INDIRECT EXPROPRIATION AND ITS VALUATION IN THE BIT GENERATION

By W. Michael Reisman & Robert D. Sloane*

I. INTRODUCTION: THE SHIFT IN PARADIGM

The number of bilateral investment treaties (BITs) has increased dramatically in the past decade. Until the mid-1970s, a bare handful of BITs existed, and the numbers increased only at a slow or moderate pace until the early 1990s. By September 1994, however, some 140 states had concluded more than 700 BITs; by 1999, more than 1300 BITs had entered into force among about 160 states; and by the end of 2002, 2181 BITs had been signed. Particular provisions of BITs vary from state to state. But certain general features, which respond to the demands of expanding globalization and, as a consequence, the increasing interdependence of national economies, characterize virtually all BITs. BITs seek to establish a stable, orderly framework for investment by creating, as the preamble to a typical United Kingdom BIT states, ‘favourable conditions for greater investment by nationals and companies of one state in the territory of the other state’.

* Myres S. McDougal Professor of International Law, Yale Law School; and Schell Fellow, Yale Law School, respectively. The authors acknowledge with gratitude the valuable comments and criticisms of Charles N. Brower, Stephen M. Schwebel, William W. Park, and Jan Paulsson.


2 Rudolf Dolzer & Margrete Stevens, Bilateral Investment Treaties xii (1995); see also id. at 267-326 (chronological list of BITs as of 1994).

3 Antonio R. Parra, The Role of ICSID in the Settlement of International Investment Disputes, 16 ICSID News, Winter 1999, at 5-8; see also Kenneth J. Vandevelde, The Economics of Bilateral Investment Treaties, (2000) 41 Harv. Int’l L.J. 469, 469 (‘By the mid-1990s, [BITs] were being negotiated at the rate of one every other day.’).


5 Vandevelde, supra n. 3, at 469-70; ICSID, supra n. 4 (‘Modern BITs have retained broad uniformity in their provisions. In addition to determining the scope of application of the treaty, that is, the investments and investors covered by it, virtually all bilateral investment treaties cover four substantive areas: admission, treatment, expropriation and the settlement of disputes. Almost all modern BITs include provisions dealing with disputes between one of the parties and investors having the nationality of the other party.’).

The two states that conclude a BIT most frequently elect to create such a regime for different, albeit interlocking and interdependent, reasons, and based on distinct, albeit interrelated, interests. For capital-exporting states, on the one hand, BITs offer their investors vital insurance against expropriation or other arbitrary treatment of investments; for developing, capital-importing states, on the other, BITs 'send an important signal to the international business community to the effect that that [state] not only welcomes foreign investment but will also facilitate and protect certain foreign ventures'. This latter interest distinguishes BITs in a vital but under-appreciated respect from their predecessors of an earlier generation, viz., Friendship, Commerce and Navigation treaties (FCNs).

FCNs, like BITs, were premised on the assumption that an increase in foreign investment in a developing state would benefit both parties: The foreign investor would earn a reasonable profit, and the host state's economy would experience the benefits of the multiplier effect, i.e. the investment would introduce new human resources and capital, transfer skills and technologies, create additional employment, develop new industries and markets, and so forth, the benefits of which would, in turn, multiply themselves throughout various areas key to the health and continuing growth of the developing state's economy. International law's assumption has been that the increase in direct foreign investment, especially in resource extraction, would also benefit the world community as a whole by bringing more goods onto the market and thereby lowering costs. FCNs, like BITs, are instruments to achieve these goals. But while FCNs addressed diverse matters in the areas of trade and investment, in the context of expropriations, the prototypical FCN treaty did little more than impose upon the host state an obligation not to expropriate covered foreign investments without paying compensation for them. Insofar as the host state honored that commitment, it had discharged its obligations to its treaty partner and that partner's national investors.

In this regard FCNs implicitly relied on a relatively simple theory of economic development: Merely put foreign investment into an underdeveloped economy, and, provided the host state refrains from expropriating the

For analogous language in a typical United States BIT, see, for example, Treaty Between the Government of the United States of America and the Russian Federation Concerning the Encouragement and Reciprocal Protection of Investment, U.S.-Russ., June 17, 1992, pmbl., (1992) 31 ILM 794, 799 [hereafter U.S.-Russ. BIT] (noting the parties mutual 'desir[e] to promote greater economic cooperation between them, with respect to investment by nationals and companies of one Party in the territory of the other Party').

7 Gary B. Born, International Commercial Arbitration 192 (2001); see generally Theodor Meron, Investment Insurance in International Law (1976).

8 Dolzer & Stevens, supra n. 2, at 12; see also Dale R. Weigel & Burns H. Weston, Valuation Upon the Deprivation of Foreign Enterprise: A Policy-Oriented Approach to the Problem of Compensation Under International Law, in 1 The Valuation of Nationalized Property in International Law 3, 4-6 (Richard B. Lillich ed. 1972); cf. Revere Copper v Overseas Private Inv. Corp. (OPIC), Award of Aug. 24, 1978, (1980) 56 ILR 258, 271-2 (observing that private parties 'committing large amounts of capital over a long period of time require contractual guarantees for their security; governments of developing countries in turn are willing to provide such guarantees in order to promote much needed economic development').
investment, it will generate a reasonable profit while the host state will experience the benefits of the multiplier effect. A generation weaned on Hayek and navigating amid the detritus of hundreds of well-intentioned but disastrous multilateral and national development programs now knows better.\textsuperscript{9} BITs reflect this knowledge, in particular, by relying on a far more sophisticated understanding of the ‘favourable conditions’ necessary to achieve the intersecting goals of the investor and the host state.

The economic and development theory of the BIT may be seen as part of a larger phenomenon:\textsuperscript{10} the ‘structural readjustment’ movement identified with the International Monetary Fund and, latterly, the Organisation for Economic Co-operation and Development’s (OECD) and private initiatives’ ‘transparency’ programs. That movement recognizes that the profits of the foreign investor, no less than the multiplier effect in the host state’s economy, depend on appropriate internal legal, administrative, and regulatory structures, all conducted through ‘transparent’ procedures designed to ensure that things are actually done the way they are supposed to be done. The ‘favourable conditions’ established by BITs consist, not merely of natural phenomena such as climate, resources, and access to the sea, nor even of an educated population in the host state receptive to and eager to participate in the benefits of foreign investment; they also contemplate, more significantly and innovatively, an effective normative framework: impartial courts, an efficient and legally restrained bureaucracy, and the measure of transparency in decision that has increasingly been recognized as a control mechanism over governments and as a vital component of the international standard of governance. Hence, in a BIT regime, the host state must do far more than open its doors to foreign investment and refrain from overt expropriation. It must establish and maintain an appropriate legal, administrative, and regulatory framework, the legal environment that modern investment theory has come to recognize as a conditio sine qua non of the success of private enterprise. This is not to say, of course, that every governmental adjustment to this normative framework that adversely affects the conditions for foreign investment will constitute an expropriatory act, but that an appropriately operational governmental framework must be in place.\textsuperscript{11}

Given the socioeconomic revolution of which they are part, it is no surprise that the proliferation of BITs coincides with large-scale privatization policies in developing states. Privatization, the BIT generation recognizes, demands far more than selling off economically inefficient publicly-owned or -managed companies to private investors. It also requires, particularly in the utility sector, the simultaneous establishment


\textsuperscript{10} For a thorough analysis of the economic and development theories of BITs, and their philosophical underpinnings, see generally Vandeveldt, \textit{supra} n. 3, at 488–96; Vandeveldt, \textit{supra} n. 1, at 628–33.

of a regulatory environment (unnecessary, of course, for state-owned industries) that forms part of the indispensable normative and legal framework without which private industry, no less than the public it serves, cannot survive, let alone thrive. Privatization, that is, calls for the very 'stable and orderly framework for investment' that BITs strive to establish. In this respect BITs pursue the macrolegal side of the macroeconomic structural readjustment policies encouraged by multilateral financial institutions. BITs consciously seek to approximate in the developing, capital-importing state the minimal legal, administrative, and regulatory framework that fosters and sustains investment in industrialized capital-exporting states.

II. INDIRECT EXPROPRIATION IN THE BIT GENERATION

By no means, however, has this shift in regime paradigm obviated the need to deter expropriation in the BIT generation; if anything, that need has increased. To shield investors from illegal expropriation and other arbitrary or discriminatory governmental conduct that threatens to discourage foreign investment remains a vital purpose of BITs. For that reason, BITs almost invariably include provisions codifying a *lex specialis* to handle claims of expropriation.\(^\text{12}\) Because states at times find themselves compelled to take private property for a public purpose such as development or environmental preservation,\(^\text{13}\) the practice of eminent domain, insofar as it serves quintessential sovereign interests, will not cease. But with the eclipse of socialism, overt expropriation by formal decree has become relatively rare.

Recognizing the need to attract private foreign capital and technology,\(^\text{14}\) many putative capital-importing states in the BIT generation, as in the FCN generation, do not wish to be perceived internationally as posing a frequent or arbitrary threat of expropriation. For this reason, those states far more frequently expropriate foreign investments indirectly. The BIT generation therefore appreciates, more than its FCN predecessor, that foreign investments may be expropriated 'indirectly through measures tantamount to expropriation or nationalization'.\(^\text{15}\) This phrase, contained in the United States-Russia BIT and mirrored in substance in virtually all BITs, includes, not simply intentional and obvious indirect expropriations, nor only intentional creeping expropriations, a frequent form of taking in prior generations. It also captures the multiplicity of inappropriate regulatory acts, omissions, and other deleterious conduct

---

12 We do not explore in this article the question whether, and at what point, BITs and associated jurisprudence may, in the aggregate, indicate the emergence of customary international law. See n. 158 infra.
14 Dolzer & Stevens, *supra* n. 2, at 11–12.
15 U.S.-Russ. BIT, art. III(1).
that undermines the vital normative framework created and maintained by BITs—and by which governments can, in effect but not name, now be deemed to have expropriated a foreign national’s investment. The major innovation of the ‘tantamount’ clause, found in substance in almost all BITs, therefore consists in extending the concept of indirect expropriation to an egregious failure to create or maintain the normative ‘favourable conditions’ in the host state.¹⁶

Jurists and scholars refer to indirect expropriations variously, and often interchangeably, as regulatory, constructive, consequential, disguised, de facto or creeping.¹⁷ Some of these terms, however, connote behavior that may not have been legally cognizable under an FCN regime, but could furnish a sound basis for a claim under a BIT regime. This development, together with the proliferation of international jurisprudence on expropriation since the early 1980s—much of which emanates from the Iran-U.S. Claims Tribunal¹⁸ and ICSID tribunals constituted pursuant to BITs or multilateral investment treaties such as NAFTA, but some of which may be found in less obvious sources, such as, for example, the case law of the European Court of Human Rights—invites inquiry into, and further refinement of, the concept of indirect expropriation and the problem of its valuation.

A. INDIRECT EXPROPRIATIONS

The general concept of indirect expropriations is not novel. In a seminal study in 1962 in the British Yearbook of International Law, G.C. Christie analyzed two early international decisions concerning expropriation:¹⁹ the judgment of the Permanent Court of International Justice in Certain German Interests in Polish Upper Silesia,²⁰ and the arbitral award rendered by a tribunal established pursuant to a special agreement between Norway and the United States in the Norwegian Shipowners Claims case.²¹ These cases, Christie concluded, establish (i) ‘that a State may expropriate property, where it interferes with it, even though the State expressly disclaims any such intention,’ and (ii) ‘that even though a State may not purport to interfere with rights to property, it may, by its actions, render those rights so useless that it will be deemed to have expropriated

¹⁶ As emphasized above, we do not suggest that every governmental adjustment to the normative framework for foreign investment that adversely affect the conditions for foreign investment, ipso facto, constitutes an expropriatory act.
¹⁸ George H. Aldrich, What Constitutes a Compensable Taking of Property? The Decisions of the Iran-United States Claims Tribunal, (1994) 88 AJIL 585, 585 n. 2 (noting that [w]hile the Algiers Declarations gave the Tribunal broad discretion in its choice of law (art. V of the Claims Settlement Declaration), international law almost invariably has been applied by the Tribunal in its decisions on takings of property).
²⁰ Certain German Interests in Polish Upper Silesia (Germany v Poland), 1926 PCIJ Rep Series A. No. 7 (May 25).
²¹ Norwegian Shipowners Claims (Norway v U.S.) (1922) 1 RIAA 307.
them.'  

Subsequently, international decisions and commentary alike have incorporated these conclusions.

The Iran-U.S. Claims Tribunal, for example, has repeatedly held that '[t]he intent of the government [concerning expropriation] is less important than the effects of the measures on the owner and the form of the measures of control or interference is less important than the reality of their impact'. As in Phillips Petroleum Co. v Iran, a deprivation of property may be effected by 'a series of concrete actions rather than [by] any particular formal decree'. A recent ICSID panel emphasized the 'ample authority for the proposition that property has been expropriated when the effect of the measures taken by the state has been to deprive the owner of title, possession or access to the benefit and economic use of his property.' Jurisprudence emanating from the European Court of Human Rights, while technically an exercise in interpretation of a human rights treaty, provides additional evidence of the authoritative consensus that international law prohibits de facto and indirect, not only de jure and direct, expropriations. In Sporrong v Kingdom of Sweden, for example, the Court found that while certain 'expropriation permits left intact in law the company’s property rights...the placement of signposts indicating that the area would be expropriated even though they left intact in law the company’s property rights', had created a situation whereby the company could neither operate effectively nor attract potential investment.

Hence, in 1989, the Restatement (Third) of Foreign Relations Law could say, on the basis of a solid body of authority, that States ‘bear responsibility,
not only for "avowed" expropriations in which the government formally takes title to property, but also [for] other actions of the government that have the effect of "taking" the property, in whole or in large part, outright or in stages.\textsuperscript{29} A more recent U.N. study provides: 'Indirect expropriation occurs when the country takes an action that substantially impairs the value of an investment without necessarily assuming ownership of the investment. Accordingly, indirect expropriation may occur even though the host country disavows any intent to expropriate the investment.'\textsuperscript{30} Scholars, finally, almost without exception, concur. In her 1982 Hague Lectures, for example, Judge Rosalyn Higgins analyzed the jurisprudence on indirect expropriations in some detail, and her conclusions corroborate the general principles formulated by Christie.\textsuperscript{31}

In short, international tribunals, jurists, and scholars have consistently appreciated that states may accomplish expropriation in ways other than by formal decree; indeed, often in ways that may seek to cloak expropriatory conduct with a veneer of legitimacy. For this reason, tribunals have increasingly accepted that expropriation must be analyzed in consequential rather than formal terms. What matters is the effect of governmental conduct—whether malfeasance, misfeasance, or nonfeasance, or some combination of the three—on foreign property rights or control over an investment,\textsuperscript{32} not whether the state promulgates a formal decree or otherwise expressly proclaims its intent to expropriate. For purposes of state responsibility and the obligation to make adequate reparation,\textsuperscript{33} international law does not distinguish indirect from direct expropriations.\textsuperscript{34}

\textsuperscript{29} Restatement (Third) of Foreign Relations Law section 712 cmt. (g) (1989).
\textsuperscript{31} Higgins, supra n. 22, at 322–4; Christie, supra n. 19, at 309–12; see also Martin Domke, Foreign Nationalizations: Some Aspects of Contemporary International Law, (1961) 35 AJIL 585, 588–9. For the contrary (minority) view, see, for example, M. Sornarajah, The International Law of Foreign Investment (1994).
\textsuperscript{32} See, in this regard, the classic statement of the arbitral tribunal in \textit{Revere Copper v Overseas Private Inv. Corp. (OPIC)}, Award of Aug. 24, 1978, (1980) 56 ILR 258, 271–2:

the effects of the Jamaican Government’s actions in repudiating its long term commitments to RJA had[ ] substantially the same impact on effective control over use and operation as if the properties were themselves conceded by a concession contract that was repudiated . . . OPIC argues that RJA still has all the rights and property that it had before the [expropriatory] events of 1974; it is in possession of the plant and other facilities; it has its Mining Lease; it can operate as it did before. This may be true in a formal sense but . . . we do not regard RJA’s ‘control’ of the use and operation of its properties as any longer ‘effective’ in view of the destruction by Government actions of its contract rights

\textit{Id.} at 292.
\textsuperscript{33} See generally Articles on the Responsibility of States for Internationally Wrongful Acts, arts. 1, 31, in Report of the International Law Commission on the Work of its Fifty-third Session, U.N. GAOR, 56th Sess., Supp. No. 10, at 43, U.N. Doc. A/56/10 (2001), annexed to G.A. Res. 56/83 (Dec. 12, 2001) (noting the principles, respectively, that ‘[e]very internationally wrongful act of a State entails the international responsibility of that State’ (art. 1), and that ‘the responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act’ (art. 31); see also id., arts. 34–8 (setting forth the general forms of reparation available under international law, viz., restitution, compensation, satisfaction, and interest).
\textsuperscript{34} That BITs embrace this equivalence is evident from, for example, the text of the BIT between the United States and Argentina. Article VI(1) of that BIT proscribes all expropriations, including...
Within the normative legal regime created by BITs, as under customary international law, indirect expropriations—typically denominated by phrases such as ‘measures tantamount to expropriation’,\(^{35}\) ‘measures having effect equivalent to nationalisation or expropriation’,\(^{36}\) or by some substantively comparable language—require fact-sensitive inquiries into the practical effect of an event or events on a foreign investor’s rights. In general, ‘[w]here the effect is similar to what might have occurred under an outright expropriation, the investor would in all likelihood be covered under most BIT provisions’.\(^{37}\) Moreover, again as under customary international law, the impact of each governmental measure must be analyzed, not in isolation, but cumulatively, because, as the European Court of Human Rights wrote in this context, ‘the consequences of [the state’s] interference [are] undoubtedly rendered more serious by the[ir] combined use’\(^{38}\).

The concept of indirect expropriation has therefore become an established feature of customary international law on state responsibility to aliens. Within the BIT generation, however, at least two ‘species’ of the genre of indirect expropriations can be usefully identified and distinguished.\(^{39}\) Because these distinctions may facilitate the appraisal of liability for indirect expropriations, their valuation processes, and the liquidation of the amount of compensation due for foreign property so expropriated, it is worthwhile to identify and define these species in greater detail.

### B. CREEPING EXPROPRIATIONS

Not every indirect expropriation is properly described as ‘creeping’. Creeping expropriations pose unique problems, both with respect to the determination of \((i)\) liability, i.e. at what stage, if any, the accretion of wrongful interferences (many of which, alone, may seem innocuous) should be deemed expropriatory as a matter of law; and \((ii)\) valuation, i.e. as of what date the value of property rights so expropriated should be

---


\(^{36}\) E.g. U.K.-Pan. BIT, art. V(1).

\(^{37}\) Dolzer & Stevens, supra n. 2, at 100 (citing Starrett Hous. Corp. v. Iran (1984) 4 Iran-US CTR 123, 23 ILM 1096, 1115); K. Scott Gudgeon, Valuation of Nationalized Property Under United States and Other Bilateral Investment Treaties, in IV The Valuation of Nationalized Property in International Law 101, 102 (Richard B. Lillich ed., 1987) (noting that BITs define expropriation ‘in a manner that promotes substance over form,’ thereby employing the so-called ‘effects test’, which reaches all forms of creeping expropriation).

\(^{38}\) Sporrong v Kingdom of Sweden, Series A 52 ECHR at 26, para. 60.

\(^{39}\) Substantial overlap between the various gradations of indirect expropriation can, and frequently will, exist. It is nevertheless useful to identify and distinguish these species because, as we explain below, it helps to clarify \((i)\) the existence vel non of an expropriation under a BIT regime; \((ii)\) the moment at which that expropriation occurs; and \((iii)\) the moment from which the value of an enterprise so expropriated should be valued for purposes of respecting paramount principles of international law on reparation.
assessed. Without concurrently purporting to take title to property or to appropriate a foreign investor’s commercial rights, a state might, for example, appoint an unreasonably intrusive government ‘supervisor’, or fix prices for a commodity indispensable to the production process at a level that destroys an enterprise’s economic viability, or refuse to hold feckless administrators to account for failure to carry out their assigned tasks. A wide variety of measures—including taxation,\(^4\)\(^0\) regulation, denial of due process, delay and non-performance, and other forms of governmental malfeasance, misfeasance, and nonfeasance—may be deemed expropriatory if those measures significantly reduce an investor’s property rights or render them practically useless.\(^4\)\(^1\) But if one or two events in that series can readily be identified as those that destroyed the investment’s value, then to speak of a creeping expropriation may be misleading. Keith Highet cogently explained in a dissenting opinion that a ‘creeping’ expropriation is comprised of a number of elements, none of which can—separately—constitute the international wrong [i.e. the creeping expropriation]. These constituent elements [may] include non-payment, non-reimbursement, cancellation, denial of judicial access, actual practice to exclude, non-conforming treatment, inconsistent legal blocks, and so forth. The ‘measure’ at issue is the [creeping] expropriation itself; it is not merely a sub-component part of expropriation.\(^4\)\(^2\)

In what one commentator described as ‘the case closest to true “creeping” expropriation, the government of Somalia directed sundry acts of harassment (including occasional arrests of key employees, blocking access to the plant site, and the nationalization of an oil depot which was a portion of the activities of the project) against a foreign-owned shellfish processing facility’, ultimately compelling the plant manager to terminate operations.\(^4\)\(^3\) OPIC decided, upon confirmation of these facts by the U.S. State Department, ‘that the actions of the Somalian government, though not openly expropriatory, were calculated to disrupt the operations of the foreign enterprise to such an extent that an inference of expropriatory intent could be drawn’; it therefore ‘honored the claim’.\(^4\)\(^4\)

Where, as in Fearn International, Inc., the decision-maker can infer expropriatory intent, it tends to be simple to characterize the aggregate of events as a taking. In some, if not most other, creeping expropriations, however, that intent, though possibly present at some level of the host state’s government, will be difficult, if not impossible, to discern. Discrete

\(^4\)\(^0\) Tax measures alleged to be expropriatory may raise unique concerns. By its ‘tax veto’ provision, for example, NAFTA suggests a qualitative difference between taxation and other measures that can, alone or in combination, culminate in an apparent expropriation. NAFTA, art. 2103(6); see William W. Park, Arbitration and the FISC: NAFTA’s ‘Tax Veto’, 2 Chi. J. Int’l L. 231 (2001).

\(^4\)\(^1\) Dolzer & Stevens, supra n. 2, at 100; see also Restatement (Third) of Foreign Relations Law section 712 cmt. (g) (1989).

\(^4\)\(^2\) Waste Mgmt., Inc. v United Mexican States ICSID Case No. ARB(AF)/98/2, Award of June 2, 2000, (2001) 40 ILM 56, 73 (Keith Hight, dissenting).


\(^4\)\(^4\) Id.
acts, analyzed in isolation rather than in the context of the overall flow of events, may, whether legal or not in themselves, seem innocuous vis-à-vis a potential expropriation. Some may not be expropriatory in themselves. Only in retrospect will it become evident that those acts comprised part of an accretion of deleterious acts and omissions, which in the aggregate expropriated the foreign investor’s property rights. Indeed, the acts—malfeasance, misfeasance, and non-feasance—comprising the expropriation in creeping expropriations may be part of a series that includes many lawful ones. The Restatement confirms that a creeping expropriation may occur where State action ‘makes it impossible for the [foreign investor] to operate at a profit,’ because ‘a State may seek to achieve the same result [i.e. expropriation] by taxation and regulatory measures designed to make continued economic operation of a project uneconomical so that it is abandoned’.

We emphasize ‘designed’ because the actual taking may not be comprised of acts that were specifically intended to expropriate, even though that is their natural and foreseeable consequence.

Because of the absence of a manifest intent in such cases, Judge Brower once observed that ‘it is difficult to envision a de facto or “creeping” expropriation ever being lawful, for the absence of a declared intention to expropriate almost certainly implies that no contemporaneous provision for compensation has been made. Indeed, research reveals no international precedent finding such an expropriation to have been lawful’. Were disclaimers of expropriatory intent sufficient to validate otherwise lawful ones? At the same time, one unlawful act within a series of otherwise lawful regulatory acts by the State cannot transform an innocent progression of legitimate, reasonable regulations in the public interest into a creeping expropriation. But this is simply to restate a point made earlier and throughout this article: that indirect expropriations of all kinds, but particularly creeping expropriations, require acutely fact-sensitive inquiries.

Restatement (third) of Foreign Relations section 712 nn. 6–7 (1989) (emphasis added). It is noteworthy that U.S. case law on the Takings Clause of the Fifth Amendment adopts substantially the same principle in the context of utility-rate regulation. See, e.g., Duquesne Light Co. v. Bunch, 488 US 299, 312 (1988) (‘[I]t is not theory but the impact of the rate order which counts . . . [W]hether a particular rate is unjust or unreasonable will depend to some extent on what is a fair rate of return given the risks under a particular rate-setting system, and on the amount of capital upon which the investors are entitled to earn that return’.) (quoting FPC v Hope Natural Gas Co. 320 US 591, 602 (1944)) (emphasis added); Covington & Lexington Turnpike Rd. Co. v Sandford 164 US 578, 597 (1896) (finding a rate to be impermissibly low if it is ‘so unjust as to destroy the value of the property for all the purposes for which it was acquired’, and therefore ‘to practically deprive ['] the owner of property without due process of law’). On regulatory takings generally, see, for example, the classic statement of Justice Holmes in Pennsylvania Coal Co. v Mahon, 260 US 393 (1922):

Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law. As long recognized some values are enjoyed under an implied limitation and must yield to the police power. But obviously the implied limitation must have its limits or the contract and due process clauses [of the Constitution] are gone. One fact for consideration in determining such limits is the extent of diminution. When it reaches a certain magnitude, in most if not all cases there must be . . . compensation to sustain the act . . . The general rule at least is that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking.

Id. at 413, 415. The Takings Clause has also created a rich jurisprudence on valuation that arguably contributes to the evolution of international standards. See Thomas W. Merrill, Incomplete Compensation for Takings, (2002) 11 N.Y.U. Envtl. L.J. 110, 115–28.

expropriatory acts, states could avoid their obligation to make reparation simply by asserting the absence of that intent. Because of their gradual and cumulative nature, creeping expropriations also render it problematic, perhaps even arbitrary, to identify a single interference (or failure to act where a duty requires it) as the ‘moment of expropriation’. Several ICSID awards illustrate these problems well.

In Benvenuti et Bonfant v People’s Republic of the Congo, the claimant, an Italian firm (B&B), entered into a joint venture with the Congo to create a company to manufacture plastic bottles of mineral water (PLASCO). The Congolese government agreed to establish a special tax regime for PLASCO, to adopt protectionist measures to obviate the threat of foreign competition, and to guarantee PLASCO’s financing. Almost immediately after it began operations, however, problems developed. Over the ensuing months and years, the government, inter alia, defaulted on its financing obligations, unilaterally fixed the prices for bottles of mineral water bottles below the level agreed upon at the initial meeting of PLASCO’s Board of Directors, failed to establish the preferential tax regime contemplated by the joint venture, neglected or refused to call regular meetings of the Board, and failed to adopt protectionist measures limiting the import of mineral water. Ultimately, the Congolese military occupied PLASCO’s corporate headquarters, and the government instituted criminal proceedings against one Corrado Bonfant, a principal of B&B, compelling B&B to shut down operations and quit the Congo. At no time, however, did the Congolese government purport to expropriate B&B’s share of PLASCO. In fact, it insisted throughout the subsequent arbitration ‘that the Italian party can return and take back its share at any time.’ The ICSID tribunal convened to hear B&B’s claim nonetheless agreed with B&B that the cumulative effect of the government’s acts (e.g. price-fixing) and omissions (e.g. failure to establish a preferential tax regime or prohibit foreign imports) ‘de facto expropriated [B&B’s] corporate shares in the PLASCO company’.

In Liberian Eastern Timber Corp. (LETCO) v Liberia, Liberia concluded a concession contract, the ‘Forest Products Utilization Contract’ with LETCO, a company wholly owned by French nationals. The contract gave LETCO ‘the exclusive right to harvest, process, transport and market timber and other forest products and to conduct other timbering operations in the “Exploitation Area”, which covered some 350,000 to 400,000 acres of forest, for a twenty-year period’. In exchange, LETCO agreed to pay specified taxes, to avoid exploiting certain species of trees, to abide by Liberian labor law, ‘to give preference to competent and qualified Liberian citizens when hiring’, and ‘to erect and maintain an efficient sawmill plant’ and other assets and infrastructure, which the contract

50 Id. at 749–50, 753–7. 51 Id. at 758. 52 Id. 53 Id. 54 Liber. E. Timber Corp. v Liberia, ICSID Award of Mar. 31, 1986 (rectified May 14, 1986), (1987) 26 ILM 647. 55 Id. at 658.
contemplated would be left ‘in good and safe-running order’ upon the expiration of the concession.\textsuperscript{56} Subsequently, over a period of several years, Liberia withdrew portions of the Exploitation Area, demanded renegotiation of the concession contract, failed to comply with certain notification provisions of the contract,\textsuperscript{57} and granted repossessed forest areas within the concession’s scope to ‘foreign companies . . . run by people who were “good friends” of the Liberian authorities’.\textsuperscript{58} As in \textit{Benvenuti et Bonfant}, Liberia never expressly expropriated LETCO’s property rights, directly or indirectly. Indeed, while this case involved a breach of contract, the tribunal effectively found that Liberia’s act constituted expropriation even absent an avowed expropriatory intent.\textsuperscript{59} But the tribunal found that even assuming, arguendo, that Liberia had sought to justify its actions as a legitimate act of nationalization, any such contention would fail because ‘the taking of’ LETCO’s property was not for a bona fide public purpose, was discriminatory and was not accompanied by an offer of appropriate compensation’.\textsuperscript{60} Indeed, while Liberia ultimately defaulted, it had previously justified its actions by claiming that LETCO had breached various obligations under the concession contract—a claim rejected on the facts by the ICSID tribunal convened to hear LETCO’s claim.

In \textit{Metalclad Corp. v United Mexican States},\textsuperscript{61} an ICSID tribunal heard a claim brought against Mexico under Chapter 11 of NAFTA, alleging that Mexico expropriated Metalclad’s purchase, construction, and development of a hazardous-waste landfill. Examining ‘[t]he totality of the[ ] circumstances’, the tribunal found ‘a lack of orderly process and timely disposition [with respect to Metalclad’s application for certain perfunctory municipal permits] in relation to [a foreign] investor acting in the expectation that it would be treated fairly and justly in accordance with the NAFTA’.\textsuperscript{62} The tribunal concluded that an accumulation of harmful acts and omissions of the Municipality of Guadalcazar, which interfered with Metalclad’s reasonable expectations, ‘taken together with the representations of the Mexican federal government, on which Metalclad relied, and the absence of a timely, orderly or substantive basis for the denial by the Municipality of a local construction permit, amount[ed] to an indirect expropriation’.\textsuperscript{63} Again, the defendant government denied an intent to expropriate. And again, the tribunal found proof \textit{vel non} of that intent to be immaterial. The tribunal’s conclusion that Mexico had expropriated Metalclad’s investment rested on an examination of the aggregate effects or consequences of Mexico’s conduct:

\begin{quote}
\textit{E}xpropriation under NAFTA includes not only open, deliberate and acknowledged takings of property, such as outright seizure or formal or obligatory transfer of title in favour of the host State, but also covert or incidental interference
\end{quote}

\begin{footnotes}
\item[56] Id. at 659.
\item[57] Id. at 660–2.
\item[58] Id. at 665.
\item[59] Id.
\item[60] Id.
\item[62] Id. at 50.
\item[63] Id.
\end{footnotes}
with the use of property which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of property . . .  

In each of the above cases, the host government therefore accomplished an expropriation, not only indirectly, but furtively, through often seemingly trivial acts of sometimes nebulous legality or propriety. Considered in isolation, for example, it would be implausible to say that the Congolese government’s neglect to call regular meetings of PLASCO’s Board of Directors, ipso facto, effected an indirect expropriation. Conversely, however, it would be equally implausible to deny that all the acts preceding the Congolese military’s occupation of PLASCO’s corporate headquarters, appraised in terms of their cumulative impact, did not effect an indirect expropriation until the dramatic moment at which that occupation forced B&B’s staff to flee the country and initiate arbitration. In an analogous context, former Judge of the Iran-U.S. Claims Tribunal Howard M. Holtzmann, concurring in the *Starrett Housing Corp.* Interlocutory Award, wrote:

The Interlocutory Award correctly holds that [the appointment of a government manager] was an act of expropriation because it denied Claimants their right to manage and control Shah Goli and the Project. The appointment of the manager was not, however, the first or only act of expropriation; in fact, it was the last of a series of such measures. The Interlocutory Award ignores the real impact of other decisive acts which resulted in a taking of Claimant’s property rights many months before. Although the Government of Iran on 30 January 1980 took the formal step of appointing a manager for the property which it had already taken, that final measure cannot logically serve to obscure the earlier acts of expropriation. In my view, a realistic assessment of the facts would have been preferable to the sterile formalism of the Interlocutory Award. By a ‘steady and inexorable’ progression of expropriatory acts and omissions, the governments in each of these cases deprived foreign investors of their property rights or rendered those rights practically useless.

64 Id. at 51. A Canadian court subsequently vacated the Metalclad award in part. See *The United Mexican States v Metalclad Corp.*, Supreme Court of British Columbia, Reasons for Judgment, 2001 BCSC 664, 119 ILR 647, (2002) 5 ICSID Rep 238. Judge Tysoe held that the NAFTA Tribunal exceeded its jurisdiction insofar as it held that the events preceding Mexico’s Ecological Decree constituted an expropriation, because the Tribunal’s analysis of section 1105 of NAFTA imposed a transparency obligation not found in that section, which ‘infected’ its section 1110 analysis to the extent that the latter involved analysis of the cumulative impact of events preceding the Decree—including failure to abide by the transparency obligation. *See id.* paras 77–80. Wholly apart from the substantive merits of Judge Tysoe’s judgment, an inquiry beyond the scope of this article, we note that this judgment did not cast doubt on the definition of a creeping expropriation under customary international law; its import is limited to the treaty regime established by NAFTA. But see *id.* para. 100 (suggesting that the Tribunal employed an ‘extremely broad’ definition of expropriation, but finding that this is an issue to which the court must defer under the arbitration law of British Columbia).

65 Cf. *Koven, supra* n. 43, at 278 (‘Where a “creeping” expropriation manifests itself over a long period of time, the definition of expropriatory action appears to ignore the chain of events prior to the one “act” which is ultimately deemed to be the one determining the date of expropriation.’).


67 *Id.*
A creeping expropriation therefore denotes, in the paradigmatic case, an expropriation accomplished by a cumulative series of regulatory acts or omissions over a prolonged period of time, no one of which can necessarily be identified as the decisive event that deprived the foreign national of the value of its investment. Moreover, they may be interspersed with entirely lawful state regulatory actions. By definition, then, creeping expropriations lack the vividness and transparency not only of formal expropriations, but also of many regulatory or otherwise indirect expropriations, which may be identified more closely with a few discrete events. The gradual and sometimes furtive nature of the acts and omissions that culminate in a creeping expropriation tends to obscure what tribunals ordinarily denominate the ‘moment of expropriation’.

Because a creeping expropriation, by its nature, cannot be defined by reference to a single, readily identifiable, expropriatory act, whether direct or not, attempting to discern the precise moment of expropriation, the ‘date on which the governmental “interference” has deprived the owner of his rights or has made those rights practically useless’, 68 will often prove a daunting task for an international tribunal. Creeping expropriations, then, require in the first instance a meticulously fact-sensitive inquiry in order to determine the moment at which liability for an expropriation attaches. But that moment need not—and in many cases, we suggest below, should not—be equated with the moment at which the value of expropriated property rights properly should be appraised for compensation purposes. Consistent with customary international law and any relevant bilateral or multilateral investment treaty provisions, which in any event generally incorporate customary international law as a minimum standard for the treatment of all investments, 69 the latter moment should be established in a manner that will enable a tribunal seized with a claim based on a creeping expropriation to give full effect to the venerable compensation principles articulated in Chorzów Factory.

C. CONSEQUENTIAL EXPROPRIATIONS

Other ‘measures tantamount to expropriation’ within the purview of a BIT regime prove even more elusive than creeping expropriations because they consist of the host state’s failures to create, maintain, and

---

68 Compañía del Desarrollo de Santa Elena, S.A. v Costa Rica, ICSID Case No. ARB/96/1, Award of Feb. 17, 2000, (2000) 439 ILM 1317, 1330; accord Starrett Hous. Corp., 23 ILM at 1115 (‘[I]t is recognized in international law that measures taken by a state can interfere with property rights to such an extent that these rights are rendered so useless that they must be deemed to have been expropriated, even though the state does not purport to have expropriated them and the legal title to the property formally remains with the original owner.’); see Weston, supra n. 17, at 106 (noting the ‘truism that judgments of this kind [i.e. about when a series of events ripens into a creeping expropriation] commonly depend on highly subjective responses to the fact patterns discerned’).

69 E.g. U.S.-Russ. BIT, arts. II(2)(a), III(2).
properly manage the legal, administrative, and regulatory normative framework contemplated by the relevant BIT, an indispensable feature of the ‘favourable conditions’ for investment. Again, this is not to say that every governmental adjustment to the normative framework of the host state that adversely affects foreign investment will constitute an expropriatory act. As the NAFTA tribunal in *Feldman v Mexico* stated:

*To paraphrase Azinian, not all government regulatory activity that makes it difficult or impossible for an investor to carry out a particular business, change in the law or change in the application of existing laws that makes it uneconomical to continue a particular business, is an expropriation under Article 1110.* Governments, in their exercise of regulatory power, frequently change their laws and regulations in response to changing economic circumstances or changing political, economic or social considerations. Those changes may well make certain activities less profitable or even uneconomic to continue.

Lawful regulation, that is, is not expropriation. Some self-described ‘regulation’, however, can and should properly be deemed expropriatory. In *Feldman*, the tribunal also aptly explained that

the ways in which governmental authorities may force a company out of business, or significantly reduce the economic benefits of its business, are many. In the past, confiscatory taxation, denial of access to infrastructure or necessary raw materials, imposition of unreasonable regulatory regimes, among others, have been considered to be expropriatory actions. At the same time, governments must be free to act in the broader public interest through protection of the environment, new or modified tax regimes, the granting or withdrawal of government subsidies, reductions or increases in tariff levels, imposition of zoning restrictions and the like. Reasonable governmental regulation of this type cannot be achieved if any business that is adversely affected may seek compensation, and it is safe to say that customary international law recognizes this.

Thus, while a host state is not, of course, precluded from regulating foreign investments, some regulations, and equally importantly, failures to regulate, may rise to the level of expropriatory action. The ultimate expropriatory effect of these failures will be painfully apparent, and at least in retrospect, the causes can be identified: for example, feckless or corrupt bureaucracies, lack of political will at the leadership level, negligence or failure to make timely decisions incumbent on the state by virtue of contracts or concession agreements, and so forth. But in consequential expropriations, while there exists, to borrow terms from criminal law, an *actus reus* and a *corpus delicti*, there may not exist a *mens rea*, an intent to expropriate. The absence of this intent within at least some echelon of the host state’s government distinguishes consequential expropriations from garden-variety indirect expropriations and also from most, though not all,
creeping expropriations—for consequential expropriation can be accomplished in the same manner as creeping expropriations.

Consequential expropriations involve deprivations of the economic value of a foreign investment, which, within the legal regime established by a BIT, must be deemed expropriatory because of their causal links to failures of the host state to fulfill its paramount obligations to establish and maintain an appropriate legal, administrative, and regulatory normative framework for foreign investment. But because consequential expropriations result from misfeasances, malfeasances, and nonfeasances of the host state, it often proves difficult to determine whether the acts and omissions of the host state (i) were themselves the *causa causans* of the loss of economic value or (ii) contributed to that loss; or by contrast, (iii) whether the loss should rather be ascribed chiefly to the foreign investor’s misjudgments or (iv) to exogenous economic factors independent of the actions (or inactions) of the host state. Where the losses that are the basis of a claim should be ascribed chiefly to the latter two factors, as the Permanent Court of Justice long ago established in the *Oscar Chinn* case, the foreign investor enjoys no right to compensation. In some cases, of course, the causes of the loss will fall clearly or predominantly in one of these categories; in others, where they fall will be far less clear.

But even when it is clear that the host state’s acts and omissions caused, or substantially caused, a legally significant depreciation in the economic value of the investment, and would therefore qualify as expropriatory within a BIT regime, determining the moment of expropriation for purposes of valuation remains, as we noted earlier, an especially daunting task. This intellectual operation, difficult in any indirect or creeping case, becomes even more so in those cases of consequential expropriation where some responsibility for the decline of the economic value of the investment could be attributable to actions or judgements of the foreign investor or to exogenous market factors. In these circumstances the depreciation of the investment’s value may be caused by a complex series of interactions between failures of the host state to fulfill its obligations under the BIT, on the one hand, and misjudgements of the investor or exogenous market factors, on the other.

The absence of an expropriatory decree, but the presence of an expropriatory consequence, defines a generic indirect expropriation. But also common to most past indirect expropriations was an expropriatory intent at some level of the governmental apparatus of the host state. In consequential expropriations, states do not form an express intent to expropriate; indeed, they may not have such an intent at all. Even though a state’s responsibility to pay compensation for expropriation does not, in any event, ‘depend on proof that the expropriation was intentional’, the

---

73 The Oscar Chinn Case (Belgium v UK) 1934 PCIJ Rep Series A/B No. 63 (Dec. 12).
man manifestation of that intent at some level of the state’s government generally furnishes a tribunal with a useful demarcation. It enables a decision-maker not only to confirm that an expropriation has taken place, but to set, based on relatively objective evidence, the moment of valuation—typically, a point in time before the host state’s conduct occasioned the depreciation in the value of the foreign investment.

Consequential expropriations lack such demarcations. Consider a few hypothetical examples:

- the host state, privatizing a theretofore state-owned enterprise, promises to establish a regulatory apparatus, but fails to;
- alternatively, the host state creates the appropriate regulatory apparatus, but it proves to be grossly inefficient;
- alternatively, the host state creates the appropriate regulatory apparatus, but in order to avoid layoffs in the public sector, staffs it with a bloated and ineffective bureaucracy comprised principally of former employees of the state-owned enterprise;
- a government agency of the host state delays beyond the statutory deadline the grant to the foreign investor of a license required to engage in certain investment activities, even though those same activities had been authorized previously by a concession or build-operate-transfer agreement with the government;
- local courts defer interminably decisions required by the BIT and critical to the profitability of the investment; or, because of the host state’s failure to establish internal legal mechanisms to accommodate a BIT regime, local courts enjoin, on the basis of that state’s internal laws, investment activities previously authorized by the host state or one of its political subdivisions;
- local government officials of one federated unit within the host state, in order to curry favor with their political constituency, blame the foreign investor in a theretofore publicly-owned but now privatized utility, for economic difficulties caused principally by the inefficient bureaucracy and infrastructure that the investor inherited, and indeed, which it was the very intention of the host state to ameliorate by privatization and the attraction and investment of foreign resources.

These types of actions (or, at times, delayed actions or failures to act) would not have been cognizable as indirect expropriations under an

para. 22; Phelps Dodge Corp. v. Iran, (1986) 10 US CTR 121, para. 22; but see Sea-Land Service, Inc. v. Iran, (1984) 6 Iran-US CTR 149, 166 (‘A finding of expropriation would require, at the very least, that the Tribunal be satisfied that there was deliberate governmental interference with the conduct of Sea-Land’s operation, the effect of which was to deprive Sea-Land of the use and benefit of its investment. Nothing has been demonstrated here which might have amounted to an intentional course of conduct directed against Sea-Land. A claim founded substantially on omissions and inaction in a situation where the evidence suggests a widespread and indiscriminate deterioration in management, disrupting the functioning of the port of Bandar Abbas, can hardly justify a finding of expropriation.’). Since Sea-Land, however, the principle that proof of intent is a necessary component of an expropriation has ‘obtained no support in subsequent Tribunal awards, which generally [have] quoted the relevant language from Tippett’s’. Aldrich, supra n. 18, at 603.
FCN regime, for in that regime the foreign investor took the host state’s legal, administrative, and regulatory apparatus on an ‘as is’ basis. Ineffective or inefficient government was often a manifest part of the ‘is’ and often the reason for, or a significant contributing factor to, the non-development or impeded development in the host state. But in a BIT regime, these delayed actions or inactions may represent violations of legal obligations and therefore may, if the facts warrant it, be characterized as ‘acts tantamount to expropriation’, for the BIT obliges the host state to create normatively ‘favourable conditions’ for the investment. This imports, as explained above, a variety of constitutive, judicial, administrative, and regulatory actions to be undertaken by the host state.

One of the reasons why failures to take internationally required administrative or judicial actions, characteristic of consequential expropriations, present particularly knotty problems for tribunals engaged in determining the moment of expropriation and moment of valuation is that the foreign investor often will fail to perceive certain actions or non-feasances as expropriatory at the time they occur. The management of a complex business in any environment is perforce a process of problem-solving. Managers may, at least initially, view these failures on the part of the administrative or judicial apparatus of the host state as transient problems or early points on a learning curve for a new bureaucracy or one relatively inexperienced in regulating foreign investment. Nor will there exist evidence of an expropriatory intent on the part of the administrative or judicial actors concerned. In hindsight, managers (or their critics) may come to believe that they should have seen the events in a more ominous light, as the first in a series of actions that would culminate in a consequential expropriation.

But hindsight, of course, is notoriously lucid. Only in retrospect does it become evident that, regardless of the state’s intent, the cumulative impact of its interferences with property rights would inevitably culminate in an aggregate effect tantamount to expropriation. And in any event, had the foreign investor or its manager immediately sought to initiate arbitration under a BIT, a tribunal might well have thought it unrealistic or premature, if not an abuse of process. Unlike direct expropriations, consequential expropriations need not, and seldom will, be accomplished d’un coup, by a single act tantamount to expropriation; for example, the decree of the Mossadegh Government of Iran expelling the management of the Anglo-Iranian Oil Company from the company’s premises and installing new management, or the Indonesian military police’s expulsion and replacement of the management of Amco Asia’s hotel in Jakarta. Hence, as with creeping expropriations, no obvious overt markers will exist to enable a tribunal to set the moment of valuation at some point before the investor’s contemporaneous conclusion.

76 See Amco Asia Corp. v Indonesia, ICSID Award of Nov. 21, 1984, (1985) 24 ILM 1022.
that it had been expropriated. Both creeping and consequential expropriations therefore make the tasks of discerning liability for expropriation in the BIT generation—and, subsequently, assigning an economic value to the enterprise so expropriated—far more difficult than the corresponding tasks for direct expropriations (and, for that matter, many garden-variety indirect expropriations).

III. MOMENT OF EXPROPRIATION AND VALUATION

Two widely accepted propositions of international law create a peculiar problem for the arbitration tribunal seized of a consequential or creeping expropriation claim cognizable under a governing BIT. The first is that BITs, consistent with customary international law, require states to pay compensation for expropriation, whether lawful or not, based on a formula that calculates loss from the moment of expropriation. In the words of one representative BIT: ‘Compensation shall be equivalent to the fair market value of the expropriated investment immediately before the expropriatory action was taken or became known, whichever is earlier.’\footnote{U.S.-Russ. BIT, art. III(1); compare U.K.-Pan. BIT, art. 5(1) (‘[C]ompensation shall amount to the fair value which the investment expropriated had immediately before the expropriation became known.’); accord World Bank: Report to the Development Committee and Guidelines on the Treatment of Foreign Direct Investment, adopted Sept. 21, 1992, (1992) 31 ILM 1363, 1382 [hereafter World Bank Guidelines] (‘Compensation will be deemed “adequate” if it is based on the fair market value of the taken asset as such value is determined immediately before the time at which the taking occurred or the decision to take the asset became publicly known.’).}

The second is the venerable principle articulated more than seventy years ago by the Permanent Court of International Justice in Chorzów Factory:\footnote{Factory at Chorzów (Germany v Poland), 1928 PCIJ Rep Series A No. 13 (Sept. 13).} ‘that 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’.\footnote{Id. at 47.} Because creeping and consequential expropriations, by their nature, involve, respectively, either (i) an accretion of acts and omissions over time, the propriety of which may be contemporaneously unclear or evident only in retrospect; or (ii) acts or omissions the illegality of which derives from the state’s failure or neglect to create and maintain an appropriate normative environment, the moment of expropriation seldom will be vividly demarcated and readily discernable by a tribunal seized with a claim for compensation based on such state conduct.\footnote{See Weston, supra n. 17, at 105–6 (noting that ‘it is very hard to get agreement on whether any one or a combination of governmental acts, at once or over time, constitutes an “indirect,” “de facto,” “disguised,” “constructive,” or “creeping expropriation” giving rise to State responsibility,’ partly because of ‘the extremely complex facts ordinarily involved and partly [because of] the problems of proof that attend them’); Koven, supra n. 43, at 277. (‘For “creeping” expropriation, where a slow accretion of interferences with the investor’s management or control of the foreign enterprise results in the inability of the project to continue, determining the date on which “an action” created that result is an absurd exercise.’)}

In the BIT generation, this epistemic difficulty raises...
certain practical problems with respect to, first, the determination of liability; second, assuming the tribunal finds liability, the determination of what should constitute adequate reparation; and finally, how to calculate that figure.  

A. THE CONDITIONS FOR A LAWFUL EXPROPRIATION

Consistent with customary international law, BITs do not prohibit expropriation per se. In the exercise of their sovereignty over natural resources or police powers, states remain entitled to expropriate foreign property for a public purpose, provided it is done in a non-discriminatory manner and accompanied by payment of ‘prompt, adequate, and effective’ compensation. ‘International law’, in the words of a recent ICSID award, ‘permits [a state] to expropriate foreign-owned property within its territory for a public purpose and against the payment of adequate and effective compensation’. This so-called ‘compensation rule’, which permits expropriation conditional on the payment of ‘prompt, adequate, and effective’ compensation, has been widely, if not always unanimously, embraced by jurists and scholars throughout the twentieth century.

81 In certain cases it may also raise a jurisdictional issue, for the moment of expropriation may determine whether a tribunal has jurisdiction under the applicable conventional regime. See, e.g., Mondev Int’l Ltd. v United States, ICSID Case No. ARB(AF)/99/2, Award of Oct. 11, 2002, (2003) 42 ILM 84, 93–9. At the same time, the moment that suffices to establish jurisdiction may operate to impede the tribunal’s efforts to award compensation pursuant to the principles enunciated in Chorzów Factory. The authors are grateful to Judge Charles N. Brower for pointing out this issue, which, while not necessarily unique to the Algiers Accords and Iran-U.S. Claims Tribunals cases, assumed a particular significance in that context.

82 E.g., U.K.-Pan. BIT, art. 5(1) (‘Investments of nationals or companies of either Contracting Party shall not be nationalised, expropriated or subjected to measures having effect equivalent to nationalisation or expropriation (hereinafter referred to as “expropriation”) in the territory of the other Contracting Party except for an internal public or social purpose against prompt, adequate and effective compensation, and in conformity with the internal law.’); U.S. Arg-BIT, art. IV, section 1 (‘Investments shall not be expropriated or nationalized either directly or indirectly through measures tantamount to expropriation or nationalization (“expropriation”) except for a public purpose; in a non-discriminatory manner; upon payment of prompt, adequate and effective compensation; and in accordance with due process of law and the general principles of treatment provided for in Article II (2) [which specifies the treatment that each state party must afford to investments of nationals or companies of the other].’); compare, e.g., INA Corp. v Iran, (1985) 8 Iran-US CTR 373 (‘It has long been acknowledged that expropriations for a public purpose and subject to conditions provided for by law . . . are not per se unlawful.’).

83 Ian Brownlie, Principles of Public International Law 70 (5th ed. 1998); Dolzer & Stevens, supra n. 2, at 97; Christie, supra n. 19, at 307.

84 Compañía del Desarrollo de Santa Elena, S.A. v Costa Rica, ICSID Case No. ARB/96/1, Award of Feb. 17, 2000, (2000) 39 ILM 1317, 1329; accord Sedco, Inc. v Nat’l Ir. Oil Co., (1986) 10 Iran-US CTR 180, 25 ILM 629, 647–8 (Brower, J., concurring) (‘A taking is unlawful under customary international law when it occurs in a discriminatory context, is not for a public purpose, or constitutes a breach of a specific obligation undertaken by the nationalizing State in relation to property in question, e.g., violates the terms of an agreement between that State and an alien.’). The legitimacy of the public purpose invoked to justify expropriation does not ‘alter the legal character of the taking for which adequate compensation must be paid’. Santa Elena, 39 ILM at 1320.

85 E.g., Brownlie, supra n. 83, at 535–8 (explaining the compensation rule).

Conventionally known as the ‘Hull formula’, the phrase ‘prompt, adequate, and effective’ provides a facially clear standard. In practice, however, ‘apart from the use of force, no question of international law seems to have aroused as much debate—and often strong feelings—as the question of the standard for payment of compensation when foreign property is expropriated’. Particularly in the 1960s and 1970s, developing and communist states sought to establish an alternative rule authorizing states to resort to their municipal laws to determine the appropriate standard of compensation. With the demise of the Cold War and the rise of the BIT generation, however, the Hull formula has firmly reestablished itself as the preeminent standard. BITs generally incorporate its traditional criteria in one form or another.

Merely restating the Hull formula, however, begs a number of questions, foremost among them, the meaning of ‘prompt, adequate, and effective’ and comparable phrases. Because Chorzów Factory remains, notwithstanding the passage of more than 70 years, the seminal international decision about compensation under international law, it still provides the fundamental normative framework within which to consider the propriety of particular methods employed to determine ‘prompt, adequate, and effective’ compensation for expropriation.

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

---

87 Dolzer & Stevens, supra n. 2, at 97 & note 262. The Hull formula originated in correspondence from former U.S. Secretary of State Hull to the Mexican government in 1938, in which he asserted that ‘under every rule of law and equity, no government is entitled to expropriate private property, for whatever purpose without provision for prompt, adequate and effective payment therefor.’ G. Hackworth, (1943) Digest of International Law 657.
88 Gudgeon, supra n. 37, at 188; see also Oscar Schachter, Foreword, in IV The Valuation of Nationalized Property in International Law vii (Richard B. Lillich ed., 1987).
89 Clagett, supra n. 86, at 31-2.
90 Brownlie, supra n. 83, at 547 (‘[A] considerable number of hosts to foreign capital are willing to conclude treaties for the protection of investments which commonly contain a provision for the payment of “prompt, adequate, and effective” compensation in case of expropriation. While these are negotiated deals, the pattern of agreements surely constitutes evidence of an international standard based upon the principle of compensation.’); see also Haliburton Fales, A Comparison for Nationalization of Alien Property with Standards of Compensation Under United States Domestic Law, in IV The Valuation of Nationalized Property in International Law 173, 175-76 (Richard B. Lillich ed., 1987).
91 Dolzer & Stevens, supra n. 2, at 97, 109; see also Brownlie, supra n. 83, at 547.
92 The United States favors the Hull formula of ‘prompt, adequate, and effective’ compensation, while other states use comparable or more general phrases ‘such as “just,” “full,” “reasonable” or “fair and equitable”’. Dolzer & Stevens, supra n. 2, at 109; see also Gudgeon, supra n. 37, at 113-14.
93 See Higgins, supra n. 22, at 315.
determine the amount of compensation due for an act contrary to international law.\footnote{Factory at Chorzów (Germany v Poland), 1928 PCIJ Rep Series A No. 13, at 47 (Sept. 13). The Court confirmed the customary character of this obligation elsewhere in the judgment, remarking that '[r]eparation therefore is the indispensable complement of a failure to apply a convention and there is no necessity for this to be stated in the convention itself.' \textit{Id.} at 21. More recently, the International Court of Justice held that the same principles applies to violations of customary international law. \textit{Corfu Channel (U.K. v Albania) (Merits),} [1949] ICJ Rep 4, 23 (Apr. 9).}{\footnote{E.g., Metalclad Corp. v United Mexican States, ICSID Case No. ARB(AF)/97/1, Award of Aug. 30, 2000, (2001) 40 ILM 36, 52; see also Amco Asia Corp. v Indonesia, Award of Nov. 21, 1984, (1985) 24 ILM 1022, 1037 (collecting cases and arbitral awards applying Chorzów Factory).}}

Countless international tribunals have cited \textit{Chorzów Factory} as the paramount compensation principle to guide determinations of the appropriate measure of damages for expropriation.\footnote{See, e.g., Amoco Int’l Fin. Corp. v Iran, (1987) 15 Iran-US CTR 189, (1988) 27 ILM 1314, 1360.} Notwithstanding some suggestions to the contrary,\footnote{See id. at 1361–2; see also Clagett, \textit{supra} n. 86, at 61–2. (International decisions rendered both before and after \textit{Chorzów Factory} have declared as “universally accepted rules of law” that an investor cannot be fully compensated for the going-concern value of his expropriated interests unless he is awarded both the “damage that has been sustained” as a result of the taking and the reasonably ascertainable “profit that has been missed.”’ (footnote and citations omitted).} it continues to represent the \textit{locus classicus} on compensation under international law.\footnote{See \textit{Amoco Int’l Fin. Corp.}, 27 ILM at 1363 (collecting cases and arbitral awards).}

\section*{B. PRINCIPLES OF VALUATION}

To implement \textit{Chorzów Factory}’s imperative in the context of an expropriation has traditionally required consideration of two issues: \textit{damnum emergens}, the value of the expropriated enterprise, including tangible property, contract rights, and intangible valuables such as business goodwill; and \textit{lucrum cessans}, lost profits.\footnote{Id. at 1360 (citing \textit{Chorzów Factory}, 1928 PCIJ Rep Series A No. 17, at 46–7 (Sept. 13)).} On the one hand, ‘the value of an expropriated enterprise does not vary according to [its] lawfulness or . . . unlawfulness’, because that value does not logically depend on the legal characterization of a fact totally foreign to the economic constituents of the undertaking, namely the conduct of the expropriating State’; on the other, considerable, but hardly unanimous, authority supports the view that international law requires states to pay a higher level of compensation for unlawful expropriations.\footnote{Id. at 1360 (citing \textit{Chorzów Factory}, 1928 PCIJ Rep Series A No. 17, at 46–7 (Sept. 13)). The Iran-U.S. Claims Tribunal has emphasized that the “first principle established by the Court [in \textit{Chorzów Factory}] is that a clear distinction must be made between lawful and unlawful expropriations, since the rules applicable to the compensation to be paid by the expropriating State differ according to the legal characterization of the taking”. The Tribunal continued: ‘The difference is that if the taking is lawful the value of the undertaking at the time of the dispossession is the measure and the limit of the compensation, while if
it is unlawful, this value is, or may be, only part of the reparation to be paid.\footnote{Ian Brownlie’s treatise asserts to similar effect that}

\footnote{\[t\]he practical distinctions between expropriation unlawful \textit{sub modo}, i.e., only if no provision is made for compensation, and expropriation unlawful \textit{per se} would seem to be these: the former involves a duty to pay compensation only for direct losses, i.e., the value of the property; the latter involves liability for consequential loss (\textit{lucrum cessans}); \ldots}

One line of authority would therefore hold that for a lawful expropriation, payment of \textit{damnum emergens} suffices; for an unlawful expropriation, the host state also owes compensation for reasonably ascertainable lost profits.\footnote{\textit{Id.}}

The distinction between \textit{damnum emergens} and \textit{lucrum cessans} provides a useful moral compass for distinguishing between lawful and unlawful expropriations. But it is economically anachronistic when applied to expropriations of foreign investments. In modern economic terms, the value of an enterprise is not the enterprise itself; it is the stream of profits it can be expected to produce over its lifetime. That forecast is what determines the price that the hypothetical willing buyer would pay the hypothetical willing seller. To say that in an unlawful expropriation, the victim must be awarded the value of the expropriated property and lost profits is therefore to double-count. Yet the distinction between \textit{damnum emergens} and \textit{lucrum cessans}, for all its anachronism, serves a useful policy purpose insofar as it permits international tribunals to penalize egregious expropriations and, hopefully, to deter them in the future. For this reason, the traditional distinction proves particularly significant in the context of creeping expropriations. By definition, they seldom, if ever, will be lawful.\footnote{\textit{Id.}}

Full compensation therefore should include \textit{lucrum cessans} to further the goal of deterrence. Otherwise, as Judge Brower suggested, ‘the host state would pocket the difference between the lower value the undertaking was shown by post-taking experience to have had and the higher

\footnote{Sedco, Inc. v Nat’l Ir. Oil Co., (1986) 10 Iran-US CTR 180, 25 ILM 629, 640 (Brower, J., concurring). While a government conceivably might acknowledge the expropriatory effect of its regulatory acts and omissions at some point and pay an investor compensation as required by international law, in practice, governments that expropriate an investment serially, by regulation or other cumulative acts that depreciate its value, rarely, if ever, acknowledge that such acts comprise an expropriation. Most frequently, they will claim that the acts represent a valid exercise of their police powers, a response to a contractual breach by the investor or, perhaps, that the investor ‘assumed the risk’ of the effect such acts would have on its investment and cannot now expect the government to pay compensation for losses incurred in the ordinary course of business. Moreover, it is difficult to see how an expropriation accomplished furtively, by a series of ostensibly valid measures that collectively deprive an investor of its property rights, could be deemed to comport with the due process requirements for a lawful expropriation under most BITs. Hence, creeping expropriations, in practice if not by definition, almost without exception prove to be unlawful.}
value it objectively enjoyed at the moment of taking . . . [N]o system of law sensibly can be understood as intended to reward unlawful conduct.'\textsuperscript{105}

To digress briefly, it is important to recognize here that Judge Brower’s approach is crafted for an indirect expropriation where no express decree of expropriation exists, but credible evidence of an intent to expropriate does. A further award of \textit{lucrum cessans} serves to deny the expropriating state any benefit from its delict. That the investor receives a reinforced value of its expropriated investment is coincidental, for as Judge Brower acknowledges, international law does not require an award of \textit{lucrum cessans} in cases of lawful expropriation. In cases of consequential expropriation, no expropriatory intent may be found, and the result of the actions of the host state usually leave little in the way of the original investment. The investment has not been seized and transferred to the state or its designated beneficiary; it has been destroyed. Hence, an award of \textit{lucrum cessans} does not serve to deprive the host state of the profits of the enterprise, for there are none. What is called, in this context, \textit{lucrum cessans} is essentially additive, a fine, the amount of which is supposedly equivalent to the \textit{lucrum cessans} of the failed enterprise. There may well be sound reasons to sanction a state that fails to fulfill its BIT obligation to create or maintain a normative environment propitious to foreign investment. But we find no basis for such a punitive award under customary international law at this time. We would therefore conclude that while an award of what is called \textit{lucrum cessans} may be warranted for some creeping expropriations, it should not be for consequential expropriations.

BITs generally adopt the principles enunciated in \textit{Chorzów Factory} in substance if not form.\textsuperscript{106} A representative provision provides:

\textquoteleft[Prompt, adequate, and effective\textquoteright] compensation shall be equivalent to the \textit{fair market value} of the expropriated investment immediately before the expropriatory action was taken or became known, whichever is earlier; be paid without delay; include interest at a commercially reasonable rate from the date of expropriation; be fully realizable; and be freely transferable at the prevailing market rate of exchange on the date of expropriation.\textsuperscript{107}

\textquoteleftFair market value\textquoteright is a term of art. It is generally taken to mean the price that a willing buyer would pay a willing seller.\textsuperscript{108} The proper method to calculate fair market value differs, however, depending on the nature of the expropriated enterprise and the circumstances attending the

\textsuperscript{105} \textit{Amoco Int'l Fin. Corp.}, 27 ILM at 1400 note 22 (Brower, J., concurring); \textit{cf. Sedco, Inc. v Nat'l Ir. Oil Co.}, (1986) 10 Iran-US CTR 180, 25 ILM 629, 648 note 35 (Brower, J., concurring) (suggesting that punitive or exemplary damages might be sought for an unlawful expropriation because otherwise ‘the injured party would receive nothing additional for the enhanced wrong done it and the offending state would experience no disincentive to repetition of the unlawful conduct’).

\textsuperscript{106} See Gudgeon, supra n. 37, at 113.

\textsuperscript{107} U.S.-Arg. BIT, art. IV(1) (emphasis added); \textit{compare} U.K.-Pan. BIT, art. 5(1) (‘Such compensation shall amount to the fair value which the investment expropriated had immediately before the expropriation became known, shall include interest until the date of payment, shall be made without delay, be effectively realisable and be freely transferable.’).

\textsuperscript{108} \textit{INA Corp. v Iran} (1985) 8 Iran-US CTR 373, section III; \textit{see also} Restatement (Third) of Foreign Relations Law section 712 (1989).
Because the willing buyer is hypothetical, and because the expropriated investor can hardly be characterized as a willing seller, the willing-buyer-willing-seller formula, despite its redolence of economic precision, is actually quite speculative—far more of an art than a science, as anyone who has reviewed expert opinions in these matters can attest. Still, for going concerns (i.e., enterprises with a history of profitability), fair market value generally includes, in addition to the net value of the enterprise’s tangible assets on the date of the expropriation, an estimate of future profits subject to a discounted cash flow analysis. Economists employ the ‘going-concern’ method subject to a discounted cash flow analysis in order to account for a potential decrease in the projected value of money over time and potential business risk.

The going-concern method has been adopted by many international tribunals, for it seems to comport best with the principles established by Chorzów Factory and its progeny. But it will not always be practicable. In Metalclad, for example, the tribunal observed that ‘where the enterprise has not operated for a sufficiently long time to establish a performance record or where it has failed to make a profit, future profits cannot be used to determine going concern or fair market value’. In these circumstances tribunals must resort to one of several common alternatives. These include (i) ‘book value’, the net value of an enterprise’s assets; (ii) ‘replacement value’, an estimate of the amount ‘necessary to create a similar undertaking’; (iii) ‘liquidation value’, the amount ‘at which individual assets comprising the enterprise or the entire assets of the enterprise could be sold under conditions of liquidation to a willing buyer less any liabilities which the enterprise has to meet’; and (iv) ‘actual investment’, the amount in fact invested prior to the expropriation.

Each method is appropriate in some circumstances but not others. In 1992, the World Bank, ‘[w]ithout implying the exclusive validity of a single standard for the fairness by which compensation is determined’, proposed guidelines to assist decision-makers in determining the most suitable method in light of the nature of the expropriated enterprise:

(i) for a going concern with a proven record of profitability, on the basis of the discounted cash flow value;

---

109 Dolzer & Stevens, supra n. 2, at 110; see also Cornelius F. Murphy, Jr., Limitations Upon the Power of a State to Determine the Amount of Compensation Payable to an Alien Upon Nationalization, in III The Valuation of Nationalized Property in International Law 49, 61 (Richard B. Lillich ed., 1975) (‘The fairness of a compensation award depends upon a proper regard being paid to all relevant considerations that, in varying degrees, touch upon the history of a given investment and its future potential after acquisition by the nationalizing State.’).


111 Clagett, supra n. 86, at 49.

112 See id. at 60–7. 113 Metalclad Corp., 40 ILM at 52.

114 Amoco Int’l Fin. Corp., 27 ILM at 1369.

115 World Bank Guidelines, supra n. 77, at 1383.

116 See Metalclad Corp., 40 ILM at 52.
(ii) for an enterprise which, not being a proven going concern, demonstrates lack of profitability, on the basis of the liquidation value;
(iii) for other assets, on the basis of (a) the replacement value or (b) the book value in case such value has been recently assessed or has been determined as of the date of the taking . . . \(^{117}\)

Each of these methods perforce requires a tribunal to ascertain or stipulate the moment or date of expropriation. That date establishes the reference point for calculating fair market value pursuant to any of these methods. Decision-makers must therefore settle, by one mode of analysis or another, upon a ‘moment of expropriation’ at which to appraise fair market value. The often nebulous and convoluted factual circumstances that comprise a creeping expropriation, and \(a\) fortiori \(a\) consequential expropriation, tend to make the moment of expropriation elusive, assuming, that is, that one can meaningfully be identified at all in such cases.\(^{118}\) At one extreme, a tribunal could elect to set the moment of expropriation at the date of the first governmental act or omission in the series of deleterious measures that, in the aggregate, constitute the expropriation; at the other, at the date of the last such measure. In the former case, adequate compensation may not be provided because investors often continue—not necessarily irrationally or irresponsibly, given the information available to them contemporaneously\(^{119}\)—to invest after the initial act ‘tantamount to’ expropriation. In the latter, the ‘fair market value’ may well have depreciated substantially, making compensation on that basis, too, inadequate insofar as it evidently fails to respect Chorzów Factory’s imperative of restitutio in integrum. The proper procedure in these circumstances is not obvious.

### C. Alternatives: Delinking Expropriation and Valuation

In a series of awards rendered in the 1980s, the Iran-United States Claims Tribunal proposed that ‘where the alleged expropriation is carried out by way of a series of interferences in the enjoyment of the property, the breach forming the cause of action is deemed to take place on the day when the interference has ripened into a more or less irreversible deprivation of the property rather than on the beginning date of the events’.\(^{120}\) That date, according to the Tribunal, must be ascertained by reference to the fact-specific ‘circumstances of each case’.\(^{121}\) The Tribunal

---

\(^{117}\) World Bank Guidelines, supra n. 77, at 1383.

\(^{118}\) Cf. Koven, supra n. 43, at 277 (expressing the view that ‘where a slow accretion of interferences with the investor’s management or control of the foreign enterprise results in the inability of the project to continue, determining the date on which “an action” created that result is an absurd exercise’).

\(^{119}\) See infra text accompanying n. 137–40.


\(^{121}\) Int’l Technical Prods. Corp. v Iran, (1985) 9 Iran-US CTR 206, 241; see also Compañía del Desarrollo de Santa Elena, S.A. v Costa Rica, ICSID Case No. ARB/96/1, Award of Feb. 17, 2000,
enunciated this proposition, however, in a series of decisions that, while arising from diverse factual scenarios, nonetheless shared a common political context, the 1979 Islamic Revolution in Iran. That meant, in practice, that in most cases involving indirect or creeping expropriations, the events culminating in a compensable expropriation tended to be similar; for example, the Iranian government’s gradual assumption of managerial control or appointment of governmental ‘supervisors’ who tended over time to interfere with foreign property rights in increasingly more intrusive ways.

Jurists and scholars generally cite Starrett Housing Corp. v Iran\textsuperscript{122} for the proposition ‘that measures taken by a State can interfere with property rights to such an extent that these rights are rendered so useless that they must be deemed expropriated, even though the State does not purport to have expropriated them and the legal title to the property formally remains with the original owner’.\textsuperscript{123} That proposition remains valid, and indeed, finds ample support in more recent arbitral awards.\textsuperscript{124} But it is worth recalling that the majority award in Starrett adopted what Judge Holtzmann, concurring, aptly described as a ‘sterile formalism’, for it declined to appreciate the legal significance of the ‘steady and inexorable’ progression of expropriatory events that preceded the Iranian government’s formal appointment of a manager for the claimant’s property.\textsuperscript{125} In consequence, the Tribunal effectively left it to an expert to determine to what extent, if any, these events should be considered in assessing the fair market value of Starrett’s property rights as of the moment of expropriation.\textsuperscript{126} While the Iran-United States Claims Tribunal added immeasurably to international jurisprudence on expropriation, including indirect expropriation, the question of the moment of expropriation therefore rarely arose. As one judge of the Tribunal acknowledged, ‘the often-difficult question of when allegedly temporary interference with the rights of property owners should be considered to have ripened into compensable taking or deprivation of those rights rarely troubled the Iran-United States Claims Tribunal’.\textsuperscript{127}

The proliferation of bilateral and multilateral investment treaties over the past decade, coupled with the tendency of governments now to

\textsuperscript{122} (1983) 4 Iran-US CTR 122.
\textsuperscript{123} Id. section IV(1) (Holtzmann, J., concurring).
\textsuperscript{124} See, e.g., Metalclad Corp. v United Mexican States, ICSID Case No. ARB(AF)/97/1, Award of Aug. 30, 2000, (2001) 40 ILM 36, 50 (affirming that expropriation under the North American Free Trade Agreement include not only formal expropriations, but also ‘covert or incidental interference with the use of property which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of property’).
\textsuperscript{126} Id. section IV(3) (noting that the majority award’s determination that the expropriation did not occur until January 31, 1980, ‘may, as a practical matter, have little effect on whatever damages may be determined’ because, \textit{inter alia}, ‘it is not yet known what method the expert will use to determine the value of the expropriated property’, and ‘[u]nder some methods of valuation, the later date of expropriation might have relatively little monetary significance’).
\textsuperscript{127} Aldrich, supra n. 18, at 587.
eschew formal expropriation, forces the phenomena of creeping and consequential expropriations into sharper focus. More recent arbitrations, principally conducted under the auspices of ICSID, indicate the extent to which the relevant ‘moment of expropriation’ in cases of creeping expropriations can prove slippery and elusive. But because ‘[v]irtually no BITs make reference to [the] different valuation methods in their expropriation clause’, BITs deliberately invite or perhaps even require decision-makers to exercise discretion in determining the appropriate method under the circumstances, including, where necessary, to ascertain the appropriate ‘moment’ from which to calculate compensation pursuant to the method elected.\(^{128}\)

BITs establish the moment of expropriation by reference to ‘the fair market value of the expropriated investment immediately before the expropriatory action was taken or became known, whichever is earlier’.\(^ {129}\) The pertinent moments under the BIT therefore occur either on the date of the expropriation or when the expropriation ‘bec[o]me[s] known’. In the case of a direct, formal expropriation, both of these moments will almost invariably be vivid and clearly demarcated, for example, the date on which the government promulgates an executive or legislative decree proclaiming its intent to expropriate. A creeping expropriation, by contrast, involves an accretion of acts and omissions of often nebulous legality that accrue over a longer time period, culminating in an aggregate effect tantamount to an outright expropriation.\(^ {130}\) A consequential expropriation involves a state’s interference with or failure to create or maintain the normative legal, administrative, and regulatory framework contemplated by a BIT, as a consequence of which managerial control, profitability, and ultimately viability, erode. Thus, the events comprising a creeping or consequential expropriation far less frequently reveal a dramatic moment that demarcates the act of expropriation.

\(^{128}\) See Francisco Orrego Vicuña, \textit{The International Regulation of Valuation Standards and Processes: A Reexamination of Third World Perspectives, in III The Valuation of Nationalized Property in International Law} 131, 134 (Richard B. Lillich ed., 1975) (‘In view of present international realities, it is neither possible nor desirable to try to establish a single standard or principle for the valuation of nationalized foreign property as a universal rule of international law. It is more realistic to approach the problem through the development of a plurality of well-defined standards.’); \textit{see also} World Bank Guidelines, \textit{supra} n. 77, at 1383; \textit{cf}. Richard B. Lillich, \textit{The Valuation of Nationalized Property by the Foreign Claims Settlement Commission, in I The Valuation of Nationalized Property in International Law} 95, 99 (Richard B. Lillich ed., 1972) (noting, in the context of appraising the United States Foreign Settlement Claims Commission, the desirability of submitting multiple methods of appraising the value of expropriated property into evidence because it increases the ‘probability . . . that an adequate award will be made’) (citation and internal quotation marks omitted).

\(^{129}\) \textit{E.g.}, U.S.-Arg. BIT, art. IV(1); \textit{compare} Model BIT of Austria, art. IV (‘[C]ompensation shall amount to the value of the investment immediately preceding the time in which the actual or impending [expropriatory] measure became public knowledge.’), \textit{with} Model BIT of the United Kingdom, art. 5(1) (‘[C]ompensation shall amount to the genuine value of the investment expropriated immediately before the expropriation or before the impending expropriation became public knowledge, whichever is earlier . . . ’), \textit{in} Dolzer & Stevens, \textit{supra} n. 2, at 167, 169–70; 228, 232.

\(^{130}\) See Higgins, \textit{supra} n. 22, at 325.
In Compañía del Desarrollo de Santa Elena, S.A. v Costa Rica, an ICSID Tribunal echoed the standard enunciated by the Iran-U.S. Claim’s Tribunal’s in Malek, remarking that ‘expropriated property is to be evaluated as of the date on which governmental “interference” has deprived the owner of his rights or has made those rights practically useless’. But in Santa Elena, Costa Rica had expropriated the claimant’s property directly and lawfully: by formal decree, in a non-discriminatory manner, and for a public purpose, viz., preservation of the environment. It did not contest the claimant’s right to compensation. In fact, Costa Rica agreed that ‘the expropriating state [owes] a duty, in both Costa Rican and international law, to pay compensation in respect of even a lawful expropriation’, and ‘that the compensation to be paid should be based upon the fair market value of the Property’.

The sole dispute in Santa Elena centered on determining the date on which the claimant’s property had been expropriated for purposes of assessing its fair market value. Costa Rica argued that the date of its formal decree of expropriation also constituted the relevant moment of expropriation for purposes of assessing fair market value. The Tribunal agreed because ‘[a]s of that date, the practical and economic use of the Property by the Claimant was irretrievably lost, notwithstanding that [the Claimant] remained in possession of the Property’. The Tribunal chose this formal date of expropriation, not because it was the formal or legal date, but because, as an economic fact, that was when the deprivation occurred. Santa Elena therefore seems to instruct us that the moment of expropriation for purposes of assessing the fair market value of the investment is the moment when the practical and economic use of the investment is irretrievably lost. In the circumstances of a creeping or consequential expropriation, however, where the state takes property rights indirectly and unlawfully, it becomes difficult if not impossible to discern when, precisely, the foreign investor ‘irretrievably lost’ the value of its investment.

In the case of a direct expropriation accomplished by a formal decree, such as Santa Elena, the expropriating state, by definition, determines in the first instance the moment of expropriation. If the investor disputes that determination, then, as in Santa Elena, it will be reviewed by the jurisdiction to which the parties consented to submit their dispute. Conversely, it is the foreign investor, by its allegation, that ‘determines’ in the first instance the moment of expropriation where, as in the case of a creeping or consequential expropriation, the state has allegedly

---

132 See supra n. 120–1 and accompanying text.
133 Id. at 1330 para. 78 (emphasis added).
134 Id. at 1328–9.
135 See id. at 1329.
136 Id. at 1330.
137 The Santa Elena tribunal implicitly recognized that creeping expropriations may present a distinct inquiry vis-à-vis valuation. The tribunal observed, for example, that ‘[a] decree which heralds a process of administrative and judicial consideration of the issue [i.e. control over an investment or property rights] in a manner that effectively freezes or blights the possibility for the owner reasonably to exploit the economic potential of the property, can, if the process thus triggered is not carried out within a reasonable period of time, properly be identified as the actual act of “taking.”’ Id. at 1330.
expropriated an investment through a gradual accretion of acts of malfeasance and nonfeasance or, even more elusively, by failing to establish or undermining the normative framework on which the foreign investor relied. Needless to say, that allegation, if disputed, remains subject to review by the jurisdiction to which the parties consented to submit their dispute. The point is not to enable foreign investors to obtain a windfall by identifying an unreasonably early stage as the relevant date of expropriation; it is to enable the tribunal to appreciate the effect of the investor’s perception of expropriation in determining the fair market value of the expropriated investment in circumstances where the state concerned has less to contribute to the clarification of this issue. Because of the nature of creeping and consequential expropriations, that is, it will be the foreign investor’s initial allegation of when the expropriation ‘became known’ that frames the dispute.

The paramount policy objectives of BITs support this conclusion. States conclude BITs principally to encourage reciprocal foreign investment, and, as a means to that end, to provide a stable and predictable framework for investment by each party’s nationals in the territory of the other. That goal obviously would be ill-served by any policy that rewards creeping or consequential expropriations. Yet investors will often be either unaware or inclined to resist the conclusion that a host state has, by an act or acts of nebulous legality (the economic effects of which remain unknown at the time), initiated what will ultimately constitute an expropriation. Often, foreign investors will be anxious to rescue or fortify their investments in the face of discrete harmful acts or regulatory omissions. Government officials may also assure them that a single ‘measure tantamount to expropriation’ represents an anomaly; it will be swiftly repaired or compensated, whether directly or by some other indulgence or offset. In these circumstances investors anxious to save their investments may well be inclined to sink further capital into them in an effort to compensate for the harmful governmental interferences or other measures tantamount to expropriation. This is particularly so where an investor reasonably believes, based on knowledge of the prevailing political and economic conditions, that the host state will not provide ‘prompt, adequate, and effective’ compensation. Investment of further capital in such cases reflects a desperate attempt to save the investment, and under the circumstances, may be the only rational and responsible course of action. To penalize the investor for such efforts may well be, to use an American expression, ‘Monday-morning-quarter-backing’, unreasonably requiring clairvoyance on the part of the investor.

While the decision to invest further capital, to hang on ‘stoically . . . in the face of host government interference’, 138 may at times be ascribed in part to the vicissitudes of business risk (and, as such, should

not be compensable), at other times it reflects a natural reaction to prior measures tantamount to expropriation. The decision of the Iran-United States Claims Tribunal in *Foremost Tehran, Inc. v Iran*,\(^1\) for example, indicates ‘that continued efforts within a company by shareholders to protect their interests [in the face of escalating governmental acts that serially diminish the value of their property rights] could endanger [the shareholders’] ultimate prospects of success [on a claim for expropriation]’.\(^2\) Victims of creeping or consequential expropriations therefore may recognize expropriatory conduct at a relatively early stage, but resist yielding to it for as long as possible, hoping to reverse it.

Alternatively, foreign investors may realize only in retrospect that the ineluctable consequence of various acts of governmental interference or measures already taken, being taken or—in the case of nonfeasance—not being taken, has been to effect an expropriation. Many of the constituent pieces of a creeping expropriation may be disguised as legitimate, or arguably legitimate, regulatory acts, responses to alleged contract breaches or temporary exercises of a state’s police power. In *Liberian Eastern Timber Corp. (LETCO) v Liberia*,\(^3\) it will be recalled, the Liberian government withdrew portions of LETCO’s initial concession first in 1970, then in 1971, and again in 1977. It demanded renegotiation of LETCO’s concession agreement in 1979. It then accused LETCO of breaching that agreement, and on that basis, withdrew still greater portions of the concession. The government ultimately claimed that LETCO could not exploit the remaining concession areas and thereby justified its decision to reassert control of them.\(^4\) But only in November 1984, more than one year after LETCO finally elected to institute arbitration, did the government formally acknowledge its decision to nullify the concession agreement based on alleged breaches by LETCO.\(^5\) While LETCO undoubtedly understood that the government’s actions threatened its investment and had already depreciated that investment’s value substantially, it chose not to institute arbitral proceedings until March 1983. This suggests that LETCO’s management either failed fully to appreciate the aggregate expropriatory effect of the Liberian government’s actions until that time or that it sought desperately to rescue its investment by all means before resorting to compulsory dispute resolution, for, in the interim, ‘LETCO continued to petition the highest governmental bodies of the Republic of Liberia so that they might intervene on its behalf to correct the situation’.\(^6\)

---

\(^{1}\) (1986) 10 Iran-US CTR 228.

\(^{2}\) Adrich, *supra* n. 15, at 591; see also id. at 607 (observing that ‘in several cases property owners found that their claims before the Tribunal had been prejudiced by their prior efforts to retain or exercise their rights in the property after they had been substantially deprived of those rights by actions attributable to Iran’).


\(^{4}\) *LETCO*, 26 ILM at 660. \(^{5}\) Id. \(^{6}\) Id. at 660.
All this is not to suggest, however, that investors should, or should be entitled to, cry ‘expropriation’ at the first sight of adverse governmental conduct. That, too, would be contrary to the objective of BITs to establish a stable, hospitable, normative framework for reciprocal foreign investment. It would be destructive of the normative goals of BITs for the law to encourage foreign investors prematurely to claim that their investments have been expropriated and to resort to compulsory dispute resolution under the relevant BIT provision. General international law has long discouraged and reprehended premature invocation of third-party dispute resolution. At the same time, for the foregoing reasons, the general rule proposed by the Iran-U.S. Claims Tribunal may not always be well-timed for determining the moment of expropriation for purposes of assessing the fair market value of an investment subjected to a creeping or consequential expropriation. Were the critical moment of expropriation for purposes of valuation set at the date of the last of the series of deleterious governmental acts of malfeasance or nonfeasance that ‘ripened into a more or less irreversible deprivation of the [investment]’, then the fair market value of that investment may well be determined to be substantially less than were the critical moment set at the date of one of the earlier acts. The ironic, indeed perverse, result of that theory would be to reward states for accomplishing expropriation tranche par tranche rather than d’un coup and to encourage states to accomplish expropriation furtively, either by a creeping or disguised series of regulatory acts and omissions of nebulous legality (creeping expropriation) or by evasion or abdication of the often politically difficult task of establishing an appropriate normative environment for investment (consequential expropriation). Conversely, it would penalize foreign investors for attempting to avoid expropriation and sustain their investments by, inter alia, fortifying them with additional capital in the face of measures of nebulous legality.

These results would be calamitous. In the first place, they contravene the venerable and general legal principle, common to municipal and international law, that a delictor may not benefit from its own delict. Second, contrary to the objectives of BITs, they would encourage foreign investors promptly to resort to compulsory dispute-resolution at an early stage rather than seek to resolve matters amicably through negotiation with the host state—lest the investor risk losing potential compensation as the fair market value of its investment progressively depreciates with each subsequent measure ‘tantamount to expropriation’.\textsuperscript{145} It would be implausible to ascribe an intention to produce such results to the drafters of BITs. It would also be wholly inconsistent with the general principles of international law on compensation explained in the preceding section and for which Chorzów Factory remains the lodestar.\textsuperscript{146} Hence, the

\textsuperscript{145} See Koven, supra n. 43, at 316 (noting one example of this phenomena arising out of the Iranian revolution, whereby ‘every month allowed to lapse between the closing of the [investor’s] plant and the [formal] date of expropriation reduced the value of the net investment’).

\textsuperscript{146} Factory at Chorzów (Germany v Poland), 1928 PCIJ Rep Series A No. 13, at 47 (Sept. 13).
Iran-U.S. Claim’s Tribunal’s proposition—that ‘where the alleged expropriation is carried out by way of a series of interferences in the enjoyment of the property’, the moment of expropriation is ‘the day when the interference has ripened into a more or less irreversible deprivation of the property rather than on the beginning date of the events’—may threaten to work a manifest injustice in circumstances of creeping or consequential expropriations: It conflates the ‘moment of expropriation’ with what might be denominated the ‘moment of valuation’, the date on which the fair market value of an investment so expropriated should be assessed for purposes of determining the ‘prompt, adequate, and effective’ compensation required by customary international law and codified in BITs. There is no reason why the results of these two analyses should be temporally congruent.

Some methods of calculating fair market value may mitigate or even obviate the problem. If, for example, the host state accomplishes a creeping expropriation before a foreign enterprise begins operating or even before the entire investment has been made, then it may be legally sufficient to award the foreign investor the sum total of its actual investment. The ICSID tribunal in *Metalclad Corp. v United Mexican States* reached that conclusion, for example, and cited precedents reaching the same result under comparable circumstances. But to calculate fair market value on the date of the last ‘measure tantamount to expropriation’ that ‘ripened’ into a manifest expropriation would be, according to most other methods of valuation (e.g., book value, liquidation value, and replacement value), to assess an investment’s value at the very ‘moment’ when the accretion of unlawful acts of the host state has so dramatically devalued the investment as to render it de facto expropriated—its ‘practical and economic use’ having been, by that time, ‘irretrievably lost’.

That theory of valuation could encourage states to accomplish expropriations furtively and indirectly, by regulatory malfeasance, misfeasance, or non-feasance, or by a ‘creeping’ progression of deleterious actions or inactions, no one of which, however, may be readily identified by an objective decision-maker as the critical ‘moment’.

---


148 *Cf. Starrett Hous. Corp. v Iran*, (1984) 4 Iran-US CTR 123, 23 ILM 1090, 1115 (Holtzmann J., concurring) (observing in analogous circumstances that ‘under some methods of valuation, [a] later date of expropriation might have relatively little monetary significance as compared to an earlier date’).


150 *Compañía del Desarrollo de Santa Elena, S.A. v Costa Rica*, ICSID Case No. ARB/96/1, Award of Feb. 17, 2000, (2000) 39 ILM 1317, 1330; *cf. Borg v Int’l Silver Co.*, 11 E2d 147, 152 (2d Cir. 1925) (Hand, J.): The suggestion that the book value of the shares is any measure of their actual value is clearly fallacious. It presupposes, first, that book values can be realized on liquidation, which is practically never the case; and, second, that liquidation values are a measure of present values. Every one knows that the value of shares in a commercial or manufacturing company depends chiefly on what they will earn, on which balance sheets throw little light.
That said, the crucial point is not that the proposition enunciated by the Iran-U.S. Claims Tribunal is necessarily ‘wrong’. It may well provide the appropriate standard for discerning the proper moment of expropriation in many cases of indirect expropriations, where it makes sense to identify the act of expropriation more closely with one or two discrete events, e.g., the fixing of a price or the appointment of a governmental ‘supervisor’. It should, however, be applied with caution when invoked to assess the fair market value of an investment expropriated consequentially or by a creeping accretion of measures.\textsuperscript{151} BITs and comparable multilateral investment treaties should, as a matter of both the intent of their drafters and the policies that animate them, be construed to deter, not reward, unlawful expropriations of all kinds. If application of the Iran-U.S. Claims Tribunal’s standard in practice reduces the amount of compensation due to victims of creeping or consequential expropriations, then, we suggest, the ‘moment of expropriation’ should be distinguished from the ‘moment of valuation’ for these purposes. And again, it is in this regard that the determination in the first instance of the investor is perforce the starting point for analysis. In any event, and whatever the method adopted by a tribunal to determine the proper ‘moment of expropriation’ in circumstances of creeping and consequential expropriations, that determination must enable the tribunal to give full effect to Chorzów Factory’s imperative ‘that reparation must, so 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’.\textsuperscript{152}

While the approach we suggest has yet to be adopted expressly, several prior awards implicitly recognize the need to distinguish between the moment of expropriation, where that phrase denotes the completion of certain formalities, and the moment of valuation, the date on which the fair market value of the claimant’s property should be assessed for purposes of providing ‘prompt, adequate, and effective’ compensation. In Amoco International Finance Corp. v Iran,\textsuperscript{153} the Iran-United States Claims Tribunal found the expropriation of Amoco’s contract rights to be ‘complete’ on December 24, 1980, when the Iranian Minister of Petroleum formally notified Amoco’s management that it viewed a 1967 joint venture between Amoco and the Iranian National Petrochemical Company as null and void. But the Tribunal nonetheless awarded Amoco compensation based on the value of its interest as of July 31, 1979, the date on which the Tribunal determined the de facto taking to have occurred.\textsuperscript{154}

\textsuperscript{151} This is particularly true because, as the Iran-U.S. Claims Tribunal has observed, market value ‘is an ambiguous concept, to say the least . . . when an open market does not exist for the expropriated asset or for goods identical or comparable to it’. Amoco Int’l Fin. Corp. v Iran, (1987) 15 Iran-US CTR 189, 27 ILM 1314, 1367. \textsuperscript{152} (Germany v Poland) 1928 PCIJ Rep Series A No. 13, at 47 (Sept. 13). \textsuperscript{153} (1987) 15 Iran-US CTR 189, (1988) 27 ILM 1314. \textsuperscript{154} Id. at 1348; see also Aldrich, supra n. 18, at 595 (‘[B]y making the valuation date July 31, 1979, the Tribunal implicitly accepted that as the effective date of the taking, rather than the date of the subsequent completion of the formalities.’).
Moreover, as a general matter, the approach we suggest comports with customary international law, which dictates that valuation of expropriated property must exclude ‘any diminution in value attributable to wrongful acts’ of the expropriating government.\textsuperscript{155} The depressing effect on values of threats or acts of nationalization must be ignored in ascertaining the market value of subsequently nationalized enterprises. Valuation in such cases is ‘calculated as if the expropriation or other governmental act had not occurred and was not threatened’.\textsuperscript{156}

IV. Conclusion

As early as 1961, Martin Domke wrote that ‘[a]n outright transfer of title may no longer constitute the foremost type of “taking” property in the technique of modern nationalization. There are various other means of “creeping” or “disguised” nationalization through regulations of foreign governments.’\textsuperscript{157} The past four decades have validated that observation. With the demise of major socialist economies and the increasing acceptance of free-market economics by even those that nominally remain—of which the People’s Republic of China provides perhaps the major example—states today rarely expropriate foreign investments by formal decree. But the failure of political and economic administrations in many states continues to contribute to the relatively frequent phenomenon of indirect expropriations, particularly those that, we suggest, should more precisely be denominated ‘creeping’ or ‘consequential’ expropriations. BITs and comparable multilateral investment treaties, which have become the preeminent mechanisms for preventing expropriations, compensating its victims, and thereby preserving the ‘favourable

\textsuperscript{155} Starrett Hous. Corp, (1984) 4 Iran-US CTR 122, 23 ILM 1099, 1133 (Howard M. Holtzmann, concurring); see also id. at 1137 (expressing the view that the majority award should not have suggested a mode of valuation, but should rather have ‘included an express instruction to the expert to exclude any diminution in value attributable to wrongful acts of Iran before the date of taking.’).

\textsuperscript{156} Lillich, supra n. 128, at 97 note 13 (quoting 8 M. Whiteman, Digest of International Law 1143 (1967)); see, e.g., Compañía del Desarrollo de Santa Elena, S.A. v Costa Rica, ICSID Case No. ARB/96/1, Award of Feb. 17, 2000, (2000) 39 ILM 1317, 1331 (observing, in the course of assessing the value of the claimant’s property as of the moment of expropriation, the absence of ‘evidence that its value at that date was adversely affected by any prior belief or knowledge that it was about to be expropriated’). Nevertheless, in cases of ‘creeping’ expropriations, this rule cannot, by itself, repair the damages to the investor per Chorzów Factory, for a creeping expropriation may be accomplished by a series of acts that, by themselves, appear innocuous or of ambiguous legality, but together plainly deprive the foreign investor of its property rights. For instance, in the ICSID arbitration of Bentwenti et Bonfant v People’s Republic of the Congo, Award of Aug. 8, 1986, (1982) 21 ILM 740, the claimant cited, among other events cumulatively comprising the expropriation, the failure of the Congolese government to ‘convene the Board of Directors as often as would have been desirable for solving the difficulties of the Company.’ Id. at 753. While that dereliction, by itself, may have depreciated the value of the company jointly owned by the claimant and the government, it would be implausible to contend that this act alone constituted an expropriation. Only in the context of the entire series of events comprising the creeping expropriation could its contribution to the creeping expropriation ultimately accomplished by the Congolese government be properly appreciated. The legality of certain expropriatory events, in short, may be less than clear where it is their cumulative effect that constitutes the expropriation.

\textsuperscript{157} Domke, supra n. 31, at 588–9.
conditions’ for mutually beneficial reciprocal foreign investment, must respond to these changes in a manner consistent with the longstanding principles of customary international law.\textsuperscript{158}

To calculate compensation for consequential and creeping expropriations carried out within the legal universe of a BIT, tribunals can no longer be content to evaluate the fair market value of an expropriated investment as of the date when an accretion of governmental acts and omissions has so dramatically devalued that investment as to render it ‘practically useless’ or its value ‘irretrievably lost’. Because these principles may, in practice, threaten the stable and mutually beneficial normative framework for reciprocal foreign investment that states design BITs to create and maintain, international tribunals seeking to award compensation for investments expropriated consequentially or by a creeping series of measures ‘tantamount to’ expropriation may benefit from an alternative principle. Above all, any standard adopted to determine the appropriate date from which to calculate compensation should effectively deter, not reward, consequential and creeping expropriations.

In this regard tribunals seized with cases raising these issues may find it both useful and appropriate to disaggregate the moment of expropriation and the moment of valuation—to distinguish the ‘moment of expropriation’, which goes to the question of liability (i.e. whether an accretion of measures has ripened into a compensable expropriation), from the ‘moment of valuation’, which goes to the question of damages. Because creeping and consequential expropriations frequently demand highly fact-sensitive inquiries, it is neither possible nor prudent to suggest a monolithic or bright-line rule for calculating compensation in these circumstances. But as a general principle, the moment of valuation should be the date on which assessing the fair market value of a foreign investment for purposes of calculating compensation will enable a tribunal to give full effect to \textit{Chorzów Factory}’s imperative. Adoption of this principle, in our view, would contribute in the long term to fortifying the stable and predictable legal regime for reciprocal foreign investment upon which both foreign investors and developing states depend in the BIT generation.

\textsuperscript{158} Whether and to what extent BITs codify customary international law remains an open question. The nearly 2,200 BITs in existence today, see supra n. 4, and the increasing citation and application of general principles enunciated in arbitral awards rendered on the basis of their standards, suggests that the broader conception of expropriation embodied by BITs to some extent has become—and to some extent remains in the process of becoming—customary international law, insofar as states begin to acknowledge these standards as legally binding in contexts not governed by BITs. In \textit{S.D. Myers Inc. v Canada}, Award of Nov. 12, 2000, (2001) 40 ILM 1408, a NAFTA tribunal affirmed that the minimum standards of treatment for investments prescribed by NAFTA, which include the requirements for a lawful expropriation, and which mirror those contained in most BITs, conform generally to customary international law. See \textit{id.} at 1438, paras 259, 262.; see also \textit{CME Czech Republic B.V. v The Czech Republic}, UNCITRAL Final Award of Mar. 14, 2003, para. 497 (observing that the some 2,200 BITs and similar multilateral investment treaties have become ‘truly universal in their reach and essential provisions’ and suggesting that their ‘concordant provisions are variations on an agreed, essential theme’).