SMART GUARANTEES IN INDIA: IS INDIAN LAW READY FOR CONTRACTUAL LIABILITY IN THE AGE OF FINTECH AND BLOCKCHAIN?

Natasha Zulfikir Kumar, Jindal Global Law School

The age we live in now is one of technology, from barter to blockchain, the Indian financial sector has become an arena of rapid digital growth and development. With this transformation, however, we must also look at if our laws have the necessary dearth to deal with this growth. Sections 126 to 147 of the Indian Contract Act, 1872[1] (herein after ICA), governs the contracts of a guarantee, the question that we must ask now is if technological developments such as blockchain based smart guarantees, which though code allow for automated assurances, meet these tenets. This article looks at if the Indian contract law is adaptable enough to govern smart guarantees as well, and what the ripple effects will be on its jurisdiction, enforceability, and most importantly the protection of the customers.

As per the ICA, a guarantee requires three parties: the principal debtor, the creditor, and the surety. Section 126 defines a contract of guarantee as one to perform the promise or discharge the liability of a third person in case of default[2]. Section 128 establishes that the liability of the surety is co-extensive with that of the principal debtor unless otherwise provided[3].

We see this principle guiding the lines of Indian jurisprudence such as in the case of *State Bank of India v. Indexport Registered (1992)*[4], in which the Supreme Court held that it is immediately upon the default of the debtor that the liability of the surety is established. Similarly, the court emphasized in the case of *SBI v. Mula Sahakari Sakhar Karkhana Ltd. (2006)*[5], that liability of the surety cannot be foregone unless it is discharged explicitly by variation of the contract (Section 133 of the ICA) or the release of the principle debtor (section 133 ICA) These laws

[1] The Indian Contract Act, 1872, §§ 126 - 147.
[2] The Indian Contract Act, 1872, §126.
[3] The Indian Contract Act, 1872, §128.
[4] *State Bank of India & Anr v. Indexport Registered & Or*s, AIR 1992 SC 1740 : (1992) 3 SCC 159
[5] *State Bank of India & Anr v. Mula Sahakari Sakhar Karkhana Ltd*., Civil Appeal No. 2801 of 2006 (Supreme Court, 6 July 2006),

were built to create a foundation for a human centric model of contracting, a paradigm that is being called into question due to the existence of smart guarantees.

The ICA has a strong framework that supports the existence of guarantees, however the concept of smart guarantees leaves it in a blurry area that is mainly interpretive in nature. This means that, although Sections 126 to 147 of the ICA[6] can be stretched to infer the enforceability and validity of smart guarantees, the Act does not specifically have the ambit to deal with self executing contracts which are algorithmic in nature. Upon taking a closer look into the application of the ICA, we see that the requirement under Section 126[7] to involve a creditor, principle debtor and a surety is satisfied in a smart guarantee as well through the digital identities and algorithmic authentication in the course of a smart guarantee. However, what puts us into murky territory is the fact that when the execution of a smart guarantee is automated and irreversible, it clashes with the liability of the surety given in Section 128.[8] The legislation has so far been unable to provide statutory recognition for the digital execution and the issues that accompany it in light of a smart guarantees algorithmic discretion, however, in order to move past simply interpretations of the ICA bent to cater to these new kinds of guarantees, we must first understand what a smart guarantee is.

Smart guarantees are self-executing digital agreements which are encoded within blockchain platforms[9]. This self-execution occurs automatically when certain predefined conditions are met, thus bypassing the need for human intervention. With conditions such as the need for an automatic transfer of funds or liquidation of collateral upon default, being met, the immediate execution allows for a level of certainty to be laid due to the block chain system being transparent and reliable.

However, benefits never come without the cost of burdens, and this transparency and reliability has come at the cost of flexibility. And thus from the judicial discretion, equitable relief, and defenses stayed in the ICA, we have entered a system built on the operation of logic, leaving the doors of overriding legal safeguards barely ajar.[10]

[6] Indian Contract Act, 1872, § § 126 - 147.
[7] Indian Contract Act, 1872, § 126.
[8] Indian Contract Act, 1872, § 128.
[9] Zibin Zheng et al., An Overview on Smart Contracts: Challenges, Advances and Platforms, arXiv:1912.10370 (2019).
[10] Smart Contracts & Indian Law: Legally Binding or Technically Blinded, 11(7) Int'l J. Res. & Analytic Rev. (2025).

When a contract is formed, in order for it to be considered valid, section 10 of the ICA requires an offer, an acceptance, and a consideration.[11] Smart contracts meet these requirements, however, it is when we look at the concept of free consent do the waters get murky. According to Section 14 of the ICA, Free consent is defined as when consent is given with the free will of the individual and not by coercion (S.15), undue influence (S.16), fraud (S.17), misrepresentation (S.18) or mistake (S. 20, 21, 22). When the basis of the expression of consent becomes code, however, there must arise the question of if we can equate algorithmic consent to human consent.[12]

Through Section 10A, the Information Technology Act, 2000 allows for the valid creation and execution of electronic contracts.[13] The Supreme Court upheld in the case of *Trimex International FZE Ltd. v. Vedanta Aluminium Ltd.* (2010) that a contract formed through an electronic exchange, as long as there is offer and acceptance, and digital communication is affirmed, can constitute binding agreements.[14] Smart guarantees, however, exist on a slightly parallel plain, as they are programmed to execute the contractual agreement automatically, potentially bypassing judicial oversight. This causes an echoing barrage of warning bells regarding doctrines designed to be equitable in nature such as estoppel or unconscionability, doctrines which require human interpretation.[15]

Human interpretation serves as the foundation through which the consumer feels confident in the ability of the law to protect them in spite of their various unique situations. Defenses to sureties are provided to the consumer as per Sections 133 to 139 of the ICA[16]. An algorithmic guarantee created and executed by code, may not accommodate these defenses. Once the chain of programming is triggered, the code executes the contractual agreement autonomously regardless of context. Contracts that go against public policy or those with unlawful consideration are seen to be void under Sections 23 of the ICA[17], so when a contract exists simply within the pixels and formulas of code, any harsh or unfair terms stripped bare of human review have the risk of going unnoticed until enforced.[18]

[11] Indian Contract Act, 1872, § 10.
[12] Indian Contract Act, 1872, § 14.
[13] Information Technology Act, 2000, §10A.
[14] *Trimex Int'l FZE Ltd. v. Vedanta Aluminium Ltd.*, (2010) 3 S.C.C. 1.
[15] Shreyas Ranjit, Digital Contracts and Smart Contracts: Legal Validity and Enforceability, Naya Legal (2022).
[16] Indian Contract Act, 1872, §§ 133–139.
[17] Indian Contract Act, 1872, § 23.
[18] "Issues Relating to Smart Contracts in the Indian Context and Their Effect on NFTs," CSIPR/NLUI (2022).

With blockchain being intangible and borderless, we approach the question of the jurisdiction of the law in these contractual guarantees.[19] If a smart guarantee coded and created in India is to be executed on a global ledger with stakeholders in multiple jurisdictions, we reach a wall of conflict painted with the question of which country's laws govern the contract.[20] Decentralized platforms create chinks in the once fullproof codification. Due to concerns of financial stability, the Reserve Bank Of India (RBI) has upheld the restrictions on the use of virtual currencies. This ban was lifted by the Supreme Court in the *Internet and Mobile Association of India v. RBI* (2020) case[21], however ambiguity persisted due to smart guarantees involving crypto assets, thus resulting in the issues of enforceability.

If we draw comparison from other jurisdictions, we see that the Law Commission of the United Kingdom has established that the principles that exist within their legal system are sufficient to govern the rise of smart contracts, as long as the intentions of the contract are made clear by both parties.[22] Many States in the United States such as Tennessee and Arizona have enacted laws recognizing contacts formed through blockchain. Singapore explicitly recognizes these e-contracts through their Electronic Transactions Act[23] which offers a statutory foundation for smart guarantees and legitimizes the automated nature of these contracts.

In 2020, India's NITI Aayog established a blockchain strategy that accepted the rise in smart contracts. Legislative action however still remains pending.[24]

For legislative action to occur in order to completely integrate smart guarantees into the statutory framework of contracts in India, there must be regulatory clarity. This means that bodies of regulation such as RBI and SEBI must establish fixed guidelines which clarify the dynamics of crypto-assets and set concrete definitions of the standards of digital consent.[25] A regulatory outline once set would allow an experimentary framework within which consumer safety in the digital concept can be explored with a statutory safety net.[26] The responsibility of

[19] Jørgen Svennevik Notland et al., The Minimum Hybrid Contract (MHC): Combining Legal and Blockchain Smart Contracts, arXiv:2002.06850 (2020).
[20] Id.
[21] *Internet & Mobile Ass'n of India v. Reserve Bank of India*, (2020) 10 S.C.C. 274.
[22] Law Commission of England and Wales, Smart Legal Contracts: Advice to Government (Nov. 25, 2021).
[23] Electronic Transactions Act 2010 (Singapore).
[24] NITI Aayog, Blockchain: The India Strategy (2020).
[25] "Smart Contracts Unlocked: Automation, Legal Status, and Real-World Impact," Mondaq (2025).
[26] Id.

interpretation and legal certainty on these topics will then be bestowed upon the judiciary which will result in smart guarantees becoming a more tangible part of the law.

Smart guarantees have become an inescapable part of contracts both within India and with the international arena as well, thus the means of navigating them must be ones which are well established and well controlled. A more pragmatic view of this conundrum could lead us to approaching a more hybrid approach in which the contracts built with code also contain human override mechanisms which can come in the form of judicial or arbitral review. These mechanisms could include a system of tiered overrides which could vary depending on the value and risk of the guarantee, thus still preserving the benefits of automation while still protecting the consumer.

With the growth in fintech and blockchain our legal framework has been tasked with the challenge of growing as well. The adaptation will provide a stable yet flexible framework within which India can achieve its fintech ambitions with the necessary protections provided by the law, enabling us to be part of a system that prioritizes both judicial excellence as well as technological literacy, thus weaving our future with the threads of both tradition and innovation.