

# Digital Lending and Shadow Banking within Indian Legal Frameworks: Systemic Risk and Financial Stability Implications

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**ABSTRACT:** The structure of credit intermediation is changing due to technological innovation and growing reliance on non-bank intermediaries, which presents a major challenge to financial law and regulation. These developments have been taking place in an institution-based legal framework in India which balances the prudential regulation to deposit-taking banks although functional convergence is increasingly becoming prevalent with the financial intermediaries. Therefore, a significant portion of credit creation has been to be carried out by non-bank and technology-based institutions that carry out bank-like activities but are not under fragmented or indirect regulatory oversight, creating systemic stability vulnerabilities. This article is a doctrinal review of the legal frameworks that govern digital lending and shadow banking in India and their historical development, legislative basis and current modification. It makes three main contributions. First, it conceptualizes financial stability as a legal outcome, shaped by statutory design, regulatory philosophy, and supervisory coherence rather than solely by macroeconomic conditions. Second, it shows that regulatory arbitrage in digital lending is a legal failure, which is the result of institution-based regulation where similar economic credit operation can undergo different legal treatment. Third, it demonstrates how digital lending increases systemic risk by hastening credit cycles, further increasing interconnectedness between regulated and unregulated intermediaries, and procyclical behaviour by driving technology-based decision-making. The study argues that the issue of systemic risk being internalized, and ensuring financial stability in India is achieved by having one, activity-based, macroprudential regulation that encompasses all forms of loan intermediation.

**Keywords:** Digital lending, Financial stability, Legal frameworks, Shadow banking, Systemic risk.

## I. INTRODUCTION

The banking institution has traditionally been the core of a financial regulation, where the introduction of credit intermediation and the core source of systemic risk are built. This institutional orientation is reflected in prudential laws and supervisory principles according to which depositor protection is the equivalent of a systemic resilience [1].

According to traditional banking regulations, the majority of the risks to financial stability are found in deposit-taking institutions; hence, they must be closely monitored through capital adequacy, liquidity rules, and resolution [2]. With the passage of time, the structural change of financial markets has challenged this assumption. The process of credit intermediation has gradually moved out of the control of regulated banks to non-bank entities that are involved in maturity transformation and the provision of liquidity beyond the normal regulatory question mark [3]. These developments gave rise to what is now described as the shadow banking system, which performs bank-like economic functions while remaining subject to lighter or indirect regulation [4]. The financial crisis of the world has demonstrated that even the intermediaries legally separated might cause systemic destabilizing effects that were as high as those caused by banks, putting the institution-based regulation to the test [5].

The rise of digital lending has complicated this regulatory framework. The digital lending models utilize algorithmic-based credit scoring, alternative data, and automated decision-making to generate and distribute credit at scale that is not necessarily subject to prudential banking regulation [6]. These platforms blur traditional legal distinctions between banks, NBFCs, and service providers, creating hybrid structures that strain existing statutory classifications [7]. Legally, the issue of digital lending does not only serve as the manifestation of technological innovation but the functional restructuring of credit intermediation that disputes the conceptual premises of financial regulation [8].

In India, the situation is especially relevant because NBFCs have long been playing the role of loaning out funds outside the conventional banking industry. NBFCs have historically supplemented banks by serving niche markets and underserved borrowers, embedding non-bank intermediaries deeply within the financial system [9]. This trend has been magnified by the growth of digital lending where fast credit expansion can be achieved using app-based and platform-driven credit models that can scale and speed up to levels never seen before [10]. The legal system that has been developed to regulate such developments however is still quite fragmented and lacking in coverage. Regulatory philosophy at the institution level, core financial statutes still continue to reflect the assumptions of a previous stage of financial intermediation, namely the Banking Regulation Act, 1949, and the Reserve Bank of India Act, 1934, which still exhibit a regulatory philosophy of institutional form to functional equivalence [11]. As a result, regulatory authority and prudential obligations remain closely tied to the legal identity of institutions rather than to the economic substance of the activities they perform. The regulatory responses in digital lending have consequently been developed not by the adoption of an overhaul statute but by subordinate regulation in the forms of circulars, guidelines, and supervisory directions. Although these have enhanced consumer protection, disclosure, and outsourcing controls, but they have been more inclined on risks in their conduct but have not developed systemic risks [12]. This dependency on piecemeal regulatory tools has resulted in coverage and enforcement failures in specific situations

where digital lending models have been applied in more layered partnerships and contractual forms. These institutional gaps make regulatory arbitrage by enabling the economic equivalency credit operations to be subjected to significantly different authoritative standards based on institutional category, further undermining the consistency and efficiency of the entire regulatory system [13].

## II. RELATED WORK

The growth of financial regulation itself is intimately related to the historical development of shadow banking. With the escalation of prudential requirements of banks in the late twentieth century, financial intermediation was more pronounced to less regulated organisations and market based arrangements that could perform the same banking functionality without the same prudential requirements [14]. These changes were initially assessed as efficiency-enhancing innovations which increased the credit supply and diversified the sources of funds [15]. Shadow banking over time took the character of an intricate net work of intermediaries that operate within the context of maturity transformation, leverage and provision of liquidity, frequently based upon short-term wholesale funding [16]. Though not legally related to banks, they were highly interrelated to the formal banking system in terms of funding, guarantees and off-balance-sheet exposures [17]. Through lack of detailed control on the system, systemic weaknesses accumulated without being noticed, leading to huge financial instability during stress.

The financial crisis that affected the world in 2008 and 2009 fundamentally changed the scholarly and regulatory views towards shadow banking. It uncovered the fact that systemic risk might not be within the controlled banking industry and spread fast by contractual and legal connections [18]. This observation led to the demand of macroprudential regulation that would be able to concentrate on systemic risk as opposed to the sole institutions [19]. The historical course of shadow banking has taken a different but similar direction in the Indian context. Realizing the role of pivotal providers of credit in the regulatory framework of the RBI Act, 1934, NBFCs would operate along with banks but with different prudential standards [20]. Although this model facilitated credit growth, it also incorporated structural interdependence among banks and non-banks, which established avenues through which stress could have been passed throughout the financial system [21]. The next emergence of digital lending is a technological amplification of this tradition, which integrates traditional shadow banking roles with platform business models, which make legal control even harder [22]. Indian financial law has responded to the growth of shadow banking and digital lending primarily through incremental regulatory adaptation rather than comprehensive statutory reform. The legislative framework that is at the heart of regulating financial intermediation is the Banking Regulation Act, 1949, and the Reserve Bank of India Act, 1934, which both incorporate the institution-centric method of regulation [23]. Although these laws enable the Reserve Bank of India to control the actions

of non-bank institutions, the very framework of such laws is predicated on a strict conceptual distinction between banks and other financial intermediaries, a distinction that has become increasingly blurred. Through delegated legislation, regulatory supervision of NBFCs has been increased to a wider scope, comprising of prudential norms that are proportional to size and systemic significance [24]. These actions are indicative of an increased awareness of the systemic significance of the non-bank intermediaries, but still limited by the statutory restrictions which categorically differentiate the intensity of regulation according to institutional typology [25]. As a result, organizations that conduct such similar credit operations remain subject to different legal requirements. Nonetheless, Digital lending has been dealt with more of regulatory provisions as opposed to statutory modification. These tools deal with disclosure, resolving complaints, and outsourcing agreements meant to lower operational and consumer [26]. However, the enforcement of prudential requirements is restricted and systemic risk accountability is made more difficult by the lack of specific statutory recognition of digital lenders [27].

The regulatory environment has been further influenced by legal reactions to stress incidences in the NBFC industry. The liquidity support programs and increased oversight after spells of financial stress depict a new macroprudential awareness in the Indian financial regulators [9]. Nonetheless, these reactions have been mostly ex post responses to immediate symptoms of stress, but not to structural weaknesses that have been caused by a fragmented systemic legal framework [28].

The Indian financial law has traditionally taken an institution-based regulatory assumption based on the perception that the systemic risk is concentrated in depository taking banks [2]. The framework has led to varying regulatory treatment of banks and non-bank financial intermediaries under statutes and supervisory tools, even as the functions of these two types of financial intermediaries become more similar in contemporary financial markets [30]. The increasing trend of digital lending and shadow banking reveals the weaknesses of this solution by showing how risks associated with banks, including credit risk, liquidity risk, and transformation of maturities, can be concentrated beyond the standard regulatory boundary. Recent research is moving toward activity-based regulation, where similar financial activities are governed by the same rules, irrespective of the type of institution performing them [31]. Doctrinally, regulatory arbitrage should not be viewed as a market response to regulation but rather as the outcome of statutory fragmentation [7]. This dynamic is shown by Indian digital lending arrangements, where legal structuring is commonly used to minimize regulatory exposure while maintaining underlying economic substance [13]. A macroprudential regulatory system entails having legal frameworks that internalize system-wide risk externality rather than having a narrow scope of the soundness of individual entities [32]. Despite the fact that Indian regulators have begun to integrate macroprudential goals in the supervisory dialogue, there is still no transfer of such goals

into legal norms that are binding and generally applicable, especially when it comes to non-bank and technology-based financial intermediaries [33].

### III. ANALYSIS AND IMPLICATIONS

The legal structure of the digital lending and shadow banking has significant consequences to the systemic risk and financial stability, especially through the prism of interconnectedness and fragmented regulation. The concept of financial stability, goes beyond prudential soundness of any given institution to the stability of the entire financial system, both with respect to how the shock is propagated within and between institutions and markets [29]. Nevertheless, the current legal frameworks have been keeping the intermediation of credit in institution silos that fails to reveal the economic reality of interlinked balance sheets and common exposures. The empirical studies of the financial networks indicate that the systemic risk emerges due to dense and opaque relationships between banks and non-bank intermediaries even in cases when they are legally different [34]. The relationship between regulated banks and less regulated non-bank financial institutions and digital lending platforms is particularly intense in these dynamics since in many cases, banks will engage in funding, liquidity assistance, or credit-enhancing activities. These interconnections create diffuse yet significant channels through which stress originating in lightly regulated segments can spread to the core banking system, thereby jeopardizing financial stability [4]. Studies mapping connections between banks and shadow banking shows these links are often underappreciated in institution-focused regulation, creating supervisory blind spots [35]. Since the law never conceptualizes these arrangements as a single system of credit intermediation, systemic risk is transferred outside of the regulatory perimeter as opposed to being reduced. This disaggregation undermines the ability of regulators to monitor aggregate leverage, maturity transformation and correlated exposures within the financial system. The consequences of such legal blind spots are particularly acute in India, where non-bank credit intermediation is extensive, heterogeneous, and deeply intertwined with the formal banking sector. The NBFC sector has experienced stress events that have shown how legal independence of entities can cause instability throughout the system that demands extraordinary liquidity assistance and regulatory safeguarding [32]. The growing inclusion of digital lending systems in these networks only heightens the degree of interconnectedness by placing technology-based intermediaries into the already-established shadow banking systems, expanding the rate and complexity of risk transmission, and being partially immune to prudential regulation, undermining systemic resilience.

These vulnerabilities are further enhanced by the contractual, technological, and organizational obscurity that defines the digital lending models. The platform based lending struc-

tures usually have several organizations that carry out distinct roles like customer acquisition, credit evaluation, loan granting, funding and recovery. Such arrangements might be formally in line with the current legal provisions but erode the legal accountability and obstruct the actual distribution of risk in the credit chain, thus compromising good supervision [7]. This opacity impairs regulators' ability to assess system-wide leverage, liquidity mismatches, and correlated exposures, particularly as digital lenders scales rapidly. In addition, the growing adoption of automated underwriting and machine-learned risk models makes it possible to expand and contract credit supply rapidly, speeding up the credit cycles and strengthening procyclicality. Although these technologies can enhance efficiency and increase access to credit, empirical research indicates that FinTech lending can increase systemic vulnerabilities by encouraging coordinated lending behaviour and strengthening herd behavior [36]. The broader transformation of banking driven by FinTech also creates structural risks, such as operational dependence on technology, data concentration, and platform dominance, which, in the absence of a legal response, can heighten systemic vulnerability [37]. Laws that do not involve macroprudential limits on such intermediaries do not adequately account for the amplification impacts of technology when it comes to systemic risk, which enhances the probability of sudden deleveraging during a crisis [38]. These weaknesses are also aggravated by fragmented legal regimes that facilitate regulatory arbitrage as a strategic decision by companies, but as a natural consequence of institution-based regulation that employs divergent legal standards to regulate economically similar activities [13]. The inconsistencies in regulatory scope are further intensified with technological risks like cybersecurity vulnerabilities of digital and mobile lending infrastructures that disrupt financial stability in case it is not properly regulated [39]. The evolving trends in FinTech and RegTech emphasize the harms of these inconsistencies to regulatory coherence that promotes the movement of risks to less regulated areas [40]. These vulnerabilities are exacerbated in the Indian context where most digital lenders are not legally recognized, which undermines the effectiveness of prudential norms and restricts the oversight ability. As digital lending becomes increasingly embedded in shadow banking networks, its faster, larger, and less transparent transmission of risk amplifies systemic vulnerabilities [41]. Collectively, all of this undermines financial stability as a regulatory goal in favour of ex post crisis management instead of ex ante systemic prevention [31]. The implications are cumulative in that since legal design influences systemic risk as much as market behavior does, a legal reconceptualization is essential for the financial legal system to function effectively, internalize systemic externalities, and prioritize financial stability as a core regulatory principle.

#### IV. CONCLUSION

This article finds the conclusion that the quickly growing trend of the digital lending and technology-based credit intermediation in India have changed the very nature of credit markets, yet have also introduced the old risks of default, obscurity and asset degradation in new technological incarnations. Even though digital lending improves access to credit

and regulatory efficiency, it has been demonstrated that regulatory arbitrage, inadequate borrower screening, and ineffective risk-sharing arrangements have increased stress in lending portfolios and have a direct impact on Non-Performing Assets (NPAs) and financial system stability in certain cases, particularly to underserved borrowers. The evidence in the banking industry in India has always indicated that an increase in the number of loans whose credit appraisal and enforcement procedures have not been carried out increases the non-performing assets (NPAs). The results can still be applied to the digital lending ecosystem, where underwriting algorithms and third-party lending service providers (LSPs) have a tendency to destabilize the traditional accountability frameworks. Existing literature also demonstrate that fintech lenders often exist in regulatory voids like shadow banks, only to increase credit risk beyond the formal prudential system an effect that is becoming common in the app-based lending industry in India.

Regarding legal aspects, the research discovers that the architecture of the NPA and default solution in India based on RBI prudential norms, SARFAESI Act, Debt Recovery Tribunals (DRTs), and Insolvency and Bankruptcy Code (IBC) is strong in its design but unfair to digital lending models. The current evidence on the efficacy of SARFAESI suggests that effective creditor rights enhance recovery and discipline of borrowers, but most digital loans are not secured or geographically close to regulators, which constrains the effectiveness of the Act. Likewise, empirical evaluations of the IBC indicate that though it has increased solution times and economic worth of big corporate downfalls, it is ineffective with tiny-ticket digital loans which comprise most fintech portfolios. By defining on-balance-sheet responsibility, limiting Default Loss Guarantees (DLGs), and bolstering consumer protection, the RBI's Digital Lending Guidelines (2022–2025) represent a major regulatory intervention intended to close these gaps. By upholding that regulated parties bear final credit risk, legal grounds support the belief that these actions reduce moral hazard and regulatory arbitrage. However, there is preliminary evidence that organizational rearrangement and compliance expenses may be a temporary barrier to financing, at least for fintech-NBFC partnerships. Notably, this research is in line with other literature in the legal-economic field, which claim that innovation-neutral regulation will not suffice to provide financial stability. Instead, the stability requires functional regulation, whereby the parties that perform bank-like roles, including the transformation of maturities and the absorption of credit risks are subjected to similar legal and prudential standards. The changing digital lending structure in India signifies this transformation, although the consistency of enforcement and the capacity to supervise are crucial issues in India. Ultimately, the research concludes that digital lending, in isolation, is not a significant driver of systemic risk, inadequate legislative coherence might raise default risks and jeopardize financial stability by putting fintech credit into the NPA recognition, recovery, and insolvency framework. Enhancing the consistency between digital lending operations and the existing default-resolution legislations in India, especially SARFAESI and the asset-classification standard of RBI, will be crucial to the sustenance of financial innovation on a fintech basis to be both inclusive and stable. The future policy should,

however, be aimed at developing policies that are not only concerned with technological regulation, but also heightening legal responsibility, creditor rights, and systemic risk containment in the rapidly digitising credit ecosystem in India.

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