REVISITING INSIDER TRADING IN THE AGE OF ALGORITHMIC TRADING: IS THE SEBI FRAMEWORK ADEQUATE?

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ABSTRACT

The explosive growth of algorithmic and high-frequency trading in the Indian capital markets where algorithmic trading is now seen to account for over 60% of the market activity and has fundamentally altered the speed, anonymity and as well as the complexity with which securities transactions are executed. Regardless, India's primary instrument for combating insider trading is the SEBI (Prohibition of Insider Trading) Regulation, 2015, which continues to operate on legal assumptions that calibrate to a human-paced market, a conscious insider, an identifiable communication and traceable transaction. This paper argues that the PIT Regulations are structurally inadequate to detect, attribute and deter insider trading in an environment which is algorithmically dominant. Looking back on the July 2025 Jane-street matter, where SEBI accused a U.S. based proprietor trading firm of manipulating Indian markets through coordinated algorithmic strategies across derivatives and cash segments and this paper identifies few discrete regulatory gaps which are the temporal mismatch between microsecond execution and post-hoc surveillance, the collapse of mens rea attribution when trading decisions are automated, the definitional strain placed on concepts of “insider’, “connected persons” and “communication”, when the operative actor is a machine and the cross border complexity generated by algorithms operating across jurisdictions which are beyond the territorial reach of SEBI.

The paper situates these gaps within a comparative framework, drawing lessons from the SEC’s Market Abuse Unit, the EU’s Market Abuse Regulation and MiFID II obligations and the UK FCA’s Senior Managers and Certificate Regime. It concludes with six targeted legislative and institutional recommendations including definitional amendments to the PIT Regulations and a mandatory Algorithmic Trading Responsible Officer regime, real-time surveillance mandates and a Rule 10b5-1 style safe harbour for the purpose of pre-committed algorithmic strategies.

The central claim of this paper is not that the existing framework has failed

but that it was never actually designed for the market which it now governs and that the cost of inaction compounds with every percentage point of market share that algorithms capture.

Keywords: Insider Trading, Algorithmic Trading, SEBI PIT Regulations, Unpublished Price Sensitive Information (UPSI), Market Abuse Regulation.

I. INTRODUCTION.

In July 2025, India's capital markets regulator found itself coming face to face with a question its existing framework was unprepared to address. The Securities and Exchange Board of India (SEBI) accused Jane Street, a U.S. based proprietary trading firm of the allegation of manipulating Indian markets to generate unlawful gains, imposing trading ban and freezing approximately ₹4,843 crore (~$565 million) of the firms assets.[1] The case turned on an allegation that appeared straightforward on its face but in reality was far more complex and intricate, namely that an algorithm, executing thousands of trades across derivatives and cash markets in coordinated millisecond bursts had been weaponised to move prices in a manner that it benefitted pre-positioned option bets. SEBI's evidence of a 7.3:1 ratio of options to equivalent exposure in stocks and futures and that combined with a systematic consistent pattern of cash market losses offset by outsized options profits which challenged the claim that this was a neutral hedging. Whether or not the conduct ultimately qualifies as insider trading under the Indian Law, the episode exposed a much deeper and an uncomfortable truth about India's regulatory architecture for market misconduct which was designed for a world that no longer existed.[2]

We live in a dynamic environment, and the world has been transforming at a remarkable speed and for the very first time in history it is found that algorithmic trade overtook manual trading in the NSE cash market in 2024 which captures a record of 53% share comparing it with 2010 which was just at 14%.[3] Additionally, an even sharper contrast emerges in the derivative segment which is that algo participation in stock futures has risen sharply from 39% in FY2015 to 73% by FY2026[4] thereby establishing automated trading as the unmistakable and an overwhelming force of dominance. Algorithmic trading is now seen to derive over 55% of all

[1] Volkan Kubali & Yuxiao Huang, *When Algorithmic Trading Meets Allegations of Market Manipulation: The Jane Street–SEBI Case*, FTI Consulting (July 28, 2025).
[2] Ibid.
[3] Aayush Khanna, *Colocation Hits 35.7%, Algo Trading Surges to 53%: The Tech-Driven Shift in NSE*, Investing.com (Feb. 10, 2025).
[4] *Algorithmic Trading in India (2026): SEBI Framework and Career Guide*, QuantInsti.

trades in India[5] which results in a significant boost in market automation while at the same time compressing the timeframes within which price sensitive information is absorbed, acted upon and also concealed. Now, into this environment, India's primary instrument for combating insider trading is found to be the SEBI (prohibition of Insider Trading) Regulations, 2015 (PIT Regulations) which continues to operate substantially as drafted which is centred on the human insider, the identifiable tip and also the traceable transaction.

This paper argues that SEBI's insider trading framework is designed only for a human-paced market and is structurally not sufficient and inadequate to deter, detect and prosecute an insider trading in an environment which is algorithmically dominant. Even though the PIT regulations, 2015 have been successful in tracing insider trading to some extent, prominent leakages remain that hinder systematic operations and it is these leakages which widen significantly when the instrument used for trading is algorithmically capable of acting on encoding informational advantages at speeds no compliance officer, trading window or even structured digital database can be meaningfully monitored[6]. Additionally, even SEBI's own 2025 circular acknowledged the risk involved in market manipulators exploiting algorithmic anonymity to engage in insider trading and as well as other fraudulent acts and yet the PIT Regulations themselves have not been revisited to address this very structural gap.[7]

II. CONCEPTUAL FOUNDATION.

Inisder Trading, as defined under Regulation 2(1)(g) of the SEBI (Prohibition of Insider Trading) Regulations, 2015, refers to trading by any person who is either a "connected person" or someone who is in possession of or having access to any Unpublished Price Sensitive Information (UPSI).[8] UPSI is defined under Regulation 2(1)(n) as any information relating to a company or its securities that is not generally available and which, upon becoming generally available, is likely to materially affect the price of the securities.[9] The primary concern addressed here is that the issue of information asymmetry, where certain market participants trade using unpublished information thereby gaining an unfair advantage over uninformed

[5] *India Algorithmic Trading Market Size, Share, Trends and Forecast by Component, Deployment, Trading Types, Trader, and Region, 2026–2034*, IMARC Group.
[6] Gunjan Modi, *SEBI (Prohibition of Insider Trading) Regulations, 2015: An Understanding of Insider Trading Regulations in India and Major Obstacles in its Implementation*, SCC Online Blog (Sept. 14, 2023).
[7] Madhvendra Jha & Devanshu Khurana, *SEBI's Crackdown on Algo Trading: A Step Forward or a Regulatory Puzzle?*, RGNUL Fin. & Mercantile L. Rev. (Apr. 5, 2025)
[8] Sristi Nimodia, *SEBI Regulations on Insider Trading and UPSI*, TaxGuru (Nov. 26, 2024).
[9] Ibid.

investors and undermining market integrity as well as investor confidence. Insider trading has been recognised as the main cause of many monetary scams in the share market thus making it one of the most critically regulated areas for ensuring transparent and fair returns to shareholders.[10]

Algorithmic trading refers to an automated, rule-based order execution which is made using computer programmes that respond to pre-defined market conditions at such a speed which no humans can replicate.[11] Algorithmic trading has been found to raise different and unique legal challenges like that of lack of transparency, difficulty in establishing intent and regulatory enforcement gaps. For the first time in history, algorithmic trade overtook manual trading in the NSE cash market in 2024 thus capturing a record of 53% share which was up from just 14% in 2010.[12] This shift has been more noticeable in the derivatives segments wherein algo participation in stock futures has risen from 39% in FY2015 to 72% in FY2016, representing one of the most significant shifts towards an automated trading.[13]

The intersection of these two concepts results in a central regulatory problem which this paper examines. Algorithms can be engineered to act upon UPSI the moment it is subtly perceptible through abnormal order flow, satellite imagery or alternative data long before it is formally disclosed. Algorithmic traders can access enriched data before it is even made public, which, in the view of certain legal scholars, falls right within the spirit, of India's insider trading regulations and maybe viewed as UPSI relating to Indian listed securities.[14] As scholars have observed, the UK Financial Service Authority remarked that the regulators are riding bicycles to chase down the high-frequent trading Ferrari, the one which constantly changes its license plates, routes and appearance. The window between Information leakage and trade execution, was once measured in days or hours but now have collapsed into fraction of seconds thereby rendering conventional surveillance architecture and structures to be structurally obsolete.[15]

[10] Gunjan Modi, *SEBI (Prohibition of Insider Trading) Regulations, 2015: An Understanding of Insider Trading Regulations in India and Major Obstacles in its Implementation*, SCC Online Blog (Sept. 14, 2023).
[11] Anurag Singh, *Algorithmic Trading and Market Manipulation: A Legal Perspective on Insider Trading Regulations*, 3 LawFoyer Int'l J. Doctrinal Legal Rsch. 367 (2024).
[12] Aayush Khanna, *Colocation Hits 35.7%, Algo Trading Surges to 53%: The Tech-Driven Shift in NSE*, Investing.com (Feb. 10, 2025).
[13] *Algorithmic Trading in India (2026): SEBI Framework and Career Guide*, QuantInsti.
[14] Armaan Patkar, *Technology Innovations in Securities Trading: Can SEBI's Bicycle Catch the High-Frequency Trading Ferrari*, 12 Indian J.L. & Tech. 24 (2016).
[15] Ibid.

III. THE CURRENT SEBI FRAMEWORK.

The PIT Regulations, 2015, operate through an interlocking architecture of definitions. An "insider" is any person who is either a "connected person" or in possession of or having access to UPSI.[16] A "connected person" includes any person who is or has been, during the time frame of 6 months prior to the concerned act, associated with the company in any way of form either directly or directly in such a manner that it allows access to UPSI.[17] This primarily includes all directors, designated persons, auditors and consultants and the regulations go further thereby outlining a list of persons who shall be deemed to be connected until and unless they rebut the assumption that with the onus to establish non-connection resting on such persons themselves.[18] Another important safeguard is the restriction on the trading window, the compliance officer is required to close the trading window as soon as there is any possibility of UPSI arising, particularly when designated individuals or a specific class of designated individuals can reasonably be expected to possess such information.[19] Continual disclosure obligations require designated individuals to either disclose acquisition or disposal in situations where trade value exceeds ₹10 lakh in a calendar quarter. The 2025 amendment has further expanded the UPSI definition wherein recognising that the original five illustrative categories no longer captured a number of price-sensitive events, SEBI then amended the definition in March 2025 to align it with the material events require to be disclosed under Regulation 30 of the LODR Regulations which was effective from June 10,2025.[20]

SEBI's Integrated Market Surveillance System (IMSS), under Regulation 11 of the SEBI (Stock Broker and Sub-Broker) Regulations,1992, uses AI-driven algorithms to identify trading patterns which are unusual in nature linked to potential insider trading violations.[21] Complementing the IMSS, SEBI also operates the Data Warehousing and Business Intelligence System(DWSIB) and these track unusual price movements and also trading volumes specifically around sensitive corporate events such as mergers, earnings announcements or

[16] Mohini Varshenya & Ankit Singhi, *Understanding the Expanded Definition of Connected Persons under SEBI (Prohibition of Insider Trading) Regulations, 2015 and Its Impact*, Corporate Professionals (Dec. 20, 2024).
[17] Ibid.
[18] Ibid.
[19] Mohini Varshenya & Deepika Vijay Sawhney, *SEBI (Prohibition of Insider Trading) Regulations, 2015 – Frequently Asked Questions*, Corporate Professionals (Aug. 14, 2020).
[20] Meher Mehta, Ayushi Singh & Maideni Shukla, *Amendments to the SEBI (Prohibition of Insider Trading) Regulations, 2015: Widening the Scope of "Unpublished Price Sensitive Information"*, S&R Assocs. (July 14, 2025).
[21] Akila Agrawal & Vidya Sunderam, *Strengthening Compliance: SEBI's Recent Enforcement Strategies Against Insider Trading*, India Corp. L. (Apr. 8, 2025).

regulatory filings[22]. Primary surveillance responsibility is entrusted to the stock exchanges while SEBI maintains proactive oversight of any market movements where analysis of trading information raises suspicion of market abuse, client details and broke records are obtained and if further analysis somehow suggests possible insider dealing then a formal investigation begins.

SEBI's enforcement armoury is quite wide-ranging. Directors under Section 11B of the SEBI act encompass with warnings, monetary restitution, cancellation of intermediary licences, debarment from the Indian securities market and disgorgement of illegally made gains.[23] Penalties under Section 15G of the SEBI Act range from ₹10 lakh to ₹25 crore, or even three times the profit made out of insider trading whichever is higher.[24] Additionally, Section 24 of the SEBI act provides for criminal prosecution and imprisonment of up to ten years.[25] SEBI also offers violators a pathway through consent orders which allows individuals or entities to pay a penalty without admitting guilt thus providing a less severe alternative to traditional enforcement actions.[26] It is also important to note that, more than 90% of the investigations initiated or completed in FY2022 and FY2023 pertained to market abuse which included insider trading and market manipulation.[27]

The 2015, overhaul represented a genuine modernisation wherein it replaced the inadequate 1992 framework and broadened the definition of "connected person", and introduced a "reasonable expectation" test for trading window closures and created the concept of pre-approved trading plans for designated persons who may be perpetually in possession of UPSI.[28] In the recent years, there has been a notable shift towards preventive regulations through administrative warnings, increased technology-driven surveillance, and also stricter disclosure norms which shows transitioning from reactive measures to preventive regulations. These are

[22] Securities & Exch. Bd. of India, *Annual Report 1999–2000: Investigation, Enforcement and Surveillance*.
[23] Manjari Tyagi, Deepika Goyal, Vishnu Sumanth & Abhiroop A Datta, *India: A Deep Dive into SEBI and Related Legislation Amid Insider Trading and Market Manipulation Investigations*, Global Investigations Rev. (Dec. 7, 2023).
[24] Sristi Nimodia, *SEBI Regulations on Insider Trading and UPSI*, TaxGuru (Nov. 26, 2024).
[25] Manjari Tyagi, Deepika Goyal, Vishnu Sumanth & Abhiroop A Datta, *India: A Deep Dive into SEBI and Related Legislation Amid Insider Trading and Market Manipulation Investigations*, Global Investigations Rev. (Dec. 7, 2023).
[26] Akila Agrawal & Vidya Sunderam, *Strengthening Compliance: SEBI's Recent Enforcement Strategies Against Insider Trading*, India Corp. L. (Apr. 8, 2025)..
[27] Manjari Tyagi, Deepika Goyal, Vishnu Sumanth & Abhiroop A Datta, *India: A Deep Dive into SEBI and Related Legislation Amid Insider Trading and Market Manipulation Investigations*, Global Investigations Rev. (Dec. 7, 2023).
[28] Akila Agrawal & Vidya Sunderam, *Strengthening Compliance: SEBI's Recent Enforcement Strategies Against Insider Trading*, India Corp. L. (Apr. 8, 2025).

considered to be meaningful advances, regardless, as the sections that follow, they demonstrate that they were designed for a market where the algorithms have already left behind.

IV. THE REGULATORY GAP: WHERE ALGORITHMS OUTPACE THE FRAMEWORK.

The most immediate inadequacy is one of temporal asymmetry. High-frequency algorithms execute in microseconds, timeframes that are structurally not visible to any post-hoc pattern analysis system. In contrast to global exchanges like NASDAQ and Euronext, SEBI has yet to integrate and include advanced RegTech solutions such as AI and machine learning for real time monitoring, limiting its liability to detect and prevent market manipulation efficiently and effectively.[29] SEBI's IMSS is triggered by anomalies in end-of-day or periodic data feeds, by which point, an algorithmically driven insider trade may be wholly completed, concealed through fragmented order routing, and the informational advantage fully monetised. High-frequency traders are found to detect large orders that enter the market on one exchange and react by purchasing or selling the stock on another, and this is done to capitalise on directional intent which is a from of front-running now executable at a level fundamentally different from its human-paced predecessor.[30] Consider a hypothetical situation where a sentiment-analysis uses an encrypted communication pattern or satellite-based supply chain data to predict that a company is likely to report poor earnings and since this kind of information may not fall within the structured digital database requirements under Regulation 3(5) of the PIT Regulations, the activity could go unnoticed and after this the algorithm could then quietly place short positions across different trading platforms within a fraction of seconds and even before the broader market reacts. No trading window has been breached, and no connected person has "communicated" anything and the IMSS will then flag the pattern only after the trade is settled.[31]

The PIT Regulations are built around a human actor. Regulation 4(1) prohibits an insider from trading when in possession of UPSI which is a formulation that assumes a conscious, identifiable human decision-maker with identifiable informational access.[32] When trading

[29] Mohini Varshenya & Deepika Vijay Sawhney, *SEBI (Prohibition of Insider Trading) Regulations, 2015 – Frequently Asked Questions*, Corporate Professionals (Aug. 14, 2020).
[30] Manoj Banthia, *Critical Issues Under SEBI PIT Regulations* (presentation, MKB & Assocs.).
[31] Mohini Varshenya & Deepika Vijay Sawhney, *SEBI (Prohibition of Insider Trading) Regulations, 2015 – Frequently Asked Questions*, Corporate Professionals (Aug. 14, 2020).
[32] Akila Agrawal & Vidya Sunderam, *Strengthening Compliance: SEBI's Recent Enforcement Strategies Against Insider Trading*, India Corp. L. (Apr. 8, 2025).

decisions are automated, attribution breaks down across the coder who designed the algorithm, the fund manager who approved its parameters, and the machine itself. Algorithmic trading poses a unique legal challenge which is of lack of transparency, difficulty in establishing intent, and regulatory enforcement gaps and these are the challenges that India's existing legal framework was not designed to address. When trading decisions are automated, attribution gets fragmented between the coder who created the algorithm, the fund manager who approved its parameters and the machine itself. The opaque nature of algorithmic trading, the identification of intent, the gaps in regulatory enforcement etc., pose unique legal issues that India's existing legal framework was not designed nor prepared to address.[33] The mens rea question is especially acute that if an algorithm that uses inferred UPSI was built to be informationally neutral, but just happens to pick up price-sensitive signals, does the fund manager 'possess' UPSI in terms of Regulation 2(1)(g)? Indian courts have not answered this question, nor do the PIT Regulations provide any guidance. This question has not been answered by Indian courts, nor is there a guide in the PIT Regulations.[34]

The PIT Regulations leave unanswered three key definitional questions. First, it is not clear whether a machine-inferred UPSI, as opposed to one directly communicated by a human, can constitute a "communication" under Regulation 3(1). More particularly, the provision states that UPSI "shall not be communicated to any person", but an algorithm or an automated system is not a legal person. Second, it is not clear whether an algorithm would be covered by the definition of a "connected person" given the expanded definition in Regulation 2(1)(d). The definition is based on relational proximity and access arising out of association with a company, concepts that cannot be easily transposed to autonomous technological systems. Third, and perhaps most importantly, trading window restrictions and closures, the primary preventive mechanism under the framework, are premised on human decision-making cycles. Given that perpetual insiders often have only limited opportunities to trade, a Trading Plan was introduced as a compliance mechanism. Regardless, there is no such framework for algorithmic strategies that operate continuously and execute trades within the trading window without any human involvement at the point of execution.[35]

Algorithmic trading is, by definition, borderless. Co-location servers could be in Singapore or

[33] *Algorithmic Trading in India (2026): SEBI Framework and Career Guide*, QuantInsti.
[34] Akila Agrawal & Vidya Sunderam, *Strengthening Compliance: SEBI's Recent Enforcement Strategies Against Insider Trading*, India Corp. L. (Apr. 8, 2025).
[35] *Algorithmic Trading in India (2026): SEBI Framework and Career Guide*, QuantInsti.

Chicago even when trading Indian securities; order routing algorithms could fragment positions across NSE, BSE and offshore derivatives markets at the same time. SEBI's reliance on a small group of generalist officers dilutes its enforcement capabilities, unlike the SEC which has dedicated divisions for market abuse, the absence of specialist resources also delays the adoption of advanced surveillance tools, forcing SEBI to increasingly rely on external audits and whistleblower reports to detect market abuses. The forensic reconstruction problem is exacerbating because at the data volumes generated by high-frequency strategies, tracing the causal chain from information receipt to trade execution requires computational infrastructure that SEBI's current architecture does not have.[36]

V. COMPARATIVE PERSPECTIVES.

The inadequacies which are identified are not inevitable features of the regulatory conditions rather they are the choices that other jurisdictions have had made differently and from which India can potentially draw targeted lessons.

The United States provides a strong example of detection architecture. In 2010, the SEC's Division of Enforcement created the Market Abuse Unit (MAU), and this unit focuses on developing new methods for investigating insider trading.[37] It aims to identify "patterns, connections, and relationships among traders and institutions at the start of investigations" using automated trading data analysis. All nine insider trading enforcement actions by the SEC in 2022 started from the MAU's Analysis and Detection Centre, which uses data analysis tools to spot suspicious trading patterns, showing the benefits of proactive, algorithm-driven monitoring.[38] Another important factor is the incentive structure established by Dodd Frank. In FY2024, the SEC awarded $255 million to whistleblowers after receiving over 24,000 tips, the highest number reported in a single year. This created an information pipeline that no surveillance system can match. Meanwhile, India lacks a similar whistleblower reward system under the PIT Regulations.[39]

The European Union tackles the algorithmic aspect directly in its laws. MiFID II requires

[36] Mohini Varshenya & Deepika Vijay Sawhney, *SEBI (Prohibition of Insider Trading) Regulations, 2015 – Frequently Asked Questions*, Corporate Professionals (Aug. 14, 2020).
[37] *SEBI Regulations on Algorithmic Trading in India*, Motilal Oswal (June 9, 2025).
[38] Sheetal Patodiya & Adyata Mohanty, *SEBI's New Algo Trading Regulations: A Game-Changer for Retail Investors*.
[39] Sristi Nimodia, *SEBI Regulations on Insider Trading and UPSI*, TaxGuru (Nov. 26, 2024).

investment firms involved in algorithmic trading to have effective systems and risk controls. These controls ensure that their trading systems cannot be used for market abuse or insider trading.[40] The Commission Delegated Regulation (EU) 2017/589 outlines mandatory pre-trade controls. Importantly, MiFID II also makes it necessary for the firms to monitor in real time and regularly review automated alerts to reduce false positives and negatives. Compliance functions must actively engage in developing and implementing algorithmic trading software. They need to maintain a direct connection with the senior manager who controls the kill switch.[41]

The EU's Market Abuse Regulation (MAR) takes a broader approach. Article 7 defines "inside information" as specific information that is not publicly available and relates to one or more issuers. If this information were made public, it would likely have a significant impact on price.[42] This definition is not tied to any specific instrument and does not link liability to a human communication chain.

The United Kingdom adds the accountability aspect. The FCA's Senior Managers and Certification Regime (SM&CR) establishes personal responsibility for algorithmic strategies used by firms. This means that if an algorithm leads to market abuse, a specific person can be held accountable. This idea of human responsibility for machine actions is mostly missing from India's framework. The key takeaway is structural, and India needs a legal system that clearly assigns liability, requires real-time controls, and promotes disclosure, which the PIT Regulations currently do not provide.

VI. RECOMMENDATIONS FOR REFORM.

The structural deficiency in this paper makes it necessary to focus on the legislative and institutional reforms. First, the SEBI (Prohibition of Insider Trading) Regulations, 2015 should be amended to expressly clarify that algorithmic inference of UPSI and not merely its direct human communication which attracts liability under Regulation 3(1). Additionally, the scope of “connected person” should be expanded to incorporate algorithm developers, coders and as

[40] Complinity – India’s Leading Compliance Software, *What is Unpublished Price-Sensitive Information (UPSI)?* LinkedIn Newsletter (Jan. 27, 2025).
[41] Armaan Patkar, *Technology Innovations in Securities Trading: Can SEBI’s Bicycle Catch the High-Frequency Trading Ferrari*, 12 Indian J.L. & Tech. 24 (2016).
[42] Nupur Wankhede, *Insider Trading: Meaning, Examples & SEBI Rules*, Bajaj Markets (Apr. 13, 2026).

well as operators who possess material access to UPSI during system design or deployment.[43]

Secondly, SEBI should mandate the appointment of an "Algorithmic Trading Responsible Officer" for the purpose of institutional participants, thus imposing individual accountability for automated trading strategies that engage in insider trading.

Thirdly, all algorithmic orders should carry exchange assigned identifiers to create comprehensive audit trails, while PIT framework must additionally require preservation of algorithmic decision logs, data inputs and trigger conditions for at least five years.[44]

Fourth, SEBI should establish a specialised Market Abuse Unit which comprises of quantitative analysts and data scientists who are capable of conducting real-time algorithmic investigations.

Finally, SEBI should introduce a formal safe harbour mechanism which is similar to Rule 10b5-1 plus in the United Sates, for pre-programmed trading strategies which are established before the existence of UPSI, thereby balancing regulatory certainty compiled with market integrity.

VII. CONCLUSION.

SEBI's insider trading framework embodies a just and necessary principle which states that no participants should profit from informational advantages that the public cannot access and that principle remains sound. What is no longer sound is the assumption embedded in its architecture, that the relevant actor is human, the relevant medium is communication, and the relevant timeframe is the trading window.

Algorithmic trading is now found to command a majority of Indian market activity and until recently there was no way to audit which trades were found to be algorithmic and which ones were actually manual trades, and this is a gap that the PIT Regulations have not addressed. The framework is not just incomplete, but it is structurally mismatched to the market that it purports to govern. Every percentage point of market share captured by algorithm widens that mismatch even more.

[43] Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, Gazette of India, Extraordinary, Part III, Section 4, No. LAD-NRO/GN/2014-15/21/85 (Jan. 15, 2015).
[44] Gunjan Modi, *SEBI (Prohibition of Insider Trading) Regulations, 2015: An Understanding of Insider Trading Regulations in India and Major Obstacles in its Implementation*, SCC Online Blog (Sept. 14, 2023).

The choice before India's regulators is between the comfort of reactive enforcement, acting after harm is already done and attribution has become nearly impossible and the discipline of proactive regulatory design which anticipates how technology reshapes misconduct.

Market evolves whether or not the law keeps pace, but the question is whether SEBI will choose to lead that evolution or just merely follow it.