

Annex I. Analytical Table of Investor-State Cases (1963–2007)

A. Investment treaty cases

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|--|--|--|--|---|
| <i>BG Group Plc v The Republic of Argentina</i> , UNCITRAL, Final Award of 24 December 2007 | <u>Main measures:</u> 1) 'Emergency law' (abolition of calculation of tariffs in US dollars); 2) Abolition of tariff adjustments under the US PPI. <u>Investment:</u> 45.11% direct and indirect equity interest in MetroGas, an Argentinean gas distribution company. | Argentina-UK BIT, international law. | 1) Fair and equitable treatment; 2) Prohibition of 'unreasonable' measures. | Decrease in the market value of claimant's shareholding. |
| <i>Sempra Energy International v Argentine Republic</i> , ICSID, Decision on the Objections to Jurisdiction, 11 May 2005; Award, 28 September 2007 | <u>Measures:</u> 1) 'Pesification' (abolition of calculation of tariffs in US dollars); 2) Abolition of tariff adjustments under the US PPI; 3) Non-payment of subsidies. <u>Investment:</u> equity interest in two Argentinean gas distribution companies | Argentina-US BIT, international law, Argentine law | 1) Fair and equitable treatment; 2) Umbrella clause. | > Decrease in the market value of shares as a result of breaches; > Partial loss of a loan extended to the subsidiaries; > Unpaid subsidies; > Damage suffered due to suspension of the PPI adjustments. |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
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| <p>> CIL: Full reparation for the injury caused by the wrongful act (<i>Chorzów Factory</i>, ILC Articles);</p> <p>> The damage must be 'the consequence or proximate cause' of the wrongful act and must not be 'too indirect, remote, uncertain' and 'speculative'.</p> | <p>Difference between the FMVs of the claimant's shareholding 'without measures' and 'with measures'.</p> | <p>> Two FMVs assessed on the basis of two transactions with Metrogas's shares: prior to the measures (1998) and after the measures (2005);</p> <p>> Claimant expert's DCF valuation dismissed as 'uncertain and speculative', particularly for the 'with measures' scenario.</p> | <p>> Average rate applicable to the US Treasury 6-month certificates of deposit ('highly secure, dollar denominated, liquid and short-term instrument');</p> <p>> Compounded semi-annually;</p> <p>> From 6 January 2002 (date of promulgation of the Emergency Law) until payment.</p> | |
| <p>> CIL: Full compensation for the losses suffered by the affected party (<i>Chorzów Factory</i>, ILC Articles);</p> <p>> BIT FMV standard applied to measure the loss in the value of equity.</p> | <p>Difference in the FMV of Claimant's equity, on the same valuation date, under:</p> <p>1) No pesification scenario;</p> <p>and</p> <p>2) Pesification scenario.</p> <p>Supplemented by three other discrete elements of damage established by the Claimant.</p> | <p>> DCF method applied to establish FMV of the equity under both scenarios.</p> <p>> Date: 31 December 2001 (immediately preceding 'pesification').</p> <p>Historical damage up to that date (due to suspension of the PPI adjustments) compensated separately.</p> | <p>> Successive 6-month LIBOR rates, plus 2% annualized premium;</p> <p>> From 1 January 2002 to the date of Award;</p> <p>> Compounded semi-annually.</p> <p>> Post-Award interest not awarded because not requested in time.</p> | <p>> In the course valuation, account taken of the post-valuation-date developments (would-be impact of the crisis circumstances; 2007 agreements concluded by Argentina with the two Argentinean companies concerned);</p> <p>> Appropriate date for currency conversion (for unpaid subsidies);</p> <p>> Loan extended by Claimant <i>after</i> the first measure was included as protected investment.</p> |

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|--|--|--|---|---|
| <i>Compañía de Aguas del Aconquija SA and Vivendi Universal SA v Argentine Republic</i> , ICSID, resubmitted case, Decision on Jurisdiction, 14 November 2005; Award, 20 August 2007 | Multiple episodes of interference by Provincial Government with Claimants' rights under a water concession agreement resulting in its termination | Argentina-France BIT, international law | 1) Fair and equitable treatment; 2) Unlawful expropriation. | > Loss of the concession |
| <i>LG&E Energy Corp, LG&E Capital Corp, LG&E International Inc v Argentine Republic</i> , ICSID, Decision on Jurisdiction, 30 April 2004; Decision on Liability, 3 October 2006; Award, 25 July 2007 | <u>Measures:</u> 1) 'Pesification' (abolition of calculation of tariffs in US dollars); 2) Abolition of tariff adjustments per the US PPI <u>Investment:</u> shareholdings in three Argentine gas transportation companies | Argentina-US BIT, international law, Argentine law | 1) Fair and equitable treatment; 2) Discriminatory treatment; 3) Umbrella clause. | <u>As claimed:</u> Decrease in the market value of shares as a result of breaches. <u>As determined by the Tribunal:</u> Dividends that would have been received by the shareholders but for the breaches. |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
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| <p>> BIT standard declined due to unlawfulness of the expropriation;</p> <p>> Damages should 'compensate the affected party fully and eliminate the consequences of the state's action' (on the basis <i>Chorzów Factory</i> and ILC Articles)</p> | Fair market value of the concession | <p>> <u>Rejected</u>: DCF method.</p> <p>> <u>Adopted</u>: 'Actual investments' method.</p> <p>> <u>Date</u>: Date of expropriation (termination of concession) but post-expropriation expenses also included in compensation.</p> | <p>> 6%;</p> <p>> From the date of expropriation – for pre-expropriation investments; from a later date – for post-expropriation investments;</p> <p>> Compounded annually;</p> <p>> Until the date of payment (no separate post-Award interest).</p> | <p>> Standard of proof (lost profits): 'balance of probabilities';</p> <p>> Evidence: late evidence on alternative valuation methods not accepted;</p> <p>> Approximation of damages (on the basis of incomplete evidence);</p> <p>> Currency issue: an injured party ought not to be prejudiced by the effects of devaluation.</p> |
| <p>Full reparation for the 'actual loss' incurred 'as a result' of the wrongful acts (<i>Chorzów Factory</i>, ILC Articles, <i>Lusitania</i>, <i>Feldman v Mexico</i>)</p> | <p><u>Rejected</u>: The 'fair market value' approach (difference in the market value of shares).</p> <p><u>Adopted</u>: The amount of dividends that could have been received by the claimants but for the adoption of the measures.</p> | N/A | <p>> Rate of short-term US Treasury bills;</p> <p>> Starting from the date of the first measure;</p> <p>> Compound;</p> <p>> Post-Award interest (starting 30 days after the Award) on the same terms.</p> | <p>> Subtracted losses incurred during the period of necessity;</p> <p>> Refused to order judicial restitution (annulment of measures) as undue interference with sovereignty;</p> <p>> Refused to compensate for future damages resulting from the continuous breach as 'uncertain';</p> <p>> Affirmed claimants' right to bring further actions if they continue to suffer damages as a result of the same measures.</p> |

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|---|--|--|--|---|
| <i>Enron Corporation and Ponderosa Assets L.P. v The Republic of Argentina</i> , ICSID; Decisions on Jurisdiction, 14 January and 2 August 2004; Award, 22 May 2007 | <u>Measures:</u> 1) 'Pesification' (abolition of calculation of tariffs in US dollars); 2) Abolition of tariff adjustments under the US PPI <u>Investment:</u> shareholding in an Argentine gas transportation company | Argentina-US BIT, international law, Argentine law | 1) Fair and equitable treatment 2) Umbrella clause | Loss in the value of the shareholding; loss of revenue due to the abolition of tariff adjustments |
| <i>Siemens A.G. v The Argentine Republic</i> , ICSID, Decision on Jurisdiction, 3 August 2004; Award, 6 February 2007 | <u>Measure:</u> Unilateral termination of a contract for the provision of services to the Argentinean State; <u>Investment:</u> Contract rights held by the Claimant's wholly owned local subsidiary | Argentina-Germany BIT, international law | 1) Expropriation (unlawful) 2) Fair and equitable treatment 3) Full protection and security 4) Arbitrary measures | Total loss of the investment's value |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|---|--|--|---|---|
| <i>Chorzów Factory</i> and <i>SD Myers</i> : compensation should undo the material harm inflicted by a breach. | Difference in the 'fair market value' of the investment (shareholding in the 'going concern') before the BIT breaches and its current value. Plus an additional amount for the earlier loss of revenue (preceding the valuation date). | > DCF method for the pre-breach value; > Actual sale price for the current value; > Both results verified by the stock exchange values; > <u>Valuation date</u> – immediately preceding the date of the measure inflicting 'most serious' damage. | > 6 month average LIBOR rate plus 2%; > Starting from the pre-breach valuation date until the date of the award; > Compounded semi-annually. | > Non-relevance of historical returns of the investment; > Country risk; > Valuation methods (book value, stock market value, unjust enrichment); > Valuation of a discrete segment of a business; > Impact of the economic crisis on the amount of compensation. |
| CIL (as reflected in the ILC Articles and the <i>Chorzów Factory</i> case) due to the unlawfulness of the expropriation, interpreted to require compensation for the 'full value of investment' | Compensation for the amounts invested up to the date of the contract termination plus additional expenses and certain other damages after that date. (The claim for lost profits rejected) | > 'Book value of the costs actually incurred' (ie the historic cost of investment) > <u>Valuation date</u> – date of Award | > Average rate applicable to US six-month certificates of deposit (2.66%); > Starting from the date of expropriation (different dates for other elements of damage) up to the date of Award; > Post-Award: from 30 days after the Award until the date of full payment; > Compounded annually. | > Capitalization of interest on the amounts of the investor's loans to its subsidiary; > Compensation for unpaid invoices; > Conditional compensation for future third party claims to the subsidiary; > Audited financial statements accepted as evidence of expenses; > Return of a performance bond ordered (an element of restitution); > Award made net of taxes. |

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| <i>PSEG Global Inc and Konya Igin Elektrik Uretim ve Ticaret Limited Sirketi v Republic of Turkey</i> , ICSID, Decision on Jurisdiction, 4 June 2004; Award, 19 January 2007 | Interference, at an early stage, with a contract to build and operate a power plant (changes in the legislative environment, abusive attempt to renegotiate contractual terms, withdrawal of a Treasury guarantee) resulting in the project's termination | Turkey-US BIT, Turkish law, international law | Fair and equitable treatment | Sunk costs and alleged loss of profits |
| <i>ADC Affiliate Limited and ADC & ADMC Management Limited v The Republic of Hungary</i> , ICSID, Decision on Jurisdiction, 15 February 2005; Award, 2 October 2006 | Direct expropriation of contractual rights to operate two terminals of an airport | Hungary-Cyprus BIT, international law | Unlawful expropriation | Loss of the contract-based business |
| <i>Azurix Corp v The Argentine Republic</i> , ICSID, Decision on Jurisdiction, 8 December 2003; Final Award, 14 July 2006 | A series of measures interfering with Claimant's water concession held through a local subsidiary | Argentina-US BIT, international law | 1) Fair and equitable treatment 2) Arbitrary measures 3) Full protection and security | Loss of business based on the concession contract |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|---|--|---|--|---|
| Not expressly discussed | Compensation for the amounts expended in connection with the investment project (claims for the FMV of the investment and for the loss of profits rejected) | N/A | > 6 month average LIBOR rate plus 2%; > Starting from a <i>mean</i> date within a 7-year range up to the date of payment; > Compounded semi-annually. | > Calculation of actual expenses; > The issue of tax gross-up. |
| CIL as expressed in the <i>Chorzów Factory</i> judgment ('wipe out the consequences... and re-establish the situation...'; 'restitution in-kind' or its equivalent value) | Fair market value of the business at the time of Award (to reflect the increased value of the investment since expropriation) | DCF method applied. Date of Award adopted as an appropriate valuation date due to the unlawfulness of the expropriation. | > No pre-Award interest because valuation performed at the date of Award; > Post-Award interest at 6% p.a. until payment; > Compounded monthly. | |
| Fair market value of the investment (water concession) | > On the basis of the amount paid by Claimant for the concession but amount reduced by more than 85% due to the gross overvaluation of the concession by the investor. > Plus additional investments (capital contributions) after the purchase of the concession. > Rejected: amount covering unpaid bills and consequential (post-breach) costs. | 'Actual investment' method but with an enormous downward adjustment. <u>Valuation date</u> – where the interference has 'ripened' (but adverse effects of previous measures should be disregarded). | > Average rate applicable to US six-month certificates of deposit; > From the date of termination of the concession until the date of payment (with 60-day break after the date of Award); > Compounded semi-annually. | > Discretion in choosing the standard of compensation; > Contributory fault ('ill-informed business judgment' by investor); > Claim for unpaid bills rejected because the amounts were owed to the investor's subsidiary; > Consequential damages rejected (costs of negotiations, termination of the concession and transfer of the service); > Unjust enrichment approach rejected. |

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| <i>CMS Gas Transmission Company v The Argentine Republic</i> , ICSID, Decision on Jurisdiction, 17 July 2003; Final Award, 12 May 2005; Decision of the Application for Annulment, 25 September 2007 | Termination by Argentina of Claimant's right to calculate gas transportation tariffs in US dollars and make inflation (US PPI) adjustments, negatively affecting the value of Claimant's shareholding in Argentinean gas transportation company, TGN. | Both Argentinean and international law, with no hierarchy between the two. In the damages section applied only international law | 1) Fair and equitable treatment 2) Umbrella clause (finding on the umbrella clause subsequently annulled) | Loss in the value of the shareholding; loss of revenue due to abolition of tariff adjustments |
| <i>Petrobart Limited v The Kyrgyz Republic</i> , Arbitration Institute of the Stockholm Chamber of Commerce, Award, 29 March 2005 | Government's stay of execution of the court debt judgment and asset-stripping of a State enterprise (the debtor) depriving the claimant of the debt payment due under a gas delivery contract with the State enterprise | Energy Charter Treaty, international law | 1) Fair and equitable treatment 2) Obligation to ensure that domestic law provides measures to assert claims | Payments not received under the gas delivery contract |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
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| International law (with reference to the ILC Articles and the <i>Lusitania</i> case): compensation must cover the loss suffered by Claimant | Calculated the difference between the fair market value of the shareholding at the time of breach under two scenarios – one with breaches and the other assuming that no breach occurred | > DCF method for both scenarios; > <u>Valuation date</u> – date of the first breach. | > Average US Treasury Bill rate (2.51% for that period) > From the valuation date to the date of the payment > Simple up to 60 days after the Award, compounded semi-annually thereafter | > Giving an option to Argentina to buy the investment (shareholding) at its residual value; > Impact of the economic crisis taken into account when performing valuation (distributing the ‘cost of the crisis in a reasonable manner’); > Detailed discussion of the DCF method application; > Decision on Annulment: compensation not payable if necessity successfully invoked under the Treaty. |
| CIL: the claimant ‘shall so far as possible be placed financially in the position in which it would have found itself, had the breaches not occurred’ | > 75% of the contractual debt due under the debt judgment (reduced from 100% due to lack of certainty that the debt would have been recovered in the absence of the measures) | N/A | > Rate in accordance with Article 7.4.9 of the UNIDROIT Principles; > From the date of the original debt judgement of the Kyrgyz court up to the date of payment; > Simple. | > Causation (test – would the damages be incurred in the absence of the governmental conduct?); > ‘reasonable appreciation’ of the amount when impossible to calculate it precisely; > claim for lost profits denied as ‘insufficiently established’; > claim for legal expenses incurred in previous court and arbitral proceedings denied. |

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| <i>MTD Equity Sdn. Bhd. and MTD Chile SA v Republic of Chile</i> , ICSID, Award, 25 May 2004 | Authorities' refusal to rezone the agricultural land in contradiction to earlier assurances, thereby preventing the MTD's partially-owned local subsidiary from realizing their investment (site development) project | Chile – Malaysia BIT and international law | Fair and equitable treatment | Money invested in the project (as claimed) |
| <i>Occidental Exploration and Production Company v The Republic of Ecuador</i> , UNCITRAL, Award, 1 July 2004 | Refusal of the government to provide VAT refunds to the claimant | Ecuador-US BIT, international law | 1) National treatment 2) Fair and equitable treatment 3) Full protection and security | Non-receipt of money to which the claimant was entitled |

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| CIL: <i>Chorzów Factory</i> dictum ('wipe out all the consequences... and re-establish the situation...') | Expenditures incurred in relation to the investment project including <i>inter alia</i> capital contributions to the subsidiary as well as financial costs (debt servicing and bank guarantee fees) less the residual value of investor's shares in the Chilean subsidiary. Resultant amount reduced by 50% due to investor's contributory fault | N/A | > Annual LIBOR rate; > From the date of the breach until the date of payment; > Compound (period of compounding not specified) | > Contributory fault (MTD made an ill-informed business decision to invest and thereby contributed to the damage) – amount of damages reduced by 50%. |
| Not discussed | Compensation equal to the amounts of VAT refunds not paid by the State to the claimant before the award (VAT refunds for future periods, denied as 'contingent and indeterminate' damages) | N/A | > Rate in accordance with the Ecuadorian tax law up to the calculation date; > 2.75% from that date to the date of Award; > 4% post-Award interest; > Simple. | > Measures to avoid double recovery (order to cease national court actions and declaring them of no legal effect); > A 'conservative measure' taken to reduce compensation by 1.5%; > Refusal to grant future damages (VAT refunds) to the claimant. |

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|--|---|--|--|--|
| <i>CME Czech Republic B.V. (The Netherlands) v The Czech Republic</i> , UNCITRAL, Partial Award, 13 September 2001; Final Award, 14 March 2003 | A number of measures by Czech media regulator resulting in the claimant's local subsidiary losing its business as exclusive provider of broadcasting services to a TV station | Netherlands-Czech BIT, Czech law and international law | 1) Expropriation (indirect, unlawful) 2) Fair and equitable treatment 3) Obligation not to impair investments by unreasonable or discriminatory measures 4) Full security and protection 5) Obligation to treat investments in conformity with principles of international law | Loss of the business of the foreign-owned subsidiary (going concern) |
| <i>Nykomb Synergetics Technology Holding AB v The Republic of Latvia</i> , Arbitration Institute of the Stockholm Chamber of Commerce, Award, 16 December 2003 | Payment of lower than agreed price for electricity produced by a power plant built and operated by the foreign-owned local enterprise | Energy Charter Treaty, international law | Discriminatory measure | Less than guaranteed amounts received for the supply of energy |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|--|--|--|---|--|
| Both the BIT expropriation clause (requiring 'just compensation' amounting to the 'genuine value' of the investment) and international law interpreted to require 'full reparation' equivalent to the 'fair market value' of the expropriated investment | Fair market value of the subsidiary company (going concern) in question. | <ul style="list-style-type: none"> > Valued on the basis of the an arms-length offer to buy the company; > Supported by the DCF valuation; > Declined: valuation by stock market analysts, on the basis of past sale of shares; > <u>Valuation date</u>: the date of the last interference which led to the cessation of the business. | <ul style="list-style-type: none"> > 10% (based on Czech law); > From the date of the initiation of arbitration (not from the date of expropriation because the respondent was not 'on notice' that it owed compensation); > Simple (civil law, Czech law, international authorities and the fact that interest rate was generous enough) | <ul style="list-style-type: none"> > Causation (multiple causes and the causation tests); > Contributory fault; > Detailed reasoning and findings on valuation; > Deduction of the residual value of the company from compensation; > Separate opinion of Prof Brownlie ('appropriate compensation', State's welfare should be taken into account, reasonable rate of return, no speculative damages (short period for foreseeable profits)) |
| CIL (ILC Articles): obligation to 'make restitution, that is, to re-establish the situation which existed before the wrongful act was committed' | <ul style="list-style-type: none"> > 'Monetary restitution': award of the difference between the contractually established double tariff and 0.75 of the tariff actually paid; > Claim for future profits rejected as too uncertain and speculative. | N/A | <ul style="list-style-type: none"> > 6% ('reasonable'); > From the mean date during the period of non-payment of the double tariff up to the date of the full payment of the award; > Simple | <ul style="list-style-type: none"> > Element of specific performance (order to pay the double tariff after the award for the remainder of the contract); > Distinguished from damage to investor with damage to investor's subsidiary (awarded to investor 1/3 of the total amount) |

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|---|---|---|---|---|
| <i>Técnicas Medioambientales Tecmed, SA v The United Mexican States</i> , ICSID, Award, 29 May 2003 | Refusal to extend the license for operation of a landfill owned by foreign investor through its local subsidiaries, leading to landfill's closure | BIT and Mexican law (on valuation criteria) | 1) Expropriation (indirect; seemingly unlawful although the Tribunal was not explicit) 2) Fair and equitable treatment | Loss of the business ('going concern' with 2 years of operation) |
| <i>Marvin Feldman v Mexico</i> , ICSID, Award, 16 December 2002 | Mexico's refusal to rebate excise taxes paid on cigarettes exported from Mexico by the Mexican enterprise owned by US claimant – with the result that said enterprise went out of business | NAFTA, international law and Mexican Law | National Treatment | > Loss of a business (Claimant's submission); > Amounts of unpaid tax rebates (Tribunal's view). |
| <i>Middle East Cement Shipping and Handling Co. SA v Arab Republic of Egypt</i> , ICSID, Decision on Jurisdiction, 27 November 2000; Award, 12 April 2002 | > Decree prohibiting the importation and sale of a certain type of cement, effectively preventing the claimant from running its cement business in Egypt; > Seizure and auction sale of a ship belonging to the claimant, allegedly to cover its debt. | Egypt-Greece BIT, international law, Egyptian law | Expropriation (indirect; seemingly unlawful although the Tribunal was not explicit) | > Loss of future profits (as claimed by the claimant); > The value of the seized and auctioned ship. |

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|--|--|---|---|---|
| 'Fair market value' of the expropriated investment (BIT) | <ul style="list-style-type: none"> > Price paid for the landfill at the tender when it was bought plus additional investments made; > Lost profits for the 2 years of operation. | <ul style="list-style-type: none"> > DCF method rejected; > FMV determined on the basis of actual investments plus a limited additional amount for lost profits | <ul style="list-style-type: none"> > 6%; > From the date of expropriation up to the date of full payment; > Compounded annually | <ul style="list-style-type: none"> > Compensation in cases of multiple violations (no 'double recovery'); > Burden of proof (prima facie case); > Claim for reputational damage rejected. |
| > 'Amount of loss or damage that is adequately connected to the breach'; > The FMV standard rejected as inapplicable in non-expropriation cases | <ul style="list-style-type: none"> > On the basis of the tax rebates due (adjusted the claimant's claim downward) > Going concern value and lost profits rejected | N/A | <ul style="list-style-type: none"> > Rate and starting date – as per Mexican tax legislation; > Up to the date of full payment; > Simple. | <ul style="list-style-type: none"> > Going concern value; > Lost profits (NAFTA 3-year limitation period). |
| BIT: 'prompt, adequate and effective compensation' amounting to the 'market value of the investments affected' | <ul style="list-style-type: none"> > Lost profits (calculated on the basis of concluded contracts); > Amount representing the value of the ship; > <u>Rejected</u>: Loss of opportunity to conclude further contracts (lack of evidence); foreign employees' compensation, liquidation expenses. | Valuation of the ship – the Tribunal took a mean number between figures submitted by the parties. | <ul style="list-style-type: none"> > 6% p.a. (in view of the rates in financial markets during the relevant period) (refused to apply national law); > From the date of expropriation until the date of payment; > Compounded annually (to make compensation 'adequate and effective'). | <ul style="list-style-type: none"> > Burden of proof (in light of <i>Asian Agricultural Products v Sri Lanka</i>); > Mitigation of damages; > Loss of opportunity. |

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| <i>Pope & Talbot Inc v The Government of Canada</i> , UNCTRAL, Interim Award on Merits, 26 June 2000; Award on Merits, 10 April 2001; Award on Damages, 31 May 2002; Award on Costs, 26 November 2002 | The 'Verification review episode' (procedure initiated by the government to verify certain information provided by the investor) where by virtue of the governmental conduct, the investor's subsidiary was 'subjected to threats, denied its reasonable requests for pertinent information, required to incur unnecessary expense and disruption [...], forced to expend legal fees and probably suffer a loss of reputation in government circles.' | NAFTA, international law | Minimum standard of treatment (fair and equitable treatment) | > Loss of profits and expenses resulting from a 7-day shutdown of the three mills (Claimant); > Costs incurred due to the unlawful conduct (Tribunal) |
| <i>SD Myers, Inc v The Government of Canada</i> , UNCTRAL, Partial Award ('Merits Award'), 13 November 2000; Second Partial Award ('Damages Award'), 21 October 2002; Final Award ('Award on Costs'), 30 December 2002 | 16-month closure of the Canada-US border for exports of chemical compound preventing a Canadian subsidiary of a US investor from carrying out its business | NAFTA + international law in case of lacunae | 1) National treatment 2) Minimum standard of treatment | Lost net income stream (lost profits) during the border closure |

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|---|--|--|--|---|
| Not discussed | <ul style="list-style-type: none"> > Out of pocket expenses relating to the 'Verification Review Episode' (including accountants' and legal fees; fees and expenses incurred in lobbying efforts to counter the actions of the government); > Out of pocket expenses incurred by the investor with respect to the Interim Hearing held by the Arbitral Tribunal in relation to the 'Verification review episode'; > Rejected: loss of profits, the value of management's time | N/A | <ul style="list-style-type: none"> > 5% (reasons not provided); > From the date as sought by the investor (roughly corresponding to the time of breach) until payment in full; > Compounded quarterly. | <ul style="list-style-type: none"> > Relationship between NAFTA Articles 1116 and 1117 (damages incurred by the investor and its investment/enterprise). |
| <ul style="list-style-type: none"> > Compensation should undo the material harm inflicted by a breach of an international obligation (with reference to <i>Chorzów Factory</i>); > Rejected: 'Fair market value' standard prescribed by NAFTA in expropriation cases | <ul style="list-style-type: none"> > Accepted: Present value of the Canadian subsidiary's lost net income stream; > Rejected: out-of-pocket expenses (as subsumed by the award for the lost net income stream), goodwill (addressed when quantifying the loss of net income stream), loss of opportunity. | N/A | <ul style="list-style-type: none"> > Canadian prime rate plus 1%; > From the date of the notice of arbitration until the date of payment; > Compounded annually. | <ul style="list-style-type: none"> > Discretion in relation to compensation in non-expropriation cases; > Damages sustained outside the host state; > Relationship with remedies under other chapters of NAFTA; > Causation/foreseeability/proximity of damage; > Burden of proof; > No double recovery in case of multiple treaty breaches; > Legal costs. |

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|---|---|---|--|---|
| <i>Emilio Agustín Maffezini v The Kingdom of Spain</i> , ICSID, Decision on Jurisdiction, 25 January 2000; Award, 13 November 2000; Rectification of Award, 31 January 2001 | Order by an official of a public entity (whose actions were attributable to Spain) to transfer 30 million Spanish pesetas from the investor's bank account to the joint venture partially owned by the investor, which subsequently went bankrupt | Argentina-Spain BIT | 1) Obligation to protect the investment 2) Fair and equitable treatment | Loss of the amount irregularly transferred from the investor's account |
| <i>Metalclad Corporation v The United Mexican States</i> , ICSID, Award, 30 August 2000 | 1) Refusal to grant a municipal permit (after a federal permit had been granted) to investor's Mexican subsidiary for constructing a waste landfill ; 2) Ecological decree prohibiting the construction of a landfill on the protected area | NAFTA and applicable rules of international law | 1) Expropriation (indirect; appears unlawful although the Tribunal was not explicit) 2) Minimum standard of treatment | Loss of the planned waste landfill business |
| <i>SwemBalt Limited v The Republic of Latvia</i> , UNCITRAL, Award, 23 October 2000 | Removal of investor's ship from the berth and auctioning it | Latvia-Sweden BIT, general international law. | Unspecified violations of obligations under the BIT and under general international law. | > Loss of ship together with furnishings and equipment; > Loss of income due to inability to lease the ship. |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|--|---|---|--|--|
| Not discussed | There was no dispute regarding the transferred amount. Compensation equal to this amount | N/A | > LIBOR rate for the Spanish peseta for each annual period since the starting date of interest calculation; > From the date of breach to the date of Award; > Compounded annually; > Post-award (if not paid within 60 days): 6%, compounded monthly, from the date of the Award until payment. | |
| Fair market value of the lost investment | > On the basis of amounts actually invested by the claimant, with certain reductions; > Rejected the claim re: the negative effect on investor's own shares (remote and uncertain causal relationship). | > <u>Rejected</u> : DCF analysis due to the absence of any history of profitable operations (speculative); > <u>Adopted</u> : Investor's 'actual investment' in the project. | > 6%; > From the date 'when the State responsibility became engaged' – date of denial of the municipal permit; > Compounded annually; > Post-Award (after 45 days) – 6% compounded monthly. | > Evidence: amount of the actual investment determined on the basis of audited tax filings; > Causation (certain damages rejected as too remote and uncertain); > 'Bundling' of costs. |
| Right to compensation derived from the BIT ('prompt, adequate and effective') and from general principles of international law | > Compensation for loss of the ship; > Compensation for loss of furnishings and equipment; > Partial compensation for the loss of income (1/4 of what was claimed – discretionary) due to absence of specific evidence. | > Market value of ship established on the basis of the agreement of sale of the ship (was cancelled because ship was not released by the authorities) | > 10% (Danish law); > From the date on which Latvia was informed of the proceedings until full payment; > Not specified whether simple or compound. | |

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|---|---|--|--|--|
| <i>Wena Hotels Ltd v Arab Republic of Egypt</i> , ICSID, Decision on Jurisdiction, 29 June 1999; Award, 8 December 2000; Decision on Annulment, 28 January 2002; Decision on Application for Interpretation of Award, 31 October 2005 | Forcible taking of two hotels leased to the claimant. Subsequent interference with operating licenses for the hotels, effectively preventing the claimant from operating the hotels. | Egypt-UK BIT, international law | 1) Expropriation (indirect; unlawful) 2) Fair and equitable treatment and full protection and security | Loss of the investment (invested capital and ability to pursue the hotel business to gain profits) |
| <i>Mr Franz Sedelmayer v The Russian Federation</i> , Arbitration Institute of the Stockholm Chamber of Commerce, Award, 7 July 1998 | Seizure and expropriation of premises and property in the premises belonging to a joint venture in which claimant held 50% interest | Germany-USSR BIT | Expropriation (direct; appears unlawful although the Tribunal was not explicit) | As claimed: 1) Value of chattels contributed to JV's capital; 2) Value of seized vehicles and equipment; 3) Cost of renovating the premises; 4) Value of the lost right to use the premises; 5) Value of seized claimant's personal belongings. |
| <i>American Manufacturing & Trading Inc v Republic of Zaire</i> , ICSID, Award, 21 February 1997 | Destruction and damaging by Zairian armed forces of the property, finished goods, raw materials and other objects of value belonging to a Zairian company, partially owned by the claimant, resulting in the closure of company | Not discussed. BIT + international law applied | 1) Breach of the 'protection and security standard'; 2) Breach of the provision on losses sustained due to riots or acts of violence. | > Destruction and damage to the company's property; > Closure of the business. |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|--|---|--|--|---|
| BIT: 'prompt, adequate and effective compensation' amounting to the 'market value of the investment immediately before the expropriation.' | > <u>Rejected</u> : claims for lost profits, lost opportunities and reinstatement costs as too speculative; > <u>Adopted</u> : actual investment in the two hotels. | > <u>Rejected</u> : DCF calculation of lost profits; > <u>Adopted</u> : Investor's actual investment in the venture | > 9% (with reference to long-term government bonds in Egypt); > Starting date not specified; > Compounded quarterly; > Post-award (after 30 days): same rate and the period of compounding. | > Indirect investment (through affiliated companies) is eligible; > Discretion in the absence of financial documentation lost as a result of the breach. |
| BIT: Compensation equivalent to the actual value of the expropriated investment immediately before expropriation | Compensated: 1) Value of property contributed to the joint venture; 2) Cost of renovating the premises; 3) Value of the lost right to use the premises. | > Value of the contributed property – on the basis of invoices and transport documents; > Value of the right to use the premises – on the basis of a report done by a firm of property consultants. | Awarded pursuant to Russian law, as required by the BIT: 1) 10%; 2) From the date of submission of the statement of claim; 3) Not indicated whether simple or compound. | > Reduction of compensation for certain property and investments that served both personal and business purposes; > Use of circumstantial evidence and testimony to establish the losses incurred. |
| CIL: compensation must 'restore to [the investor] the conditions previously existing as if the event had never occurred or taken place'. It should be equal to 'the true value or the actual market value of the properties destroyed or the losses suffered'. | 'Discretionary and sovereign power' to award an 'all-inclusive' lump sum (appears to include an amount for the value of the damaged property plus an amount for the loss of profits/business opportunity) | > Value of the damaged property assessed on the basis of an expert report | > Pre-award interest subsumed by the amount of compensation; > Post-award: 7.5% from the date of award (if not paid within 60 days); > Not specified whether simple or compound | > The risk of conducting business in unstable country like Zaire should be taken into account; > Express reference to equitable principles. |

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|---|--|--|---|-------------------------------|
| <i>Southern Pacific Properties (Middle East) Ltd v Arab Republic of Egypt</i> , ICSID, Award, 20 May 1992 | Government's cancellation of an investment project (developing an international tourist complex) by an Egyptian joint venture with the 60% participation of the claimant | Egyptian law and international law (supplementary and corrective function) | Lawful expropriation | Loss of a share in a business |
| <i>Asian Agricultural Products Ltd v Sri Lanka</i> , ICSID, Award, 27 June 1990 | Destruction by Sri-Lankan security forces of a shrimp farm – the principal facility of a Sri Lankan company half-owned by the claimant, causing the company to go out of the business of cultivating and exporting shrimp. | Sri Lanka-UK BIT (plus international and domestic law where referred to (expressly or impliedly) by the BIT). As per damages – only int'l law applied by the Tribunal. | Breach of 'due diligence' obligation to afford adequate protection. | Loss of a share in a business |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|--|--|--|--|---|
| Egyptian law: 'fair compensation for the value of the expropriated investment' | Claimant's out-of-pocket expenses plus compensation for the loss of commercial opportunity | > <u>Rejected</u> : DCF method; use of past transactions with shares; > <u>Adopted</u> : out-of-pocket expenses plus loss of commercial opportunity | Under Egyptian law: > 5%; > Simple; Under international law: > From the date of the deprivation until the date of payment. | > Impact on compensation of the non-investment international law obligations (UNESCO Convention); > Adjustment for currency devaluation. |
| CIL: compensation should adequately reflect 'the full value of the investment lost as a result of said destruction and damages incurred as a result thereof' | > A reasonable price a willing buyer would pay for the shareholding, determined on the basis of the value of the company's tangible assets less global liabilities. > Considered the existence of a valuable goodwill and ability to earn profits insufficiently demonstrated and thus refused to include those in the compensation | Method for valuing tangible assets not specified | > 10% ('reasonable'); > From the date when the 'State's international responsibility became engaged' (considered date of the request for arbitration); > Not specified whether simple or compound; | > Burden of proof; > Deduction of company's liabilities from the value of assets. |

B. Non-treaty cases

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|--|---|---|--|---|
| <i>Autopista Concesionada de Venezuela, CA v Bolivarian Republic of Venezuela</i> , ICSID, Decision on Jurisdiction, 27 September 2001; Final Award, 23 September 2003 | Non-performance by the State of the concession agreement for the construction of a highway, leading to the frustration of the concession-based business of a foreign-owned local company. The contract subsequently terminated by the concessionaire. | Concession Agreement, Venezuelan Law, International Law (corrective/complementary function only) | Breach of multiple clauses of the Concession Agreement | 'Sunk' investment and alleged loss of profits |
| <i>Compañía del Desarrollo de Santa Elena, SA v The Republic of Costa Rica</i> , ICSID, Award, 17 February 2000; Rectification of the Award, 8 June 2000 | Direct expropriation (for environmental purposes) of the property known as 'Santa Elena', consisting over 30 kilometres of Pacific coastline, previously purchased by the claimant for tourism development | Costa Rican and international law concurrently, with international law prevailing | Expropriation (not clear whether lawful or unlawful) | Loss of property |
| <i>Himpurna California Energy Ltd v PT PLN (Persero)</i> , ad hoc arbitration under UNCITRAL rules, Final Award, 4 May 1999 | Indefinite suspension of the energy sales contract (ESC) after the claimant made substantial investment in developing a geothermal plant in order to provide electricity to the respondent under the ESC | Indonesian law and international law (the latter was found to be applicable pursuant to the 'tacit common position' of the parties. | Breach of contract | Loss of investments made and loss of future profits under the ESC |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|---|--|--|---|---|
| As prescribed by the concession agreement (the fair value of the assets and works, all other costs and expenses, all other loss or damages, including lost profits and <i>damnum emergens</i>) | Awarded out-of-pocket expenses incurred in connection with the concession, but denied lost profits due to their speculative nature (the project was not substantially realized) | N/A | > Average lending rate of the five principal Banks in the host country (as prescribed by the contract); > From the date of termination of the concession (later dates for post-termination costs); > Simple | > Audited financial statements of the claimant considered <i>prima facie</i> reliable; > Various types of out-of-pocket expenses discussed. |
| 'Fair market value' of the property (common ground between the parties) | 'Fair market value' of the property at the time of expropriation | > 'Approximation' based on the two appraisals effected by the parties ('splitting the baby'); > Valuation date: date of expropriation. | > Rate not specified; > From the date of expropriation; > Compound; > Post-award interest: simple, at 6%, until the date of payment | |
| Damages for breach of contract on the basis of <i>damnum emergens</i> and <i>lucrum cessans</i> | <i>Damnum emergens</i> (capital invested and expended) plus <i>lucrum cessans</i> (present value of the expected future revenue stream). The Tribunal reduced the amount of <i>lucrum cessans</i> to prevent the abuse of right by the claimant) | DCF method applied to value <i>lucrum cessans</i> (diminished to account for amortization of the original investment – to avoid double counting; amount of awarded profits proportionate to investments made – to prevent abuse of right). | Interest not discussed | > Reliance on equitable considerations; > No second-guessing about cost-effectiveness of investments made (<i>damnum emergens</i>); > Use of the abuse of right doctrine to limit the amount of damages (<i>lucrum cessans</i>); > Public nature of the respondent ('Indonesia and its people') considered when deciding to limit damages. |

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|---|--|---|--|--|
| <i>Biloune and Marine Drive Complex Ltd v Ghana Investments Centre and the Government of Ghana</i> , UNCTRAL, Award on Jurisdiction and Liability, 27 October 1989; Award on Damages and Costs, 30 June 1990 (95 ILR) | A number of measures resulting in the cessation of the project of construction of a hotel resort complex by the joint venture with claimant's equity participation | Investment agreement, law of Ghana, customary international law | Expropriation in violation of the investment agreement (not clear whether considered internationally unlawful) | Claimed alternatively: 1) Loss of money invested; 2) Loss of profits. |
| <i>Amco Asia Corporation, Pan American Development Limited, PT Amco Indonesia v Republic of Indonesia</i> (resubmitted case), ICSID, Award on the Merits, 31 May 1990. | Forcible taking of hotel management rights by police and army and subsequent revocation of the license to engage in business ventures in Indonesia, resulting in the loss of income-producing contract rights to manage the hotel. | Indonesian law, international law (supplementary and corrective function) | 1) Internationally unlawful conduct of the army and police personnel; 2) Denial of justice (revocation of the license). | Loss of stream of profits generated under the hotel management contract (the business was a going concern) |
| <i>The Government of the State of Kuwait v The American Independent Oil Company (AMINOIL)</i> , Ad hoc Arbitral Tribunal, Award, 24 March 1982 | Nationalization of a 60-year oil concession (including both rights and physical assets) held by the US claimant, 30 years before the concession's expiry | Kuwaiti law, international law | Lawful nationalization | Loss of business |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|--|--|--|---|---|
| CIL: 'full – ie, prompt, adequate and effective – compensation' equivalent to the 'fair market or actual value of the property at the time of the expropriation' | 1) <u>Rejected</u> : the loss of profit claim because the project was 'uncompleted and unoperative'; 2) <u>Adopted</u> : the 'actual investments' approach | > On the basis of expenditures incurred in relation to the project. > <u>Valuation date</u> : linked to the expulsion of the claimant from Ghana, the last one in the series of measures leading to expropriation | > LIBOR rate; > From the time of Biloune's deportation (date of expropriation) to the time of payment; > Simple. | > Evidence of actual expenditures; > Currency conversion. |
| > To place the claimant in the same pecuniary position it would have been in if the contract had been performed (<i>Sapphire</i>); > Compensation ought to approximate as closely as possible in monetary terms the principle of <i>restitutio in integrum</i> (on the basis of <i>Chorzow</i>). | > Discretionary lump sum for the unlawful conduct of army and police personnel; > Award of lost profits ('value of the stream of profits') from the date of license revocation to the end of the contract term. | > Book value rejected; > DCF method adopted (from the date of the award to the end of the contract term) > <u>Valuation date</u> : date of award (past profits from the date of breach to the date of award – on the basis of available data). | > 6% (in accordance with Indonesian law); > From the date of the original request for arbitration; > Simple. | > Mitigation; > Foreseeability; > Causation; > Detailed discussion of the DCF analysis; > Discount rate and risk factor; > Inflation adjustment (including its relationship with the award of interest). |
| CIL: 'appropriate compensation' (UN Resolution 1803) – refused to give the general interpretation but stated that what is 'appropriate' will be determined by relevant circumstances of a concrete case. | Value of company's assets reverted to the State plus the 'value of the undertaking itself as a source of profit' ('moderate estimate' of the loss of profits by reference to the 'reasonable rate of return' based on 'legitimate expectations' of the investor) | > <u>Rejected</u> : net book value of company's assets; > <u>Adopted</u> : depreciated replacement value of assets; > Exact method of valuation of the 'undertaking itself as a source of profit' not identified; > <u>Date</u> : date of the nationalization decree. | > 7.5% ('reasonable rate') + 10% for inflation (total 17.5%); > From the date of nationalization (end date not specified); > Compounded annually. | > Concept of legitimate expectations; > Equitable considerations; > Counter-claims by the State; > Experts (joint report of parties' experts); > Inflation adjustment of compensation. |

| Case (descending chronological order) | Measure(s) at issue and investment affected | Applicable law | Violations found (including lawful expropriations) | Economic loss |
|--|--|---|--|---|
| <i>Libyan American Oil Company (LIAMCO) v The Government of the Libyan Arab Republic</i> , Ad hoc Tribunal (Sole Arbitrator), Award, 12 April 1977 | Nationalization of long-term concession rights held by the claimant almost 20 years after the concessions had been granted | Libyan law when consistent with international law and subsidiarily the general principles of law. | Lawful nationalization but without compensation | Loss of business |
| <i>Sapphire International Petroleum Ltd v National Iranian Oil Company</i> , Ad hoc Tribunal, Arbitral Award, 15 March 1963. | Repudiation of an oil concession contract | General principles of law | Breach of contract | Expenses incurred in performance of the contract and profits lost as a result of contract repudiation |

| Legal standard of compensation applied | Approach to calculation of compensation | Valuation method and date (where relevant) | Interest (rate, simple/compound, starting date) | Other damages-related issues discussed |
|---|---|--|--|---|
| CIL: 'confused state' of international law on the matter of compensation; the standard of 'equitable compensation' adopted. | <i>Damnum emergens</i> ('market value' of the nationalised physical assets) plus <i>lucrum cessans</i> | <ul style="list-style-type: none"> > Physical assets: net value reduced by tax liabilities (method of valuation not specified); > Valuation of <i>lucrum cessans</i> not supported by methodology ('equitable'); > Separate claim for the loss of profit under a different concession contract rejected (profit 'doubtful and not probably realizable'). | <ul style="list-style-type: none"> > Libyan law: 5%; > From the date of award until payment; > Not specified whether simple or compound. | <ul style="list-style-type: none"> > Restitution (rejected); > Declaratory award (rejected). |
| Full compensation includes the loss suffered (<i>damnum emergens</i>), for example the expenses incurred in performing the contract, and the profit lost (<i>lucrum cessans</i>), for example the net profit which the contract would have produced | Awarded the expenses incurred in performance of the contract and a discretionary amount for the loss of profit (loss of opportunity). Refused to award expenses incurred <i>before</i> the conclusion of the contract | N/A | <ul style="list-style-type: none"> > 5% > Compound > From the date of request for arbitration (all as claimed) | <ul style="list-style-type: none"> > It is not necessary to prove the exact damage; <i>sufficient probability</i> of the existence and extent of the damage is enough; > Compensation for the loss of profit (ex aequo et bono, ie on a discretionary basis) in the absence of the record of profitable operations. |