

UiO : **Det juridiske fakultet**

Valuation of Expropriated Property under Investment Treaty Law

- On the Distinction between Lawful and Unlawful Expropriation

Kandidatnummer: 639

Leveringsfrist: 25.4.2015

Antall ord: 17264



Table of Contents

1	INTRODUCTION.....	1
1.1	Short Introduction to Investment Treaty Law on Expropriation.....	1
1.2	Object and Purpose	2
1.3	Research Methodology and Limitations	3
1.4	Structure of the Thesis	4
2	THE DISTINCTION BETWEEN LAWFUL AND UNLAWFUL EXPROPRIATION.....	5
3	THE STANDARD OF COMPENSATION FOR LAWFUL EXPROPRIATIONS	9
3.1	The Standard in International Investment Agreements.....	9
3.2	Fair Market Value	10
3.3	The Date of Valuation.....	11
4	VALUATION OF FAIR MARKET VALUE.....	13
4.1	Choosing a Valuation Method	13
4.2	Valuation Methods	16
4.2.1	The Income-Based Approach	16
4.2.2	The Market-Based Approach.....	19
4.2.3	The Asset and Cost Based Approach	24
5	THE STANDARD OF COMPENSATION FOR UNLAWFUL EXPROPRIATIONS	29
5.1	Customary International Law.....	29
5.2	Full Reparation.....	31
5.2.1	The Value of Restitution.....	33
5.3	Heads of Damage	35
5.4	The Date of Valuation for Unlawful Expropriation.....	37
5.4.1	Introduction	37
5.4.2	Chorzów’s Date of Valuation	37
5.4.3	Creeping Expropriations – The Date of Expropriation?.....	41
6	FINAL REMARKS.....	43
7	REFERENCES.....	45
7.1	Bibliography.....	45

7.2	Table of Cases	49
7.3	Table of Treaties	51

1 Introduction

1.1 Short Introduction to Investment Treaty Law on Expropriation

Provisions on expropriation of foreign investments are a common feature of bilateral and multilateral investment treaties (hereinafter investment treaties).¹ These provisions seek to balance two potentially conflicting interests; (i) the investor's property rights and (ii) the host state's need for regulatory freedom in the pursuit of public purposes.

Recognizing the interests of both parties, investment treaty provisions afford the state with a right to expropriate if compensation is paid to the investor. In addition, lawful expropriations have to serve a public purpose, be done in accordance with due process of law, and be conducted in a non-discriminatory manner. If the state does not comply with the treaty requirements for a lawful expropriation, the state commits an unlawful act for which it is obligated to make full reparation for the injury caused.²

The compensation standard for lawful expropriation in investment treaties is generally the standard of fair market value.³ The fair market value of an expropriated investment is the price that the investment would have traded at in a hypothetical commercial transaction. The standard is therefore detached from the investor and can be regarded as an objective standard of compensation.

The primary remedy for making reparation for an unlawful expropriation is restitution in kind; however, this is in practice rarely claimed and awarded due to the problems associated with enforceability of awards against the state.⁴ Instead tribunals award damages equal to the investor's loss. Reparation is thus a subjective standard aimed at wiping out the consequences of the unlawful act.

Investment treaties also contain dispute settlement provisions that are a standing offer to the investor to initiate arbitral proceedings against the state for claims based on the treaty provisions. If successful, investors are then left with a pecuniary award, which can normally be enforced in accordance with either ICSID Convention or the New York Convention.⁵ In-

¹ According to UNCTAD (2014) p. 114 there were 3,236 investment treaties in force at the end of 2013

² Marboe (2007) p. 725

³ Ibid p. 730

⁴ See Ripinsky (2008) p. 57-59 for an analysis on why restitution is rarely claimed.

⁵ ICSID Convention Article 54(1) and New York Convention Article III both leave the investor with a binding award that can only be denied recognition in limited circumstances

vestment treaties thus provide the investor with an important dispute settlement mechanism, which ensures that the investor's rights are effective and not illusory.

1.2 Object and Purpose

The aim of this thesis is to give an account of how investment arbitration tribunals arrive at the ultimate sum awarded for a claim based on a finding of an expropriation. This necessitates separate studies of the different standards for compensation and damages.

The thesis supposes that there has been a taking of a foreign investment that is attributable to the state, and for which an arbitral tribunal is to award either compensation or damages. Consequentially the thesis does not consider the jurisdictional requirements of who qualifies as an investor and what qualifies as an investment in the treaty, nor does it attempt to answer when a state act passes the threshold for expropriation. Mitigation, causation and contributory fault, although important when considering compensation and damages, also fall outside of the scope of this thesis as the focus here is on the primary loss caused. The same goes for moral damages as these are not financially assessable. Interest will only be considered as a head of damage as the issue of interest for lawful expropriation is an unsettled and complicated topic that warrants a more thorough examination than is permitted here.

With regards to damages there has been a development in recent case law towards awarding the economic difference between the investor's actual present day position and the hypothetical position of the investor if the state had not acted unlawfully. This means that if the general economic conditions of the investment improved in the interim period between the expropriation and the award, the state has to pay damages reflecting this change. Additionally, it seems that the tribunals have accepted that the value of the investment at the date of the expropriation and any consequential loss represents the lower limit of damages due.⁶ The consequences of such a view are that states now bear the risk of both favorable and unfavorable changes in the fair market value of an unlawfully expropriated investment. This has rendered the distinction between lawful and unlawful expropriation more important, and naturally, the cases that have taken this approach will be afforded quite a bit of attention in this thesis.

Furthermore, the thesis will look at the valuation methods used in investment arbitration practice for awarding compensation adhering to these standards.

⁶ See e.g. *ADC v Hungary*, *Kardassopoulos v Georgia*, *Yukos Owners v Russia*, *Unghlaube v Costa Rica*

For investors contemplating dispute settlement, the concern is not just the legal basis of a claim but maybe more so the amount of compensation that they can expect to receive after a lengthy and costly legal battle.⁷ Precise estimates of how much an investor can expect to achieve, if successful, through investment treaty arbitration is of vital importance in order to assess the risk of such a process. As the sum ultimately awarded is largely based on methods of valuation the most commonly used methods are considered.

Sound valuation methods are also vital to the well-functioning of investment treaties. On the one hand, too high valuations of losses affect the state and ultimately the people of the state. Excessive awards can also lead to less than efficient number of expropriations as states might refrain from expropriating in cases where it would have been efficient if compensation was set correctly. Furthermore, excessive awards can create an incentive for the costly and slow process of investment arbitration rather than alternative means of dispute settlement.⁸ On the other hand, too low valuation of losses can erode faith in property rights and lead to opportunistic expropriation with the likely effects of reduced foreign investment, which is contrary to the goal of investment treaties.⁹

1.3 Research Methodology and Limitations

This thesis is an analytical study of primarily recent case law in investor-state arbitration, where the investor has been awarded either compensation or damages. The study is limited to claims forwarded under the dispute-settlement provisions of bilateral and multilateral investment treaties. An important limitation to the material is that only publicly available cases are analyzed. Another limitation of the analysis is that quite often some of the submitted material used for valuation purposes often is not available. In addition to case law, I will also be relying on some influential scholarly works including those of Ripinsky with Williams,¹⁰ Marboe,¹¹ and for valuation purposes, Kantor.¹²

In studies of case law in international investment law there are two important limitations to the findings. Firstly, the lack of a doctrine of stare decisis or binding precedents in international law means that the future tribunals are not obliged to follow past practice.¹³ Secondly,

⁷ Marboe (2009) p. 2

⁸ Wells (2003) p. 478

⁹ Ibid p. 481

¹⁰ See Ripinsky (2008)

¹¹ See Marboe (2009)

¹² See Kantor (2008)

¹³ Commission (2007) p. 134 with reference to Statute of the International Court of Justice Article 59

tribunals cannot go beyond the claims submitted by the parties, which might lead to awards being rendered contrary to the tribunal's true view on the law.¹⁴

Despite the lack of stare decisis in international law, tribunals and parties to investment disputes are to an increasing degree referring to past awards. Over time this might lead to *de facto* precedents in international investment law. The view of tribunals on previous awards is well described in an oft-quoted paragraph found in the case of *Saipem v Bangladesh*:

*“The Tribunal considers that it is not bound by previous decisions. At the same time, it is of the opinion that it must pay due consideration to earlier decisions of international tribunals. It believes that, subject to compelling contrary grounds, it has a duty to adopt solutions established in a series of consistent cases. It also believes that, subject to the specifics of a given treaty and of the circumstances of the actual case, it has a duty to seek to contribute to the harmonious development of investment law and thereby to meet the legitimate expectations of the community of States and investors towards certainty of the rule of law.”*¹⁵

The rationale behind this passage explains why this thesis is primarily a study of past cases.

1.4 Structure of the Thesis

The remainder of this thesis divided into five chapters: (i) Chapter 2 provides a short discussion on the legal distinction between a lawful and an unlawful expropriation, (ii) Chapter 3 examines the compensation standard for lawful expropriations in detail, (iii) Chapter 4 deals with the valuation techniques used in arbitration practice for awarding compensation adhering to the standard for lawful expropriations, (iv) Chapter 5 examines the standard of compensation for unlawful expropriations, and (v) In Chapter 6 I provide some final remarks.

¹⁴ Ripinsky (2008) p. 57

¹⁵ *Saipem v Bangladesh* paragraph 90

2 The Distinction between Lawful and Unlawful Expropriation

States enjoy sovereignty over their territories and resources.¹⁶ Their sovereignty is limited by international law and obligations that the state has accepted through treaties. In investment treaties states generally accept obligations not to “*nationalize or expropriate an investment of an investor of another Party in its territory or take a measure tantamount to nationalization or expropriation*”,¹⁷ or that investments cannot be “*expropriated, nationalized or subjected to other measures having a similar effect*”, unless the state complies with the treaty requirements for expropriating.¹⁸ What constitutes an expropriation is normally not defined in any detail in the treaties. Essentially, an expropriation entails a seizure by the state of the investment and/or a transfer of legal title to the investment to the state or a state-mandated third party.¹⁹ Nationalization is a large-scale expropriation of an entire industry or sector coupled with a transfer of the legal title to the property to the state. Expropriations and nationalizations are normally referred to as direct expropriations.

Measures that have “*a similar effect*” or are “*tantamount to nationalization or expropriation*” are generally referred to as indirect expropriation. Indirect expropriations are measures that leave the legal title to the property intact but interfere with the investor’s ownership rights through regulatory acts and omissions, to the extent that it has the same effect as an expropriation of the investment. Indirect expropriations often take place in the form of creeping expropriation. Stern explains creeping expropriation as “a process extending in time and comprising a succession of measures that, taken separately, do not have the effect of dispossessing the investor but when taken together do lead to such a result.”²⁰

Whether a state act is held to be a direct expropriation or an indirect expropriation is of little legal importance because both are normally covered by the investment treaty text and are as such just subspecies of expropriation. However, in practice, indirect expropriations rarely comply with the due process and compensation requirements and are, as will be discussed below, unlawful.²¹

If a tribunal holds that a state has expropriated an investment, the tribunal has to determine the lawfulness of the expropriation. When deciding on the legality, the tribunal has to pay atten-

¹⁶ Sornarajah (2010) p. 119

¹⁷ NAFTA Article 1110(1)

¹⁸ Norway-Russia bilateral investment treaty (BIT) Article 5

¹⁹ UNCTAD (2011) p. 6-7

²⁰ Stern (2008) p. 36

²¹ Marboe (2009) p. 61

tion to the specific wording of the investment treaty. Notwithstanding that treaties are worded differently, the substance of provisions on expropriation is to a degree standardized. This is shown by the comprehensive survey done in 2007 by the United Nations Conference on Trade And Development (UNCTAD):

*“Most agreements include the same four requirements for a lawful expropriation, namely public purpose, non-discrimination, due process and payment of compensation. Furthermore, most BITs have similar provisions regarding the standard of compensation. Notwithstanding some variations in language, the overwhelming majority of BITs provide for prompt, adequate and effective compensation, based on the market or genuine value of the investment.”*²²

The requirement of a public purpose essentially means that the taking *“must be motivated by the pursuance of a legitimate welfare objective, as opposed to a purely private gain or an illicit end.”*²³ The public purpose must be present at the time of the taking but does not depend on the ultimate achievement of the goal. Conversely, the requirement is not fulfilled if the taking of property initially had no public purpose but is later used to serve a public purpose.²⁴ Tribunals have tended to afford states a wide margin of appreciation in determining if an expropriation has a public purpose.²⁵ A finding of lack of public purpose is thus rare but not unheard of.²⁶

The requirement of non-discrimination means that the expropriation cannot be based on the foreign national belonging to *“a specific racial, religious, cultural, ethnic or national group.”*²⁷ This requirement is not violated simply because the expropriation targets a foreign investor; the expropriation must be motivated by one of the investor’s specific traits.

The due process requirement is formulated differently in the treaties and the fulfillment of this requirement will necessarily depend on the investment treaty formulation. In general, the due process requirement will require that the expropriation complies with the procedures of the domestic legislation and internationally recognized principles on due process, and that the investor is afforded with a right to an independent review of the case and the compensation due.²⁸ Case law on the requirement is limited, but one notable case is that of *ADC v Hungary*.

²² UNCTAD (2007) p. 52

²³ UNCTAD (2011) p. 28-29

²⁴ *Ibid* p. 31

²⁵ Newcombe (2009) p. 371

²⁶ See *ADC v Hungary*, paragraphs 429-433

²⁷ Newcombe (2009) p. 373

²⁸ Reinisch (2008) p. 191-193, UNCTAD (2011) p. 36

The International Centre for Settlement of Investment Disputes (ICSID) Tribunal in ADC explained that the requirement requires:

*“an actual and substantive legal procedure for a foreign investor to raise its claims against the depriving actions already taken or about to be taken against it. Some basic legal mechanisms, such as reasonable advance notice, a fair hearing and an unbiased and impartial adjudicator to assess the actions in dispute, are expected to be readily available and accessible to the investor to make such legal procedure meaningful.”*²⁹

For indirect expropriations such procedures will rarely be available to the investor because the expropriatory measure(s) are normally regulatory acts that are not directed towards the investor. The absence of even the possibility to challenge the expropriation means that indirect expropriations normally are unlawful.³⁰

A majority of investment treaties provide for prompt, adequate and effective compensation or phrases that are generally interpreted as having the same meaning.³¹ Adequate compensation is normally understood as the fair market value of the investment and will be dealt with in chapter 3 and 4. Many treaties also contain detailed rules on the precise methods that are to be used for calculating the compensation due.³² A payment of compensation is normally effective if the payment is made in “in convertible or freely useable currency”.³³

With regards to the promptness of the payment of compensation and its importance for the legality of the expropriation there does not seem to be an established consensus in investment arbitration practice. Often a tribunal will conclude that an expropriation was, regardless of the fulfillment of the other requirements, unlawful “*because no compensation had been paid.*”³⁴ In another case one might see a tribunal state that even though no compensation had been paid prior to the arbitral proceedings “*it suffices to conclude that the present expropriation was lawful, since it wants only compensation*”³⁵

It has been suggested that if there has been a non-payment of compensation this should not by itself render an expropriation unlawful. A more nuanced approach has been suggested where-

²⁹ ADC v Hungary paragraph 435

³⁰ Marboe (2009) p. 61, Reisman (2004) p. 137 footnote 104

³¹ UNCTAD (2007) p. 48

³² Reinisch (2008) p. 195-196

³³ UNCTAD (2011) p. 40

³⁴ Vivendi v Argentina paragraph 7.5.21

³⁵ Tidewater v Venezuela paragraph 146

by only non-payment for an unreasonable period of time and/or negotiation in bad faith should affect legality. However, if there has been a non-payment but the requirements for good faith are fulfilled, the act of non-payment itself should not render the expropriation unlawful as even good faith application of accepted valuation guidelines can lead to diverging results, which in turn could necessitate third party mediation.³⁶ An example of a tribunal supporting this nuanced approach can be found in the case of *ConocoPhillips v Venezuela*:³⁷

*“The requirements for prompt payment and for interest recognise, in accordance with the general understanding of such standard provisions, that payment is not required at the precise moment of expropriation. But it is also commonly accepted that the Parties must engage in good faith negotiations to fix the compensation in terms of the standard set, in this case, in the BIT, if a payment satisfactory to the investor is not proposed at the outset.”*³⁸

In this case the ISCID Tribunal concluded that Venezuela had not negotiated in good faith by relying on book value as the method of valuation because this would not comport to the investment treaty standard of fair market value. The Tribunal thus held that Venezuela had acted unlawfully.³⁹

There are several compelling arguments to support this nuanced approach. First of all valuation is not a science, as it necessarily requires complicated judgements on value. Furthermore, this gives tribunals the necessary flexibility to distinguish between egregious acts of confiscation and bona fide expropriations only wanting compensation. This being said there still seems to be conflicting views on the importance and content of the requirement.

³⁶ Ripinsky (2008) p. 67-69

³⁷ *Tidewater v Venezuela* and *Mobil v Venezuela* are also cases that take a similar approach to the requirement

³⁸ *ConocoPhillips v Venezuela* paragraph 394

³⁹ *Ibid* paragraphs 394, 400-402

3 The Standard of Compensation for Lawful Expropriations

3.1 The Standard in International Investment Agreements

The standard of compensation in customary international law for lawful expropriation has been a hotly debated topic until recently. Traditionally, developed states argued for a standard of “full compensation”, which entails compensation equal to the fair market value of the taken investment. Developing countries have argued that expropriation demands a standard of national treatment or a standard that provides for less than fair market value.⁴⁰

The issue of the compensation standard in customary international law has lost a lot of its importance due to rapid expansion of investment treaties. Investment treaties that contain provisions on expropriation are recognized by arbitral tribunals as “a *lex specialis* whose provisions will prevail over rules of customary international law.”⁴¹ This makes the relevant standard of compensation for lawful expropriations in investment arbitration the specific binding treaty language.⁴²

The standard of compensation for lawful expropriations that can be found in investment treaties are on their surface different. Examples include ‘real value’⁴³ ‘market value’,⁴⁴ ‘prompt adequate and effective’,⁴⁵ and ‘genuine market value’,⁴⁶ to name a few. In sum it might be fair to say that most treaties provide for compensation equal to the fair market value of the investment.⁴⁷ In investment arbitration practice, terms such as ‘value’,⁴⁸ ‘genuine value’,⁴⁹ ‘market value’⁵⁰ and ‘actual value’⁵¹ have been interpreted as a reference to fair market value.

Some investment treaties could be interpreted as providing for something less than fair market value. These are not dealt with in this thesis because the standard of fair market value is the prevalent standard, and since it will necessarily depend on the circumstances of the particular

⁴⁰ Newcombe (2009) p. 377

⁴¹ ADC v Hungary paragraph 481

⁴² Wälde (2008) p. 15-16

⁴³ Australia-Hongkong BIT Article 6(1)

⁴⁴ Greece-South Africa BIT Article 4(1)

⁴⁵ Australia-Czech Republic BIT Article 6(1)(c)

⁴⁶ Italy-Tanzania BIT Article 5(1)

⁴⁷ Ripinsky (2008) p. 78-79

⁴⁸ Siemens v Argentina paragraph 353

⁴⁹ CME v Czech Republic Partial Award paragraph 624

⁵⁰ Tidewater v Venezuela paragraphs 151-152

⁵¹ Vivendi v Argentina paragraph 8.2.10

case and thus be hard to generalize about how to value an expropriation according to such a standard. The focus in the following is therefore on fair market value.

3.2 Fair Market Value

In the context of compensation it is clear that when an investment treaty makes reference to a value then it is the economic value of the investment. The economic value of an investment is not possible to determine by its characteristics but has to be determined by reference to a distinct perspective. Marboe has explained the concept of value in the following way:

*“Value, however, is not an objective quality of things. It always depends on a specific relationship between the particular object and a subject. As Immanuel Kant pointed out, value may only be understood as appreciation by persons. Without the needs and affections of people, things would not have any value. ‘Value’, therefor, is a relative concept.”*⁵²

The value a specific person puts on an object depends, as the quoted passage suggests, on the preferences of that person. Another way of describing this is that the economic value to a person is equal to a person’s reservation price, which is determined by that person’s disposable income, preferences and the prices of substitute goods. If a market for a property exists, the subjective perspectives of value by the large numbers of buyers and sellers are balanced into an objective value for a property.⁵³ One definition of fair market value is:

*“The estimated amount of which property should exchange on the date of valuation between a willing buyer and a willing seller in an arm’s length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion.”*⁵⁴

As the quoted definition suggests, the concept of fair market value is to find the price the property would trade at in a hypothetical commercial transaction between a willing seller and a willing buyer. Certain assets/businesses are not traded in the market, which means that there in reality does not exist a market for the asset/business. The valutors, and ultimately the arbitral tribunal, will in such circumstances have to rely on a valuation method that determines the price that the asset would trade at in a hypothetical market. The concept of fair market value is in these cases a legal construct.⁵⁵

⁵² Marboe (2009) p. 22 – Footnotes omitted

⁵³ Ripinsky (2008) p. 183 with reference to Marboe (2007) p. 735-736

⁵⁴ Kantor (2008) p. 31

⁵⁵ Ibid p. 58-59

A common misinterpretation of the standard of fair market value is that it is synonymous with the price paid for the property. The price paid for a property is merely the subjective valuation of a particular buyer for the property and, therefore, just a historic fact. The standard of fair market value is an objective valuation. Consequently, the standard does not consider what is called special value. Special value refers to features of the property that makes it particularly attractive to a specific buyer.⁵⁶ A typical source of special value is synergistic value, such as operational synergy and financial synergy, which is created by combining two or more assets.⁵⁷ This means that the possible special value an investment has to an investor is not compensated under the fair market value standard.

When considering the value of a property the principle of highest and best use applies. Simply put, the principle of highest and best use means that the valuation of a property is not dependent upon the current use of the property, but has to be determined according to its best use and thus the highest value that it could be put to use in. The ICSID Tribunal in *Unглаube v Costa Rica*, which concerned the expropriation of a beachfront property, explained this principle as follows:

*“If, as Claimants’ expert has suggested, it is appropriate, in determining fair market value, to identify the highest and best use of this particular property, it seems plain to the Tribunal that that can only be the highest and best use subject to all pertinent legal, physical, and economic constraints.”*⁵⁸ (my underscore)

In the *Unглаube* case the Tribunal looked at the specifics of the property in question and held that the property had to be valued based on a usage “*appropriate to the environmentally-sensitive surroundings*” and “*with a density comparable to that permitted by the guidelines set forth in the 1992 Agreement*”.⁵⁹ Even though the property in the case potentially could have been used to build a large-scale hotel on the beach, the principle of highest and best use excluded this for valuation purposes, as it was not legally feasible.

3.3 The Date of Valuation

The valuation of compensation or damages for an expropriated investment is highly dependent on the date of valuation. Value changes constantly as new information on an investment and its operating conditions is revealed. Consider a company that discloses a lawsuit against it

⁵⁶ Marboe (2009) p. 177

⁵⁷ Damodaran (2006b) p. 1-3

⁵⁸ *Unглаube v Costa Rica* paragraph 309

⁵⁹ *Id.*

claiming \$100 in damages, which potential buyers perceive as having a 90% chance of succeeding. A rational willing buyer would incorporate this information into his valuation of the company and reduce the value by \$90, which is the expected value of the lawsuit ($0.9 \times \$100$). As this example shows, value changes as new information is disclosed and willing buyers price in this information in their valuations.⁶⁰

Since the goal of a valuation is to determine the value as of the date of valuation, only information preceding the date of valuation (ex-ante information) is relevant. Information on events that occur after the valuation (ex-post information) would not be available to buyers on the date of valuation and should therefore be disregarded. As the discussion below will show, ex-post information is sometimes used in order confirm the reasonableness of assumptions made in the submitted valuations.⁶¹ This is because ex-post information on actual earnings often can be the most reasonable assumption on the expectations of buyers and sellers as of the date of valuation.⁶²

With regards to lawful expropriations, determining the date of valuation is normally a straightforward exercise. Most investment treaties provide that whichever is earlier, the moment of expropriation or the moment that the expropriation became public knowledge, is the date of valuation.⁶³ In practice, this will normally be identifiable by a government decree expressing the intent to expropriate or actions such as an outright seizure of the investment. The rationale behind this rule is to exclude any effect that disclosure of information on a state's intent to expropriate would have on the market value of an investment. If this information was included the state would benefit from its own actions through a lower valuation of the investment.⁶⁴ From the date of valuation states expropriating businesses assume the equity risk of the investment when expropriating lawfully, as subsequent events that decrease or increase the value of the investment are irrelevant to the valuation.

⁶⁰ Ripinsky (2008) p. 243

⁶¹ This is discussed in chapter 4.2.1 on the income-based approach

⁶² Abdala (2007) p. 3-4

⁶³ Ripinsky (2008) p. 243-244

⁶⁴ Ibid p. 244

4 Valuation of Fair Market Value

4.1 Choosing a Valuation Method

The focus in this chapter is on some of the most common valuation methods that can be used in order to determine the fair market value of an investment. If there is an active market for the property in question, there would not be a need for a valuation method as the price at which the investment trades at would be the market value. A tribunal would of course rely on this price in the award.⁶⁵ However, in many circumstances, if not most, it is not possible to fetch a price from the market as the investment is unique and/or not traded in the market. This necessitates the use of valuation methods.

There is no single method that is appropriate to use for all kinds of property. Some investment treaties specify the accepted methods but since no method fits all tribunals are afforded discretion on the choice of valuation method.⁶⁶ The choice of valuation method is primarily determined by the property being valued. In this regard, it is useful to distinguish between methods used for valuing businesses and methods used to value individual assets. Since most takings affect entire businesses, the weight of the discussion here is put to valuation methods that are appropriate to value these. Some of the factors that affect the likely choice a tribunal might make on valuation method are addressed below.

The most common methods used in investment arbitration practice are the income-based approach, which is also referred to as the discounted cash flow method (DCF), the market-based approach and the asset and cost based approach.⁶⁷ Underlying the common choices by tribunals is also the notion that willing buyers in fact use these methods in practice.⁶⁸ Additionally, valuations have on several occasions been based on historic cost. This rarely reflects market value but is still discussed below due to its usage in practice.⁶⁹

For businesses that generate income it is appropriate to use methods that value the business on the worth of the future cash flows to the business. The rationale behind this is that a hypothetical buyer values the business based on the expected future inflows of profit rather than on the historic cost of the business, since this is the benefit that the buyer can expect to get from the purchase.⁷⁰ As these methods value the business on future income they are generally referred

⁶⁵ Ibid p. 189

⁶⁶ Ripinsky (2008) p. 192, See for instance Italy-Bosnia and Herzegovina BIT Article 5(4)

⁶⁷ Marboe (2009) p. 186

⁶⁸ Ripinsky (2008) p. 187

⁶⁹ See e.g. Metalclad v Mexico paragraph 122, Vivendi v Argentina paragraph 8.3.13

⁷⁰ Ibid (2008) p. 195

to as forward-looking methods. The preferred method of tribunals for forward-looking valuations is the DCF method.⁷¹

In order for a tribunal to apply the DCF method the investment in question has to pass what many tribunals have considered the entry requirement for applying the DCF method, which is that the business is a going concern.⁷² It is important to note here that a different definition of going concern is used in investment arbitration than in accounting. In accounting, the term is normally used for a business that is expected to continue operating for the foreseeable future. If not then the business is in liquidation. Kantor explains the use of the term in investment arbitration: “*Tribunals employing the term ‘going concern’ to mean several years of profitability are in reality worried about establishing forward-looking compensation ‘with reasonable certainty’.*”⁷³ As the quote illustrates tribunals are reluctant to award market value based on future income if it is unlikely that the business would have earned profit in the future. The case of *Metalclad v Mexico* is a good illustration of tribunals’ attitude towards the DCF method. The ICSID Tribunal noted:

*“where the enterprise has not operated for a sufficiently long time to establish a performance record or where it has failed to make a profit, future profits cannot be used to determine going concern or fair market value.”*⁷⁴

In the case the Tribunal rejected the DCF method because “*the landfill was never operative and any award based on future profits would be wholly speculative.*”⁷⁵ Instead, the Tribunal based the valuation on the actual investment. The case suggests that tribunals are unlikely to apply the DCF method in cases where operations have not begun.

In *Asian Agricultural Products v Sri Lanka*, the ICSID Tribunal stated that “*‘goodwill’ requires the prior presence on the market for at least two or three years, which is the minimum period needed in order to establish continuing business connections.*”⁷⁶ The minimum period prescribed here of 2-3 years is perhaps just an indicative period if compelling evidence of likely future profit is provided. In this regard the case of *Vivendi v Argentina*, and the more nuanced take on the evidence necessary for profitability that was expressed there, is of interest. The ICSID Tribunal noted:

⁷¹ See e.g. *Gold Reserve Inc v Venezuela* paragraph 831, Marboe (2009) p. 397

⁷² Kantor (2008) p. 91

⁷³ *Ibid* p. 95

⁷⁴ *Metalclad v Mexico* paragraphs 119, 121

⁷⁵ *Ibid* paragraph 122

⁷⁶ *Asian Agricultural Products v Sri Lanka* paragraph 103

“that in an appropriate case, a claimant might be able to establish the likelihood of lost profits with sufficient certainty even in the absence of a genuine going concern. For example, a claimant might be able to establish clearly that an investment, such as a concession, would have been profitable by presenting sufficient evidence of its expertise and proven record of profitability of concessions it (or indeed others) had operated in similar circumstances.”⁷⁷
(my underscore)

The underscored parts of the quote highlight that past profit is not an absolute requirement for a going concern valuation. Proof that makes it likely that future profit would be earned such as expertise and proven record of performance can in a particular case be sufficient for such valuation. With regards to the standard of evidence the Tribunal in this stated that “*convincing evidence*” for profitability in the circumstances faced would have to be provided.⁷⁸ This highlights that the going concern requirement is based on an overall assessment of the probability for future profit. In most cases, this will require that the claimant can display proof of past profit.

Market-based methods can also be used for valuing profit-generating businesses. The market-based method is based on the notion that the market value of a business might be adequately reflected by the value of comparable businesses. If the comparable business is valued on its profit-generating potential, the method will incorporate that potential in the valuation of the business.⁷⁹ The benefit of the method is that is relatively easy to use, however, it can be a challenging process of identifying comparable companies and relevant performance metric(s) that drive the value of both companies. Do the businesses being compared have to be in the same industry? The same country? Of the same size? Can a private company be compared to a public company? How old can the metrics on the compared business be? These are just some of the questions that valuers could have to look at in order to justify a valuation based on the relative value to that of other businesses.⁸⁰

If forward-looking methods are not considered appropriate asset and cost based methods will have to be used. These do not cover the additional value that a business can have beyond the value of the sum of the assets. Therefore, these methods should generally only be used when the business is not worth more than its assets.

⁷⁷ Vivendi v Argentina paragraph 8.3.4

⁷⁸ Ibid paragraph 8.3.8

⁷⁹ Kantor (2008) p. 15

⁸⁰ For a discussion on this see Kantor (2008) p. 119-130

If the expropriation targets only at a specific asset the likely choice of valuation method depends on the whether the asset is unique or if it is traded in the market. Real estate is in a sense always unique and is well suited for the use of a market-based method such as the comparable transactions method. If the asset is identical or very similar to other assets traded in the market, the tribunal is likely to use an asset-based approach such as replacement value. Highly specialized assets, for which there are few or comparable assets traded, will likely lead to the use of an asset-based method such as adjusted book value.

One of the most important factors affecting the choice of valuation method is the submission of the parties. If tribunals are not assisted by their own valuation experts, they will rarely have any other valuations available. Ripinsky points out that “*Tribunals are rarely proactive in using valuation methods; they usually limit themselves to the examination of the methods, calculations and evidence produced by the parties.*”⁸¹ *Yukos v Russia* is a good example of this as the Permanent Court of Arbitration (PCA) Tribunal eventually relied on one of the claimant’s corrected submission since it had no other valuation available that had not been rejected.⁸²

4.2 Valuation Methods

4.2.1 The Income-Based Approach

The goal of the income-based approach/DCF method is to arrive at the present value of a business’ anticipated future cash flows. The reasoning underlying this method is that the likely price paid in the market for a business is reflected by what the business is expected to earn the holders of equity interest in the business. In fact the DCF method is often used by willing buyers in the market, and thus the result reached of such an analysis would be likely to be close to the fair market value if the assumptions made in the calculation are similar to those of willing buyers.⁸³

The mechanics of the DCF method is a two-step process. Firstly, the valuator has to calculate the expected year-by-year cash inflows to the business for the forecast period. If the business is terminated after the forecast period because, i.e., it is based on a concession that ends then, there is no need for additional calculations. However, if the company in theory could exist beyond the forecast period or even indefinitely, the terminal value of the business has to be forecast and discounted back. Secondly, each yearly figure has to be discounted down to present value by applying a discount rate. The discount rate reflects two factors that affect the

⁸¹ Ripinsky (2008) p. 234

⁸² *Yukos Owners v Russia* paragraphs 1782-1787

⁸³ Ripinsky (2008) p. 195

present value of future cash flows; Firstly, it adjusts for the time value of money since money received years from now has less real value than the same nominal amount received today. A payment of a dollar today can immediately start earning interest and is therefore worth more than a dollar paid ten years from now. Secondly, it adjusts for the risk associated with a future cash flow.⁸⁴

Forecasting future cash flows is not an easy exercise as it requires an assessment of the business' likely performance over a period where the operating conditions are constantly changing. Some of the factors that need to be analyzed include sales, costs, general and industry-specific conditions and the competition faced. In order to do so the valuator has to consider the past performance of the business and its value drivers, and make an assumption as to the likely performance in changing economic circumstances.⁸⁵ With regards to information, the general rule is that only information preceding the valuation date is relevant as ex-post information would not have been available to a willing buyer then. From the date of valuation until the date of the award information on what the actual conditions of the business would have been is revealed. On several occasions tribunals have used this information used in order to test the reasonableness of the assumptions made in the valuation,⁸⁶ and as pointed out earlier ex-post information can often be the most reasonable assumption on the expectations of willing buyers as of the date of valuation.⁸⁷

Once the cash flows have been determined the figures arrived at have to be adjusted by the relative sizes of equity and debt and be discounted. In order to do so the valuator could use either the indirect equity method or the direct equity method. The indirect equity method calculates the present value of the firm by discounting future cash flows to the firm by the weighted average cost of capital (WACC) rate. In order to reach the equity value, debt then has to be subtracted. The direct equity method calculates the present value of cash flows to equity (after having paid all expenses, taxes, interest and principal payments) by discounting them by the cost of equity.⁸⁸ Both methods can be expressed by this formula:

$$\text{Present value} = \text{Cash flow}/(1+r)^t$$

⁸⁴ Ibid p. 196-197

⁸⁵ See Marboe (2009) p. 219-231

⁸⁶ Ripinsky (2008) p. 254-255 with reference to Santa Elena v Costa Rica, paragraph 84 & Starrett Housing v Iran, paragraph 18

⁸⁷ Abdala (2007) p. 3-4

⁸⁸ Kantor (2008) p. 173-175

r here represents the discount rate and has to be added by one and compounded by a power equal to t , which represents the number of years. This calculation has to be performed for all years in the forecast range and include terminal value of applicable. The aggregate of these calculations is the net present value of the future cash flows.

The WACC rate is calculated as follows:⁸⁹

WACC = Weight of equity × cost of equity + weight of debt × Cost of debt

The formula for calculating the weight of equity is:

Equity ÷ (debt + equity)

If equity in the numerator is replaced by total amount of debt then the same formula can be used for calculating the weight of debt.

The cost of debt is based on the effective rate the company has on its current debt. This rate will have to be calculated based on the business' outstanding debt. As interest paid on debt often is tax deductible, calculating this rate might require an adjustment for the deductibility.

Cost of equity can be calculated in several ways. The two most common methods are the build up procedure and the capital asset pricing model (CAPM). Under the build up procedure the discount rate is comprised of a base rate and a subjective risk component. The base rate consists of a risk free component and systematic risk for equity investments. Generally, government bonds of developed countries are regarded as free of risk, and as a sufficient indicator for the risk free rate.⁹⁰ The systematic risk is the additional risk of making an equity investment rather than a debt investment and can be a source of controversy.⁹¹ As investment treaties are meant to protect investors against certain political risks, such as the risk of expropriation and unfair and inequitable treatment, these should not be included in the discount rate. In the case of *Gold Reserve Inc v Bolivia* the ICSID Tribunal noted:

*“However, the Tribunal also considers that the country risk premium adopted by Mr Kaczmarek (Navigant) is too low, as it takes into account only labor risks and not other genuine risk that should be accounted for – including political risk, other than expropriation.”*⁹²

⁸⁹ Ibid (2008) p. 159-163

⁹⁰ Ripinsky (2008) p. 197

⁹¹ Kantor (2008) p. 147-153

⁹² Gold Reserve Inc v Venezuela paragraph 841

The subjective risk covers the risk that distinguishes an investment in that company from a generic investment. This risk includes technical risk, financial risk, exchange rate risk, etc. The calculation of this component is a source of controversy in proceedings as states will tend to see this risk as very high and investors will view the risk as low.⁹³

CAPM is comprised of the risk free rate and an equity market premium adjusted by a beta factor. The equity risk premium is based on historical data on the excess risk of making an equity investment rather than a risk-free one.⁹⁴ The beta reflects the volatility of the company and can be based either on statistical analysis of the company's share prices or on the beta for comparable companies.⁹⁵ CAPM assumes that subjective risk can be eliminated through diversification, which might necessitate changes to the forecasted cash flows in order to account for subjective risk.⁹⁶

As the discussion on this method shows the income-based method is a complicated method of valuation, which necessitates a range of assumptions both on the size of possible future profit and the risks faced by the business. With the benefit of hindsight, valuers can to a certain degree limit the speculative element of the method, however, tribunals can naturally not look beyond the proceedings, which often makes assumptions about the future a necessary exercise.

4.2.2 The Market-Based Approach

4.2.2.1 *In General*

The market-based approach seeks to determine the value of an asset based on various methods of comparison of the relative value of the asset to that of other comparable assets. The market-based approach entails a three-step process. The first step is finding comparable assets that have been priced by the market. If the assets are not identical in size or units, a second step of scaling the market price to a common variable is necessary. The final step is to adjust for differences in the quality of the asset.⁹⁷

⁹³ Kantor (2008) p. 155-159

⁹⁴ Ibid p. 147-149

⁹⁵ Ibid p. 166

⁹⁶ Ibid p. 163-165

⁹⁷ Damodaran (2006a) p. 0-1

Two methods for relative valuation are discussed here; the comparable transactions method and the comparable companies method. Additionally, stock prices and prior information on the market value of the property being valued is discussed.

4.2.2.2 Relative Valuation – Comparable Transactions Method

The comparable transactions method is only dealt with through a simple example here. The method can be made more complex and accurate by including more comparable transactions in the comparison material and averaging the valuations derived from each comparison. The example follows the three-step process outlined above.

Let us say that you are contemplating a sale of your apartment and want to have a valuation of your apartment. If your neighbor's apartment was sold yesterday, the sales price could be considered a comparable transaction for the value of your apartment, as the apartment is in the same neighborhood and even the same building. If your apartment is slightly smaller, then an adjustment for the difference in number of square meters is appropriate. Finally, an adjustment might also be appropriate if you recently refurnished your apartment whilst your neighbor's apartment was sold without any improvements in the past 20 years.

4.2.2.3 Relative Valuation – Comparable Companies Method

The comparable companies method seeks to calculate a value based on the value of one or more comparable businesses. Because the compared company has been priced by the market a relative valuation of the property will also encompass future profit, as the compared company's market price would be based on the future income.⁹⁸ Following the three-step process described above the valuator first has to find a relevant company for comparison. Secondly, the valuator has to calculate a multiple by dividing the market value of the comparable business on a metric that is considered relevant to the value of both businesses. The multiple then has to be multiplied by the metric for the valued business. Finally, adjustments might be appropriate if the valued company for some reason is deemed to be worth more or less than the comparable company.

A simple example of the method example could be a comparable company with stock market capitalization of \$100 million and Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) of \$5 million. The EBITDA multiple then is $100 \div 5 = 20$. If the company being valued has an EBITDA of \$20 million then this method leads to a stock value of $20 \times$

⁹⁸ Marboe (2009) p. 203

\$20 million = \$400 million. This method can in theory be applied to any business that has a comparable business with a known market price and a common metric.

This example supposes that the value of both companies is 100 % determined by the chosen metric. Consequently, there is a risk that the value of a company is not fully reflected by the chosen metric and that the valuation is incorrect. This can to a certain degree be mitigated by including more metrics and calculating and averaging the results derived from each calculation. Another way to improve the accuracy of the valuation might be to include more companies in the multiple calculation by averaging the multiple from each calculation.

The only case that has directly applied this method so far is the case *Yukos Owners v Russia*. Interestingly this case resulted in the award of over US\$ 50 billion in damages – the largest award known in investment arbitration. However, the case is not a clear-cut example of the method as it also relied on a DCF valuation for the performance metrics of Yukos. This makes the approach taken by the Tribunal a hybrid approach.

In the Yukos case only the claimants had submitted valuations of Yukos. Their valuations based on the DCF method and the comparable transactions method were rejected. The Tribunal chose the comparable companies method, which the respondent had corrected for flaws in the comparison material. The corrections added by the respondent are not available in the final award, however, the respondent's valuation expert – Mr. Dow – wrote an expert report on the Tribunal's methodology afterwards. This report also sheds light on how the initial valuation of the claimant was calculated.

According to Mr. Dow claimant had used the following four multiples:

- The ratio of the company's enterprise value to its EBITDA.
- The ratio of the company's market price to its earnings.
- The ratio of the company's enterprise value to its proven oil and gas reserves.
- The ratio of the company's enterprise value to its oil and gas production.⁹⁹

The reference companies chosen by the claimants were both Russian and international oil companies.¹⁰⁰ Mr. Dow submitted a report excluding Rosneft because “*the market perceives Rosneft as having higher value by virtue of being a majority state-owned and that oil development assets are accordingly valued more in the hands of Rosneft than they are in the hands*

⁹⁹ Dow (2014) paragraph 19

¹⁰⁰ Yukos Owners v Russia paragraph 1715

of the other Russian companies.”¹⁰¹ Furthermore, he excluded the major international oil companies as he believed that these were not comparable and gave equal weights to the remaining comparable companies. This had the effect of reducing the value by 32% or about USD \$ 31.7 billion.¹⁰² A large part of this reduction had to have been caused by the 70% weighting of Rosneft. This clearly shows the importance of both the weighting of metrics and the choice of comparable companies can have on the final value.

After these corrections the weighted average multiple values for the compared companies was calculated. The average was then multiplied by the metrics derived from the DCF valuation for Yukos, in order to determine an implied enterprise value for Yukos based on each metric. The four results calculated were then averaged resulting in a valuation of USD 61.076 billion. This was the value that the Tribunal held was the value of the company in 2007.¹⁰³

4.2.2.4 Data on the Asset

Past information in the form of offers or transactions on the asset being valued can provide the tribunal/parties’ valuation experts with useful information for the valuation. The prerequisites for applying such information is, as the ad hoc Tribunal in *CME v Czech Republic* explains it, that the transaction:

“was negotiated at arms-length and that the valuation of CNTS reflects the valuation of a willing buyer and a willing seller at the point of time relevant for this arbitration.”¹⁰⁴ (my underscore)

The underscored parts of the quote highlight some of the necessary requirements for past data on the asset being a reliable indicator of current value. The first three address the requirements for an actual market transaction. If these are not present then the offer is likely affected by their absence. The requirement of a relevant point of time is important because the longer the period between the valuation date and the date the information stems from is; the more likely it is that an intermediate event has affected the value of the asset.

¹⁰¹ Dow (2014) paragraph 25

¹⁰² Ibid paragraph 26

¹⁰³ Yukos Owners v Russia paragraph 1783-1784 – This figure still had to be adjusted to the relevant valuation dates as the submitted valuation was not of a relevant date of valuation

¹⁰⁴ CME v Czech Republic paragraph 560

In the *CME v Czech Republic*, the Tribunal held that the date of expropriation was 5 August 1999.¹⁰⁵ The agreement on the merger transaction was concluded 29 March 1999. This short time lapse made the Tribunal confident that this data was the fair market value of CNTS.¹⁰⁶

Information on a prior offer to purchase the investment was used in *Ascom v Kazakhstan*. The date of expropriation was 30 April 2009.¹⁰⁷ The Tribunal based its valuation of damages on an offer of USD 199 million made in September 2008.¹⁰⁸

As both cases show, prior information on the value of the asset can be used if the time between the offer/purchase and the date of valuation is not too long. If such information is used it might be appropriate to take into account possible events that have affected the market value of the asset by making adjustments for intermediate events.¹⁰⁹

4.2.2.5 *Stock prices*

Another method that is based on data on the valuated asset itself is the market capitalization method. This method takes the stock price of a single share in a company and then multiplies it by the total amount of stocks being valued. In expropriation cases, this often means all stocks issued. This method is rather straightforward if the stock price is a reliable indicator of the price that would be paid for the entire business; however, there are a number of circumstances that could lead to discrepancies between market capitalization and fair market value.

Firstly, stocks are often traded on a speculative basis. Buyers of stock might hope to earn money through increases in stock price rather than dividends, which could lead to the stock price reflecting other factors than real value.¹¹⁰

Secondly, stock prices are based on smaller transactions where the buyers normally do not acquire controlling interests in the company. The absence of control means that these stocks are sold at a discount that reflects the absence of some or all of the powers of control.¹¹¹ This helps to explain why, even looking away from potential synergy effects, buyers of entire companies often offer and pay more than the market capitalization value of the company. The

¹⁰⁵ Ibid paragraph 492

¹⁰⁶ Ibid paragraph 534

¹⁰⁷ *Ascom v Kazakhstan* paragraphs 1497-1499

¹⁰⁸ Ibid paragraphs 1707, 1747-1748

¹⁰⁹ Marboe (2009) p. 188

¹¹⁰ Ibid p. 190

¹¹¹ Kantor (2008) p. 256

reason investors do so is that they believe that there is a value in controlling the company because they are able to run it better. Generally, the premium will be greater the poorer the management of the company is. It also depends on the probability of implementing changes in the management of the company.¹¹² If market capitalization is to be used to value an entire company, adjustments for the control premium will often be necessary.

Finally, adjustments for lack of marketability can in be appropriate for illiquid shares such as privately held shares. Liquidity entails the relative ease that an asset can be sold at. Ease of sale represents a value in its own, and if a share cannot be sold quickly then adjustments to the share price can be appropriate.¹¹³

The possibility for inaccurate valuations due to lack of marketability was accepted in *Enron v Argentina*. The ICSID Tribunal agreed with the claimant's point that when a market is illiquid or the volume of transactions limited, the market capitalization method might lead to distorted valuations. The Tribunal noted that this could be mitigated by taking longer time periods into consideration.¹¹⁴ The Tribunal did not elaborate further on how this ought to be done but possible ways could be to apply the median or the arithmetic mean of the transactions during the period. Instead of relying on the market capitalization value for the valuation, the Tribunal used the market capitalization value "*to verify the outcome of the DCF method so as to establish whether the variables used in the latter reflect reasonable assumptions.*"¹¹⁵ Due to the aforementioned pitfalls of the market capitalization method the Tribunal's use of the method seems to have been reasonable given the circumstances in the Argentinian stock market at the time.¹¹⁶

4.2.3 The Asset and Cost Based Approach

4.2.3.1 Introduction

Asset based methods value businesses based on the net value of the business' assets. Consequentially, this method cannot lead to an award of value that exceeds the sum of the individual assets and therefore disregards the value that can be created by combining assets.¹¹⁷ The advantage of the method is that it is less speculative than the income-based and market-based approaches since there is no need to "look into the future" or determine comparable transac-

¹¹² Damodaran (2012) p. 494-495

¹¹³ Kantor (2008) p. 258-259

¹¹⁴ *Enron v Argentina* paragraph 383

¹¹⁵ *Ibid* paragraphs 424, 437

¹¹⁶ *Ibid* paragraph 425 – In the Tribunal's view the Argentinian crisis had led to "*wide speculation*" at the time

¹¹⁷ Ripinsky (2008) p. 218-219

tions or companies. The method is thus an easier way of establishing value than income-based methods but does so at the cost of accuracy.

The discussion here primarily focuses on the asset-based method of book value as a tool for valuation purposes. This section also considers liquidation value and the cost-based methods of replacement value and historic cost.

4.2.3.2 *Book Value*

Book value is an accounting concept and refers to the value as per the business' balance sheets. The book value of an asset is the book value less depreciation.¹¹⁸ This value is normally recorded on the balance sheet at acquisition cost. The book value of a business is the net sum of all assets carried on the business' balance sheet, which is equal to assets less liabilities and depreciation.¹¹⁹ The values assets are carried at on the balance sheet are for various reasons rarely measures of fair market value. The balance sheet is a tool used for tax purposes and financial reporting. In accounting, there is a principle of conservatism that leads to an understatement of the value of assets and overestimation of liabilities.¹²⁰ Additionally, recorded depreciation does not necessarily reflect genuine economic depreciation, which can lead to further discrepancy between book value and fair market value.¹²¹ Businesses might often also own assets that have value but are not carried on the balance sheet.

For these reasons, the balance sheet is generally not accepted by valuation experts as a measure of the real value of the business. It is thus not surprising that tribunals have been reluctant to use book value as a measure of compensation in regards to businesses.¹²² The method has been favored more for valuation of individual assets such as machinery and equipment.¹²³

In order to address the shortcomings of book value the valutors use a method called adjusted book value. The first step when using this method is to adjust the book values to the market value. In addition, assets that are not found on the balance sheet but still have a market value, such as assets that are fully depreciated for accounting purposes but still have economic value, internally developed intellectual property and goodwill have to be added to the adjusted book

¹¹⁸ Marboe (2009) p. 268

¹¹⁹ World Bank (1992) p. 43

¹²⁰ Marboe (2009) p. 269

¹²¹ Ripinsky (2008) p. 221

¹²² Marboe (2009) p. 270

¹²³ Ibid p. 273

value. Similarly, liabilities such as contingent liabilities and liabilities for corporate capital gains taxes on appreciated assets have to be added.¹²⁴

In *Siemens v Argentina* the ICSID Tribunal adjusted the book value by removing a tax credit because the tribunal found that the company would not make any profit that it could use the tax credit on.¹²⁵ The Tribunal also removed an entry on the books for risks related to contract termination as the tribunal awarded the investor damages for consequential losses, which the Tribunal said would lead to double counting.¹²⁶ As this case shows the process of adjusting the book value is necessarily dependent upon the concrete circumstances of the valued business and its assets, which requires some judgment by the valuator.

4.2.3.3 Liquidation Value

If a company is not expected to make profit in the future, then the principle of highest and best use might lead to a valuation based on the liquidation value of the business.¹²⁷ A company's liquidation value "*means the amounts at which individual assets comprising the enterprise or the entire assets of the enterprise could be sold under conditions of liquidation to a willing buyer less any liabilities which the enterprise has to meet.*"¹²⁸ A company in liquidation is under financial pressure and will have to terminate its operations over a limited period of time. This reduces the chances of finding the buyer that is willing to pay the highest price, which in turn means that the sale price will carry a discount.¹²⁹ The size of the discount depends on the urgency of the situation. Orderly liquidation value is appropriate for a business that has some time to field offers from many willing buyers in order to get the best price for the asset. Often this means that the seller can sell off individual assets rather than all the assets at one time. Distress liquidation value is justified if the company is desperate to liquidate its assets. Under such circumstances the business often has to sell all of its assets at once at a heavily discounted price.¹³⁰ In recent arbitration practice this method has rarely been used.¹³¹

¹²⁴ Kantor (2008) p. 232

¹²⁵ *Siemens v Argentina* paragraph 373

¹²⁶ *Ibid* paragraph 374

¹²⁷ Marboe (2008) p. 287

¹²⁸ World Bank (1992) p. 42-43

¹²⁹ Ripinsky (2008) p. 224

¹³⁰ *I.c.*

¹³¹ *Ibid* p. 226

4.2.3.4 *Replacement Value*

Replacement value should generally be used for specific assets and not to value going concerns.¹³² The replacement value of an asset can be defined as the sum that would have to be paid for an asset of similar kind, utility and condition.¹³³ If there are no equivalent assets being traded, the replacement would have to be of the closest equivalent utility to the expropriated asset.¹³⁴ If the asset is new and unused it is often easy to establish the replacement value – the purchase of the asset might be even be used as evidence of value.¹³⁵ However, if the asset is either highly specialized or has been impaired to a degree due to usage, a tribunal would have to determine what the cost would be to purchase an asset with equivalent utility if this method is to be applied. Additionally, economic depreciation and differences in the asset being valued and the replacement cost asset will have to be factored into the valuation if applicable.

4.2.3.5 *Historic Cost*

Historic cost relies on the historic amounts spent by the investor. The method is distinguished from book value, as it does not consider depreciation.¹³⁶ Investment arbitration tribunals have on many occasions relied on the historic amounts spent by the investor as a measure of fair market value.¹³⁷ This, however, is rarely an indicator of fair market value as willing buyers are primarily concerned with what profit a business can generate or the market price for equivalent assets rather than historical cost. The expenses paid would normally only reflect fair market value if they are spent on an acquisition of assets under market conditions just prior to the expropriation, in which case the method is similar to a use of historical data on the asset for valuation purposes. The effect of awarding the historic cost of the investment is that the investor is put in a situation where the investment was not made, which is comparable to the reliance interest in contract law.

Two short examples can be illustrative of why this method often does not reflect fair market value. In the case of a startup business the value of the business depends on the efficiency of the investor at setting up the business and the contribution of know-how, technology and

¹³² Marboe (2009) p. 283

¹³³ Ripinsky (2008) p. 219

¹³⁴ Marboe (2009) p. 283

¹³⁵ This would make this method similar to the method discussed in 4.2.2.4

¹³⁶ Marboe (2009) p. 278-279

¹³⁷ See for instance *Metalclad v Mexico* paragraph 122, *Vivendi v Argentina* paragraphs 8.3.12-8.3.13, *Azurix v Argentina* paragraphs 424-425

management skills. Depending on these factors the fair market value of the business could be more or less than the money spent. The method also fails to account for value in high risk undertakings.¹³⁸ Consider a business that is set up to develop a new treatment for cancer. If the project fails, a willing buyer would probably be willing to pay close to zero. If it succeeds, the market value might be many times that of the historic cost.

The tendency in practice has been to use this method for businesses when forward-looking methods have been considered too speculative.¹³⁹ Additionally, the popularity can also be explained to a degree by the fact expenses can be ascertained with higher a higher degree of certainty than future profits.¹⁴⁰

The historic cost method was used in *Siemens v Argentina*. Kantor has suggested that the investor in this case might not have received sufficient compensation through the reliance on historic cost.¹⁴¹ The case concerned a contract to provide a system for immigration control, personal identification and electoral information system.¹⁴² Siemens had completed the system engineering stage of the contract and had begun the operations stage.¹⁴³ Through the engineering stage of the project it is likely that Siemens had contributed with management know-how and technical expertise that created value in excess of the expenses incurred by Siemens. As only these amounts were awarded, Siemens probably did not receive the fair market value of the investment. The case clearly illustrates the potential risks of under- and overcompensation that relying on historic cost can have.

With regards to the eligibility expenses under this method only a theoretical starting point will be provided here. First of all the funds sought recovered under the historic cost method have to be spent for the purpose of the investment. Secondly, the expenses have to have a link to the investor. Thirdly, the expense has to be reasonably incurred.¹⁴⁴

¹³⁸ Ripinsky (2008) p. 231

¹³⁹ Ibid p. 227

¹⁴⁰ Ibid p. 229

¹⁴¹ Kantor (2008) p. 238

¹⁴² *Siemens v Argentina* paragraph 81

¹⁴³ Ibid paragraphs 86-91

¹⁴⁴ For a detailed analysis on the recoverability of expenses see Ripinsky (2008) p. 266-273

5 The Standard of Compensation for Unlawful Expropriations

5.1 Customary International Law

For many years, the distinction between lawful and unlawful expropriations did not have a great impact on the final sum awarded. Since modern valuation techniques are able to value investments on their income-generating potential, lost profit was recoverable under both standards. This made the main difference the chance of being awarded compensation for consequential loss. The following quote from the partial award in *CME v Czech Republic* is good illustration of the previous view on reparation:

*“The Respondent is obligated to “wipe out all the consequences” of the Media Council’s unlawful acts and omissions... Restitution in kind is not requested by the Claimant... Therefore, the Respondent is obligated to compensate the Claimant by payment of a sum corresponding to the value which a restitution in kind would bear. This is the fair market value of Claimant’s investment as it was before consummation of the Respondent’s breach of the Treaty in August 1999.”*¹⁴⁵

There are several possible explanations as to why tribunals previously focused exclusively on the fair market value as of the date of the expropriation as the standard of compensation for unlawful expropriations. The primary reason is probably that most investments tend not to increase in value after expropriations. Secondly, party submissions might solely have been focused on the date of expropriation. Thirdly, tribunals might have taken the narrow approach to reparation and focused on restoring the status quo ante.¹⁴⁶ Fourthly, Sabahi has argued that it was because investment arbitration tribunals relied on the standard of compensation for lawful expropriation and for unlawful takings as well.¹⁴⁷

To support his argument Sabahi points to *Metalclad v Mexico* and *Tecmed v Mexico*. The above quoted partial award in *CME v Czech Republic* clearly shows that this was not always the case and even in *Metalclad v Mexico* the ICSID Tribunal also recognized the principle of reparation and noted that the amount awarded would also be consistent with this standard.¹⁴⁸ Most likely, the exclusive focus on valuating the investment as of the date of expropriation was caused by a combination of these reasons.

¹⁴⁵ *CME v Czech Republic* Partial Award paragraph 618

¹⁴⁶ The status quo ante approach is explained below in 5.2

¹⁴⁷ Sabahi (2011) p. 95

¹⁴⁸ *Metalclad v Mexico* paragraph 122

The approach to reparation seems to have changed starting with the award in *ADC v Hungary* in 2006. The Tribunal in *ADC* held that the expropriation was unlawful because Hungary had not fulfilled any of the requirements for a lawful expropriation contained in the Hungary-Cyprus BIT Article 4. On the standard of compensation, the Tribunal held that:

*“The BIT only stipulates the standard of compensation that is payable in the case of a lawful expropriation, and these cannot be used to determine the issue of damages payable in the case of an unlawful expropriation since this would be to conflate compensation for a lawful expropriation with damages for an unlawful expropriation.”*¹⁴⁹

The Tribunal further held that the BIT did not contain rules on the standard of compensation for an unlawful expropriation and stated that the standard contained in customary international law would apply to the question of damages.¹⁵⁰ The Tribunal went on by awarding damages in accordance with the standard of full reparation.

This approach has since been recognized in *Siemens v Argentina*,¹⁵¹ *Vivendi v Argentina*,¹⁵² *Biwater Gauff v Tanzania*,¹⁵³ *Siag & Vecchi v Egypt*,¹⁵⁴ *Funnekotter v Zimbabwe*,¹⁵⁵ *Kardassopoulos v Georgia*,¹⁵⁶ *Un glaube v Costa Rica*,¹⁵⁷ *ConocoPhillips v Venezuela*,¹⁵⁸ and *Yukos Owners v Russia*.¹⁵⁹ The distinction only proved significant in a few of these cases. Several of these cases will be dealt with in detail below in 5.4 as the “new” application of the principle of reparation is largely about the date of valuation.

Only one case to date has explicitly denied the application of the principle of reparation for unlawful expropriation. In *Rumeli Telekom v Kazakhstan* the ICSID Tribunal held that the Chorzów standard only applies to other wrongful acts than unlawful expropriation.¹⁶⁰ The award is somewhat confusing in this respect, as the tribunal seems to have overlooked its

¹⁴⁹ *ADC v Hungary* paragraph 481

¹⁵⁰ *Ibid* paragraph 483

¹⁵¹ *Siemens v Argentina* paragraph 353

¹⁵² *Vivendi v Argentina* paragraphs 8.2.3-8.2.7

¹⁵³ *Biwater Gauff v Tanzania* paragraph 775

¹⁵⁴ *Siag & Vecchi v Egypt* paragraphs 538-541

¹⁵⁵ *Funnekotter v Zimbabwe* paragraph 111

¹⁵⁶ *Kardassopoulos v Georgia* paragraphs 512-515

¹⁵⁷ *Un glaube v Costa Rica* paragraph 306

¹⁵⁸ *ConocoPhillips v Venezuela* paragraph 342-343

¹⁵⁹ *Yukos Owners v Russia* paragraphs 1766-1769

¹⁶⁰ *Rumeli Telekom v Kazakhstan* paragraph 792

finding of a violation of the fair and equitable treatment provision in the treaty.¹⁶¹ The case is thus perhaps not a good example of how future tribunals will proceed.

5.2 Full Reparation

If a state expropriates an investment that does not comport to the requirements set out in an investment treaty, the state commits an internationally wrongful act that entails the international responsibility of the state.¹⁶² According to ILC Article 31, the legal consequence of international responsibility is to make “*full reparation for the injury caused*”. In Article 31(2) injury is defined as “*any damage, whether material or moral*”. Moral damages are not considered here, as these are not financially assessable.

The basis of the customary international law on reparation stems from the frequently cited judgment from the Permanent Court of International Justice (PCIJ) regarding the Factory at Chorzów. The case concerned a nitrate factory in Upper Silesia that belonged to German nationals, which was transferred to a Polish national through a ministerial decree. The PCIJ held that the expropriation was unlawful as it was done contrary to Article 7 of the Geneva Convention of 1922.¹⁶³ On the principle of reparation, the PCIJ stated:

*“The essential principle contained in the actual notion of an illegal act – a principle which seems to be established by international practice and in particular by decisions of arbitral tribunals – is that reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it – such are the principles which should serve to determine the amount of compensation due for an act contrary to international law.”*¹⁶⁴

From the quote it is clear that the objective of reparation is to “*re-establish the situation which would, in all probability, have existed if that act had not been committed.*” In other words reparation is a subjective standard, which in investor-state disputes aims at putting the specific investor in the probable hypothetical situation he or she would have been in had the state not breached the treaty obligations. This is comparable to the expectation interest in contract law.

¹⁶¹ Ibid paragraph 618

¹⁶² See ILC Article 1 – These articles will be used as expressions of customary international law in the following

¹⁶³ Chorzów Factory paragraph 123

¹⁶⁴ Ibid paragraph 125

Reparation can take the form of “*restitution, compensation and satisfaction, either singly or in combination*”, cf. ILC Article 34. Satisfaction is of little practical importance in investor-state disputes. On the relationship between restitution and compensation, it is clear from ILC Article 36(1) that the state is only obligated to compensate for damage “*not made good by restitution*”,¹⁶⁵ which makes restitution the primary remedy for making reparation. However, restitution is for various reasons rarely claimed in practice,¹⁶⁶ which makes damages the *de facto* primary remedy for unlawful expropriations.

The obligation to pay damages includes any “*financially assessable damage including loss of profits*”.¹⁶⁷ The state is therefore liable for any loss caused by the unlawful act. Damages therefore have a compensatory objective aimed at wiping out all of the financial consequences of the unlawful act. Typically, this will require an award of the value of investment, lost profit, to the extent that this is not accounted for by the investment's value, and any other consequential loss that the unlawful act has caused. So far it seems that tribunals have viewed the loss suffered by the investor for the taking of the investment as the fair market value of the investment. This, however, is only the lower limit of the investor's loss and it could lead to less than full reparation for the investor if the investment has a special value to the investor.¹⁶⁸

The case of *CME v Czech Republic* seems to be a good illustration of the difference between fair market value and full reparation. The Tribunal awarded the investor the fair market value of the investment, which they based on the sum paid by the claimant about 6 months prior to the expropriation. From the sum paid the Tribunal deducted a sum relating to what was called “*the Zelezny Factor*”.¹⁶⁹ The Tribunal did not consider that this was related to the business itself; however, as the Tribunal said that it was awarding “*the value which a restitution in kind would bear*”,¹⁷⁰ the special value this investment had to the investor meant that the investor's loss was not fully wiped out when this deduction was made. So far, this distinction between subjective value and fair market value has been largely overlooked by tribunals when awarding damages.

¹⁶⁵ ILC Article 36(1)

¹⁶⁶ See Ripinsky (2008) chapter 3.2.3 for an analysis

¹⁶⁷ ILC Article 36(2)

¹⁶⁸ See chapter 3.2 for more details on special value

¹⁶⁹ *CME v Czech Republic* paragraphs 538-549, 620

¹⁷⁰ *CME v Czech Republic Partial Award* paragraph 618

5.2.1 The Value of Restitution

There are two possible approaches to the obligation of paying damages equal to the value of restitution. Under the narrow approach the state has to wipe out all the consequences by compensating the value of restitution prior to the unlawful act. From the Commentary to the ILC Articles, it is clear that the ILC intentionally adopted the narrow definition.¹⁷¹ ILC Article 35 reflects this as the state's obligation is to “*re-establish the situation that existed before the wrongful act was committed*”. In the words of the PCIJ in *Chorzów Factory*, this would entail an obligation of paying damages amounting to “*the value of the undertaking at the moment of dispossession, plus interest to the day of payment.*”¹⁷²

The broad approach to restitution entails an obligation to restore a present hypothetical situation in which the unlawful acts had not been committed. Under this approach the tribunal has to award damages equal to the difference between the investor's actual and hypothetical situation at the date of the award ‘but for’ the state's unlawful expropriation. This often leads to a valuation date of the investment being the date of the award. This approach will be referred to in the following as the *Chorzów* standard.

Recently, the tribunals that have applied the *Chorzów* standard have held that the investment value as of the date of the expropriation and any consequential loss constitute the lower limit of compensation due for expropriation.¹⁷³ The consequence of such a view is that states bear both the risk of a decrease in value as the investment remains on their hand but still have to pay damages according to the value as of the date of expropriation, and any increase in value that the investor would have enjoyed ‘but for’ the unlawful act since this is to be awarded as damages.

Only the PCA Tribunal in *Yukos Owners v Russia* specifically addressed the rationale behind this lower limit. The Tribunal held that the investor in “*absence of the expropriation...could have sold the asset at an earlier date at its previous higher value.*”¹⁷⁴ As this case concerned a direct expropriation through a seizure and auction of the company's assets, the state did in fact prevent such a sale of at least the auctioned assets through the expropriation.¹⁷⁵

¹⁷¹ ILC (2001) Commentary to Article 35 paragraph (2)

¹⁷² *Chorzów Factory* paragraph 124

¹⁷³ See e.g. *Siemens v Argentina* paragraph 352 & *Yukos Owners v Russia* paragraph 1768

¹⁷⁴ *Yukos Owners v Russia* paragraph 1768

¹⁷⁵ *Ibid* paragraphs 98-102

However, for indirect expropriations, the investor's title to the investment is by definition unaffected, and the investor could, at least formally, have sold it off. Abdala & Spiller have argued that if the state's measures do not prevent the investor from divesting, the investor is in any case to be awarded the difference between the hypothetical value and the actual value as of the date of the award.¹⁷⁶ Their argument is that if economic conditions deteriorate, compensation limited to the value as of the date of the expropriation would give the investor a windfall, as the state acts are not the cause of this loss. Whether tribunals accept this notion or not remains to be seen, but other arguments have also been put forward in scholarly writing for the lower limit approach.

Ripinsky and Williams have noted that “*logically, compensation for unlawful expropriation cannot be lower than that for a lawful one.*”¹⁷⁷ The writers do not elaborate on why this is logical, but this would create a disincentive for acting unlawfully, which in turn would make the rules on lawful expropriation more effective and prevent attempts at opportunistic expropriations. This does, however, bring a certain punitive element to the table rather than a compensatory one.

On the other hand, there will rarely be an abundance of actual willing buyers due to the uncertainty surrounding the future of the investment. In cases of indirect expropriation, the lower limit approach has the benefit of shutting the door on a speculative exercise of determining whether the investor would have divested or not at some point between the expropriation and the award.

Whether a tribunal will award damages based on a decreased value of an indirectly expropriated investment is unclear but the expressed views of tribunals so far seems to support that the lower limit would be chosen. If the compensatory goal of wiping out the consequences is to be fulfilled, an award based on the lower limit would lead to a windfall for the claimant, and be contrary to this.

As the application of the broad approach mainly involves the determination of the relevant date of valuation, a more detailed analysis of investment arbitration practice will be left for 5.4.2 below.

¹⁷⁶ Abdala (2008) p. 118

¹⁷⁷ Ripinsky (2008) p. 245, see also p. 256

5.3 Heads of Damage

The loss suffered by the investor between the date of expropriation and the date of the award can be categorized into different heads of damage. These are as follows:

- The value of the investment less any residual value,
- Lost profit,
- Interest, and
- Incidental expenses

Depending on the date of valuation of the investment, different heads of damage are relevant and can be compensated for.

If the date of valuation is the date of expropriation, the damage not made good by restitution is the value of the investment to that particular investor, interest loss and any incidental expenses. Incidental expenses are considered at the end of this section. If the investment was indirectly expropriated any residual value will have to be deducted from the investment value as this is not lost to the investor. If the value of the investment is calculated using a forward-looking method, then the loss of profit will already be accounted for by the method, which would obviate an award of this.¹⁷⁸ If not, then lost profit could be awarded, however, this will probably rarely be the case, as the tribunal will in a sense already have denied that any loss of profit has occurred between the expropriation and the award through the choice of valuation method. To the extent that it is necessary to ensure full reparation, the investor will also have to be awarded interest on the investment value from the date of expropriation using an interest rate and mode of calculation that wipes out the consequences of the unlawful act.¹⁷⁹

If full reparation demands valuing the investment value as of a later date than the date of expropriation, the investment's value as of that date will have to be awarded. Interest will also normally have to be awarded on the investment value if the date of valuation is set earlier than the date of the award. For income-generating investments the tribunal will also have to award past lost profit that the investor would have earned in the absence of the unlawful act in the interim period between the date of the unlawful act and the date of valuation. Interest on past lost profit should also be awarded to the extent that it is warranted to ensure full reparation. In

¹⁷⁸ This is dealt with in detail in chapter 4.2

¹⁷⁹ See ILC Article 38. The rate and mode of computation remains an unsettled topic in customary international law and is not dealt with in this thesis, see Ripinsky (2008) p. 364-391 and Marboe (2009) p. 329-377 for a thorough discussion

such cases the relationship between investment value and lost profit can pose a risk for double counting. The case of *Yukos Owners v Russia* seems to be a good illustration of just that.

In *Yukos Owners v Russia* the Tribunal had to value dividends for a ten year period between the date of expropriation and the date of the award. The Tribunal considered the parties' submissions on the issue and made a discretionary downward adjustment that took into account risks of higher taxes and those associated with the company structure.¹⁸⁰ The business was valued using a comparable companies method coupled with a discounted cash flow valuation, and the equity value of the investment was index adjusted to the present day value. This technique failed to account for company value and dividends being inversely related, as hypothetically paid dividends cannot at the same time both contribute to the growth of equity and be in the hands of the investor earning interest, which was also awarded on the amount. As Russia's valuation expert noted in a subsequent report, the Tribunal's finding was that Yukos' company value mirrored the development of comparable companies, but paid, according to his calculations, dividends of more than three and a half times that of the historical dividends paid by the comparable companies.¹⁸¹ It is thus possible that the investors were awarded more than their actual loss, which would be contrary to the compensatory principle underlying the Chorzów standard. Therefore, valuers should pay particular care when awarding both past lost profit and investment value.

In order for reparation to wipe out all the consequences of the unlawful act, investors will sometimes also have to be awarded incidental expenses caused by the act. This rule is subjected to certain limitations as can be shown by the Commentary to ILC Article 36:

*"It is well established that incidental expenses are compensable if they were reasonably incurred to repair damage and otherwise mitigate loss arising from the breach."*¹⁸²

As can be seen by the quote incidental expenses can only be awarded if they were "*reasonably incurred*" (1) to repair damage or (2) to mitigate loss. In the context of international investment law incidental expenses will normally be expenses incurred in order to mitigate further loss. These expenses will be awarded if they were "reasonably incurred" and there is causation between the unlawful act and the expenses incurred.

In practice there have been a few cases that have considered such damages but general concepts such as causation, remoteness and reasonableness are still unclear.¹⁸³ A noteworthy case

¹⁸⁰ *Yukos Owners v Russia* paragraphs 1805-1811

¹⁸¹ *Dow* (2014) paragraph 75

¹⁸² ILC (2001) Commentary to Article 36 paragraph (34)

in this respect is *Siemens v Argentina*. The investor claimed damages for costs incurred by maintaining a ‘skeleton operation’, storage costs, training costs and technical support costs, which were accepted by the Tribunal as justified.¹⁸⁴ The Tribunal did not provide any reasons as to why these costs were justified; however, the tribunal must have viewed these as reasonable losses caused by the unlawful act. Such losses will have to be awarded in order to put the claimant in the position he would have been in ‘but for’ the unlawful act.

5.4 The Date of Valuation for Unlawful Expropriation

5.4.1 Introduction

For unlawful direct expropriations it is normally easy to determine the date of expropriation since these normally are marked by either a definitive act such as a seizure or a decree that deprives the investor of the investment. For indirect expropriations it can be a challenging process of determining the exact date valuation unless the expropriation is the result of a single act tantamount to expropriation. The date of valuation for indirect expropriations that do not happen at one particular moment (creeping expropriations) is dealt with in 5.4.3 below.

The topic that is discussed next here is the justification for using a later valuation date than the date of expropriation. Logically, if a later valuation date is to be used the investor would have had to have retained the investment until that date. Additionally, any subsequent increase in the overall value of the investment and lost profit must have benefitted the investor in order for there to have been a loss. The following analysis looks at cases dealing with this issue.

5.4.2 Chorzów’s Date of Valuation

The first tribunal that chose a later valuation date was the ICSID Tribunal in the case of *ADC v Hungary*. The case concerned the expropriation of an operating agreement for the Budapest Ferihagy International Airport. The Tribunal held that the state measures constituted an unlawful expropriation, as it violated the requirements of public purpose, due process, non-discrimination and because just compensation had not been paid.¹⁸⁵ The value of the agreement had risen markedly after the date of expropriation due to Hungary’s accession to the EU and a substantial increase in the number of tourists that travelled to Hungary.¹⁸⁶ The Tribunal had to determine which party that would benefit from these events. A valuation based on the date of expropriation would have considered these events as ex-post information, which

¹⁸³ Ripinsky (2008) p. 306-307

¹⁸⁴ *Siemens v Argentina* paragraphs 329, 386, 403

¹⁸⁵ *ADC v Hungary* paragraph 476

¹⁸⁶ Abdala (2007) p. 6

would have benefited Hungary. Conversely, a valuation of the hypothetical value as of the date of the award would treat this information as ex-ante information, which would benefit the claimant.

The Tribunal held that the applicable standard of compensation was the Chorzów standard and that the investor was to be awarded compensation based on the market value as of the date of the award.¹⁸⁷ Given the facts this approach seems to have merit. The main driver of the overall value of the investment was the number passenger travelling through the airport. As this number had increased and ADC is a professional airport operator, it seems probable that the investment would have increased in value after the date of expropriation. Had the investor not been compensated as of the date of the award, the compensatory objective of the Chorzów standard would not have been achieved. Choosing an earlier valuation date would not have put the claimant in the hypothetical situation he would have been in ‘but for’ the unlawful expropriation.

Another interesting case in this respect is *Vivendi v Argentina*. The ICSID Tribunal held that there had been an unlawful expropriation and that the relevant standard of compensation was, as in *ADC v Hungary*, the Chorzów standard.¹⁸⁸ The Tribunal based its valuation on the amounts invested by claimant and included amounts spent after the date of expropriation.¹⁸⁹ Had the Tribunal not considered these amounts, the investor would not have received compensation for losses caused by the unlawful act. Naturally, the goal of wiping out all the consequences would not have been fulfilled if the investor did not receive compensation for all of the amounts invested. The case can thus be taken into account as a case that bases the valuation on the date of the award. However, it is possible to view it as an example of a valuation based on the date of expropriation coupled with an award of damages for incidental expenses. This is mostly a theoretical point.

The arguably most expansive application of the Chorzów standard thus far is the case of *Yukos Owners v Russia*. The case concerned Russia’s expropriation of the oil company Yukos. The expropriation was deemed by the PCA Tribunal to be unlawful as it was not carried out under due process of law and no compensation had been paid.¹⁹⁰ Regarding the question of the relevant valuation date, the Tribunal held that the claimant was entitled to choose between the date of expropriation and the date of the award.¹⁹¹ In reaching this conclusion, the Tribu-

¹⁸⁷ *ADC v Hungary* paragraphs 497-499, 514, 519

¹⁸⁸ *Vivendi v Argentina* paragraphs 8.2.3-8.2.7

¹⁸⁹ *Ibid* paragraphs 8.3.15-8.3.20

¹⁹⁰ *Yukos Owners v Russia* paragraphs 1583-1585

¹⁹¹ *Ibid* paragraphs 1763 & 1769

nal first looked at the Energy Charter Treaty Article 13 and the preparatory works and held that these did not contain anything of relevance on the date of valuation for damages.¹⁹² Instead the Tribunal looked to Article 35 and Article 36 of the ILC Articles, and held that Article 35 entails an “*obligation of restitution [that] applies as of the date of when a decision is rendered.*”¹⁹³ The Tribunal went on by explaining that restitution would demand the payment of the higher value as of the date of the award and the date of the expropriation.¹⁹⁴ This meant that the state bore the risks of both any increase and any decrease in the real value of the investment from the date of the expropriation until the date of the award.

In reaching the value of the investment ‘but for’ the expropriation, the Tribunal relied on the RTS Oil & Gas Index and adjusted the submitted and corrected 2007 valuation backwards to the date of the expropriation and the date of the award.¹⁹⁵ This approach assumed that Yukos’ value would have mirrored the development of the index. However, it is rather unlikely that Yukos actually would have done so. On the other hand, assuming that a company would have performed on par with the index might in most circumstances be the most reasonable assumption. Taking into account that there was no indication in the case that the investors actually would have divested prior to the date of the award, it seems to have been implicitly assumed that they would have retained the investment until the date of the award. Therefore, the compensatory objective underlying the Chorzów standard necessitated an award of compensation based on the value as of the date of the award. Had the Tribunal not done so, the award would not have wiped out the consequences of Russia’s unlawful acts. The total difference in value between the two dates, after a deducting for contributory fault, was more than USD 33 billion.¹⁹⁶ The award clearly shows how important the choice of valuation date can be.

Two cases can be illustrative of the Chorzów standard applied but found non-significant for the valuation date. In *Rumeli Telekom v Kazakhstan* the ICSID Tribunal surprisingly held that the Chorzów standard only applies to other wrongful acts than unlawful expropriation.¹⁹⁷ As such, the case is not an example of the Chorzów standard; however, the Tribunal noted that in the present case a choice of standard would not have mattered, as the correct approach in ei-

¹⁹² Ibid paragraph 1765

¹⁹³ Ibid paragraph 1766 – The Tribunal seems to have overlooked that Article 35 adopts the narrow definition of restitution.

¹⁹⁴ Ibid paragraphs 1767-1768

¹⁹⁵ Ibid paragraph 1815

¹⁹⁶ Ibid paragraph 1826

¹⁹⁷ *Rumeli Telekom v Kazakhstan* paragraph 792

ther case was to award the value at the time of the expropriation.¹⁹⁸ For this reason the case is dealt with here.

The investment in the Rumeli case had appreciated since the date of expropriation and the Tribunal would have had to consider this ex-post information if the Chorzów standard had been applied. Interestingly, the application of this standard would probably have led to the same result as applying the investment treaty standard, because the Tribunal viewed the positive developments as attributable to the new owner, which meant that the claimant would not have been in this improved situation ‘but for’ the unlawful acts.¹⁹⁹ Choosing a later valuation date would not have been necessary in these circumstances for the achievement of the compensatory objective behind the Chorzów standard, as an earlier date of valuation fulfilled this objective. It can thus be argued that this case is in line with the previously discussed cases.

The second case is *Kardassopoulos v Georgia*, where the ICSID Tribunal held that Georgia had violated the due process requirement and unlawfully expropriated the investment by terminating the investor’s concession.²⁰⁰ The Tribunal seems to have implicitly applied the Chorzów standard as it noted that the Tribunal had to award compensation because restitution no longer was possible.²⁰¹ The Tribunal recognized that the principle of full reparation might require that damages are awarded as of the date of the award if “*it is demonstrated that the Claimants would, but for the taking, have retained their investment.*”²⁰²

When applying the Chorzów standard to the specifics of the case, the Tribunal held that the investor would have sold the investment ‘but for’ the unlawful acts of Georgia.²⁰³ The evidence the Tribunal relied on for the likely hypothetical outcome is not available in the award, however, it appears that the investor had been negotiating a sale in the months prior to the expropriation,²⁰⁴ and that a sale of the shares would have been an “*an entirely acceptable outcome*”.²⁰⁵ The Tribunal also relied on industry experts that testified that the consortium the investment was a part of “*would likely have sought to negotiate with [the claimant] and purchase*” the investment.²⁰⁶ As this finding suggests, retention of the investment is a prerequisite for choosing a later valuation date. If the investment would have been sold around the date of

¹⁹⁸ Ibid paragraph 793

¹⁹⁹ Ibid paragraphs 807-808

²⁰⁰ *Kardassopoulos v Georgia* paragraphs 404-405

²⁰¹ Ibid paragraph 512

²⁰² Ibid paragraph 514

²⁰³ Ibid paragraph 515

²⁰⁴ Ibid paragraph 140

²⁰⁵ Ibid paragraph 515

²⁰⁶ Ibid paragraph 516

expropriation there would not have been any loss of value with regards to the investment beyond this date. Naturally, the compensatory objective underlying the Chorzów standard would not demand a later valuation date in such cases.

The final case worth mentioning in this regard is *Unglaube v Costa Rica*. The case concerned a lengthy attempt by Costa Rica to expropriate a real estate property. At the date of the award Costa Rica still had not formally expropriated the investment. The ICSID Tribunal held that since 22 July 2003 the state had taken actions that effectively deprived the claimant of the normal rights of ownership.²⁰⁷ These actions were deemed unlawful, as adequate compensation had not been paid.²⁰⁸ In order to wipe out the consequences of the unlawful act the Tribunal awarded the fair market value of the investment as of 1 January 2006. This was based on an assumption that the investor would have sold the property six months prior to a market peak.²⁰⁹

There is no trace in the award of any proof that the investor actually would have sold the investment at that point. The only link between the loss and the unlawful act was that the state's actions prevented the investor from selling at an earlier point.²¹⁰ The investor had claimed the price as of the market peak but the Tribunal refused to award this sum as this would have credited the investor with "*perfect judgment regarding a highly changeable real estate market as well as perfect market timing*".²¹¹ As this shows the Chorzów standard does not warrant choosing the optimal date of valuation but rather the probable date. Naturally, "losses" that it is unlikely that the investor would have suffered, should not be compensated. This is perfectly in line with the previously discussed cases.

5.4.3 Creeping Expropriations – The Date of Expropriation?

Unless an indirect expropriation is the result of a single act tantamount to expropriation, it often becomes difficult to determine the exact date of the expropriation. Creeping expropriations are the result of a series of measures taken by the state that in sum constitutes an expropriation. Setting an exact date as the 'moment of expropriation' when the taking does not occur at one particular instant can prove to be a difficult challenge for tribunals.²¹²

²⁰⁷ *Unglaube v Costa Rica* paragraph 223

²⁰⁸ *Ibid* paragraph 305

²⁰⁹ *Ibid* paragraph 318

²¹⁰ *Ibid* paragraph 316

²¹¹ *Ibid* paragraph 317

²¹² Corey (2012) p. 997

For indirect expropriations the tendency in arbitration practice has been to focus on the date on which the government measures lead to an “*irreversible deprivation*” as the date of expropriation.²¹³ This moment is normally towards the end of the state’s actions and if the fair market value of the investment is assessed as of that date it runs the risk of not compensating the investor for some of the negative effects of the expropriation.²¹⁴ Conversely, if the date of expropriation is set early in the series of events, there is a risk that the state has to compensate for reduced value caused by lawful measures.²¹⁵

Reisman and Sloane were among the first to recognize this potential risk for deviation from the “correct” measure of damages that equating the moment of expropriation with the moment of valuation poses. They suggested that “*the ‘moment of expropriation’ should be distinguished from the ‘moment of valuation’*” in order to avoid over- or undercompensating the investor.²¹⁶ Their article was published in 2004 and it seems that their article was premised on investment treaties containing the relevant standard of compensation also for unlawful expropriations.²¹⁷

As noted above indirect expropriations should generally be held to be unlawful acts for which the state is liable to make reparation. Since the publication of their article, recent case law has moved away from the view that the investment treaty standard of compensation also applies for unlawful expropriations. Instead, tribunals now focus on awarding damages that wipes out the consequences of the unlawful act. Even though tribunals should look away from loss caused by the unlawful act in theory could do so without adjusting the date of valuation, a practical way of avoiding under- or overcompensating the investor is to delink the ‘moment of expropriation’ from the date of valuation in cases concerning creeping expropriation.

The case of *Kardassopoulos v Georgia* seems to be a good example of just that. The case concerned an expropriation of the two investors’ rights in an oil pipeline. The government expropriated the investment through two decrees. The expropriation was deemed to have been effected by the second decree on 20 February 1996. The Tribunal separated the date of valuation and the date of expropriation, and held that 10 November 1995 – the day before the first decree – was the relevant date of valuation.²¹⁸ The Tribunal explained that the reason behind this choice of an earlier date was “*to ensure full reparation and to avoid any diminution of*

²¹³ Marboe (2009) p. 135

²¹⁴ Corey (2012) p. 998

²¹⁵ Ibid p. 997

²¹⁶ Reisman (2004) p. 148

²¹⁷ Ibid p. 133

²¹⁸ *Kardassopoulos v Costa Rica* paragraph 517

value attributable to the State's conduct leading up to the expropriation."²¹⁹ This approach is in line with the Chorzów standard because it ensures that all of the investor's loss is wiped out.

The previously mentioned case of *Un glaube v Costa Rica* is also illustrative of the new approach to valuation dates. Costa Rica had from July 2003 until the award tried and failed to expropriate the investor's real estate property through several resolutions. During that period the real estate prices in the region had risen sharply until 2006, and then stabilized before dropping substantially.²²⁰ The Tribunal considered that "*the determination of a 'date of expropriation' (and its use as 'the date of valuation' of the 75-Meter Strip) presents a complicated and unsatisfactory set of choices.*" The Tribunal saw "*no rational basis for selecting*" a date of expropriation.²²¹ Instead, the tribunal assumed that the investor would have sold the investment just prior to the peak.²²²

As these two cases show the potential risk posed by linking the date of valuation with the date of expropriation should not be an issue any longer if tribunals apply the Chorzów standard. This allows tribunals to choose an appropriate date of valuation ensures that all of the loss caused by the unlawful act is wiped out. Determining the valuation date will necessarily depend on the concrete factual circumstances of the particular case as has been shown by these cases.

6 Final Remarks

As was shown through this thesis calculating damages and compensation for expropriation can be a challenging exercise that requires the arbitrators to make numerous assumptions on future events and comparable companies, transactions and assets. Even the choice of an appropriate valuation method can be a difficult exercise. The complexity associated with calculating damages and compensation can necessitate the use of valuation experts for the tribunals. As party submission often vary, it is necessary that arbitrators have an understanding of the underlying basics of the valuation methods, and seek guidance when complex questions arise.

Through the 'new wind' of awarding an amount higher than the fair market value of the expropriated property, the rules on lawful expropriation might become more effective as states

²¹⁹ I.c.

²²⁰ *Un glaube v Costa Rica* paragraph 313

²²¹ *Ibid* paragraph 316 – with reference to Reisman (2004) p. 130-133

²²² *Ibid* paragraph 318

now bear both the upside risk and downside risk. In the cases where the Chorzów standard was applied significantly, the subsequent events did in fact develop favorably, which meant that the investor's loss was higher than the fair market value as of the date of valuation and as such the results seems justified. As was shown in the discussion on *Yukos v Russia*, the application of the Chorzów standard can be a challenging process when the investment is a business that is destroyed. Even if it is clear that the investor's loss would have been greater than the sum as of the date of expropriation, measuring the loss of something that no longer exists can for large assets over longer periods of time lead tribunals to make assumptions that the investment would have followed the market.

As the differences between the sum awarded as compensation or damages can be substantial it can be expected that the question of legality will receive much attention in future arbitral proceedings.

7 References

7.1 Bibliography

- Abdala (2007) Abdala, Manuela A., Pablo T. Spiller and Sebastian Zuccon, "Chorzów's Compensation Standard As Applied In ADC v. Hungary", *Transnational Dispute Management* 3 (2007), <http://www.transnational-dispute-management.com/article.asp?key=1013> [Accessed 20 April 2015]
- Abdala (2008) Abdala, Manuela A., and Pablo T. Spiller, "Chorzów's Standard Rejuvenated – Assessing Damages in Investment Treaty Arbitrations", *Journal of International Arbitration*, Volume 25 issue 1 (2008), p. 103-120 (Siter fra HeinOnline)
- Commission (2007) Commission, Jeffery P., "Precedent in Investment Treaty Arbitration – A Citation Analysis of a Developing Jurisprudence", *Journal of International Arbitration*, Volume 24 Issue 2 (2007), p. 129-158. http://www.linklaters.com/pdfs/Insights/us/JOIA_Article.pdf [Accessed 20 April 2015]
- Corey (2012) Corey, Shain, "But Is It Just? The Inability for Current Adjudicatory Standards to Provide "Just Compensation" for Creeping Expropriations", *Fordham Law Review*, Volume 81 No. 2 (2012), p. 973-1012. http://fordhamlawreview.org/assets/pdfs/Vol_81/Corey_November.pdf [Accessed 20 April 2015]
- Damodaran (2006a) Damodaran, Aswath, "Chapter 7 - Relative Valuation: First Principles." I: *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance*, 2nd ed., 2006. (<http://pages.stern.nyu.edu/~adamodar/pdfiles/damodaran2ed/ch7.pdf>) [Accessed 20 April 2015]
- Damodaran (2006b) Damodaran, Aswath, "Chapter 15 – The Value of Synergy." I: *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance*, 2nd ed., 2006. (<http://pages.stern.nyu.edu/~adamodar/pdfiles/damodaran2ed/ch15.pdf>) [Accessed 20 April 2015]
- Damodaran (2008) Damodaran, Aswath, "What is the riskfree rate? A Search for the Basic Building Block", *Stern School of Business working paper* (2008). http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1317436 [Accessed 20 April 2015].
- Damodaran (2012) Damodaran, Aswath, "The value of control: implications for control premiums, minority discounts and voting share differen-

- tials”, *NYU Journal of Law & Business* (2012), Vol. 8(2), p 487-503. http://www.nyuilb.org/wp-content/uploads/JLBv8n2_5_Damodaran.pdf [Accessed 20 April 2015]
- Dolzer (2012) Dolzer, Rudolf, and Christoph Schreuer, *Principles of International Investment Law*, 2nd ed., 2012
- Dow (2014) Dow, James, Expert Report of Professor James Dow, 8 November 2014, (<http://www.italaw.com/sites/default/files/case-documents/italaw4155.pdf>) [Accessed 20 April 2015]
- Fortier (2004) Fortier, L. Yves, and Stephen L. Drymer, “Indirect Expropriation in the Law of International Investment: I know It When I See It, Or *Caveat Investor*”, *ICSID Review* (2004) Volume 19(2), p. 293-327 <http://icsidreview.oxfordjournals.org/content/19/2/293.extract> [Accessed 20 April 2015]
- ILC (2001) International Law Commission, *Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries*, 2001, (A/56/10). (http://legal.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf) [Accessed 20 April 2015]
- Kantor (2008) Kantor, Mark, *Valuation for Arbitration: Compensation Standards, Valuation Methods and Expert Evidence*, 1st ed., 2008
- Marboe (2007) Marboe, Irmgard, “Compensation and Damages in International Law – *The Limits of ‘Fair Market Value’*”, *The Journal of World Investment & Trade* (2006), Vol. 7(5), p. 723-759. <http://www.transnational-dispute-management.com/article.asp?key=1166> [Accessed 20 April 2015]
- Marboe (2009) Marboe, Irmgard, *Calculation of Compensation and Damages in International Investment Law*, 2009
- Newcombe (2009) Newcombe, Andrew, and Lluís Paradell, *Law and Practice of Investment Treaties*, 2009.
- Reinisch (2008) Reinisch, August, “Legality of Expropriations”, I: *Standards of Investment Protection*, August Reinisch (ed.), 2008, p. 171-204. http://www.univie.ac.at/intlaw/reinisch/legal_expropriation_ar.pdf [Accessed 20 April 2015]
- Reisman (2004) Reisman, Michael W., and Robert D. Sloane, “Indirect Expropriation and its Valuation on the BIT Generation”, *Faculty Scholarship Series* (2004), paper 1002.

- http://digitalcommons.law.yale.edu/fss_papers/1002 [Accessed 20 April 2015]
- Ripinsky (2008) Ripinsky, Sergey, and Kevin Williams, *Damages in International Investment Law*, 2008
- Sabahi (2011) Sabahi, Borzu, *Compensation and Restitution in Investor-State Arbitration*, 1. Utg, 2011. (Siter fra Oxford Scholarship Online)
- Sornarajah (2010) Sornarajah, Muthucumaraswamy, *The International Law on Foreign Investment*, 3rd ed. 2010.
- Stern (2008) Stern, Brigitte, “In Search of the Frontiers of Indirect Expropriation”, I: Contemporary Issues in International Arbitration and Mediation: The Fordham Papers 2007, Arthur W. Rovine (red.), 2008, p. 29-52 (Siter fra Brill Online)
- UNCTAD (2007) UNCTAD, *Bilateral Investment Treaties 1995-2006: Trends in Investment Rulemaking*, (UNCTAD/ITE/IIA/2006/5), 31 January 2007. (http://unctad.org/en/Docs/iteiia20065_en.pdf) [Accessed 20 April 2015]
- UNCTAD (2011) UNCTAD, *Expropriation: A Sequel*, (UNCTAD/DIAE/IA/2011/7), 29 November 2011. (http://unctad.org/en/Docs/unctaddiaeia2011d7_en.pdf) [Accessed 20 April 2015]
- UNCTAD (2014) UNCTAD, *World Investment Report 2014*, (UNCTAD/WIR/2014)24 June 2014. (http://unctad.org/en/publicationslibrary/wir2014_en.pdf) [Accessed 20 April 2015]
- Wells (2003) Wells, Lou, “Double Dipping in Arbitration Awards? An Economist Questions Damages Awarded to Karaha Bodas Company in Indonesia”, *19 Arbitration Interational* (2003), p. 471-482. (Siter fra HeinOnline)
- World Bank (1992) World Bank, *Legal Framework for the Treatment of Foreign Investment*, Report No. 11415 Volume II: Guidelines, World Bank Group, 25 September 1992, (<http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1999/>

11/10/000094946_99090805303082/Rendered/PDF/multi_page.pdf), [Accessed 20 April 2015]

Wälde (2007)

Wälde, Thomas W., and Borzu Sabahi, “Compensation, Damages and Valuation in International Investment Law”, *Transnational Dispute Management* (2007), Vol. 4(6), p. 1-64.
<http://www.transnational-dispute-management.com/article.asp?key=1165> [Accessed 20 April 2015]

7.2 Table of Cases

All cases are available from www.italaw.com unless specified otherwise.

ADC v Hungary	ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary, ICSID Case No. ARB/03/16, Award of the Tribunal of 2 October 2006
Asian Agricultural Products v Sri Lanka	Asian Agricultural Products LTD v Republic of Sri Lanka, ICSID Case No. ARB/87/3, Final Award of 27 June 1990
Ascom v Kazakhstan	Anatolie Stati, Gabriel Stati, Ascom Group S.A., Terra Raf Trans Traiding LTD. v Republic of Kazakhstan, Stockholm Chamber of Commerce, Case No. 1:14-cv-00175-ABJ, Award of 19 December 2013
Azurix v Argentina	Azurix Corp. v The Argentina Republic, ICSID Case No. ARB/01/12, Award of 14 July 2006
Biwater Gauff v Tanzania	Biwater Gauff LTD. V United Republic of Tanzania, ICSID Case No. ARB/05/22, Award of 24 July 2008
CME v Czech Republic Partial Award	CME Czech Republic B.V. v The Czech Republic, UNCITRAL Arbitration Proceedings, Partial award of 13 September 2001
CME v Czech Republic	CME Czech Republic B.V. v The Czech Republic, UNCITRAL Arbitration Proceedings, Final award of 14 March 2003
ConocoPhillips v Venezuela	ConocoPhillips Petrozuata B.V., ConocoPhillips Hamaca B.V., ConocoPhillips Gulf of Paria B.V., and ConocoPhillips v Bolivarian Republic of Venezuela, ICSID Case No. ARB/07/30, Decision on Jurisdiction and Merits of 3 September 2013
Enron v Argentina	Enron Corporation and Ponderosa Assets, L.P., ICSID Case No. ARB/01/3, Award of 22 May 2007
Funnekotter v Zimbabwe	Bernardus Henricus Funnekotter and Others v Republic of Zimbabwe, ICSID Case No. ARB/05/6, Award of 22 April 2009
Gold Reserve Inc v Venezuela	Gold Reserve Inc v Bolivarian Republic of Venezuela, ICSID Case No. ARB(AF)/09/1, Award of 22 September 2014
Kardassopoulos v Greece	Ioannis Kardassopoulos v The Republic of Georgia, IC-

	SID Case No. ARB/05/18 Ron Fuchs v The Republic of Georgia, ICSID Case No. ARB/07/15, Award of 3 March 2010
Metalclad v Mexico	Metalclad Corporation v The United Mexican States, ICSID Case No. ARB(AF)/97/1, Award of 30 August 2000
Mobil v Venezuela	Mobil Corporation, Venezuela Holdings, B.V., Mobil Cerro Negro Holding, Ltd., Mobil Venezolana de Petróleos Holdings, Inc., Mobil Cerro Negro, Ltd., and Mobil Venezolana de Petróleos, Inc. v. Bolivarian Republic of Venezuela, ICSID Case No. ARB/07/28, Award of 9 October 2014
Rumeli Telekom v Kazakhstan	Rumeli Telekom A.S. and Telsim Mobil Telekomikasyon Hizmetleri A.S. v Republic of Kazakhstan, ICSID Case No. ARB/05/16, Award of 29 July 2008
Saipem v Bangladesh	Saipem S. p. A. v The Peoples Republic of Bangladesh, ICSID Case No. ARB/05/7, Award of 30 June 2009
Santa Elena v Costa Rica	Compañía del Desarrollo de Santa Elena, S.A. v The Republic of Costa Rica, ICSID Case No. ARB/96/1, Final Award of 17 February 2000
Siemens v Argentina	Siemens A.G. v. The Argentine Republic, ICSID Case No. ARB/02/8, Award of 6 February 2007
SPP v Egypt	Southern Pacific Properties (Middle East) Limited v Arab Republic of Egypt, ICSID Case No. ARB/84/3, Award of 20 May 1992
Starrett Housing v Iran	Starrett Housing Corporations, Starrett Systems Inc, and Starrett Housing International Inc v The Governement of the Islamic Republic of Iran, 16 Iran-US CTR (1987) 112, Award No. 314-24-1, Final Award of 14 August 1987. This award was only mention as it was referenced by Ripinsky and is not available at www.italaw.com
Tecmed v Mexico	Técnicas Medioambientales Tecmed, S.A. v. The United Mexican States, ICSID Case No. ARB (AF)/00/2, Award of 30 August 2000
Tidewater v Venezuela	Tidewater Investment SRL, Tidewater Caribe, C.A., v. The Bolivarian Republic of Venezuela, ICSID Case No. ARB/10/5, Award of 13 March 2015
Un glaube v Costa Rica	Marion Un glaube v Republic of Costa Rica, ICSID Case No. ARB/08/01, Reinhard Un glaube v Republic of Costa Rica, ICSID Case No. ARB/09/20, Award of 16 May 2012

Vivendi v Argentina	Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v Argentine Republic, ICSID Case No. ARB/97/3, Award of 20 August 2007
Yukos owners v Russia	Hulley Enterprises Limited v The Russian Federation, PCA Case No. AA 226, Yukos Universal Limited v The Russian Federation, PCA Case No. AA 227, Veteran Petroleum v The Russian Federation, PCA Case No. AA 228, Final award of 18 July 2014

7.3 Table of Treaties

Investment treaties:

Australia-Hong Kong BIT (1993)
Greece-South Africa BIT (2001)
Italy-Bosnia and Herzegovina BIT (2000)
Italy-Tanzania BIT (2003)
NAFTA Convention (1994)
Norway-Russia BIT (1995)

Other treaties:

ICSID Convention (1965)
New York Convention (1956)