligation."[48] Causation is also rarely addressed in IIAs.

25. To establish causation, a claimant investor must demonstrate both a factual and legal connection between the State's breach and its losses. Factual causation requires an investor to demonstrate that it would not have sustained the injury claimed *but for* the alleged treaty violation. Since factual causation is an inherently fact-driven inquiry, tribunals have examined it through different lenses, considering whether the wrongful act "necessarily" caused the losses,[49] constituted a "sine qua non" act,[50] or served as the "underlying or dominant" cause.[51]

26. As for legal causation, a claimant investor can only recover losses that are "proximate", "foreseeable", or "direct" to the State's breach, excluding those that are too "remote" or "consequential".[52] These tests limit how far down the factual chain a loss should be traced.[53] The ILC Commentary acknowledges the relevance of legal causation but does not prescribe a specific test.[54] In practice, tribunals have applied a range of approaches, exercising their discretion in determining the appropriate standard. Some tribunals have focused on whether a State's actions were the proximate cause of the loss,[55] whether the loss was a foreseeable consequence of those actions,[56] whether there is a direct link between the wrongful act and the alleged injury,[57] or a combination of these standards.[58] Taking a slightly different approach, the *S.D. Myers v. Canada* tribunal applied a contract/tort law paradigm in evaluating the concepts of foreseeability and remoteness.[59] Although these tests are sometimes used indiscriminately, they should not be viewed as equivalent because a directness standard is more restrictive than a proximity or foreseeability standard.[60] In practice, proximity and foreseeability will often, though not always, yield the same results. Tribunals should therefore apply the test deemed most fitting based on the specific facts of the case and the nature of the breach alleged. If a State considers that a more

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[46] B. Cheng, *General Principles of Law as Applied by International Courts and Tribunals* (1953), pp. 241 ff.

[47] ARSIWA, article 31(1) and also articles 34, 36(1), 37(1).

[48] ILC Commentary, article 31, comment 10.

[49] *Nordzucker v. Poland*, para. 63.

[50] *Ronald S. Lauder v. Czech Republic*, UNCITRAL (Lauder v. Czech Republic), Final Award, 3 September 2001, para. 234.

[51] *Biwater v. Tanzania*, Award, 24 July 2008, para. 786.

[52] V. Lanovoy, "Causation in the Law of State Responsibility", *The British Yearbook of International Law*, volume 90 (2022) (Lanovoy), p. 37.

[53] B. Sabahi et al., "Principles Limiting the Amount of Compensation", in *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration*, Beharry (ed.) (2018), p. 329.

[54] I. Marboe, "Damages in Investor-State Arbitration: Current Issues and Challenges", in *International Investment Law and Arbitration* (2018) (Marboe), p. 39.

[55] *LG&E Energy Corp., LG&E Capital Corp. and LG&E International Inc. v. Argentine Republic*, ICSID Case No. ARB/02/1 (LG&E v. Argentina), Final Award, 25 July 2007, para. 50; *Pey Casado v. Chile*, Award, 13 September 2016, para. 218.

[56] *Amco Asia Corporation and others v. Republic of Indonesia*, ICSID Case No. ARB/81/1 (Amco v. Indonesia), Award in Resubmitted Proceeding, 31 May 1990, para. 172; *Burlington Resources, Inc. v. Republic of Ecuador*, ICSID Case No. ARB/08/5 (Burlington v. Ecuador), Decision on Reconsideration and Award, 7 February 2017, para. 333.

[57] *Archer Daniels Midland and Tate & Lyle Ingredients Americas, Inc. v. United Mexican States*, ICSID Case No. ARB(AF)/04/5 (ADM v. Mexico), Award, 21 November 2007, para. 282.

[58] *Joseph Charles Lemire v. Ukraine (II)*, ICSID Case No. ARB/06/18, Award, 28 March 2011, para. 170.

[59] *S.D. Myers v. Canada*, Second Partial Award, 21 October 2002, paras. 154, 159.

[60] Lanovoy, pp. 46, 57.

stringent test of directness should apply, it could include language to this effect in its IIAs or consider issuing a joint interpretation with the other State party.

27. Harm can also be the result of a combination of factors (i.e. causal overdetermination). ARSIWA provides that there is no reduction or attenuation of reparation for concurrent causes except in cases of contributory fault.[61] However, an intervening cause can sever the chain of causation.[62] When this happens, the respondent State must prove that such a factor (rather than its breach) caused the investment's failure. Some events are so compelling that they break the causal link, making the State's actions too remote.[63] The burden falls on the State to prove that the investor's injury is attributable to other causes, such as the investor's contributory fault or negligence.[64] Where contributory fault or negligence is found, some tribunals have reduced the amount of compensation owed to the claimant.[65] If a tribunal determines attenuation of damages to be appropriate, it could seek additional evidence or submissions from the parties and the assistance of the quantum experts to provide a more objective and methodical basis for the reduction in damages. Contributory fault is further discussed in section E below on State defences.

Recommendations

Tribunals should distinguish between factual causation (the investor would not have suffered the loss but for the breach) and legal causation (the compensable loss is sufficiently connected to the breach).

Tribunals should carefully analyse the causal link between the breach that has been established and the harm claimed, ensuring that the damage is not too remote or speculative.

To the extent possible, tribunals should exercise caution in admitting damages for indirect losses and for approximate or unforeseeable consequences of the breach.

Tribunals should take into account any contributory fault of, or failure to mitigate by, the investor when assessing the amount of damages. Tribunals may seek further submissions or expert evidence to ensure an objective and methodical reduction.

Where a respondent alleges that an intervening cause broke the causal chain, tribunals should assess whether the intervening factor was predominant or unforeseeable that the State's breach is too remote to justify liability.

D. Standard of compensation

28. The quantification of damages stems from the standard of compensation. The applicable IIA is the logical place to begin this analysis, as it sets out the State's obligations. However, compensation is often only addressed in relation to expropriation. Some treaties also limit compensation to breaches of specific obligations. For all other breaches (including unlawful expropriation), tribunals will resort to rules of customary international law, as elaborated in the *Chorzów Factory*

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[61] ILC Commentary, article 31, comment 12.

[62] Ibid., para. (13). For cases where causation was not established, *Lauder v. Czech Republic*, para. 234; *Biwater v. Tanzania*, paras. 790, 798.

[63] *Ioan Micula, et al. v. Romania*, ICSID Case No. ARB/05/20, Award, 11 December 2013, paras. 926–927.

[64] *Bear Creek Mining Corporation v. Republic of Peru*, ICSID Case No. ARB/14/21 (Bear Creek v. Peru), Award, 30 November 2017, para. 568; *Stati et al. v. Kazakhstan*, para. 1332.

[65] *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Chile*, ICSID Case No. ARB/01/7 (MTD v. Chile), Award, 25 May 2004, paras. 242–243; *Copper Mesa Mining Corporation v. Republic of Ecuador*, PCA Case No. 2012-02 (Copper Mesa v. Ecuador), Award, 15 March 2016, paras. 6.100–6.102; *STEAG GmbH v. Kingdom of Spain*, ICSID Case No. ARB/15/4 (STEAG v. Spain), Decision on Jurisdiction, Liability and Directions on Quantum, 8 October 2020, paras. 794–796.

case and codified in ARSIWA. Thus, the standard of compensation depends on the violation alleged.

29. The function of damages is compensatory in nature. This means that the award of damages is not intended to punish the State.[66] Rather, tribunals should seek to place the injured party in the position it would have been in but for the injury.

30. Lawful Expropriation: Most IIAs prescribe the conditions for an expropriation to be considered lawful, requiring that the State action: (i) complies with due process; (ii) is non-discriminatory; (iii) serves a public interest; and (iv) provides for the payment of compensation. If these conditions are not met, tribunals have considered the expropriation unlawful and applied the full reparation principle under customary international law. However, some tribunals have found an expropriation to be lawful despite the non-payment of compensation.[67]

31. IIAs also typically mandate "prompt, adequate, and effective" compensation, known as the "Hull formula or rule". Such provisions provide guidance on the measure of compensation (i.e. fair market value (FMV)), the date of valuation (i.e. the date preceding the expropriation), and sometimes the applicable rate of interest. Even when treaties use vague terms such as "market value", "genuine value", or "adequate" compensation, they are generally interpreted in line with the FMV standard.[68] This standard determines value by "the price … at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."[69] Some treaties give further guidance on valuation, for example, referring to going concern value, asset value, declared tax value, or other criteria. This analysis generally leads to compensation equal to the FMV of the expropriated property just prior to the expropriation, plus any applicable interest. Depending on the terms of the relevant treaty, tribunals may be required to consider other factors in assessing compensation.

32. Unlawful expropriation: For non-compliant expropriations, tribunals will apply the principle of full reparation under customary international law as reflected in article 31 of ARSIWA. Additional guidance is provided in article 34, which states that full reparation may "take the form of restitution, compensation, and satisfaction". Although the standard of full reparation was created in the context of State-State disputes, investment tribunals have applied the principle by analogy to guide their calculation of damages in investor-State disputes.

33. The Permanent Court of International Justice provided further guidance on the full reparation principle in the *Chorzów Factory* case, stating:

> Reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear.[70]

34. The *Chorzów Factory* case establishes two main consequences for a breach of an internationally wrongful act. The first is that a State's primary obligation is to make restitution, whether material (e.g. by returning unlawfully seized property) or legal

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[66] ILC Commentary, article 36, comment 4.

[67] *Tidewater v. the Bolivarian Republic of Venezuela*, ICSID Case No. ARB/10/5 (Tidewater v. Bolivarian Republic of Venezuela), Award, 13 March 2015, para. 140; *Venezuela Holdings, B.V., et al v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/27, Award, 9 October 2014, paras. 301, 306.

[68] Marboe, pp. 23–24; UNCTAD, *Bilateral Investment Treaties 1995–2006: Trends in Investment Rulemaking* (2007), p. 48; World Bank, *Guidelines on the Treatment of Foreign Direct Investment* (World Bank Guidelines), Guideline IV.3.

[69] American Society of Appraisers, *ASA Business Valuation Standards* (2008), p. 23; World Bank Guidelines, Guideline IV.5.

[70] *Chorzów Factory*, p. 47.

(e.g. reversing a governmental act). If restitution is impossible or overly burdensome, the State may pay damages instead. This can occur, for example, when the property is lost, destroyed, or changed.[71] Some IIAs allow a tribunal to award damages or restitution, and where restitution is ordered, a State may opt to pay damages representing the FMV of the expropriated property. However, tribunals seldom award restitution,[72] likely due to the perceived encroachment on State sovereignty and doubts about its enforceability.

35. The second is that damages should "as far as possible, wipe out all the consequences of the illegal act".[73] In practice, tribunals calculate damages by comparing the FMV in the *but-for* scenario with that in the actual world, taking the difference as the measure of loss. Because the value in the actual world after the expropriation is typically zero, damages are generally equivalent to the *but-for* FMV. This approach aligns with that used for lawful expropriations except that it may also account for increases in value after dispossession and incidental expenditures.[74] Only a handful of tribunals, however, have awarded damages based on post-breach value increases, likely because such increases are rare.[75] Thus, in most cases, compensation under IIAs produces a similar result as compensation assessed under customary international law.[76]

36. Restitution may also be awarded in combination with other forms of reparation, including compensation for damages not covered by restitution.[77] However, tribunals should ensure that the combined reparation does not result in double recovery. Declaratory relief is also a ubiquitous remedy. It takes the form of a declaration of liability when a State is found to have breached an IIA obligation. According to the ILC Commentary, such declarations "may be treated as a form of satisfaction" but "are not intrinsically associated with the remedy of satisfaction."[78] Rather, it is a "necessary part of the process of determining" the lawfulness of the conduct in question.

37. Other treaty breaches: Other IIA disciplines, such as FET, national treatment, most favoured nation treatment (MFN), umbrella clauses, and performance requirements also trigger the application of the full reparation principle in the absence of specific guidance on compensation for breaches of those disciplines.[79] When these breaches have the same impact as expropriation (i.e. the investor has been completely

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[71] ILC Commentary, article 35, comment 4.

[72] For cases where restitution was granted: *Antoine Goetz and others v. Republic of Burundi*, ICSID Case No. ARB/95/3, Award, 10 February 1999, paras. 135–136; *Mr. Franck Charles Arif v. Republic of Moldova*, ICSID Case No. ARB/11/23 (Arif v. Republic of Moldova), Award, 8 April 2013, para. 571.

[73] *Chorzów Factory*, p. 47; *CME Czech Republic B.V. v. Czech Republic*, UNCITRAL (CME v. Czech Republic), Partial Award, 13 September 2001, para. 618; *Tenaris S.A. and Talta – Trading e Marketing Sociedade Unipessoal Lda. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/12/23, Award, 12 December 2016, para. 396.

[74] *Chorzów Factory*, p. 50; cf. Dissenting Opinion of Lord Finlay, pp. 70–71; *Hulley Enterprises Ltd. v. Russian Federation*, PCA Case No. 2005-03/AA226, Final Award, 18 July 2014, para. 1769; *ADC Affiliate Limited and ADC & ADMC Management Limited v. Republic of Hungary*, ICSID Case No. ARB/03/16 (ADC v. Hungary), Award, 2 October 2006, paras. 496–497; *Siemens A.G. v. The Argentine Republic*, ICSID Case No. ARB/02/8 (Siemens v. Argentina), Award, 6 February 2007, para. 352.

[75] *ADC v. Hungary*, para. 497; ***ConocoPhillips Petrozuata B.V., ConocoPhillips Hamaca B.V. and ConocoPhillips Gulf of Paria B.V. v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/07/30, Decision on Jurisdiction and the Merits, 3 September 2013, paras. 343, 401;** *Quiborax S.A., Non Metallic Minerals S.A. and Allan Fosk Kaplún v. Plurinational State of Bolivia*, ICSID Case No. ARB/06/2, Award, 16 September 2015, para. 422.

[76] Ripinsky/Williams, p. 88.

[77] ARSIWA, article 34.

[78] ILC Commentary, article 37, comment 6.

[79] *Glencore International A.G., C. I. Prodeco S.A. and Sociedad Portuaria Puerto Nuevo S.A. v. Republic of Colombia (II)*, ICSID Case No. ARB/19/22 (Glencore v. Colombia II), Award, 19 April 2024, para. 325; *Greentech Energy Systems A/S, NovEnergia II Energy & Environment (SCA) SICAR, and NovEnergia II Italian Portfolio SA v. Italian Republic*, SCC Case No. V 2015/095, Award, 23 December 2018, para. 548.

and permanently deprived of ownership, the property's value, or the ability to use or control the property effectively), tribunals have calculated damages on a similar basis as an unlawful expropriation.[80] However, awarding damages for non-expropriatory breaches using the same methodology applied to expropriation cases risks conflating conceptually distinct harms. For example, an FET violation that affects a going concern may require a different standard of compensation than FMV. Therefore, it would logically be rare for tribunals to find a non-expropriatory breach causing a permanent deprivation of property without also finding expropriation.

38. For breaches that are not expropriatory in nature, tribunals should analyse the specific harm caused by the treaty violation to compensate the investor for the actual losses incurred.[81] Blurring this distinction risks applying an ill-suited valuation approach because a non-expropriatory breach may not directly result in a diminution in the investment's value, as implied by a comparison between the investment's FMV in the *but-for* case and the actual world.[82] Determining the appropriate amount of damages requires consideration of various factors such as the interests affected (e.g. shares, debt, contractual rights), the breach alleged, and the nature of the injury (e.g. whether the investment was destroyed or temporarily impaired).[83] This assessment depends fundamentally on the specific facts of the case. Tribunals should therefore ensure that compensation claims are grounded with robust analyses by requiring parties to present calculations of specific harms directly linked to the treaty violation.

Recommendations

Tribunals should identify the applicable standard of compensation, beginning with the terms of the applicable IIA. Where the standard of compensation is not expressly addressed for the alleged breach in the underlying treaty, tribunals should refer to the customary international law, general principles of international law, ARSIWA, and the *Chorzów Factory* case to establish the standard of compensation.

Tribunals should apply the principle of full reparation for unlawful expropriations which includes restitution where possible, or compensation equivalent to the value of the lost investment in the *but-for* scenario.

Tribunals should ensure that damage awards are compensatory and not punitive in function. Compensation should aim to place the investor in a position it would have been in but for the internationally wrongful act and not necessarily punish the State for the act.

For violations such as FET, national treatment, MFN, umbrella clauses, or performance requirements, tribunals should avoid systematically resorting to the same standards of compensation as for expropriation. They should avoid applying FMV automatically unless the breach caused complete and permanent deprivation. Instead, damages should reflect the actual harm incurred, based on the nature of the injury and the investor's interests affected.

Tribunals should require parties to present robust, fact-based harm analyses, requiring credible evidence linking the treaty breach to specific losses. Tribunals should reject

[80] *Murphy Exploration & Production Company International v. Republic of Ecuador*, PCA Case No. 2012-16, Partial Final Award, 6 May 2016, para. 482; *Gemplus, S.A., SLP, S.A. and Gemplus Industrial S.A. de C.V. v. United Mexican States*, ICSID Case No. ARB(AF)/04/3, Award, 16 June 2010, paras. 12–26; ***Talsud S.A. v. The United Mexican States*, ICSID Case No. ARB(AF)/04/4, Award, 16 June 2010, paras. 12–52;** *CMS v. Argentina*, para. 410.

[81] ILC Commentary, article 36, comment 4; M. Kinnear, "Damages in Investment Treaty Arbitration", in *Arbitration Under International Investment Agreements: A Guide to the Key Issues*, K. Yannaca-Small (ed.) (2010), pp. 561–562; A. Cohen Smutny, "Some Observations on the Principles Relating to Compensation in the Investment Treaty Context", *ICSID Review*, volume 22 (2007), pp. 19–20.

[82] *PSEG Global and Konya Ilgin Elektrik Üretim ve Ticaret Limited Sirketi v. Turkey*, ICSID Case No. ARB/02/5 (PSEG v. Turkey), Award, 19 January 2007, para. 308.

[83] Ripinsky/Williams, p. 90.

speculative or unsubstantiated claims and encourage the use of expert valuations where appropriate.

E. State defences to damages

39. A State may invoke various circumstances that limit the amount of compensation due in response to a claim for damages. The most common defences are: (i) the investor's contributory fault; (ii) the investor's failure to mitigate its injury; (iii) the defence of necessity; (iv) the investor's failure to comply with local laws; and (v) the prohibition against granting speculative damages.

40. Contributory fault: ARSIWA provides that reparation shall account for "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."[84] This reflects the well-established notion that IIAs are not insurance policies for investors' unwise business decisions.[85]

41. Once the investor has proven that a causal link exists between the State's unlawful conduct and the damage suffered, the burden shifts to the State to prove that the investor materially contributed to its own injury.[86] An investor's conduct must have been "wilful or negligent" and must have "materially contributed to the damage."[87] Contributory fault also encompasses the investor's inadequate assessment of risk or voluntary assumption thereof.[88] Once contributory fault is found, tribunals are afforded discretion to determine the magnitude of the reduction in the compensation awarded.[89] Tribunals can be guided by the parties' experts in deciding on the amount of reduction.

42. Failure to mitigate: As a general principle of international law, the injured party is obligated to act reasonably in mitigating its losses,[90] which also applies in the context of investment law.[91] The objective is "to avoid the aggrieved party sitting back and waiting to be compensated for harm which it could have avoided and reduced."[92]

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[84] ARSIWA, article 39.

[85] *Emilio Agustín Maffezini v. The Kingdom of Spain*, ICSID Case No. ARB/97/7 (Maffezini v. Spain), Award, 13 November 2000, para. 64; *MTD v. Chile*, Award, para. 178; *El Paso Energy International Company v. The Argentine Republic*, ICSID Case No. ARB/03/15 (El Paso v. Argentina), Award, 31 October 2011, para. 401.

[86] *LSF-KEB Holdings SCA and others v. Republic of Korea*, ICSID Case No. ARB/12/37, Award, 30 August 2022, paras. 809–810; *Copper Mesa v. Ecuador*, para. 6.88; *Stati et al. v. Kazakhstan*, para. 1454.

[87] ILC Commentary, article 39, comments 1, 5; *Burlington v. Ecuador*, para. 576; *(DS)2, S.A., Peter de Sutter and Kristof De Sutter v. Republic of Madagascar (II)*, ICSID Case No. ARB/17/18, 17 April 2020, para. 461; *Occidental Petroleum Corporation and Occidental Exploration and Production Company v. The Republic of Ecuador*, ICSID Case No. ARB/06/11 (Occidental v. Ecuador II), Award, 5 October 2012, paras. 666–670.

[88] Ripinsky/Williams, p. 315.

[89] *MTD v. Chile*, Decision on Annulment, 21 March 2007, para. 101; *STEAG v. Spain*, para. 795; *UAB E energija v. Republic of Latvia*, ICSID Case No. ARB/12/33 (UAB v. Latvia), Decision on Annulment, 8 April 2020, para. 197; *Caratube International Oil Company LLP and Devincci Salah Hourani v. Republic of Kazakhstan (II)*, ICSID Case No. ARB/13/13 (Caratube v. Kazakhstan II), Award, 27 September 2017, para. 1192; *Occidental v. Ecuador II*, para. 670; section C above.

[90] ILC Commentary, article 31, comment 11; *Hrvatska Elektroprivreda d.d. v. Republic of Slovenia*, ICSID Case No. ARB/05/24, Award, 17 December 2015, para. 215.

[91] *Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt*, ICSID Case No. ARB/99/6, Award, 12 April 2002, para. 167; *Bridgestone Licensing Services, Inc. and Bridgestone Americas, Inc. v. Republic of Panama*, ICSID Case No. ARB/16/34, Award, 14 August 2020, para. 565.

[92] *The Islamic Republic of Iran v. The United States of America*, IUSCT AWARD NO. 604-A15 (II:A)/A26 (IV)/B43-FT (Islamic Republic of Iran v. United States), 10 March 2020, para. 1797.

This duty to mitigate arises from the moment the investor became aware of the circumstances giving rise to the breach.[93]

43. To establish a failure to mitigate, the respondent must show that the claimant was unreasonably inactive or engaged in unreasonable conduct after the breach.[94] The duty of mitigation can therefore require the investor to sell products, stop the delivery of services, attempt to renegotiate a contract, or give up an unprofitable project.[95] Some tribunals have been cautious in applying this principle, holding that the investor's mitigation efforts need only be reasonable taking all circumstances into account.[96] For example, the *SPP* tribunal held that the claimant was under no duty to accept "an unsuitable alternative",[97] and the *AIG* tribunal noted that forcing an investor to accept a solution more favourable to the host State would wrongly permit States to breach their international obligations with impunity.[98] It follows that the costs incurred by an investor in mitigating losses are recoverable so long as they are reasonably incurred and do not exceed the damage avoided through the mitigation.[99] The damages awarded should, in principle, reflect the total loss arising from the injury, less any avoided losses due to the mitigation, plus the costs associated with the mitigation effort. Tribunals have broad discretion to decide the magnitude of such reduction.[100]

44. Necessity: The state of necessity is a circumstance precluding wrongfulness under customary international law and can be invoked where the State's measure was the only way for it to safeguard an essential interest against a grave and imminent peril.[101] This defence allows for the non-performance of an obligation during the period of necessity. Necessity has been restrictively interpreted to cover "exceptional cases" and as requiring several conditions, most notably that the State cannot have contributed to the situation of necessity.[102] The ILC Articles leave open the possibility that compensation may still be due for "material loss" even where the necessity defence is successful,[103] though it remains unclear under what conditions this would occur.[104]

45. Some IIAs include necessity defences in non-precluded measures provisions or essential security exception clauses. Whether these provisions have the same scope and effect as the customary international law defence of necessity remains disputed.[105] These clauses and the necessity defence were widely discussed in the arbitration cases concerning Argentina's Emergency Law, which was enacted in response to the country's financial crisis in the early 2000s. Tribunals were split in their interpretation, with most rejecting Argentina's defence,[106] and a few considering that

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[93] *CME v. Czech Republic*, Final Award, 14 March 2003, para. 303.

[94] *William Ralph Clayton, William Douglas Clayton, Daniel Clayton and Bilcon of Delaware, Inc. v. Government of Canada*, PCA Case No. 2009-04, Award on Damages, 10 January 2019, para. 204; *Cairn Energy PLC and Cairn UK Holdings Limited v. The Republic of India*, PCA Case No. 2016-07 (Cairn Energy v. India), Final Award, 21 December 2020, para. 1887.

[95] Marboe, p. 55.

[96] *Iran v. United States*, paras. 1797–1798.

[97] *Southern Pacific Properties (Middle East) Limited v. Arab Republic of Egypt*, ICSID Case No. ARB/84/3 (SPP v. Egypt), Award, 20 May 1992, para. 172.

[98] *AIG Capital Partners, Inc. and CJSC Tema Real Estate Company Ltd. v. The Republic of Kazakhstan*, ICSID Case No. ARB/01/6, Award, 7 October 2003, para. 10.6.4(5).

[99] *Hydro Energy 1 S.à r.l. and Hydroxana Sweden AB v. Kingdom of Spain*, ICSID Case No. ARB/15/42, Award, 5 August 2020, para. 117.

[100] *MTD v. Chile*, Decision on Annulment, 21 March 2007, para. 101; *STEAG v. Spain*, para. 795; *UAB v. Latvia*, para. 197; *Caratube v. Kazakhstan II*, para. 1192; *Occidental v. Ecuador II*, para. 670.

[101] ARSIWA, article 25(1); Ripinsky/Williams, p. 339.

[102] ARSIWA, article 25(2)

[103] ARSIWA, article 27(b); ILC Commentary, article 27, comments 1, 4.

[104] F. Paddeu, "Circumstances Precluding Wrongfulness", in *Max Planck Encyclopedia of Public International Law*, paras. 22–29.

[105] Ripinsky/Williams, p. 340.

[106] *El Paso v. Argentina*, para. 665; *CMS v. Argentina*, para. 331; *Sempra Energy International v. The Argentine Republic*, ICSID Case No. ARB/02/16, Award, 28 September 2007, para. 346.

it met the requirements under customary international law or of the treaty provisions.[107]

46. By its nature, the necessity defence could protect a broad range of interests that are often implicated in investment disputes. Indeed, it has already been invoked in cases concerning the military[108] as well as protection of the environment and public health.[109] However, its narrow interpretation by tribunals to date has largely limited its application.

47. Compliance with local law: It is common for IIAs to limit treaty protection to investments established in compliance with local law. An investor's compliance with local laws can be relevant at all stages of the proceedings, including quantum. For example, a tribunal may lack jurisdiction if the investor violated local law at the time the investment was made,[110] or it may reject a merits claim if it finds that the State's measure was a legitimate response to an investor's unlawful conduct.[111] Non-compliance with local law may also be relevant to the calculation of damages, for instance, in the context of contributory fault (see paras. 40–41 above).[112]

48. Some first-generation IIAs contain provisions requiring compliance with local law, which tribunals have routinely interpreted as only excluding investments which were *established* in violation of local law.[113] Even absent an explicit legality requirement, some tribunals have held that IIA protection should not be available to investments made illegally.[114] Some new model IIAs go further by encouraging investors to comply with international norms and industry standards, such as principles of corporate social responsibility, corporate governance, human rights principles, and environmental standards. To clarify the applicability of these norms and standards to investors, some IIAs have opted to directly impose the requirements on investors, while others encourage investors to adopt them in their practices and internal policies, or require investors to comply with domestic laws and regulations including on human rights, environmental protection, and labour laws.

49. Prohibition against granting speculative damages: Consistent with the standard of proof (see paras. 20–22 above), it is a settled principle under international law that States may not be ordered to pay compensation for speculative damages.[115] Tribunals' rejections of speculative damages have manifested in several ways. In line with the full reparation principle, tribunals have only awarded damages for actual losses, not hypothetical harm.[116] For instance, the *Mobil (I)* tribunal refused to grant damages which it considered not ripe, finding that the investors' projected loss had not yet

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[107] *LG&E v. Argentina*, paras. 258–259; *Continental Casualty Company v. Argentine Republic*, ICSID Case No. ARB/03/9, Award, 5 September 2008, para. 265.

[108] *AAPL v. Sri Lanka*, paras. 63–64.

[109] *Michael Anthony Lee-Chin v. Dominican Republic*, ICSID Case No. UNCT/18/3, Final Award, 6 October 2023, para. 265.

[110] *Alvarez and Marin Corporation S.A. v. The Republic of Panama*, ICSID Case No. ARB/15/14, Award, 12 October 2018, para. 135; *Cairn Energy v. India*, para. 709.

[111] *Bear Creek v. Peru*, para. 335; *Worley International Services Inc. v. Republic of Ecuador*, PCA Case No. 2019-15, Final Award, 22 December 2023, para. 314; *Hesham Talaat M. Al-Warraq v. The Republic of Indonesia*, Final Award, 15 December 2014, para. 645.

[112] *Copper Mesa v. Ecuador*, paras. 6.99–6.102; *Occidental v. Ecuador II*, paras. 679–680, 687.

[113] *Khan Resources v. Mongolia*, Decisions on Jurisdiction, 25 July 2012, paras. 383–384; *Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v. The Argentine Republic*, ICSID Case No. ARB/07/26, Decisions on Jurisdiction, 19 December 2012, para. 260; *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, Decisions on Jurisdiction, 21 December 2012, para. 257, citing *Gustav F.W. Hamester GmbH & Co. KG v. Republic of Ghana*, ICSID Case No. ARB/07/24, Award, 18 June 2010, para. 96.

[114] *Fraport AG Frankfurt Airport Services Worldwide v. Republic of the Philippines (II)*, ICSID Case No. ARB/11/12, Award, 10 December 2014, para. 332; *SAUR International S.A. v. Argentine Republic*, ICSID Case No. ARB/04/4, Decision on Jurisdiction and Liability, 6 June 2012, para. 308.

[115] *Amoco International Finance Corporation v. The Government of the Islamic Republic of Iran*, No. 310-56-3, Partial Award, 14 July 1987, IUSCT, para. 238; M. Kantor, Valuation for Arbitration: Compensation Standards, Valuation Methods and Expert Evidence (2008), p. 71.

[116] ILC Commentary, article 36, comment 27; *Chorzów Factory*, at p. 57.

materialized at the time of the arbitration.[117] The tribunal held that it was, however, possible for the investors to claim compensation in a new arbitration for those losses.[118] Likewise, tribunals have been reluctant to award future lost profits unless an anticipated income stream could be shown with reasonable certainty. This scenario arises in the context of damages claims calculated based on the discounted cash flow model and may result in their rejection (see paras. 53–55 below).

50. In sum, there are several defences that States can invoke in investment disputes. These defences are not typically set out in IIAs, particularly in so-called first-generation IIAs, but are rather drawn from customary international law, general principles of international law, or arbitral practice. In that context, tribunals should make greater use of the parties' experts in calculating reductions in damages based on contributory fault or failure to mitigate, to promote greater rigor and economic precision in their awards.

Recommendations

Tribunals should assess defences that aim to limit compensation. Where contributory fault or failure to mitigate is established, tribunals should assess the damages accordingly. Tribunals should also ensure that damages reflect actual (not speculative) harm and apply a high standard of proof for lost profits and future earnings.

Tribunals should consider the investor's compliance with local law and relevant international norms, not only at the jurisdictional and merits stages, but also at the quantum stage.

Tribunals should be mindful of equitable principles and proportionality principles in assessing damages, taking into account factors such as the economic situation of the respondent States, the position of the claimants, and other relevant circumstances.

F. Valuation methods

51. Tribunals have relied on a range of forward-looking or backward-looking valuation methods to determine the FMV of an investment.[119] Forward-looking methods focus on the asset's profit-making potential and can involve either an income-based or market-based approach.[120] Backward-looking methods, on the other hand, take an asset-based approach and focus on the historical value of the assets.

52. Determination of the appropriate valuation method is fact-specific and usually depends on a range of factors, including the sector or industry of the investment, the type of asset, the stage of the project's development, and the quality and quantity of information available. Notably, each valuation method may produce a different result, and tribunals are therefore tasked with selecting the one that most accurately reflects the FMV of the investment. The goal is to place the investor in a position equivalent to the situation it was in at the time of the unlawful act.[121] It is therefore good practice for experts to be instructed to use multiple valuation methods when ascertaining

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[117] *Mobil Investments Canada Inc. and Murphy Oil Corporation v. Government of Canada (I)*, ICSID Case No. ARB(AF)/07/4, Decision on Liability and Principles of Quantum, 22 May 2012, paras. 469–473; *PJSC DTEK Krymenergo v. Russian Federation*, PCA Case No. 2018-41, Award, 1 November 2023, paras. 841–842.

[118] This option was in fact exercised by one of the investors. Following the tribunal's rejection of Canada's jurisdictional objections based on a time bar and *res judicata*, the parties subsequently settled the case: *Mobil Investments Canada Inc. v. Canada (II)*, ICSID Case No. ARB/15/6, Award, 4 February 2020.

[119] Ripinsky/Williams, p. 193; A/CN.9/WG.III/WP.220, paras. 20–26.

[120] C.L. Beharry and E. Méndez Bräutigam, "Damages and Valuation in International Investment Arbitration" (Beharry/Bräutigam), in *Handbook of International Investment Law and Policy*, J. Chaisse, L. Choukroune, S. Jusoh (eds.) (2021), pp. 1438–1439.

[121] Wälde/Sabahi, pp. 1064–1065.

damages.[122] A wide difference may result from certain assumptions being unsubstantiated, which would warrant an explanation from the parties.

1. Income-based approach

53. An income-based approach values an asset by reference to its future revenue-generating potential. The most commonly used income-based approach is the discounted cash flow (DCF) method, which calculates the present-day value of the business' anticipated cash flows.[123] In short, the DCF method predicts the future cash flows of the business and applies a discount rate to account for the time value of money and factors in the risk associated with investing in a State.[124] The discount rate is normally a significant area of disagreement between the damages experts and it can impact the final result considerably.[125] The discount rate should reflect the actual level of risk to which the investment was subject before the unlawful act.[126] In this regard, whether the country risk premium should be included as a general expropriation risk is debatable. On one hand, investors should be shielded from a State's propensity to expropriate, and the State should not be able to benefit from its own wrongdoing.[127] On the other hand, the FMV should reflect what a willing buyer in the market would have taken into account, including the general risk of being expropriated.[128] From a practical perspective, it can be empirically difficult to isolate or calculate the extent to which this factor is reflected in the country risk premium.[129]

54. The DCF method is a highly sensitive valuation tool, where slight changes in the input can significantly affect the result.[130] Its reliability, therefore, varies depending on the quantity and quality of information available, for example, regarding the assets' performance, business expenditures, market conditions, financing, competitive forces, and industry outlook.[131] It is important, therefore, that the parameters be substantiated with reliable evidence and that the assumptions be reasonable and realistic. Tribunals have been reluctant to apply DCF valuations where claimants fail to establish the future profitability of their asset with a sufficient degree of certainty,[132] for instance, where the company is not a going concern or lacks an

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[122] *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2 (Crystallex v. Bolivarian Republic of Venezuela), Award, 4 April 2016, paras. 916–918; *Rusoro Mining v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/12/5 (Rusoro v. Bolivarian Republic of Venezuela), Award, 22 August 2016, paras. 787–790; *Windstream Energy v. Canada*, PCA Case No. 2013-22 (Windstream Energy v. Canada), Award, 27 September 2016, para. 481; *Guris et al. v. Syrian Arab Republic*, ICC Case No. 21845/ZF/AYZ, Final Award, 31 August 2020, para. 338; *Mason Capital L.P. and Mason Management LLC v. Republic of Korea*, Case No. 2018-55, Final Award, 11 April 2024, para. 1034; Marboe, pp. 50–51.

[123] Beharry/Bräutigam, p. 1439.

[124] Marboe, p. 47; Beharry/Bräutigam, p. 1439.

[125] Beharry/Bräutigam, p. 1439.

[126] Wälde/Sabahi, p. 1077.

[127] *Gold Reserve v. Bolivarian Republic of Venezuela*, para. 814.

[128] *Saint-Gobain Performance Plastics Europe v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/12/13, Decision on Liability and the Principles of Quantum, 30 December 2016, paras. 717–723.

[129] J. Searby, "Measuring Country Risk in International Arbitration", in *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration*, Beharry (ed.) (2018), pp. 255–256.

[130] *OI European Group B.V. (OIEG) v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/11/25, Award, 10 Mar 2015, para. 663; *Eiser Infrastructure Limited and Energía Solar Luxembourg S.à r.l. v. Kingdom of Spain*, ICSID Case No. ARB/13/36 (Eiser v. Spain), Award, 4 May 2017, para. 465; ILC Commentary, article 36, comment 26.

[131] Beharry/Bräutigam, p. 1439.

[132] *Vivendi v. Argentina I*, para. 8.3.5; *SPP v. Egypt*, para. 188; *Metalclad Corporation v. The United Mexican States*, ICSID Case No. ARB(AF)/97/1 (Metalclad v. Mexico), Award, 30 August 2000, para. 120; *NextEra Energy Global Holdings B.V. and NextEra Energy Spain Holdings B.V. v. Kingdom of Spain*, ICSID Case No. ARB/14/11, Decision on Jurisdiction, Liability, and Quantum Principles, 12 March 2019, para. 647.

established record of profitability.[133] The ILC Commentary also notes that sufficient certainty is normally achieved "by virtue of a contractual arrangement or, in some cases, a well-established history of dealings."[134]

55. To ensure that monetary damages are awarded on the basis of satisfactory evidence and are not inherently speculative, tribunals should only apply the DCF method when certain conditions are met. Useful criteria for determining whether the DCF method is appropriate include: (i) the existence of a historical record of financial performance; (ii) the reliability of projected future cash flows; (iii) the presence of an established market for the investment; (iv) the feasibility of calculating a meaningful weighted average cost of capital; and (v) whether the investment operates in a regulated market.[135] To further minimize the speculations in applying the DCF model, tribunals could require party-appointed experts to identify and justify the key assumptions underlying their evaluations. Alternatively, tribunals could appoint their own experts or advisors to assess these assumptions, and their impact on the damages' calculation.

2. Market-based approach

56. Market-based valuation methods infer an asset's value from publicly available information pertaining to similar publicly traded companies or transactions.[136] This is a forward-looking approach as it reflects the market's perception of the investment's income-making prospects.[137] Quantum experts rely on several sources of information to infer the market value of an asset, most commonly by reference to comparable companies or transactions (comparables method), or to data points involving the investment (valuation indicators in the asset).

57. Comparables method: This method values the asset in question based on the value of companies holding similar assets or arm's length transactions involving comparable assets or enterprises on or near the valuation date, and makes adjustments to account for any reasonable differences.[138] Tribunals have generally only relied on comparable companies where there is a sufficient number of reasonably similar businesses in terms of their product, size, geography, and financial profile.[139] Valuations based on comparable transactions are, however, less common because sales information is not readily available. This method has historically been adopted in cases where it is the standard method for valuing an asset in the industry (e.g. real estate); it reflects an arm's length transaction, the assets share similar characteristics, and the method provides the most reliable valuation evidence.[140]

58. While the comparables method provides a quick and easy data point, it ultimately reflects the intrinsic value of comparable assets that may not apply to the investor's assets. As a result, the comparables method is vulnerable to the survivorship bias inherent in comparing the asset's value to that of established projects with a long history of profits. Particularly for early-stage projects, there is a risk that the investment will not achieve the returns of the comparable companies that

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[133] *Deutsche Telekom AG v. Republic of India*, PCA Case No. 2014-10, Final Award, 27 May 2020, paras. 200, 209; *Rand Investments Ltd. and others v. Republic of Serbia*, ICSID Case No. ARB/18/8, Award [Redacted], 29 June 2023, paras. 684–687.

[134] ILC Commentary, article 36, comment 27, citing Washington, D.C., United States Government Printing Office, *Damages in International Law*, volume III (1943), p. 1837.

[135] *Rusoro v. Bolivarian Republic of Venezuela*, para. 759.

[136] Beharry/Bräutigam, p. 1440; Beharry, p. 205.

[137] Ibid.

[138] Wälde/Sabahi, pp. 1062–1063.

[139] *Crystallex v. Bolivarian Republic of Venezuela*, para. 901; *CMS v. Argentina*, para. 412; *Khan Resources v. Mongolia*, para. 399; S. P. Pratt and A. V. Niculita, *Valuing a business: the analysis and appraisal of closely held companies*, 5th edition, (2008) (Pratt/Niculita), p. 262; Wälde/Sabahi, pp. 1070–1071.

[140] Pratt/Niculita, p. 310; *Vestey Group Ltd v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB/06/4 (Vestey v. Bolivarian Republic of Venezuela), Award, 15 April 2016, paras. 352–354; *Windstream Energy v. Canada*, para. 476; *Occidental v. Ecuador*, paras. 787–788; *Crystallex v. Bolivarian Republic of Venezuela*, para. 909; Wälde/Sabahi, p. 1071.

were successful in the market. To adjust for this uncertainty, tribunals could apply a discount factor or compare projects at similar stages of progress.

59. Additionally, some tribunals have been sceptical about the method due to the high degree of subjectivity involved in selecting comparable companies or transactions. In light of these concerns, tribunals have tended to use comparables as a secondary check rather than as a primary method of valuation.[141]

60. Valuation indicators in the asset: Another market-based method looks at indicators of value for the investment, such as its stock prices, past transactions, or past purchase offers. This method can be suitable, for example, where the investment is the only asset in a publicly traded company. In that case, the value of the asset can be inferred by looking at its market capitalization on a given date. However, this method may be less instructive when the company's shares are not traded in sufficient volumes or with sufficient frequency. Likewise, where the factual scenario does not provide for a "clean" valuation date, as is often the case with indirect and creeping expropriations, this approach may not reflect the investor's actual losses.[142] Contemporaneous arm's-length offers to purchase or transactions involving the asset can provide meaningful evidence of the asset's value, particularly when they occur near the valuation date. For example, the tribunal in *Kahn Resources v. Mongolia* relied on a contemporaneous purchase offer, which it adjusted to account for the State's wrongful action.[143]

3. Asset-based approach

61. The asset-based approach is a backward-looking valuation method that determines the value of a business by summing its tangible and intangible assets. The most common asset-based approach calculates investment-related expenditures incurred prior to the wrongful act. To be awarded damages on this basis, the investor must show that the expenses were: (i) linked to the investment; (ii) made by the investor; (iii) not manifestly unreasonable; and (iv) supported by sufficient evidence.[144] Other asset-based methods assess the enterprise's book value (total net assets minus total liabilities net of accumulated depreciation, depletion, amortization, and impairment),[145] the liquidation value (estimated price under conditions of liquidation),[146] and the replacement value (amount necessary to replace assets in their actual condition prior to the valuation date with similar assets).[147]

62. Asset-based approaches, like investment costs, involve simpler calculations that rely on more readily available information as compared to the forward-looking valuation methods. Because these figures are based on data generated for non-litigation purposes, they are also less susceptible to potential bias.[148] This also means that damages computed using these methods can be ascertained with a relatively high degree of certainty. While simplicity and unambiguity are key advantages, asset-based

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[141] *Gold Reserve v. Bolivarian Republic of Venezuela*, para. 832; PwC, "International arbitration damages research: Closing the Gap between Claimants and Respondents", *Journal of Damages in International Arbitration*, volume 3, No. 1 (PwC) (2015), p. 8.

[142] *Crystallex v. Bolivarian Republic of Venezuela*, paras. 889–895; *Rusoro v. Bolivarian Republic of Venezuela*, paras. 767–769, 789.

[143] *Khan Resources v. Mongolia*, paras. 419–420; *OAO "Tatneft" v. Ukraine*, PCA Case No. 2008-8, Award on the Merits, 29 July 2014, paras. 608–609 (involving share transactions).

[144] Ripinsky/Williams, pp. 266, 271; Beharry/Bräutigam, p. 1443.

[145] *Libyan American Oil Company v. The Government of the Libyan Arab Republic*, Ad hoc Arbitration, Award, 12 April 1977, para. 320; *Enron Corporation and Ponderosa Assets, L.P. v. Argentine Republic*, ICSID Case No. ARB/01/3, Award, 22 May 2007, para. 382; *Tidewater v. Bolivarian Republic of Venezuela*, para. 165.

[146] *CME v. Czech Republic*, Final Award, para. 612.

[147] *Petrolane, Inc., et al. v. Islamic Republic of Iran et al.*, IUSCT Case No. 131, Award, 14 August 1991, paras. 106–108; *Vestey v. Bolivarian Republic of Venezuela*, paras. 400–414, 424–426; *Antoine Abou Lahoud and Leila Bounafeh-Abou Lahoud v. Congo*, ICSID Case No. ARB/10/4, Award, 7 February 2014, para. 572.

[148] Wälde/Sabahi, p. 1072.

approaches may undercompensate an investor whose asset was highly profitable or overcompensate a claimant whose asset is worth less than its investment costs.[149]

63. Tribunals are likely to resort to a cost-based valuation when: (i) the project is not yet in the production phase; (ii) there is an insufficient basis to estimate future cash flow projections without being speculative; (iii) the company is not a going concern and future income and costs are uncertain; and (iv) there is a significant disparity between the investments made and the compensation claimed.[150] Investment costs should also be made net of recovery (i.e. accounting for any sums recovered).

64. It is still under debate whether damages should be limited to the amount invested by a claimant or whether they can be calculated based on expected future cashflows. At the heart of this debate are concerns about excessive damages claims and the need to avoid speculative outcomes. Relying solely on an investor's investment costs may not fully address concerns about inflated awards, as this approach can still result in high damages claims particularly for early-stage, capital-intensive projects where the initial costs can exceed the market value of the project at the time of the expropriation. Tribunals should instead be guided by relevant factors to determine the most suitable valuation method in each case. The choice of methodology requires examining the information available, the likelihood of the investment's profitability, and the nature of the harm suffered.

Recommendations

Tribunals should invite parties to focus their valuation and supporting evidence on a method that corresponds to the nature of the investment, its performance record, the stage of development, and the nature of the harm suffered.

Where the investment is ongoing and income-generating, tribunals should invite the parties to justify the use of the DCF method by demonstrating that the following conditions are met: (i) a historical record of past performance; (ii) reliable projection of future cash flows; (iii) an established market for the investment; (iv) the feasibility of calculating a meaningful weighted average cost of capital; and (v) operation of the investment in a regulated market. Tribunals should make clear that the DCF method is appropriate only when sufficiently robust factual and financial foundations are established.

Tribunals should invite parties to rely on market-based methods, where the investment is mature and has a proven record of going concern, while emphasizing the need for transparency and objectivity in selecting the data and assumptions underlying the valuation. Caution should be exercised regarding subjective or selective data.

Tribunals should clarify that cost-based valuations are more appropriate where the following conditions are met: (i) the project is not yet in the production phase; (ii) there is an insufficient basis to estimate future cash flow projections without being speculative; (iii) the company is not a going concern and future income and costs are uncertain; and (iv) there is a significant disparity between the investments made and the compensation claimed.

G. Interest

65. Interest determinations are increasingly regarded as a key component in assessing damages. Most IIAs, however, only mention interest in the context of lawful expropriation. Similarly, article 38(1) of ARSIWA affords tribunals broad discretion, stating that interest "shall be payable when necessary to ensure full reparation".[151] As

[149] Wälde/Sabahi, p. 1072; Beharry/Bräutigam, p. 1443.
[150] *SAS v. Plurinational State of Bolivia*, para. 859.
[151] C.L. Beharry and J.P. Hugues, "Article 38: The Treatment of Interest in International Investment Arbitration", *ICSID Review*, volume 37, issue 1–2 (2022), pp. 339–358.

a result, differing practices have developed with regard to the application of interest. The main reason for this divergence is the differing views of tribunals on the purpose of interest. In legal terms, interest provides "compensation for the loss of the use of that sum during a period within which the payment thereof continues to be withheld."[152] In economic terms, the function of interest is to bring the value of money forward in time.

66. While typically framed from the perspective of investors, interest is of equal importance to States, as it is not only a component of damages that may be payable to an investor, but as States may also seek interest on arbitration costs and legal fees if it prevails in the proceedings.[153]

1. Pre-award interest

67. Period Covered: Interest is applied from a specific date until the date of the award (pre-award interest) and from that date until payment (post-award interest). This is reflected in article 38(2) of ARSIWA which states that "[i]nterest runs from the date when the principal sum should have been paid until the date the obligation to pay is fulfilled." Pre-award interest compensates for delayed payment of sums owed due to the breach, while post-award interest encourages timely payment.

68. The starting date for calculating damages can vary. Tribunals have used the date of the breach,[154] the commencement of arbitration,[155] or the date of the award.[156] In practice, interest is generally applied from the date of breach, thereby preventing gaps between this period and the award date.[157] However, complications can arise when multiple treaty violations are alleged with different facts. In such circumstances, a tribunal may use different start dates for different measures or injuries suffered.[158] As for the end date, this is normally the date of payment.

69. Interest Rate: In the absence of guidance in ARSIWA[159] and IIAs, tribunals have adopted three main approaches on interest rates. First, the borrowing costs of the claimant investor[160] or respondent State[161] are routinely considered by tribunals. Alternatively, tribunals may apply inter-bank benchmark rates commonly used in financial markets. Inter-bank rates are applied in lieu of actual rates to be paid by an investor to avoid outcomes dependent on the investor's creditworthiness. Some tribunals have similarly rejected the sovereign borrowing rate,[162] premised on the

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[152] *Illinois Central Railroad Co. (U.S.A.) v. United Mexican States*, General Claims Commission, Award, 6 December 1926, para. 5.

[153] *Gabriel Resources Ltd. and Gabriel Resources (Jersey) v. Romania (I)*, ICSID Case No. ARB/15/31, Award, 8 March 2024, para. 1358(2)(b)–(c); *Peteris Pildegovics and SIA North Star v. Kingdom of Norway*, ICSID Case No. ARB/20/11, Award, 22 December 2023, para. 626(3)–(5); *Marko Mihaljevic v. Republic of Croatia*, ICSID Case No. ARB/19/35 (Mihaljevic v. Croatia), Award, 19 May 2023, para. 152(b)–(c).

[154] *MTD v. Chile*, Award, para. 247; *AAPL v. Sri Lanka*, para. 114; *Metalclad v. Mexico*, para. 128.

[155] *SwemBalt AB, Sweden v. The Republic of Latvia*, UNCITRAL, Decision by the Court of Arbitration, 23 October 2000, para. 47; *Amco v. Indonesia*, Award, 20 November 1984, para. 281.

[156] *Arif v. Moldova*, para. 618; *ADC v. Hungary*, paras. 520, 522.

[157] M. Beeley, "Approaches to the Award of Interest", in *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration*, Beharry, (ed.) (2018), p. 393.

[158] *Strabag SE v. Libya*, ICSID Case No. ARB(AF)/15/1, Award, 29 June 2020, para. 964; *Siemens v. Argentina*, para. 397.

[159] ILC Commentary, article 38, comment 10.

[160] *Karkey Karadeniz Elektrik Uretim A.S. v. Islamic Republic of Pakistan*, ICSID Case No. ARB/13/1, Award, 22 August 2017, paras. 990, 998; *Mobil Exploration and Development Inc. Suc. Argentina and Mobil Argentina S.A. v. Argentine Republic*, ICSID Case No. ARB/04/16, Award, 25 February 2016, para. 292.

[161] *Eiser v. Spain*, paras. 475–478; *Bear Creek v. Peru*, paras. 714–716.

[162] *Tidewater v. Bolivarian Republic of Venezuela*, para. 205; *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, PCA Case No. 2005-04/AA227, (Yukos Universal v. Russian Federation), Award, 18 July 2014, para. 1679.

coerced loan theory which treats the claimant as an unwilling creditor of the State.[163] This approach has been criticized due to its focus on the State's unjust enrichment instead of the investor's loss, and the potential effect of unduly penalizing developing States.

70. Second, rates based on an investor's return on investment are grounded in the theory that the claimant would have invested the deprived funds and earned a return. This approach can give rise to wide-ranging rates, depending on whether the rate is based on low-risk investments, such as treasury bills[164], inter-bank rates (often with a surcharge applied), or by reference to the anticipated return on the claimant's investment.[165] Given the uncertainty surrounding a claimant's potential return on investment, some tribunals have chosen to use a risk-free rate.[166]

71. Third, fixed rates have been used on the basis of national law, contractual provisions, or prevailing economic conditions, yet with limited explanation.[167] When adopting this approach, tribunals should ensure that the rate is based on both economically and legally sound grounds.

72. According to a study, the most frequently applied rates are inter-bank rates and risk-free rates.[168] Tribunals should explain the rationale for selecting a particular interest rate (and any surcharge) to ensure it is consistent with the principle of full reparation. The applicable rate should also be denominated in the same currency as the damages sum awarded.[169]

73. Modality of Calculation: Traditionally, interest was calculated on a simple basis on the principal sum.[170] This is reflected in ARSIWA[171] but has been receding over the past 25 years, with some tribunals continuing to use simple interest.[172] It is said that compounding interest more accurately reflects the time value of money and mirrors real-world financial transactions.[173] Despite its prevalence in investment arbitration, it is notable that this practice is not prevalent in other areas of international dispute resolution, including international commercial arbitration.[174]

74. From a practical standpoint, commercial interest rates are often designed with compounding frequencies (e.g. annually, semi-annually, quarterly, monthly, or daily) in mind and a different compounding period may distort the intended rate. Tribunals should, therefore, ensure that if a certain rate is adopted, it is properly applied.

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[163] M.S. Knoll and J.M. Colon, "The Calculation of Prejudgment Interest", in *Public Law and Legal Theory Research Paper Series*, Research Paper No. 06–21 (2005).

[164] *Siemens v. Argentina*, para. 396; *ADM v. Mexico*, Award, 21 November 2007, para. 300.

[165] *SAUR International v. Argentina*, ICSID Case No. ARB/04/4, Award, 22 May 2014, p. 430; *Vivendi v. Argentina I*, para. 9.2.8.

[166] *Sistem Mühendislik Inşaat Sanayi ve Ticaret A.Ş. v. Kyrgyz Republic*, ICSID Case No. ARB(AF)/06/1, Award, 9 September 2009, para. 194.

[167] *Sunlodges v. Tanzania*, para. 502; *AAPL v. Sri Lanka*, para. 115 (applying 10 per cent); *Mr. Franz Sedelmayer v. The Russian Federation*, SCC, Arbitration Award, 7 July 1998, para. 466.

[168] PwC, International Arbitration Damages Study (2023), p. 10.

[169] *ADM v. Mexico*, para. 300; *S.D. Myers v. Canada*, Second Partial Award, para. 304; *Odyssey v. Mexico*, Decision on Interpretation of the Award, 16 December 2024, para. 57.

[170] ILC Commentary, article 38, comment 8; M.M. Whiteman, *3 Damages in International Law* (1943).

[171] ILC Commentary, article 38, comment 9.

[172] *Glencore v. Colombia II*, para. 361(3); *Bank Melli Iran and Bank Saderat Iran v. The Kingdom of Bahrain*, PCA Case No. 2017-25, Final Award, 9 November 2021, para. 836(c); *OperaFund Eco-Invest SICAV PLC and Schwab Holding AG v. Kingdom of Spain*, ICSID Case No. ARB/15/36 (OperaFund and Schwab Holding v. Spain), Award, 6 September 2019, para. 746(5).

[173] F.A. Mann, "Compound Interest as an Item of Damage in International Law", *UC Davis Law Review*, volume 21 (1988), p. 585.

[174] PwC, *Damages awards in international commercial arbitration: A Study of ICC awards* (2020), p. 20.

2. Post-award interest

75. The treatment of post-award interest is similar to that of pre-award interest.[175] In fact, some tribunals do not differentiate between the two when ordering interest until the date of payment. Others distinguish pre- and post-award interest, varying not only the start date but also the interest rate and/or mode of calculation. Typically, post-award interest starts from the award date, although some tribunals allow a grace period for States to take internal steps to arrange for payment.[176] This reflects good practice given the reality that most States cannot effectuate payment immediately. As for interest rates, while tribunals have used the same rate as pre-award interest, it can be higher for post-award interest.[177] Similarly, calculation methods differ with some tribunals choosing to apply only compound post-award interest[178] or use shorter compounding frequencies.[179] These variations acknowledge the distinct purpose served by post-award interest, which is to incentivize prompt payment.

76. Interest can significantly impact the total damages awarded, which can sometimes be equivalent to or exceed the principal sum.[180] The absence of rules has afforded tribunals wide discretion on interest, resulting in a lack of uniformity on key components such as the rate, the period covered, and the mode of calculation. And there is divergence in viewpoints on these issues.

Recommendations

Tribunals should clearly understand and articulate the purpose and legal basis of awarding interest.

Tribunals should define and justify the start date for interest accrual and the time period.

Tribunals should select an interest rate that is transparent, reasonable, and consistent with the principle of full reparation.

Tribunals should specify the mode of interest calculation and, where compound interest is applied, clarify the compounding frequency.

Tribunals should be mindful of the significant impact interest can have on the final amount awarded, which may equal or exceed the principal sum, and of the principle of proportionality.

H. Allocation of costs

77. Apart from monetary claims for damages, tribunals must also decide how to allocate the parties' costs between them. These costs include the arbitration costs, such as the administrative fees of the arbitral institution and the tribunal's fees and expenses, as well as the parties' legal costs, including counsel and expert fees, translation costs, and any travel-related expenses. Costs can form a significant part of an award, with investors' costs averaging $6.4 million and State's costs averaging $4.7 million.[181]

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[175] *ADM v. Mexico*, para. 304(5); *PSEG v. Turkey*, para. 354(3); *MTD v. Chile*, Award, para. 253(4).

[176] *Tenaris S.A. and Talta – Trading e Marketing Sociedade Unipessoal Lda. v. Bolivarian Republic of Venezuela (I)*, ICSID Case No. ARB/11/26, Award, 29 January 2016, para. 595; *Yukos Universal v. Russian Federation*, para. 1691; *Wena Hotels Ltd. v. Arab Republic of Egypt*, ICSID Case No. ARB/98/4 (Wena Hotels v. Egypt), Award, 8 December 2000, para. 136.

[177] *Gold Reserve v. Bolivarian Republic of Venezuela*, para. 863(ii)–(iii); *Eiser v. Spain*, para. 486(d); *Maffezini v. Spain*, paras. 96–97.

[178] *OperaFund and Schwab Holding v. Spain*, para. 746(5)–(6); *CMS v. Argentina*, para. 471.

[179] *Metalclad v. Mexico*, para. 131; *Maffezini v. Spain*, paras. 96–97.

[180] *Wena Hotels v. Egypt*; *Compañia del Desarrollo de Santa Elena S.A. v. Republic of Costa Rica*, ICSID Case No. ARB/96/1, Award, 17 February 2000; *The American Independent Oil Company (AMINOIL) v. The Government of the State of Kuwait*, Final Award, 24 March 1982.

[181] M. Hodgson et al., "2021 Empirical Study: Costs, Damages and Duration in Investor-State Arbitration", p. 10; A/CN.9/WG.III/WP.153, paras. 17–21.

78. Arbitration rules generally grant tribunals broad discretion to decide on the allocation of costs.

79. Broadly, two approaches can be identified in arbitration practice: (i) the loser pays or "costs follow the event" approach, where the losing party reimburses the prevailing party for costs incurred; and (ii) the "bear your own costs" approach, where each party bears their own legal costs and shares half of the arbitration costs. Traditionally, the preferred approach in investment arbitration was for each party to bear their own costs, consonant with the practice of international courts. However, there has been a gradual shift towards the "costs follow the event" approach in recent years.[182] A hybrid of this approach is the relative success approach by which costs are apportioned based on the relative success of each party's arguments in the arbitration. However, assigning costs based on issues or phases carries practical challenges.[183]

80. Greater guidance on the allocation of costs could increase transparency, consistency, and predictability.[184] The allocation of costs can also be an effective tool to control parties' conduct during arbitral proceedings and deter frivolous claims or claims for inflated damages. In allocating costs, tribunals should also consider how the parties' behaviour impacted the costs, for example, whether the damages calculations were well supported by evidence, the analysis was clear and comprehensible rather than obstruse or overly complicated, and that the arbitration proceeded expeditiously.

Recommendation

Tribunals should allocate costs based on the applicable rules, apply it consistently, and provide reasons for the allocation.

In allocating costs, tribunals should consider the disproportionality between damages claimed and awarded, the clarity of the experts' damages analyses, the parties' conduct, and the meritoriousness of the claims.

Tribunals, in conjunction with the parties, can agree to apply certain rules on costs in the procedural order. Parties could be required to periodically report on their costs as a measure of early cost control.

[182] Hodgson et al., p. 16; *Georg Gavrilovic and Gavrilovic d.o.o. v. Republic of Croatia*, ICSID Case No. ARB/12/39, Award, 26 July 2018, para. 1316.

[183] M. Hodgson and A. Campbell, "The Allocation of Costs in Investment Treaty Arbitration", in *Contemporary and Emerging Issues on the Law of Damages and Valuation in International Investment Arbitration*, Beharry (ed.) (2018), pp. 403–404.

[184] S.D. Franck, *Arbitration Costs: Myths and Realities in Investment Treaty Arbitration* (2019), p. 187.