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# Valuation Standards for Calculating ICSID Awards

Jason Pan<sup>1</sup>

## I. INTRODUCTION

Fair market value is the “price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm’s length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts.”<sup>2</sup> Fair market value is often the standard for deciding awards for investment treaty breaches,<sup>3</sup> and its calculation is as much art as science. The lack of standards when calculating market value for determining awards creates an unnecessary source of uncertainty for investors, who are unsure *ex ante* whether claims are worth adjudicating, and by extension, whether legal protections for their investments are adequate.

The International Centre for the Settlement of Investment Disputes (ICSID) is an organ of the World Bank charged with adjudicating disputes between investors and foreign governments.<sup>4</sup> ICSID was established in 1965 to encourage the cross-border flow of investments, especially to the developing world, by creating a forum through which aggrieved foreign investors can bring claims against host governments.<sup>5</sup> Around the same time in 1964, William Sharpe published his theory of the Capital Asset Pricing

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1. JD/MBA 2013, University of Virginia School of Law and Darden School of Business. I thank Professor Joseph D’Agostino of Savannah Law School for his feedback on this article.

2. *International Glossary of Business Valuation Terms*, NAT’L ASS’N OF CERTIFIED VALUATORS & ANALYSTS (Jan. 25, 2012), available at [http://www.nacva.com/association/A\\_bv\\_terms.asp#terms\\_F](http://www.nacva.com/association/A_bv_terms.asp#terms_F).

3. Mark Kantor, *Valuation for Arbitration: Uses and Limits of Income - Based Valuation Methods*, 4 TRANSNAT’L DISP. MGMT. 1, 6 (2007) (“Investment treaties, courts and commercial codes in many countries routinely acknowledge that the proper measure of compensation for injury to business interests is the impact on the company’s market value.”).

4. *About ICSID*, INT’L CTR. FOR SETTLEMENT OF INV. DISPUTES (Jan. 25, 2012), [http://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=ShowHome&pageName=AboutICSID\\_Home](http://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=ShowHome&pageName=AboutICSID_Home).

5. *Id.*

Model,<sup>6</sup> which would serve as a foundation of modern valuation theory by mathematically relating risk and return in a simple model.<sup>7</sup> Both international arbitration and valuation practice have evolved greatly over the past forty-some years, but not in synchronization. The valuation of damages remains a source of uncertainty in ICSID arbitrations, and by extension a source of risk to international investments. While a body of scholarship examines the legal principles underpinning awards,<sup>8</sup> the mathematics behind the calculation of awards has not received the same level of scrutiny.

The variation in mathematical approaches adopted by ICSID tribunals underscores the difficulty and subjectivity of calculating the impact of a government action on an investor's business interests. Since 1981, the International Valuation Standards Council (IVSC) has been developing a set of standards to promote consistency and robustness in the calculation of market value.<sup>9</sup> This article discusses a framework where IVSC standards are given legal weight and serve as guidelines for the calculation of awards during ICSID proceedings.

Part 1 discusses issues in ICSID's current approach to award valuation. Part 2 gives an overview of IVSC's valuation standards and their development. Part 3 examines how applying IVSC standards would address valuation issues in ICSID arbitrations. Part 4 identifies growth opportunities for IVSC that can aid ICSID arbitrations. Part 5 explores the challenges of implementing a valuation standards framework for ICSID arbitrations.

## I. CURRENT ICSID APPROACH TO AWARD VALUATION

No framework seems to underpin valuation analyses during ICSID arbitrations. After establishing the legal basis for an award, tribunals use their impression of valuation best practices as well as discretion to conduct the analysis. The result is a range of outcomes dependent on the assumptions and philosophy of the adjudicating tribunal. Points of divergence include which valuation technique to apply and the application

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6. William Sharpe, *Capital Asset Prices – A Theory of Market Equilibrium Under Conditions of Risk*, 19 THE J. OF FIN. 425, 425–42 (1964), available at <http://www.jstor.org/stable/2977928>.

7. Alan R. Palmiter, *Capital Asset Pricing Model*, FIN. VALUATION IN LEGAL CONTEXTS (Mar. 16, 2004), <http://www.wfu.edu/~palmiter/Law&Valuation/chapter%202/2-5-0.htm> (“A widely-used valuation model, known as the Capital Asset Pricing Model, seeks to value financial assets by linking an asset's return and its risk”).

8. See Henry Weisburg, *Means to be Made Whole: Damages in the Context of International Investment Arbitration*, EVALUATION OF DAMAGES IN INTERNATIONAL ARBITRATION 165 (Dossiers: ICC Institute of World Business Law 2006).

9. *About IVSC*, INT'L VALUATION STANDARDS COUNCIL (Jan. 25, 2012), <http://www.ivsc.org/about>.

itself. In particular, *CMS Gas vs. Argentina*<sup>10</sup> illustrates ICSID's ad hoc approach to valuation analysis.

In the 1980s, Argentina privatized its domestic gas distribution industry, and U.S.-based CMS Gas bought a 29.42% stake in Transportadora de Gas del Norte (TGN).<sup>11</sup> The Argentine government issued a license to TGN for thirty-five years, with the possibility of renewal for ten additional years dependent on certain conditions.<sup>12</sup> The government's tariff payment to TGN "would be adjusted every six months in accordance with the United States Producer Price Index (US PPI)."<sup>13</sup>

During Argentina's early 2000's economic crisis, the government froze US PPI adjustments,<sup>14</sup> which decreased the value of the tariffs. Both parties agreed to submit to ICSID arbitration.<sup>15</sup> The claimant sought to force the government to buy out CMS Gas's shares in TGN.<sup>16</sup> The arbitral tribunal agreed with CMS Gas and assumed the task of determining the fair market value of the claimant's stake in TGN.<sup>17</sup>

Since the U.S.-Argentina Bilateral Investment Treaty did not address how fair market value should be calculated, the tribunal decided to impose its own "discretion."<sup>18</sup> The tribunal considered five approaches<sup>19</sup> for establishing fair market value. Among them were the "exchange" approach, which valued assets by comparing them to similar assets that are publicly

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10. ICSID Case No. ARB/01/08 (May 12, 2005) [hereinafter *CMS Gas*], available at [https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC504\\_En&caseId=C4](https://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=showDoc&docId=DC504_En&caseId=C4).

11. *Id.* at 17-18.

12. *Id.* at 17.

13. *Id.*

14. *Id.* at 18.

15. *Id.* at 5.

16. *Id.* at 113.

17. *Id.*

18. *Id.* at 118.

19. The "asset value" approach valued assets at their replacement cost. The "comparable transaction" approach triangulated the value of assets by examining similar past transactions. The "option" approach valued assets according to their highest possible use. The "asset value" approach was dismissed as "inappropriate in the present circumstances" and received no further elaboration. The "comparable transaction" approach was dismissed because 1) the Tribunal was not provided with data of comparable transactions and 2) "it would be a most speculative enterprise to try and determine the compensation to CMS on that basis." The "option" approach was dismissed because "it is very difficult to imagine what uses or options there could be for gas transmission lines other than to transport gas." See *id.* at 119.

traded,<sup>20</sup> and the “discounted cash flow” (DCF) approach, which valued assets as the sum of projected cash flows discounted at a rate that reflected the uncertainty or risk of those cash flows.<sup>21</sup>

The claimant argued for DCF because it explicitly accounted for the future profits of its investment and because of its common use in “international finance and international arbitration.”<sup>22</sup> It conducted a DCF analysis and valued its shares in TGN at \$261.1m.<sup>23</sup> The respondent argued against DCF, because it resulted in the “gross overvaluation of the shares.”<sup>24</sup> Instead it sought the “stock exchange valuation of shares of similarly situated companies.”<sup>25</sup> The respondent declined to submit a valuation estimate.<sup>26</sup>

The tribunal rejected the “exchange” approach since the Argentine gas distributors trading on the Argentine stock exchange were significantly different.<sup>27</sup> In addition, it considered equities in Argentina to be an illiquid market, so the prices that companies traded for were not necessarily an accurate reflection of their fair value.<sup>28</sup> The tribunal enthusiastically settled on DCF. It cited its perception that “DCF techniques have been universally adopted” and that “there is adequate data to make a rational DCF valuation.”<sup>29</sup> The tribunal’s goal was to calculate “a range of values which can be rationally justified.”<sup>30</sup>

As a first cut, the tribunal used the valuation submitted by the claimant, which drew its data from “forecasted figures prepared by TGN for internal use.”<sup>31</sup> The tribunal relied on expert testimony from both parties, and with the help of its own professionals on staff, parsed through the assumptions that went into the claimant’s DCF.<sup>32</sup> The tribunal acknowledged the impact of its assumptions, since “depending on the choices of variables to which changes were made and the size of such changes, significantly disparate results were reached.”<sup>33</sup>

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20. *Id.*

21. *Id.*

22. *Id.* at 114.

23. *Id.*

24. *Id.*

25. *Id.*

26. *Id.* at 115.

27. *Id.* at 119.

28. *Id.*

29. *Id.* at 121.

30. *Id.* at 122.

31. *Id.* at 120.

32. *Id.* at 126.

33. *Id.* at 58.

The tribunal considered the ten-year potential extension of the license too speculative, and thus limited the window of compensation to the remainder of the original 35-year contract.<sup>34</sup> It faulted the claimant for not including the impact of the Argentine economic crisis into its demand forecasts.<sup>35</sup> The claimant responded that much of its demand had been locked in with contracts, but the tribunal asserted that “it would be highly unrealistic to assume that some adjustments to those ship-or-pay contracts would not have been made.”<sup>36</sup> Noting that Argentina’s GDP declined 10.9% in 2002, the tribunal concluded “. . . that it is reasonable to assume that sales revenues would have decreased by 5% in each of 2002 and 2003 and by 1% in 2004.”<sup>37</sup> The tribunal reached this conclusion despite acknowledging that it did not have access to any studies on the “Argentine elasticity of demand with respect to gas prices.”<sup>38</sup>

The tribunal next attacked the discount rate as too low. A low discount rate would increase the net present value of the claimant’s investment. The claimant used a “build-up” method starting with the U.S. Treasury rate as the risk-free rate and layering on risk premiums to calculate the return the claimant should expect given the riskiness of its investment in TGN.<sup>39</sup> Its calculated return was very close to one the Argentine government used in a 1997 tariff review.<sup>40</sup>

The tribunal stated that in the 1997 review, the government was incentivized to cite an artificially low discount rate for two reasons. A higher discount rate suggested to potential investors that investing in Argentina was risky, and the government wanted “. . . to project a positive image of that country as a foreign investment venue.”<sup>41</sup> Secondly, a higher discount rate meant the government would have to pay more in tariffs to meet investors’ desired rate of return.<sup>42</sup> On this basis, the tribunal increased

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34. *Id.* at 128.

35. *Id.* at 129.

36. *Id.*

37. *Id.* at 130 (Because the Argentine GDP rebounded in 2003 and 2004 at 8.8% and 7.8%, the tribunal gradually increased demand during 2005-2011 to about 3%, with a steady 1.5% thereafter).

38. *Id.* at 130.

39. *Id.* at 132.

40. *Id.*

41. *Id.*

42. *Id.* (“[T]he higher the cost of equity [the Argentine state regulatory agency] would set, the higher the tariff would be.”).

the discount rate from 13.45% to 14.5%.<sup>43</sup> With its respondent-friendly adjustments of claimant's DCF analysis, the tribunal awarded the claimant \$133.2m, about half of its desired \$261.1m.<sup>44</sup>

Whether the tribunal's valuation work was performed correctly and reasonably is open to debate. Two points, however, stand out from its methodology. First, the assumptions underlying the DCF analysis were significant enough to decrease the award from the requested \$261.1m to the actual \$133.2m. Secondly, the adjustments to the assumptions were almost entirely at the tribunal's discretion, with little data or guidelines on best practices to back them up. For example, instead of applying several valuation methods and triangulating out a valuation, the tribunal chose to rely exclusively on DCF without applying additional methods to double-check the result.

The tribunal concluded it had enough data for its assumption-laden analysis.<sup>45</sup> In practice however, assumptions, such as demand growth, the exchange rate,<sup>46</sup> discount rate, and cost projections,<sup>47</sup> were pulled out of thin air based on little or no data. Given its budget and time constraints, the tribunal can only use its best judgment when faced with incomplete information. Adopting an analytical framework recommended by a recognized body of practitioners, however, would reduce the arbitrariness and increase the rigor of the application of individual judgment in award calculations.

## II. VALUATION STANDARDS

The International Valuation Standards Council was formed in 1981 as the globalization of investments increased demand for professional valuation

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43. *Id.* at 133.

44. *Id.* at 136.

45. *Id.* at 120. ("[T]here is adequate data to make a rational DCF valuation of TGN").

46. *Id.* at 131 (The Tribunal stated the claimant's assumption of a 3.59 peso-to-dollar exchange, the rate at the time the valuation was conducted, was too generous. It noted the peso had since appreciated to 2.97, which it concluded was "fairly representative of what value the peso could be expected to be in a stabilizing or a reasonably stable environment.").

47. *Id.* at 135 (The Tribunal determined the claimant's projection of costs was too conservative. It considered the costs to be more fixed in nature than the claimant presumed, since "there is a significant amount of rigidity in this type of expenditures in a regulated industry where the maintenance of safety has to be paramount." Given the Tribunal's assumption that demand decreased in the near term, these fixed costs would eat into margins and thus claimant's future profits. When demand rose back after the dip, the Tribunal believed that costs, despite their fixed nature, would rise because "the requirements for safety do not decrease and with aging equipment, maintenance expenditures will tend to rise." The Tribunal increased the claimant's assumption of operations and maintenance expenditures as a percentage of sales from 7-10.2% to 8-11.5%).

services of property interests.<sup>48</sup> IVSC's goal is to establish "internationally accepted standards for reporting the value of property."<sup>49</sup> The standards cover 1) an official set of definitions, 2) ethics and competency requirements for the valuing professional, 3) procedures for conducting the valuation, and 4) conventional wisdom regarding appropriate assumptions and models.<sup>50</sup>

Valuation standards originated in the 1930s with the desire of American real estate appraisers to increase their fees by providing customers some assurance regarding the quality of their services.<sup>51</sup> Standards establish a basis of objectivity customers can turn to if the valuation is disputed.<sup>52</sup> The increasing sophistication of capital markets encouraged the spread of valuation standards to other asset classes.<sup>53</sup> Periodic financial crises increased the sense of urgency for standards development, and regulators reacted by establishing standard-setting bodies in their respective countries.<sup>54</sup> IVSC resulted from the collaboration of standard-setting bodies in the U.S. and Britain.<sup>55</sup> It develops standards for use in four contexts: 1) "financial statements," 2) "transactions involving transfers of ownership," 3)

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48. Michael Milgrim, Lead Editor, Int'l Valuation Standards Council, Presentation at the Japan Real Estate Institute in Tokyo: International Valuation Standards for Global Property Markets 4 (Jan. 31, 2001), *available at* <http://www.ivsc.org/pubs/archives/papers/JREI-0101.pdf> ("In response both to market instability and the quickening pace of globalization of capital markets, members of a technical committee of the Royal Institution of Chartered Surveyors (RICS) and representatives of US appraisal organizations began a series of meetings at the end of the decade that culminated in the formation of The International Assets Valuation Standards Committee (TIAVSC) in 1981.").

49. INTERNATIONAL VALUATION STANDARDS [hereinafter *White Book*] at section 3.1.1, *available at* [http://propertystandards.propertyinstitute-wa.com/documents/IVSC-3\\_000.pdf](http://propertystandards.propertyinstitute-wa.com/documents/IVSC-3_000.pdf).

50. Chris Thorne, Vice Chairman, IVSC Standards Board, Presentation at the 5th International Conference on the Valuation of Plant, Machinery and Equipment: Valuation Standards: Are we doing it right?, pp. 5-6 (Oct 1, 2007), *available at* <http://www.ivsc.org/pubs/papers/071000right.pdf> (explaining the distinction between conduct, process, definitional, and technical standards).

51. *See id.* at 2.

52. *Id.* at 3. ("Their objective was to build public trust by introducing regulations to prevent actual or perceived problems that arose in the work undertaken by their members.").

53. *Id.* at 5. ("Although the acceptance of standards in the property markets is now long established, new markets are turning on to value. There is a rapidly developing recognition coming from outside the confines of the traditional valuation professions that the financial markets need valuation standards.").

54. *Id.* at 4. ("Indeed, it appears that historically much of initiative for the creation of valuation standards has come from the regulatory sector, whether governmental or private.").

55. Milgrim, *supra* note 48, at 4-5.



“decisions on loans and mortgages secured by property,” and 4) “litigation and tax settlements.”<sup>56</sup>

The IVSC framework consists of six layers of publications, collectively known as the “White Book,” which is meant to be read as a single document.<sup>57</sup> The highest and most authoritative layer is “General Valuation Concepts and Principles,” which “presents the fundamental concepts and principles that underpin the valuation/appraisal discipline.”<sup>58</sup> It articulates the definitions of general terms used throughout the White Book, like property, ownership interest in property, and market value. It also outlines Generally Accepted Valuation Principles, which represent “accepted or best practice in the Valuation profession.”<sup>59</sup> The next layer is the “Code of Conduct,” which sets ethical and competency requirements for a valuation work product to be considered valid.<sup>60</sup> The third layer is “Property Types,” which tailors the general concepts and principles to four particular property types: real property, personal property, businesses, and financial interests.<sup>61</sup>

The fourth layer is the Standards, which promote a common language for valuation work through the use of defined terms and lay out best practices to which valuation professionals should adhere.<sup>62</sup> The fifth layer is Applications, which elaborate on the Standards for three common applications, 1) “Valuation for Financial Reporting,” 2) “Valuation for Lending Purposes,” and 3) “Valuation of Public Sector Assets for Financial Reporting.”<sup>63</sup>

The sixth layer is Guidance Notes, which “provide guidance on specific Valuation issues and how Standards are to be applied in more specific business and service-providing situations.”<sup>64</sup> Standards, Applications, and Guidance Notes are considered the meat of the framework, and for interpretive purposes, they are equally weighted.<sup>65</sup> Guidance Notes expand on Standards and Applications by providing implementation guidance for

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56. *White Book*, at section 3.1.1.

57. Milgrim, *supra* note 48, at 10.

58. Trevor Ellis, *Philosophy and Application of the International Valuation Standards for Minerals and Petroleum*, PROF. GEOLOGIST 14, 16 (January/February 2004 edition), available at <http://www.mineralsappraisers.org/TPGJanFeb04pgs14-19.pdf>.

59. *Id.*

60. *Id.*

61. *Id.*

62. *Id.*

63. *Id.*

64. *Id.*

65. *White Book* at 3.2.1-3.2.2 (“Standards, Applications, or Guidance Notes may be published as separate sections, each is a component part of the entirety. . . .The Standards, Applications, and Guidance Notes. . . .have equal authority.”).

niche topics. They divide into four areas: 1) “valuation of different types of property (real property, leasing, plant and equipment and personal property),” 2) “valuation of property according to cash flow (intangible assets, businesses and specialized trading property),” 3) “guidance on the application of valuation approaches (a cost approach for financial reporting and discounted cash flow analysis),” and 4) “miscellaneous topics (hazardous and toxic substances, reviewing valuations, mass appraisal for property taxation and historic property).”<sup>66</sup>

An additional layer outside the White Book is white papers, which showcase the scholarship of IVSC members, but unlike White Book content, are not subject to public review.<sup>67</sup> These papers serve the twin functions of 1) expanding the IVSC brand and 2) stimulating debate on issues in the profession. Commentaries represent another layer that is published without public review and is meant to address inquiries regarding interpretation of the White Book.<sup>68</sup>

IVSC bifurcates into Standards and Professional boards. The Professional board develops educational materials as well as ethical and competency standards for the profession.<sup>69</sup> The Standards board maintains the White Book.<sup>70</sup> From consulting peer organizations and soliciting feedback, the Standards board identifies areas of development and organizes a task force to address each one. The resulting work product is then subject to public review for at least 90 days.<sup>71</sup> After the comments are considered, the White Book is edited to reflect the update.<sup>72</sup> Ten editions of the White Book have been published, the most recent being in 2013.<sup>73</sup>

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66. Carlos Arenillas Lorente, *The IVSC: the challenge of developing global valuation standards*, 1 CNMV BULL. Q. 73, 77 (2009), available at [http://www.ivsc.org/sites/default/files/0905\\_ivsc\\_challenge\\_lorente.pdf](http://www.ivsc.org/sites/default/files/0905_ivsc_challenge_lorente.pdf).

67. Ellis, *supra* note 58, at 17.

68. Milgrim, *supra* note 48, at 13.

69. See *IVSC Professional Board*, INT’L VALUATION STANDARDS COUNCIL (Jan. 25, 2012), <http://www.ivsc.org/workplan>.

70. *IVSC Standards Board*, INT’L VALUATION STANDARDS COUNCIL (Jan. 25, 2012), <http://www.ivsc.org/boards/standards/index.html>.

71. *How are standards set?*, INT’L VALUATION STANDARDS COUNCIL brochure at 7 (Jan. 25, 2012), <http://www.ivsc.org/sites/default/files/brochure.pdf>.

72. *Id.*

73. See Lorente, *supra* note 66, at 76 (article was written in 2009 when there were eight editions. Since then another two editions were published in 2011 and 2013, available at <http://www.pagebros.co.uk/ivs/>).

The White Book can be a useful tool for valuing awards, because it is comprehensive and frequently updated. To the extent it is underdeveloped, IVSC has shown enthusiasm for continuing to improve the breadth and depth with which the White Book addresses valuation topics. For example in 2004, IVSC released a guidance note addressing the valuation of mineral property in extractive industries. Drafted by mineral and petroleum valuation experts recognized in their industries, it provides instructions on the “appropriate application of valuation analysis to extractive industries properties,” factors to consider in determining market value, and potential mistakes in the analysis.<sup>74</sup> 25% of ICSID cases relate to the oil, gas, and mining sectors;<sup>75</sup> the extractive industries guidance note, as part of the White Book, can provide a ready-made framework for such valuation analyses.

### III. USING VALUATION STANDARDS FOR DETERMINING ICSID AWARDS

The White Book could serve as an additional source of law during award determinations, with the investment contract, the governing investment treaty, and customary international law taking precedence. Most investment treaties are silent on award calculations,<sup>76</sup> and the application of market valuation in international investment disputes is still a relatively young concept.<sup>77</sup> This leaves a substantial gap in the guidance available to tribunals for computing fair market values. The White Book can fill this gap by providing both substantive and procedural guidance for conducting valuation analysis.

*CMS Gas* illustrates the White Book’s substantive guidance for valuation analysis. The governing treaty did not address determination of fair market value.<sup>78</sup> The tribunal also did not cite any precedents in its

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74. See Ellis, *supra* note 58, at 18.

75. *Distribution of All ICSID Cases by Economic Sector*, ICSID CASELOAD STATISTICS Issue 2011-2, at 12 (Jan. 25, 2012), <http://icsid.worldbank.org/ICSID/FrontServlet?requestType=ICSIDDocRH&actionVal=CaseLoadStatistics>.

76. See *CMS Gas*, *supra* note 10, at 118 (“[T]he Treaty offers no guidance as to the appropriate measure of damages or compensation . . . This is a problem common to most bilateral investment treaties and other agreements such as NAFTA.”).

77. The 1927 case of *Chorzow Factory* (1927 P.C.I.J. No. 9 (July 26)) of the now defunct Permanent Court of International Justice articulated the idea that compensation should be the fair market value of the property (“reparation must, as far as possible, wipe out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed”), available at [http://www.worldcourts.com/pcij/eng/decisions/1927.07.26\\_chorzow.htm](http://www.worldcourts.com/pcij/eng/decisions/1927.07.26_chorzow.htm).

78. *CMS Gas*, *supra* note 18, at 118.

valuation analysis. To the extent the tribunal exercised its discretion, it could have done so with assistance from “Guidance Note 8: Depreciated Replacement Cost” and “Guidance Note 9: Discounted Cash Flow Analysis.”<sup>79</sup>

GN8 provides a “surrogate” valuation methodology that was only briefly considered by the *CMS Gas* tribunal.<sup>80</sup> When there is not enough data to determine market value with confidence, GN8 suggests calculating depreciated replacement cost,<sup>81</sup> which can be used as another data point to compare against other market-value estimates. Depreciated replacement cost is the “estimate of the Market Value for the Existing Use (MVEU) of the land plus the gross replacement (or reproduction) costs of improvement less allowances for physical deterioration and all relevant forms of obsolescence and optimization.”<sup>82</sup> Thus, the land TGN owned, plus the amount spent to build the distribution infrastructure less wear and tear and “functional/technical obsolescence,”<sup>83</sup> could have been used to generate a market value to verify the result of the DCF analysis.

GN9 suggests there may be gaps in the tribunal’s valuation. The tribunal excluded the potential lease extension in the time horizon of the DCF.<sup>84</sup> Section 5.1 of GN9 recognizes lease renewal may extend the time-horizon, and setting the time horizon “is typically driven by market behavior that is characteristic of the class of property and its market sector.”<sup>85</sup> Instead of dismissing the license renewal as speculative, the tribunal could have examined whether there was a history of businesses in the same industry having their licenses renewed.

The tribunal relied exclusively on the build-up method for the discount rate.<sup>86</sup> Section 5.1 states that “discount rates should be selected from

79. Hereinafter, respectively *GN8* and *GN9*.

80. *CMS Gas*, *supra* note 10, at 116 (tribunal considered “asset value or the replacement cost approach”).

81. *International valuation guidance note 8: depreciated replacement cost*, INT’L VALUATION STANDARDS 6<sup>TH</sup> ED., Section 3.1 (“an acceptable method used in financial reporting to arrive at a surrogate for market value of specialised and limited market properties, for which market evidence is unavailable”), available at <http://www.romacor.ro/legislatie/22-gn8.pdf>.

82. *GN8*, *supra* note 81, at 3.1.

83. *Id.* at 3.11.

84. See *CMS Gas*, *supra* note 10, at 128.

85. *International valuation guidance note 9: discounted cash flow analysis*, INT’L VALUATION STANDARDS 6<sup>TH</sup> ED., Section 5.1, available at <http://www.romacor.ro/legislatie/23-gn9.pdf>.

86. See *CMS Gas*, *supra* note 10, at 132.

comparable properties or businesses in the market.”<sup>87</sup> As a check for its built-up discount rate, the tribunal could have considered the discount rates used by competitor businesses. Section 3.4 states “theoretically, [the discount rate] should reflect the opportunity cost of capital, i.e., the rate of return the capital can earn if put to other uses having similar risk.”<sup>88</sup> When the build-up method involves assuming risk premiums with little data to back it up, an additional outward-looking perspective from examining similarly risky investments could help the tribunal add bounds to those premiums.

IVSC also provides procedural guidance for valuation analysis. It is publishing a Code of Ethics and a discussion paper titled “Definition of a Professional Valuer.” They provide a basis by which a tribunal can evaluate the credentials of expert witnesses and the credibility of their testimony. For example, the paper states that valuation professionals should possess three competencies: 1) professional skills, 2) technical skills, and 3) sufficient industry-related knowledge to make appropriate assumptions.<sup>89</sup> The Code of Ethics covers principles like objectivity, due care, and professionalism.<sup>90</sup> The tribunal could use these metrics when screening witnesses.

The White Book outlines steps to be followed during valuation analysis. For example under “Statement of Standard,” there is a checklist for “performing and reporting a Market Value estimate.”<sup>91</sup> Such a checklist could guide expert witnesses in their valuation analyses, and also serve as a reference by which the tribunal can evaluate the robustness of the analyses.

Another procedural benefit of the IVSC framework is the thoroughness with which it has crafted a common language and format for presenting valuation analysis. Throughout the White Book as well as the Glossary in the addenda, commonly used terms like “going concern value” and “cash flow” receive precise definitions. A common set of defined terms minimizes a potential source of disagreement and confusion during ICSID proceedings.

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87. *GN9*, *supra* note 85, at Section 5.1.

88. *Id.* at Section 3.4.

89. *Discussion paper: Definition of a Professional Valuer*, INT’L VALUATION STANDARDS COUNCIL 6 (July 2010), available at [http://www.ivsc.org/sites/default/files/1007\\_def\\_of\\_prof\\_valuer.pdf](http://www.ivsc.org/sites/default/files/1007_def_of_prof_valuer.pdf).

90. *Exposure draft: Proposed Code of Ethics for Professional Valuers*, INT’L VALUATION STANDARDS COUNCIL 46 (July 2010), available at [http://www.ivsc.org/sites/default/files/1105\\_coe\\_v6\\_0.pdf](http://www.ivsc.org/sites/default/files/1105_coe_v6_0.pdf).

91. *IVS 1 market value basis of valuations*, section 5.1 at 100, available at <http://www.romacor.ro/legislatie/07-ivs1.pdf>.

## IV. STATUS AND FUTURE OF IVSC

IVSC's ambition is to have the same relevance in the valuation world as the International Financial Reporting Standards Foundation<sup>92</sup> and Financial Accounting Foundation<sup>93</sup> have in the accounting world. As of 2010, IVSC consisted of sixty-seven delegates from fifty countries.<sup>94</sup> Its primary sources of funding are 1) membership dues, 2) sale of published materials, and 3) corporate sponsorships,<sup>95</sup> which together supported a 2011 budget of \$1.1m.<sup>96</sup> The International Accounting Standards Board (IASB), the standard setting body of the IFRS Foundation, had a 2008 budget of 16m British pounds.<sup>97</sup> If IVSC does achieve such mainstream recognition, it will enjoy more resources and wider participation, which will improve the breadth and depth of its standards.

The U.S. counterpart of IVSC is the Appraisal Foundation. The Savings and Loan crisis, during which many lending institutions failed from underwriting faulty loans, led Congress to regulate appraisal practice, which was covered in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989.<sup>98</sup> Title XI of the Act requires that for transactions regulated by Federal agencies, "all appraisals shall, at a minimum: (a) Conform to generally accepted appraisal standards as evidenced by the Uniform Standards of Professional Appraisal Practice (USPAP) promulgated by the Appraisal Standards Board of the Appraisal Foundation . . . unless principles of safe and sound banking practice require compliance with

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92. The International Financial Reporting Standards are the accounting standards used in many countries. Its main website is available at <http://www.ifrs.org/Home.htm>.

93. The Financial Accounting Foundation is charged with Generally Accepted Accounting Principles, which are the accounting standards used in the U.S. Its main website is available at <http://www.fasb.org/faf/index2.shtml>.

94. *International Valuation Standards Council 2010 Annual Report*, at 7, available at <http://www.ivsc.org/content/may-2011-issue-37-0>.

95. Lorente, *supra* note 66, at 78.

96. *Strategy and Operational Plan*, INT'L VALUATION STANDARDS COUNCIL 2010 22, available at [http://www.ivsc.org/sites/default/files/strategy\\_operational\\_plan.pdf](http://www.ivsc.org/sites/default/files/strategy_operational_plan.pdf).

97. *International Accounting Standards Committee Foundation Preliminary Budget – 2008 Calendar Year*, p. 7 (Apr. 2007), available at [http://www.iasb.org/NR/rdonlyres/3ABF1DA2-C039-439A-9C49-FA872F7B1B6B/0/BudgetpostTrusteemeetingMJCB\\_clean.pdf](http://www.iasb.org/NR/rdonlyres/3ABF1DA2-C039-439A-9C49-FA872F7B1B6B/0/BudgetpostTrusteemeetingMJCB_clean.pdf).

98. *About us: History of the Appraisal Foundation*, APPRAISAL FOUND., (Jan. 25, 2012), available at <http://www.appraisalfoundation.org>.

stricter standards.”<sup>99</sup> State appraiser–regulatory agencies must “recognize and enforce the standards, requirements, and procedures prescribed under [Title XI].”<sup>100</sup>

The Appraisal Subcommittee is a federal agency that enforces Title XI. It oversees the Appraisal Foundation, its self-regulatory organization (SRO) counterpart in the appraisal industry, which publishes USPAP, the American equivalent of IVSC’s White Book. In 2006, IVSC and the Appraisal Foundation issued a memorandum of understanding, known as the Madison Agreement, to eventually converge their respective standards into a single framework.<sup>101</sup> The White Book currently has no legal weight and is adopted on a voluntary basis.<sup>102</sup> Thus a convergence would improve its robustness as it receives increased scrutiny.

IVSC is also building linkages with IASB. As accounting moves to reporting assets and liabilities at fair value,<sup>103</sup> IVSC has sought to develop standards that “are consistent with the requirements of Valuers under [IASB’s] International Financial Reporting Standards [(IFRS)].”<sup>104</sup> A recent example is the guidance note on the valuation of mineral property in extractive industries. It was written in reaction to an “Extractive Industries Issues” white paper published by IASB, which “express[ed] tentative opinions and alternatives for the principles on which to base the drafting of a financial reporting standard for the minerals and petroleum industries.”<sup>105</sup> IVSC concluded that several of the paper’s assertions were based on an incomplete understanding of the valuation of mineral reserves, which led the Standards board to organize a task-force and develop the guidance note.<sup>106</sup> Given such collaborations, IASB has publicly acknowledged IVSC as a “sister organisation.”<sup>107</sup> The evolution of the White Book into a sister

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99. Ben Henson, Executive Director, Appraisal Subcommittee, to Gregory J. Accetta, Chair, of the Appraisal Standards Board (Jul. 12, 2007), *available at* <https://www.asc.gov/Documents/ASBCorrespondence/LTR%20ASB%20Jurisdictional%20Exception%202007.12.07.pdf>.

100. *Id.*

101. Memorandum of Understanding between the International Valuation Standards Committee and the Appraisal Foundation (Feb. 3, 2006), *available at* <http://www.iasplus.com/en/binary/resource/0606ivscagreement.pdf>.

102. Lorente, *supra* note 66, at 77.

103. Jean-Florent Rérolle, *The fair value debate: from accounting utopia to financial realism*, 4 *Revue Trimestrielle de Droit Financier* 1, 1 (2008) (“accounting standard-setters have gradually replaced the historical cost principle with fair value”), *available at* [http://www.ivsc.org/sites/default/files/0804\\_fairvaluedebate\\_rerolle.pdf](http://www.ivsc.org/sites/default/files/0804_fairvaluedebate_rerolle.pdf).

104. *White Book* at 3.1.2.

105. *See* Ellis, *supra* note 58, at 15.

106. *Id.*

107. *See* Milgram, *supra* note 48, at 8.



volume of IFRS will boost the White Book's adoption and the input it receives, thus improving its comprehensiveness.

IVSC advises prominent international organizations, like the Organization for Economic Cooperation and Development, World Bank, United Nations Economic and Social Council, International Monetary Fund, World Trade Organization, and the Basel Committee on Banking Supervision, on valuation issues.<sup>108</sup> ICSID should also consult with IVSC. Given that ICSID's caseload has surged since 1997,<sup>109</sup> its awards, and their proper valuation, will become increasingly influential for resolving or deterring investment disputes.

Given its ambitious mission,<sup>110</sup> IVSC is well suited to serve ICSID's need for valuation standards. While IVSC's most prominent collaboration is with IASB, financial reporting is only one application of the White Book.<sup>111</sup> The White Book is more comprehensive than USPAP, which has a regulatory focus.<sup>112</sup> With ICSID's support, IVSC could eventually establish an Application and Guidance Notes tailored to valuation in an international investment context. It could specifically address issues like determining the country-risk premiums that go into a discount rate, and the time horizon when the license includes an option to renew, both of which were issues in *CMS Gas*.

## V. HOW TO GET BUY-IN FROM ICSID MEMBERS

Integrating the White Book into how ICSID calculates awards creates both procedural and substantive issues. The 1966 Convention on the Settlement of Investment Disputes between States and Nationals of Other States establishes the procedural framework for ICSID arbitrations.<sup>113</sup> The ICSID Administrative Council can add Rules and Regulations to supplement

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108. 2010 IVSC Annual Report, *supra* note 94, at 13.

109. Total Number of ICSID Cases Registered by Calendar Year, ICSID CASELOAD STATISTICS Issue 2011-2, at 7 (jumps from 3 cases in 1996 to 10 in 1997).

110. See Lorente, *supra* note 66, at 78 ("it was also agreed that the IVSC should be the international spokesperson for the [valuation] profession.").

111. Ellis, *supra* note 58, at 15 ("valuation for financial reporting is only one application of the standards contained in the IVS").

112. *Id.* at 14 (the White Book is "more comprehensive than the USA's equivalent set of appraisal standards, Uniform Standards of Professional Appraisal Practice").

113. ICSID convention, regulations, and rules, INT'L CTR. FOR SETTLEMENT OF INV. DISPUTES (Jan. 25, 2012), [http://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR\\_English-final.pdf](http://icsid.worldbank.org/ICSID/StaticFiles/basicdoc/CRR_English-final.pdf).



this framework, which must be approved by a 2/3 majority of the Council.<sup>114</sup> The Council consists of one representative from each member-country, with each having one vote.<sup>115</sup>

IVSC may have difficulty getting enough buy-in from ICSID members to exceed the 2/3 threshold. As of May 5, 2011, ICSID had 157 member-countries,<sup>116</sup> of which only forty-four had a professional valuation association that was a member of IVSC.<sup>117</sup> Four of IVSC's members are from South America, five from sub-Saharan Africa, and eleven from Eastern Europe and Central Asia.<sup>118</sup> ICSID has forty-three members in sub-Saharan Africa, eight in South America, and twenty-three in Eastern Europe and Central Asia.<sup>119</sup> Thus about 10% of ICSID's sub-Saharan African members are represented in IVSC, as are about half of ICSID's South American members, and less than half of its Eastern European and Central Asian members.<sup>120</sup>

To get the buy-in of these developing regions, IVSC could adopt both bottom-up and top-down strategies. At the grassroots level, IVSC could expand its membership in those regions, so that the member professional associations in countries of those regions could lobby on its behalf. Its Standards Board could craft Guidance Notes to address issues specific to developing countries. A step in this direction is IVSC white paper "Valuation in Emerging Markets."<sup>121</sup> The white paper addresses issues in emerging markets that constrain valuation analysis, such as "an inadequate legal framework, difficulties in obtaining information, greater economic volatility, outdated national valuation standards, lack of trained valuation experts, external pressures, excessive or insufficient government intervention, and transition towards the recognition of intangible property."<sup>122</sup>

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114. *Id.* at 12.

115. *Id.* at 13.

116. *List of contracting states and other signatories of the convention (as of May 5, 2011)*, INT'L CTR. FOR SETTLEMENT OF INV. DISPUTES (Jan. 25, 2012), available at <http://icsid.worldbank.org/ICSID/FrontServlet?requestType=ICSIDDocRH&actionVal=ShowDocument&language=English>.

117. *IVSC membership*, INT'L VALUATION STANDARDS COUNCIL (Jan. 25, 2012), <http://www.ivsc.org/members/index.html>.

118. *Id.*

119. *Supra* note 116.

120. *Supra* note 118 and 119 (Sub-Saharan Africa: 5/43 = 11.6%, South America: 4/8 = 50%, Eastern Europe and Central Asia 11/23 < 50%).

121. International Valuation Standards Council, *International Valuation White Paper: Valuation in Emerging Markets* (Jul. 1 2001).

122. *See* Kantor, *supra* note 3, at 12.

Concurrently, the Professional Board could create training materials and perhaps subsidize the establishment of a valuation profession in countries that lack it. A long-term benefit of more valuation professionals in these countries is that they will broaden the pool from which ICSID draws tribunal members and expert witnesses, which will bring a valuable and currently underrepresented perspective to ICSID arbitrations.<sup>123</sup>

With regard to top-down advocacy, IVSC could articulate the added value of the White Book to arbitral award determinations. 61% of ICSID cases do not settle and instead are resolved by the tribunal.<sup>124</sup> In 46% of those resolved cases, the tribunal awarded compensation to the investor-claimant.<sup>125</sup> Given that a substantial proportion, 28%<sup>126</sup> of ICSID cases, result in awards, the proper valuation of these awards should be of major concern to all parties involved. Valuation standards would help address two common criticisms of ICSID, which are that the forum is biased against developing countries, and its awards lack consistency.

The “perception of bias” led to Bolivia’s 2007 withdrawal,<sup>127</sup> Ecuador’s 2009 formal denunciation of ICSID,<sup>128</sup> and Argentina’s reluctance to enforce ICSID awards.<sup>129</sup> The nationality of tribunal members suggests the determination of ICSID awards is stacked against developing countries.<sup>130</sup> Of tribunal members, 47% are from Western Europe and 23% from North

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123. See *infra* note 131.

124. *ICSID Arbitration and Conciliation Proceedings – Outcomes*, ICSID CASELOAD STATISTICS Issue 2011-2 at 13.

125. *Id.*

126. *Supra* note 124 and 125 (46% of 61% = 28%).

127. Sun Kim, *The Battle Between Private Corporations and the Regulatory Power of the State: The Problems with Bilateral Investment Treaties*, RIGHT RESPECT (Apr. 5 2010), available at <http://www.rightrespect.com/2010/04/05/the-battle-between-private-corporations-and-the-regulatory-power-of-the-state-the-problems-with-bilateral-investment-treaties>.

128. *Ecuador Submits a Notice under Article 71 of the ICSID Convention*, INT’L CTR. FOR SETTLEMENT OF INV. DISPUTES (Jan. 25, 2012), available at <http://icsid.worldbank.org/ICSID/FrontServlet?requestType=CasesRH&actionVal=OpenPage&PageType=AnnouncementsFrame&FromPage=NewsReleases&pageName=Announcement20>.

129. Emily Alexander, *Taking Account of Reality: Adopting Contextual Standards for Developing Countries in International Investment Law*, 48 VA. J. INT’L L. 817, 829 (2008).

130. Empirical evidence suggests ICSID awards are not significantly more biased than the awards of alternative arbitral forums. See Susan Franck, *The ICSID Effect? Considering Potential Variations in Arbitration Awards*, 51 VA. J. INT’L L. 825, 852 (2011).

America.<sup>131</sup> Only 10% of the tribunal members are from South America, 2% from sub-Saharan Africa, and 2% from Eastern Europe and Central Asia.<sup>132</sup>

The developing world has an especially strong interest in how ICSID awards are valued. South American governments are the respondent for 30% of ICSID cases, Eastern Europe and Central Asia for 22%, and sub-Saharan Africa for 16%.<sup>133</sup> Written, objective standards might guard against any potential bias of tribunal members by forcing them to justify their valuation analysis to conform to such standards.

An infamous example of the inconsistency in international arbitration is the Czech Republic cases. The cases were two separate proceedings that were in the same forum, adjudicating factually identical claims, but reached contradictory awards.<sup>134</sup> ICSID awards lack consistency because awards do not have precedential value, and there is no appellate body to enforce uniformity.<sup>135</sup> Without precedents and appellate decisions to look to, investors cannot form expectations on the possible values of an award. With standards to establish a process for valuing awards, however, both investors and foreign governments can enter investment agreements with more confidence regarding the basis behind a potential award calculation.

#### CONCLUSION

The ultimate purpose of valuation standards is not its mandatory and universal adoption; IVSC recognizes that a one-size-fits-all approach is not

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131. *Arbitrators, Conciliators and ad hoc Committee Members Appointed in ICSID Cases*, ICSID CASELOAD STATISTICS Issue 2011-2, p. 16 (Jan. 25, 2012), available at <https://icsid.worldbank.org/ICSID/FrontServlet?requestType=ICSIDDocRH&actionVal=ShowDocument&CaseLoadStatistics=True&language=English21>.

132. *Id.*

133. *Geographic Distribution of All ICSID Cases by State Party Involved*, ICSID CASELOAD STATISTICS Issue 2011-2, p. 11 (Jan. 25, 2012), available at <https://icsid.worldbank.org/ICSID/FrontServlet?requestType=ICSIDDocRH&actionVal=ShowDocument&CaseLoadStatistics=True&language=English21>.

134. Joseph D'Agostino, *Rescuing International Investment Arbitration: Introducing Derivative Actions, Class Actions, and Compulsory Joinders*, 98 VA. L. REV. 177, 194 (2012) (The "Czech Republic cases" refer to *CME v. Czech Republic* [UNCITRAL Arbitration No. 403/VERMERK/2001/CME, Partial Award and Separate Opinion, ¶ 418 (Sept. 13, 2001), 9 ICSID Reports 113 (2006)] and *Lauder v. Czech Republic* [In the Matter of an UNCITRAL Arbitration, Final Award, ¶ 77 (Sept. 3, 2001), 9 ICSID Reports 62 (2006)]). Although the Czech Republic cases were not arbitrated by ICSID, ICSID's lack of an appellate body and citing precedents also create conditions for inconsistent awards.

135. *Id.* at 200.

appropriate for an inherently subjective task like valuation analysis.<sup>136</sup> Instead, the value proposition is to add to the menu of terms that investors and governments can negotiate over in their investment agreements. If an investor finds the current ad hoc approach to valuation analysis to be a major concern, the host government can provide assurance by agreeing to the use of valuation standards when calculating arbitral awards. The government's agreeing to use valuation standards might help it extract a favorable concession on other negotiated terms; and thus, both parties get more of what they want.

The World Bank, which established ICSID, seeks to “reduce poverty and support development.”<sup>137</sup> ICSID plays an important role in this aspiration. By protecting against the idiosyncratic risks of investing in unstable countries, investment agreements facilitate capital flows to less developed countries.<sup>138</sup> ICSID enforces the integrity of these agreements.<sup>139</sup> A source of risk to investors is mitigated to the extent valuation standards add certainty and efficiency to the calculation of awards during investor-state disputes, and investors can negotiate for use of these standards. Moreover, a barrier to the cross-border flow of capital is removed, and an opportunity to improve the material standard of living for millions is created. As one scholar observed, “international investment law has tremendous potential to continue the encouragement of investment and development in countries that need it most, as well as to facilitate the global flow of capital

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136. See *White Book* at 3.2 (“[I]t is intended that the International Valuation Standards and the national standards of respective Member States shall be complementary and mutually supportive”).

137. *What We Do*, WORLD BANK (Apr. 4, 2012), available at <http://www.worldbank.org/en/about/what-we-do>.

138. Olivia Chung, *The Lopsided International Investment Law Regime and its Effects on the Future of Investor-State Arbitration*, 47 VA. J. INT'L L. 953, 966 (2007) (“However, [bilateral investment treaties] are not simply vehicles for an arbitration clause or agreements for the protection of foreign property; they are meant to be part of a process of investment and economic development.”). A counterpoint is that empirical evidence suggests there is no statistical relationship between bilateral investment treaty adoption and the inflow of foreign direct investment. See Jason Yackee, *Do Bilateral Investment Treaties Promote Foreign Direct Investment? Some Hints from Alternative Evidence*, 51 VA. J. INT'L L. 397 (2011).

139. Andrew Guzman, *Why LDCs Sign Treaties that Hurt Them: Explaining the Popularity of Bilateral Investment Treaties*, 38 VA. J. INT'L L. 639, 657 (1998) (“The Model U.S. BIT allows the investor and the host to select the forum in which they wish to arbitrate their disputes. These include the International Centre for the Settlement of Dispute . . .”).

to where it promotes economic growth best. It is a system worth saving as long as globalization exists.”<sup>140</sup>

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140. See D’Agostino, *supra* note 134, at 229.