University of Gothenburg
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Business and Innovation Law II, 30 hec

Department of Law

Monitoring as Fact and Norm

ECONOMIC CONTRACT THEORY MEETS LEGAL REALITY IN INTERNATIONAL JOINT VENTURES

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1 Introduction: Two Views of the Same Boardroom

Two disciplines look at the same boardroom and see different things. The economist sees a monitoring mechanism: an agent whose presence reduces informational asymmetry and adjusts the incentive structure between the joint venture partners. The cost of her appointment is c; the benefit is the reduction of private benefit from B to b; the net effect on the financing constraint is calculable. The lawyer sees a fiduciary: a person bound by duties of care and loyalty to the company she serves, constrained by conflict-of-interest rules she cannot waive, and exposed to personal liability for breach. The economist asks whether the monitoring is cost-effective. The lawyer asks whether the monitor's conduct meets the standard that her position requires. They are asking different questions about the same person – and this essay is about what happens in the space between those questions.

The divergence is not merely terminological. It reflects fundamentally different ways of constructing the relationship between facts and norms. In economic contract theory, the analytical starting point is a set of given facts (effort levels, signal realisations, payoff structures) and the task is to design a contract that produces optimal outcomes given those facts.[1] The model's power lies in its capacity to derive clear predictions from explicit assumptions. But the assumptions embed a specific conception of what a "fact" is: something exogenous, determinable, and – critically – independent of the institutional process through which it is established.

Legal reasoning, particularly in the Scandinavian tradition, operates with a different understanding. The Nordic functional approach to law, developed through Hägerström's critique of metaphysical jurisprudence and refined by subsequent generations of scholars, rejects the idea that legal concepts carry fixed, context-independent meaning.[2] A concept like "due care" does not have an essential content that can be determined in the abstract; its meaning is constituted by the specific relation in which it is applied, the interests at stake, and the normative framework within which the court operates. As Martinson has argued, legal analysis necessarily moves through three registers (norms, facts, and values) and none of these registers is reducible to the others or prior to them.[3] Facts do not precede norms; they are partly constituted by normative categories. And norms do not float free of factual context; they acquire operational content through application to particular situations.

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[1] Tirole (2006), Chapter 3; Mallios, Lectures 3–4.

[2] For the foundational critique, see Olivecrona (1971); for the modern development, see Martinson, 'The Scandinavian Approach to Property Law, Described through Six Common Legal Concepts,' Juridica International 22 (2014), and Johan Sandstedt, Comparative Property Law and the Profound Differences between Nordic Functionalism and Continental Substantialism – the (Ir)relevance of Ownership, in Annina H Persson and Eleonor Kristoffersson, eds, Swedish Perspectives on Private Law Europeanisation, Oxford, Hart Publishing, 2017, s 41–52.

[3] Martinson, 'The Norms, Facts and Values Method,' Cahiers de Méthodologie Juridique, n. 36 (2022), pp. 1435–1452.

This methodological perspective has a direct bearing on the analysis of monitoring in joint ventures. The economic model treats monitoring as a mechanism that produces facts – facts about effort, about performance, about compliance – and the contract specifies the consequences of those facts. The functionalist legal analysis asks a different set of questions: what function does a particular piece of monitoring information serve in a particular legal relation? How does the legal system qualify that information, as evidence, as a basis for a claim, as a trigger for a contractual consequence, and what normative standards govern that qualification? The answers to these questions are not given by the economic model, they are produced by the legal system's own institutional processes. The monitoring data does not speak for itself. It must be interpreted, classified, and assessed within a framework of norms and values that the economic model treats as transparent but that are, in reality, constitutive of the legal outcome.

The central thesis follows from this contrast. The legal system partially fills the disciplinary function that, in the economic model, an external "budget breaker" must perform: fiduciary duties, liability rules, and standards of care impose consequences that go beyond the contractual sharing arrangement.[4] But those consequences are not automatic. They depend on ex post normative assessments – of care, of materiality, of causation – that introduce frictions the economic model does not capture. The legal rule operates, in Cooter and Ulen's terms, as a price that alters the incentive structure facing rational actors; but the effectiveness of that price depends on institutional factors, including the clarity of the rule and the cost, speed, and predictability of enforcement.[5] The legal system's budget-breaker function is therefore not a binary switch – law either works or it does not – but a variable whose effectiveness depends on calibration.

The argument proceeds by isolating four points at which the economic model's facts and the legal system's norms come apart: the translation of binary effort into an open-textured standard of care; the gap between economically informative and legally actionable signals; the divided loyalty of the partner-appointed monitor; and the threshold problem in triggering contractual consequences. Section 2 builds the economic apparatus, from the unilateral model to the team problem and the budget breaker; Section 3 maps the contractual monitoring mechanisms of real JV agreements onto it; Section 4 traces the four divergences where the model meets legal reality; Section 5 asks how a transactional lawyer can design contractual architecture to narrow them; and Section 6 explains, through the Scandinavian functional method, why the gap can be managed but never closed. The essay's contribution is to identify the specific points at which calibration succeeds and fails, and to show how contractual design can improve it.

[4] Holmström (1982).

[5] Cooter, R. & Ulen, T. (2016), Law & Economics, 6th ed., Chapter 1 on the relationship between legal rules and economic incentives, and Chapter 12 on property rights and transaction costs.

2 The Economics of Monitoring: From Unilateral to Bilateral

The economics that follow are not presented for their own sake. Each element of the model – effort, signal, budget breaker – becomes, in Section 4, a site where the legal system's construction of facts pulls away from the model's assumptions. The economist of the introduction builds her account here; the lawyer's objections are deferred until the apparatus is in place.

2.1 The Simple Case: Monitoring Under Unilateral Moral Hazard

The starting point is the fixed-investment model with moral hazard, as developed by Tirole and presented in Mallios's Lecture 3.[6] An entrepreneur with wealth $A < I$ seeks external financing for a project requiring investment I. The project yields R if successful and 0 if it fails. The probability of success is p_h under high effort and p_l under low effort, where low effort affords the entrepreneur a private benefit B. Because effort is unobservable, the lender must design a contract that makes high effort incentive-compatible: $\Delta p \times R_h \geq B$. This constraint limits pledgeable income and creates a financing threshold: only entrepreneurs with $A \geq \bar{A}$ are funded. The result is credit rationing – positive-NPV projects go unrealised because the information asymmetry makes them unfinanceable.[7]

Monitoring, as introduced in Mallios's Lecture 6, addresses this by adding a third actor who, at cost c, reduces the entrepreneur's private benefit from B to b.[8] The incentive-compatibility constraint relaxes to $\Delta p \times R_h \geq b$, the financing threshold falls, and more projects are funded. The monitor herself requires incentives ($\Delta p \times R_m \geq c$) and must invest I_m. Under competitive conditions, monitoring is socially beneficial when $p_h(B - b)/\Delta p > c$ – the expected gain from reducing the private benefit exceeds the monitoring cost.[9]

In a venture capital context, this framework is directly applicable. The VC fund invests I_m, monitors the startup founder, and reduces the scope for shirking. Limited partners provide the remaining capital $I - A - I_m$ and break even. The roles are clearly delineated: one principal (the LP-funded VC), one agent (the founder), one direction of monitoring. The model's assumptions – binary effort, observable signals, enforceable contracts – are reasonable approximations of this reality.[10]

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[6] Tirole (2006), Chapter 3. See also Mallios, Lecture 3, slides 4–13.

[7] Tirole (2006), pp. 115–120. The financing threshold $\bar{A} = p_h(B/\Delta p) - (p_h R - I)$ is derived from the simultaneous satisfaction of the incentive-compatibility (IC) and individual-rationality (IR) constraints. See Mallios, Lecture 3, slide 1.

[8] Mallios, A. (2026). Lecture 6: Monitoring. GM1405 Enterprise Risk Management, University of Gothenburg, slides 10–13.

[9] Tirole (2006), Chapter 8, Section 8.2. See also Holmström & Tirole (1997), Section III.2, where the condition $p_h(B - b)/\Delta p > c$ is derived as the threshold for socially beneficial monitoring.

[10] Holmström & Tirole (1997), pp. 670–675.

2.2 The Bilateral Case: Double Moral Hazard in Joint Ventures

A joint venture between two capital-intensive parties breaks this clean structure. Consider two firms, A and B, each contributing resources to a jointly owned entity. Firm A provides technology and engineering capacity; Firm B provides market access and distribution. The JV's success depends on both parties' effort: A must deliver its technology diligently, B must open its channels effectively. But neither can directly observe the other's effort. Each party faces a temptation to shirk – to divert resources to its own parallel operations, to assign second-tier personnel, to prioritise competing projects – while free-riding on the other's contribution.

This is a double moral hazard problem. Formally, it requires two simultaneous incentive-compatibility constraints: one ensuring that A prefers high effort given B's expected behaviour, and one ensuring the same for B given A's. The critical difference from the unilateral case is that these constraints compete for the same pool of resources. Every unit of expected payoff allocated to A to satisfy her constraint is a unit unavailable for B's. The contract must motivate both parties simultaneously, and the feasible set of contracts that accomplish this is generally smaller than in the unilateral case.[11]

Under double moral hazard, linear sharing contracts – where each party receives a fixed proportion of the output – can themselves be optimal.[12] This is directly relevant to JV practice, where profit-sharing is almost invariably proportional to equity stakes. The result is not that linear contracts are ideal in an absolute sense, but that more complex contracts do not necessarily improve matters when both parties' incentives must be balanced simultaneously. A JV's profit-sharing arrangement, while seemingly simple, may thus be the best available contract given the bilateral information asymmetry – but it is a second-best outcome, not a first-best one.

2.3 The Team Problem and the Budget Breaker

A deeper result emerges once output depends on the joint effort of several agents whose individual contributions are unobservable. Sharing the output among the agents cannot achieve first-best incentives if the entire output must be distributed (budget balance). This is the team moral-hazard problem.[13] The intuition is mathematical but powerful: to give each of n agents full marginal incentives, each would need to receive 100% of the marginal return to her own effort. But the sum of these shares would exceed 100%, violating budget balance.

[11] For a general treatment of bilateral moral hazard in contractual relationships, see Bhattacharyya & Lafontaine (1995), Section II.

[12] Bhattacharyya, S. & Lafontaine, F. (1995). 'Double-Sided Moral Hazard and the Nature of Share Contracts.' RAND Journal of Economics, 26(4), pp. 761–781.

[13] Holmström (1982), pp. 324–328.

Consequently, under any budget-balanced sharing rule, at least some agents will under-invest in effort. The outcome is second-best: effort is positive but inefficiently low.

The solution is the budget breaker – an external party who can inject or extract resources outside the output pool. If the team meets a performance threshold, each member receives her share; if it fails, a penalty is imposed that goes to the budget breaker. This external "stick" breaks the mathematical constraint and restores incentive efficiency. The budget breaker does not need to contribute productive effort; her function is purely disciplinary.[14]

To make this concrete, consider a common institutional arrangement in capital-intensive JVs: project financing provided by an external bank. The bank does not contribute productive effort to the JV; it does not develop technology, operate facilities, or sell products. Its role is purely financial. But the loan agreement typically includes covenant provisions: the JV must maintain specified financial ratios (debt service coverage, leverage limits), meet operational milestones, or satisfy reporting requirements. If these thresholds are breached, the bank can impose consequences that fall outside the JV's output pool – increased interest rates, acceleration of the loan, seizure of pledged collateral, or, in extremis, forced liquidation.

This is a budget breaker in precisely the relevant sense. The bank's covenant structure establishes a performance threshold below which a penalty is imposed on the team as a whole. The penalty – the loss of favourable financing terms, the forced diversion of cash flow to debt service, the potential loss of assets – does not come out of the JV's profit-sharing arrangement between the partners. It is an external extraction that both partners suffer from, regardless of which one shirked. Because the penalty is symmetric in its impact (both partners lose if the bank acts) but external in its source (the bank, not the JV's output), it breaks the budget-balance constraint that prevents the partners' sharing arrangement from generating first-best incentives.

The disciplinary mechanism works precisely because the bank is indifferent to the internal allocation of effort between the partners. The bank cares only about whether the JV meets its covenants. If Partner A shirks and the JV's debt service coverage ratio falls below the agreed threshold, the bank acts and Partner B suffers alongside Partner A. This makes each partner internalise, at least partially, the consequences of the other's shirking, because each knows that her own payoff depends not only on her own effort but on the bank's response to the team's aggregate performance. The free-riding incentive that plagues bilateral sharing is attenuated, though not eliminated, by the external threat.

Importantly, the bank-as-budget-breaker is not a theoretical abstraction. Project finance structures with covenant packages are standard in infrastructure JVs, energy JVs, and large-scale industrial partnerships. The practice of conditioning external financing on aggregate

[14] Holmström (1982), pp. 328–332. The budget-breaker result shows that breaking the balanced-budget constraint is sufficient to restore first-best incentives under certain conditions.

performance thresholds is, from the perspective of economic theory, an institutional solution to the team moral hazard problem.[15]

This example also foreshadows the legal analysis that follows. The determination of whether a covenant has been breached is not a mechanical exercise. Financial covenants are defined in contractual language that requires interpretation; operational milestones involve judgments about what constitutes "completion" or "compliance"; reporting requirements presuppose standards of accounting and disclosure that are themselves normatively constructed. The budget breaker's disciplinary power thus depends on a chain of normative determinations – precisely the kind of fact-to-norm transformation that the economic model takes as given but that, as we shall see, the legal system treats as open.

2.4 The Legal System as Budget Breaker – and as Friction

The central thesis of this essay is that the legal system partially fills the budget-breaker function. Fiduciary duties, standards of care, and liability rules impose consequences on JV participants that are not derived from the contractual sharing arrangement. A board member who breaches her duty of care under Chapter 29, Section 1 of the Swedish Companies Act (aktiebolagslagen, ABL) may be held personally liable for damages – a penalty that does not come out of the JV's profit pool but falls on the individual.[16] This breaks budget balance and creates incentives that pure output sharing cannot.

However, a critical qualification is necessary. Legal intervention is itself a friction imposed on the actors. It introduces costs (litigation, compliance, uncertainty) and constraints (fiduciary duties that may conflict with monitoring functions). It improves outcomes only if it is sufficiently well-aligned with the economic incentives of each agent simultaneously – a condition that may or may not be satisfied depending on the context.[17] Consider the fiduciary duty of a JV board member: it may help align incentives when it prevents a partner from extracting value at the JV's expense (deterring shirking, as the model intends). But it may hinder monitoring when it prevents the board member from reporting information back to her appointing partner (breaking the information channel that monitoring requires). The legal system is thus not an unambiguous solution to the budget-breaker problem; it is an institutional mechanism whose effectiveness depends on calibration.

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[15] For the role of financial intermediaries as monitors in the Holmström–Tirole framework, see Holmström & Tirole (1997), particularly Section III on the monitor's dual function as capital provider and disciplinary agent. On the use of covenants as monitoring mechanisms in project finance, see Tirole (2006), Chapter 4 on debt covenants and Chapter 8 on the relationship between monitoring intensity and covenant design.

[16] Aktiebolagslag (2005:551), 29 kap. 1 §. See Andersson, S., Johansson, S. & Skog, R., Aktiebolagslagen: En kommentar, commentary on Chapter 29.

[17] See note 5 above. More generally on legal intervention as friction, see Pistor, K. & Xu, C., 'Incomplete Law – A Conceptual and Analytical Framework,' Yale Law School Working Paper.

This sets the stage for the analysis that follows. The question is not simply whether law "works" as a budget breaker, but under what conditions legal norms are well-calibrated to the economic incentives they seek to influence – and what happens to monitoring when they are not.

3 Monitoring Mechanisms in Joint Venture Agreements

Having established the economic framework, we can now examine the concrete monitoring mechanisms in JV agreements and assess how they relate to the bilateral incentive problem. These mechanisms are the instruments through which the economist's abstract monitor takes institutional form – and the first point at which the lawyer's questions begin to intrude.

3.1 Board Representation: The Monitor's Triple Role

Each JV partner typically nominates directors to the JV company's board. In economic terms, these nominees serve as monitors: they observe the JV's operations, assess whether the counterparty is fulfilling its obligations, and report back. In the unilateral model this is straightforward – the monitor watches the agent. In the bilateral model, each partner's nominee is simultaneously monitoring the counterparty, being monitored by the counterparty's nominees, and owing fiduciary duties to the JV entity itself. This triple role has no counterpart in Tirole's model.[18]

Under Swedish corporate law, the board member's primary obligation runs to the company. Chapter 8, Section 4 ABL imposes a general duty of care; Chapter 29, Section 1 establishes liability for breach.[19] The lojalitetsplikt (duty of loyalty), though uncodified, is recognised in Swedish case law and extends to sustained commercial relationships.[20] The partner-appointed director is therefore caught between her appointing partner's expectations and her legal duty to the venture – the foundational conflict of joint-venture governance.[21]

Contractual practice documents a variety of responses to this tension: some JV agreements explicitly affirm the duty of loyalty, some create carve-outs for specified matters, some adopt dual-loyalty frameworks, and some waive the duty entirely.[22] This variation is itself analytically significant. It demonstrates that the legal default – undivided loyalty to the JV – is

[18] Tirole (2006), Chapter 8, assumes a single monitor with an unambiguous objective function. The bilateral extension introduced here draws on the double moral hazard framework.

[19] Aktiebolagslag (2005:551), 8 kap. 4 § (general duty of care) and 29 kap. 1 § (liability for breach).

[20] NJA 2017 p. 203 (affirming the duty of loyalty in sustained commercial relationships under Swedish law).

[21] Shishido, Z. (1987). 'Conflicts of Interest and Fiduciary Duties in the Operation of a Joint Venture.' Hastings Law Journal, 39, pp. 63 ff.

[22] Bamford, J. et al. (2019). 'JV Directors Duty of Loyalty.' Harvard Law School Forum on Corporate Governance. See also Gibson Dunn (2012). 'Recent Trends in Joint Venture Governance.' Harvard Law School Forum on Corporate Governance.

frequently perceived as misaligned with the economic function of monitoring, and that parties invest considerable effort in recalibrating it contractually.

3.2 Information Rights, Audit Clauses, and Veto Mechanisms

JV agreements typically include detailed information-exchange provisions: quarterly financial reports, access to books and records, audit rights, and management reporting requirements. In economic terms, these are signal-generation mechanisms. They correspond to the early performance-monitoring model's two-signal structure (H and L), conditioning the monitoring mechanism on observable indicators.[23]

Veto rights and qualified-majority requirements operate differently. They do not generate information; they give the monitoring party power to block decisions that may reflect opportunistic behaviour. In the bilateral context, veto rights are typically symmetric: each partner can block certain categories of decisions. This is a structural response to the double moral hazard problem – since both parties can shirk, both need a defensive mechanism. But symmetric veto rights also create the risk of deadlock, an economic cost that the model does not account for.

4 Facts and Norms: Where the Model Meets Legal Reality

Return now to the two observers of the opening. By this point the economist has a complete account of the boardroom: effort levels, signals, a budget breaker, a calibrated set of incentives. The lawyer, watching the same meetings, treats none of these as settled. Where the economist reads a fact, the lawyer sees raw material awaiting normative qualification. This section traces that divergence across four registers: effort as a standard of care, the informational gap, the monitor's dual loyalties, and the threshold problem.

4.1 Effort as a Normative Standard

In the economic model, effort is binary: high or low. The entire incentive structure depends on this being, at least in principle, determinable. In legal terms, what the economist calls "effort" corresponds to open-textured normative concepts: due care, diligence, loyalty. The translation from one register to the other is not merely a change of vocabulary; it involves a fundamentally different mode of reasoning about what constitutes adequate performance.

Under Swedish corporate law, the standard against which board conduct is measured is developed across several interconnected sources. Chapter 8, Section 4 ABL establishes the board's general obligation to manage the company's affairs, including maintaining adequate internal controls and ensuring that the company's organisation is fit for purpose.[24] The

[23] Mallios, Lecture 6, slides 4–9 (early performance monitoring with signals H and L).

[24] Aktiebolagslag (2005:551), 8 kap. 4 §. The provision was substantially developed in the 2005 reform; see Prop. 2004/05:85, pp. 308–312.

preparatory works to the 2005 Companies Act clarify that the standard of care is objective and contextual: the question is what a normally diligent board member, possessing the competence that the position requires, would have done in the same circumstances.[25] This is a striking contrast to the economic model's binary choice. The legal standard does not ask whether the board member chose "high" or "low" effort; it asks whether her conduct fell below a normatively defined threshold of reasonable care – a threshold that is itself context-dependent and determined ex post.

Chapter 29, Section 1 ABL establishes the liability framework: a board member who, in the exercise of her duties, causes damage to the company through breach of the ABL, the applicable annual accounts legislation, or the articles of association, is liable for damages.[26] The Supreme Court has further elaborated this standard. In NJA 2014 s. 604, the Court assessed board liability where the board had failed to act on information that, with hindsight, indicated financial deterioration. The case illustrates how the legal system reconstructs the effort question ex post: the court examined what information was available to the board, what a reasonable board would have done with that information, and whether the actual board's conduct fell short of that standard.[27]

For the budget-breaker analysis, this has a critical implication. The legal system's capacity to function as an effective disciplinary mechanism depends on its ability to identify and sanction inadequate effort. But if "inadequate effort" is not a factual finding but a normative construction – assembled ex post from evidence, contextual assessment, and comparison with an idealised standard – the disciplinary signal is less precise than the economic model assumes. The "penalty" imposed by liability rules operates through a normative filter that introduces uncertainty, delay, and context-dependence. An agent contemplating shirking does not face a clear-cut penalty with known probability; she faces a diffuse risk that her conduct will, at some future point, be assessed against a standard she cannot fully predict in advance. This is a friction that attenuates the incentive effects the model predicts, though it does not eliminate them.

The unwritten duty of loyalty (lojalitetsplikt) in Swedish contract law adds a further dimension. Affirmed in NJA 2017 s. 203, the duty of loyalty extends to sustained commercial relationships and imposes behavioural requirements that go beyond what the agreement

[25] Prop. 2004/05:85, p. 310. The preparatory works explicitly reject a subjective standard based on the individual board member's personal capabilities, establishing instead an objective benchmark calibrated to the demands of the specific board position.

[26] Aktiebolagslag (2005:551), 29 kap. 1 §. See Andersson, Johansson & Skog, Aktiebolagslagen: En kommentar, commentary on Chapter 29, for the doctrinal development.

[27] NJA 2014 s. 604. The case is significant for establishing that the board's duty of care includes an obligation to actively seek out and respond to warning signals – a holding with direct implications for monitoring in JV contexts.

explicitly stipulates.[28] The duty of loyalty is not a fixed standard; its intensity scales with the depth of the parties' interdependence – the more relational the contract, the more demanding the obligation.[29] In a JV context, this means that the normative standard of "effort" is not only context-dependent but relationship-dependent: it adjusts dynamically to the nature of the parties' cooperation. The economic model has no corresponding category; it assumes that all relevant constraints are either captured in the contract or irrelevant.

4.2 The Informational Gap: Economically Informative versus Legally Actionable Signals

The model's signals are stylised: H or L, with known conditional probabilities. In JV practice, the most informative signals are often informal: behavioural cues in board meetings, shifts in organisational commitment, changes in communication patterns, the reassignment of key personnel to competing projects. These signals carry enormous informational value – an experienced partner can sense a counterparty's loss of commitment months before any formal indicator captures it.

Yet these signals have deeply uncertain legal status. "They seemed disengaged at the board meeting" cannot ground a material breach claim. The result is a systematic asymmetry: the economically most informative signals are the legally least actionable, and the legally most robust evidence (audited financial statements, formal compliance reports) is often the economically least timely. This gap means that the legal system's budget-breaker function is calibrated to formal, verifiable information – not to the richer, more immediate signals that economic monitoring actually relies on.

Swedish procedural law provides an interesting nuance here. Under 35 kap. 1 § rättegångsbalken, Swedish courts apply the principle of free evaluation of evidence (fri bevisprövning): there are no formal rules excluding categories of evidence, and the court is free to consider any evidence presented and to assess its probative value according to its own judgment.[30] In principle, this means that informal monitoring signals – observations of counterparty behaviour, testimony about engagement levels, patterns of communication – are not formally excluded from legal proceedings. A party could, in theory, present evidence that the counterparty's representatives appeared disengaged, that key personnel were reassigned, or that communication deteriorated.

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[28] NJA 2017 s. 203. See also Munukka, J. (2007), Kontraktuell lojalitetsplikt, Stockholm, arguing that the intensity of the duty of loyalty varies with the character of the relationship.

[29] Munukka (2007), particularly Chapter 5 on the factors determining the intensity of the loyalty obligation. Munukka identifies duration, mutual dependence, and the parties' investment in the relationship as key variables – all present in high degree in a JV.

[30] Rättegångsbalk (1942:740), 35 kap. 1 §. The principle of free evaluation of evidence is a cornerstone of Swedish procedural law, designed to allow the court maximum flexibility in assessing what has been proven.

However, the formal admissibility of such evidence does not translate into probative force. A court applying the standard of proof in civil cases – styrkt, meaning that the fact must be established with a high degree of probability – will typically require more than subjective impressions of declining commitment.[31] The gap between admissibility and probative value mirrors the gap between observability and verifiability in Hart and Moore's framework.[32] Swedish procedural law is more permissive than the economic model's binary observable/verifiable distinction suggests – but this permissiveness does not close the gap. It merely softens it. The economically most informative signals remain the legally weakest, even if they are not formally inadmissible.

This creates a practical challenge for JV governance. The monitoring party observes a pattern of behaviour that, in economic terms, constitutes a clear low-effort signal. But to translate that observation into a legal claim – for breach of fiduciary duty, material breach of the JV agreement, or grounds for exit – she must transform the informal signal into evidence that meets the relevant standard of proof. This transformation is costly, uncertain, and time-consuming. It is, in effect, a transaction cost of using the legal system as a budget breaker – a cost that the economic model does not account for.

One legal mechanism that partially addresses this gap is the right to request a special examination (särskild granskning) under Chapter 10, Sections 21–24 ABL.[33] This mechanism allows a shareholder – and, in a JV context, a partner who suspects opportunistic behaviour – to have an independent examiner investigate the company's management. The special examiner's report carries substantially greater evidentiary weight than the monitoring party's own observations, because it is produced by an independent actor under a formal mandate. In economic terms, special examination is a mechanism for transforming observable-but-not-verifiable information into verifiable information: it bridges the gap that Hart and Moore identify as the source of contractual incompleteness.[34] However, the mechanism is not costless: it requires a shareholding threshold, a formal request procedure, a fee, and time. It is a partial, imperfect solution to a structural problem.

4.3 The Monitor's Dual Loyalties

In the unilateral model, the monitor's objective is unambiguous: reduce B to b. In the bilateral JV context, the monitor – the board member nominated by one partner – faces a conflict that

[31] On the standard of proof in Swedish civil litigation, see Ekelöf, P.O., Edelstam, H. & Heuman, L., Rättegång IV, 7th ed., particularly the discussion of the 'styrkt' standard and its application in commercial disputes.

[32] Hart, O. & Moore, J. (1988), 'Incomplete Contracts and Renegotiation,' Econometrica, 56(4), pp. 755–785, at pp. 757–758.

[33] Aktiebolagslag (2005:551), 10 kap. 21–24 §§. Shareholders holding at least one tenth of all shares may request the general meeting to appoint a special examiner; if the meeting declines, they may petition Bolagsverket (the Swedish Companies Registration Office) to appoint one.

[34] Hart, O. & Moore, J. (1999), 'Foundations of Incomplete Contracts,' Review of Economic Studies, 66(1), pp. 115–138.

the model cannot express. Her economic function is to serve her appointing partner's interests by overseeing the counterparty. Her legal duty is to serve the JV company's interests, which may diverge from her appointing partner's.

Swedish law addresses this tension through a specific mechanism: the conflict-of-interest rule in Chapter 8, Section 23 ABL. A board member may not participate in decisions regarding matters in which she has a personal interest that may conflict with the company's interest.[35] In a JV context, this rule is triggered with particular frequency: virtually any decision that affects the distribution of resources or opportunities between the JV and a partner's parallel operations involves a potential conflict for the partner-appointed board member. The jäv rule is, in economic terms, a legal mechanism that attempts to address the monitoring paradox by removing the conflicted monitor from the decision rather than trying to resolve the conflict. But removal is itself costly: it deprives the board of the expertise and perspective that the appointee was meant to contribute, and in a 50/50 JV it can shift the balance of power on the board.

The preparatory works acknowledge the difficulty. Prop. 2004/05:85 notes that the conflict-of-interest rule must be applied with regard to the specific circumstances of each case, and that a broad interpretation could render partner-appointed board members unable to participate in a wide range of decisions.[36] Swedish doctrine is divided on how to manage this. One position reads the jäv rule restrictively in closely held companies and JVs, where the very point of the board's composition is to mirror the owners' interests;[37] another insists, more formalistically, that the director's legal duty runs to the company regardless of the corporate structure.[38] This doctrinal disagreement is itself analytically significant: it shows that the legal system has not resolved the monitoring paradox but has instead produced competing interpretations of how to manage it. From the perspective of economic contract theory, this interpretive uncertainty is an additional friction: the parties cannot predict, at the time of contracting, how broadly the jäv rule will be applied to their nominated board members, and therefore cannot fully calibrate their monitoring architecture to the legal constraints it will face. The problem can, however, be addressed at the formation of the JV through the principle of unanimous shareholder consent (alla aktieägares samtycke) and through the company's articles of association.

The information-flow problem compounds this. Even outside the scope of the jäv rule, a board member who obtains commercially sensitive information through her board

[35] Aktiebolagslag (2005:551), 8 kap. 23 §. The provision applies to transactions between the company and the board member, or between the company and a third party where the board member has a material interest.

[36] Prop. 2004/05:85, p. 315. The preparatory works emphasise that the rule is not intended to be applied mechanically but requires a case-by-case assessment of whether a genuine conflict exists.

[37] Sandström, T. (2017), Svensk aktiebolagsrätt, 6th ed., Wolters Kluwer, discussion of 8 kap. 23 § in the context of closely held companies.

[38] Nerep, E. & Samuelsson, P. (2019), Aktiebolagslagen: en lagkommentar, Del II, commentary on 8 kap. 23 §.

participation faces constraints on sharing that information with her appointing partner. The duty of confidentiality (tystnadsplikt) that attaches to board information under general principles of Swedish corporate law means that the monitor's information channel – which the economic model treats as frictionless – is normatively regulated.[39] The monitoring paradox is therefore not merely a theoretical construction but a practical constraint that JV partners must navigate in their governance design.

4.4 The Threshold Problem

In the economic model, signals trigger consequences automatically: if L, the payoff is zero. In legal reality, triggering a contractual consequence requires demonstrating that a contractual threshold has been crossed. A material breach clause presupposes that someone – a court or an arbitral tribunal – will determine whether the breach is material. This determination involves contract interpretation, evidence assessment, and normative judgment. The classification of a signal as H or L, which the model treats as given, is in legal terms a contested question.

Swedish contract law applies an objective method of contract interpretation: the decisive factor is not what one party subjectively intended but what the contract, assessed in its context, must be understood to mean.[40] In a JV context, the interpretation of clauses such as "material breach," "reasonable endeavours," or "best efforts" – all common formulations in international JV agreements – requires the court to supply normative content that the contract itself does not fully specify. Whether a particular pattern of behaviour constitutes a "material breach" cannot be resolved by observation alone; it requires a judgment about the gravity of the breach in relation to the contract as a whole, the consequences for the non-breaching party, and the breaching party's degree of fault.[41]

For the budget-breaker analysis, this means that the disciplinary mechanism operates with significant delay and uncertainty. The "penalty" is not automatic; it must be claimed, proven, and adjudicated. During this process, the incentive effects that the economic model predicts are attenuated. A party considering shirking does not face the model's clean payoff structure (if L, then zero) but a probabilistic assessment of whether her behaviour will, at some future

[39] On the duty of confidentiality for board members, see Prop. 2004/05:85, p. 313, and Dotevall, R. (2008), Bolagsledningens skadeståndsansvar, 2nd ed., Norstedts Juridik, Chapter 4 on the scope and limits of the duty of confidentiality.

[40] The objective method of interpretation is established through a line of Supreme Court cases; see NJA 2012 s. 597 and NJA 2015 s. 741 for recent applications in commercial contexts. See also Adlercreutz, A. & Gorton, L., Avtalsrätt II, 6th ed.

[41] On the concept of material breach (väsentligt avtalsbrott) in Swedish law, see Ramberg, J. & Ramberg, C., Allmän avtalsrätt, 11th ed., Chapter 18 on breach and remedies. The assessment is holistic and contextual, not reducible to a mechanical test.

point, be classified as a material breach – a classification that depends on interpretive choices she cannot fully anticipate.

The interaction between contractual thresholds and the duty of loyalty creates a further complication. Even if a JV partner's behaviour does not cross the threshold of material breach, it may still violate the duty of loyalty, creating a basis for a damages claim under 29 kap. 1 § ABL or under the general contractual loyalty obligation.[42] The legal system thus provides two disciplinary channels – one contractual (material breach) and one normative (loyalty) – each with different thresholds and different evidentiary requirements. The economic model's single H/L signal is, in legal reality, assessed against multiple overlapping standards.

5 Bridging the Gap: Contractual Design for Effective Monitoring

The two observers have so far talked past each other. The transactional lawyer is the figure who has listened to both – and whose task is to draft around the gap they reveal. The preceding analysis identified four structural points where the economic model's assumptions diverge from legal reality: the transformation of binary effort into a normative standard, the gap between economically informative and legally actionable signals, the monitor's dual loyalties, and the threshold problem in triggering contractual consequences. This section examines how she can design contractual mechanisms that bridge these gaps – making the legal system's budget-breaker function more effective by reducing the frictions identified above.

5.1 Liquidated Damages and Contractual Penalties: Eliminating the Threshold Problem

The threshold problem identified in Section 4.4 arises because "material breach" is a normatively open concept whose application depends on ex post judicial assessment. One contractual response is to replace the open standard with predetermined consequences for specified behaviours. Liquidated damages clauses (vitesklausuler) define in advance the financial consequence of particular breaches, eliminating the need for a court to assess materiality or quantify damages.[43]

In economic terms, a well-designed liquidated damages clause transforms the legal budget breaker from a slow, uncertain, normatively mediated process into something closer to the

[42] On the relationship between material breach and the duty of loyalty, see Munukka (2007), Chapter 7, arguing that the loyalty obligation can be breached even in the absence of a formal contractual breach.

[43] On liquidated damages in Swedish contract law, see 36 § avtalslagen for the court's power to adjust unreasonable contract terms. Swedish law does not have the common law's penalty doctrine; liquidated damages are generally enforceable unless manifestly unreasonable. See Ramberg & Ramberg, Allmän avtalsrätt, Chapter 18.

automatic trigger that the economic model assumes. If the JV agreement stipulates that failure to deliver quarterly financial reports within 30 days of the quarter's close results in a payment of a specified sum, the signal (late report) and the consequence (payment) are directly linked without the intermediate step of normative qualification. The H/L classification is contractually defined rather than judicially constructed.

However, Swedish law imposes a limit: under Section 36 of the Contracts Act (avtalslagen), a court may adjust a contract term that is unreasonable, including a penalty clause that is disproportionate to the harm caused.[44] This means that even contractually defined consequences are subject to normative review – the legal system retains a residual power to override the parties' calibration. The friction is reduced but not eliminated.

5.2 Key Person Clauses: Making Informal Signals Contractible

The informational gap identified in Section 4.2 arises because the most economically informative signals – behavioural cues, organisational changes, communication shifts – are not contractible. One targeted response is the key person clause (nyckelpersonsklausul): a contractual provision that requires specified individuals to be dedicated to the JV and that triggers defined consequences if they are removed or reassigned.[45]

The economic logic is precise. The reassignment of a counterparty's key personnel is one of the most informative informal signals of declining commitment – but in the absence of a key person clause, it is merely an observable fact with no contractual consequence. The key person clause transforms it into a contractible signal: if Person X is reassigned without the other partner's consent, a specified consequence follows (renegotiation right, termination right, or penalty). In Hart and Moore's terms, the clause moves the signal from the observable-but-not-verifiable category to the verifiable category by defining in advance what counts as a relevant change and what consequence it triggers.[46]

5.3 Milestone Structures and Earn-Out Mechanisms: Private Budget Breakers

The budget-breaker analysis in Section 2.3 identified the external bank as an institutional budget breaker. But the parties can also construct private budget-breaker mechanisms within the JV agreement itself. Milestone-based contribution structures – where portions of a party's capital commitment or resource contribution are released conditional on the JV achieving

[44] Lag (1915:218) om avtal, 36 §. The provision is a general reasonableness control applying to all contract terms. For its application to penalty clauses, see NJA 2012 s. 597 and Prop. 1975/76:81, pp. 100–118.

[45] Key person clauses are standard in JV agreements, particularly in technology and knowledge-intensive industries. For discussion of their function in Swedish commercial practice, see Ramberg, C. (2014), Kontraktstyper, Chapter 3 on cooperation agreements.

[46] Hart & Moore (1988), pp. 757–758, on the distinction between observable and verifiable information as the source of contractual incompleteness.

defined operational targets – create a performance threshold analogous to the bank's covenant structure.[47]

If the JV fails to reach a milestone, the conditional contribution is withheld – imposing a cost on the JV as a whole that resembles the budget-breaker penalty. The critical design question is whether the milestones are defined with sufficient precision to be contractually enforceable. Vaguely defined milestones ("substantial progress toward commercialisation") recreate the threshold problem; precisely defined milestones ("regulatory approval obtained by [date]") minimise it.

Earn-out mechanisms operate similarly but in reverse: a portion of a party's return is contingent on post-formation performance. This aligns incentives intertemporally and creates ongoing motivation for effort, in contrast to the static sharing rule that cannot achieve first-best.[48]

5.4 Expert Determination: A Faster Budget Breaker

One of the most significant frictions identified in the analysis is the delay inherent in judicial or arbitral determination of whether a contractual threshold has been crossed (Section 4.4). Expert determination clauses offer a contractual response: disputes about specific factual or technical questions – has a milestone been achieved? does a financial ratio comply with the agreed standard? – are referred to an independent expert whose determination is binding.[49]

In economic terms, expert determination reduces the cost and delay of the legal budget breaker's disciplinary function. The expert's decision is faster, cheaper, and less procedurally complex than arbitration or litigation. Importantly, it also reduces normative uncertainty: the expert applies technical or financial standards rather than the open-textured legal standards (reasonableness, materiality, due care) that introduce friction in judicial proceedings.

However, the mechanism has limits. An expert determination clause must carefully delineate its scope – questions of law, fiduciary duty, or contract interpretation are typically not suitable for expert determination and must be reserved for arbitration or courts. The design challenge is to allocate the factual components of monitoring disputes to the expert (did the covenant breach occur?) while reserving the normative components for the legal system (does the breach justify termination?).

[47] Milestone structures are common in pharmaceutical and technology JVs. For the economic logic of staged financing as a monitoring mechanism, see Tirole (2006), Chapter 5 on multi-period financing.

[48] Holmström (1982), pp. 328–332, on the insufficiency of static sharing rules under team moral hazard.

[49] Expert determination clauses are enforceable under Swedish law as a form of agreed dispute resolution. On the distinction between expert determination and arbitration, see Heuman, L. (2003), Skiljemannarätt, Chapter 1.

5.5 Contractually Defined Material Breach: Reducing Normative Uncertainty

Perhaps the most consequential contractual design choice is the definition of material breach itself. Rather than relying on the general Swedish law standard – which, as discussed in Section 4.4, requires a holistic, contextual assessment – the JV agreement can enumerate specific circumstances that constitute material breach for the purposes of triggering exit rights, buy-out mechanisms, or termination.[50]

This is the most direct contractual response to the threshold problem. By defining material breach ex ante and exhaustively, the parties effectively pre-empt the normative assessment that would otherwise occur ex post. The economic model's clean H/L distinction is approximated contractually: certain specified events are H, everything else is L, and the classification does not depend on judicial interpretation.

The risk is over-specification. An exhaustive list of material breach events may fail to capture forms of opportunistic behaviour that the parties did not foresee at the time of contracting – precisely the problem that Hart and Moore identify as the source of contractual incompleteness.[51] A well-drafted JV agreement therefore typically combines a defined list of specified material breach events with a residual general standard ("any other breach that materially and adversely affects the non-breaching party's rights or interests under this Agreement"), preserving some normative flexibility while reducing the uncertainty associated with a purely open-textured standard.

5.6 Synthesis: Contractual Design as Calibration

The contractual mechanisms examined in this section share a common logic: they seek to calibrate the legal system's budget-breaker function by reducing the frictions that the analysis in Section 4 identified. Liquidated damages reduce delay and normative uncertainty. Key person clauses make informal signals contractible. Milestone structures create private budget breakers. Expert determination accelerates the disciplinary process. Defined material breach clauses reduce threshold uncertainty.

None of these mechanisms eliminates the underlying tension between economic monitoring and legal fact-construction. Each introduces its own costs and limitations. Liquidated damages are subject to reasonableness review under 36 § avtalslagen. Key person clauses cannot capture all forms of organisational commitment. Milestones must be precisely defined to be enforceable. Expert determination must be carefully scoped. And exhaustive breach

[50] For the practice of defining material breach exhaustively in commercial agreements, see Ramberg & Ramberg, Allmän avtalsrätt, Chapter 18, noting that parties to sophisticated commercial agreements frequently prefer contractual certainty over the flexibility of the general legal standard.

[51] Hart (1995), Chapter 4, on the impossibility of writing complete state-contingent contracts.

definitions risk the incompleteness that Hart and Moore show is inherent in complex contractual relationships.

These instruments address the JV as a going concern. A distinct set of questions arises when the venture fails rather than merely underperforms, and the cross-border insolvency of an international JV would warrant separate treatment that this essay does not attempt.[52]

But taken together, these mechanisms represent a sophisticated contractual response to the problem that this essay has analysed: the gap between the economic model's assumption that facts are given and the legal reality that facts must be constructed. The transactional lawyer's task, informed by economic contract theory, is not to choose between the economic model and the legal system but to design contractual architectures that make the interaction between them as productive as possible.

6 The Functional Method and the Limits of Modelling

6.1 Why Methodology Matters: Two Ways of Constructing Facts

The preceding sections have repeatedly encountered a structural divergence: the economic model treats a given phenomenon – effort, a signal, a breach – as a fact with determinate content, while the legal system treats the same phenomenon as raw material requiring normative processing before it acquires legal significance. This divergence is not accidental. It reflects fundamentally different methodological commitments that merit explicit examination.

Economic contract theory models legal rules as components of an incentive structure.[53] The analytical move is to take a set of facts as given – the probability distribution over effort levels, the informational content of signals, the payoff structure of the contract – and to derive the optimal rule or contract that maximises a specified objective (typically aggregate surplus). This approach has enormous explanatory power. It reveals why monitoring exists (to reduce moral hazard), when it is socially beneficial (when the expected gain exceeds the cost), and what institutional structures support it (budget breakers that break the balanced-budget constraint). The preceding sections have drawn extensively on this explanatory power.

But the approach has a methodological limitation that becomes visible precisely when it is applied to legal institutions. The model takes facts as inputs and norms as outputs. The design question is: given these facts, what is the optimal norm (contract, rule, institution)? This presupposes that facts can be established independently of norms – that one can first determine what happened and then decide what should follow. As Section 4 demonstrated,

[52] A natural but distinct extension lies beyond this essay's scope: the cross-border insolvency of an international JV and the determination of its centre of main interests (COMI) under Regulation (EU) 2015/848. On the COMI concept see Case C-341/04 Eurofood IFSC Ltd [2006] ECR I-3813.

[53] Cooter & Ulen (2016), Chapter 1.

this presupposition does not hold in the legal context. Whether a board member exercised "due care" is not a factual finding that precedes the legal assessment; it is a conclusion produced through the legal assessment. The norm (the standard of care) partly constitutes the fact (the determination of breach). Facts and norms are, in the language of the Scandinavian functionalist tradition, mutually constitutive.[54]

6.2 The Functionalist Critique of Conceptual Abstraction

The Scandinavian functional approach to law provides a methodological framework for understanding this mutual constitution.[55] The core of the functionalist method is a refusal to derive legal solutions from abstract concepts. The continental substantialist tradition (what the older literature called Begriffsjurisprudenz) treats legal concepts as having fixed, essential content from which specific legal consequences can be deduced. If X is "ownership," then certain consequences follow regardless of context. The functionalist method rejects this deduction. It asks instead: what function does the concept serve in the specific relation under analysis? What interests are at stake, and how should the relevant norm be applied in light of those interests?

The Gillberg v. Sweden case illustrates the point.[56] The judges used "ownership of the documents" as the decisive category, thereby shifting the analysis away from the actual conflict of interests (the researcher's obligations versus the public interest in transparency) and toward an abstract conceptual deduction (the owner controls the owned thing). The functionalist critique is that this conceptual move obscured the legally relevant question rather than resolving it. The concept of ownership did not illuminate the interests at stake; it displaced them with a category that carried its own logic, independent of context.

This critique applies with considerable force to the economic model's treatment of monitoring. In the model, "effort" is a concept with fixed content: it is either high or low, and its level determines the probability of success. "Signal" is a concept with fixed content: it is either H or L, and its informational value is given by the conditional probabilities. "Monitoring" is a concept with fixed content: it costs c and reduces B to b. These concepts function in the model as the substantialist legal tradition's concepts function in legal reasoning – they carry inherent, context-independent meaning from which consequences can be derived.

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[54] See Martinson, 'The Norms, Facts and Values Method' (2022), on the interdependence of the three registers. The point is not merely that norms influence the interpretation of facts (a truism) but that the categories through which facts are identified and classified are themselves normative constructions.

[55] Martinson, 'The Scandinavian Approach to Property Law' (2014); Sandstedt, 'Comparative Property Law and the Profound Differences between Nordic Functionalism and Continental Substantialism.'

[56] Martinson (2014), discussing Gillberg v. Sweden, ECHR (2012). The case concerned a researcher who refused to provide access to sensitive research data; the ECHR majority reasoned that the university 'owned' the documents and could therefore compel access. Martinson shows how the ownership concept diverted attention from the actual interests in conflict – privacy versus transparency.

The functionalist legal analysis undertaken in this essay has shown that these concepts do not function in this way when they enter the legal system. "Effort" becomes a normative standard of care whose content is constituted by context (Section 4.1). "Signal" becomes evidence whose probative value depends on institutional factors – admissibility, standard of proof, evidentiary rules – that are not captured by the concept itself (Section 4.2). "Monitoring" becomes a complex institutional practice embedded in a web of fiduciary duties, conflict-of-interest rules, and confidentiality obligations that transform its character (Section 4.3). In each case, the functionalist question – what function does this concept serve in this particular relation? – yields a different answer than the substantialist question – what does this concept essentially mean?

6.3 The Norms-Facts-Values Method Applied

The norms-facts-values method offers a structured way to trace these transformations.[57] The method does not propose a hierarchy among the three registers – it does not claim that norms are "more important" than facts, or that values override both. Rather, it insists that legal analysis always operates simultaneously in all three registers, and that the interaction between them is constitutive of the legal outcome. A legal conclusion cannot be derived from facts alone (that would be naive empiricism), from norms alone (that would be conceptual deduction), or from values alone (that would be policy argument unconstrained by law). It is produced through the interaction of all three.

Applied to the monitoring analysis, the method reveals the following structure. The norms – the duty of care under 8 kap. 4 § ABL, the liability rule in 29 kap. 1 § ABL, the conflict-of-interest rule in 8 kap. 23 § ABL, the contractual loyalty obligation affirmed in NJA 2017 p. 203, the principles of contract interpretation applied by Swedish courts – constitute the legal framework within which monitoring operates. These norms are not external constraints imposed on an otherwise autonomous economic system; they are constitutive of the monitoring relationship itself. A board member who knows she is bound by a duty of care and exposed to personal liability for breach does not merely monitor differently; she is a different kind of monitor than the one the economic model describes.

The facts – the signals that monitoring produces, the observations of counterparty behaviour, the financial reports, the audit results – are not self-interpreting. Their legal significance depends on the normative framework within which they are assessed. A quarterly report showing declining margins is not, in itself, a "low signal." It becomes a legally relevant fact only when it is assessed against the contractual obligations of the JV agreement, the duty of care the board has in responding to it, and the evidentiary standards a court would apply in determining whether it demonstrates a breach. The facts are constituted as legal facts through normative processing.

[57] Martinson (2022), pp. 1435–1452.

The values – efficiency, fairness, creditor protection, contractual freedom, the protection of legitimate expectations – guide the normative assessment but do not determine it mechanically. The tension between efficiency and fairness is particularly visible in the monitoring context. The economic model optimises for efficiency: the monitoring arrangement that maximises aggregate surplus, net of monitoring costs, is optimal. The legal system also cares about efficiency – Cooter and Ulen's framework makes this explicit – but it simultaneously pursues values that may conflict with efficiency, including the protection of fiduciary relationships, the principle that the burden of proof should not be allocated in a way that systematically disadvantages one party, and the commitment to procedural fairness in dispute resolution.[58]

The interaction of these three registers explains why the legal system functions as an imperfect budget breaker. The norms impose constraints and consequences that go beyond the contractual sharing arrangement – this is the budget-breaker function. But the facts that trigger these consequences must be established through normative processes that introduce delay, cost, and uncertainty – these are the frictions. And the values that guide the normative assessment may not align with the economic model's efficiency criterion – this is the calibration problem.

6.4 Beyond Olivecrona: What the Functional Method Adds

It would be insufficient to frame this analysis simply as an application of Olivecrona's thesis that legal concepts are "hollow words."[59] Olivecrona's contribution was to deny that legal concepts refer to metaphysical entities – that "ownership" denotes a real relationship between a person and a thing, or that a "right" exists in the same way that a physical object exists. This was a necessary first step: it freed Scandinavian legal thought from conceptual realism and opened the way for functional analysis. But the modern functional method goes further than Olivecrona's critique. It does not merely deny that legal concepts have fixed referents; it provides an affirmative methodology for analysing how legal concepts function in specific contexts – what work they do, what interests they serve, and what they obscure.

In the monitoring context, this means that the relevant question is not the Olivecronean one – "is 'effort' a real fact or a legal construction?" – but the functionalist one: "what function does the concept of effort serve in the specific relation between this JV board member, this JV company, and this appointing partner, at this point in the JV's life cycle?" The answer depends on context, on the applicable norms, and on the values at stake. It is not derivable from the concept itself – neither from the economic model's binary definition nor from any abstract legal definition. The functional method insists on this irreducible contextuality, and it is this

[58] Cooter & Ulen (2016), Chapter 12, discussing the relationship between efficiency and other legal values in the design of property rights and contractual institutions.

[59] Olivecrona (1971), Chapter 7.

insistence that distinguishes it from both the economic model's conceptual apparatus and from earlier forms of legal realism.

A parallel arises in the transposition of EU consumer-protection directives. When Member States implement a directive through the lens of national property-law concepts – particularly the concept of "ownership" – the functional purpose of the directive may be undermined by the conceptual framework through which it is implemented.[60] The concept, rather than serving the directive's purpose, diverts the legal analysis into a separate conceptual logic with its own internal coherence but no necessary connection to the interests the directive was designed to protect. The parallel to the monitoring analysis is direct: the economic model's concepts (effort, signal, budget breaker) may, when imported into legal reasoning without functional adaptation, divert the analysis away from the interests and relationships that are actually at stake.

7 Conclusion

This essay has argued that the relationship between economic contract theory and legal methodology in the analysis of monitoring is neither one of simple complementarity nor one of irreconcilable opposition. Rather, it is a relationship structured by a methodological asymmetry. The economic model operates with a substantialist conception of its core concepts – effort, signal, monitoring cost – treating them as having fixed, context-independent content from which contractual consequences can be derived. The legal system, particularly in its Scandinavian functionalist mode, operates with a contextual, relational conception that refuses to assign fixed meaning to concepts independently of the specific relation in which they function.

This asymmetry has practical consequences. In the ex ante phase of a joint venture, when the monitoring architecture is being designed, the economic model is a powerful heuristic. It identifies the incentive problems (bilateral moral hazard), reveals the limitations of contractual solutions (the impossibility of first-best under budget balance), and points toward institutional mechanisms (budget breakers) that can improve outcomes. The transactional lawyer who understands this framework designs better contracts: contracts with liquidated damages that reduce threshold uncertainty, key person clauses that make informal signals contractible, milestone structures that create private budget breakers, and expert determination provisions that accelerate the disciplinary process.

But the economic model cannot tell the lawyer how these contractual mechanisms will function once they enter the legal system. The liquidated damages clause is subject to reasonableness review under 36 § avtalslagen. The key person clause must be interpreted according to Swedish principles of objective contract interpretation. The milestone structure's

[60] Faber, W. & Martinson, C., 'Can Ownership Limit the Effectiveness of EU Consumer Contract Law Directives? A Suggestion to Employ a "Functional Approach,"' in Apathy & Martinson (eds.).

consequences depend on whether a court finds that the milestone was "achieved" – a normative question, not a factual one. And the expert determination clause must be carefully scoped to avoid encroaching on matters that require judicial resolution. At every point, the contractual mechanism designed on the basis of economic logic must be assessed through the legal system's own normative processes – processes that the functional method illuminates and the economic model, by design, abstracts away from.

The contribution of the Scandinavian functional approach is not to deny the value of economic analysis but to insist on the irreducible normativity of the legal system within which economic mechanisms operate. Monitoring does not merely produce facts about effort and performance. It produces material that must be classified, interpreted, and assessed within a framework of norms and values. The budget breaker is not a mechanical device but an institutional process – slow, costly, normatively mediated – whose effectiveness depends on calibration. And the legal concepts through which this process operates – care, loyalty, materiality, breach – are not fixed categories but functional tools whose content is constituted by context.

The lawyer who understands both the economic model and the functional method occupies a distinctive analytical position. She can see the incentive structure that the economic model reveals and the normative processes that the functional method illuminates. She can design contracts that are economically sound and legally robust. And she can recognise, with a precision that neither discipline alone affords, the boundary between what can be achieved through contractual design and what depends on the institutional performance of the legal system itself. The two observers of the opening, in the end, are reconciled not by one displacing the other but by a single practitioner who can hold both their questions in view at once.

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