AN EARLY WARNING FRAMEWORK FOR CORPORATE DISTRESS: REIMAGINING INSOLVENCY PREVENTION IN INDIA

*Pranjal Parey**

Anushka Bhatt†

ABSTRACT

Insolvency prevention is a global priority, emphasized by institutions such as the World Bank, United Nations Commission on International Trade Law (UNCITRAL), International Monitory Fund(IMF) and the Organisation for Economic Cooperation and Development(OECD). Early Warning Systems are now encouraged worldwide to increase corporate resilience. India faces a parallel challenge: As observed by Mr. Rajeshwar Rao, Former Deputy Governor of the Reserve Bank of India, the average period between the date of default and the filing of an application for Corporate Insolvency Resolution Process (CIRP) often extends to several months. During this time, substantial enterprise value is destroyed, ultimately depressing recovery outcomes for all stakeholders.[1] *The real success of a formal insolvency framework lies in its role as a deterrent rather than in its actual use.*

This paper argues that to avoid excessive reliance on debt recovery tools such as the Insolvency and Bankruptcy Code, 2016 (hereinafter IBC) [2] *and the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, India requires a comprehensive Pre-Insolvency Early Warning Framework grounded in global best practices. Drawing upon international experience focused on crisis prevention rather than resolution, this paper proposes an Early Warning Framework comprising three core, interconnected pillars. First, a statutory duty on directors to install an internal risk management system and to act decisively when insolvency becomes probable rather than merely imminent. Second, an Artificial Intelligence/Machine Learning-Driven National Early Warning System Dashboard integrating data from Information Utilities, the*

* Pranjal Parey is a student at National Law University, Delhi, specialising in Insolvency and Restructuring.

† Anushka Bhatt is a student at National Law University, Delhi, specialising in Insolvency and Restructuring.

[1] *See generally* Insolvency and Bankruptcy Code, 2016, No. 31 (India) [hereinafter IBC); Insolvency and Bankruptcy Board of India, Annual Report, 2022–23, at 18–22 [hereinafter IBBI].

[2] Insolvency and Bankruptcy Code, *supra* note 1.

Ministry of Corporate Affairs[3], the GST Network[4], and credit bureaus[5]; And third, a Confidential Pre-Insolvency Mediation and Restructuring mechanism under the Financial Stability and Development Council. This integrated architecture ensures that distressed companies are identified early, that management is compelled to act swiftly, and that a discreet, efficient resolution platform exists that preserves viable businesses while significantly reducing reliance on formal insolvency proceedings.

[3] *See generally* Companies Act, 2013, No. 18, §§ 134, 177, 178, & 230 (India).

[4] *See generally* Central Goods and Services Tax Act, 2017, No. 12 (India).

[5] *See generally* Credit Information Companies (Regulation) Act, 2005, No. 30 (India).

INTRODUCTION

The Insolvency and Bankruptcy Code, 2016 has transformed the architecture of Indian corporate debt resolution. By consolidating fragmented debtor-creditor legislation and establishing time-bound proceedings before the National Company Law Tribunal, the Code altered a legal landscape long characterized by creditor helplessness in the face of chronic default. Since its enactment, the IBC has resolved thousands of corporate insolvency cases and provided a systemic foundation for credit discipline that had previously been absent from Indian commercial law.

Yet the IBC's empirical performance reveals a structural inadequacy that law reform cannot cure by procedural refinement alone. Data published by the Insolvency and Bankruptcy Board of India[6] consistently demonstrates that firms entering the CIRP are, at the point of admission, already severely distressed: median default-to-admission lags of eighteen months or more, net worth erosion exceeding ninety per cent in a substantial proportion of cases, and recovery rates well below the World Bank's benchmarks for comparable developing economies[7]. Of admitted CIRP cases, forty-six percent have ended in liquidation, while approved resolution plans account for only fifteen percent of outcomes.[8] India's recovery rate of approximately twenty-six cents per dollar of admitted claims compares unfavourably with an OECD high-income average of seventy cents.[9]

These outcomes reflect not a failure of the IBC's resolution machinery, but a deeper architectural limitation: the Code is designed as a resolution statute, not a prevention statute. The central research question this Article addresses is: *How can Indian insolvency law incorporate preventive mechanisms capable of detecting corporate distress before default while preserving creditor rights and market discipline?* This question matters because the answer is not merely technical. It

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[6] *See* IBBI, *supra* note 1, at 19 (showing that as of March 2023, 46% of admitted CIRP cases had ended in liquidation, while only 15% had achieved resolution through an approved plan).

[7] *See generally* WORLD BANK GROUP, DOING BUSINESS 2020: COMPARING BUSINESS REGULATION IN 190 ECONOMIES 98–101 (2020).

[8] *See* IBBI, *supra* note 1, at 19 (showing that as of March 2023, 46% of admitted CIRP cases had ended in liquidation, while only 15% had achieved resolution through an approved plan).

[9] *See* WORLD BANK GROUP, *supra* note 7 (noting India's recovery rate of 26.5 cents on the dollar as against the OECD high-income average of 70.2 cents).

requires a reorientation of the normative foundations of Indian insolvency law; from a system premised on creditor enforcement rights and debtor accountability after default, toward a system that treats the preservation of enterprise value and employment as independent statutory objectives justifying intervention before default crystallizes.

As Finch and Milman observe, the probability of preserving enterprise value in restructuring is inversely correlated with the depth of financial distress at the time of intervention.[10] Goode similarly notes that insolvency systems that intervene only at the point of formal default systematically sacrifice the going-concern value that could have been preserved through earlier action.[11] Jackson's foundational account of bankruptcy law as a solution to the collective action problem among creditors reinforces this point: The longer individual creditors wait to enforce claims before formal proceedings commence, the greater the destruction of the value and the less value is available for collective distribution.[12] The implication is not merely empirical but normative: A legal system that permits the destruction of distributable value through strategic delay in the enforcement of creditor rights fails by its own redistributive logic. This is because such delays diminish the total value available to the creditor community whose interests the bankruptcy system is designed to protect.

Global insolvency law has increasingly responded to this diagnosis through preventive restructuring mechanisms that operate upstream of formal insolvency proceedings. The European Union's Preventive Restructuring Directive of 2019[13] obligates Member States to provide accessible restructuring tools for firms facing a "likelihood of insolvency." The United States Chapter 11 regime[14] and its pre-packaged variant have long enabled firms to restructure before liquidation becomes inevitable. England's Restructuring Plan[15] and Australia's safe harbour reforms[16] represent further legislative expressions of this prevention-oriented

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[10] *See generally* VANESSA FINCH & DAVID MILMAN, CORPORATE INSOLVENCY LAW: PERSPECTIVES AND PRINCIPLES 1–15 (Cambridge University Press, 3d ed. 2017) [hereinafter Finch & Milman].

[11] *See generally* ROY GOODE, PRINCIPLES OF CORPORATE INSOLVENCY LAW 1–22 (Thomson Sweet & Maxwell, 4th ed. 2011) [hereinafter Goode, Principles].

[12] *See generally* THOMAS H. JACKSON, THE LOGIC AND LIMITS OF BANKRUPTCY LAW 1–27 (Harvard University Press, 1986) [hereinafter Jackson, Logic and Limits].

[13] Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on Preventive Restructuring Frameworks, 2019 O.J. (L 172) 18 [hereinafter EU Preventive Restructuring Directive].

[14] 11 U.S.C. §§ 1101–1174 (2018) [hereinafter Bankruptcy Code].

[15] *See* Corporate Insolvency and Governance Act 2020, c. 12, §§ 1–17 (U.K.) (introducing the Restructuring Plan procedure to English insolvency law).

[16] *See* Australian Corporations Act 2001 (Cth) § 588GA (Austl.) [hereinafter Corporations Act 2001].

philosophy. Japan's Civil Rehabilitation Act[17] extends these principles to a civil-law jurisdiction with features analogous to India's own legal traditions. India has taken a modest step toward preventing pre-insolvency value destruction through the pre-packaged insolvency mechanism for MSMEs,[18] but no comprehensive preventive restructuring framework exists for larger corporate entities.

This Article proposes a Three-Pillar Early Warning Framework to address this gap. Chapter I examines director duties and internal corporate monitoring obligations as the first line of defense against insolvency. A preliminary section within Chapter 1 explains why existing Indian mechanisms fail to address early corporate distress and why new architecture is required. Chapter II develops the architecture of a National AI-Driven Early Warning System that enables systemic, data-driven detection of corporate distress. Chapter III presents a Confidential Pre-Insolvency Mediation and Restructuring Mechanism as the institutional channel through which early warning signals are converted into productive restructuring outcomes. Before the Conclusion, an Implementation section addresses the practical institutional challenges of the proposed reforms.

The three pillars are not independent proposals but components of an integrated legal architecture. The director-duty framework creates internal governance obligations and generates the company-level compliance data that feeds the national EWS. The EWS in turn provides objective, externally-verified distress signals that trigger eligibility for the pre-insolvency mediation mechanism. The mediation mechanism converts those signals into restructuring outcomes that avoid formal CIRP. Each pillar reinforces the others, and the framework as a whole is calibrated to the specific institutional context of Indian insolvency law.

I. WHY EXISTING INDIAN MECHANISMS FAIL TO ADDRESS PRE-INSOLVENCY DISTRESS

Before presenting the proposed framework, it is necessary to explain why existing Indian mechanisms are structurally inadequate as instruments of early corporate distress detection and resolution. Three principal mechanisms deserve analysis: schemes of arrangement under the Companies Act, RBI restructuring frameworks, and the pre-packaged insolvency process under the IBC. The central conclusion is that each mechanism, however valuable within its proper domain, fails to satisfy the foundational requirement of any preventive insolvency architecture: the capacity to detect and address corporate distress before the deterioration of the distressed firm's financial position has rendered rehabilitation either impossible or disproportionately costly.

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[17] *See* Civil Rehabilitation Law (Law No. 225 of 1999) (Japan).

[18] Insolvency and Bankruptcy Code 2016, *supra* note 1, §§ 54A–54P (pre-packaged insolvency resolution process for MSMEs, inserted by the Insolvency and Bankruptcy Code (Amendment) Act, No. 26 of 2021).

A. Mechanism in Companies Act, 2013

Schemes of arrangement under Section 230 of the Companies Act, 2013 permit a company to restructure its debts through a court-approved compromise with creditors. However, this mechanism suffers from a fundamental design limitation: it is reactive rather than preventive. Initiation requires the company or its creditors to apply to the NCLT, but the trigger is typically an existing crisis rather than an anticipated one. The process demands majority approval by number and three-fourths by value of each creditor class present and voting, with no cross-class cramdown mechanism capable of binding dissenting classes.[19] Accordingly, a minority of creditors can block a commercially sensible restructuring, replicating the collective action problem that formal insolvency is designed to address. More critically, the scheme mechanism contains no monitoring or early-detection component: it presupposes a distress event has matured to the point where creditor involvement is unavoidable.

B. The RBI Restructuring Framework

The Reserve Bank of India's restructuring frameworks, including the June 2019 Prudential Framework for Resolution of Stressed Assets and its predecessors, have attempted to incentivize pre-insolvency restructuring in the banking sector by creating disincentives for evergreening and requiring lenders to identify and classify accounts exhibiting stress early.[20] These frameworks, however, are addressed to regulated lenders rather than to corporate borrowers. Additionally, while they create obligations for creditor banks to recognize and provision for stressed exposures, they impose no affirmative obligations on distressed companies or their directors to take preventive action. The framework is fundamentally creditor-facing: it does not generate any obligation on companies to detect, report, or remediate distress before formal default. It also lacks an institutional channel through which early identified distress can be converted into structured restructuring, leaving banks with the binary choice between bilateral renegotiation, which is subject to all the collective action problems that formal insolvency is designed to address, and formal enforcement under the IBC or SARFAESI. The evidence from India's NPA cycle of 2012 to 2018 suggests that bilateral renegotiation without a structured institutional framework systematically results in delay, evergreening, and the progressive deterioration of recoverable

[19] Companies Act 2013, *supra* note 3, at § 230(6) (requiring approval by a majority in number representing three-fourths in value of creditors or class members present and voting).

[20] Reserve Bank of India, Financial Stability Report, Issue No. 23, 2021, at 58–66 [hereinafter RBI Financial Stability Report].

value rather than an efficient early resolution.[21]

C. The Pre-Packaged Insolvency Process for MSMEs

The pre-packaged insolvency process introduced for MSMEs under Sections 54A to 54P of the IBC, [22] represents a more sophisticated acknowledgement of the limitations of purely reactive insolvency law. However, it remains limited in three critical respects. First, it is available only to MSMEs as defined under the Micro, Small and Medium Enterprises Development Act, 2006, excluding the large and systemically significant corporate debtors whose distress creates the greatest macroeconomic risk. Second, eligibility is conditioned on the existence of a "default", defined as non-payment of a debt when due, meaning the mechanism intervenes after financial distress has already crystallized into legal default. Third, the pre-packaged process involves formal CIRP proceedings before the NCLT, which, even with the streamlined timelines applicable to MSMEs, carries the reputational, commercial, and operational costs that deter early voluntary engagement. None of these mechanisms adequately detect or address corporate distress before default. The Three-Pillar Framework proposed in this Article is designed to fill this structural gap.

II. DIRECTOR DUTIES AND INTERNAL MONITORING FOR EARLY DETECTION OF CORPORATE DISTRESS

Corporate governance constitutes the most proximate institutional layer for the detection of financial distress. Directors possess both the legal authority and the informational position necessary to identify deteriorating financial conditions and to initiate corrective action at the earliest feasible point. This Chapter argues that Indian law must impose legally enforceable obligations on directors to maintain robust internal monitoring systems, to conduct periodic solvency assessments, and to respond through defined escalation protocols when financial indicators signal approaching distress. The present legal framework fails to impose such obligations, [23] and the resulting governance gap is a material

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[21] *Id.*

[22] IBC*, supra* note 1, at §§ 54A–54P (outlining the pre-packaged insolvency resolution process for MSMEs, inserted by the Insolvency and Bankruptcy Code (Amendment) Act, No. 26 of 2021).

[23] IBC, *supra* note 1, at § 66 (including obligations to refrain from fraudulent and wrongful trading).

contributing cause of the value destruction that precedes CIRP admission.[24]

A. The Structural Deficit in Current Indian Corporate Governance Law

The Companies Act, 2013, mandates audit committees and risk management committees for certain categories of listed and unlisted public companies.[25] The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, imposes additional governance structures on listed entities.[26] These mechanisms, however, are directed at financial reporting integrity and enterprise risk management in general strategic terms, they do not specify obligations calibrated to the detection of insolvency-proximate financial conditions. The IBC's wrongful trading provision in Section 66[27] provides for director liability in cases of fraudulent or wrongful conduct, but this provision is purely reactive; it is triggered only after CIRP has commenced and it imposes no affirmative pre-insolvency monitoring obligations.

Van Zwieten's analysis of director liability in insolvency and its vicinity identifies the absence of affirmative pre-insolvency duties as a governance gap common to many civil and common law jurisdictions, creating perverse incentives for directors to delay acknowledgement of financial difficulty in preference for managerial optimism or reputational self-preservation.[28]

Keay similarly argues that the zone-of-insolvency concept, the period during which a firm has not yet become technically insolvent but faces a foreseeable likelihood of doing so, requires a distinct legal treatment that neither pure shareholder-primacy nor post-hoc insolvency liability adequately provides.[29] The proposed framework addresses this bias directly by creating both mandatory monitoring obligations, which remove the discretion to delay acknowledgment, and a safe harbor that makes early acknowledgment behaviourally rational rather than personally costly.

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[24] *See generally* Kristin van Zwieten, *Director Liability in Insolvency and its Vicinity*, 38 OXFORD J. LEGAL STUD. 382 (2018).

[25] *See generally* ANDREW KEAY, DIRECTORS' DUTIES 287–312 (LexisNexis, 3d ed. 2016).

[26] Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2015, reg. 21 [hereinafter SEBI LODR Regulations].

[27] IBC, *supra* note 1, at § 66 (regulating fraudulent and wrongful trading).

[28] van Zwieten, *supra* note 24.

[29] ANDREW KEAY, *supra* note 25, at 287–312.

B. Mandatory Internal Risk Monitoring: Statutory Architecture

The proposed reform would require companies above defined thresholds of outstanding debt, turnover, or systemic importance to maintain continuously operating internal financial surveillance mechanisms.[30] These systems must track, at a minimum: (1) liquidity ratios including current and quick ratios; (2) the interest coverage ratio measuring debt service capacity from operating earnings; (3) operating cash flow to current liabilities as a real-time liquidity stress indicator; and (4) consecutive periods of net operational losses and declining EBITDA margins, working capital deterioration, and debt covenant breach events. These indicators collectively span the principal dimensions of financial distress identified in the empirical literature on corporate failure prediction.[31]

Threshold values for each indicator should be prescribed by subordinate regulation developed by the IBBI in consultation with the RBI and the MCA, with periodic revision as Indian-market empirical data accumulates. The design must observe a proportionality principle: monitoring obligations should scale with firm size and systemic significance, applying the most demanding requirements to the largest and most systemically connected entities. This proportionality principle is embedded in the EU Preventive Restructuring Directive's governance framework[32] and reflects sound regulatory design.

Upon any threshold breach, directors must be required to convene the Board-Level Solvency Committee within seven days and the full board within fourteen days. At the board meeting, directors must formally document their assessment of the breach and the firm's solvency position, the restructuring options available, and any decision to engage creditors or external advisors. This documentation requirement serves a dual purpose: it creates an evidentiary record establishing whether directors fulfilled their statutory obligations, and it structures board deliberation in a manner that counteracts optimism bias and managerial self-interest. This is particularly important, given bankruptcy scholarship has identified optimism bias and managerial self-interest as primary causes of governance failure in the approach of insolvency.

C. The Board-Level Solvency Committee

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[30] *See generally* John Y. Campbell, Jens Hilscher & Jan Szilagyi, *In Search of Distress Risk*, 63 J. Fin. 2899, 2905–2915 (2008).

[31] *See generally* Edward I. Altman, *Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy*, 23 J. Fin. 589, 601–609 (1968).

[32] EU Preventive Restructuring Directive, *supra* note 13, at art. 3(1).

The proposed framework establishes a dedicated Board-Level Solvency Committee for firms meeting the specified thresholds. Current audit committees under Section 177 of the Companies Act, 2013[33] and risk committees under SEBI LODR Regulations[34] lack the specific solvency-monitoring mandate and financial distress expertise required to serve this function. The Solvency Committee is a distinct institution with four core responsibilities: (1) continuous oversight of the internal monitoring systems; (2) supervision of periodic solvency assessments and going-concern evaluations; (3) standing review of restructuring options including debt rescheduling, covenant modification, asset disposals, and capital restructuring; and (4) formal reporting of distress signals to the full board and, where applicable, to regulatory authorities under the National EWS described in Chapter II.

The Committee's constitution must include a majority of independent directors and at least one member with demonstrated professional expertise in finance, restructuring, or insolvency practice. This composition requirement mirrors the independence and expertise standards the Companies Act, 2013 imposes on audit committees[35] and reflects the established legislative judgment that monitoring functions are most effective when populated by directors free from managerial conflicts of interest. Meetings should be held quarterly as a minimum, with mandatory extraordinary meetings triggered by any threshold breach notification from the monitoring system.

D. Periodic Solvency Assessments and Independent Review

Directors must conduct formal solvency assessments at prescribed intervals that encompasses the following: (1) going-concern evaluations prepared in accordance with applicable accounting standards; (2) stress testing of financial projections under adverse macroeconomic scenarios; and (3) scenario modelling of debt service capacity under each stress scenario. Where the internal assessment identifies material uncertainty about the firm's ability to meet its obligations over a twelve-month horizon, the board must commission an independent review of the assessment by an external financial professional before the assessment is presented to the full board.

The requirement for independent review in cases of material uncertainty

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[33] Companies Act 2013, *supra* note 3, at § 177.

[34] SEBI LODR Regulations, *supra* note 16, at reg. 21.

[35] Companies Act 2013, *supra* note 15, at § 177(2) (requiring that the audit committee consist of a majority of independent directors).

is essential. The EU Preventive Restructuring Directive[36] and the Australian safe harbor reforms [37] both incorporate equivalent independent-assessment requirements, lending comparative support for this design choice.

E. Director Liability in the Zone of Insolvency

The zone of insolvency, the period during which insolvency is foreseeable but has not yet legally occurred, has generated substantial doctrinal evolution in comparative law, and the contours of that evolution are directly instructive for the design of an Indian preventive framework.

The foundational American articulation appears in the Delaware Court of Chancery's analysis in *Credit Lyonnais Bank Nederland, N.V. v. Pathe Communications Corp.*[38] Chancellor Allen's dictum in that case, that when a firm is in the vicinity of insolvency, directors must consider the interests of all residual claimants, not merely shareholders, was widely understood to establish that the zone of insolvency generated some form of enhanced director obligation toward creditors. *Production Resources Group v. NCT Group*[39] adopted and extended this reasoning, holding that creditors' interests become paramount as the firm enters the zone of insolvency, thereby suggesting that creditors could have standing to enforce director obligations directly. Solomon's analysis of this jurisprudence traces its theoretical foundations in the shift of residual risk from equity to debt as a firm approaches insolvency.[40]

The Delaware Supreme Court's decision in *North American Catholic Educational Programming Foundation v. Gheewalla* [41] fundamentally and definitively recalibrated this trajectory, however. The Supreme Court held with explicit clarity that creditors of a corporation in the zone of insolvency have no right to assert direct claims for breach of fiduciary duty against directors. The

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[36] EU Preventive Restructuring Directive, *supra* note 13, at art. 3(1).

[37] *See generally* Jason Harris, *Reforming Insolvent Trading to Encourage Restructuring: Safe Harbor or Sleepy Hollows?*, 27 J. BANKING & FIN. L. & PRAC. 294 (2016).

[38] Credit Lyonnais Bank Nederland, N.V. v. Pathe Commc'ns Corp., Civ. A. No. 12150, 1991 WL 277613 (Del. Ch. Dec. 30, 1991).

[39] N. Am. Catholic Educ. Programming Found., Inc. v. Gheewalla, 930 A.2d 92, 101–03 (Del. 2007) (holding that creditors have no right to assert direct claims for breach of fiduciary duty against directors even when the corporation is in the zone of insolvency); *see also* Prod. Res. Grp. v. NCT Grp., 863 A.2d 772, 787–92 (Del. Ch. 2004).

[40] *See generally* Odelia Minnes & Dov Solomon, *Game of Thrones: Corporate Law and Bankruptcy Law in the Arena of Directors' Liability*, 27 COLUM. J. EUR. L. 1 (2021).

Court reasoned that fiduciary duties, properly understood, run to the corporation as an entity, not to any specific class of stakeholders directly. When a corporation becomes insolvent, creditors may bring derivative claims on behalf of the corporation for director conduct that harms the corporate estate and thereby harms the creditors' interests. But the zone of insolvency does not give creditors a direct cause of action. The Court expressed concern that recognizing direct creditor claims in the zone of insolvency would expose directors to an unpredictable and potentially unlimited array of claims from disparate creditor classes with conflicting interests.

The significance of *Gheewalla* for the present analysis is threefold. First, the case confirms that fiduciary expansion toward creditors in the zone of insolvency is not a natural consequence of doctrinal evolution, even in sophisticated common law systems. Second, the decision highlights the genuine policy tension between providing creditors with enforceable governance rights during a time when a company is financially distressed and maintaining the governance clarity that enables directors to take decisive action without being paralyzed by conflicting creditor claims. Third, and most importantly for India, the case illustrates why the zone-of-insolvency problem cannot be satisfactorily resolved through the judicial development of fiduciary doctrine alone. The proper instrument for creating enhanced director obligations in distress is legislation, and legislation has the added advantage of being able to pair director obligations with the safe harbor protections that are essential to their effectiveness.

English law addresses the concern of recognizing director claims in the zone of insolvency through the wrongful trading doctrine in Section 214 of the Insolvency Act 1986.[42] Section 214 imposes liability on directors who, knowing or having reasonable grounds to know that insolvent liquidation was unavoidable, failed to take every step to minimize potential loss to creditors.[43] The objective-subjective standard established in *Re Purpoint Ltd*[44] holds directors to the standard of the reasonably diligent person with both the general knowledge and skill expected of a director and any additional knowledge or skill the particular director actually possesses.

Indian law currently lacks a coherent zone-of-insolvency doctrine. Section

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[42] Insolvency Act 1986, c. 45, § 214 (UK) [hereinafter Insolvency Act 1986].

[43] *See In re* Produce Mktg. Consortium Ltd. (No. 2) [1989] BCLC 520, 553–55 (Ch) (Eng.).

[44] *See In re* Purpoint Ltd. [1991] BCC 121, 128 (Ch) (Eng.) (establishing the objective-subjective standard for wrongful trading liability).

66 of the IBC[45] provides for liability in cases of fraudulent or wrongful trading but is reactive, activated only after CIRP commences. It imposes no affirmative pre-insolvency obligations and provides no guidance on director duties during a company's approach to insolvency. This gap should be filled through statutory reform establishing that directors who fail to maintain the required monitoring systems and who ignore breach notifications are subject to personal liability. The liability standard should be modelled on the English wrongful trading objective-subjective test,[46] adapted to the specific governance obligations of the proposed framework.

III. AN AI-DRIVEN NATIONAL EARLY WARNING SYSTEM FOR CORPORATE DISTRESS DETECTION

Director-level monitoring, however rigorously mandated, cannot provide the systemic visibility necessary for regulatory early intervention. This is because directors may fail to establish adequate systems, may manipulate internal reports, or may rationalize distress signals as transient. The history of major corporate failures in India and in other countries demonstrates that internal governance failures are frequently contributing causes of financial deterioration rather than passive accompaniments of the corporate life cycle.[47] A robust early warning architecture must therefore include a systemic, externally operated monitoring mechanism that generates objective distress signals independent of voluntary managerial disclosure. This Chapter develops the architecture of a National Early Warning System designed to serve this function.

A. Conceptual Foundations and Comparative Precedents

The academic foundations of financial distress prediction are well established. Altman's seminal 1968 discriminant analysis demonstrated that financial ratios drawn from audited balance sheet and income statement data could correctly classify firms as bankrupt or solvent up to two years before filing.[48] Subsequent scholarship, including Campbell, Hilscher, and Szilagyi's dynamic hazard model that incorporates market-based variables,[49] has extended this toolkit to encompass transaction-flow data and real-time indicators unavailable to

[45] IBC, *supra* note 1, at § 66 (policing fraudulent and wrongful trading).
[46] Insolvency Act 1986, *supra* note 42, at § 214(2)–(3).
[47] RBI Financial Stability Report, *supra* note 20, at 58–66.
[48] Altman, *supra* note 31, at 601–09.
[49] Campbell, Hilscher & Szilagyi, *supra* note 30, at 2910–18.

Altman's static model. The IBBI's own discussion paper on early warning signals acknowledges the relevance of this literature to the Indian regulatory context.[50]

The Basel Committee on Banking Supervision has long advocated supervisory early warning systems that uses multi-source financial data to identify institutional vulnerabilities.[51] China's People's Bank of China has implemented a corporate credit risk early warning system that integrates enterprise financial statements, tax records, and credit bureau data to forewarn of bankruptcy.[52] This system provides a direct precedent for the data integration proposed here. The IMF's survey of early warning systems across jurisdictions documents their effectiveness in reducing the social costs of financial distress when implemented with appropriate institutional governance and proportionate regulatory responses.[53] The RBI's Prompt Corrective Action framework for banks[54][55] demonstrates that threshold-based early regulatory intervention is technically and institutionally feasible in the Indian context.

B. Data Architecture and Integration

The National EWS would aggregate data from four primary regulatory sources, each providing a distinct dimension of a firm's financial condition.

The first source is the Information Utilities framework under the IBBI IU Regulations,[56] which maintains real-time records of financial contracts and default events reported by financial creditors. This stream provides the most directly insolvency-proximate data: actual default occurrences across the corporate sector,

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[50] *See generally* Bankruptcy Law Reforms Committee, The Report of the Bankruptcy Law Reforms Committee, Vol. I: Rationale and Design, 2015 (India).

[51] *See generally* Basel Committee on Banking Supervision, Frameworks for Early Supervisory Intervention (2018) [hereinafter Basel EWS Paper].

[52] Mingwei Li, *A Corporate Bankruptcy Early Warning Framework Based on Principal Component Analysis to Optimize the Construction of Financial Index System in Big Data Environment*, 18 Int'l J. Comput. Info. Sys. & Indus. Mgmt. Applications (2026).

[53] *See* Abdul d Abiad, *Early Warning Systems: A Survey and a Regime-Switching Approach* 18–27 (IMF Working Paper WP/04/57, 2004).

[54] *See generally* Reserve Bank of India, Prompt Corrective Action Framework for Banks, RBI/2016-17/276 (2017) [hereinafter RBI PCA Framework].

[55] *Id.* (establishing three risk threshold levels—Risk Threshold 1, 2, and 3—for banking institutions, each triggering escalating supervisory restrictions and mandatory corrective actions).

[56] *See generally* Insolvency and Bankruptcy Board of India (Information Utilities) Regulations, 2017.

updated continuously as creditors report to the IU network. The second source is the Ministry of Corporate Affairs registry, which holds financial statements filed by all registered companies under the Companies Act, 2013. Annual filings contain the balance sheet, income statement, and cash flow data necessary to compute distress indicators and to track financial trajectory over time.

The third source is the Goods and Services Tax Network. GST return profiles[57], particularly declining turnover, irregular filing behaviour, and input-output mismatches, provide real-time operational stress signals that lead the signals available from audited annual statements by six to twelve months in many cases. Because GST data captures actual transaction flows rather than accrual accounting constructs, it is substantially more resistant to earnings management than financial statement data. The fourth source is credit bureau data from institutions licensed under the Credit Information Companies (Regulation) Act, 2005.[58] Credit bureau profiles, incorporating repayment behavior, days past due, credit utilization trends, and changes in aggregate credit availability, are among the most reliable leading indicators of corporate financial distress in the empirical literature.[59]

The statutory basis for integrating these data streams must be established through an amendment to the IBC empowering the IBBI to mandate data sharing from the MCA, GSTN, and credit bureaus for EWS purposes. This legal basis is necessary to override the information silos that currently separate these regulatory systems. Coordination with the Financial Stability and Development Council, which has a cross-sectoral mandate for financial stability monitoring, [60]would ensure that EWS outputs are integrated into broader macroprudential surveillance.

C. Predictable Architecture and Alert Models

The EWS analytical core would deploy an ensemble of predictive models to produce a composite distress probability score for each covered entity. Alert generation should operate in three tiers. Tier One alerts place firms on an enhanced supervisory watchlist requiring more frequent data review and a notification to the firm's Solvency Committee under Chapter I. Tier Two alerts trigger automatic

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[57] Central Goods and Services Tax Act, 2017, No. 12 (May 26, 2025) (India).

[58] Credit Information Companies (Regulation) Act, 2005, No. 30 (June 23, 2005) (India).

[59] *See generally* WORLD BANK GROUP, CREDIT REPORTING KNOWLEDGE GUIDE 2019; John Y. Campbell, Jens Hilscher & Jan Szilagyi, *In Search of Distress Risk*, 63 J. Fin. 2899, 2910–18 (2008).

[60] d Abiad, *supra* note 53, at 18–27.

notifications to the IBBI and relevant sectoral regulators, and generate an invitation to the firm's directors to enter the confidential pre-insolvency mediation mechanism described in Chapter III. Tier Three alerts, acute distress indicators approaching the formal default threshold, activate mandatory regulatory outreach and the potential appointment of an independent monitor. This tiered structure mirrors the RBI's three-tier Prompt Corrective Action framework [61] and is consistent with the Basel Committee's guidance on proportionate supervisory escalation.[62]

D. Institutional Governance, Accountability

The institutional governance of the EWS is as important as its analytical architecture; indeed, from a legal design perspective, it is more important. A system that produces accurate distress predictions but lacks transparent governance and meaningful firm rights is not merely legally vulnerable; it is practically ineffective, because firms and financial creditors will resist the authority of a system whose outputs they cannot scrutinize or challenge. The institutional design of the EWS must therefore be developed with as much care as its analytical architecture, and it should be the primary focus of the legislative and regulatory framework this scholarship recommends.

The system must be housed within a clearly designated regulatory body, the IBBI supported by the FSDC, with a board-level oversight committee that includes representatives from MCA, RBI, and independent financial experts. Companies must publish annual transparency reports that disclose the system's performance metrics. These reports must include false positive and false negative rates, the number and distribution of alerts issued at each tier, the average time from alert to resolution event, and the outcomes of challenged assessments. These transparency requirements will enable academic and professional scrutiny of the system's operational effectiveness and will guard against regulatory capture or institutional stagnation.

Firms that receive Tier Two or Tier Three alerts must have a statutory right to submit supplementary information challenging the model's assessment within fourteen days of notification. A dedicated EWS Review Panel, comprised of IBBI officers, independent financial experts, and representation from the banking

[61] RBI PCA Framework, *supra* note 54 (establishing three risk threshold levels for banking institutions, each triggering escalating supervisory restrictions and mandatory corrective actions).

[62] Basel EWS Paper, *supra* note 51, at 24–30.

regulator— must adjudicate challenges within twenty-one days after a firm submits supplementary information. Furthermore, the panel must document the basis for any regulatory action taken pursuant to an alert. Firms that successfully challenge an alert must be entitled to a formal correction of their assessment record.

The combination of algorithmic detection and structured human review is essential to a system that is both effective and legally defensible. As the IMF's survey notes, early warning systems that lack transparent governance and challenge mechanisms generate regulatory legitimacy problems that ultimately reduce their operational effectiveness, because firms and creditors will resist their authority.[63] The model governance framework must also address the risk of model drift: the possibility that predictive models calibrated on historical data will become progressively less accurate as the economic environment evolves. A mandatory annual model review conducted by an independent technical panel should verify that predictive performance continues to meet the accuracy thresholds specified in the founding legislation.

Data governance is also a critical constraint. The aggregation of sensitive financial information from multiple regulatory sources engages the provisions of the Digital Personal Data Protection Act, 2023.[64] The EWS statutory framework must therefore specify the following: (1) access controls limiting EWS alert data to designated regulatory personnel; (2) strict prohibitions on using EWS data for purposes beyond distress prevention; and (3) critical prohibitions on public disclosure of EWS alerts prior to confirmed regulatory intervention.[65] Premature disclosure of distress alerts could precipitate creditor runs and supply-chain disruption, thereby converting manageable liquidity stress into acute insolvency— the very outcome the system is designed to prevent.

IV. CONFIDENTIAL PRE-INSOLVENCY MEDIATION AND RESTRUCTURING MECHANISM

Early warning signals are valuable only if they trigger effective intervention. A system that detects distress but channels firms directly into formal CIRP foregoes the benefits of early detection: (1) the going-concern value that restructuring can preserve; (2) the employment that insolvency destroys; and (3)

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[63] d Abiad, *supra* note 53, at 20–24.

[64] Digital Personal Data Protection Act, No. 22 of 2023, India Code (2023) [hereinafter DPDPA 2023].

[65] *Id.* at §§ 4, 7 (restricting the processing of personal and sensitive data without a valid legal basis, subject to specified exemptions for activities of the State).

the creditor recoveries that cooperative renegotiation can produce in excess of liquidation proceeds. This Chapter develops the institutional architecture of a Confidential Pre-Insolvency Mediation and Restructuring Mechanism designed to convert early warning signals into productive restructuring outcomes before formal insolvency becomes necessary.

A. Relationship to Existing IBC Mechanisms

The proposed mechanism operates upstream of the IBC's existing processes. Formal CIRP is initiated under Sections 7, 9, and 10 of the IBC upon the occurrence of a "default" as statutorily defined.[66] The pre-insolvency mechanism is designed for firms that exhibit distress indicators, as identified by their internal monitoring systems under Chapter I or by the National EWS under Chapter II, but have not yet crossed the default threshold triggering formal CIRP eligibility. In this respect, the mechanism occupies the doctrinal space between normal commercial operations and formal insolvency, analogous to the "likelihood of insolvency" threshold in the EU Preventive Restructuring Directive[67] and the "financial difficulties" criterion for voluntary administration under Australian law.[68]

If the pre-insolvency mechanism fails to produce an agreed restructuring plan within the prescribed timeframe, the firm's creditors retain their full rights to initiate CIRP under the IBC. The mechanism does not create a procedural bar to formal insolvency proceedings; it creates a time-limited opportunity to avoid them.

B. Eligibility and Exclusions

Eligibility for the mechanism should require satisfaction of two positive conditions and the absence of specified disqualifications. The first positive condition is the existence of defined financial distress indicators: either threshold breaches identified by the firm's internal monitoring system or a Tier Two or Tier Three EWS alert. This ensures that the mechanism is available only to firms in genuine distress, not deployed strategically to delay legitimate creditor

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[66] IBC, *supra* note 1, at §§ 7, 9, 10 (including initiation of CIRP by a financial creditor upon default; initiation by an operational creditor; voluntary initiation by the corporate debtor).

[67] EU Preventive Restructuring Directive, *supra* note 13, at art. 4(1).

enforcement.

The second positive condition is that the firm must not yet be in "default" within the meaning of the IBC,[69] ensuring that the mechanism is genuinely preventive rather than an alternative route to CIRP admission. If a firm has already defaulted on debt, the appropriate mechanism is CIRP or the pre-packaged insolvency process under Sections 54A to 54P of the IBC.[70]

The disqualifications mirror those applicable under Section 29A of the IBC[71] Firms under active fraud investigation by law enforcement authorities and promoters who are disqualified from participating in insolvency resolution are excluded. These exclusions ensure that the mechanism cannot be instrumentalised as a shelter from criminal accountability. The firm's Solvency Committee or, in the case of an EWS-triggered access, the IBBI's Pre-Insolvency Restructuring Secretariat should verify eligibility within five business days of application.

C. Confidentiality Architecture and Standstill

Confidentiality is the foundational design feature distinguishing this article's proposed mechanism from existing restructuring processes. A firm's decision to enter pre-insolvency restructuring carries severe commercial risks if disclosed: counterparty termination clauses, creditor acceleration, supplier flight, and investor panic can all convert manageable liquidity stress into acute crisis. Without robust confidentiality, rational directors will delay entry until the firm's condition is so deteriorated that confidentiality is no longer possible. This is precisely the pattern of late-stage intervention that the framework is designed to break.

The statutory confidentiality regime should include: (1) an absolute prohibition on disclosure of a firm's participation by any party, professional, or regulator involved in the process; (2) a duty of strict confidentiality binding all participants regarding information exchanged during mediation; (3) prohibitions on the use of mediation-disclosed information for any purpose outside the process, including in subsequent litigation; and (4) criminal sanctions calibrated to deter breach. A temporary standstill on creditor enforcement must also accompany the confidentiality regime to create the breathing space necessary for productive negotiation.

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[70] IBC, *supra* note 1, at §§ 54A–54P.

[71] IBC, *supra* note 1, at § 29A (listing disqualification criteria for resolution applicants and promoters).

The standstill should suspend rights to accelerate loans, enforce security, or initiate formal CIRP or winding-up proceedings for an initial period of sixty days, with an extension to one hundred and twenty days upon demonstrated good faith progress in negotiations certified by the Restructuring Professional. UNCITRAL's Legislative Guide identifies the availability of adequate negotiating time as a critical success factor while cautioning against extended standstills that erode distributable value through carrying costs.[72]

D. The Restructuring Professional and Mediation Process

The mediation should be conducted by Restructuring Professionals empanelled by the Pre-Insolvency Restructuring Secretariat on the basis of qualifications in insolvency law, corporate finance, or professional restructuring practice. The Restructuring Professional's role is substantially different from, and in important respects more demanding than, the role of a Resolution Professional under the IBC. In formal CIRP, the Resolution Professional exercises quasi-adjudicatory functions within a court-supervised process and is backed by the statutory authority of the NCLT. The Restructuring Professional, by contrast, operates in a pre-formal-proceedings environment where their authority derives entirely from the parties' voluntary acceptance of the process and from the statutory framework establishing the mechanism. Their effectiveness depends on their ability to manage complex multi-creditor negotiations, maintain the confidence of all parties simultaneously, and provide credible neutral assessments of financial condition without appearing to advocate for any party's position. These competencies are distinct from the administrative and legal coordination skills central to CIRP administration.

The Restructuring Professional's role combines facilitated negotiation, independent financial assessment, and plan drafting. Under these roles, Restructuring Professionals facilitate information exchange between debtor and creditors through a confidential data room, provide a neutral assessment of the firm's financial condition and restructuring feasibility, and assist in developing a restructuring plan meeting the statutory requirements.

E. Creditor Classes, Voting Thresholds, and Cramdown

Creditors must be organized into classes reflecting their distinct legal

[72] UNCITRAL, Legislative Guide on Insolvency Law 210–12 (2004) [hereinafter UNCITRAL Legislative Guide].

rights and economic positions in the firm's capital structure. From highest to lowest class, categories of creditors include secured financial creditors, unsecured financial creditors, operational creditors, and any identified sub-class of creditors with homogeneous interests. This class structure is essential to the fairness of any binding vote. Creditors with different legal priorities have different interests in restructuring outcomes, and a single undifferentiated vote would allow majorities drawn from one class to impose outcomes that systematically advantage their class at the expense of others.

Within each class, approval of the restructuring plan requires the support of creditors representing not less than sixty-six percent of the total value of claims in that class, mirroring the voting threshold applicable to resolution plans under Section 30(4) of the IBC[73] and consistent with the practice of major restructuring jurisdictions. When the plan is approved within the required number of classes but one or more dissenting classes exist, a cramdown mechanism should enable the plan to bind dissenting creditors within those classes, subject to the "no worse off" protection. In short, this protection requires that each dissenting creditor must receive no less under the plan than they would receive in a liquidation of the firm on the same date.

This cramdown mechanism follows the design of the EU Preventive Restructuring Directive's cross-class cramdown provisions[74] and the English Restructuring Plan's equivalent mechanism.[7576] The Companies Act, 2013's scheme of arrangement requires approval by three-fourths in value and a majority in number, without a statutory cramdown mechanism capable of binding dissenting classes. The proposed framework improves on this model by enabling economically viable restructurings to proceed without being defeated by hold-out creditors who prefer the rent-seeking leverage of a blocking position over the collective value of successful restructuring. The breadth of available restructuring instruments, debt rescheduling and maturity extension, interest payment deferrals, debt-to-equity conversions, new money injections on priority terms, operational restructuring (including asset disposals and workforce adjustments), and covenant

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[73] IBC, *supra* note 1, at § 30(4) (requiring approval by not less than 66% in value of the financial creditors for a resolution plan to be submitted to the Adjudicating Authority).

[74] EU Preventive Restructuring Directive, *supra* note 13, at arts. 10–11 (cross-class cram-down requirements including the 'best interest of creditors' test and the 'relative priority rule').

[75] Corporate Insolvency and Governance Act 2020, c. 12, §§ 1–17 (UK).

[76] *See generally* GOODE, *supra* note 11, (discussing how the English Restructuring Plan's cross-class cram-down mechanism, modelled on US Chapter 11, represents a significant evolution beyond the traditional Scheme of Arrangement).

modifications all ensure that the proposed mechanism can accommodate diverse capital structures and distress scenarios.

F. Judicial Confirmation and Statutory Effect

Following creditor approval, the restructuring plan must receive confirmation from the National Company Law Tribunal to acquire statutory binding force against all creditors, including those who did not participate in the mediation and those who dissented from the restructuring plan. The NCLT's confirmation role should be confined to a legality review. This review verifies that the plan was adopted through the prescribed process, that it satisfies the "no worse off" standard for dissenting creditors, and that it does not violate any mandatory legal provisions.[77] The NCLT should not conduct a merits assessment of the plan's commercial wisdom; that assessment is reserved to the creditors acting through the approval mechanism.

This limited judicial role preserves the speed advantage of the pre-insolvency mechanism while ensuring that the resulting plan has the statutory force necessary to prevent individual creditor defection following confirmation. It parallels the role of the NCLT in confirming resolution plans under Section 31 of the IBC[78] while reflecting the non-adjudicatory character of the pre-insolvency process. World Bank Principles identify this combination of creditor-driven commercial decision-making and limited-judicial-legality review as best practices for voluntary restructuring mechanisms.[79]

If the mediation period of the proposed mechanism expires without an approved plan—whether because the parties failed to reach an agreement, the debtor provided inadequate disclosure, or the requisite voting threshold was not achieved—the standstill terminates immediately and creditors recover their full enforcement rights under the IBC and applicable law. Creditors who participated in the mediation in good faith may use information obtained in the data room to inform their subsequent IBC applications, subject to existing confidentiality protections regarding third-party information.

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[77] *See generally* WORLD BANK, PRINCIPLES FOR EFFECTIVE INSOLVENCY AND CREDITOR/DEBTOR REGIMES 63–71 (2021) [hereinafter World Bank Principles].

[78] IBC, *supra* note 1, at § 31 (noting judicial approval of resolution plans by the Adjudicating Authority following commercial decision of the Committee of Creditors).

[79] *See* WORLD BANK PRINCIPLES, *supra* note 77, at 63–71 (discussing judicial confirmation as a mechanism for ensuring plan legality while preserving speed advantages of out-of-court restructuring).

G. Safe Harbor for Directors — A Good Faith Protection

The safe harbor for directors who initiate the proposed mechanism in good faith is the behavioral keystone of the entire framework. Without protection from personal liability for decisions made during a genuine restructuring attempt, directors face a dominant strategy of delay. There is a tension here between distress formally creating personal exposure (to shareholder claims that director conduct caused the firm's decline, to creditor claims under zone-of-insolvency doctrine, and to reputational harm) to delay, however commercially irrational, deferring these risks.

The proposed safe harbor grants directors statutory protection from liability under Section 66 of the IBC and from breach-of-duty claims under the Companies Act, 2013 for conduct undertaken in good faith in the course of the mediation process. This protection is subject to the condition that the director reasonably believed at the time of initiating the mechanism that restructuring offered a genuine prospect of avoiding insolvency. The condition follows the Australian model in Section 588GA of the Corporations Act, 2001.[80] Empirical surveys following Australia's 2017 safe harbor reforms found measurable increases in early director engagement with financial advisers upon detection of distress, and this is precisely the behavioural shift that the proposed Indian mechanism seeks to produce.[81]

The safe harbor is lost if the director is subsequently found to have initiated the mechanism in bad faith. Bad faith may exist, for example, when directors seek to delay creditor enforcement while concealing asset dissipation, or if the NCLT finds that insolvency was inevitable at the time of initiation and no genuine restructuring was feasible. These conditions prevent the safe harbor from being instrumentalized as a general-purpose shield against director insolvency liability.

The interaction between the pre-insolvency mechanism and the IBC's voluntary CIRP initiation provision under Section 10[82] requires statutory clarity. A director who initiates the pre-insolvency mechanism and acts in good faith throughout, but who ultimately fails to achieve a restructuring plan, should be treated, for the purpose of subsequent CIRP proceedings, as having satisfied the good faith conduct requirement applicable to promoters and management under

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[80] *See* Corporations Act 2001, supra note 16, at § 588GA.

[81] Harris, *supra* note 37, at 103–10 (noting that empirical surveys of Australian corporate restructuring professionals in the two years following the 2017 safe harbor reforms indicated a measurable increase in early director engagement with financial advisers upon detection of distress).

[82] IBC, *supra* note 1, at § 10 (voluntary initiation of CIRP by the corporate debtor).

the resolution framework. This treatment encourages directors to engage with the mechanism rather than filing voluntarily for CIRP to gain the protection of the formal process.

CONCLUSION

The argument advanced in this Article rests on a structural diagnosis of Indian insolvency law's principal limitation: the IBC's exclusive focus on resolving insolvency after it has occurred condemns the system to intervening in corporate financial distress at a stage when enterprise value has already been substantially destroyed. The empirical record, late admission lags, low recovery rates, and high liquidation frequencies are all the predictable consequences of this design rather than an incidental operational failure. The research question this Article addressed—how Indian insolvency law can incorporate preventive mechanisms capable of detecting corporate distress before default while preserving creditor rights and market discipline—admits of a specific and legally grounded answer. This answer involves a three-pillar architecture of director monitoring duties, a National Early Warning System, and a Confidential Pre-Insolvency Mediation Mechanism.

Preventive insolvency architecture is not merely technically preferable to reactive resolution; it is normatively desirable on multiple independent grounds. The preservation of enterprise value is the first and most direct benefit. When a firm enters CIRP with net worth substantially eroded and operations disrupted, the going-concern value that a functioning business represents—the organizational capital, customer relationships, supplier networks, workforce expertise, and productive employment that cannot survive formal liquidation—is destroyed in the process of resolution. Early intervention preserves these sources of value precisely because it operates before the spiral of creditor enforcement, counterparty termination, and workforce flight that CIRP admission typically precipitates.

Protection of employment is a second and independently compelling normative justification for this framework. Corporate insolvency in India, as the liquidation rate demonstrates, frequently ends in the permanent dissolution of the debtor enterprise. Liquidation irreversibly destroys employment, thereby transferring social costs to workers, their families, dependent communities, and the public support systems that all absorb the consequences of mass unemployment. The employment-destruction externality of insolvency is not priced into the decisions of creditors enforcing their individual rights, and this creates a systematic divergence between private creditor incentives and social welfare. A preventive

framework that converts potential liquidations into successful restructurings directly internalizes part of this externality to align the outcomes of the restructuring process more closely with aggregate social welfare.

Improved creditor recovery rates represent the third major benefit of this framework. India's twenty-six cent recovery rate does not reflect the value available in distressed firms at the point of original default. Rather, it reflects the destruction of that value during the delay between default and CIRP admission, the costs of formal proceedings, and the steep discount applied to assets sold under forced-liquidation conditions in illiquid markets. Early intervention, by preserving going-concern value and reducing the transaction costs of resolution, directly increases the net present value available for distribution to creditors.

The reduction of systemic financial instability is the fourth justification. The accumulation of non-performing assets in India's banking sector—a chronic structural constraint on credit availability and banking sector health—is driven in significant part by the late recognition and late resolution of corporate distress. A preventive framework that identifies distress earlier and converts it into restructuring rather than NPA accumulation directly reduces this systemic risk accumulation. The macroeconomic returns to a functioning early warning and restructuring architecture are therefore substantially greater than the private returns to individual creditors and debtors, although the latter is itself a compelling justification for public investment in the institutional infrastructure required.

The Three-Pillar Early Warning Framework proposed here is designed to deliver these normative benefits through coordinated legal reform at three institutional layers. Chapter I's director-duty framework creates accountability at the level of the firm for the governance decisions made in the approach of insolvency. Chapter II's National Early Warning System provides the systemic, externally verified layer of distress detection that internal governance alone cannot supply. And Chapter III's Confidential Pre-Insolvency Mediation Mechanism is the institutional channel through which early detection is converted into productive restructuring outcomes.

The framework's implementation would require legislative action on three fronts: (1) an amendment of the Companies Act, 2013 to impose director monitoring obligations and the zone-of-insolvency liability framework; (2) an amendment of the IBC to establish the National EWS, mandate data sharing, and create the pre-insolvency mediation mechanism as a formal statutory process; and (3) an effort by the IBBI and MCA to subordinate regulation in order to specify threshold values, eligibility criteria, and procedural rules. This legislative agenda is substantial but well-precedented by the comprehensive reforms that produced the IBC itself. The question is not whether India will develop preventive

restructuring mechanisms, but whether it will do so through deliberate legal design or through the gradual judicial and regulatory improvisation that shaped the IBC's early years. The answer this Article advocates is one of deliberate design: a coherent statutory framework that addresses the structural deficit of late-stage intervention, that aligns the incentives of directors, creditors, and regulators toward early action, and that builds on the comparative experience of jurisdictions that have grappled with the same challenges. The Three-Pillar Early Warning Framework is that design.