

Investor Protection in Commodity Futures Markets: Challenges under Indian Securities Law

Dr. Surya Saxena,

Assistant Professor (Senior Scale). School of Law, UPES, Dehradun

surya.saxena@ddn.upes.ac.in

Mr. Deepak Bansal,

Assistant Professor, School of Law, Manav Rachna University, Faridabad

bnsdeepak@gmail.com

Akanshi Taneja,

Assistant Professor, School of Law, Presidency University, Bengaluru

tanejaakanshi@gmail.com

Mrs. Surbhi Goyal,

Assistant Professor of Law, ICFAI University, Dehradun

surbhi.goyal@iudehradun.edu.in

Dr. Sakshi Gupta,

Assistant Professor of Law, MNLU Chhatrapati Sambhajinagar

Sakshi.gupta@mnlu.ac.in

Mrs. Kritika,

Assistant Professor, DGIM College, Faridabad

kritika425vashishta@gmail.com

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Abstract:

Commodity futures markets play a pivotal role in facilitating price discovery, risk management, and efficient allocation of resources in the Indian economy, particularly for the agricultural and commodity sectors. With the merger of the erstwhile Forward Markets Commission (FMC) into the Securities and Exchange Board of India (SEBI) in 2015, commodity derivatives came under the broader framework of Indian securities regulation, signalling a significant step towards strengthening market integrity and investor confidence. Despite these reforms, retail and institutional investors continue to face several challenges arising from market manipulation, insider trading, excessive speculation, algorithmic trading, information asymmetry, and inadequate financial literacy. These concerns undermine investor confidence and adversely affect the transparency and fairness of commodity futures trading.

This paper critically examines the existing legal and regulatory framework governing investor protection in India's commodity futures markets under the Securities Contracts (Regulation) Act,

1956, the SEBI Act, 1992, and the regulations issued by SEBI. It analyses the effectiveness of regulatory mechanisms in preventing fraudulent and unfair trade practices while ensuring market efficiency. The study further explores emerging challenges posed by technological advancements, cross-border transactions, digital trading platforms, and the growing participation of retail investors. Through an examination of judicial pronouncements, SEBI enforcement actions, and comparative international regulatory practices, the paper identifies existing gaps in the investor protection framework. It argues that while the integration of commodity derivatives regulation with the securities market has enhanced regulatory oversight, further reforms are required to strengthen surveillance mechanisms, improve investor awareness, enhance dispute resolution, and promote greater market transparency. The paper concludes by proposing legal and policy recommendations aimed at achieving a balanced regulatory framework that safeguards investors while fostering the growth, stability, and credibility of India's commodity futures markets in an evolving financial ecosystem.

Kew Words: *Futures Market; Investor Protection; Securities Law; Securities and Exchange Board of India (SEBI); Commodity Derivatives; Market Manipulation; Securities Contracts (Regulation) Act, 1956; Regulatory Framework; Price Discovery; Financial Markets.*

I. Introduction and Research Framework

1. Background

Commodity futures markets constitute an indispensable component of the financial architecture of modern economies by facilitating efficient price discovery, risk transfer, and market liquidity. These markets enable producers, farmers, processors, exporters, importers, manufacturers, and institutional investors to hedge against adverse price fluctuations in commodities such as agricultural products, metals, and energy resources. By allowing participants to lock in future prices through standardized derivative contracts, commodity futures reduce uncertainty, improve business planning, and contribute to overall economic stability. Beyond hedging, these markets also serve as valuable indicators of future demand and supply conditions, thereby assisting policymakers and market participants in making informed economic decisions.

In India, commodity derivatives have undergone significant regulatory transformation over the past decade. Historically, commodity futures were regulated by the Forward Markets Commission (FMC) under the Forward Contracts (Regulation) Act, 1952. However, concerns regarding fragmented regulation, weak enforcement mechanisms, and instances of market abuse prompted the Government of India to undertake comprehensive reforms. The most significant reform occurred in 2015, when the FMC was merged with the Securities and Exchange Board of India (SEBI) through the Finance Act, thereby bringing commodity derivatives within the broader securities regulatory regime. Simultaneously, commodity derivatives were recognized as "securities" under the Securities Contracts (Regulation) Act, 1956 (SCRA), creating a unified regulatory framework for both securities and commodity derivative markets.

The merger represented a paradigm shift in India's financial regulatory landscape. SEBI's sophisticated surveillance systems, stronger enforcement powers, integrated market supervision, and established investor protection mechanisms were expected to enhance market integrity and align India's commodity markets with internationally accepted regulatory standards. Since assuming regulatory control, SEBI has introduced numerous reforms, including stricter eligibility norms for market intermediaries, enhanced disclosure requirements, tighter risk management frameworks, improved warehouse accreditation systems, investor grievance redressal mechanisms, regulation of algorithmic trading, and stronger surveillance against market manipulation and insider trading.

Despite these institutional reforms, investor protection in commodity futures markets continues to face significant challenges. Commodity derivatives differ fundamentally from equity securities because they involve physical delivery mechanisms, warehousing infrastructure, quality certification, seasonal price fluctuations, and global supply chain dynamics. These unique characteristics expose investors to risks beyond ordinary market volatility. Persistent concerns include excessive speculation, price manipulation through dominant market positions, insider trading based on privileged warehouse or inventory information, misleading investment recommendations disseminated through digital platforms, algorithmic trading practices, delivery defaults, cyber risks, inadequate investor awareness, and regulatory coordination issues among SEBI, exchanges, warehouse regulators, and other governmental agencies.

The increasing participation of retail investors has further intensified these concerns. The rapid expansion of online trading platforms, mobile applications, and low-cost brokerage services has democratized access to commodity derivatives. However, many retail participants possess limited understanding of leverage, margin requirements, settlement procedures, and associated risks, making them particularly vulnerable to financial losses and fraudulent practices. Consequently, ensuring robust investor protection has become central to maintaining market confidence, promoting financial inclusion, and ensuring the long-term credibility of India's commodity derivatives ecosystem.

Against this backdrop, the present study seeks to critically evaluate the adequacy of the existing legal framework governing investor protection in India's commodity futures markets. It examines whether the post-2015 regulatory architecture has effectively addressed emerging risks and identifies areas where legislative, institutional, and policy reforms remain necessary to enhance market integrity and investor confidence.

2. Research Problem

The integration of commodity derivatives into India's securities regulatory framework was expected to establish a comprehensive system of investor protection comparable to that existing in equity and securities markets. While SEBI has significantly strengthened market regulation through enhanced surveillance, disclosure norms, risk management mechanisms, and enforcement actions, investor protection remains fragmented due to practical enforcement limitations,

technological developments, increasing market sophistication, and evolving forms of financial misconduct.

The emergence of high-frequency algorithmic trading, artificial intelligence-driven investment advisory services, cross-border commodity transactions, digital trading platforms, and complex derivative products has created regulatory challenges that existing legal provisions do not comprehensively address. Furthermore, effective enforcement continues to be constrained by evidentiary difficulties, coordination among multiple regulatory agencies, and limitations in detecting sophisticated market manipulation. Consequently, there remains a pressing need to assess whether India's present legal framework adequately safeguards investors participating in commodity futures markets.

3. Research Questions

The study is guided by the following research questions:

1. Whether the existing Indian legal framework adequately protects investors participating in commodity futures markets?
2. What are the principal legal, institutional, and regulatory challenges affecting investor protection in commodity derivatives?
3. To what extent have SEBI's post-2015 regulatory reforms strengthened market integrity and investor confidence?
4. What best practices from mature international commodity derivatives markets can be incorporated into the Indian regulatory framework?

4. Objectives of the Study

The principal objectives of this research are:

- To examine the historical evolution of commodity futures regulation in India.
- To analyse the statutory and regulatory framework governing investor protection under the SEBI Act, 1992, the Securities Contracts (Regulation) Act, 1956, and related regulations.
- To identify legal, institutional, and enforcement deficiencies affecting investor protection.
- To undertake a comparative analysis of India's regulatory framework with selected international jurisdictions.
- To recommend legal and policy reforms for strengthening investor confidence, enhancing market transparency, and improving regulatory effectiveness.

5. Research Methodology

The present study adopts a doctrinal legal research methodology, focusing on the systematic examination and interpretation of statutes, delegated legislation, judicial decisions, regulatory instruments, and scholarly literature relating to commodity futures regulation. The research employs an analytical approach to critically evaluate the effectiveness of existing legal provisions governing investor protection and a comparative approach to examine regulatory practices adopted in advanced jurisdictions, particularly the United States and the United Kingdom.

The study primarily relies upon primary legal sources, including the SEBI Act, 1992, the Securities Contracts (Regulation) Act, 1956, relevant SEBI Regulations, circulars, notifications, enforcement orders, and important judicial pronouncements of the Supreme Court of India, High Courts, and the Securities Appellate Tribunal. Secondary sources comprise Law Commission Reports, Parliamentary Committee Reports, academic books, peer-reviewed journal articles, policy papers, SEBI consultation papers, annual reports of stock exchanges, and publications issued by international regulatory bodies such as the International Organization of Securities Commissions (IOSCO), the U.S. Commodity Futures Trading Commission (CFTC), and the U.K. Financial Conduct Authority (FCA). These materials collectively provide the doctrinal, comparative, and policy foundations necessary to critically assess India's investor protection framework and formulate recommendations for future regulatory reforms.

II. Legal Framework Governing Investor Protection in Commodity Futures Markets

2.1 Historical Evolution of Commodity Futures Regulation in India

The regulation of commodity futures markets in India has undergone a significant transformation, reflecting the country's evolving financial landscape and increasing integration with global markets. Commodity derivatives have historically served as essential instruments for hedging price risks in agricultural commodities, metals, and energy products. However, concerns regarding speculative trading and market abuse led to a cautious regulatory approach during the post-independence period.

The principal legislation governing commodity futures for more than six decades was the Forward Contracts (Regulation) Act, 1952 (FCRA). Enacted to regulate forward trading in commodities, the Act sought to prevent undesirable speculation while ensuring orderly market development. The FCRA empowered the Central Government to recognize commodity exchanges, regulate forward contracts, prohibit trading in specified commodities where necessary, and supervise market participants. Although progressive for its time, the legislation was primarily designed for traditional commodity markets and did not adequately anticipate the complexity of modern electronic derivatives trading.

To administer the FCRA, the Government established the Forward Markets Commission (FMC) in 1953 as the sector-specific regulator for commodity derivatives. The FMC exercised supervisory functions over commodity exchanges, approved trading contracts, monitored market practices, and advised the Government on policy matters. Despite these responsibilities, the Commission possessed relatively limited statutory powers compared to contemporary financial regulators. Its dependence on governmental approval for significant regulatory actions, coupled with constrained investigative and enforcement powers, weakened its ability to effectively combat sophisticated market manipulation and investor fraud.

The inadequacies of the fragmented regulatory framework became increasingly apparent following episodes such as the National Spot Exchange Limited (NSE) crisis of 2013, which exposed serious deficiencies in market supervision, warehousing regulation, and investor protection.

Although NSEL operated as a spot exchange rather than a commodity derivatives exchange, the crisis highlighted broader concerns regarding regulatory coordination, governance failures, and systemic risks within commodity markets. These developments prompted the Government to initiate comprehensive institutional reforms.

A landmark reform occurred through the Finance Act, 2015, whereby the FMC was merged with the Securities and Exchange Board of India (SEBI). Simultaneously, the FCRA was repealed, and commodity derivatives were formally recognised as "securities" under the Securities Contracts (Regulation) Act, 1956 (SCRA). This structural integration established a unified regulatory framework governing both securities and commodity derivatives, enabling SEBI to exercise comprehensive oversight over commodity exchanges, intermediaries, and market participants.

The merger represented a paradigm shift in Indian financial regulation. By integrating commodity derivatives into the securities market framework, the reform sought to leverage SEBI's advanced surveillance systems, investigative powers, enforcement mechanisms, and investor protection infrastructure. While the integration has significantly strengthened regulatory oversight, evolving technological risks and increasingly sophisticated trading strategies continue to challenge the effectiveness of investor protection measures.

2.2 Present Legal Framework

The contemporary regulatory regime governing commodity futures markets is primarily based upon a combination of statutory enactments, delegated legislation, SEBI regulations, and regulatory circulars. Collectively, these instruments seek to ensure market integrity, transparency, and investor protection while promoting efficient price discovery.

The Securities and Exchange Board of India Act, 1992 constitutes the principal legislation empowering SEBI to regulate India's securities and commodity derivatives markets. Sections 11 and 11B confer wide-ranging powers upon SEBI to protect investors, regulate intermediaries, prevent fraudulent and unfair trade practices, conduct investigations, issue binding directions, and impose civil penalties. These provisions enable SEBI to adopt preventive as well as corrective regulatory interventions. However, the effectiveness of these powers largely depends upon timely enforcement and technological capabilities for detecting sophisticated market abuse.

The Securities Contracts (Regulation) Act, 1956 (SCRA) provides the statutory foundation for regulating stock exchanges and commodity derivatives exchanges. Following the 2015 amendments, commodity derivative contracts were incorporated within the statutory definition of "securities," thereby bringing commodity trading under SEBI's regulatory jurisdiction. The Act governs recognition of exchanges, approval of derivative contracts, listing standards, market infrastructure, and trading practices. The integration has eliminated regulatory fragmentation and promoted consistency in market regulation.

The regulatory framework is further supplemented by the SEBI (Stock Brokers) Regulations, which prescribe licensing requirements, capital adequacy norms, codes of conduct, disclosure obligations, and professional responsibilities applicable to brokers operating in commodity

derivatives. These regulations seek to minimise conflicts of interest, improve intermediary accountability, and ensure ethical conduct towards investors. Nevertheless, challenges remain in supervising digital intermediaries and investment influencers operating through online platforms. Similarly, the SEBI (Intermediaries) Regulations establish uniform standards governing registration, compliance, inspections, disciplinary proceedings, and enforcement actions against various market intermediaries. These regulations promote market discipline by requiring intermediaries to maintain transparency, financial integrity, and adequate internal control systems. Commodity exchanges are also governed through numerous SEBI circulars and operational guidelines, which regulate margin frameworks, position limits, algorithmic trading, warehouse accreditation, delivery mechanisms, risk management systems, settlement procedures, and cyber security requirements. SEBI has continuously revised these circulars to address emerging market developments, particularly concerning algorithmic trading, electronic surveillance, and warehouse-based settlement systems. While these dynamic regulatory instruments enhance flexibility, frequent amendments occasionally create compliance challenges for smaller market participants.

Overall, India's legal framework has evolved into a sophisticated regulatory structure comparable with international standards. However, regulatory effectiveness continues to depend upon robust enforcement, inter-agency coordination, and the regulator's ability to address rapidly evolving technological risks.

2.3 Regulatory Institutions

Investor protection within commodity futures markets is supported by a network of specialised regulatory institutions, each performing complementary functions within the market ecosystem.

At the apex is the Securities and Exchange Board of India (SEBI), which functions as the principal regulator responsible for licensing intermediaries, supervising exchanges, conducting investigations, enforcing regulatory compliance, and protecting investor interests. SEBI's integrated market surveillance system enables real-time monitoring of suspicious trading patterns, significantly improving its capacity to detect market abuse.

The Multi Commodity Exchange of India (MCX) is India's largest commodity derivatives exchange, facilitating trading primarily in metals, bullion, crude oil, and energy products. The National Commodity and Derivatives Exchange (NCDEX) predominantly caters to agricultural commodity derivatives and plays an important role in supporting farmers, traders, and agri-business participants. The Metropolitan Stock Exchange (MSE) also provides commodity derivative trading facilities, although its market share remains comparatively limited.

Supporting these exchanges are clearing corporations, which guarantee settlement of trades by acting as central counterparties, thereby substantially reducing counterparty credit risk. Depositories facilitate the dematerialisation and electronic transfer of securities and warehouse receipts, contributing to operational efficiency and transparency.

An equally important institution is the Warehousing Development and Regulatory Authority (WDRA), which regulates accredited warehouses, negotiable warehouse receipts, quality certification, and storage infrastructure. Since commodity derivatives frequently culminate in physical delivery, effective coordination between SEBI and WDRA is essential to prevent delivery disputes, quality manipulation, and warehouse-related fraud. Nevertheless, jurisdictional overlaps occasionally create regulatory complexities that may adversely affect investor confidence.

2.4 Existing Investor Protection Mechanisms: A Critical Evaluation

SEBI has established a comprehensive framework of investor protection mechanisms designed to minimise systemic risk and promote market confidence. These mechanisms extend beyond conventional disclosure requirements and incorporate preventive, supervisory, and remedial safeguards.

Margin requirements constitute the first line of defence against excessive leverage by ensuring that market participants maintain adequate financial resources before entering derivative positions. Similarly, position limits restrict excessive market concentration and reduce the likelihood of price manipulation by dominant traders.

Sophisticated risk management systems, including real-time mark-to-market settlements, daily margining, volatility controls, circuit filters, and stress testing, have substantially enhanced market resilience. Integrated surveillance technologies further enable exchanges and SEBI to identify abnormal trading behaviour, insider trading, spoofing, circular trading, and market manipulation at an early stage. While these technological interventions have improved regulatory efficiency, increasingly sophisticated algorithmic trading strategies continue to challenge surveillance capabilities.

Investor grievances are addressed through SEBI's grievance redressal mechanisms, exchange-level complaint systems, online dispute resolution processes, and arbitration frameworks. The availability of specialised arbitration offers investors a relatively inexpensive and expeditious alternative to conventional litigation. However, delays in enforcement of arbitral awards and limited awareness among retail investors continue to reduce the practical effectiveness of these remedies.

The establishment of the Investor Protection Fund (IPF) provides financial compensation in limited circumstances involving broker defaults, thereby enhancing investor confidence. However, the scope of compensation remains relatively narrow and does not adequately address losses arising from market manipulation or fraudulent investment advice.

SEBI has also strengthened disclosure obligations, mandatory Know Your Client (KYC) requirements, anti-money laundering compliance, and intermediary due diligence to improve market transparency. Suitability obligations imposed upon intermediaries require investment recommendations to be appropriate to investors' financial capacity and risk profile. Nonetheless, the rapid growth of social media-based investment influencers, unregistered advisory services, and

digital trading applications has created significant regulatory gaps that existing suitability standards do not fully address.

Overall, India's investor protection framework reflects considerable regulatory maturity and compares favourably with international standards. Nevertheless, its effectiveness is constrained by enforcement delays, technological innovation, fragmented institutional coordination, limited investor literacy, and the emergence of new forms of digital market abuse. Consequently, while the legal framework provides a robust statutory foundation, continuous regulatory adaptation and stronger enforcement remain indispensable for ensuring meaningful investor protection in India's evolving commodity futures markets.

III. Contemporary Challenges in Investor Protection in Commodity Futures Markets

The integration of commodity derivatives into India's securities regulatory framework has considerably strengthened market supervision. Nevertheless, investor protection remains vulnerable to several structural, technological, and institutional challenges. Unlike equity markets, commodity futures involve underlying physical assets, warehousing systems, delivery obligations, and global price movements, making regulation inherently more complex. While SEBI has adopted sophisticated surveillance mechanisms and risk management practices, evolving market practices continue to expose investors—particularly retail participants—to significant financial risks. This chapter critically analyses the principal challenges affecting investor protection in India's commodity futures markets.

3.1 Market Manipulation

Market manipulation remains one of the most serious threats to the integrity of commodity futures markets. Artificial interference with market prices not only undermines price discovery but also erodes investor confidence in the fairness of trading.

Commodity markets are susceptible to practices such as circular trading, where a group of participants repeatedly trade among themselves to create artificial trading volumes and misleading market activity. Such transactions distort genuine market demand and induce unsuspecting investors to enter the market based on false signals.

Another common concern is price rigging, whereby influential traders deliberately influence commodity prices through coordinated buying or selling strategies. Since commodity prices often affect farmers, manufacturers, exporters, and consumers simultaneously, manipulated prices have consequences extending beyond investors and may adversely affect the broader economy.

Equally problematic is the creation of artificial scarcity through hoarding or strategic withholding of commodities. Traders possessing significant inventories may intentionally restrict market supply to inflate futures prices. Similarly, cornering of commodities occurs when dominant market participants acquire substantial control over deliverable stocks, thereby enabling them to manipulate settlement prices and force counterparties into disadvantageous positions.

Manipulation may also occur during the delivery process, where market participants exploit warehouse logistics, quality certification, or delivery timelines to influence contract settlement.

Such practices compromise the credibility of physically settled contracts and disproportionately affect smaller investors who lack bargaining power.

SEBI has initiated enforcement proceedings against entities involved in fraudulent trading, synchronized transactions, and unfair trade practices under the SEBI (Prohibition of Fraudulent and Unfair Trade Practices) Regulations, 2003 (PFUTP Regulations). Nevertheless, proving manipulation requires extensive economic analysis, digital evidence, and complex data analytics, making enforcement both resource-intensive and time-consuming. Consequently, sophisticated market abuse often remains difficult to detect before substantial investor losses occur.

3.2 Excessive Speculation

Commodity derivatives were originally developed as instruments for hedging commercial risk, enabling producers, traders, exporters, and manufacturers to protect themselves against adverse price fluctuations. A hedger participates in futures markets to reduce uncertainty associated with future commodity prices.

In contrast, speculators participate primarily to profit from anticipated price movements without possessing any commercial exposure to the underlying commodity. While speculation contributes to liquidity and efficient price discovery, excessive speculative participation may significantly increase market volatility and disconnect futures prices from underlying economic fundamentals. The rapid expansion of electronic trading platforms has attracted large numbers of retail investors who frequently view commodity derivatives as short-term investment opportunities rather than sophisticated risk management instruments. Many investors enter highly leveraged positions without adequately understanding concepts such as initial margins, mark-to-market settlements, leverage, rollover costs, and contract expiry.

The resulting speculative activity often amplifies price volatility, exposing inexperienced investors to substantial financial losses. Although SEBI prescribes position limits, margin requirements, and surveillance mechanisms to discourage excessive speculation, these measures cannot entirely eliminate behavioural biases, herd mentality, and momentum-driven trading. Consequently, balancing market liquidity with investor protection remains one of the regulator's most challenging responsibilities.

3.3 Warehousing and Delivery Risks

Unlike most financial securities, commodity derivative contracts frequently culminate in physical delivery, making warehouse infrastructure an essential component of investor protection.

Investors remain exposed to quality disputes, where delivered commodities fail to satisfy prescribed grading or quality standards. Such disputes undermine confidence in warehouse certification systems and increase settlement uncertainty.

Similarly, warehouse receipts, which represent ownership of stored commodities, are vulnerable to fraud, duplication, improper verification, and operational irregularities. The credibility of negotiable warehouse receipts depends upon accurate inventory records, independent inspections, and effective regulatory oversight.

Another significant concern is storage fraud, involving false inventory declarations, unauthorized removal of stored commodities, deterioration of goods due to inadequate storage conditions, or deliberate misrepresentation of warehouse capacity. Such practices may artificially influence market prices while exposing investors to significant financial losses.

Delivery defaults further complicate investor protection. Failure to deliver commodities in accordance with contractual obligations undermines settlement certainty and disrupts market confidence. Although SEBI has strengthened warehouse accreditation standards and risk management mechanisms in coordination with the Warehousing Development and Regulatory Authority (WDRA), effective implementation remains dependent upon continuous inspections, technological integration, and coordinated enforcement across multiple agencies.

3.4 Information Asymmetry

Efficient financial markets depend upon equal access to material information. However, commodity futures markets continue to suffer from significant information asymmetry, particularly between institutional participants and retail investors.

Certain market participants possess privileged access to information relating to warehouse inventories, production estimates, import-export data, logistics disruptions, weather forecasts, and government procurement policies before such information becomes publicly available. Early access to this information enables informed traders to exploit market opportunities at the expense of less informed investors.

Unlike conventional securities markets, where insider trading is primarily associated with unpublished price-sensitive corporate information, commodity markets present unique challenges arising from inventory-related and supply-chain information. Although SEBI has strengthened disclosure requirements and surveillance systems, proving misuse of confidential commodity-related information remains considerably more difficult because information frequently originates from multiple public and private sources.

Institutional investors also possess superior technological infrastructure, sophisticated research capabilities, and access to advanced analytical tools unavailable to ordinary retail investors. This structural imbalance reduces market fairness and increases the likelihood of uninformed investment decisions.

3.5 Technology and Algorithmic Trading

Technological innovation has transformed commodity derivatives trading by improving market efficiency, liquidity, and transaction speed. However, it has simultaneously introduced new risks affecting investor protection.

Algorithmic trading and high-frequency trading (HFT) enable market participants to execute thousands of transactions within fractions of a second using automated computer programs. While algorithmic trading enhances liquidity under normal market conditions, it may also facilitate manipulative practices such as spoofing, layering, quote stuffing, and momentum ignition, which distort genuine market behaviour.

Detecting such practices requires highly sophisticated surveillance technologies capable of analysing massive volumes of real-time trading data. Although SEBI has invested significantly in integrated market surveillance systems, regulatory authorities continue to face substantial technological challenges in monitoring increasingly complex trading algorithms.

Growing reliance on digital trading infrastructure has also increased cybersecurity risks. Cyber-attacks targeting exchanges, brokers, clearing corporations, or warehouse management systems may compromise sensitive investor information, disrupt market operations, or affect settlement systems. Consequently, technological resilience has become an integral component of modern investor protection.

3.6 Investor Awareness and Financial Literacy

Legal protection alone cannot ensure investor confidence unless market participants possess sufficient financial literacy to understand the products in which they invest.

Commodity derivatives remain inherently complex financial instruments involving leverage, margin requirements, contract specifications, settlement mechanisms, and delivery obligations. Many retail investors participate without fully understanding these features, exposing themselves to avoidable financial risks.

The proliferation of online trading applications has simplified market access but has simultaneously encouraged speculative trading through gamified investment interfaces and aggressive promotional campaigns. Equally concerning is the rapid growth of social media-based investment advice, where unregistered influencers frequently recommend commodity trading strategies without regulatory oversight or professional accountability.

Instances of mis-selling by intermediaries, exaggerated return projections, and misleading investment advertisements further increase investor vulnerability. Although SEBI has strengthened investor education initiatives and introduced regulations governing investment advisers and research analysts, continuous financial education remains essential to ensuring meaningful investor protection.

3.7 Regulatory Coordination Issues

Commodity futures markets operate at the intersection of securities regulation, banking regulation, consumer protection, agricultural policy, and warehousing regulation. Consequently, effective investor protection requires close coordination among multiple regulatory authorities.

While SEBI regulates commodity derivatives trading and market intermediaries, the Warehousing Development and Regulatory Authority (WDRA) supervises accredited warehouses and negotiable warehouse receipt systems. The Reserve Bank of India (RBI) influences commodity markets through monetary policy, banking regulation, and financing of commodity transactions, whereas the Ministry of Consumer Affairs oversees broader commodity market policies relating to essential commodities, warehousing, and consumer interests.

The multiplicity of regulatory institutions frequently creates jurisdictional overlaps, inconsistent policy responses, and fragmented enforcement. Coordination challenges become particularly

evident in cases involving warehouse fraud, commodity financing, cross-border transactions, and systemic market disruptions, where responsibilities often overlap among several agencies.

Although the post-2015 regulatory integration under SEBI has substantially improved institutional coherence, a more harmonised framework for information sharing, joint investigations, technological integration, and coordinated policy formulation remains necessary. Strengthening inter-regulatory cooperation will be indispensable for addressing emerging risks and ensuring comprehensive investor protection in India's increasingly sophisticated commodity futures markets.

Overall, these contemporary challenges demonstrate that investor protection in commodity futures markets cannot be achieved solely through statutory regulation. It requires dynamic supervision, technological preparedness, institutional coordination, continuous investor education, and responsive regulatory reforms capable of addressing the evolving nature of modern commodity derivatives trading.

IV. Comparative Analysis and Judicial Developments

4.1 Comparative Analysis of Investor Protection Frameworks

The globalization of commodity derivatives markets has necessitated the adoption of internationally harmonized regulatory standards that promote market integrity, investor confidence, and financial stability. India's post-2015 regulatory framework has moved significantly closer to global best practices following the merger of the Forward Markets Commission (FMC) with the Securities and Exchange Board of India (SEBI). Nevertheless, a comparative analysis with mature jurisdictions demonstrates that further reforms are necessary to strengthen investor protection.

(A) United States

The United States possesses one of the most advanced regulatory frameworks for commodity derivatives through the Commodity Futures Trading Commission (CFTC), established under the Commodity Exchange Act. The CFTC exercises extensive supervisory, investigative, and enforcement powers over commodity futures and derivatives markets, with investor protection forming one of its principal regulatory objectives.

A distinguishing feature of the U.S. framework is the imposition of position limits to prevent excessive speculation and market concentration. These limits restrict the number of contracts that a single participant may hold, thereby reducing opportunities for price manipulation, market cornering, and artificial scarcity. Equally significant is the CFTC's sophisticated market surveillance system, which continuously monitors trading activity using advanced data analytics to detect spoofing, insider trading, market manipulation, and disruptive trading practices.

The CFTC also possesses broad enforcement powers, including the authority to impose substantial monetary penalties, suspend market participants, initiate civil proceedings, and coordinate criminal investigations with other federal agencies. Another notable innovation is the Whistleblower Program, which provides financial incentives and statutory protection to

individuals reporting violations of commodity laws. This mechanism has significantly enhanced regulatory detection of complex financial misconduct. Compared to India, where whistleblower protection within commodity markets remains relatively underdeveloped, the U.S. framework demonstrates the importance of incentivizing internal reporting as a preventive regulatory tool.

(B) United Kingdom

In the United Kingdom, commodity derivatives fall within the regulatory jurisdiction of the Financial Conduct Authority (FCA), which adopts a principles-based regulatory approach emphasizing market conduct, consumer protection, and institutional accountability.

The FCA places considerable emphasis on product governance, requiring financial institutions to ensure that derivative products are appropriately designed, marketed, and distributed to suitable categories of investors. This proactive approach minimizes the risk of unsuitable investments being sold to retail consumers.

Investor protection is further strengthened through comprehensive disclosure obligations, requiring intermediaries to communicate material risks, costs, conflicts of interest, and product characteristics in a transparent and comprehensible manner. The FCA's stringent conduct regulations impose fiduciary-like responsibilities upon regulated entities, requiring them to act honestly, fairly, and in the best interests of their clients throughout the investment process.

Compared to the United Kingdom, India's regulatory framework provides strong disclosure requirements and intermediary obligations; however, enforcement of suitability standards and regulation of digital investment advisory platforms continue to require further strengthening.

(C) IOSCO Principles and India's Compliance

The International Organization of Securities Commissions (IOSCO) has developed globally accepted principles for securities regulation that serve as benchmarks for investor protection and financial market governance. These principles emphasize market integrity, transparency, fair trading practices, effective enforcement, risk management, investor protection, and cross-border regulatory cooperation.

India has made substantial progress in aligning its commodity derivatives framework with IOSCO standards. The integration of commodity derivatives under SEBI, adoption of electronic surveillance systems, enhanced disclosure norms, strengthened intermediary regulation, investor grievance redressal mechanisms, and improved risk management practices reflect significant compliance with international regulatory expectations.

However, certain areas continue to require improvement. Greater coordination between SEBI and other regulatory authorities, enhanced supervision of algorithmic trading, stronger oversight of warehouse infrastructure, regulation of social media-based investment advice, and more effective cross-border information sharing remain necessary to achieve full conformity with evolving IOSCO standards. Accordingly, while India's regulatory framework broadly reflects international best practices, continuous institutional and technological adaptation remains essential.

4.2 Judicial Developments

Indian courts and regulatory tribunals have played an important role in strengthening investor protection by affirming the broad regulatory mandate of SEBI and reinforcing the principles of market fairness, transparency, and investor confidence.

In *MCX Stock Exchange Ltd. v. Securities and Exchange Board of India*, the Supreme Court reaffirmed the wide amplitude of SEBI's statutory powers under the SEBI Act, 1992. The Court emphasized that SEBI is entrusted with the dual responsibility of regulating securities markets and protecting investor interests. It observed that regulatory measures adopted by SEBI should be interpreted purposively to preserve market integrity and ensure the orderly functioning of financial markets. The decision reinforces judicial recognition of SEBI as a proactive market regulator capable of responding to evolving financial practices.

The litigation arising from the National Spot Exchange Limited (NSEL) crisis further highlighted the necessity of robust regulatory oversight and effective institutional coordination. Although the dispute primarily concerned spot trading rather than commodity derivatives, judicial proceedings underscored fundamental principles of transparency, accountability, investor protection, and regulatory responsibility. The litigation exposed systemic weaknesses relating to warehousing, settlement mechanisms, and governance structures, ultimately influencing subsequent reforms within India's commodity market regulatory framework.

The Securities Appellate Tribunal (SAT) has, through various decisions concerning commodity exchanges and market intermediaries, consistently upheld SEBI's authority to impose disciplinary measures where necessary to maintain market integrity. SAT jurisprudence reflects the principle that regulatory intervention should be proportionate yet sufficiently effective to deter market abuse, safeguard investors, and preserve public confidence in financial markets.

More broadly, the Supreme Court of India has repeatedly observed that securities regulation constitutes an essential instrument of economic governance aimed at protecting investors and maintaining fair, efficient, and transparent markets. Judicial interpretation has consistently favoured a purposive construction of securities legislation, recognizing that regulatory flexibility is indispensable in addressing increasingly sophisticated forms of financial misconduct. These decisions collectively affirm that investor protection is not merely a statutory objective but a constitutional imperative linked to economic stability, public confidence, and the orderly development of India's financial markets.

V. Findings, Recommendations and Conclusion

5.1 Major Findings

The present study demonstrates that the regulation of commodity futures markets in India has undergone a substantial transformation following the merger of the Forward Markets Commission (FMC) with the Securities and Exchange Board of India (SEBI) in 2015. The integration of commodity derivatives into the securities regulatory framework has enhanced market surveillance, strengthened intermediary regulation, improved disclosure requirements, and introduced more sophisticated risk management mechanisms. Consequently, the post-merger regulatory regime

represents a significant advancement over the fragmented framework that previously governed commodity markets.

Despite these improvements, the research reveals that the existing investor protection framework remains predominantly reactive rather than preventive. Regulatory interventions frequently occur after market abuse has taken place instead of identifying and mitigating risks at an early stage. Contemporary challenges such as algorithmic trading, digital investment platforms, warehouse-related fraud, and information asymmetry continue to expose investors to evolving forms of market misconduct that existing regulations only partially address.

The study further finds that retail investors remain particularly vulnerable due to limited financial literacy and inadequate understanding of complex derivative products. The increasing accessibility of commodity trading through online platforms has expanded market participation; however, many investors continue to engage in leveraged trading without fully appreciating the associated legal and financial risks. The proliferation of unregulated social media investment advice has further aggravated investor vulnerability.

Another significant finding concerns the impact of technological innovation, which has progressed more rapidly than the corresponding legal framework. High-frequency trading, artificial intelligence-driven trading systems, and cyber-related risks require continuous regulatory adaptation supported by advanced technological capabilities.

Finally, the research highlights that effective investor protection depends upon stronger institutional coordination. While SEBI functions as the principal market regulator, matters relating to warehousing, commodity financing, banking regulation, and consumer protection involve multiple regulatory agencies. Fragmented oversight occasionally results in jurisdictional overlap, inconsistent enforcement, and delays in regulatory response, thereby affecting investor confidence.

5.2 Recommendations

Considering the above findings, the study proposes a series of legislative, regulatory, educational, and institutional reforms to strengthen investor protection in India's commodity futures markets.

From a legislative perspective, a dedicated set of Commodity Derivatives Investor Protection Regulations should be introduced under the SEBI Act, specifically addressing the unique characteristics of commodity derivatives. The statutory framework should also expressly recognise investor rights in commodity markets, including the rights to transparency, timely disclosure, fair market practices, effective grievance redressal, and protection against fraudulent conduct.

On the regulatory front, SEBI should further strengthen market surveillance by integrating Artificial Intelligence (AI) and machine learning technologies capable of detecting sophisticated market manipulation, insider trading, and algorithmic abuse in real time. A unified data-sharing framework between SEBI, the Warehousing Development and Regulatory Authority (WDRA), commodity exchanges, and clearing corporations should be established to facilitate seamless exchange of market intelligence. Additionally, comprehensive regulations governing algorithmic

trading should be periodically reviewed, and regular stress-testing of commodity exchanges should be mandated to enhance market resilience during periods of extreme volatility.

With respect to investor education, intermediaries should conduct mandatory investor suitability assessments before permitting participation in complex commodity derivative products. A nationwide Commodity Derivatives Financial Literacy Programme, jointly implemented by SEBI, stock exchanges, educational institutions, and industry bodies, should be introduced to improve investor awareness. Further, disclosure documents should be simplified and presented in clear, investor-friendly language to facilitate informed decision-making.

From an enforcement perspective, mechanisms for adjudicating investor complaints should be expedited through greater use of digital dispute resolution systems. India should also strengthen whistleblower protection by introducing statutory safeguards and incentive mechanisms comparable to those adopted in mature jurisdictions. Finally, stricter penalties for market manipulation, delivery fraud, and misleading investment advice, coupled with more efficient arbitration procedures, would significantly enhance regulatory deterrence and investor confidence.

5.3 Conclusion

Commodity futures markets are indispensable to India's economic development, providing efficient mechanisms for price discovery, risk management, and capital allocation. The post-2015 regulatory reforms have undoubtedly strengthened investor protection by integrating commodity derivatives within the broader securities law framework and expanding SEBI's supervisory and enforcement capabilities. Nevertheless, the rapid evolution of financial technology, increasing retail participation, and growing market complexity continue to expose investors to emerging risks that require dynamic regulatory responses.

The study concludes that while India's legal framework broadly aligns with international standards, meaningful investor protection cannot be achieved solely through statutory regulation. It requires a combination of preventive supervision, technological innovation, coordinated institutional governance, effective enforcement, and sustained investor education. Adopting these reforms will not only enhance market integrity and investor confidence but also contribute to the development of a transparent, resilient, and globally competitive commodity derivatives market capable of supporting India's long-term economic growth.

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