

CODE VERSUS PRECEDENT: BLOCKCHAIN-DRIVEN GOVERNANCE AS A RESPONSE TO THE CRISIS OF TRUSTS IN MODERN CANADIAN FINANCE

ShuYu Zhou, ZhaoXia Deng*

School of English for International Business, Guangdong University of Foreign Studies (GDUFS), Guangzhou 510515, Guangdong, China.

Corresponding Author: ZhaoXia Deng, Email: Angelina_dzx@163.com

Abstract: Canada's trust law is caught in a structural crisis, torn between the rigid formalism of common law and the need for adaptive governance in a digitalized global economy. Drawing on Frederick Schauer's theory of "rules as exclusionary reasons" and Douglass North's concept of "path dependence," this paper argues that Canada's regulatory framework—exemplified by Section 122 of the Income Tax Act and Section 56 of the Ontario Securities Act - prioritizes procedural compliance over substantive resilience, leading to systemic failures such as the collapse of Penn West Petroleum Trust and the judicial rejection of cryptocurrency trusts in QuadrigaCX. Through case studies and comparative analysis, we demonstrate how Canada's adherence to outdated doctrines undermines both domestic stability and international alignment with OECD standards. We propose a dual-track solution: legislative modernization through a Uniform Digital Trust Act and the integration of blockchain-based smart contracts (e.g., ERC-1400) to encode fiduciary duties into programmable legal structures. This approach not only resolves the Schauer-North paradox but also positions Canada as a leader in responsive, technology-driven trust governance.

Keywords: Canadian trust law; Fiduciary crisis; Legal formalism; Path dependence, Blockchain governance

1 INTRODUCTION

Canada's trust law reflects a dual legal system: the adaptive flexibility of Québec's civil code coexists with the procedural inflexibility of English common law. While this hybrid framework offers legal diversity, it also reveals a fundamental tension: how to balance institutional stability with the growing need for adaptive, technologically responsive governance. This tension is particularly visible in two areas: domestic Real Estate Investment Trusts (REITs) and international trust structures.

Domestically, the rigidity of Section 122 of the Income Tax Act exemplifies the problem. By requiring REITs to distribute 90% of their taxable income annually, the law prioritizes short-term investor returns at the expense of long-term financial resilience. This structural vulnerability is demonstrated by the collapse of Penn West Petroleum Trust. Internationally, Canada's commitment to legal formalism increasingly diverges from global regulatory trends. The "main purpose test" under Section 94(4), which legitimizes offshore entities such as the Barbados shell company based solely on formal documentation, clashes with the OECD's substance-over-form principle. Similarly, the QuadrigaCX decision, where the court refused to recognize cryptocurrencies as trust assets due to their intangible nature, reveals a judiciary still anchored in 19th-century tangibility standards. Its conservatism becomes in great contrast with Québec's evolving acceptance of digital property.

Why do such outdated doctrines persist despite pressure for reform? Frederick Schauer's theory of legal rules as "exclusionary reasons" and Douglass North's concept of institutional path dependence offer an explanation[1,2]. Schauer's theory reveals how formalist traditions prioritize rule-following even at the expense of undermining purpose or practical outcomes, while North's notion exposes how legal institutions, once enacted, become self-reinforcing thus resist reform. Together, they reveal a legal mindset in which adherence to precedent takes priority over adapting to realities, and where institutional inertia is misinterpreted as stability. Overcoming this impasse requires a dual-track strategy. On one hand, legislative modernization must align Canadian trust law with international substance-based standards. On the other, as Lawrence Lessig's "code is law" paradigm suggests, technological reform—particularly the integration of smart contracts and blockchain protocols—could encode fiduciary duties directly into programmable legal structures[3]. In a word, as digital globalization continues to change the landscape of trust governance, Canada stands at a crossroad. It can either remain confined by outdated formalism or lead a paradigm shift toward responsive, interoperable trust governance in the digital age.

2 LEGAL FORMALISM AND PATH DEPENDENCE: HOW TAX RIGIDITY AND DISCLOSURE RULES FUEL SYSTEMIC RISK IN CANADIAN REITS

2.1 Section 122's Rigid Payout Rule: How Formalism Triggered Penn West's Collapse

Canadian Real Estate Investment Trusts (REITs), structured as pooled property investment vehicles, leverage Section 122 of the Income Tax Act to provide investors with tax-advantaged income by mandating 90% annual distribution. While

designed to ensure investor returns, this rule inadvertently prioritizes short-term payouts over long-term financial resilience. This tension is intensified by the 2006 Specified Investment Flow-Through (SIFT) tax reform. Targeting tax deferrals, the reforms forced energy trusts (many structured as REITs) to convert into taxable corporations while retaining Section 122's rigid payout requirement. Consequently, these entities were subjected to a dilemma: rising corporate tax liabilities (29.5% to 31.5% between 2011-2012) collided with fixed distribution ratio, eroding financial flexibility during economic downturns.

The collapse of Penn West Petroleum Trust illustrates this regulatory paradox. Compelled to distribute 90% of income (CAD 500 million annually pre-2006), its capital reserve plummeted to 5.8% (CAD 210 million reserves against CAD 3.3 billion debt) by 2006. The 2008 oil crash (50% price drop) triggered a death spiral: issuing additional bonds to sustain dividends inflated debt to CAD 3.67 billion in 2009. Legislators' 2010 rejection of lowering the threshold - citing "crashing investor confidence" - exposed deeper regulatory capture, as energy lobbyists contributed CAD 4.2 million to maintain the status quo. This trajectory mirrors Robert K. Merton's "Law of Unintended Consequences" - the manifest function of the rule (investor protection) is subverted by its latent dysfunction (amplifying systemic risk)[4]. Schauer's "exclusionary reasons"[1] explains Section 122's persistence and application to converted organizations despite negative economic outcomes. As Schauer argues: rules, given top priority in regulators' cognitive paradigm excludes alternatives, especially those requiring changes. Simultaneously, North's path dependence reinforces this sense of priority[2]: once institutionalized, the 90% rule evolved into part of legislators' cognitive paradigm becoming an unchallengeable "truth." This interplay transforms external challenge into internal resistance. As a result, a compliance tyranny is created: Schauer's rules ensure obedience by 'excluding competing considerations,' while North's path dependence naturalizes such adherence through cognitive lock-in[1,2]. Ultimately, Penn West's internal plans (20-25% reserves to 5.8%; 5% capital expenditures to 3.1%) collapsed under compliance pressures, exemplifying formalism's contradiction: rules designed for stability ironically produce instability.

Penn West's collapse is not merely a clash of rules and reality but an empirical validation of Schauer and North's theories: when law operates as an exclusionary reason and institutions resist adaptation due to path dependence, systemic collapse transitions from contingency to inevitability. This pathology has penetrated into Canada's regulatory ecosystem. Section 56 of the Ontario Securities Act mandate ambiguous "material facts" disclosure, diverting 15-20% of REIT budgets to speculative risk reporting. Judicial rulings like *Re Morguard*, prioritizing immediate income over innovation, embodies Schauer's "rules overriding substance" and North's "adaptive inefficiency" - sacrificing long-term adaptability for ritual compliance[1,2].

2.2 The Disclosure-Distribution Trap: How Section 56 and Section 122 Create a Feedback Loop

The collapse of Penn West Petroleum Trust reveals a fundamental tension in Canada's REIT regulatory framework. For instance, during the 2008 crisis, Penn West reduced capital expenditures to 3.1% (from a planned 5%) while diverting approximately 19% of its operational budget to preemptively report speculative risks. This resource misallocation exposes a destructive interaction: Section 122's procedural rigidity (Schauer's rule-bound formalism) work together with Section 56's disclosure ambiguities (North's path dependence) to trap trustees in a self-defeating cycle[1,2]. Section 122's rigid payouts deplete crisis buffers, forcing trustees into North's "adaptive inefficiency[2]" - prioritizing formal compliance over strategic innovation. Conversely, Section 56's ambiguities, sustained by judicial precedents (North's cognitive lock-in[2]), legitimize rules as authoritative. Together, they form a self-sustaining regulatory loop: rules compel compliance in ways that reinforce their own authority.

Central to Section 56 lies its critical flaw: its demand for "full, true, and plain disclosure" of "material facts". Legislators' failure to define the scope of "material facts" compels trustees to adopt a defensive mindset. Framed as a form of "compliance insurance," this mentality, transforms disclosure from a compliance instrument into a legal defence strategy. To illustrate, primarily to avoid litigation, trustees tend to disclose even conceivable risks, including hypothetical regulatory changes, geopolitical disruptions, or decade-out climate policies. The cost of this "compliance insurance" materializes in cold statistics: REITs now allocate 15-20% of operational budgets to speculative risk reporting- resources equivalent to funding three mid-sized solar farms annually. This diversion epitomizes a paradox: rules designed to protect investors starve the innovations that would actually secure their futures. Additionally, it reveals a even deeper institutional evasion: Section 56's ambiguity is not accidental but a risk-transfer strategy. By delegating "material fact" judgments to trustees, regulators outsource liabilities while preserving the guise of investor protection. The Alberta Court's 2020 *Re Morguard* ruling crystallized this regulatory distortion through what Schauer terms "rules overriding substance" - prioritizing procedural compliance over functional outcomes[1]. By asserting that "beneficiaries' entitlement to immediate income cannot be subordinated to speculative future gains," the court turned Section 56's ambiguous disclosure standard into a litigation deterrent. Therefore, trustees are compelled to confront a regulatory dilemma: either withhold information and face potential litigation, or over-disclose and compromise long-term growth initiatives. North's "adaptive inefficiency" manifests here as courts privilege short-term risk mitigation (e.g., shielding against shareholder suits) over long-term institutional adaptability[2]. This judicial enforcement completes a feedback loop: courts convert legislative ambiguity into enforceable rigidity, as seen in Penn West's collapse - depleted reserves + defensive disclosures → innovation paralysis. Each layer of 'protection' tightens system's stranglehold on adaptability. As a result, trustees are rendered captives of procedure, with their strategic discretion subordinated to the imperatives of compliance.

Courts, far from neutral arbiters, actively contribute to this trap. In *Re Morguard*, judges exploited Section 56's ambiguity by equating disclosure volume with legal prudence - a strategic move to avoid accountability for substantive oversight.

This judicial reasoning weaponized legislative ambiguity, shielding courts from criticism while maintaining stability in execution. The Ontario Superior Court's 2017 Greenberg decision amplifies this institutional paralysis. Although acknowledging that "litigation-driven disclosure risks distorting accountability," the court declined to modernize Section 56's interpretive framework, adhering to precedents, like "a navigator with an old map." As North explains: the transitional costs of redefining "material fact" (e.g., legislative gridlock, judicial retraining) exceed the perceived benefits of long-term systemic resilience. This inverse relationship exposes a system punishing sustainability to subsidize legal risk management. Overwhelmed by exhaustive risk disclosures, investors, increasingly turn to short-term, low-risk assets, making long-term innovation even less attractive. Eventually, the destructive interaction between rule-bound formalism and path dependence culminates in a tragedy of legal logic: rules that seem flawless on paper fail in practice. Here, Schauer's idea of "exclusionary reasons" and North's theory of "path dependence" have become tools that reinforce institutional decay[1,2]. Penn West's collapse wasn't an exception but the inevitable outcome of this system: a company buried under 37 pages of risk disclosure and merely 2% investment in renewables, operates as a tragic opera staged in the theatre of compliance, where an audience of investors eventually left holding empty purses.

2.3 Institutional Paralysis and Global Divergence: The Self-Defeating Cycle of Formalism in Canadian REIT Governance

Canada's trust law is trapped in a self-defeating cycle: rules designed to ensure stability, such as Section 122's rigid payouts and Section 56's ambiguous disclosures, undermine resilience through procedural formalism. Schauer's "tyranny of rules"[1] illustrates how ritualized compliance (e.g., 90% distribution ratio) suppress adaptive judgment, while North's theory of path dependence[2] explains their persistence: decades of institutional inertia has equated procedural compliance with fiduciary competence.

Penn West's collapse demonstrates this failure. Draining 90% of income under Section 122 slashed its reserves to 5.8% by 2006, while Section 56 diverted 19% of its budget to speculative risk reporting - resources that could have funded renewable energy upgrades. Courts' decisions further exemplify North's adaptive inefficiency[2] by accelerating this institutional decay. In *Re Morguard and Greenberg*, they turn disclosure volume into evidence of transparency, and rigid payouts into proof of fiduciary duties, transforming ambiguity into enforceable rigidity. Trustees thus perform in a "compliance theatre"[1]: procedurally flawless but substantively damaging. Globally, Canada's 20th-century formalism clashes with modern governance. While the EU adopts blockchain for real-time compliance, Canada's outdated standards undermines OECD alignment, damaging cross-border credibility. Ultimately, Canada's regime embodies a deep paradox: rules designed to reduce risk end up contributing to it. Unless legislators confront this "tyranny of formalism"[1], investors will remain caught in the tragedy staged at the "compliance theatre"[1].

3 CROSS-BORDER GOVERNANCE CRISIS: HOW OUTDATED TAX RULES CLASH WITH BLOCKCHAIN REALITIES

3.1 Case Study: How Canada's Tax Rules Enable Barbados Shell Company

Canada's trust law framework, grounded in procedural formalism, sustains domestic inefficiencies while extending challenges internationally. The rigidity of Section 122's payout mandate and Section 56's ambiguous disclosure rules reflects a system that prioritize ritualized compliance over adaptive governance. Such domestic tensions, however, not only mirrors but amplifies Canada's systemic regulatory disjunction in transnational governance. In cross-border trusts, procedural formalism similarly overrides substantive examination, undermining both domestic credibility and international coordination.

Canada's anti-avoidance framework under Income Tax Act Section 94(4) sets a crucial criterion for cross-border transactions: a "reasonable business purpose" is deemed absent if tax avoidance constitutes "one of the main purposes". However, enforcement - illustrated by the Barbados Shell Company Tax Avoidance Case - relies on the same formalist approach under domestic law. Section 94(4)'s procedural focus enables regulatory inefficiency which stems from a mutually reinforcing interplay between Schauer's legal formalism and North's path dependence[1,2]. To illustrate, its "main purpose" test functions as an "exclusionary reason[1]," displacing substantive examination with a narrow focus on documentary compliance. North's path dependence reinforces this formalism by embedding it within the cognitive paradigms of policymakers[2], who conflate procedural adherence with regulatory efficiency. The Barbados Shell Company case exemplifies this dynamic: the CRA accepted trust documents and tax filings as proof for a "reasonable business purpose," despite the entity's lack of personnel, operations, and risk management. As Allison Christians observes[5], the CRA's rationale reveals a regulatory disjunction: Canada's domestic tax law prioritizes formalist compliance, while international standards, such as the OECD's Principal Purpose Test, emphasize substance over form.

As policymakers internalize compliance checklists as normative benchmarks, substantive reforms, such as alignment with OECD's PPT, are rejected as disruptive or unnecessary. Canada's failure to amend Section 94(4) or issue binding guidelines since its 2017 PPT commitment illustrates path-dependency, which is further reinforced by political powers. For instance, energy lobby groups, representing beneficiaries of procedural formalism, contributed CAD 4.2 million to federal campaigns in 2019 - a strategic investment to compel the regulators into maintaining the status quo[6]. Altogether, perceived as exclusionary reasons, formal compliance expels substantive reforms, such as adopting the OECD standard, as threats to "legal certainty." Judicial conservatism conveyed by legal reasoning further amplifies this tension. In *Re Morguard and Greenberg*, courts transformed Section 56's ambiguous disclosure requirements into quantifiable

compliance metrics (e.g., pages of filings). By equating disclosure volume with fiduciary efficiency, courts institutionalize a cognitive bias: regulators conflate documentation compliance with regulatory transparency, ignoring the economic vacuum of shell companies such as the Barbados company. This judicial formalism, as a deliberate avoidance of substantive examination, legitimizes path-dependent stagnation. Together, these forces forge a dual barrier to radical reform: while international standards increasingly prioritize substance-over-form, Canada's domestic practices remain anchored in rigid formalism.

This disjunction carries profound consequences. Domestically, it enables artificial structures that contravene the Income Tax Act's anti-avoidance objectives; internationally, it prevents Canada's alignment with OECD transparency standards, undermining its credibility in cross-border tax governance. Moreover, Canada's formalism is fundamentally incompatible with blockchain's decentralized nature. Canada's focus on static filings, such as anti-avoidance under Section 94(4), reflects a 20th-century approach which is incapable of verifying the economic substance of blockchain transactions. This inability exposes a deeper cognitive flaw: regulators, trained under Schauer's formalism, are unable to envision compliance beyond paper trails, rendering them blind to decentralized economic realities. Nevertheless, Canada's inaction is not mere institutional inertia but a political choice - one that prioritizes the performative "theatre" of compliance (Schauer) over the OECD's substance-driven governance. Without dismantling the path-dependent alliance between lobbyists, formalist regulators, and conservative courts, Canada's embrace of OECD standards will remain rhetorical. To avoid becoming a relic of the analog age, Canada must confront not only its rules, but the power structures that sustain their tyranny.

3.2 Judicial Lock-in: Why Canadian Courts Reject Cryptocurrency Trusts

Canada's legal formalism, entrenched through statutory rigidity (e.g., Section 122's distribution rules), extends North's path-dependent mindset into judicial reasoning. This "judicial lock-in" reflects a deeper structural issue. On one hand, Schauer's concept of exclusionary reasons[1] explains how courts prioritize rules over contextual judgement. On the other, North's theory of cognitive path dependence[2] institutionalizes historical biases, reinforcing outdated norms. Together, these forces create a legal culture where procedural compliance take precedence over substantive adaptation, particularly in emerging areas as cryptocurrency trusts. Here, legal rules function as "epistemic barriers", excluding blockchain's cryptographic realities from judicial consideration.

For example, the 2019 *QuadrigaCX* ruling (Nova Scotia Supreme Court) represented the judicial lock-in mentioned. The court applied the 19th-century "certainty of subject matter" doctrine rigidly thereby denying cryptocurrency's status as trust property due to its lack of "physical form." By weaponizing the 19th-century doctrine as a "gatekeeper," the court blocked the recognition of blockchain's cryptographic nature, enacting what Boaventura de Sousa Santos describes as "cognitive imperialism"- the imposition of analog-era logic on emerging digital realities. Regarding blockchain's cryptographic traceability (e.g., immutable wallet addresses) as insufficiently "tangible," the court prioritized procedural formalism (documentary proof) over functional substance (algorithmic certainty). This approach entrenches North's "cognitive lock-in"[2]: judges, bound by precedent, perpetuate 19th-century norms despite digital realities.

Nevertheless, Québec's recognition of cryptocurrency as "incorporeal property" under its Civil Code(Art. 906) demonstrates statutory adaptability absent in common law systems. By legislatively redefining property, Québec's civil law demonstrates that institutional change is politically contingent, challenging North's assumption of "universal path dependence[2]." The statutory adaptability conveyed by the code indicates that Canada's common law is more than passively bound by precedents, but rather actively preserving outdated norms. In contrast, U.S. courts in *In re Bitfinex* transcended formalist constraints through functional equivalence analysis. Rather than focusing on "physical form," U.S. judges, adopting a functional approach, evaluated whether blockchain's cryptographic nature fulfill trust law's core objectives - transparency and traceability. By prioritizing fiduciary function such as transparency and traceability, U.S. courts reinterpret legal rules as adaptive tools than exclusionary barriers, representing a jurisprudential evolution that Canada's trust law fails to keep up with.

While Québec's civil law system and U.S. courts regularly updates and reinterpret legal principles, Canadian trust law remains constrained by a path-dependent pathology. Judges, for instance, bound by precedents, often default to cognitive lock-in, perceiving rules as unchallengeable truth under the guise of what Schauer terms "exclusionary reasons[1]." This pathology is even compounded by systemic educational deficits. Revealed by a 2021 Canadian Judicial Council report only 12% of judges received blockchain training - contrasting with the U.S., where 35% of federal judges completed cryptocurrency courses. As a result, groups of under-trained judges, conditioned by Schauer's formalism, likely mistake doctrinal familiarity (e.g., 'tangible property') for legal certainty, equating rule compliance with fiduciary competence. Altogether, North's path dependence combines with Schauer's formalism, producing a willful ignorance - a systemic refusal to keep up with technological changes.

Nevertheless, the pathology has radiated into Canada's regulatory framework. For instance, Ontario's Rule 56-501 pilot, reduces smart contracts to "automatic record-keeping tools," significantly negating their transformative potential. Similarly, Alberta's insistence on paper-based compliance purposefully ignores blockchain's potential by sticking to procedural execution, showcasing a "techno-fix" that should be deemed as adaptive inefficiency. In a word, regulatory incentives are constantly utilizing smart contracts as digital puppetry on the surface to shield the performative regulatory framework underneath. By assimilating blockchain into paper-based rituals (e.g., Alberta's filings), regulators are allegedly adopting technology only to consolidate current power structures by sending the signal that substantive changes will be put forward, which usually end up in barely scratching the surface.

Ultimately, the formalism evidenced in Canadian trust law transforms blockchain - a tool for decentralized transparency - into a prop for "compliance theatre." By forcing cryptographic certainty into 19th-century property doctrines, courts together with regulators enact a "tyranny of rules": innovation is permitted only when it reinforces existing systems. This self-sustaining cycle, where Schauer's "tyranny of rules" feeds North's "institutional inertia"[1,2], reduces blockchain's liberating potential into nothing. Canada thus risks becoming a 19th-century relic, fossilizing innovation to preserve the political economy of formalism.

3.3 Structural Defects and Modernization Pathways: Proposing a Symbiotic Legal-Technological Reform for Cross-Border Digital Trusts

Canada's trust law, constrained by Schauer's "tyranny of rules" and North's cognitive path dependence[1,2], is structurally unfit to govern cross-border digital assets. The judiciary's reliance on analog-era legal doctrines creates systemic obstacles to legal modernization. Outdated mechanisms such as Section 94(4)'s formalist "main purpose test" and the QuadrigaCX court's application of 19th-century tangibility requirements to cryptocurrency trusts demonstrate how dated formalism prevents regulatory evolution. This institutional rigidity contrasts with contemporary governance trends, particularly the OECD's economic substance principle and blockchain technology's requirement for purpose-built fiduciary structures. Therefore, Canada's regulatory framework presents a paradoxical duality: Domestically, it operates through procedural checklists such as the CRA's documentary compliance requirements, while internationally advocating for the substance-over-form principles of OECD. This contradiction becomes particularly evident when analyzing jurisdictional approaches comparatively. Québec's Civil Code (Art. 906) formally classifies digital assets as "incorporeal property," while U.S. courts in *In re Bitfinex* validated blockchain's ability to enforce fiduciary transparency. These contrasting developments highlight Canadian common law's failure to modernize, while caught in a trap between preservation of 19th-century legal frameworks and the pressing need for technological adaptation.

To reconcile this conflict, Canada must pursue a symbiotic legal-technological reform. Legislatively, the enactment of a Uniform Digital Trust Act could modernize Canada's trust framework through three levels: (1) adopting OECD-style economic substance requirements to replace Section 94(4)'s "main purpose test," (2) statutorily defining digital assets as legitimate trust property, and (3) formally abolishing outdated property doctrines. Technologically, integrating blockchain innovations such as ERC-1400 smart contracts could automate compliance while embedding fiduciary duties into code[7]. Programmable contracts, for instance, might dynamically adjust REIT payout ratios in response to real-time market shifts, circumventing Section 122's rigid mandates. In this way, a twofold modernization strategy - combining legislative updates with algorithmic enforcement - could propel the nation beyond its reliance on conservative precedents. The evolved governance model would maintain legal certainty while promoting adaptability, achieving the essential balance between legal tradition and digital innovation required for 21st-century financial ecosystems.

4 BLOCKCHAIN-ENABLED GOVERNANCE: ALGORITHMIC RESPONSE TO CANADIAN TRUSTS' CRISIS

Canada's trust law crisis embodies a theoretical deadlock: Schauer's "tyranny of rules"[1] prioritizes procedural compliance over adaptability, while North's "cognitive lock-in"[2] entrenches outdated practices as unchallengeable "truth". The QuadrigaCX ruling, denying cryptocurrency trusts under 19th-century tangibility doctrines, exemplifies this impasse. Courts, bound by Schauer's formalism (rules as exclusionary reasons), dismissed blockchain's cryptographic nature, while legislators, trapped in North's inertia, preserved Section 94(4)'s "main purpose test". Lawrence Lessig's concept of "code is law" transcends this binary by redefining legal certainty[3]: not as formal compliance (Schauer) or historical inertia (North), but as algorithmic responsiveness. To illustrate, Lessig's framework redefines law evolution: by building adaptability through systematic design, Canada has the opportunity to move beyond crisis-driven reform. Rather than choosing between stability and innovation, this approach offers a reconciliation, where code serves as the new precedent, and blockchain functions as a living trust.

Technologically, ERC-1400 smart contracts offer a practical vision of this adaptive governance. By programmatically adjusting REIT payouts in response to oil price fluctuations, they preserve the enforcement of rules (such as secured distribution) while undermining rigidity through real-time adaptation. Concurrently, integrating the OECD's Principal Purpose Test into blockchain systems could revolutionize anti-avoidance enforcement. For instance, smart algorithms could analyze IP traffic to identify offshore shell entities - if 90% of access originates from Canada, the system would deem the structure as a domestic trust. In this way, this approach replaces Section 94(4)'s paper-based test with data-driven transparency. Legislatively, the proposed Uniform Digital Trust Act (UDTA) formalizes this paradigm shift. It reframes trust law's "three certainties" as algorithmic building blocks: token-holder votes as intention, distributed ledgers as "subject-matter", and verified identities as objects. This transformation reflects how fiduciary governance is structured in a digital age. Meanwhile, the immutability of code satisfies Schauer's demand for predictability. Unlike static legal precedents, code's programmability introduces a built-in capacity for change - an embedded adaptability that directly challenges North's concept of path dependence.

Nevertheless, code-driven governance, while offering greater efficiency, brings with it serious concerns around legal accountability and democratic legitimacy. In fact, Schauer's concept of "tyranny of rules" may reemerge in algorithmic systems. For example, automated decisions, such as dynamic payout adjustments, are usually powered by proprietary algorithms which are shielded by trade secrecy or technical complexity. Thus, it may create obstacles for stakeholders to

understand how decisions are made. This opacity reflects Schauer's broader critique of formalism. When rules are encoded into software, they tend to prioritize procedural compliance - what the system does - over substantive justification - why it does it. In this way, such systems risk undermining the transparency that is essential to legal due process. For instance, consider an ERC-1400 contract that automatically reduces REIT dividends during a market downturn. Even if the financial impacts are drastic, investors may lack recourse to challenge the algorithm's logic or assumptions. Additionally, North's path dependence highlights a deeper complication. Although Blockchain's decentralized governance appears democratic on the surface, it may unintentionally entrench technocratic control. Those who validate the network - often large tech enterprises - can influence or control code updates. As a result, they may shape rules in ways that favor their own interests, mirroring the same institutional inertia North warned of, in a digital form. Consider Ethereum's 2016 DAO hard fork: a small group of developers reversed transactions to recover from a major hack, overriding one of blockchain's core principles - immutability. Such centralized interventions, masked as technical necessity, illustrate how code-based governance risks becoming vulnerable to concentrated influence. The UDTA's safeguards must therefore address three layers of risk: (1) Mandating open-source audits and "explainable AI" standards to make algorithmic decisions transparent, ensuring compliance with principles such as Canada's Duty of Procedural Fairness[8]; (2) Distributing code-update authority across stakeholders (e.g., token holders, regulators, civil society) through decentralized autonomous organizations (DAOs), preventing monopolization by tech elites; (3) Embedding judicial review triggers within smart contracts - for example, requiring human reexamination if payout adjustments exceed 20% - to balance automation with discretionary judgment. Without appropriate safeguards, code-driven governance risks trading one form of rigidity for another. In such a scenario, legal formalism gives way to algorithmic determinism, where rules are coded into software instead of statutes. Under the facade of innovation, this shift can actually deepen exclusion and marginalization that it was designed to confront.

In a word, Canada now stands at a critical crossroad. It may stick to analog-era legal frameworks, perpetuating the rigidity Schauer critiques and the inertia North warns of, or it may pioneer a paradigm where code becomes law's adaptive counterpart. This transformation calls for a new vision of governance - one that functions as a dynamic ecosystem. In this model, blockchain ensures the immutability of core principles, smart contracts flexibly adjust obligations in response to context, and democratic oversight acts as a safeguard against algorithmic overreach. Such a synthesis resolves the Schauer-North paradox: rules retain certainty through code's precision, while institutional adaptability is embedded into their design. By embracing this vision, Canada could convert its trust law crisis into a global precedent: where fiduciary duties evolve with market realities, compliance is both transparent and responsive, and innovation thrives within insurance of accountability.

5 CONCLUSION

Canada's trust law crisis is beyond a matter of outdated statutes. It is deeply rooted in a structural tension between Schauer's "tyranny of rules" and North's "path dependence"[1,2]. Addressing this crisis demands a fundamental revisit of governance - one that shifts away from formalism and toward systemic transformation. This paper argues that the integration of blockchain is not merely a technological update, but a paradigm shift. By redefining fiduciary governance, it transits legal formalism from a rule-bound system into an adaptive, code-driven, ecosystem. By embedding responsiveness into the institutional framework, Canada can dismantle the self-perpetuating loop of procedural rigidity and cognitive inertia, creating a trust regime that reconcile legal certainty with the flexibility of financial markets.

Central to this vision is Lessig's "code is law" framework[3], which reframes fiduciary governance through three interconnected pillars. First of all, smart contracts such as ERC-1400 exemplify algorithmic adaptability, by replacing mandates, such as Section 122's rigid payout rules, with dynamic obligations that are responsive to real-time variables, it preserve compliance while circumventing formalism's rigidity, ensuring rules evolve alongside market realities. Secondly, the proposed Uniform Digital Trust Act (UDTA) reconceptualizes trust law's foundational "three certainties" through blockchain technology: consensus mechanisms encode intention, distributed ledgers verify subject-matter, and cryptographic identities secure objects. This transition, from paper-based formalism to cryptographic accountability, marks more than a technical upgrade. It represents a structural shift that embeds flexibility directly into governance design, challenging North's "adaptive inefficiency"[2]. Last but not least, transparency safeguards, such as decentralized autonomous organizations (DAOs) and explainable AI standards, can mitigate the risks of algorithmic opacity. By democratizing authority over code updates, the model prevents control from concentrating in the hands of a few technical actors. At the same time, it embeds judicial review triggers into the system, allowing legal oversight to intervene when necessary. Together, these mechanisms strike a balance between automation and democratic accountability. In this way, transparency is no longer a box-ticking exercise; it becomes a living institutional norm rather than a symbolic gesture. This transformation is foundational, not additive. Unlike Québec's statutory updates or U.S. courts' functional equivalence approach, Canada's UDTA redefines the fundamental basis of trust law itself. Blockchain no longer merely digitizes existing legal processes. Instead, it becomes the institutional scaffold - a dynamic infrastructure where legal principles evolve through coded precedents rather than crisis-driven reforms. Here, code's immutability satisfies Schauer's demand for predictability, while its programmability dismantles North's path dependence[2], resolving the paradox of rules-as-constraints versus rules-as-adapters.

Canada now faces an existential choice. Sticking to 19th-century doctrines risks turning its legal system to a relic as global governance moves toward algorithmic agility. Conversely, embracing the UDTA framework positions Canada as a pioneer of adaptive legal systems, where fiduciary duties evolve with cryptographic precision, compliance transcends

ritualistic disclosure, and innovation thrives within guardrails of accountability. This is not mere modernization but the creation of a new governance species - one where code serves not as a disruptor but as ally of justice, ensuring law remains a living force in the digital age.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

REFERENCES

- [1] Frederick Schauer. *Playing by the Rules: A Philosophical Examination of Rule-Based Decision-Making in Law and in Life*. Oxford: Oxford University Press, UK. 1993. DOI: <https://doi.org/10.1093/acprof:oso/9780198258315.001.0001>.
- [2] Douglass C North. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press. 1990. DOI: <https://doi.org/10.1017/CBO9780511808678>.
- [3] Lawrence Lessig. *Code: And Other Laws of Cyberspace*. New York: Basic Books. 1999, 89-112. ISBN: 978-0465039132
- [4] Robert K Merton. *Social Theory and Social Structure*. New York: Free Press. 1968, 120-124. ISBN: 978-0029211304
- [5] Allison Christians. *Form over Substance in Canadian Tax Treaty Policy*. McGill LJ 47 at 53. 2017: 62: 2. <https://mcgilllawjournal.ca/articles/form-over-substance-in-canadian-tax-treaty-policy/>.
- [6] Boaventura de Sousa Santos. *Toward a New Legal Common Sense: Law, Science and Politics in the Paradigmatic Transition*. New York: Routledge, USA. 2002, 298. <https://www.routledge.com/Toward-a-New-Legal-Common-Sense-Law-Globalization-and-Emancipation/Santos/p/book/9780406949974>.
- [7] Ethereum Foundation. 'EIP-1400: Security Token Standard'. 2018. <https://github.com/ethereum/EIPs/blob/master/EIPS/eip-1400.md>.
- [8] Cass R Sunstein. *Algorithmic Transparency in the Administrative State*. 71 Duke LJ 1. 2022. <https://scholarship.law.duke.edu/dlj/vol71/iss1/1/>.