REGULATING FOR GROWTH: FROM REGULATORY COMPLIANCE TO REGULATORY CAPITAL, A SOCIO-LEGAL THEORY OF PRINCIPLE-BASED FINANCIAL REGULATION AND DEVELOPMENTAL OUTCOMES IN INDIA

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ABSTRACT

Financial-regulation scholarship has long treated compliance as a private cost, a deadweight burden that efficient regulation should minimise. This article inverts that assumption. It argues that in emerging economies financial regulation increasingly operates not as a constraint upon markets but as developmental infrastructure that produces them, and it introduces a socio-legal construct, Regulatory Capital, to name the institutional value that compliance generates. Drawing together five bodies of scholarship that have evolved in parallel (institutional economics, socio-legal theory, law and development, financial regulation, and public governance), the article advances a Developmental Regulatory Capital Theory (DRCT). It theorises the causal pathway through which legal design becomes institutional trust, trust becomes investment confidence, and investment confidence becomes inclusive sectoral growth. The theory is deliberately bidirectional: the same regulatory flexibility that accumulates developmental capital can, absent institutional quality, produce distorted capital, regulatory arbitrage, financialisation and consumer harm. India's 2023-2026 regulatory reset, the consolidation of Reserve Bank Master Directions, the draft Securities Markets Code, an expanding self-regulatory-organisation ecosystem, and digital public infrastructure, supplies the empirical laboratory. Three case studies (the Securities Markets Code delegation controversy, the Jane Street enforcement action, and the Andhra Pradesh microfinance contraction) test the theory against its hardest cases. The article contributes a measurement framework, a five-fold typology and a set of testable propositions, offering a generalisable lens for comparative research across emerging markets.

Keywords: principle-based regulation; regulatory capital; developmental state; socio-legal theory; financial regulation; India; financialisation; RegTech.

1. Introduction

Every legal order that governs finance confronts a deceptively simple question: what is compliance *for*? The dominant answers are familiar. Compliance exists to prevent market failure, to protect consumers, to preserve systemic stability, or, more recently, to enable innovation. Each of these answers, whatever its analytic virtues, shares an unstated premise, that compliance is a friction, a private cost that well-designed regulation should minimise. On this view the ideal regulatory state is the one that extracts obedience most cheaply. This article contends that the premise is mistaken, or at least badly incomplete, for the class of economies that most need regulation to do developmental work.

A quiet transformation in Indian financial law between 2023 and 2026 exposes the limits of the cost paradigm. The Reserve Bank of India has consolidated thousands of accreted circulars into a coherent architecture of Master Directions.[1] The Securities and Exchange Board of India has moved toward principle-based disclosure and, through the draft Securities Markets Code, toward a framework statute that consolidates fragmented securities legislation.[2] Alongside these sit the instruments of India's digital public infrastructure, the Unified Payments Interface, Aadhaar-enabled identity, the Account Aggregator consent architecture, and the Open Credit Enablement Network. What is striking about the latter set is that they do not merely *regulate* markets; several of them *constitute* markets that did not previously exist. Financial law here is not restrictive but productive: it manufactures trust, interoperable data, digital identity and capital mobility as public goods.

Legal scholarship lacks a vocabulary adequate to this shift. This article supplies one. It introduces **Regulatory Capital**, to be sharply distinguished from the Basel sense of capital adequacy, as the institutional value created when financial regulatory compliance produces legal certainty, supervisory credibility, trusted information, lower transaction costs and public legitimacy, thereby enabling productive investment and inclusive development. Building on that construct, it advances a **Developmental Regulatory Capital Theory (DRCT)**, which

[1]Reserve Bank of India, Master Directions (consolidating extant circulars and instructions); see also M. Rajeshwar Rao, Deputy Governor, RBI, Regulation and Supervision in a Dynamic Financial Landscape (address, 2023). https://website.rbi.org.in/or/web/rbi/-/speeches-interview/reflections-challenges-in-regulations-remarks-delivered-by-shri-m.-rajeshwar-rao-deputy-governor-reserve-bank-of-india-november-2-2023-at-the-gatekeepers-of-governance-summit-organised-by-excellence-enablers-in-mumbai-1391

[2]The draft Securities Markets Code, 2025 (proposing consolidation of the SEBI Act, 1992, the Securities Contracts (Regulation) Act, 1956, and the Depositories Act, 1996). https://ibclaw.in/securities-markets-code-2025-introduced-in-parliament-to-consolidate-sebi-laws/

specifies the causal pathway by which financial law becomes an institution of economic development. The thesis is that principle-based regulation contributes to growth not chiefly by lowering compliance costs but by *accumulating regulatory capital*, and that the same flexibility, unaccompanied by institutional quality, can just as readily produce its pathological inverse.

2. Research Problem and Significance

The literature is fragmented into conversations that do not speak to one another. Institutional economists explain why institutions generate prosperity but treat regulation as merely one component of institutional quality.[3] Financial-regulation scholars theorise how regulation should be designed to achieve stability, protection or innovation, but rarely trace the developmental consequences of compliance itself.[4] Development economists study financial deepening and inclusion but seldom examine the legal mechanisms through which regulatory systems become productive.[5] Socio-legal theorists interrogate legitimacy, pluralism and governance, but not compliance as an economic institution. Each field answers its own question well; none answers the bridging question:

How does financial regulatory compliance become an institutional asset that contributes to economic development?

The significance of the question is neither abstract nor parochial. For a lower-middle-income country pursuing an ambitious development agenda while simultaneously simplifying regulation, building digital public infrastructure and deepening financial inclusion, the difference between compliance-as-cost and compliance-as-capital is the difference between a regulatory state that merely restrains conduct and one that builds developmental capability. If the cost paradigm is wrong, then the metric by which reforms are judged, reduction of compliance burden, is itself the wrong metric, and a large body of policy evaluation rests on a category error. India, uniquely, permits the question to be examined because it is running all

[3] Douglass C. North, Institutions, Institutional Change and Economic Performance (1990); Oliver E. Williamson, The Economic Institutions of Capitalism (1985); Daron Acemoglu & James A. Robinson, Why Nations Fail (2012). http://doi.org/10.1017/CBO9780511808678

[4] See Julia Black, Forms and Paradoxes of Principles-Based Regulation, 3 Cap. Mkts. L.J. 425 (2008); Douglas W. Arner, Jànos Barberis & Ross P. Buckley, The Evolution of FinTech: A New Post-Crisis Paradigm?, 47 Geo. J. Int'l L. 1271 (2016). https://doi.org/10.1093/cmlj/kmn026

[5] Raghuram G. Rajan & Luigi Zingales, Financial Dependence and Growth, 88 Am. Econ. Rev. 559 (1998). https://www.jstor.org/stable/116849.

of these experiments at once.

3. Scope and Methodology

This is a theory-building article in the socio-legal tradition; its ambition is conceptual and interpretive rather than econometric. The method triangulates three modes of inquiry. First, **doctrinal analysis** of the principal instruments of India's 2023-2026 reset, the Master Directions, the draft Securities Markets Code, the self-regulatory-organisation framework and the data-governance statutes, to establish the legal architecture with precision. Second, a **socio-legal reading of law-in-action**, pursued through three analytically chosen case studies that expose the gap between the black-letter design of principle-based regulation and its operation in the field. Third, **conceptual synthesis**, integrating five previously disconnected literatures into a single developmental model and reducing that model to testable propositions.

The scope is deliberately bounded. The article addresses financial-sector regulation administered chiefly by the Reserve Bank, the securities regulator, the insurance regulator and the international financial-services authority; it does not extend to fiscal policy, competition law or the broader constitutional order except where these bear directly on regulatory capital. The case studies are selected on a most-difficult-case logic: each is a setting in which principle-based flexibility is under acute strain, so that a theory able to illuminate them is more likely to travel. The article claims analytical generalisability, the portability of its framework, rather than statistical generalisability, which future empirical work using the measurement framework proposed in Part 5 could supply.

4. Article Structure

Part 5 develops the theoretical framework in five movements: the transmission mechanism that converts compliance into capital, the five forms that regulatory capital takes, a bidirectional analytical model with an accompanying measurement framework and proposition set, and the political economy that determines which pathway a jurisdiction travels. Part 6 situates the contribution within, and against, the existing scholarship and specifies the research gap. Part 7 tests the theory through three comparative case studies and derives, from the model, a set of departmental adherence obligations and an inward-outbound schema for engagement with external agencies. Part 8 situates India comparatively against the United Kingdom, Singapore and the European Union. Part 9 engages the strongest counterarguments, including those from critical legal studies and political economy, and states the novelty of the contribution. Part 10 distils a concise policy memorandum for regulators. Part 11 concludes.

5. Theoretical Framework

5.1 Theoretical mechanisms: compliance as an intermediate institution

The evolution of financial regulation is conventionally narrated as a movement from rule-based to risk-based to principle-based supervision. That narrative is incomplete. A fourth and fifth stage are discernible in emerging-market practice: an *adaptive* stage, in which regulation governs emergent and rapidly mutating risks such as algorithmic trading, artificial intelligence and climate exposure; and a *developmental* stage, in which the explicit function of regulation is to create the institutional capability that sustains inclusive economic growth. India, this article argues, is entering the fifth stage, a stage scholarship has not adequately named.

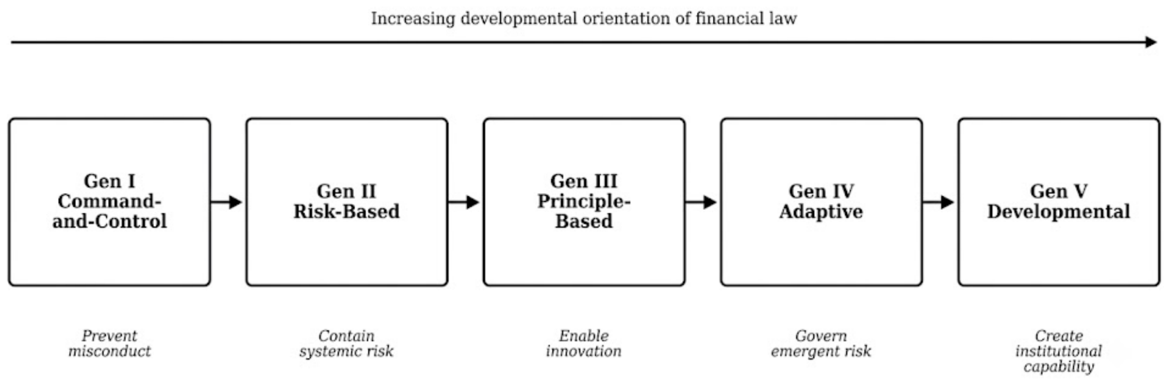

Figure 1. Five generations of financial regulation. Each stage subsumes rather than replaces its predecessors; the developmental orientation of financial law increases from left to right.

The dominant literature assumes a black box between 'better regulation' and 'growth'. DRCT opens the box. The transmission mechanism runs from legal design through regulatory behaviour to institutional capability; capability generates institutional trust; trust lowers transaction costs and information asymmetries; lowered costs raise investment confidence; confidence deepens financial markets and drives sectoral growth; growth, in turn, replenishes regulatory legitimacy, which enables the next cycle of reform. Compliance, on this account, is neither the terminus (as in the enforcement view) nor a deadweight (as in the cost view). It is an *intermediate institution*, the mechanism by which legal text is converted into economic capability. The cycle is self-reinforcing rather than linear.

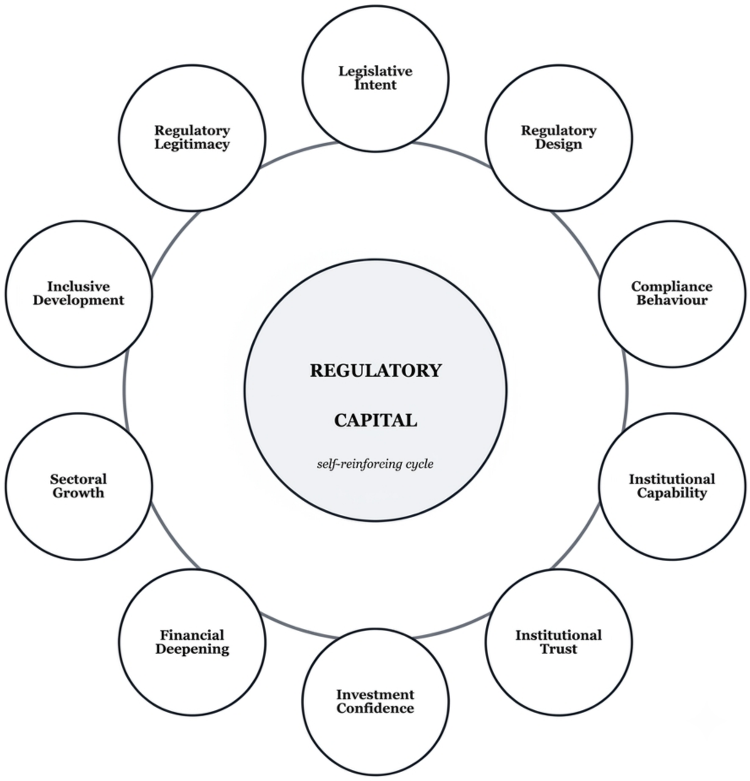

Figure 2. The Regulatory Capital Cycle. Compliance is an intermediate institution converting legislative intent into developmental capability, which in turn regenerates regulatory legitimacy.

The construct is best understood by analogy to social capital. Just as Putnam's civic trust lowers the cost of cooperation and thereby raises economic performance,[6] regulatory capital lowers the cost of transacting under uncertainty and thereby raises the productivity of investment. The analogy can be formalised. If economists write developmental output as a function of capital, labour and technology, regulatory capital (RC) may be written as a function of five institutional inputs: legal certainty (L), compliance capability (C), institutional quality (I), trust (T) and governance (G), $RC = f(L, C, I, T, G)$. The claim is not that this relation is presently estimable, but that naming its arguments makes visible a conversion process the compliance-cost literature

[6] Robert D. Putnam, Making Democracy Work: Civic Traditions in Modern Italy (1993); see also Francis Fukuyama, Trust: The Social Virtues and the Creation of Prosperity (1995). https://doi.org/10.1515/9781400820740

renders invisible.

The functional form warrants a caveat that is also a research agenda. *RC = f(L, C, I, T, G)* is offered as a heuristic rather than a cardinal production function: its arguments are latent institutional constructs, several of which, trust and governance above all, are unobservable and can be approached only through the proxy indicators catalogued in the Regulatory Capital Assessment Framework below. The relation is presumptively one of *complementarity* rather than substitution: legal certainty yields little developmental capital where supervisory capability is absent, so the inputs reinforce one another and a deficit in one depresses the marginal product of the rest. Estimation faces three obstacles that the article does not pretend to resolve, the measurement of latent variables, the endogeneity of reform to the very outcomes it is meant to produce, and the long and variable lags between legal design and developmental effect. What can be specified now is the analogue to total-factor productivity: a *regulatory-productivity residual*, the portion of sectoral development not explained by conventional capital, labour and technology, that the framework attributes to accumulated regulatory capital. Rendering that residual estimable, through panel indicators across jurisdictions, is the empirical programme this theory invites rather than completes.

5.2 The five forms of developmental regulatory capital

Regulatory capital is not monolithic. It is usefully disaggregated into five interrelated forms, each with distinct indicators. **Legal** regulatory capital consists in clarity, proportionality, predictability and coherence of obligation. **Institutional** regulatory capital consists in supervisory capability, inter-agency coordination and enforcement credibility. **Informational** regulatory capital consists in disclosure quality, transparency, trusted data and interoperability. **Technological** regulatory capital consists in RegTech, SupTech, AI-assisted supervision and machine-readable reporting. **Social** regulatory capital consists in legitimacy, public trust, inclusion and participation. The five accumulate jointly; a deficit in any one caps the developmental yield of the others, so that a system rich in legal clarity but poor in social legitimacy will underperform its formal design.

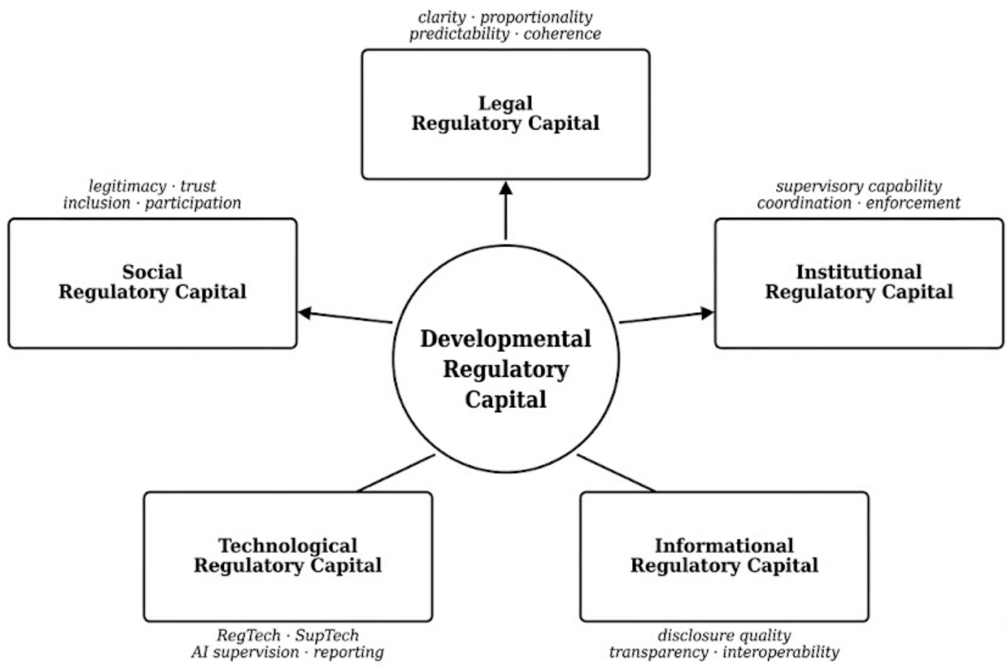

Figure 3. The five forms of developmental regulatory capital and their indicators.

5.3 The bidirectional analytical model

A celebratory theory of regulatory capital would be a poor socio-legal theory. The framework is therefore bidirectional. Principle-based regulation supplies flexibility; whether that flexibility accumulates *constructive* or *distorted* regulatory capital is conditioned by institutional quality. Where oversight, supervisory capacity and accountability are strong, flexibility yields legal certainty, trust, productive investment and inclusive development. Where they are weak, the identical flexibility yields interpretive voids, regulatory arbitrage, speculative finance and, ultimately, consumer harm and developmental loss. Institutional quality is thus not a background condition but the pivotal *conditioning variable* that determines which pathway a jurisdiction travels. This is the analytic heart of the theory and the point at which it becomes genuinely socio-legal rather than merely economic.

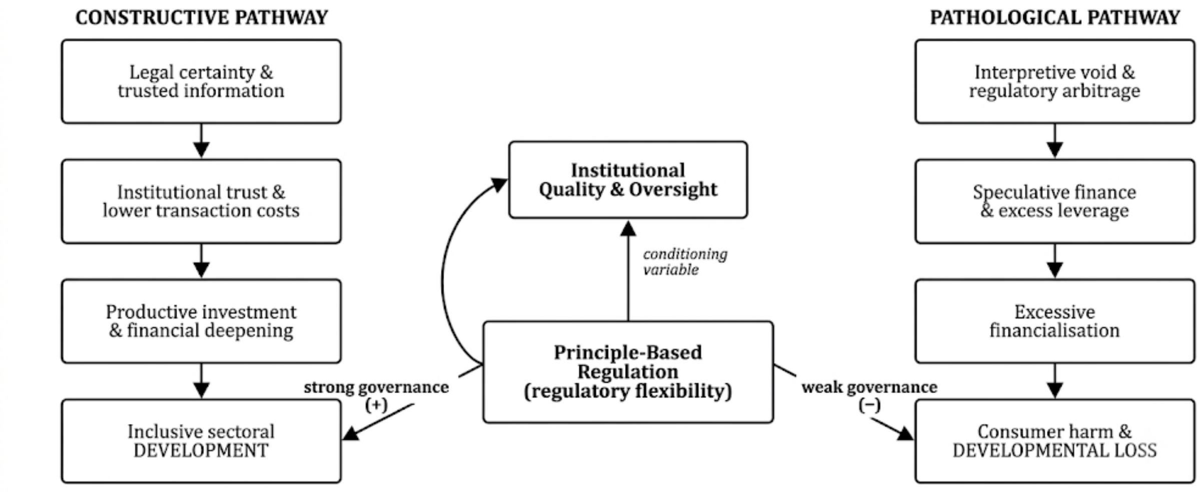

Figure 4. The bidirectional analytical model. The same regulatory flexibility produces constructive or pathological outcomes according to the strength of institutional quality and oversight.

5.4 The measurement framework, typology and propositions

To move beyond conceptualisation, the article proposes a **Regulatory Capital Assessment Framework (RCAF)** that renders the theory diagnostically usable across jurisdictions. Each dimension is stated as a question with associated indicators, permitting comparative scoring.

Table 1. Regulatory Capital Assessment Framework (RCAF).

Dimension	**Diagnostic question**	**Illustrative indicators**
Legal	Does the framework provide clarity, predictability and proportionality?	Coherent rulebooks; certainty of obligation; simplified directions
Institutional	Does it strengthen supervisory capability and regulatory credibility?	Supervisory effectiveness; inter-agency coordination; use of SupTech
Informational	Does it improve market integrity and the quality of information?	Disclosure quality; transparency; data interoperability; reduced misconduct
Technological	Does it enable continuous, machine-readable compliance?	RegTech adoption; digital reporting; AI-assisted supervision

Dimension	**Diagnostic question**	**Illustrative indicators**
Social	Does it sustain legitimacy and protect citizens?	Consumer protection; grievance redress; financial inclusion; public trust
Developmental	Does it convert the above into sustainable, inclusive sectoral growth?	Productive credit access; MSME finance; welfare-consistent outcomes

The framework in turn supports a **typology** that moves the debate beyond a binary of 'good' and 'bad' regulation. Regulatory capital may be thin, procedural, adaptive, developmental or distorted, with correspondingly different developmental yields.

Table 2. A typology of regulatory capital.

Type	**Characteristics**	**Likely developmental outcome**
Thin	Formal compliance without trust; box-ticking	Limited growth
Procedural	Predictable but rigid; rule-bound	Stability without dynamism
Adaptive	Principle-based and technology-enabled	Innovation
Developmental	High trust, proportionality and institutional capability	Inclusive sectoral growth
Distorted	Weak oversight; flexibility captured for arbitrage	Excessive financialisation; consumer harm

Finally, the theory is reduced to six propositions that later empirical research may test. **P1:** Principle-based regulation enhances regulatory capital by increasing legal certainty and reducing unnecessary complexity. **P2:** Regulatory capital mediates the relationship between regulatory reform and sectoral investment. **P3:** Regulatory capital strengthens institutional trust, thereby lowering transaction costs and information asymmetries. **P4:** The developmental impact of principle-based regulation is contingent on complementary institutional quality, supervisory capability and digital governance. **P5:** Weak governance converts regulatory flexibility into arbitrage, producing financialisation rather than inclusive development. **P6:** The long-run legitimacy of financial regulation depends on its capacity to balance innovation, efficiency, protection and developmental objectives.

5.5 The political economy of regulatory capital

The model so far treats institutional quality as the variable that sorts constructive from distorted capital, but institutional quality is not exogenous, it is itself the product of power. A complete socio-legal theory must therefore ask *who* shapes the accumulation and distortion of regulatory capital. The public-choice tradition supplies the starting point: regulation is demanded and supplied in a political market, and well-organised incumbents capture it to serve private ends.[7] Principle-based regimes are unusually exposed to a subtler variant, *cultural* capture, because discretion widens the space in which a regulator may come to see the world through the industry's eyes without any quid pro quo.[8] Where rules constrain, principles invite, and the invitation is most readily accepted by the best-resourced participants. This is the mechanism by which the flexibility that produces developmental capital in Figure 4 tips into distortion: not through crude corruption but through the quiet asymmetry of who can afford to shape interpretation.

In emerging markets the political-economy stakes are sharpened by two features. First, credit and regulatory forbearance are prized political resources, and lenders demonstrably favour the politically connected, so that the distributional question of *whose* access regulatory capital expands is never neutral.[9] Second, the autonomy of the supervisory bureaucracy, the very capacity that Figure 4 makes pivotal, is itself contested terrain, strengthened or hollowed through extended struggle between executives and regulators, particularly under electoral and growth-model pressures.[10] The delegation of authority to self-regulatory organisations, analysed in Part 7, is on this view not merely an administrative reallocation but a distributional settlement whose beneficiaries must be watched. A seventh proposition follows: **P7:** the ratio of constructive to distorted regulatory capital in any jurisdiction is a function of the balance of

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[7]George J. Stigler, The Theory of Economic Regulation, 2 Bell J. Econ. & Mgmt. Sci. 3 (1971); Jean-Jacques Laffont & Jean Tirole, The Politics of Government Decision-Making: A Theory of Regulatory Capture, 106 Q.J. Econ. 1089 (1991), https://doi.org/10.2307/2937958.

[8]Daniel Carpenter & David A. Moss eds., Preventing Capture: Special Interest Influence in Legislation, and How to Limit It (2014) http://doi.org/10.3917/rfsp.654.0672p; Ernesto Dal Bó, Regulatory Capture: A Review, 22 Oxford Rev. Econ. Pol'y 203 (2006), https://doi.org/10.1093/oxrep/grj013.

[9]Asim Ijaz Khwaja & Atif Mian, Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market, 120 Q.J. Econ. 1371 (2005). http://doi.org/10.1162/003355305775097524

[10]Aydın Çoban, Navigating Financial Cycles: Economic Growth, Bureaucratic Autonomy, and Regulatory Governance in Emerging Markets, Reg. & Governance (2025), https://doi.org/10.1111/rego.12621; see also Emilios Avgouleas & David C. Donald eds., The Political Economy of Financial Regulation (2019). https://doi.org/10.1017/9781108612821

organised interests and the insulation of supervisory bureaucracy from capture. Institutional quality, in short, is endogenous to political power, and any developmental theory of regulation that ignores this understates the fragility of the constructive pathway.

6. Literature Review and Research Gaps

The contribution is best located against the five conversations it seeks to integrate. The socio-legal tradition supplies the intellectual scaffolding. Teubner's reflexive law describes regulation that structures self-regulating social subsystems rather than commanding outcomes;[11] Ayres and Braithwaite's responsive regulation theorises an enforcement pyramid escalating from persuasion to sanction;[12] Moore's semi-autonomous social field explains why regulated actors generate their own binding norms within a state framework;[13] and Braithwaite's and Picciotto's accounts of regulatory capitalism explain the paradox of 'freer markets, more rules' and the hybrid public-private character of contemporary regulation.[14] These theories describe the *form* of modern regulation with great subtlety. What they do not do is theorise the *developmental conversion*, the process by which regulatory form becomes economic capability. That is the gap DRCT fills.

Table 3. Five literatures and the developmental gap.

Field	Central question answered	What it leaves unexplained
Financial regulation	How should markets be controlled for stability, protection and innovation?	How regulation contributes to national development
Institutional economics	Why do institutions create prosperity?	How regulatory systems themselves become developmental institutions
Development economics	How does finance generate growth?	How legal architecture determines financial productivity

[11]Gunther Teubner, Substantive and Reflexive Elements in Modern Law, 17 Law & Soc'y Rev. 239 (1983). http://doi.org/10.2307/3053348
[12]Ian Ayres & John Braithwaite, Responsive Regulation: Transcending the Deregulation Debate (1992). http://doi.org/10.1093/oso/9780195070705.001.0001
[13]Sally Falk Moore, Law and Social Change: The Semi-Autonomous Social Field as an Appropriate Subject of Study, 7 Law & Soc'y Rev. 719 (1973). https://doi.org/10.2307/3052967
[14]John Braithwaite, Regulatory Capitalism: How It Works, Ideas for Making It Work Better (2008); Sol Picciotto, Regulating Global Corporate Capitalism (2011). http://doi.org/10.4337/9781848441262

Field	Central question answered	What it leaves unexplained
Law and development	How do property rights and courts enable growth?	Financial regulation as developmental law
Socio-legal theory	How does law operate in action; whence its legitimacy?	Financial regulation as developmental governance

Two clarifications guard against misreading. First, 'regulatory capital' here bears no relation to the Basel capital-adequacy sense; it denotes an institutional resource, not a solvency buffer. Second, the article does not claim that principle-based regulation is novel, that literature is mature, but that the *conversion of compliance into developmental capital* has never been adequately conceptualised. The dominant scholarship measures compliance *cost*; this article measures compliance *value*, and in doing so reframes compliance from a private burden into a productive public asset.

A recent empirical turn in the post-2020 literature reinforces the need for this reframing rather than pre-empting it. Studies now interrogate the *effectiveness* of principle- and outcomes-based instruments directly: systematic reviews find the causal evidence for regulatory sandboxes thinner and more context-dependent than their popularity implies; work on emerging markets shows regulatory governance rising and falling with growth models and bureaucratic autonomy; and micro-econometric studies trace how regulatory shocks to credit propagate into human-capital outcomes.[15] What this body of work measures piecemeal, effectiveness here, governance there, welfare consequences elsewhere, DRCT proposes to organise under a single construct, supplying the conversion mechanism that connects these findings into a developmental account.

7. Comparative Case Studies

Three cases test the theory where it is most exposed. Together they show that regulatory capital is not merely financial but interpretive, delegated and human, and that each form can be

[15]See Yueqi Wang et al., Effectiveness of Regulatory Sandboxes in Financial Services: A Systematic Review, Reg. & Governance (2026), https://doi.org/10.1111/rego.70129; Aydın Çoban, Navigating Financial Cycles: Economic Growth, Bureaucratic Autonomy, and Regulatory Governance in Emerging Markets, Reg. & Governance (2025), https://doi.org/10.1111/rego.12621; Muneer Kalliyil & Soham Sahoo, Does Restricting Access to Credit Affect Learning Outcomes?, 182 J. Dev. Econ. 103790 (2026), https://doi.org/10.1016/j.jdeveco.2026.103790.

depleted as well as accumulated.

7.1 The Securities Markets Code and the constitutional limits of delegated capital

The draft Securities Markets Code was widely welcomed as the most consequential securities legislation in a generation, codifying disgorgement, unifying 'market abuse' and strengthening the regulator's hand. Yet its parliamentary scrutiny revealed a constitutional limit on how far regulatory capital may be delegated. A residuary clause empowering the regulator to specify, through subordinate legislation, further activities amounting to criminal market abuse was challenged as untenable: determining what constitutes a crime is an essential legislative function that Parliament cannot delegate.[16] The Standing Committee accepted the objection, recommending deletion of the residuary criminal power and confinement of criminal liability to conduct that is 'grave, wilful and systemic', while leaving the parallel *civil* residuary power intact because civil delegation 'does not engage the same constitutional concerns'.

For DRCT the episode is doctrinally rich. It establishes a *bifurcation*: civil regulation may be principle-based and flexible, but criminal regulation must remain rule-based and statute-bound. Because market abuse is a scheduled offence under the anti-money-laundering statute,[17] interpretive ambiguity in one instrument cascades into severe enforcement consequences under another. Delegated regulatory capital, in short, is constitutionally bounded: flexibility that is legitimate for civil supervision becomes illegitimate the moment it defines crime.

7.2 Jane Street and the interpretive void

In July 2025 the securities regulator issued an interim order against a global proprietary-trading firm, alleging manipulation of a banking index across numerous expiry sessions and directing a substantial deposit of alleged unlawful gains.[18] The firm characterised its conduct as ordinary index arbitrage, a commonplace mechanism that keeps related instruments in line. The dispute exposed what this article calls the *interpretive void*: the legal order lacked a market-tested

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[16] The argument invoked the reasoning of In re Delhi Laws Act, 1912, AIR 1951 SC 332, on the permissible limits of delegated legislation. The Delhi Laws Act, 1912, AIR 1951 SC 332, [1951] 2 SCR 747 (India).

[17] See The Prevention of Money-Laundering Act, 2002, sch. (scheduled offences); the Committee insisted that the scope of the criminal offence and its money-laundering trigger remain coextensive. https://www.incometaxindia.gov.in/w/schedule-27

[18] Sec. & Exch. Bd. of India, Interim Order in the matter of alleged index manipulation (Jane Street Group) (July 2025). WTM/AN/MRD/MRD-SEC-3/31516/2025-26 (July 3, 2025), https://www.sebi.gov.in/enforcement/orders/jul-2025/interim-order-in-the-matter-of-index-manipulation-by-jane-street-group_95040.html.

standard for distinguishing legitimate institutional-scale arbitrage from manipulation when the actor is large enough that its own hedging moves prices. The doctrinal distinction, arbitrage exploits a pre-existing discrepancy, manipulation creates one, is easy to state and hard to apply to algorithmic, multi-entity, cross-market strategies.

The case demonstrates the theory's central caution about *interpretive capital*. A framework statute can confer enforcement power immediately, but the interpretive clarity that participants need to operate confidently emerges only gradually, through adversarial adjudication that is expensive for everyone. Interpretive capital cannot be legislated; it must be built through case law. In the interim, participants bear asymmetric risk, and that uncertainty may chill precisely the large-value institutional participation the reform was designed to attract, a developmental cost invisible to the compliance-burden metric.

7.3 The self-regulatory ecosystem and delegated capital

The reallocation of regulatory capital from a single state regulator to a distributed network is an accelerating, deliberate policy. Recent recognitions span fintech, non-banking finance, payment-system operators and fixed-income markets.

Table 4. The expanding self-regulatory ecosystem (illustrative).

Sector	Self-regulatory body	Status
Fintech	Fintech Association for Consumer Empowerment (FACE)	Recognised (2024)
Non-banking finance	Finance Industry Development Council (FIDC)	Recognised (2025)
Payment-system operators	Self-Regulated PSO Association (SRPA)	Recognised (2025)
Fixed income & derivatives	FIMMDA	Recognised (2025)

This creates a multi-tiered regulatory state, private governance under public oversight, that Moore's semi-autonomous social field anticipates. It generates *delegated* regulatory capital, but also accountability gaps: when a self-regulatory organisation fails, on whom does the loss fall? The model the article proposes answers this by fixing explicit adherence obligations across the regulatory departments, so that delegated capital remains traceable to a public locus of responsibility. Table 5 sets out these *departmental tables of adherence*, mapping each body to the RCAF dimension it principally serves and the indicator by which its adherence is assessed.

Table 5. Departmental tables of adherence, internal engagement model.

Department / body	**Primary RCAF dimension**	**Adherence obligation / instrument**	**Adherence indicator**
RBI - Dept. of Regulation	Legal; Institutional	Consolidated Master Directions; proportionate norms	Rulebook coherence; certainty of obligation
SEBI - Markets & Enforcement	Informational; Legal	Principle-based disclosure; market-abuse standard	Disclosure quality; interpretive consistency
IRDAI	Social; Institutional	Conduct and solvency supervision	Consumer protection; grievance redress
IFSCA (GIFT City)	Technological; Developmental	Innovation-friendly, unified supervision	Investment attraction; sandbox throughput
FIU-IND	Institutional; Informational	AML/CFT reporting and analysis	STR quality; typology feedback
SROs / MIIs	Social; Institutional	Delegated registration and monitoring	Oversight reporting; member compliance
Data-protection authority	Informational; Social	Consent architecture; data governance	Consent integrity; trust in digital finance

Regulatory capital is not produced in isolation from the international order. The article therefore proposes an *inward-outbound* schema for the system's engagement with external agencies. Inbound flows, standards, mutual evaluations and calibration from bodies such as the Financial Action Task Force, the Basel Committee, the international financial institutions and the international organisation of securities regulators, are absorbed as raw material for domestic capital. Outbound flows, credibility signals to global investors and rating agencies, assurance to correspondent banks, delegation to domestic self-regulatory organisations and cooperation with peer regulators, export the institutional credibility that domestic compliance has produced. Adherence to external standards, on this reading, is not a cost imposed from outside but an input that, once metabolised, becomes a domestic developmental asset.

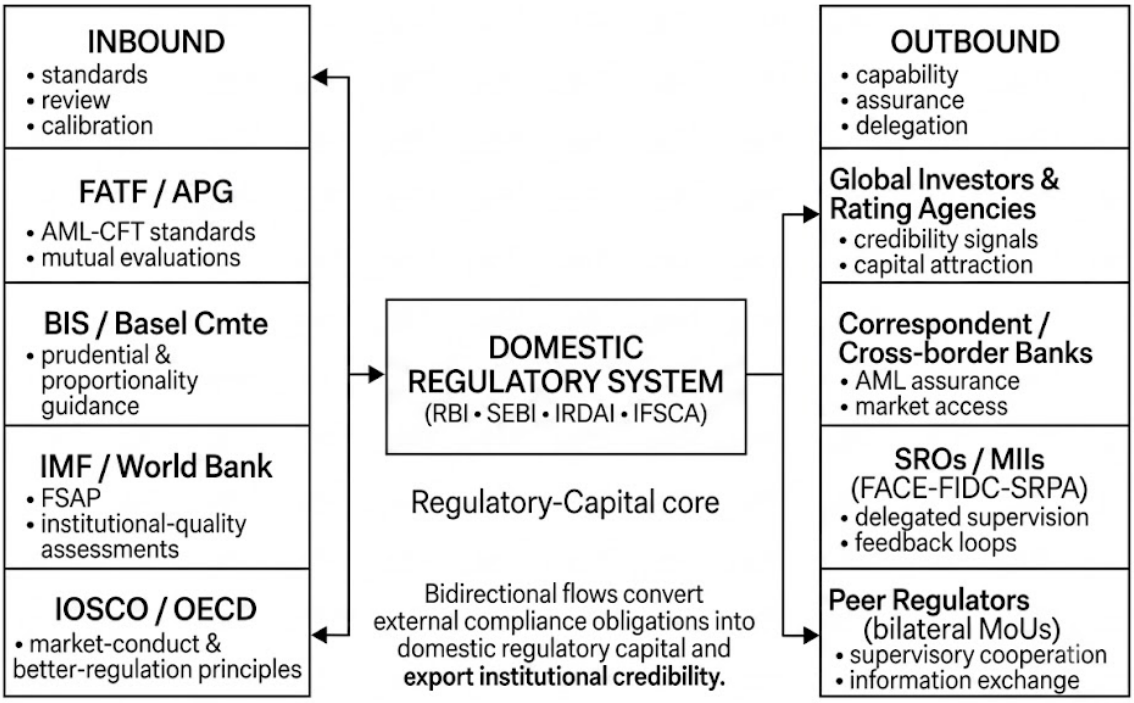

Figure 5. Inward-outbound model of engagement with external agencies. External standards are absorbed as inputs to domestic regulatory capital; institutional credibility is exported in return.

7.4 The Andhra Pradesh microfinance contraction and human capital

The final case shows that distorted or poorly sequenced regulation depletes a form of capital the financial literature rarely counts, human capital. A 2010 state ordinance, enacted for the legitimate consumer-protection purpose of curbing coercive lending and over-indebtedness, effectively halted microfinance operations in the state and, because lenders were exposed nationwide, transmitted a supply-driven credit contraction well beyond its borders.[19] The developmental consequences were both macroeconomic and, more tellingly for this article,

[19]The Andhra Pradesh Micro Finance Institutions (Regulation of Money Lending) Act, 2010, https://prsindia.org/files/bills_acts/acts_states/andhra-pradesh/2011/2011AP1.pdf; on the nationwide transmission, see Emily Breza & Cynthia Kinnan, Measuring the Equilibrium Impacts of Credit: Evidence from the Indian Microfinance Crisis, 136 Q.J. Econ. 1447 (2021), https://doi.org/10.1093/qje/qjab016 (documenting significant declines in casual daily wages, household wage earnings and consumption in more-exposed districts).

intergenerational.

Recent quantitative work makes the magnitudes concrete. Exploiting the contraction as a natural experiment across more than three million children, Kalliyil and Sahoo estimate that greater exposure produced a persistent decline in learning outcomes of roughly **0.08 of a standard deviation in mathematics and 0.05 in reading**, losses that did not fade with time, were larger and more persistent for younger children in their formative years, and were more pronounced for girls, so that the shock reinforced pre-existing patterns of within-household resource allocation.[20] The mechanism was liquidity, not labour: with income constraints binding, households cut education spending and, for older children, reduced years of schooling as costs rose at higher grades. Complementary work using a synthetic difference-in-differences design estimates an approximately **4.5-percentage-point fall in school enrolment**, with households protecting the schooling of older children as constraints tightened.[21] The lesson for regulatory-capital theory is direct: regulation aimed at one objective, here, consumer protection, can, if it constricts credit abruptly and without complementary safety nets, deplete the human capital that constitutes a country's developmental future.

Two policy implications follow, both of which the framework treats as first-order rather than incidental. **First**, financial-regulatory design must weigh not only consumer protection and financial stability but the wider welfare consequences of sudden credit contraction, especially where poor households rely on small-scale borrowing to smooth volatile incomes. **Second**, where access is to be restricted, the restriction should be sequenced and paired with transitional support, targeted cash transfers or comparable safety nets, so that consumption and schooling are shielded during adjustment. This is the pathological pathway of Figure 4 made concrete, and it vindicates the theory's insistence that developmental outcomes, not compliance burden, are the ultimate test of a regulatory regime. Table 6 synthesises the three cases against the theory.

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[20]Muneer Kalliyil & Soham Sahoo, Does Restricting Access to Credit Affect Learning Outcomes? Evidence from a Regulatory Shock to Microfinance in India, 182 J. Dev. Econ. 103790 (2026), https://doi.org/10.1016/j.jdeveco.2026.103790.

[21]Sheetal Sekhri, Yutong Chen & Md Amzad Hossain, Credit Crisis and Strategic Human Capital Decisions: Evidence from Micro-Finance Regulation in India (SSRN Working Paper No. 4914403, 2024), https://ssrn.com/abstract=4914403.

Table 6. Comparative synthesis of the case studies.

Case	**Form of regulatory capital**	**Governance condition**	**Developmental signal**
Securities Markets Code delegation	Delegated; Legal	Constitutional limit enforced	Constructive (limit clarified)
Jane Street enforcement	Interpretive	Standard not yet built	At risk (chilling effect)
SRO ecosystem	Delegated; Institutional	Oversight developing	Contingent on accountability
AP microfinance contraction	Human	Weak sequencing / no safety net	Distorted (developmental loss)

8. Comparative Reflection: India in a Global Regulatory Transition

India is best read not as an isolated experiment but as one national instance of a global regulatory transition, and a short comparison sharpens what is distinctive about it. The **United Kingdom** is the archetypal principle-based jurisdiction: its Principles for Businesses long framed conduct in high-level terms, and the Financial Conduct Authority's Consumer Duty now converts that tradition into an explicitly *outcomes*-based obligation, requiring firms to evidence good outcomes for retail customers rather than merely observe process.[22] The Duty is a direct answer to the classic critique of principles, that firms can demonstrate adherence without delivering the intended benefit, and its measurement apparatus is, in the vocabulary of this article, an instrument for verifying that flexibility has produced social and informational regulatory capital rather than its simulacrum.

Singapore illustrates the technological and developmental forms most vividly. The Monetary Authority of Singapore's regulatory sandbox, and its later fast-track 'Sandbox Express', institutionalise controlled experimentation as a permanent supervisory capability rather than a

[22]Financial Conduct Authority, PS22/9: A New Consumer Duty (July 2022), https://www.fca.org.uk/publications/policy-statements/ps22-9-new-consumer-duty; FCA Handbook, Principles for Businesses (PRIN).

one-off concession.[23] Yet the comparative evidence counsels humility about sandboxes: a recent systematic review finds that rigorous causal evidence for their effectiveness remains thin and concentrated in a few high-capacity jurisdictions, a reminder that the technological form of regulatory capital yields developmental returns only where institutional capacity is already deep.[24] India's IFSCA and GIFT City sit squarely in this Singaporean lineage, but with a far larger inclusion imperative behind them.

The **European Union** supplies the most legislated model of the informational and technological forms. Its Digital Finance Package, and in particular the Markets in Crypto-Assets Regulation and the Digital Operational Resilience Act, pursue harmonised, machine-readable and resilience-oriented obligations across the single market.[25] The EU's comparatively rule-heavy digital-finance turn is the mirror image of the UK's outcomes turn, and India's position is a third path: it pairs UK-style principle-based supervision and Singapore-style experimentation with a distinctive substrate, population-scale digital public infrastructure and a financial-inclusion mandate absent from all three comparators. That combination is what makes India a laboratory rather than merely a follower, and it is why a theory built on the Indian case travels to other emerging markets more readily than one abstracted from a mature, high-capacity jurisdiction. Table 7 summarises the comparison.

Table 7. Comparative regulatory approaches and their regulatory-capital emphasis.

Jurisdiction	**Signature instrument / approach**	**Capital form emphasised**	**Lesson for India**
United Kingdom	Principles for Businesses; Consumer Duty (outcomes-based)	Social; Legal	Verify outcomes, not just process
Singapore	MAS regulatory sandbox; Sandbox Express	Technological; Developmental	Capacity precedes sandbox returns
European Union	Digital Finance Package; MiCA; DORA	Informational; Technological	Harmonisation aids interoperability

[23] Monetary Authority of Singapore, FinTech Regulatory Sandbox Guidelines (Nov. 2016, rev. 2022), https://www.mas.gov.sg/development/fintech/regulatory-sandbox; MAS, Sandbox Express (2019).
[24] See, e.g., Yueqi Wang et al., Effectiveness of Regulatory Sandboxes in Financial Services: A Systematic Review, Reg. & Governance (2026), https://doi.org/10.1111/rego.70129.
[25] European Commission, Digital Finance Package (Sept. 24, 2020); Regulation (EU) 2023/1114 (Markets in Crypto-Assets, MiCA); Regulation (EU) 2022/2554 (Digital Operational Resilience Act, DORA). https://finance.ec.europa.eu/publications/digital-finance-package_en.

Jurisdiction	Signature instrument / approach	Capital form emphasised	Lesson for India
India	Master Directions; SMC; sandboxes over digital public infrastructure	All five, inclusion-weighted	Distinctive: DPI + inclusion mandate

9. Discussion: Counterarguments and Novelty

Five objections deserve a direct answer. The **first** is that 'regulatory capital' merely relabels institutional quality. It does not. Institutional quality is a stock attribute of a polity; regulatory capital is a *flow* produced by a specific process, compliance, and is disaggregable into five measurable forms with a bidirectional sign. The construct identifies the mechanism (compliance-as-conversion) that the institutional-quality literature leaves as a black box, and it makes the pathological case (distorted capital) analytically central rather than anomalous.

The **second** objection, associated with cautious supervisors, is that principle-based regulation suits mature markets and that a lower-middle-income country with acute consumer-protection needs should retain rule-based safeguards. The theory accommodates this precisely through the bifurcation established in Part 7: developmental regulation is not uniformly principle-based but calibrates the mode to the stakes, flexible where flexibility builds capability, rule-bound where consumer protection or criminal liability is engaged. The objection, properly understood, is not a refutation of DRCT but a specification of its governance condition.

The **third** objection is that reflexive and responsive-regulation theory already capture this terrain. They capture the *form* of governance, how regulation structures self-regulation and escalates enforcement, but they are agnostic about developmental conversion. DRCT is not a rival to those theories; it is a developmental extension of them, adding the causal claim that regulatory form, under the right institutional conditions, produces economic capability that can be named, disaggregated and measured.

The **fourth** objection comes from critical legal studies and is the most searching. On this view the language of 'regulatory capital' risks becoming an apologetic vocabulary: by recasting compliance as a productive public good, the theory may launder the coercive and distributive realities of financial law, and principle-based regulation's celebrated flexibility is really legal indeterminacy that transfers power to whoever controls interpretation, cloaking discretion in the neutral idiom of 'outcomes'.[26] The article takes the objection seriously rather than deflecting it, and answers on two levels. Analytically, the bidirectional model already internalises the critique: 'distorted capital' is precisely the name this theory gives to flexibility captured by the powerful, and the framework's insistence on measured developmental outcomes, not professed adherence, is designed to expose exactly the gap between form and benefit that critical scholars warn of. Normatively, the theory is avowedly not celebratory: its central claim is conditional ('under the right institutional conditions'), and it treats the indeterminacy of principles as a danger to be governed, not a virtue to be assumed. What critical legal studies frames as an indictment of principle-based regulation, DRCT reframes as the empirical question the framework exists to answer.

The **fifth** objection, from political economy, presses the same point in a different register: if institutional quality is endogenous to organised power, then a theory that makes institutional quality the master variable simply relocates the problem rather than solving it. This is correct, and Part 5.5 concedes it openly. The response is that acknowledging endogeneity is more honest than the alternatives, the compliance-cost literature ignores power entirely, and celebratory accounts of principle-based reform assume it away. By building capture, cultural capture and bureaucratic autonomy into the model as determinants of the constructive-to-distorted ratio, the theory turns political economy from an external critique into an internal variable, and it yields a testable prediction (P7) rather than a counsel of despair. The framework does not promise that regulatory capital will be well distributed; it specifies the conditions under which it will not be, which is the first step to guarding against them.

The **novelty**, against this backdrop, lies in three moves: reconceiving compliance as productive rather than costly; specifying the transmission mechanism, its bidirectional character and its political-economy conditions; and supplying a framework, typology and proposition set that make the theory travel and test.

10. A Policy Memorandum for Regulators

The theory yields a compact set of recommendations. Each is stated as an action, tied to the form of regulatory capital it protects, so that a regulator can read the framework operationally

[26] On indeterminacy and the legitimating work of legal form, see Duncan Kennedy, Form and Substance in Private Law Adjudication, 89 Harv. L. Rev. 1685 (1976), http://doi.org/10.2307/1340104; Mark Kelman, A Guide to Critical Legal Studies (1987).

rather than only conceptually. The recommendations are addressed to India's financial regulators but are drafted to be portable to peer emerging-market authorities.

Table 8. Summary of recommendations for regulators.

#	**Recommendation**	**Capital protected / rationale**
1	Evaluate reforms by the regulatory capital they build, legal certainty, trust, inclusion, not merely the compliance burden they cut.	All forms; corrects the cost-metric error
2	Publish ex ante interpretive standards for high-value, price-moving institutional activity rather than leaving them to adversarial adjudication.	Interpretive; reduces chilling effect
3	Keep principle-based flexibility for civil supervision but hold criminal liability to rule-based, statute-bound definition.	Legal; respects the constitutional bifurcation
4	Tether every delegation to a self-regulatory body to explicit adherence obligations and a public locus of ultimate responsibility.	Delegated; closes accountability gaps
5	Sequence credit-tightening measures and pair them with transitional safety nets (e.g. targeted transfers) to shield schooling and consumption.	Human; averts developmental loss
6	Insulate supervisory bureaucracy from capture: transparency of discretion, rotation, and structural separation of investigation and adjudication.	Institutional; guards against distortion
7	Treat adherence to external standards (FATF, Basel, IOSCO) as an input to domestic capital and instrument SupTech to make compliance continuous and machine-readable.	Informational; Technological
8	Begin measuring the Regulatory Capital Assessment Framework indicators so that the regulatory-productivity residual becomes trackable over time.	Diagnostic; enables evidence-based reform

11. Conclusion

This article set out to answer a question that five mature literatures leave unanswered: how does financial regulatory compliance become an institutional asset that contributes to development? Its **synthesis of findings** is that, in emerging economies, financial regulation has begun to function as developmental infrastructure, and that the value it creates, legal certainty, supervisory credibility, trusted information, technological interoperability and public legitimacy, is best understood as regulatory capital. India's 2023-2026 reset furnishes the evidence: consolidation and framework legislation build legal and institutional capital; digital public infrastructure builds informational and technological capital; and the three case studies show how delegated, interpretive and human capital may each be accumulated or depleted according to the strength of institutional quality.

The **theoretical contribution** is a Developmental Regulatory Capital Theory that integrates institutional economics, socio-legal theory, law and development, financial regulation and public governance into a single model, introducing the concepts of regulatory capital, regulatory productivity and developmental regulation, and reducing the model to testable propositions. The **practical implications** follow directly: reforms should be evaluated by the regulatory capital they build rather than the compliance burden they cut; delegated authority should be tethered to explicit departmental adherence obligations; interpretive standards for high-value institutional activity should be articulated ex ante rather than left to expensive adjudication; and credit adjustments should be sequenced with transitional safeguards for human capital.

The **limitations** are candidly acknowledged. The article is theory-building, not empirical; the RCAF is proposed, not yet estimated; the Indian setting, though unusually rich, is a single laboratory. These limitations mark the **avenues for future research**: empirical operationalisation of the RCAF and the regulatory production function; comparative application across other emerging markets, the principle-based approaches of the United Kingdom and Singapore, the responsive tradition of Australia, the digital-finance turn of the European Union, to test the framework's portability; and longitudinal study of whether interpretive capital, once built through case law, in fact restores the participation that its absence chills.

The **final implication** reaches beyond India. If compliance is a productive public asset rather than a private cost, then the central question for any developing financial order is no longer whether its regulation is lighter or stricter, but under what legal and institutional conditions compliance becomes capital. That reframing, from regulating against harm to regulating for growth, is the contribution this article offers to the interdisciplinary study of law in the contemporary era, and the space it opens for the research that must follow.