

# Compensation and Restitution in Investor-State Arbitration

*Principles and Practice*

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to the claimant the difference between the actual value of its shares in Transener, the Argentine electricity transmission monopoly, at the time of the unlawful act, ie June 2002, and the hypothetical value of the shares at June 2002, assuming that the unlawful acts had not occurred. In determining this value, the tribunal first considered a discounted cash flow valuation<sup>189</sup> would be appropriate, as the valuation in question was one of an operating business with a nine-year history and fairly certain future cash flows.<sup>190</sup> However, the tribunal ultimately decided that the complexities of the Argentine financial crisis would make such a forecast too speculative.<sup>191</sup> Therefore, the tribunal instead used a 2006 sale of a different owner's shares in Transener as a proxy for the value of National Grid's shares in Transener under the hypothetical scenario. The value of National Grid's shares was then calculated at US\$ 52.8 million. The tribunal then subtracted US\$ 14 million that National Grid received on a 2004 (post-event)<sup>192</sup> sale of its shares to reach a final value of US\$ 38.8 million.

### Discounted cash flow

#### Method

Discounted cash flow (DCF) valuation is the most complex and widespread valuation method, particularly for valuing businesses.<sup>193</sup> DCF calculates 'the present value of future expected net cash flows... using a discount rate'.<sup>194</sup> It estimates the value of a property based on the present value of the amount of cash that the property could generate for its owners in the future.

DCF has an extremely broad scope of applicability,<sup>195</sup> which, unfortunately, is offset by the difficulty in accurately performing a DCF valuation. Any DCF model is highly dependent on the assumptions the valuer makes. As DCF valuation is not based directly on actual market prices, there is no built-in check against wrong assumptions, which can make the calculated DCF value drastically different from actual fair market value.<sup>196</sup> The arbitrators, however, can and should examine the reasonableness of the assumptions.

There are two main parts to DCF valuation: first, forecasting net future cash flows; and, second, discounting the net cash flows.<sup>197</sup>

<sup>189</sup> See pp 118–21 for discussion of the discounted cash flow method.

<sup>190</sup> *National Grid*, above note 21, paras 276–7.

<sup>191</sup> *Id.*, para 290.

<sup>192</sup> See Section 5.6.4.3 below on treatment of post-act events.

<sup>193</sup> Blum, above note 116, at 20.

<sup>194</sup> AICPA, above note 97, discounted cash flow method.

<sup>195</sup> Cornell, above note 156, at 100. DCF may, for example, be used to estimate the value of a property in an illiquid market where there are not many transactions involving sale of comparable properties. See, eg, *Rumeli Telekom v Kazakhstan*, discussed at p 111 above.

<sup>196</sup> For example, even a difference of a small fraction of a percent in the discount rate can result in a multi-million dollar difference in the final value. See, eg, *Rumeli Telekom*, above note 89, paras 810–3.

<sup>197</sup> The generalized formula for DCF valuation is

$$NPV = \sum_{t=0}^n \frac{FCF_t}{(1+k)^t} + \frac{FCF_n * (1+g)}{(k-g)} / (1+k)^{n+1}$$

where NPV is the net present value (the DCF value), FCF is the free cash flow of the period in question, k is the chosen discount rate, g is the estimated long-term growth rate (see below for further