CTEI WORKING PAPERS

CTEI-2014-4

CTEI WORKING PAPERS

AWARDING INTEREST IN INVESTMENT ARBITRATION [a]

Enrik Haxhirexha [b]

Abstract

Judging by the last few years trends, international investment arbitral practice and jurisprudence has evolved quite dramatically with respect to awarding interest from a time when its practice was unreflective of commercial realities. This seems to be particularly true with the recent trend in regards to the award of compound versus simple interest, even though no uniform approach on the issue has yet emerged. The underlying premise of this paper is that, in international arbitration, awards of interest can undoubtedly be as relevant as the principal amount owed for the loss caused. In this light, we submit that awarding compound instead of simple interest would streamline the current practice, which still suffers from a major unpredictability issues that are undesired for the system. Furthermore, the adoption of compounding interest instead of simple interest would enhance the respect for the principle of full compensation. Indeed, it would be realistic, for in conformity with the current state of affairs of modern financial transactions where compound interest is the norm.

In this thesis, we seek to explore the mechanics of awarding interest in investment arbitration. In doing so, we will firstly go through a general overview of some of the most pertinent aspects that call for attention in this subject i.e. what are the main reasons for awarding interest. We will thereafter look at issues such as the main legal sources that allow for the award of interest and the way they interplay, if at all. Secondly, we will focus on the interest rate and the different approaches that arbitral tribunals use to choose the appropriate one to be applied to a given case. Lastly, we will endeavor to further arguments in favor of the award of compound interest in international arbitration. In doing so, scholarly literature vehemently advocating on the matter of award of compound versus simple interest, the review of legal sources, and last but not least past and recent investment arbitration case law and other relevant international jurisprudential sources, will be taken into account.

[a] Master thesis previously submitted in partial fulfillment of the requirements for the award of the LL.M. degree in International Dispute Settlement (MIDS)

[b] Graduate Institute of International and Development Studies, Geneva.

CENTRE FOR TRADE AND ECONOMIC INTEGRATION (CTEI)

The Centre for Trade and Economic Integration fosters world-class multidisciplinary scholarship aimed at developing solutions to problems facing the international trade system and economic integration more generally. It works in association with public sector and private sector actors, giving special prominence to Geneva-based International Organisations such as the WTO and UNCTAD. The Centre also bridges gaps between the scholarly and policymaking communities through outreach and training activities in Geneva.

www.graduateinstitute.ch/ctei

INSTITUT DE HAUTES ÉTUDES INTERNATIONALES ET DU DÉVELOPPEMENT
GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES
CP 136 – CH-1211 GENÈVE 21
TÉL +41 22 908 57 00
http://graduateinstitute.ch

Abbreviations

BIT	Bilateral Investment Treaty
FET	Fair and Equitable Treatment Standard
ICSID	International Centre for Settlement of Investment Disputes
IIA	International Investment Agreement
ILC	International Law Commission
LIBOR	London Interbank Offered Rate
MFN	Most Favored Nation
PCIJ	Permanent Court of International Justice

TABLE OF CONTENTS

1. Introduction

It is an established fact that today, international investment arbitration is the most used mechanisms for the resolution of international investment disputes and there seems to be a relentless trend towards its increasing popularity. This is, except for the fact that it provides the most suitable mechanism of investment protection to date among investor-state parties, certainly also majorly due to the commercially-oriented expertise that investment arbitration can offer to its users through business-minded practitioners. Logically, its users (the claimants; and not their lawyers), who have their fundamental interest in dispute, are primarily concerned about getting redress for the damage they have been caused, often by seeking to be compensated to the fullest. Therefore, the subject of damages and interest awards is, ultimately, among the most essential to them.

However, of all subjects related to investment arbitration, the law on damages, and in particular, its component concerning the award of interest by arbitral tribunals, has been by far among its historically most neglected areas.[3] Thus, accounting for the least theoretical attention, notwithstanding the crucial role it may play in practice.[4] The explanation for this lack of attention seems to have been dictated by the overwhelming perception that the computation and award of interests due is increasingly guided by the arbitrators' exercise of their discretionary power applied to the factual matrix of each given case, instead of principled legal vis-à-vis economic and financial reality considerations. Additionally, this has been often aggravated by the absence of articulate reasoning in the awards on how a particular conclusion had been reached.

As a consequence, the predictability of investment arbitration, a relevant feature for any just and effective adjudicatory system may be undermined. In fact, unpredictable interest awards may as well backfire and turn into a platform for raising voices of discontent that can hurt investment arbitration as a whole. In our judgment, this would

[3] See J.Y. Gotanda, 'Assessing Damages in International Commercial Arbitration: A Comparison With Investment Treaty Disputes', (2007) 4 TDM, 14.
[4] Gotanda (n 1)

be an unwelcome result for all those believing in the system of investment arbitration as a promoter of international rule of law and good governance.[5]

Fortunately, in recent international arbitration practice and scholarship, the subject of awarding of interest has drawn more attention among arbitration practitioners than in the past, for obvious reasons. As Gotanda points out, international arbitral tribunals, especially in investment disputes, are often confronted with claims that involve large amounts (ranging among the millions of dollars).[6] Consequently, in cases where there is a long lapse of time between the moment when the injury occurs and the final award is rendered, whether a tribunal awards interest and its method of calculation is perhaps as crucial to the claimant from a financial perspective as the principal amount claimed, but it could be even more important.[7]

For example, it is deemed informative to refer to the very recent arbitration award of *Yukos Universal Limited (Isle of Man) v. The Russian Federation*[8], where the amount of interest awarded was in excess of several billion USD.[9] Also, worth mentioning is, *inter alia*, the investment arbitration dispute between *Compañía del Desarrollo de Santa Elena v. Costa Rica*, where the tribunal awarded 4.15 million USD in damages and 11.85 million USD in interest.[10] Similarly, in the case of *Wena Hotels Limited v. Arab Republic of Egypt,* the tribunal awarded approximately 8.1 million USD in damages and approximately 11 million USD in interest.[11] The list of cases is much longer. According to a recent and meaningful quantitative study, only at ICSID, in the

[5] See T. Schultz, C.G. Dupont, 'Investment Arbitration: Promoting the Rule of Law or Over-Empowering Investors? A Quantitative Empirical Study' (2014). Eur. J. Int'l L, Forthcoming; King's College London Law School Research Paper No. 2014-16. 28,29 < http://ssrn.com/abstract=2399179 > accessed 14 July 2014.
[6] See J. Y. Gotanda, 'A Study of Interest'(2008) VI DOSSIERS OF THE ICC INSTITUTE OF WORLD BUSINESS LAW, ICC Publications; Villanova Law/Public Policy Research Paper No. 2007-10. 1 <http://ssrn.com/abstract=1005425> accessed 14 July 2014.
[7] Ibid.
[8] See *Hulley Enterprises Limited (Cyprus) v Russian Federation*, PCA Case No AA 226, UNCITRAL; *Veteran Petroleum Limited (Cyprus) v Russian Federation*, PCA Case No AA 228, UNCITRAL.
[9] See *Yukos Universal Limited (Isle of Man) v Russian Federation*, (2014), Award, PCA Case No.AA 227, para. 1823.
[10] See *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, (2000), Award, ICSID Case No. ARB/96/1, para. 95-107.
[11] See *Wena Hotels Limited v. Arab Republic of Egypt,* (2000), Award, ICSID Case No. ARB/98/4, para. 126-129.

period between 1990 and 2014, there have been a total of 50 cases where the arbitral tribunal has awarded interest.[12]

Despite the extensive adoption of interest awards by arbitral tribunals, concerns as evidenced above with respect to the predictability of such awards, but also the award of less-than-full compensation to the injured claimant for the loss of the use of its money, have a detrimental effect towards the system.[13] In fact, Gotanda notes that: "In (…) investment disputes, the primary purpose of an award of interest is to ensure that the aggrieved party is fully compensated for the loss of the use of money."[14] As we will see in greater detail in the forthcoming sections the non-respect of the full compensation principle, by way of awarding simple instead of compound interest, can create some sort of undesired systemic underachievement, which derives mainly from tribunals embracing a diversity of approaches and methods employed for the calculation of interest.[15]

As the stakes rise and a uniform approach in the award of interest is not handy, a lot of resources are invested by the parties in proposing and disputing what approaches and methods better account for adjusting the award in order for it to reflect its present-day value. In other words, whenever there is a significant lapse of time between the moment when the injury occurs and the moment when the award is rendered by the arbitral tribunal, the parties to the dispute and the arbitrators are frequently faced with the puzzling question of how to tackle the passage of such time. Constantly, in international arbitral practice, this has been done through the award of interest by the arbitral tribunal in order to compensate for the lost time value of an asset (i.e. money) for which the claimant should have been paid as of the moment when the injury occurred, but it did not.[16]

[12] See T. Hart, 'Study of Damages in International Center for the Settlement of Investment Disputes Cases', (2014) 11 TDM, 18.
[13] See J.Y. Gotanda, 'The Unpredictability Paradox: Punitive Damages and Interest in International Arbitration', (2010) 7 TDM, 15.
[14] See J.Y. Gotanda, 'Assessing Damages in International Commercial Arbitration: A Comparison With Investment Treaty Disputes', (2007) 4 TDM, 8.
[15] Gotanda (n 12).
[16] See A.X. Fellmeth, 'Below-Market Interest in International Claims Against States', (2010) 13 J Int Economic Law, 426-427

Be it as it may, that does not mean that interest is awarded automatically.[17] A number of issues need to be addressed before an arbitral tribunal could award interest. Ripinsky & Williams submit the following, as the most pertinent issues to be considered beforehand by the arbitral tribunals: "whether interest should be awarded at all; the applicable rates of interest; the starting date for the calculation of interest (dies a quo); whether interest should be simple or compound; whether to grant post-award interest and if so, on which terms."[18]

Another way of tackling the lost time value of an asset in investment arbitration is through claims for loss of profit, usually this is the case with injury/expropriation of an income-earning asset.[19] The reason behind lost profits claims and awards is that, absent wrongful act on the state's part, the claimant would have been able to dispose of its capital to earn a much bigger return than what available through an investment realizing just commercial rate interest.[20] It is worth noting that, while there are dissimilarities in the burden of proof among this two type of claims (if any, very low in case of interest claims and higher in lost profit claims), there also is a degree of potential overlap among the two, both falling under the lost time value rubric.[21] In practice interest claims are alternative to lost profit claims, which have a track record of often being difficult to entertain by arbitral tribunals for considered as too speculative. However, lost profits claims and awards will not be dealt with in this paper.

1.1 A definition of interest and the rationale for awarding it in investment arbitration

So, what is interest really? Affolder comes up with this definition of interest: "the return or compensation for the use or retention by one person of a sum of money

[17] See S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 366.
[18] See S. Ripinsky, K.Williams (n 15) 362.
[19] See Fellmeth (n 14)
[20] See Fellmeth (n14)
[21] See Fellmeth (n 14)

belonging to or owed by any reason to another."[22] As per this definition, the interest award basic and most important function is to compensate the claimant for the missed opportunity to use the money. If not misappropriated by the respondent, that money would have allowed the claimant to make a profit out of its use, perhaps by investing the money in a profit earning investment vehicle of some sort.

The next question then is: what is the rationale behind awarding interest in international arbitration? Senechal and Gotanda, identify three main reasons to explain why a respondent is obliged to pay interest to a successful claimant.[23]

Firstly, the award of interest promotes the principle of full compensation, for it seeks to put the claimant in the position it would have been but for the breach of the respondent.[24] Thus, its payment acknowledges 'the loss of the opportunity to make a return', from the time of injury until the time of award. In fact, in the absence of such delay (from the date of injury until the date of the award), a claimant would be fully compensated by the award itself therefore, it would not be necessary to award interest as well. Nevertheless, in practice delay is more common than not and extends for a considerable period of time thus, leading to major losses in regards to claimant's finances. In other words, to clarify, when an arbitral tribunal awards interest it aims to acknowledge the necessity to fully compensate the claimant, not just in regards to the original injury (loss), but takes into account further the lapse of time from the moment of injury (loss) until and the moment of full restoration of the claimant.[25]

Secondly, interest awards counter 'unjust enrichment' of the respondent by asking it to compensate the claimant by virtue of the potential advantage it had from the use of its money, which it illegitimately held back.[26] Put differently, the respondent was accorded a benefit i.e. 'the earning capacity' of the claimant's money without compensating it for the loss of use of such. Therefore, the respondent must pay back for the 'opportunity cost' of the use of such money it wrongfully appropriated from

[22] See N. Affolder, 'Awarding Compound Interest in International Arbitration', (2001) 12 Am. Rev. Int'l Arb, 4
< http://ssrn.com/abstract=1307878 > accessed 16 July 2014.
[23] See T.J. Senechal, J.Y. Gotanda, 'Interest as Damages', (2009) 47 Colum. J. Transnat'l L. 495, 496.
[24] Senechal, Gotanda (n 21)
[25] Senechal, Gotanda (n 21)
[26] Senechal, Gotanda (n 21)

the claimant. According to this line of thought, the respondent must be liable for not less than the appropriate cost it would have sustained in taking a loan for the same amount of money at issue for the period concerned.[27]

Finally, interest awards further efficiency.[28] The underlying rational for this, is to look interest awards as, *inter alia*, a way through which to deter respondents from engaging in wrongful behavior. That is to say, not awarding interest may most likely confer on respondents an unfair advantage that raises the risk of avoiding future arbitration of disputes on the part of the claimant, as well as causing delay with regards to their settlement on the part of respondents, whom gain by using claimants' financial resources while the dispute is ongoing.[29]

Investment arbitration case law seems to agree with the above mentioned reasons. In this light, it is worth recalling what the tribunal said in *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic*: "The object of an award of interest is to compensate the damage resulting from the fact that, during the period of non-payment by the debtor, the creditor is deprived of the use and disposition of that sum he was supposed to receive."[30]

Also, in *LG&E Energy Corp.*, *LG&E Capital Corp*., and *LG&E International*, *Inc .v. Argentine Republic*, the tribunal held that: "(…) interest is part of the "full" reparation to which the Claimants are entitled to assure that they are made whole. In fact, interest recognizes the fact that, between the date of the illegal act and the date of actual payment, the injured party cannot use or invest the amounts of money due."[31]

1.2 Types of interest

[27] Senechal, Gotanda (n 21)
[28] Senechal, Gotanda (n 21)
[29] Senechal, Gotanda (n 21)
[30] See *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic,* (2007), Award, ICSID Case No. ARB/97/3 para. 9.2.3.
[31] See *LG&E* Energy Corp., *LG&E* Capital Corp., and *LG&E* International, Inc .*v*. *Argentine* Republic. (2007), Award, ICSID Case No. ARB/02/1, para. 55

Two types of interest can generally be distinguished, depending on whether we look at it with an emphasis towards its timespan factor (i.e. by reference to the lost time value for which it is due) or its method of calculation (i.e. by reference to how it rapports with the principal amount owed).

Based on its timespan factor interest can be distinguished in: pre-award interest and post-award interest.[32] The first one mainly refers to the amount of interest accrual on the principal sum from the date of injury (default) up to the date of the award.[33] The second one, on the other hand, refers to the amount of interest accrual from the moment of the award until the date of payment.[34] Ripinsky and Williams note that, in the field of investment arbitration, while it is warranted to award both, pre and post-award interest, neither of the two are automatically granted in every circumstance.[35]

This appears to be particularly true with respect to pre-award interest in cases of unlawful expropriation.[36] The rationale behind this is that in such circumstances (of unlawful expropriation) arbitral tribunals are inclined to (or at least should) compute the valuation of the expropriated property (asset) at issue, starting from the date of the award instead of the date of expropriation (as when there is lawful expropriation).[37] This is a very welcome practice in our view, for it distinguishes among lawful and unlawful expropriation, making the respondent state account for purposes of compensation, of any increase in value of the expropriated property (asset) from the date of expropriation until the date of the award.[38] As a result, cases where pre-award compensation in not awarded are possible and do not derogate from fully compensating claimants.

[32] See M. Rubino-Sammartano, ' *International Arbitration Law and Practice'*, (2nd edn Kluwer Law International, The Hague 2001), 816; S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 366.
[33] Rubino-Sammartano (n 30)
[34] Rubino-Sammartano (n 30)
[35] See S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 366.
[36] Ripinsky, Williams (n 33)
[37] Ripinsky, Williams (n 33)
[38] I. Marboe, 'Compensation and Damages in International Law', (2006) 7 J. World Invest. & Trade, 723

With regard to post-award interest, there have been some instances when such interest has not been awarded by the tribunal in a few controversial decisions i.e. *Enron Corp. and Ponderosa Assets, L. P. v. Argentine Republic* and *Sempra Energy International v. Argentine Republic*.[39] In these awards, the tribunals held that, absent a claim for the award of post-award interest or in case of a late filing of such claim, the tribunal would be stepping beyond the boundaries of its adjudicating mandate if it would award post-award interest.

This argument is not convincing to us, and we take the side of the dissenting arbitrator, the Hon Marc Lalonde, in the *Sempra Energy International v. Argentine Republic* case, who opined that interest should have run up to the date of payment of compensation. In fact, we completely agree with his statement that: "Acting otherwise (…) is ignoring the basic characteristic of interest which is the recognition of the time value of money and of the lost opportunity to earn a reasonable rate of return. In addition, it is giving a strong incentive to the party at fault to delay infinitely and with impunity the payment of the sums due. The arbitral system should not encourage that kind of behavior."[40]

1.3 Authority to award interest by arbitral tribunals

At this point, it should not seem extravagant that the authority to award interest in international arbitration is deemed crucial. But where does this authority come from? Brower and Sharpe explain that the award of interest has increasingly become customary in investment arbitration as part of an award for damages.[41] Ripinsky and William note that, being interest part of compensation in most circumstances it is deemed part of an arbitral tribunals' inherent power.[42] Gotanda submits that the obligation to pay interest as an element of a damages award is a well-established

[39] See *Enron Corp. and Ponderosa Assets, L. P. v. Argentine Republic,* (2007), Award, ICSID Case No ARB/01/3, para. 452 ; *Sempra Energy International v. Argentine Republic*, (2007), Award, ICSID NO. ARB/02/16, para. 485.
[40] See *Sempra Energy International v. Argentine Republic*, (2007), Partial Dissenting Opinion, ICSID NO. ARB/02/16.
[41] See C.N. Brower and J.K. Sharpe, 'Awards of Compound Interest in International Arbitration: The Aminoil Non- Precedent', (2006) 3 TDM, 155
[42] Ripinsky, Williams (n 33) 363

international legal principle.[43] Affolder recognizes that lacking an agreement to the contrary by the parties, awarding interest is generally considered as falling in the realm of arbitral tribunals' authority to grant fair and just compensation.[44]

This view has been upheld in investment arbitration jurisprudence. In fact, in *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic*, the tribunal stated: "Absent treaty terms or provisions in the governing law to the contrary, it is generally accepted that international tribunals may award interest to an injured claim; indeed the liability to pay interest is now an accepted legal principle"[45]

Previously, the most salient passages regarding the tribunals' inherent authority to award interest are attributed to the Iran-US Claims Tribunal. In fact, in Case No. A19 the tribunal submitted, that: "claims for interest are part of the compensation sought and do not constitute a separate cause of action requiring their own independent jurisdictional grant. (…) In doing so, it has regularly treated interest, where sought, as forming an integral part of the 'claim' which it has a duty to decide. The Tribunal notes that the Chambers have been consistent in awarding interest as 'compensation for damages suffered due to delay in payment'. (…) Indeed, it is customary for arbitral tribunals to award interest as part of an award for damages, notwithstanding the absence of any express reference to interest in the *compromis*. Given that the power to award interest is inherent in the Tribunal's authority to decide claims, the exclusion of such power could only be established by an express provision (…).Consequently, the Tribunal concludes that it is clearly within its power to award interest as compensation for damage suffered."[46]

[43] See J.Y. Gotanda, 'Compound Interest in International Disputes' (2004) 3 TDM, TDM 3 (2004) 2

[44] See N. Affolder, 'Awarding Compound Interest in International Arbitration', (2001) 12 Am. Rev. Int'l Arb, 51.

[45] See *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic,* (2007), Award, ICSID Case No. ARB/97/3 para. 9.2.1

[46] See Islamic Republic of Iran v United States of America Case No A19, (1987) 16 Iran-USCTR, 261; ILC, 'Report of the International Law Commission on the Work of its 42nd Session' (1 May–20 July 1990) UN Doc A/45/(A/56/10)

In conclusion, we can say that the power of an arbitral tribunal with the duty to fully compensate the claimant encompasses within it the inherent authority of the same to award interest in achieving that objective.

2. Legal sources on interest in investment arbitration jurisprudential context

International investment law is a particularly recent field of law for as we know it today compared to other legal fields, and as such is among the most dynamic. For this reason in investment law and arbitration the identification of legal sources embodying well-established rules has proved terribly difficult, especially so in respect to interest awards.

2.1 Sources of national law on interest

Originally when disputes used to be brought under state contract or national investment laws, these sources were applied to the merits of the dispute by investment arbitration tribunals.[47] Yet, their application was subject to the supervision of international law directly or indirectly based on whether national law was consistent with international law.[48] This approach has been more recently abandoned and investment tribunals seek to apply domestic and international law concurrently, when so required.[49]

One of some cases of the kind is *Autopista Concesionada de Venezuela CA* (Aucoven) *v Venezuela*, where the tribunal analyzed the issue of compound interest at first in relation to Venezuelan law, and afterwards vis-à-vis international law.[50] Furthermore it looked at Clause 26 of the Contract *in casu*, and it found based on it

[47] See A. Grisel, 'The sources of investment law' in Zachary Douglas, Joost Pauwelyn, and Jorge E. Viñuales (eds), *The Foundations of International Investment Law: Bringing Theory Into Practice* (Oxford University Press, Oxford 2014) 216.
[48] Griesel (n 45)
[49] Griesel (n 45)
[50] *Autopista Concesionada de Venezuela* CA (Aucoven) *v Venezuela*, (2003), Award, ICSID Case No ARB/00/5, para. 396.

vis-à-vis Venezuelan law that compound interest was not applicable.[51] Based on this it decided to avoid to what international law had to say on the matter as it did not consider it necessary for the specific circumstances of the case.[52]

Another case is *Desert Line Projects LLC v. The Republic of Yemen*, where the tribunal impliedly endorsed the arguments of Respondents that "(…) the award of compound interest is contrary to the Yemeni law applicable to the Contracts. (…)"[53] Accordingly the tribunal went on saying that: "(…) the appropriate rate of interest in this case is the simple rate of 5% per annum."[54]

Also, in *Duke Energy Electroquil Partners & Electroquil S.A. v. Republic of Ecuador*, the tribunal submitted that: "(…) It considers that the prohibition of compound interest contained in local law must be enforced especially considering Article VIII of the BIT which specifies that the Treaty shall not derogate from the laws and regulations of the host State. In addition, although increasingly common in ICSID practice, the award of compound interest is not a principle of international law."[55]

By contrast, in *Occidental Petroleum Corporation and Occidental Exploration and Production Company v. The Republic of Ecuador*, the tribunal found, after discussing the some later cases at the time where simple interest had been awarded, that: " (…) compound interest is the norm in recent expropriation cases under ICSID. The Tribunal sees no reason to depart from the norm and from the basis pleaded by both parties."[56] In this case the tribunal opted to disregard Venezuelan law's position in regards to compound interest and preferred instead to focus on the recent trends and international law.

[51] Ibid.
[52] Ibid.
[53] See *Desert Line Projects LLC v. The Republic of Yemen*, (2008), Award, ICSID Case No. ARB/OS/17, para. 294.
[54] Ibid. para. 295.
[55] *Duke Energy Electroquil Partners & Electroquil S.A. v. Republic of Ecuador*, (2008), Award, ICSID Case No. ARB/04/19, para. 473.
[56] *Occidental* Petroleum Corporation *and Occidental* Exploration *and* Production Company *v*. The Republic of *Ecuador*, ICSID Case No. ARB/06/11. para. 840.

2.2 Sources of treaty law on interest

According to Ripinsky, today the biggest amount of investment disputes, are filed on the basis of international investment agreement (also known as "IIA's").[57] IIA's provide substantive rights for investors and obligations for states. In this sense, they are the primary legal source to apply to disputes based on such agreements. However, while IIA's tend to have the same normative pattern, their provisions may vary from a linguistic point of view. Thus, Ripinsky notes, requiring the tribunal to apply international norms in accordance with the terms of such treaty.[58] Consequently, it is no surprise that certain aspects of awards are *sui generis* and accordingly do not reflect a generally applicable rule of law.[59] This is certainly true when it concerns specifically to the question of interest awards.

Be it as it may, in respect to interest awards we argue that such norms, however unique or potentially different from other IIA's, do provide a legal source at least for those state acts which they contemplate to address in the specific case i.e. lawful expropriation. Somewhat paradoxically, however, in investment arbitration practice only two cases were expressly characterized as lawful expropriations by arbitral tribunals: *Kuwait v. American Independent Oil Co.* (Aminoil) and *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica.*[60]However, in both cases treaty law was not applicable as there was no treaty in place therefore, the tribunal applied international law as the controlling law of the dispute.

Nevertheless, a typical treaty provision that would be considered a legal source in lawful expropriation cases is for example, Article 4 of the BIT between Austria-Rep. of Korea, which states that: "Investments of investors (…) shall not be expropriated (…) except for a public purpose by due process of law and against compensation. Such compensation shall amount to the actual value of the investment expropriated immediately preceding the time in which the actual or impending measure became

[57] See S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 22
[58] Ripinsky (n 55)
[59] Ripinsky (n 55)
[60] See B. Sabahi, *Compensation and Restitution in Investor-State Arbitration: Principles and Practice*, (1st edn Oxford University Press, Oxford 2011) 96.

public knowledge. The compensation shall be paid without undue delay and shall carry the usual bank interest of the country in which the investment was made until the time of payment (…)"[61] Another example can be found in Article 6 of the US-Rwanda BIT titled 'Expropriation and Compensation', which provides for: "interest at a commercially reasonable rate".[62]

Similar provision may be found in nearly all 2101 BIT's and 270 other international investment agreements in force today.[63] However, such rules apply only to cases of compensation for lawful expropriation. Accordingly, they are not suitable for damages arising on the basis of breaches of other treaty provisions.[64] The same rational is found to be applicable in case of interest awards.

2.3 Customary international law as legal source on interest

Customary international law constitutes a source of important rules when it comes to causes of action, in investment disputes, other than lawful expropriation. These rules are applied whenever the IIA's fall short of providing clear guidance with respect to other causes of action (such as: contractual disputes between investor and host state; unlawful expropriation etc.). They address damages in general, and interest specifically (as an element of the former).[65]

Article 38 of the ILC Articles on 'Interest' provides that:

"1. Interest on any principal sum payable under this chapter shall be payable when necessary in order to ensure full reparation. The interest rate and mode of calculation shall be set so as to achieve that result.

2. Interest runs from the date on which the principal sum should have been paid until the date the obligation to pay is fulfilled."[66]

[61] See Article 4 of Austria-Republic of Korea BIT (1991).
[62] See Article 6 of US-Rwanda BIT (2008).
[63] See http://investmentpolicyhub.unctad.org/IIA (accessed 14 July 2014)
[64] Ripinsky (n 55) 23
[65] Ripinsky (n 55) 25
[66] Article 38 of the ILC Articles on state responsibility

Ripinsky notes that, in practice, arbitral tribunals regard the ILC Articles on State Responsibility as proof and as mirroring international custom.[67] While Caron submits that: "when there is a *legal vacuum* of authority relevant to an issue, courts and arbitral panels will turn to whatever is available. In that situation, even a set of articles adopted by the ILC will be quite influential, perhaps even more influential than a treaty."[68] The International Court of Justice too, seems to support the view that the ILC Articles may constitute international customary law.[69]

In this light, referring back to Article 38 of the ILC Articles we can acknowledge that it expressly deals with interest. Further, the provision elucidates in the first sentence of its first paragraph that the objective of an interest award is to provide full reparation. In the second sentence, it deals with the rate of interest and the computation method (i.e. if interest should be calculated on a simple or compound basis), which have to be determined as to make sure the achievement of its full reparation objective. In its second paragraph, Article 38 identifies the timeframe when interest is supposed to start, specifying that interest starts running by the time when the principal sum was supposed to be paid up to the moment of its actual payment. Now, a list of cases will be mentioned in the following paragraphs, in order to reflect the extent of the general acceptance of the ILC Articles, and thus also Article 38 on 'Interest' specifically, as embodying international customary law.

The arbitral panel in *CMS Gas Transmission Company v. The Republic of Argentina*, in the context of breaches it had asserted to exist in relation to the BIT that applied to the case, alluded to Article 38 of the ILC Articles so to instill the principles upon which the award of reparation is based. It stated that:
"Decisions concerning interest also cover a broad spectrum of alternatives, provided it is strictly related to reparation and not used as a tool to award punitive damages or to achieve other ends."[70]

[67] Ripinsky (n 55) 33
[68] See D.D. Caron, The ILC Articles on State Responsiblity: The Paradoxical Relationship between Form and Authority, (2002) 96 *Am. J. Int'l L.* 866
[69] See *Bosnia and Herzegovina v. Serbia and Montenegro - Application of the Convention on the Prevention and Punishment of the Crime of Genocide* - Judgment of 26 February 2007 - Judgments [2007] ICJ 2, paras. 385,388, 398, 401, 407.
[70] See *CMS Gas Transmission Company v. The Republic of Argentina*, (2005), Award, ICSID Case No. ARB/01/8, para, 404

That assertion seems to further the stance espoused in the Commentary of ILC Articles vis-à-vis Article 38, that as we have seen highlights that the objective of awarding interest is that of ensuring full reparation.[71]

Likewise, in *Siemens A.G. v Argentine Republic*, the tribunal, in its reasoning in regards to the applicable rate of interest, whether it should have been awarded simple or compound and the date from which it should accrue, in order to ensure the compensation due for the breaches of the BIT of the case at hand, it once again alluded to Article 38 of the ILC Articles as reflecting customary international law.[72] In its own words, the tribunal stated:

"As an expression of customary international law, Article 38 of the Draft Articles states:
'1. Interest on any principal sum payable under this Chapter shall be payable when necessary in order to ensure full reparation. The interest rate and mode of calculation shall be set so as to achieve that result. 2. Interest runs from the date when the principal sum should have been paid until the date the obligation to pay is fulfilled.'

Thus, in determining the applicable interest rate, the guiding principle is to ensure full reparation for the injury suffered as a result of the internationally wrongful act."[73]

Concerning the moment of accrual of interest, the Tribunal submitted that:
"For purposes of erasing the effects of the expropriation, interest should accrue from the date the Tribunal has found that expropriation occurred, namely May 18, 2001, in respect of the book value of the investments made for the Project up to that date. Compensation for post-expropriation costs incurred after May 18, 2001 should accrue interest as from the date on which they were incurred. (…) As for interest on unpaid Government bills, interest should accrue from January 1, 2000 since they relate to services rendered in 1999."[74]

[71] See ILC, *Draft Articles on Responsibility of States for Internationally Wrongful Acts with Commentaries*, (2001), paras. 1-7-9.
[72] See *Siemens A.G. v. The Argentine Republic*, (2007), Award, ICSID Case No. ARB/02/8, para. 394,395.
[73] Ibid. paras. 395,396
[74] Ibid. para. 397.

Finally, in respect to whether interest should be calculated on a simple or compound basis, the tribunal submitted that it should be awarded on a compound basis.[75] It stated that: "As regards compounding of interest, the question is not, as argued by Argentina, whether Siemens had paid compound interest on borrowed funds during the relevant period but whether, had compensation been paid following the expropriation, Siemens would have earned interest on interest paid on the amount of compensation. It is in this sense that tribunals have ruled that compound interest is a closer measure of the actual value lost by an investor."[76]

In yet another case, *LG&E Energy Corp., LG&E Capital Corp., LG&E International Inc. v Argentina*, the issue of interest came along. This time the claimants asked the Tribunal to award interest to be calculated on a compound basis. In this respect the Tribunal submitted that: "In the Tribunal's view, interest is part of the "full" reparation to which the Claimants are entitled to assure that they are made whole. In fact, interest recognizes the fact that, between the date of the illegal act and the date of actual payment, the injured party cannot use or invest the amounts of money due. It is therefore decisive to identify the available investment alternatives to the investor in order to establish "full" reparation. It has been acknowledged that in "modern economic conditions", funds would be invested to earn compound interest. (…) the Tribunal is of the opinion that compound interest would better compensate the Claimants for the actual damages suffered since it better reflects contemporary financial practice."[77]

Also, worth mentioning is *BG Group Plc. v. The Republic of Argentina*, where the arbitral tribunal in discussing the question of the appropriate standard of compensation to the breaches in the case at hand, referred to the PCIJ decision in the *Factory at Chorzow case*, and elucidated that the latter's findings are applicable beyond (unlawful) expropriation cases by virtue of Article 31 of the ILC Articles.[78] In this regard, the tribunal submitted that, under this rule (ILC Article 31), which aims at

[75] Ibid.para. 401.
[76] Ibid. para. 399.
[77] See See *LG&E* Energy Corp., *LG&E* Capital Corp., and *LG&E* International, Inc .*v*. *Argentine* Republic. (2007), Award, ICSID Case No. ARB/02/1, para. 55-57.
[78] See *BG Group Plc. v. The Republic of Argentina*, (2007), Award, UNCITRAL (1976 rules), para. 246

codifying customary international law, states are obliged to make full reparation when deemed responsible for an international wrongful act which causes injury (material damage).[79] With respect to the question of award of interest the tribunal found the appropriate rate of interest to be based on the US Treasury six-month certificates of deposit and further noted that, in the case at hand: "(…) the standard of 'full reparation' (…) would not be achieved if the award were to deprive Claimant of compound interest."[80]

In *Nykomb Synergetics Technology Holding AB v. The Republic of Latvia*, the tribunal stated that: "(…) it seems to be agreed between the parties, that the question of remedies to compensate for losses or damages caused by the Respondent's violation of its obligations under (…) the Treaty must primarily find its solution in accordance with established principles of customary international law. Such principles have authoritatively been restated in The International Law Commission's Draft Articles on State Responsibility (…)."[81] However, when it came to award interest the tribunal decided to award simple interest and at 6% interest rate corresponding to the Latvian prevailing interest rate.[82]

On the same line, the tribunal in *CME Czech Republic B.V. v Czech Republic* it stated that: "The Tribunal does not find particular circumstances in this case justifying the award of compound interest. The calculation of the compensation itself already fully compensates Claimant for the damage suffered. Awarding simple interest compensates the loss of use of the principal amount of the award in the period of delay." [83] In reaching such conclusion, the Tribunal alluded to Article 38 of the ILC Articles and commentary.[84]

More recently, in *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, the tribunal referring to Article 38 of the ILC Articles submitted that: "(…) the awarding

[79] Ibid. para. 247.
[80] Ibid. para. 455,456.
[81] See *Nykomb Synergetics Technology Holding AB v. The Republic of Latvia*, (2003), Award, SCC, para. 5.3.
[82] Ibid.
[83] See *CME Czech Republic B.V. v. The Czech Republic*, (2003), Award, UNCITRAL (1976 rules), para. 647.
[84] Ibid.

of interest depends on the circumstances of each case; in particular, on whether an award of interest is necessary in order to ensure full reparation."[85] The tribunal then went on to award to the Claimants no pre-award interest vis-à-vis the shares of the company as it decided to adopt the date of the award as the date for their valuation.[86] Other tribunals have done this in cases of unlawful expropriation when so benefited the Claimant. However, the tribunal awarded simple interest on the dividends the Claimants should have received since the date of expropriation (2004) until the date of the award (2014) amounting approximately 3 billion USD.[87] That is by far the largest interest award in history. In conclusion, the tribunal awarded also compound post-award interest that would start accruing at the moment the Respondent will fail to pay the award within a 6 months period of grace.[88]

2.4 Arbitral tribunals' decisions as a legal source on interest awards

Cassese has acknowledged that two main reasons, i.e. the underdeveloped character of international law and the lack to it of a principal legislative organ entrusted to emanate new rules, have been crucial in increasing the creative role of international adjudicatory bodies in construing the existence of international legal principles, laying down their scope and content, and in furthering new concepts.[89] This appears to be the case with the law on the award of interest, which has been refined and increasingly developed by means of awards in separate cases. In this respect, borrowing from Schwarzenberger's acute observation vis-à-vis compensation awards, we argue that problems arising when awarding interest under international law are almost by definition stereotyped at first.[90] Eventually, experiment has a tendency to turn into practice, and extensive practise to consolidate into law.[91]

[85] See *Yukos Universal Limited (Isle of Man) v. The Russian Federation*, (2014) UNCITRAL, PCA Case No. AA 227, para. 1653.
[86] Ibid. para 1768,1769, 1826
[87] Ibid. para 1824-1827.
[88] Ibid. para. 1689, 1690, 1692.
[89] See A. Cassese, *International Law*, (2nd edn Oxford University Press, Oxford 2001) 159.
[90] See G. Schwarzenberger, International Law as Applied by International Courts and Tribunals, (3rd edn Stevens & Sons Ltd, London 1957) 661.
[91] Schwarzenberger (n 88)

In fact, regardless formal recognition of the doctrine of precedent (stare decisis) as rule of international law, investment arbitration jurisprudence is in practice a good example when it comes to arbitral tribunals constantly referring to previous awards for guidance. As Ripinsky observes, when investment arbitration case law on a specific issue is settled, by way of a number of unbroken and uncontested recent decisions, that case law bears authoritative value.

The most revealing reasoning, shared among arbitrators, on the weight to be given to past investment arbitration awards and jurisprudence at large vis-à-vis its precedential value, is enshrined in the Sapiem v Bangladesh award, where it was stated that: "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."[92]

This view has been upheld also by Grisel who distinguishes, on the one hand, among formal sources of the law on interest, such as: international law; treaty law and domestic law. While on the other hand, there are exist also what he calls 'material sources' of law i.e. investment arbitration case law on interest awards.[93] His argument will be considered further in the last part of this paper.

3. Overview of the three main variables when awarding interest in jurisprudential context

This part of the paper, as the title suggests, endeavours to serve as an overview of the three main variables when awarding interest. Namely: the interest rate applicable; the starting date for interest accrual; and whether interest should be awarded on a

[92] See *Saipem S.p.A. v. The People's Republic of Bangladesh*, (2009), Award, ICSID Case No. ARB/05/07, para. 67.
[93] Grisel (n 45)

compound rather than simple basis. The relevance of this section in this paper is based on three main considerations.

Firstly, it stands to highlight the fact that each and every one of these variables can and indeed do play an important role when awarding interest, singularly and as a whole. Importantly, looking at it from a financial perspective, each of these variables can become a game changer if misapplied in the circumstances of a given case, causing that a claimant may be either undercompensated or overcompensated. Thereby in practice deviating from the dictates of the full compensation principle. Just to give an example, as to when and how this might happened, let us think of a hypothetical scenario where an arbitral tribunal sets wrongly the date of accrual of interest, two years after the appropriate date. In this case, even if the tribunal gets it right with respect to the two other variables (i.e. applicable interest rate and compound or simple basis for calculating it according to the circumstances), it would nevertheless cause the claimant to be undercompensated. In conclusion, in awarding interest in investment arbitration one should stick to the motto proposed by Dumas' in its novel 'The Three Musketeers', i.e.: "*tous pour un, un pour tous*", in order to ensure that the principle of full compensation is respected.

Secondly, this section aims to look at the above mentioned variables under the lens of investment arbitration jurisprudence. This way, it will present the various approaches that have been adopted by tribunals in investment arbitration practice. Some comments will follow from scholars in relation to the approaches presented.

Thirdly, this section aims to be the bridging platform for the main topic of this thesis; or why compound interest should, generally, be awarded instead of simple interest. In the pursuance of this aim, it aspires at the same time, to clarify and frame the bigger picture of awarding interest in investment arbitration. It will do so, by presenting the multifaceted and complex character of such exercise and some of the main issues that it confronts with in practice.

3.1 Setting the date for interest accrual in case law

As we have already mentioned above in our example, setting the date from when interest starts accruing (also known as *dies a quo*) is of huge practical importance and it carries with it part of the responsibility to grant claimants full compensation. In investment arbitration practice four approaches to setting the starting date for the purpose of interest accrual can be distinguished. These approaches set respectively the starting time for interest accrual at namely: the date of the expropriation (or breach); date of formal demand for compensation from the claimant; date of arbitration request; date of the award (which usually entails no pre-award interest).[94]

It is important to say at the inception, that the cause of action on the basis of which the dispute is instituted is, *inter alia*, important on setting the *dies a quo*. Furthermore, as we will see, for certain causes of action it is much easier to establish the *dies a quo* than for others. In lawful expropriation cases, for instance, there is a generalized likelihood that a treaty (BIT or else) will govern the issue. In such circumstances, the treaty in force would usually provide the *die a quo* in its expropriation provision.

Ripinsky, notes that a large number of countries set the *dies a quo* as of the date of lawful expropriation.[95] Another variation that appears to be slightly more flexible to a certain extent in, at least theoretically, setting the *dies a quo* even before the date of expropriation is in the case of Austria Model BIT which provides for: "(…) the time in which the actual or impending measure became public knowledge (…)"[96] This way, in the hypothetical scenario that the advent of expropriation becomes public even before the formal act of expropriation, and consequently happens to devalue the property before the actual (later) date of formal expropriation, it could still be taken into account by the tribunal.

[94] See S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 374.
[95] Ripinsky (n 92).
[96] See Article 4 of Austria-Republic of Korea BIT (1991).

On the other hand, Article 38 (2) of the ILC Articles provides that the *dies a quo* under customary international law: "(…) runs from the date when the principle sum should have been paid until the date the obligation to pay is fulfilled."[97] Accordingly, under customary international law the *dies a quo,* corresponds to the date of payment, of the principal sum. Which date that might be in practice is considered highly circumstantial, in theory all the four above mentioned approaches could be possible.[98] Cases of lawful and unlawful expropriation, where generally the *dies a quo* are respectively the date of expropriation and date of the award, and purely contractual cases, where domestic laws' usually provide the *dies a quo* by prescribing a default date on payment (there appears to be no uniformity among domestic laws), are arguably less complicated in practice.

However, the difficulties in determining the *dies a quo* seem a much harder exercise when case such as breaches of investment treaty provisions are concerned.[99] One might just think for a moment to breaches of 'full protection and security' or 'fair and equitable treatment' provisions to appreciate that in such cases determining the *dies a quo* cannot be so straight forward compared to the group of above mentioned cases. In this respect, lacking hard and fast rules, investment arbitration jurisprudence has the potential, if not the mandate, to illuminate the way towards the right path. Below it will be shown when and how the four approaches for establishing the *ides a quo* have been used in practice.

3.1.1 Date of expropriation (or breach) as *dies a quo*

As already mentioned above, the date of expropriation is the preeminent method for fixing the *ides a quo* in lawful treaty expropriation cases, as generally provided in the respective expropriation provision of such treaties. However, this approach has been adopted in investment arbitration practice also in cases involving non-treaty

[97] See Article 38 (2) of the ILC *Draft Articles of State Responsibility for Wrongful Acts*.
[98] Ripinsky (n 92).
[99] Ripinsky (n 92) 375

expropriation. This appears uncontroversial considering that both 'controlling' international law and domestic laws seem to be very uniform in regards to the issue. For example, in *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, the tribunal decided as the date of valuation of the property, the date of expropriation.[100] As a consequence, it acknowledged that such date coincided with the ides a quo when it had to awarded interest.[101] Similarly, in *Southern Pacific Properties* (Middle East) Limited *v*. Arab Republic of *Egypt*, the tribunal had asserted that fixing the *dies a quo* at the date of the taking (expropriation), would not only be consistent with logic and standard jurisprudential practice in similar cases of expropriation, but also consistent to what are the requirements on this issue of a great number of constitutions and domestic laws.[102]

With regard to treaty breaches not amounting to expropriation, especially but not exclusively when the 'fair market value' standard of compensation was applied to measure the investment's value in relation to a past date, such date was regarded as the *dies a quo* for the purpose of awarding interest. Walde and Sabahi, welcome this practice and submit that in such cases the relevant *dies a quo* should be when the state is or should have become aware of the significant treaty breach.[103]

In *Sempra Energy International v. Argentine Republic*, the tribunal deemed that fair market value was the suitable standard for determining the value of the losses sustained by the Claimant, as a consequence of the treaty breaches.[104] In doing so, the tribunal decided to compare the fair market value of the companies concerned, before and after the measures put in place by Argentina in January 2002.[105] Thereafter, when addressing the issue of pre-award interest the Tribunal

[100] *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, (2000), Award, ICSID Case No. ARB/96/1, para. 90.
[101] Ibid. para. 104-107.
[102] See *Southern Pacific Properties* (Middle East) *Limited v*. *Arab Republic* of *Egypt,* (1992), Award, ICSID Case No. ARB/84/3, para. 234.
[103] See T.W. Wälde, B. Sabahi, 'Compensation, Damages and Valuation in International Investment Law', (2007) 4 TDM, 47.
[104] See *Sempra Energy International v. Argentine Republic*, (2007), Award, ICSID NO. ARB/02/16, para. 404.
[105] Ibid.

unanimously reached the decision that it would be suitable to establish January 1, 2002 as the *ides a quo*.[106]

Another example is *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile,* which concerned an investment agreement made in 1997 for the development of a real estate project between investor and the competent Chilean agency. The contract contained approval of the investment, however did not have rezoning approval at the time. Consecutively, MTD was later on made aware that no rezoning would be possible for the project, as it was deemed inconsistent with the government's urban development and environmental policies. On 4 November 1998 this position was formalized by the competent Chilean minister acknowledging that the land was not going to be rezoned.[107] On the merits phase, the tribunal held that, on the basis of the MFN clause contained in the Chile-Malaysia-BIT obligations such as rezoning approvals were part of the FET standard.[108] For this reasons, the tribunal submitted that approval of an investment to be later found inconsistent with governmental urban policy was a breach the fair and equitable treatment provision by Chile.[109] Ultimately, on the matter of interest, the tribunal submitted that: "(…) interest on the amount of damages for which Chile is responsible should accrue from November 5, 1998, the day after Minister Henríquez notified the Claimants that it was against his Government's policy to modify the PMRS."[110]

However, not always has been possible to establish the *dies a quo* with clear-cut precision in practice. In fact, cases of indirect expropriation or fair and equitable treatment breach are particularly more complex and uncertain, unless the acts at issue end up in a complete dispossession of the investment. For example, in *PSEG Global Inc. and Konya Ilgin Elektrik Üretim Ve Ticaret Limited Sirketi v. Republic of Turkey,* where the tribunal could not establish the *dies a quo* straightforwardly, for the case did not involve an expropriation or a precise date of termination of the

[106] Ibid. para 485.
[107] See *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile,* (2004), Award, ICSID Case No. ARB/01/7, para. 80.
[108] Ibid. para. 103, 104.
[109] Ibid. para. 163, 166.
[110] Ibid. para. 247.

concessionary contract.[111] Eventually, as the tribunal based its valuation of the amount of compensation on the historic cost approach requiring to look at all investment expenses in retrospective, which spanned in the case at hand over 7 years, the tribunal set at its discretion the date of the *ides a quo* in the middle (mean date approach). [112]

3.1.2 Date of request for arbitration/formal demand for payment as *dies a quo*

As we did already mentioned above other two possible approaches that can be used in setting the *idea a quo* are: the date of arbitration and the date of formal demand for payment.

The date of request for arbitration approach was used in *Asian Agricultural Products* Ltd. *v*. Republic of *Sri Lanka*.[113] The main reason the tribunal gave for adopting this approach was that Sri Lanka's international responsibility was triggered at the date of the request for arbitration, as result the tribunal concluded that such date would be used for the purpose of establishing the *ideas a quo* on the basis of which interest should be awarded.[114]

Regarding the second approach, that presumes the *ides a quo* to coincide with the date of the formal demand for payment, it has never been adopted in investment arbitration jurisprudence.[115] What is interesting of this approach on a practical perspective is that it would, if adopted, at least theoretically require that the *ides a quo* be set at a date preceding the arbitration request. Therefore, it is submitted that it may only acquire relevance in practice in those circumstance when the time span

[111] See *PSEG Global Inc. and Konya Ilgin Elektrik Üretim Ve Ticaret Limited Sirketi v. Republic of Turkey,* (2007), Award, ICSID Case No. ARB/02/5, para. 349-351.
[112] Ibid.
[113] See *Asian Agricultural Products* Ltd. *v*. Republic of *Sri Lanka*, (1990), Award, ICSID Case No. ARB/87/3. Para. 114.
[114] Ibid.
[115] See S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 377.

between the date of the request for payment proceeds the date for the request of arbitration and is enough as to be practically meaningful when it comes to reflecting a higher financial return for the claimant when awarding interest.

3.1.3 Date of award as *dies a quo*

The date of the award as *dies a quo* reflects the general presumption in cases of unlawful expropriations that pre-award interests should not be awarded. Accordingly it is more important in relation to such cases. The underlying reason for this is that the damages valuation phase should take already into account compensation for lost time value.[116] A practical example of this approach is to be found in *ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary*, where the tribunal laid down its landmark decision on the necessary distinction among lawful and unlawful expropriation vis-à-vis the calculation of damages.[117] The tribunal established that the compensation for the investment should reflect fair market value at the date of the award, thus concluding that no pre-award interest was necessary in this case to make the claimant whole.[118]

Looking at the four main approaches that might be relevant in setting the *ides a quo* in investment arbitration practice does provide with an extra tool in the understanding of the mechanic of interest awards in practice. It is worth mentioning, however without going deep into details that, on exceptional circumstances, tribunals have in practice established the *idea a quo* at multiple dates in order to account for the different composing elements of damages.[119]

[116] Ripinsky (n 113).
[117] *ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary*, (2006), Award, ICSID Case No. ARB/03/16 , para. 481, 482.
[118] Ibid. para. 520.
[119] See *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic,* (2007), Award, ICSID Case No. ARB/97/3 para. (vi) operative part; *Autopista Concesionada de Venezuela* CA (Aucoven) *v Venezuela*, (2003), Award, ICSID Case No ARB/00/5, para. 369-374; *Siemens A.G. v. The Argentine Republic*, (2007), Award, ICSID Case No. ARB/02/8, para. 397,398.

3.2 Establishing the applicable interest rate when awarding interest in case law

Once the *ides a quo* has been established, the following step would be to establish the suitable interest rate. In investment arbitration, in theory, the arbitral tribunal may feel compelled to apply the interest rate provided in an agreement among the claimant investor and the respondent State or a domestic statute as the case may be. However, in practice these situations represent the exception rather than the rule. Accordingly, no single and uniform approach exists to determine the suitable interest rate. On the contrary, as we will see below, different approaches have been adopted in practice.

What is worth mentioning at this point, before looking at the different approaches adopted in investment arbitration jurisprudence, is that the legal sources applicable in most cases i.e. BIT's and international customary law (with small exceptions for some specific BIT's)[120] serve only as guidelines and fail to supply a specific interest rate readily usable.

Regarding BIT's, they provide the various kinds of options such as the following: appropriate market rate; normal commercial rate; commercial reasonable rate; appropriate rate; commercial rate established on a market basis; market rate of the currency of indemnification; fair and equitable rate; rate applicable in the territory of the expropriating Contracting Party; prevailing commercial rate; usual bank interest; London Interbank Offered Rate (LIBOR).[121] In principal, these apply only to lawful expropriation cases. On the other hand, customary international law, enshrined in Article 38 (1) of the ILC Articles provides that: "Interest on any principal sum payable (…) shall be payable when necessary in order to ensure full reparation. The interest rate and mode of calculation shall be set so as to achieve that result."[122] As it appears from the above, investment arbitration jurisprudence turns to be crucial.

[120] See Article 5 (2) of Brazil-Finland BIT.
[121] Ripinsky (n 113)
[122]

3.2.1 'Investment alternatives' method for determining the interest rate

What the investment alternatives method seeks to achieve is, an interest rate that would reflect the monetary value that a claimant would have been able to gain if timely paid, plus, the monetary value that could be earned from investing the previous amount in a common commercial investment vehicle in the country of claimant.[123] This method has been adopted in various investment arbitration disputes. For instance, in *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, the tribunal said: "(…) where an owner of property has at some earlier time lost the value of his asset but has not received the monetary equivalent that then became due to him, the amount of compensation should reflect, at least in part, the additional sum that his money would have earned, had it, and the income generated by it, been reinvested each year at generally prevailing rates of interest. (…)"[124]

Also, in *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic,* the tribunal held: " Having regard to Claimants' business (…) and the generally prevailing rates of interest (…) the Tribunal concludes that a 6% interest rate represents a reasonable proxy for the return Claimants could otherwise have earned on the amounts invested and lost in the Tucumán concession."[125] However, the tribunal failed to explain how it reached that conclusion.

In *LG&E Energy Corp*., *LG&E Capital Corp*., *and LG&E International, Inc .v*. *Argentine Republic,* the tribunal noted that: "(…) Claimants' expert proposal to use Argentina's borrowing rate as speculative and extemporaneous. The Tribunal notes further that Argentina has supported the use of a pre-judgement interest rate based on short-

[123] See *Sylvania Technical* Sys., Inc. *v Iran*, (1985), Award, 8 *Iran*-U.S.CTR 298, 320
[124] See *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, (2000), Award, ICSID Case No. ARB/96/1, para. 104.
[125] See *Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic,* (2007), Award, ICSID Case No. ARB/97/3 para. 9.2.8.

term U.S. Treasury bills. This is therefore the rate of interest to be applied."[126] In doing so it noted that: "(…) interest compensates Claimants for the impossibility to invest the amounts due."[127]

On the same line, in *BG Group Plc. v. The Republic of Argentina*, the tribunal expressed that the rate of interest is a benchmark for establishing in which instrument the investor could have reasonably put its funds in order to earn a return.[128] In applying this method, tribunals usually have set interest rates in function of instruments such as short-term US Treasury Bills or US certificates of deposit[129], and the rate has been normally constituted the average in rapport to the timespan of interest accrual.

3.2.2 'Borrowing-rate' method for determining the interest rate

Another method that has been quite used in investment arbitration practice is the borrowing-rate method. According to this method, the suitable interest rate is established by reference to the borrowing-rate applied by financial institutions in the country of the claimant, particularly the prime rate i.e. the rate at which money is lent to the most creditworthy clients (corporates).

The main downside of this method is that it lacks the uniformity necessary for general application to a large pool of claimants in all cases. However, in certain circumstances it does have an advantage. As a prominent scholar has argued, if it is established in a particular case that the claimant in order to ensure the liquidity necessary for the normal proceeding of its business had to take a loan, then the interest rate paid on that loan would be the measure of damages.[130] As a

[126] See *LG&E Energy Corp*., *LG&E Capital Corp*., *and LG&E International, Inc .v*. *Argentine Republic*. (2007), Award, ICSID Case No. ARB/02/1, para. 102.

[127] Ibid. para. 104.
[128] See *BG Group Plc. v. The Republic of Argentina*, (2007), Award, UNCITRAL (1976 rules), para. 455
[129] When this instruments were chosen the investor was from U.S.
[130] See I. Marboe, 'Compensation and Damages in International Law The Limits of "Fair Market Value"', (2007) 4 TDM 754.

consequence, it is advisable in such occasions to use that interest rate for purposes of awarding interest to the claimant. By contrast, if the claimant has not borrow from third-parties to bridge the period when its money is wrongfully withheld then it would over-compensate the claimant if it were awarder interest on the basis of the borrowing-rate approach.

In practice investment arbitration tribunals whenever have based their interest rate computation on the grounds that the borrowing–rate method was the most suitable in the particular case, have used primarily the LIBOR[131] rate and in certain cases added on top of it a risk premium of a few percentage points per year.[132] In reaching such conclusions they have just asserted that it was reasonable according to the circumstances of the case and failed to express why they had added the risk premium. However, one reason is that the premium seeks to set the interest rate at what the investor would have been asked to pay if it would have borrowed funds.

3.2.3 'Rate in the Host Country' method for determining the interest rate

Another method used to determine the appropriate interest rate in investment arbitration has been to refer to the interest rate provided under national law. Ripinsky distinguishes four situations when this has been done in investment arbitration: when national law applied concurrently with international law; specific reference was made to national law in this regard under the BIT applicable; when tribunals found they could not rely on international law for determining the suitable interest rate; other compelling reasons pointed at national law.[133]

[131] See *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile,* (2004), Award, ICSID Case No. ARB/01/7, para.250; *Emilio Agustín Maffezini v. The Kingdom of Spain*, (2000), Award, ICSID Case No. ARB/97/7, para. 96.
[132] See *Enron Corp. and Ponderosa Assets, L. P. v. Argentine Republic,* (2007), Award, ICSID Case No ARB/01/3, para. 452; *PSEG Global Inc. and Konya Ilgin Elektrik Üretim Ve Ticaret Limited Sirketi v. Republic of Turkey,* (2007), Award, ICSID Case No. ARB/02/5, para. 348.
[133] Ripinsky (n 113) 371

As Gotanda points out, national laws do not reconcile with respect to how they establish the suitable interest rate.[134] In civil law countries for instance it is set by statue or it is fixed by the central bank periodically.[135] On the other hand in common law jurisdiction fixing the appropriate interest rate usually fall under the judges (or arbitrators) discretion.[136] Ultimately, in countries where Islamic law applies, as a general rule interest is forbidden. Nevertheless, also some such countries have permitted it for commercial transactions.[137]

Be it as it may, the host-country method has been confronted with disproval for it is argued that it should not apply when a State's international responsibility is concerned.[138] In fact, in such cases international law should govern the issue of determining the appropriate interest rate. However, faced with international law's ambiguity towards this issue, there has been a push toward adopting the solution provided under national law specifically when formally provided that it applies. An exception to this would arguably be when national law precludes interest payments (as in Islamic law countries).[139] As we will see below, this kind of tension among international law and domestic law, has been at the centre of several investment arbitration cases.

For example, in *Wena Hotels Limited v. Arab Republic of Egypt,* the tribunal held the appropriate interest rate to be at 9%.[140] Egypt decided to start annulment proceedings, where it argued that the tribunal disregarded the application of Egyptian law. In its decision on the merits of Egypt's application for annulment the Annulment Committee held that: "(…) the compensation must not be eroded by the passage of time or by the diminution in the market value. The award of interest that

[134] See J. Y. Gotanda, 'A Study of Interest'(2008) VI DOSSIERS OF THE ICC INSTITUTE OF WORLD BUSINESS LAW, ICC Publications; Villanova Law/Public Policy Research Paper No. 2007-10. 1 <http://ssrn.com/abstract=1005425> accessed 14 July 2014.
[135] Gotanda (n 132)
[136] Gotanda (n 132)
[137] Gotanda (n 132)
[138] Marboe (n 128)
[139] Ripinsky (n 132)
[140] See *Wena Hotels Limited v. Arab Republic of Egypt,* (2000), Award, ICSID Case No. ARB/98/4, para. 128

reflects such international business practices meets these two objectives. The option the Tribunal took was in the view of this Committee within the Tribunal's power. International law and ICSID practice, unlike the Egyptian Civil Code, offer a variety of alternatives that are compatible with those objectives."[141]

Similarly, in *Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt*, the tribunal concluded that: the provision in Egyptian law on which Respondent relies is not applicable to claims based on the BIT, i.e., public international law. The BIT provides (Art. 4.c)) that the compensation in case of expropriation 'shall include interest until the date of payment.' Regarding such claims for expropriation, international jurisprudence and literature have recently, after detailed consideration, concluded that interest is an integral part of the compensation due after the award (…)"[142]

By contrast, in a much earlier decision, *Southern Pacific Properties* (Middle East) *Limited v. Arab Republic of Egypt,* was held that: "In light of these various considerations, the Tribunal reaches the conclusion that, subject to the exception discussed below (…), Article 42 (1) of the Washington Convention requires that interest be determined according to Egyptian law because there is no rule of international law that would fix the rate of interest or proscribe the limitations imposed by Egyptian law. With respect to the rate of interest, the Tribunal is of the view that it should be five percent (…)"[143]

3.2.4 'Reasonable and fair considerations' for setting the interest rate

[141] See *Wena Hotels Limited v. Arab Republic of Egypt,* (2002), Annulment proceedings, ICSID Case No. ARB/98/4, para. 50-53.
[142] See *Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt*, (2002), Award, ICSID Case No. ARB/99/6, para. 174.
[143] See *Southern Pacific Properties* (Middle East) *Limited v. Arab Republic of Egypt,* (1992), Award, (ICSID Case No. ARB/84/3), para. 222, 223

In some other cases, tribunals used to establish a specific rate and held it was 'reasonable' or 'fair' without further reasoning.[144] However, it is argued that decisions embodying such characterizations (such as 'reasonable' and 'fair') vis-à-vis a specific interest rate, in practice, reflect (if anything) nothing but an unjustifiable high self-esteem of tribunals, considering that they are devoid of any jurisprudential value and fail with success in explaining the rationale upon which they are based.

3.3 Awarding compound versus simple interest

Once an arbitral tribunal determines the first two main variables on which an award of interest depends i.e. the *ides a quo* and the interest rate, the last step to arriving at generating the actual figure corresponding to the interest award in a specific case is to decide whether interest should be calculated compound or simple. As we have seen during this paper, we would not be wrong to say that whether a tribunal awards compound versus simple interest, can be in practice, literally, the multi-million dollar question. The right answer to which, in our view, we will endeavour to give in the next and paramount section of this thesis. For now, however, it is important to introduce what these two concepts entail and how they are applied vis-à-vis the principal sum.

3.3.1 The simple interest approach

Calculating interest awards, based in the simple interest approach, means that the final sum to be awarded is arrived at by applying the pre-established interest rate applicable to the principal sum of compensation, which remains invariable for no matter how much time elapses (also known as 'base amount').

A simple example shows us that, if we invest US$5000 in a business, for 5 years, at an annual interest rate of 5 % to be calculated on the basis of simple interest approach, we will be able to earn a total of US$250/year for all 5 years. This method of calculation does not take into account the possibility of adding the interest

[144] Marboe (n 128)

earning to the base amount of US$5000 so to make a 'new base amount' upon which the interest of 5% be calculated in the second year, and so forth for all five years.

3.3.2 The compound interest approach

By contrast, when adopting the compound interest approach, the interest earned on every compounding period (which in our example is every year), joins the principle sum of compensation ('base amount'), thus merging in a 'new base amount' upon which interest is calculated. This process can go on and on infinitely. For our purposes, i.e. investment arbitration practice, the general assumption is that interest stops accruing at the date of payment.

The table below shows the two different calculation approaches based on our simplistic example:

Compound interest versus simple interest		
$5,000 invested at %5 interest	**Compound (annually)**	**Simple**
Start	$5,000.00	$5,000.00
After 1 year	$5,250.00	$5,250.00
After 2 years	$5,512.50	$5,500.00
After 3 years	$5,788.13	$5,750.00
After 4 years	$6,077.53	$6,000.00
After 5 years	$6,381.41	$6,250.00
Growth	27.6%	25%
Annualized rate	5.52%	5%

It is important to note that, even when applying the compound interest approach, in practice it is possible to discern the difference among the application of the two approaches, by deriving the annualized rate. In fact, it translates the compounding of the interest rate of 5%/year in simple interest terms, which in this case is 5.52% for year. Obviously, the higher the amounts at stake and the longer the timespan over which the interest is owed (calculated), and the greater will be the difference among which method is chosen in practice. In investment arbitration the stakes tend to be relatively high, thus calling for greater sophistication on the part of the arbitrators not only vis-à-vis principled legal considerations, but increasingly on economic and financial considerations too. As we will argue in the next section, this is a price worth

paying if by so doing it will be possible to effectively comply with the principle of full compensation and level the playing field with respect to interest awards.

4. Awarding compound interest in international arbitration: the emergence of *jurisprudence constante*

In this section we will discuss why, generally compound interest should be awarded by investment arbitration tribunals instead of simple interest, thus becoming the first presumption when tribunals are confronted with having to award interest. The exception being, if under the circumstance of a given case it is clearly shown that the award of compound interest would be inappropriate vis-à-vis simple interest, then the latter should be awarded. Nevertheless, based on modern financial and economic realities in the world of international business transactions, scholarly debate and a new investment arbitration trend emerging on the issue, it will be submitted that simple interest today should be righteously reserved the place of the exception that proves the rule, rather than vice-versa.

4.1 Conventional standpoint in international law and jurisprudence

Conventionally in inter-state disputes, the normal standpoint whenever the circumstances called for the award of interest in order to remedy a wrongful withholding of a certain amount or a deprivation of funds to for a certain time, the norm has been to award simple interest. In fact in 1943, Whiteman, in an attempt to summarize international jurisprudence on the subject of compound interest submitted that: "There are few rules within the scope of the subject of damages in international law that are better settled than the one that compound interest is not allowable. Although in rare cases, compound interest, or its equivalent, has been granted, tribunals have been almost unanimous in disapproval of its allowance."[145]

[145] See M.M. Whiteman, Damages in International Law, Vol 3 (US Government printing office, Washington 1943) 1997

According to Schwebel this trend continued even after the creation of the Iran-US Claims Tribunal and was reflected in its jurisprudence thereof.[146]

Another preeminent scholar, who served in the position of Special Rapporteur, Prof. Arangio-Ruiz, worked on the codification and progressive development of the law of international responsibility of states. He scrutinized the jurisprudence and precedents then available on the issue of compound interest awards in international law and observed that jurisprudence was divided in: the negative decisions and decisions where compound interest was awarded.[147]

In regards to the negative decisions vis-à-vis compounding of interest, which made up the majority at the time, it is worth noting Arangio-Ruiz's concise categorization of them in: "(i) the decision that simply adjusts an ill-defined negative orientation of previous case-law (*Christern and Company*); (ii) decisions which, while recalling previous case-law, indicate however that in special circumstances the mechanism of compound interest could be useful in fulfilling the requirement of full compensation (*British claims in the Spanish Zone of Morocco* and *Norwegian Shipowners' Claims*); (iii) the decision that considers that in the specific case the compound interest mechanism would result in a sum exceeding by far the actual *lucrum cessans* (*Portugese Colonies*); (iv) the decision which, on the contrary, considers that compound interest, while acceptable in principle, would lead in the specific case to insufficient compensation (*Fabiani*)."[148]

As for the cases where compound interest was awarded, Arangio-Ruiz, said that they indicated that compound interest was, in principle, deemed to be an element of reparation, and therefore he concluded his report saying that: "(…) compound interest should be awarded whenever it is proved that it is indispensable in order to ensure full compensation for the damage suffered by the injured State."[149]

[146] See S.M. Schwebel, 'Compound Interest in International Law', (2005) 2 TDM 3
[147] Schwebel (n 144) 4
[148] Schwebel (n 144) 4
[149] See Gaetano Arangio-Ruiz, Second report on State responsibility, Yearbook of the International Law Commission, (1998), Vol II, Part I, *Document A/CN.4/425 and Add.L*, , 29-30

Things have not changed drastically since J. Crawford took his place (1997-2001). In fact, in ILC's Third report on State Responsibility, with respect to where does international customary law stand vis-à-vis whether interest should be awarded compound or simple, the Special Rapporteur submitted that the issue must be looked at on a case by case basis.[150]

In this line the commentary to the ILC Articles, acknowledges the possibility of compound interest, but expresses its general disapproval by international jurisprudence.[151] It also recognizes that several scholars and tribunals have advocated for the award of compound interest when it reflects what the claimant reasonably had paid for the temporary loss of funds.[152] However, based on the actual state of international law, it submits that there is no entitlement to compound interest, but when special circumstances might allow for it to achieve the goal of full reparation."[153] As a consequence, the ILC Articles support the presumption that simple interest is the rule and compound interest is the exception.

4.2 Demystifying the award of compound interest

In recent times, a large community of scholars that have dedicated time to the study of interest and how it is awarded by international tribunals, have voiced their discontent and united in their disproval in regards to the simple interest rule.[154] We agree with them and would like to join them in the critique of the simple interest rule, and submit that awarding compound interest should instead constitute the presumption in investment arbitration absent specific circumstances. The reasons we put forward have already been voiced by preeminent scholars and practitioners,

[150] See Third report on State responsibility, Yearbook of the International Law Commission, (2000), Vol II, Part I, *Document A/CN.4/507/add.I*, para. 207.
[151] See ILC Articles of State Responsibility, Commentary to article 38, para. 8.
[152] Ibid. para. 9
[153] Ibid.
[154] See S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 383

and have consistently been reflected in some late investment arbitration cases. In fact, it is not this papers' aim to frame the struggle in favour of allowing for compound interest as one of defeating ancient and medieval prejudices. Nevertheless, we would like to emphasise that, the arguments that will be put forward, are in striking contrast with the trends seen in investment arbitration early jurisprudence, and substantiated by economic and financial reality considerations, which should be given proper weight in this context.

In fact, the main critique to the simple interest rule, at least regarding investment arbitration, is that in our modern times it lacks a proper rationale for justifying its *raison d'être*.[155] As Affolder noted, historically one of the main rationales for prohibiting compound interest, in favour of simple interest, is closely related to the concern about the exploitation of the vulnerable debtor, and more recently consumer protection.[156] Is true in fact that, such rationales, played and may still play a role in a certain domestic context. As a result, the adoption of simple interest was seen as having the quality of being more just and transparent as a solution vis-à-vis such weaker players.[157]

However, Affolder points out that, such issues are of little relevance when it comes to investment arbitration where the parties are investors and states.[158] We agree with this statement for it aims to reflect that the identity of the parties plays an important role when it comes to computing the loss time value of funds. In fact, under such circumstances, Fellmeth observes that compound interest is consistent with: "economic reasoning, equity, and pragmatic considerations alike."[159] He further explains that since debt and investments usually carry compound interest, it would not be fair to award simple interest to the injured party (claimant), as it strips

[155] Ripinsky (n 152)
[156] See N. Affolder, 'Awarding Compound Interest in International Arbitration', (2001) 12 Am. Rev. Int'l Arb, 50, 90
< http://ssrn.com/abstract=1307878 > accessed 16 July 2014
[157] Afforder (n154) 90
[158] Affolder (n 154) 90
[159] See A.X. Fellmeth, 'Below-Market Interest in International Claims Against States', (2010) 13 J Int Economic Law, 440.

it of funds that it would likely have earned if compensated instantaneously.[160] Put differently, the claimant could have invested the amount of compensation due as well as the return on it, thus earning compound interest. Accordingly, it has been argued that awarding compound interest is an element of the reparations due under the Chorzow Factory doctrine.[161] On the other hand, if the claimant had debts, being paid on time would have allowed him to circumvent to pay compound interest on its debt.

Ultimately, awarding simple interest in such cases would greatly benefit the respondent, an undesired outcome. In fact, it is argued that, if the respondent would have borrowed money from the claimant, it would have done so on a compound interest basis, as a normal commercial debt.[162] Therefore, deviating from awarding compound interest, can translate in obliging the claimant to extend a loan to the respondent against its will, for which the latter while being the malefactor is at the same time the beneficiary of its own wrongful conduct. Thus, giving the respondent a strong incentive to adopt dilatory tactics, considering that the longer he refuses to pay the more he benefits by using claimants' funds and earning compound interest on it.

In order to avoid such potentially disruptive practices, for the process of awarding interest in investment arbitration, Mann noticed that it is: "(…) necessary to base a decision applying international law on legal principle, that is, on reasoning derived from a rational appreciation of legal rules, and (…) thus to inaugurate "a new conception of justice in accord with the highest knowledge and truest insight perceptible to the human mind."[163] More practically, he suggested that: "In this spirit it is necessary first to take account of modern economic conditions. It is a fact of universal experience that those who have a surplus of funds normally invest them

[160] Fellmeth (n 157)
[161] Fellmeth (n 157)
[162] Fellmeth (n 157)
[163] See F.A. Mann, 'Compound Interest as an Item of Damage in International Law', (1988) 21 U.C. Davis L. Rev. 585

to earn compound interest."[164] In conclusion he firmly argued that: "compound interest may be and, in the absence of special circumstances, should be awarded to the claimant as damages by international tribunals." [165]

On quite the same tone, Brower and Sharpe held the opinion that international tribunals must mirror the actual financial situation of the globe. But while doing so, they also ardently advocate for predictability, and thus for well-reasoned decisions.[166] We cannot but agree more with the key point they make.

Similarly, Colon and Knoll, acknowledge that: "in finance and all commercial transactions, compound interest is the norm."[167] They point that even when a bank, would only offer simple interest on deposits, once that amount has accrued, a depositor would take the amount, now made of principal and interest, and put it in another deposit account in a different bank, and so on. As a result, the depositor would be earning compound interest.[168]

For Colon and Knoll, simple interest is not appropriate as compensation. It is noticed that simple interest in the end is the same as extending an interest-free loan to the other party that pays it, thus giving that party and unfair advantage.[169] Since the main objective of awarding interest it to put parties in the position that would have existed if the award (compensation) would have been paid straight after the injury (such as expropriation/breach), awarding simple interest flies in the face of the obligation to ensure full compensation of the claimant.[170] Accordingly, they submit

[164] Mann (n 161).
[165] Mann (n 161) 586
[166] See C.N. Brower and J.K. Sharpe, 'Awards of Compound Interest in International Arbitration: The Aminoil Non- Precedent', (2006) 3 TDM, 178.
[167] See J.M. Colon, and M.S. Knoll, 'Prejudgment Interest in International Arbitration' (2007) *Faculty Scholarship.* Paper 185. 9
< http://scholarship.law.upenn.edu/faculty_scholarship/185 > (accessed 16 July 2014)
[168] Colon and Knoll (n 165)
[169] Colon and Knoll (n 165)
[170] Colon and Knoll (n 165) 10

that: "All awards of prejudgment interest should therefore be computed using compound interest."[171]

To conclude, we would like to refer to Gotanda's insightful observation that, today, nearly all financing and investment vehicles are based on compound interest.[172] Therefore, it would be against the laws of reason and also unfair and impartial if one would award the claimant just simple interest, at a moment when the shortcoming on the part of respondent's to pay in a punctual fashion weight on the shoulders of claimant.[173] For example, in the form of financial charges on a compound interest basis or deprivation to investment in an alternative that would have had a compounding return on investment.[174]

4.3 Investment arbitration jurisprudence on compound interest

As we have been able to see, compound interest in international law and jurisprudence, have been awarded rarely and on an irregular basis. Investment arbitration seemed to be no exception at its inception. However, with the advent of one landmark case: *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, the wind seems to have changed direction and compound interest awards have lost their traditional taboo status. In fact, until then the rule of thumb, when faced with having to make an interest award was to cite Whiteman on that: "(…) there are few rules within the scope of the subject of damages in international law that are better settled than the one that compound interest is not allowable."[175]

However, in *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica,* the tribunal held that absent any hard and fast rule on the international law plain: "(…) the determination of interest is a product of the exercise of judgment, taking into

[171] Colon and Knoll (n 165) 10
[172] See J.Y. Gotanda, 'Compound Interest in International Disputes' (2004) 3 TDM, TDM 3 (2004) 11
[173] Gotanda (n 170)
[174] Gotanda (n 170)
[175] See M.M. Whiteman, Damages in International Law, Vol 3 (US Government printing office, Washington 1943) 1997

account all of the circumstances of the case at hand and especially considerations of fairness which must form part of the law to be applied by this Tribunal. In particular, where an owner of property has at some earlier time lost the value of his asset but has not received the monetary equivalent that then became due to him, the amount of compensation should reflect, at least in part, the additional sum that his money would have earned, had it, and the income generated by it, been reinvested each year at generally prevailing rates of interest."[176] Accordingly, the tribunal concluded that simple interest is was not appropriate in this case and awarded compound interest.[177] This case opened the flood gates for many other following awards where compounding interest was considered to be the appropriate method of interest calculation.

When reading the tribunals decision, it is perhaps much clearer now, to understand the basis of its reasoning, as it reflects to the same arguments of scholars that we saw in the previous section vis-à-vis the opposition of the simple interest rule. It emerges, if looked in that way, that what the tribunal in *Santa Elena* is trying to say is that it based its reasoning on principled legal considerations comingled with an appreciation of the economic and financial reality. We welcome this line of reasoning, at least for what concerns the compound versus simple interest variable in the interest calculation exercise.

Thereafter, the tribunal in *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile,* following the same line of reasoning note that: "compound interest is more in accordance with the reality of financial transactions and a closer approximation to the actual value lost by an investor."[178] In so doing, it argued that the amount of compensation has to mirror the potential returns forgone due to the impossibility to reinvest both the money due at the time of injury loss plus its potential return.[179]

[176] See *Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica*, (2000), Award, ICSID Case No. ARB/96/1, para. 103, 104.
[177] Ibid. para. 105, 106
[178] See *MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile,* (2004), Award, ICSID Case No. ARB/01/7, para. 251
[179] Ibid.

Also, in *Azurix* Corp. *v*. The *Argentine Republic*, it was submitted that: "The Tribunal considers that compound interest reflects the reality of financial transactions, and best approximates the value lost by an investor. Therefore, compound interest should be paid on the amount of damages awarded (…)"[180]

Further, confirming the same position, the tribunal in *LG&E Energy Corp., LG&E Capital Corp., and LG&E International, Inc. v. Argentine Republic,* acknowledged that interest compensates Claimants for the impossibility to invest the amounts due (…) and that in 'modern economic conditions', funds would be invested to earn compound interest."[181] As a result, the tribunal awarded compound interest as consistent with contemporary financial realities.[182]

Siemens A.G. v. The Argentine Republic, is yet another example of the espousing by arbitral tribunals of a reasoning grounded in economic and financial considerations. In fact, the tribunal held: "As regards the compounding of interest, (…) had compensation been paid following expropriation, Siemense would have earned interest on interest paid on the amount of compensation. It is in this sense that (…) compound interest is a closer measure of the actual value lost by the investor."[183]

On that same vain*, in El Paso Energy International Company v. The Argentine Republic*, concluded that: "Compound interest is generally recognized by arbitral tribunals in the field of investment protection, including all awards in the Argentine cases. The Tribunal shares the view expressed by these awards that compound interest reflects economic reality and will therefore better ensure full reparation of the Claimant's damage."[184]

[180] See *Azurix* Corp. *v*. The *Argentine Republic*, (2006), Award, ICSID Case No. ARB/01/12. para. 440
[181] See *LG&E* Energy Corp., *LG&E* Capital Corp., and *LG&E* International, Inc .*v*. *Argentine* Republic. (2007), Award, ICSID Case No. ARB/02/1, para. 56, 104
[182] Ibid. para. 103.
[183] See *Siemens A.G. v. The Argentine Republic*, (2007), Award, ICSID Case No. ARB/02/8, para. 399.
[184] See *El Paso Energy International Company v. The Argentine Republic*, ICSID Case No. ARB/03/15, para. 746.

The more recent award, Señor *Tza Yap Shum v*. *The Republic of Peru*, the tribunal based its decision on the respondent's argument that the suitable interest rate should seek to indicate the likely return that the claimant would have earn had the damages awarded been re-invested for a favorable return.[185] The importance of this decision stand in the fact that defendant in contrast to past case, are themselves recognizing the fundamental rationale behind an award of compound interest i.e. its conformity with modern financial practices. Which seems as this case shows to be working quite in favor also of respondent when facing much larger interest claims by claimants.

In a salient decision vis-à-vis the award of compound interest, in *Gemplus S.A., SLP S.A., Gemplus Industrial S.A. de C.V. v. The United Mexican States*, after hearing the divergent opinions of the parties on whether compound or simple should be awarded, the tribunal submitted that: "(…) the reference to "commercial" and "market" in Article 5 of these BITS both point to the permissible application of reasonable compound rates, given that it is the universal practice of banks and other loan providers in the world market to provide monies at a cost amounting to or equivalent to compound rates of interest and not simple interest. In addition, it is clear from the legal materials cited by the Claimants (summarised above, to which several more could be added) that the current practice of international tribunals (including ICSID) is to award compound and not simple interest. In the Tribunal's opinion, there is now a form of "*jurisprudence constante*" where the presumption has shifted from the position a decade or so ago with the result it would now be more appropriate to order compound interest, unless shown to be inappropriate in favour of simple interest, rather than vice-versa."[186]

[185] See *Señor Tza Yap Shum v. The Republic of Peru*, (2011), Award, ICSID Case No. ARB/07/6, para. 286

[186] See *Gemplus S.A., SLP S.A., Gemplus Industrial S.A. de C.V. v. The United Mexican States*, ICSID Case No. ARB(AF)/04/3, para. 16-26.

The proposition that of compound interest awards constitute "*jurisprudence constante*" has been upheld also in the very recent multi-billion dollar dispute of *Yukos Universal Limited (Isle of Man) v Russian Federation*.[187]

While the series of cases provided in this section it is just a portion of the whole cases where compound interest have been awarded, it was tried, as far as possible to make it representative of our main arguments of this paper i.e. the necessity to merge principled legal considerations with the economic and financial realities in which we live in today. In doing so, it is noticed that more sophisticated explanations, at least vis-à-vis the choice of whether to order compound or simple interest are emerging. This is appreciated, for greater clarity in reasoning is key to enhancing predictability in future interest awards but also in investment arbitration as a system.

Another important thing that we have noticed is that a paradigm-shift started with the landmark decision in Santa Elena, but still underway today. It would be interesting to see in the future, how the actual trend of awarding compound interest in investment arbitration is going to influence the development of a uniform rule of international customary law that would take into account modern economic and financial practices. What is certain, however, is that there seems reason to believe judging from the emerging jurisprudence, that in concern to interest awards investment arbitration is and will be regaining some of its more characteristic and precious qualities, such us predictability, efficiency and commercial spirit.

5. Conclusion

As we have seen, investor-state relationships for different reasons can exacerbate and end-up to be resolved in investment arbitration. Though some time forgotten, the main interest of an investor starting investment arbitration proceedings is based on the fact that he wants to be compensated back for the losses/injury inflicted by

[187] See *Yukos Universal Limited (Isle of Man) v Russian Federation*, (2014), Award, PCA Case No.AA 227, para. 1689.

the host state. In investment arbitration compensatory claims more often than not involve millions of dollars, and in the last few years the compensation awarded has reach at least in three cases more than one billion $USD.

In light of this we have explained that, in cases where there is a long lapse of time between the moment when the injury occurs and the final award is rendered, whether a tribunal awards interest and its method of calculation is perhaps as crucial to the claimant from a financial perspective as the principal amount claimed, but it could be even more important. Thus, we noted that the purpose of interest is to compensate the claimant for the loss time value of money (funds).

Be it as it may, we acknowledged the difficulties present as a result of there being no uniform approach for calculating the interest due to a claimant. Concerns with respect to the predictability of such awards, but also the award of less-than-full compensation to the injured claimants were put forward as the main issues that might, thus undermine a given dispute and the whole system alike.

Subsequently, we spoke about the three main reasons for awarding interest i.e.: the promotion of full compensation (seeking to put the claimant in the position it would have been but for the breach of the respondent); interest awards counter 'unjust enrichment' of the respondent (asking it to compensate the claimant by virtue of the potential advantage it had from the use of its money, which it illegitimately held back); interest awards further efficiency (the underlying rational for this is to look interest awards as, inter alia, a way through which to deter respondents from engaging in wrongful behavior).

We looked in what types of interest could be distinguished and we discussed the fact that there seem to be an inherent power of tribunal to award interest, at least for as long as investment arbitration in concerned, and criticized a few decisions that had failed to award post-award interest.

Further on we looked at the main legal sources on interest, such as domestic laws; treaties; international customary law and arbitral jurisprudence. While doing so we

showed that most of the sources have had a role to play into practice (some more than others for obvious reasons).

Then, we looked at the main variables (i.e. ides a quo; interest rate; and compound versus simple approach) when calculating the interest that is due to the claimant. We established that these variables are deeply interconnected among one another and can literally influence in many important ways the actual amount to be awarded. Therefore, we impliedly recognized than any eventual discussion regarding whether interest should be awarded compound or simple is effective as long as the other variables are calculated in the appropriate fashion.

Additionally, we saw how investment arbitration jurisprudence had dealt with these variables and their calculation for the purpose of awarding interest. The approaches that have been adopted by tribunals in practise in their determination of the ides a quo and interest rate, were given particular attention, while the approaches of calculating compound versus simple was also discussed and explained. We pointed out that awarding interest is a complex exercise, nevertheless on that has to be carried out with great care and craft in order to ensure that the claimant is fully compensated.

In the last part of our paper we looked at the conventional stance of international law and jurisprudence in respect to whether interest should be awarded compound or simple. We concluded that today simple interest is the rule under customary international law. In this respect we argued that this status quo cannot be preserved any longer in investment arbitration for it goes against basic notions of the economic and financial context we live in today, a context too well known to players such as large investors and sovereign state.

We went on presenting different arguments based on the premises that investment arbitration tribunal cannot any longer ignore modern economic condition. We gave some example of why considering todays financial practices compound interest should be preferred. The conclusion that we reached was that only by awarding

compound interest can a claimant (investor) be fully compensated with respect to the loss/injury he has suffered.

Furthermore, we went through some of the most recent case law to substantiate our arguments. Such arguments, all in all, are in line with reasoning provided by arbitral tribunals that have recognized that compound interest today is no longer the exception when awarding interest but has instead become "*jurisprudence constante*".

Finally, this paradigm-shift started with the landmark decision in Santa Elena, and is still on-going. It would be interesting to see in the future, if the actual trend of awarding compound interest in investment arbitration is going to influence the development of a uniform rule of international customary law that would take into account modern economic and financial practices. What is certain, however, is that there seems to be good reasons to believe, by judging from the emerging jurisprudence that in concern to interest awards in investment arbitration the path for a uniform rule is being lain down. This is a noteworthy development especially considering that it plays an important role in bolstering investment arbitrations' more characteristic and precious qualities, such us predictability, efficiency and commercial spirit.

6. Bibliography

Articles

Affolder, N. 'Awarding Compound Interest in International Arbitration', (2001) 12 Am. Rev. Int'l Arb, 4 < http://ssrn.com/abstract=1307878 > accessed 16 July 2014.

Brower C.N. and Sharpe, J.K. 'Awards of Compound Interest in International Arbitration: The Aminoil Non- Precedent', (2006) 3 TDM, 155

Caron, D.D., The ILC Articles on State Responsiblity: The Paradoxical Relationship between Form and Authority, (2002) 96 *Am. J. Int'l L.* 866

Cassese, A. *International Law*, (2nd edn Oxford University Press, Oxford 2001) 159.

Colon, J.M. and Knoll, M.S., 'Prejudgment Interest in International Arbitration' (2007) *Faculty Scholarship.* Paper 185. 9
< http://scholarship.law.upenn.edu/faculty_scholarship/185 > (accessed 16 July 2014)

Fellmeth, A.X. 'Below-Market Interest in International Claims Against States', (2010) 13 J Int Economic Law

Gaetano Arangio-Ruiz, Second report on State responsibility, Yearbook of the International Law Commission, (1998), Vol II, Part I, *Document A/CN.4/425 and Add.L*, , 29-30

Gotanda, J. Y. 'A Study of Interest'(2008) VI DOSSIERS OF THE ICC INSTITUTE OF WORLD BUSINESS LAW, ICC Publications; Villanova Law/Public Policy Research Paper No. 2007-10. 1
<http://ssrn.com/abstract=1005425> accessed 14 July 2014.

Gotanda, 'Assessing Damages in International Commercial Arbitration: A Comparison With Investment Treaty Disputes', (2007) 4 TDM, 14.

Gotanda, J.Y. 'Assessing Damages in International Commercial Arbitration: A Comparison With Investment Treaty Disputes', (2007) 4 TDM, 8.

Gotanda, J.Y. 'The Unpredictability Paradox: Punitive Damages and Interest in International Arbitration', (2010) 7 TDM, 15.

Gotanda, J.Y. 'Compound Interest in International Disputes' (2004) 3 TDM, TDM 3 (2004) 2

Grisel, A. 'The sources of investment law' in Zachary Douglas, Joost Pauwelyn, and Jorge E. Viñuales (eds), *The Foundations of International Investment Law: Bringing Theory Into Practice* (Oxford University Press, Oxford 2014) 216.

Hart, T. 'Study of Damages in International Center for the Settlement of Investment Disputes Cases', (2014) 11 TDM, 18.

ILC, *Draft Articles on Responsibility of States for Internationally Wrongful Acts with Commentaries*, (2001), paras. 1-7-9.

Mann, F.A. 'Compound Interest as an Item of Damage in International Law', (1988) 21 U.C. Davis L. Rev. 585

Marboe, I. 'Compensation and Damages in International Law', (2006) 7 J. World Invest. & Trade, 723

Marboe, I. 'Compensation and Damages in International Law The Limits of "Fair Market Value"', (2007) 4 TDM 754

Ripinsky, S., Williams, K., *Damages in International Investment Law,* (1st edn BIICL, London 2008) 366.

Rubino-Sammartano, M. ' *International Arbitration Law and Practice'*, (2nd edn Kluwer Law International, The Hague 2001), 816; S. Ripinsky, K.Williams, *Damages in International Investment Law,* (1st edn BIICL, London 2008) 366.

Sabahi, B. *Compensation and Restitution in Investor-State Arbitration: Principles and Practice*, (1st edn Oxford University Press, Oxford 2011) 96.

Schultz, T., Dupont, C.G. 'Investment Arbitration: Promoting the Rule of Law or Over-Empowering Investors? A Quantitative Empirical Study' (2014). Eur. J. Int'l L, Forthcoming; King's College London Law School Research Paper No. 2014-16. 28,29 < http://ssrn.com/abstract=2399179 > accessed 14 July 2014.

Senechal, T.J. ,Gotanda, J.Y. 'Interest as Damages', (2009) 47 Colum. J. Transnat'l L. 495, 496.

Schwarzenberger, G., International Law as Applied by International Courts and Tribunals, (3rd edn Stevens & Sons Ltd, London 1957) 661.

Schwebel, S.M. 'Compound Interest in International Law', (2005) 2 TDM 3

Wälde, T.W. and Sabahi, B. 'Compensation, Damages and Valuation in International Investment Law', (2007) 4 TDM, 47.

Whiteman, M.M., "Damages in International Law", Vol 3 (US Government printing office, Washington 1943) 1997

Third report on State responsibility, Yearbook of the International Law Commission, (2000), Vol II, Part I, *Document A/CN.4/507/add.I*, para. 207.

ILC Articles of State Responsibility, Commentary to article 38, para. 8.

Cases

Hulley Enterprises Limited (Cyprus) v Russian Federation, PCA Case No AA 226, UNCITRAL; *Veteran Petroleum Limited (Cyprus) v Russian Federation*, PCA Case No AA 228, UNCITRAL.

Yukos Universal Limited (Isle of Man) v Russian Federation, (2014), Award, PCA Case No.AA 227, para. 1823.

Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica, (2000), Award, ICSID Case No. ARB/96/1, para. 95-107.

Wena Hotels Limited v. Arab Republic of Egypt, (2000), Award, ICSID Case No. ARB/98/4, para. 126-129.

Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic, (2007), Award, ICSID Case No. ARB/97/3 para. 9.2.3.

LG&E Energy Corp., *LG&E* Capital Corp., and *LG&E* International, Inc .*v*. *Argentine* Republic. (2007), Award, ICSID Case No. ARB/02/1, para. 55

Enron Corp. and Ponderosa Assets, L. P. v. Argentine Republic, (2007), Award, ICSID Case No ARB/01/3, para. 452 ; *Sempra Energy International v. Argentine Republic*, (2007), Award, ICSID NO. ARB/02/16, para. 485.

Sempra Energy International v. Argentine Republic, (2007), Partial Dissenting Opinion, ICSID NO. ARB/02/16.

Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic, (2007), Award, ICSID Case No. ARB/97/3 para. 9.2.1

Islamic Republic of Iran v United States of America Case No A19, (1987) 16 Iran-USCTR, 261; ILC, 'Report of the International Law Commission on the Work of its 42nd Session' (1 May–20 July 1990) UN Doc A/45/(A/56/10)

Autopista Concesionada de Venezuela CA (Aucoven) *v Venezuela*, (2003), Award, ICSID Case No ARB/00/5, para. 396.

Desert Line Projects LLC v. The Republic of Yemen, (2008), Award, lCSID Case No. ARB/OS/17, para. 294.

Duke Energy Electroquil Partners & Electroquil S.A. v. Republic of Ecuador, (2008), Award, ICSID Case No. ARB/04/19, para. 473.

Occidental Petroleum Corporation *and Occidental* Exploration *and* Production Company *v*. The Republic of *Ecuador*, ICSID Case No. ARB/06/11. para. 840.

Bosnia and Herzegovina v. Serbia and Montenegro - Application of the Convention on the Prevention and Punishment of the Crime of Genocide - Judgment of 26 February 2007 - Judgments [2007] ICJ 2, paras. 385,388, 398, 401, 407.

CMS Gas Transmission Company v. The Republic of Argentina, (2005), Award, ICSID Case No. ARB/01/8, para, 404

Siemens A.G. v. The Argentine Republic, (2007), Award, ICSID Case No. ARB/02/8, para. 394,395.

LG&E Energy Corp., *LG&E* Capital Corp., and *LG&E* International, Inc .*v*. *Argentine* Republic. (2007), Award, ICSID Case No. ARB/02/1, para. 55-57.

BG Group Plc. v. The Republic of Argentina, (2007), Award, UNCITRAL (1976 rules), para. 246

Nykomb Synergetics Technology Holding AB v. The Republic of Latvia, (2003), Award, SCC, para. 5.3.

CME Czech Republic B.V. v. The Czech Republic, (2003), Award, UNCITRAL (1976 rules), para. 647.

Yukos Universal Limited (Isle of Man) v. The Russian Federation, (2014) UNCITRAL, PCA Case No. AA 227, para. 1653.

Saipem S.p.A. v. The People's Republic of Bangladesh, (2009), Award, ICSID Case No. ARB/05/07, para. 67.

Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica, (2000), Award, ICSID Case No. ARB/96/1, para. 90.

Southern Pacific Properties (Middle East) *Limited v*. *Arab Republic* of *Egypt,* (1992), Award, ICSID Case No. ARB/84/3, para. 234.

Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica, (2000), Award, ICSID Case No. ARB/96/1, para. 103, 104.

MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile, (2004), Award, ICSID Case No. ARB/01/7, para. 251

Azurix Corp. *v*. The *Argentine Republic*, (2006), Award, ICSID Case No. ARB/01/12. para. 440

LG&E Energy Corp., *LG&E* Capital Corp., and *LG&E* International, Inc .*v*. *Argentine* Republic. (2007), Award, ICSID Case No. ARB/02/1, para. 56, 104

Siemens A.G. v. The Argentine Republic, (2007), Award, ICSID Case No. ARB/02/8, para. 399.

El Paso Energy International Company v. The Argentine Republic, ICSID Case No. ARB/03/15, para. 746.

Señor Tza Yap Shum v. The Republic of Peru, (2011), Award, ICSID Case No. ARB/07/6, para. 286

Gemplus S.A., SLP S.A., Gemplus Industrial S.A. de C.V. v. The United Mexican States, ICSID Case No. ARB(AF)/04/3, para. 16-26.

Yukos Universal Limited (Isle of Man) v Russian Federation, (2014), Award, PCA Case No.AA 227, para. 1689.

Sempra Energy International v. Argentine Republic, (2007), Award, ICSID NO. ARB/02/16, para. 404.

MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile, (2004), Award, ICSID Case No. ARB/01/7, para. 80.

PSEG Global Inc. and Konya Ilgin Elektrik Üretim Ve Ticaret Limited Sirketi v. Republic of Turkey, (2007), Award, ICSID Case No. ARB/02/5, para. 349-351

Asian Agricultural Products Ltd. *v*. Republic of *Sri Lanka*, (1990), Award, ICSID Case No. ARB/87/3. Para. 114.

Sylvania Technical Sys., Inc. *v Iran*, (1985), Award, 8 *Iran*-U.S.CTR 298, 320

Compañía del Desarrollo de Santa Elena, S.A. v. Costa Rica, (2000), Award, ICSID Case No. ARB/96/1, para. 104.

Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic, (2007), Award, ICSID Case No. ARB/97/3 para. 9.2.8.

LG&E Energy Corp., *LG&E Capital Corp*., *and LG&E International, Inc .v*. *Argentine Republic*. (2007), Award, ICSID Case No. ARB/02/1, para. 102.

BG Group Plc. v. The Republic of Argentina, (2007), Award, UNCITRAL (1976 rules), para. 455

MTD Equity Sdn. Bhd. and MTD Chile S.A. v. Republic of Chile, (2004), Award, ICSID Case No. ARB/01/7, para.250; *Emilio Agustín Maffezini v. The Kingdom of Spain*, (2000), Award, ICSID Case No. ARB/97/7, para. 96.

Enron Corp. and Ponderosa Assets, L. P. v. Argentine Republic, (2007), Award, ICSID Case No ARB/01/3, para. 452; *PSEG Global Inc. and Konya Ilgin Elektrik Üretim Ve Ticaret Limited Sirketi v. Republic of Turkey,* (2007), Award, ICSID Case No. ARB/02/5, para. 348.

ADC Affiliate Limited and ADC & ADMC Management Limited v. The Republic of Hungary, (2006), Award, ICSID Case No. ARB/03/16 , para. 481, 482.

Compañía de Aguas del Aconquija S.A. and Vivendi Universal S.A. v. Argentine Republic, (2007), Award, ICSID Case No. ARB/97/3 para. (vi) operative part; *Autopista Concesionada de Venezuela* CA (Aucoven) *v Venezuela*, (2003), Award, ICSID Case No ARB/00/5, para. 369-374; *Siemens A.G. v. The Argentine Republic*, (2007), Award, ICSID Case No. ARB/02/8, para. 397,398.

Wena Hotels Limited v. Arab Republic of Egypt, (2000), Award, ICSID Case No. ARB/98/4, para. 128

Wena Hotels Limited v. Arab Republic of Egypt, (2002), Annulment proceedings, ICSID Case No. ARB/98/4, para. 50-53.

Middle East Cement Shipping and Handling Co. S.A. v. Arab Republic of Egypt, (2002), Award, ICSID Case No. ARB/99/6, para. 174.

Southern Pacific Properties (Middle East) *Limited v. Arab Republic of Egypt,* (1992), Award, (ICSID Case No. ARB/84/3), para. 222, 223

Legal Articles

Article 4 of Austria-Republic of Korea BIT (1991).

Article 6 of US-Rwanda BIT (2008).

http://investmentpolicyhub.unctad.org/IIA (accessed 14 July 2014)

Article 38 of the ILC Articles on state responsibility

Article 4 of Austria-Republic of Korea BIT (1991).

Article 38 (2) of the ILC *Draft Articles of State Responsibility for Wrongful Acts*.

Article 5 (2) of Brazil-Finland BIT.