1. Alternative approaches to pecuniary damages

Depending on the circumstances, two alternative approaches may be appropriate to assess the damages resulting from a wrongful action or non-contractual performance:

- An expenditure-revenue approach, focused on the increase in costs and reduction in revenues.
- An asset valuation approach, focused on the value of the asset expropriated, terminated or destroyed.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Components of damage</th>
<th>Example</th>
<th>Effect of breach on revenue producing -asset</th>
<th>Are “sunk costs” relevant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure-Revenue</td>
<td>Incremental costs (damnum emergens) + reduced revenues</td>
<td>Supply of defective equipment, which has to be repaired and leads to</td>
<td>Temporary</td>
<td>No</td>
</tr>
<tr>
<td>Approach</td>
<td>(lucrum cessans)</td>
<td>reduced sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset Valuation Approach</td>
<td>Value of asset or contract being expropriated, destroyed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>or terminated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expropriation</td>
<td>Permanent and complete</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Illegal termination of contract (e.g. JV between commercial bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>between commercial bank and insurance</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>company)</td>
<td></td>
</tr>
</tbody>
</table>

2. The expenditure-revenue approach

*Damnum emergens*

This category includes, in turn, two different concepts:

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1 International Arbitrator. E-mail: manuel.conthe@mconthe.com. Visit his website at www.manuelconthe.com.
• Pecuniary damages:
  = additional/incremental out-of-pocket expenses (e.g. repair works) resulting from breach of contract or non-performance

  Not to be confused with “sunk costs” (i.e. purchase price or investments already made).

• Non-pecuniary damages (i.e. “moral damages”)
  = non-pecuniary harm (e.g. physical or mental suffering, loss of moral reputation…) resulting from wrongful behavior

*Lucrum cessans*
  = decrease in revenue (e.g. loss of sales while the machine is being repaired) resulting from breach of contract or non-performance

What if the presumably lost benefits were likely, but not certain, or are difficult to quantify?

This is the origin of the concept of “loss of opportunity” or ”loss of chance,” a partial recognition of *lucrum cessans*, as reflected, for instance, in the Unidroit Principles:

“Compensation may be due for the *loss of chance* in proportion to the probability of its occurrence” (Unidroit Principles, 7.4.3-2)

This expenditure-revenue approach, typical of contractual breaches, should be applied in keeping with any specific contractual clauses limiting contractual responsibility (e.g. clauses establishing “liquidated damages” in lieu of actual damages, excluding consequential damages or foregone profits, or capping pecuniary liabilities resulting from breach of contract).

3. The asset value approach

As indicated, this is the appropriate valuation approach when the breach of contract or wrongful behavior resulted in the expropriation, destruction or termination of the asset or contract.

*A long controversy in the theory of value: inputs or outputs?*

There are essentially two alternative approaches to measure the economic value of a good, service, asset or contract:

• The value of the resources (inputs) historically required for its production or acquisition;

• The value of the services or flows (outputs) that it will produce from now into the future

This distinction was at the heart of a famous change of paradigm among economists in XIX century’s Europe. Even if subsequently the “output/market approach” got the upper hand, the distinction is still relevant today, because some items are still valued on the basis of “inputs” or historic costs, as the following table illustrates:
<table>
<thead>
<tr>
<th>Item</th>
<th>How to determine value</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>In Alfred Marshall’s famous analogy(^2), costs (supply) and utility (demand) determine the market price jointly, as the upper and lower blades of a scissors.</td>
</tr>
<tr>
<td>Goods</td>
<td>Labor theory of value (Classical Economists: Ricardo, Marx...)</td>
<td>Utility theory (Marginal Revolution: Jevons, Walras, Menger)</td>
</tr>
<tr>
<td>National Accounts: GDP components</td>
<td>Government-provided services (e.g. health services, education)(^3)</td>
<td>Market-provided final goods and services (i.e. excluding “intermediate transactions”)</td>
</tr>
<tr>
<td>Accounting Standards (e.g. IAS, IFRS...): Valuation of balance sheet items</td>
<td>Historic Value Accounting (i.e. historic value less amortization)</td>
<td>Fair Value Accounting (i.e. “mark-to-market” valuation)(^6)</td>
</tr>
</tbody>
</table>
| Legal services (including arbitrators’ fees) | Hourly rates | • Success fees  
• Ad valorem fees (e.g. X% of amount in dispute) |
| Investment | • Investment costs ("sunk costs")  
• Book value | • Discounted Cash Flows (DCF)  
• Market approaches (multiples, comparable transactions/companies...) |

The difference in approaches to valuation of an asset was nicely captured in a funny survey run years ago by the new 2017 Nobel Prize in Economics, Richard Thaler, together with his colleague

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\(^2\) *Principles of Economics* (1890), Book V, Chapter III, 27

\(^3\) In “The Valuation of the Social Income”, *Economica*, 7:26, (1940), pages 105-124, John Hicks, one of the fathers of the UN’s System of National Accounts, recommended that government provided goods and services should be evaluated at costs, since no market prices are available and “the benefit of the services is at least as good as their costs”. His colleague Simon Kuznets accepted this view in “On the Valuation of Social Income – Reflections on Professor Hicks’ Article” *Economica*, 15:57, (1948).


Eldar Shafir among subscribers to a wine newsletter, *Liquid Assets*. Respondents were highly knowledgeable wine consumers with substantial home cellars, most of them economists or business executives.

The question they put to subscribers, in three separate experiments, was:

“Suppose you bought a case of a good 1982 Bordeaux in the futures market for $20 a bottle. The wine now sells at auction for about $75 a bottle.

You…

[...have decided to give one bottle of this wine to a friend as a gift] Scenario 1
[...have decided to drink a bottle of this wine with dinner] Scenario 2
[...inadvertently dropped the bottle and broke it] Scenario 3

Which of the following amounts best captures your feeling of the cost to you of [giving away/drinking/breaking] this bottle?

They got the following responses (in %):

<table>
<thead>
<tr>
<th>Subjective cost</th>
<th>Giving away</th>
<th>Drinking</th>
<th>Breaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount ($)</td>
<td>Rationale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>I already paid for the bottle</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>+20</td>
<td>This was the amount I paid years ago</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>+75</td>
<td>This is the amount I would need to replace it</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>-55</td>
<td>This is the saving I am making (i.e. $75 - $20)</td>
<td>14%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Arbitration disputes are typically closer to Scenario 3 of Thaler and Shafir’s experiment and there is a natural inclination - frequently enshrined in BITs- to prefer the “output/market/fair value” approach.

**Conditions precedent to apply the DCF method**

Arbitrators have come to realize, however, that the DCF approach is indeed the ideal valuation methodology, but only provided several conditions are met.

Recently, two Arbitral Tribunals -both chaired by my good friend Juan Fernández-Armesto- have spelled them out:  

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- The enterprise has an established historical record of financial performance;

- There are reliable projections of its future cash flow, ideally in the form of a detailed business plan adopted in tempore insuspecto, prepared by the company’s officers and verified by an impartial expert;

- The price at which the enterprise will be able to sell its products or services can be determined with reasonable certainty;

- The business plan can be financed with self-generated cash, or, if additional cash is required, there must be no uncertainty regarding the availability of financing;

- It is possible to calculate a meaningful WACC, including a reasonable country risk premium, which fairly represents the political risk in the host country;

- The enterprise is active in a sector with low regulatory pressure, or, if the regulatory pressure is high, its scope and effects must be predictable: it should be possible to establish the impact of regulation on future cash flows with a minimum of certainty.

In the DCF methodology, only the future is relevant and “sunk investment costs” do not play any role.  

"Sunk investment costs", an imperfect (but sometimes useful) measure of value

When a DCF or market approach to valuation is not practical, arbitrators are frequently forced to rely -very much as national Statistical Offices when estimating the value of Government-provided services in order to calculate GDP- on “inputs”, i.e. on the investment made in the project or the book value at which the asset was carried.

But sunk investment costs or book valuations may be inadequate whenever any of two opposite problems are suspected to be at work:

The problem of overvaluation

Sunk investment costs may overestimate the real value of an enterprise or project in at least cases:

- Over-invoicing and extravagant investment expenditures

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9 Economists rightly point out that, from a normative economic point of view, “bygones are bygones” and hence decision-makers need only consider the effects of their actions going forward, without taking into account prior investments or costs, since they are already inevitable. Sunk costs must be ignored. There is however ample evidence that, in practice, human decision makers fall often prey to the so-called “sunk-cost fallacy”. For an explanation of this empirical phenomenon based on the concept of “mental accounts”, see Richard H. Thaler, “Mental Accounting Matters”, Journal of Behavioral Decision Making, 12, September 1999, particularly pages 190-192, or chapter 8 of his recent book “Misbehaving. The Making of Behavioral Economics”, Norton Company, 2015. For a recent review explaining the pervasiveness of the fallacy, see Corina Haita-Falah, “Sunk-cost fallacy and cognitive ability in individual decision-making”, Journal of Economic Psychology, 58, 2017, pages 44-59.
• Post-investment adverse changes: when “sunk costs” become “stranded costs”\textsuperscript{10}

This may happen as a result of:

- Regulatory changes (e.g. liberalization of previously regulated markets)
- Emergence of disrupting technologies or new competitors (“Schumpeterian innovation” and “the alchemist’s fallacy”)\textsuperscript{11}
- Unexpected adverse market trends (e.g. steep, sustained decline in the price of the mineral or hydrocarbon being mined or extracted)

\textit{The problem of undervaluation}

Conversely, sunk investment costs may be rationally suspected to underestimate the real value of an enterprise or project when any of the following conditions obtain:

• The investor, working in an uncertain environment against adverse odds, overcame barriers and risks before achieving eventually economic success
• Post-investment favorable market changes (e.g. increased sale prices) produced a significant upside

Under any of these circumstances, the \textit{ex post} rate of return on the initial investment may become exceptionally high, which may induce the host Government to claim that the resulting profits are “excessive” or “unfair” and should be taxed away, or, alternatively, that the business should be expropriated, at a price not in excess of investment costs.\textsuperscript{12}

Such reasoning, however, would be a blatant case of “hindsight bias”, as it neglects the \textit{ex ante} risks faced by the successful investor only because he/she overcame them and the project did

\textsuperscript{10} The concept of “stranded costs” emerged during the liberalization of electricity markets and, consequently, was defined as “those costs that cannot be recovered by regulated firms during the transition from traditional regulation to an open, competitive environment”. See, for instance, José Antonio García Martín, “Stranded Costs: An Overview”, Working Paper No.0108 Universitat Pompeu Fabra and CEMFI, 2001, available at ftp://www.cemfi.es/wp/01/0108.pdf. But the concept can be understood in a broader sense, as in this paper, to describe any sunk investment costs that, due to unexpected post-investment developments reducing the company’s revenues, are unlikely to be recovered by the investor. Hence the term “stranded” (in Spanish, “varado”, like a boat sitting on the sand during low tide).

\textsuperscript{11} In “Schumpeterian Profits and the Alchemist’s Fallacy Revised”, Yale Working Papers on Economic Applications and Policy, Discussion Paper No.6, 2005, American economist William D. Norhaus argues that, due to competition, innovators are unable to capture most of the potential monopoly profits resulting from the innovation, the bulk of those benefits being passed on to consumers through lower prices.

\textsuperscript{12} This way of reasoning is at the root of what American economist Raymond Vernon described as the “obsolescing bargain model” (OBM) between foreign multinationals and host Governments in his book “Sovereignty at bay: The Multinational spread of multinational US enterprises”, New York Basic Books, 1971. In the OBM, the initial bargain when the foreign investment is negotiated favors the multinational, but relative bargaining power shifts gradually to the host country government as investments become sunk, which leads the government to impose new conditions on the multinational, ranging from higher taxes to complete expropriation. Thus, the original bargain obsolesces.
In the case of an initially risky, but eventually successful investment the reason for an *ex post* high rate of return was lucidly explained centuries ago by the famous Scottish economist Adam Smith:¹³

> “In a perfect fair lottery, those who draw the prizes ought to gain all that is lost by those who draw the blanks. In a profession where twenty fail for one that succeeds, that one ought to gain all that should have been gained by the unsuccessful twenty. The counsellor at law who, perhaps, at near forty years of age, begins to make something by his profession, ought to receive the retribution, not only of his own so tedious and expensive education, but that of more than twenty others who are never likely to make anything by it”.

**A way-out: “adjusted investment costs” as a proxy for real value**

In order to overcome the limitations of the raw figure of investment costs, arbitrators may occasionally introduce adjustments, including:¹⁴

- Negative adjustment for wasteful investment (or to cover operating losses)
- Positive adjustment for implicit capital gains (e.g. to reflect the increase in sales prices)
- Positive adjustment for loss of opportunity, when the amount of foregone profits is uncertain, but the likelihood of profits very high.

Such adjustment may well be justified, but only to the extent that it does not capture the full net present value of the investment’s future cashflows, as this would entail “double counting”.

As explained below when discussing *Karaha Bodas*, there is a fine line between adjusting investment costs for loss of opportunity or lost profits, which may be legitimate, and “double dipping”, which is not.

### 4. Non-pecuniary damages (“moral damages”)

**The concept**

While the term “moral damage” seems to derive from the French legal term “préjudice moral”, its first international recognition goes back to Umpire Parker’s 1923 Opinion in the *Lusitania* cases (resulting from the sinking of the Briths Ocean Liner off the coast of Ireland by a German submarine during World War I on 17 May 1915, killing almost 2,000 people, including 128 US citizens):¹⁵

> “Mental suffering is a fact as real as physical suffering, and susceptible of measurement by the same standards. The courts of France under the provisions of the Code Napoleon have always held that mental suffering or “préjudice moral” is a proper element to be considered

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¹³ Adam Smith, “The Wealth of Nations” (1776), Book I, Chapter X, Part I on Inequalities arising from the Nature of the Employments themselves”.

¹⁴ See case law section below.

in actions brought for injuries resulting in death. A like rule obtains in several American States, including Louisiana, South Carolina, and Florida. The difficulty of measuring mental suffering or lost mental capacity is conceded, but the law does not refuse to take notice of such injury on account of the difficulty of ascertaining its degree”.

The concept found also its way into the International Law Commission’s Articles on State Responsibility. Thus, for instance, article 31 of the ILC Articles reads: (emphasis added)

1. The responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act.
2. Injury includes any damage, whether material or moral, caused by the internationally wrongful act of a State”.

Moral damages are compensatory in nature, and cannot be conceived as punitive damages in disguise.16

The wording of the arbitration clause or the BIT may have significant influence on whether any damages suffered by the investor or his family, as different from the investment as such, may be claimed.

Thus, for instance, article 25 of the ICSID Convention explicitly circumscribes the jurisdiction of the Center to legal disputes “arising directly out of an investment”. Thus, as argued by Ingeborg Schwenzer and Pascal Hachem, the crucial question will be whether the personal injury of the investor arises directly out of the investment.17

**Moral damages in international arbitration**

*Desert Line Projects v. Yemen*18

**Basic Facts**

- Desert Line Projects (DLP), an Omani construction company, entered a contract with the Yemeni Government for the construction of an extensive network of roads. The work had been largely finished by late 2003, but the Government failed to pay.

- Under pressure from its own subcontractors, DLP threatened to suspend further work and in April 2004 brought action against the Government before the Yemeni Commercial Court.

- In May 2004 DLP interrupted the work at one of the sites. A few days later, the Yemeni Army put DLP’s personnel and equipment under military siege.

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16 As the title of their article makes clear, Jagussch and Sebastian suspect that Tribunals occasionally apply moral damages with a punitive intent.
18 ICSID Case ARB/05/17, February 2008
In June 2004, the President of Yemen asked DLP to complete its construction program and instructed DLP to submit the evaluation of the work done by two construction experts, under an Arbitration Agreement, which both parties signed later that month.

In early August 2004, the Yemeni Arbitral Tribunal issued its award.

Later that month, there was an “altercation” between DLP’s personnel and the Yemeni Army, which resulted in three employees (including the son of DLP’s chairman) being arrested for three days.

In September 2004, the Yemeni Government applied to the Yemeni courts for the annulment of the award. During this and subsequent months, DLP complained about “harassment, threat and theft” committed by armed groups.

In October 2004, the chairman of DLP received a phone call urging him to leave Yemen, since his life was in danger. He abandoned Yemen and left his son in charge. In the same month, the Government offered DLP to pay less than half the amount set out in the award, as part of a “settlement”. DLP complained about the arbitrary conditions and unfairness of the offer, but in December 2004 it signed the “settlement agreement”.

The ICSID Arbitration

In the ICSID Arbitration started by DLP under the Yemen-Oman BIT, DLP requested to be paid the true price of the work carried out (well in excess of the price determined by the Yemeni Arbitral Tribunal) and more than US$100 million as compensation for moral damages.

The ICSID Tribunal did not recognize any international effect to the December 2004 settlement agreement -as it had been signed under physical and financial duress-, and ordered the Yemeni Government the amount determined in the Yemeni Arbitral Award.

Concerning moral damages, the ICSID Tribunal argued: 19

“Even if investment treaties primarily aim at protecting property and economic values, they do not exclude, as such, that a party may, in exceptional circumstances, ask for compensation for moral damages. It is generally accepted in most legal systems that moral damages may also be recovered besides pure economic damages”.

“It is also recognized that a legal person (as opposed to a natural one) may be awarded more damages, including loss of reputation, in specific circumstances only”.

“The Arbitral Tribunal finds that the violation of the BIT by the [Government], in particular the physical duress exerted on the executives of [DLP], was malicious and is therefore constitutive of a fault-based liability (...). The Arbitral Tribunal agrees that [DLP]’s prejudice was substantial since it affected the physical health of the [DLP]’s executives and the [DLP]’s credit and reputation”.

19 Paragraphs 289-291.
But the Tribunal considered the amount requested exaggerated and granted a compensation of US$ 1 million. “This amount is indeed more than symbolic yet modest in proportion to the vastness of the project”.

*Biwater Gauff vs. Tanzania*\(^{20}\)

Bywater Gauff, a UK-based company was selected by the Republic of Tanzania to manage and operate a project to modernize Dar es Salaam’s water delivery and sewage services. After a few years, Tanzania seized the company’s assets, occupied its facilities, and deported three of its executives.

Claimants did not ask specifically for moral damages, and the majority of the Tribunal held that no compensation could be awarded because, the project being of “no economic value”, the Claimant did not actually suffer any monetary loss as a result of the Republic’s violation of the BIT.

In his dissenting vote, Gary Born argued that the Tribunal should have awarded moral damages to the investor, as Tanzania had deliberately violated the fundamental international rights and protections of the claimant, thereby causing moral damages to the Claimants that demanded “a remedy beyond merely declaring it a violation of the relevant BIT”.

*Joseph C. Lemire vs. Ukraine*\(^{22}\)

In this case, Mr. Lemire, a US citizen, was first invited into Ukraine as a leading investor in the nascent radio industry and then suffered an unlawful treatment by the Ukrainian regulator.

Mr. Lemire based his claim for moral damages in the following factors:

- The disrespect he and his team suffered during the procedures.

- Ukraine eroded his image, turning him from a “great pioneer” into a “loser incapable of expanding his business and playing in a bigger league”, thus depriving him of the first mover advantage and a promising leadership position in the radio industry.

- His radio station, Gala Radio, suffered many inspections by the State regulator, the National Council.

In its award, the Arbitral Tribunal, after reviewing international precedents on moral damages, summed up the exceptional conditions which should be met before moral damages can be granted (“Lemire test”):\(^{23}\)

1. The State’s actions imply physical threat, illegal detention or other analogous situations in which the ill-treatment contravenes the norms according to which civilized nations are expected to act;

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\(^{22}\) ICSID Case No.ARB/06/18, 20 March 2011.

\(^{23}\) Paragraph 333.
(ii) The State’s actions cause a deterioration of health, stress, anxiety, other mental suffering such as humiliation, shame and degradation, or loss of reputation, credit and social position; and

(iii) Both cause and effect are grave or substantial.

The Tribunal concluded that the moral aspects of Mr. Lemire’s mistreatment by his regulator “have already been compensated by the awarding of a significant amount of economic compensation [i.e. US$ 8.7 million], and that the extraordinary tests required for the recognition of separate additional moral damages have not been met in this case”.

II. CASE LAW

This section will analyze three arbitration cases in which the concepts discussed above lie at the heart of the dispute and of the Tribunal’s decision.

1. Karaha Bodas Company (KBC) vs. Pertamina & PLN

Basic Facts

- In 1994, US Caithness Energy and Japan’s Tomen set up a company (KBC) to build, own and operate a 400 MW geothermal electricity-generating facility in Indonesia.

- The foreign investors entered a contract with two State-owned companies, Pertamina – an oil and gas Company - and PLN- an electric utility, which entered with KBC a 30 year pay-or-take energy sales contract, with the price set in US$.

- Under the Contract, acts of the Indonesian Government could not be considered force majeure relieving Pertamina and PLN from fulfilling their contractual obligations.

- In 1997-1998, in the wake of the East Asian financial crisis, when the project was not yet in operation (but KBC had invested US$ 94 million) three Presidential decrees ordered Pertamina and PLN not to perform their contractual obligations, as

  - the demand for electricity had slumped; and

  - the steep devaluation of the rupiah made it impossible to pass on to Indonesian electricity users the agreed US$ price of the electricity

The Claim

- Claimant (KBC) asked for US$ 94 million in damnum emergens, plus US$512 as the present value, discounted at 8.5%, of the lost profits associated with the “loss of geothermal development opportunities”.

The Award

- The Award granted KBC US$93 million in damnum emergens and US$ 150 as lost profits.²⁵

Comment

In a famous article, Harvard Business School Professor Louis T. Wells criticized the award as a case of “double dipping”.²⁶ He drew the following analogy:

“Consider an individual saber whose bank account is covered by deposit insurance. Say the saver’s bank fails, and deposit insurance pays both the amount of the deposit and foregone interest for 30 years into the future. The large award, parallel to the apparently awarded in the KBC case, leaves the saver better off with bank failure than without, because it can deposit the principal elsewhere and earn interest again, ending up with principle plus twice the interest. Of course, the US Federal Deposit Insurance Corporation does not pay future interest when a bank fails”.

In my view, Mr. Well’s analogy is unfair, insofar as a bank deposit yields a low short term variable rate, with no potential upside. A more apposite comparison would have been the unexpected expropriation of an old 30-year Treasury bond with a high coupon, well in excess of market yields at the time of the expropriation/default. In that case, the value lost by the investor would have been not only the principal of the bond, but also its above-market yield.

My impression is that the Tribunal in Karaha Bodas did allow KBC any “double dipping”, but used the “adjusted investment costs” criterion described above, with and add-on of US$150 million (i.e. some 30% of Claimant’s DCF calculation) to account for the “loss of opportunity” for KBC owners of making significant profits over a 30-year period, particularly bearing in mind that under the Contract decisions by the Indonesian Government could not be considered force majeure.

2. Rusoro Mining Ltd. vs. Venezuela²⁷

Basic Facts

- During the period 2006-2008, Rusoro, a Russian-owned company listed in the Toronto Stock Exchange, bought 5 gold mines in Venezuela. Rusoro’s investment (acquisition costs and new investments, net of funding for operating losses) amounted to US$ 774 million.

- Starting in 2009, the Chávez Government introduced measures (e.g. gold export restrictions) which affected adversely foreign mining companies. Those measures reduced significantly the price of Rusoro’s shares in the Toronto Stock Exchange.

²⁵ In his well-known book “Valuation for Arbitration. Compensation Standards, Valuation Methods and Expert Evidence” (Wolters Kluwer, 2008, page 87, footnote 281), Mark Kantor argues that “the Karaha Bodas panel significantly reduced the total damages that would otherwise have been calculated under DCF computation. Moreover, the panel did so in a manner that does not permit a reader of the award to recreate the calculations”.


²⁷ ICSID Case No.ARB (AF)/12/5, 22 August 2016.
• In September 2011, less than one month after gold reached its all-time peak of US$1,838/oz., Venezuela effectively nationalized Rusoro’s mines.

**The Claim**

• Besides other minor claims, Rusoro fundamentally asked for US$ 2.23 billion as the FMV of the nationalized investment, calculates as a weighted average of the prices resulting from comparable public traded companies (50%), comparable transactions (30%) and a partial DCF analysis (20%).

**The Award**

• “The Tribunal must thus calculate the fair market value of an Enterprise which no well-informed purchaser would buy, at a fair price”.

• “The effect of the increased export restrictions must be excluded from the valuation of Rusoro’s Enterprise –otherwise the State would be deriving advantage from its own wrong”

• “DCF is not a friar’s balm which cures all ills. Small adjustments in the estimation [of parameters] can yield significant divergences in the results”.

• The Tribunal valued the company as the weighted average of three concepts

<table>
<thead>
<tr>
<th>Concept</th>
<th>Explanation</th>
<th>Value (US$ million)</th>
<th>Weight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adjusted Investment Valuation</td>
<td>Historical investment in each company, adjusted for increase in Gold Index Value from purchase date up to September 2011</td>
<td>1,128</td>
<td>50</td>
</tr>
<tr>
<td>3. Rusoro’s Maximum Market Valuation)</td>
<td>The maximum valuation was reached in mid-2008, before Venezuela’s Measures</td>
<td>700</td>
<td>25</td>
</tr>
<tr>
<td>Result</td>
<td></td>
<td><strong>966.5</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Comment**

This is a good example of a case in which a Tribunal considered the DCF and market approaches (e.g. use of comparable companies) as too speculative and uncertain, and preferred to use instead a very sensible “adjusted investment” methodology.

3. **C**aratube International Oil Company vs. Republic of Kazakhastan (“C**aratube II)”

**Basic Facts**

• In 2002 Caratube, a company owned by the Palestian, US-based Devincci Hourani and his family, spent US$9 million entered a Contract with Kazakhstan’s Ministry of Energy and

28 ICSID Case No. ARB/13/13, 27 September 2017,
Mineral Resources (MERM) to explore and develop the Caratube fields, already discovered and partly appraised in the 1960's (particularly the supra-salt deposits), but in need of a 3D seismic survey and the drilling of two sub-salt exploration wells.

- A 5-year Exploration Period was foreseen (which the Contractor could extend twice for up to 2 years each time), with the Production Period extending for 25 additional years once the Contractor made a “commercial discovery”.

- In November 2006 Caratube asked for a 2-year extension of the Exploration period and submitted a Revised Work Program, which the MERM approved in February 2007, with the corresponding Amendment to the Contract being signed in July 2007.

- In May 2007, Mr. Rakhat Aliyev, then son-in-law of President Nazarbayev, and brother-in-law of one of the Hourani brothers, was removed from his post of Kazakhstan’ Ambassador to Austria and accused of two kidnappings. Claimants argue that this was in retaliation because Mr. Aliyev had criticized Mr. Nazarbayev’s declared intention to change the Constitution and run again for President, and announced his own intention to run for such office.

- According to the Claimants, this was followed by a harassment campaign against not only Mr. Aliyev, but also against those who were perceived as assisting him, including the Hourani family, and was not limited to Caratube, but also directed against all the investments of the extended Hourani family.

- In September 2007, the regional Prosecutor’s Office issued a “Recommendation on elimination of disregard of the rule of law” and invited the MERM to terminate its contract with Caratube, due to its breaches of obligations provided in the Work Program. A few weeks later, on 1 October 2007, the MEMR sent to Caratube a “Notice of Termination of Operations”, which it subsequently confirmed in May 2008.

- During the 2002-2008 period Caratube invested US$ 39.2 million (out of which US$ 20.8 million were out of pocket expenses).

The Claim

Claimants requested the following compensation:

- US$ 941 as the FMV of Caratube at the time of expropriation, calculated using the DCF methodology.

Claimants argued that if the Tribunal rejected such claim for absence of the required degree of certainty, then they were entitled to the “loss of opportunity” to obtain profits from the field (which they assess at 99% of FMV!).

They rejected compensation based on “sunk costs”, as they would not only be contrary to the principle of full reparation, but also to any business rationale in the oil industry where
the field had been de-risked and reserves confirmed”. “An award of sunk costs would also create an incentive for states to transfer all risks of the exploration stage to the investor”.

- US$ 50 million in compensation for the moral damages caused by:
  
  (i) The pain, stress, shock, anguish, humiliation and shame that Mr. Devincci Hourani has suffered as a result of Kazakhstan’s acts and omissions in relation to his investments, which forced him to leave the country for his own safety and the subsequent harassment and threats to Mr. Devincci Hourani and his family;
  
  (ii) The harm to Mr. Devincci Hourani and Caratube’s reputation;
  
  (iii) The harassment of Caratube’ employees.

**The Award**

By majority, the Tribunal concluded that

- It had not been demonstrated that MERM rightfully terminated the Contract based on its material breach by Caratube.

- The investor was “substantially deprived of the value of its investment”, as a result of a “sovereign act” (e.g. the actions and recommendations of the Prosecutor’s Office) which amounted to an “unlawful expropriation”.

- “FMV [does] not provide a basis for damages that are sufficiently certain. Therefore, for a majority of the Tribunal, in these circumstances Caratube’s sunk investment costs best express in monetary terms the damages incurred by Caratube as a result of the unlawful expropriation”.29

Reasons for rejecting the application of FMV:

- Caratube was not a going concern with a proven record of profitability
- It had been in existence and performed the Contract for just over 5 years.
- Claimants have not sufficiently established that Caratube would have become a going concern but for the termination of the Contract.
- At the time of termination, Caratube was still in the exploration phase of the Contract and did not dispose of a long-term contract that guaranteed a certain level of profits. The majority of the investment was yet to be made.
- The Claimants have not established with a sufficient degree of certainty the oil reserves.
- Caratube’s contractual performance was sub-standard from the early stages of Contract performance.
- Lack of reliable oil price estimates for a cash-flow projection over a period of 37 years.

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29 Paragraph 1087.
Reasons for rejecting “loss of opportunity”:

- “Any damage, including damages for lost opportunity, must be sufficiently certain in order to be recovered (...). Claimants must show that it is more probable than not, by a preponderance of evidence, that the facts they allege are true”.

Reasons for applying the “sunk costs” criterion (i.e. compensation of US $ 39.2 million):

- “The breach deprived the sunk costs of purpose for the Claimant”.
- Caratube reinvested into the Project all of the revenues generated from trial production, and such investment also is part of Caratube’s investment.

- The Tribunal “was troubled by the ‘conspicuous timing’ of some of the alleged acts of harassment which coincided with the developments in this Arbitration”.

However, “Claimants have not satisfied their burden of proof with respect to the Respondent’s [i.e. State’s] alleged involvement in any acts of harassment against the Claimants”. 30

III. CONCLUSIONS

- When assessing “damnum emergens” (i.e. incremental expenditures) and “lucrum cessans” (i.e. foregone benefits) resulting from a breach of contract, if the income-producing asset or contract is not expropriated or terminated, sunk investment costs should be generally disregarded, as they do not represent an additional/incremental expenditure.

  Doing otherwise may result in excessive compensation.

- Sunk investment costs may, however, be useful as an imperfect valuation basis of an expropriated assets or terminated contract, when income or market-based valuation methods (DCF, market approaches) cannot be used or relied upon.

  When using such input-based valuation method, it may be exceptionally appropriate to adjust investment costs to capture subsequent post-investment latent capital gains or a clear “loss of opportunity”. But such upward adjustment should be less than the NPV of the asset’s future cash flows, as, otherwise, there would be double-counting.

- Moral damages should always be compensatory in nature and be added to any pecuniary damages awarded.

  Experience shows that, while moral damages are recognized as a type of harm to be compensated, Arbitral Tribunals are reluctant to grant them:

30 Paragraph 1203.
- In the case of companies, because loss of reputation should be considered a pecuniary damage and, if compensation has already been granted for damages, the Tribunal may be careful to avoid “double dipping”.

- More generally, even in the presence of genuine, severe suffering or moral harm sustained by individuals related to the firm, Tribunals may require convincing proof of the relation of such moral damages with the BIT-protected investments and of their causal direct link with State’s actions.