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BBA | Semester II | UK2MDCMGT101

Stock Market Operations

Course Code: UK2MDCMGT101 • Module 3 Notes

Module 3: Stock Exchanges and Commodity Derivatives in India

Course: Stock Market Operations (UK2MDCMGT101) • Semester II • BBA FYUGP Kerala University

1. Stock Exchanges: Theoretical Foundations, Evolution, and Economic Mandate

Under Section 2(j) of the **Securities Contracts (Regulation) Act, 1956 (SCRA)**, a **Stock Exchange** is statutorily defined as:

> *"Any body of individuals, whether incorporated or not, constituted before corporatisation and demutualisation, or a body corporate incorporated under the Companies Act, 1956 or Companies Act, 2013, for the purpose of assisting, regulating, or controlling the business of buying, selling, or dealing in securities."*

In economic theory, the stock exchange is the institutional apex of the capitalist financial architecture. It provides the legal, physical, and digital infrastructure that brings together the supply and demand for long-term financial instruments, ensuring market transparency, systemic stability, and enforceable property rights.

Core Economic Functions of Stock Exchanges

The existence of organized stock exchanges fulfills five indispensable macroeconomic functions:

1. **Continuous Liquidity Generation:** By maintaining a transparent, continuous, and centralized marketplace, the exchange ensures that investors can instantly convert long-term financial claims into cash without incurring punitive liquidation discounts.
2. **Efficient Capital Mobilization and Allocation:** Stock exchanges aggregate dispersed savings from millions of retail households and institutional pension pools and channel them into enterprise sectors demonstrating the highest marginal productivity of capital, expanding national productive capacity.
3. **Systematic Price Discovery:** Through continuous bidding under transparent auction matching rules, stock exchanges establish objective, unmanipulated market clearing prices that synthesize vast streams of global macroeconomic and company-specific data.
4. **Platform for Safe and Orderly Trading:** By licensing intermediaries, enforcing standardized contract specifications, and deploying central counterparty settlement guarantees, exchanges insulate market participants from insolvency and fraudulent defaults.
5. **Barometer of Economic Performance:** Real-time price fluctuations and broad-market indices reflect aggregate business sentiment, guiding industrial capital investment decisions, fiscal planning, and central bank monetary interventions.

The Demutualisation and Corporatisation Revolution

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Historically, stock exchanges across the globe and in India originated as mutual non-profit associations of brokers—colloquially operating as exclusive "gentlemen's clubs." In these mutually owned exchanges, the trading members (brokers) simultaneously possessed threefold authority: they were the *owners* of the exchange, the *managers* governing its board of directors, and the exclusive *operators* executing trades for clients.

This concentrated, unified structure harbored fatal, institutional **conflicts of interest**. Governing boards comprised of active trading brokers routinely manipulated trading rules, suppressed surveillance reports, relaxed margin collections during speculative bubbles, and intervened to shield defaulting broker-members at the expense of ordinary retail investors—a systemic vulnerability exposed in India during the 1992 and 2001 capital market crises.

Following the recommendations of the landmark **Justice M. H. Kania Committee (2001)**, SEBI mandated the complete **Corporatisation and Demutualisation** of all Indian stock exchanges under the SCRA:

- **Corporatisation:** The legal transformation of an unincorporated association of brokers into a limited liability joint-stock company governed by the Companies Act.
- **Demutualisation:** The complete structural, ownership, and operational segregation of three institutional pillars:
  1. *Ownership:* Held by diversified public and institutional shareholders (banks, insurance companies, foreign investors), with trading brokers strictly prohibited from owning more than a minority equity stake (maximum 49% collective broker ownership; no single broker exceeding 5%).
  2. *Management & Governance:* Vested in an independent Board of Directors dominated by Public Interest Directors (PIDs) appointed with SEBI pre-approval, completely insulated from broker influence.
  3. *Trading Rights:* Held by licensed trading members who possess pure operational trading access without acquiring any proprietary ownership or board governance privileges.

2. Premier Indian Stock Exchanges: NSE and BSE

The Indian equity and derivatives market is anchored by two premier national institutions of global standing: the National Stock Exchange of India (NSE) and the Bombay Stock Exchange (BSE).

1. The National Stock Exchange of India (NSE)

The **National Stock Exchange of India (NSE)** was incorporated in November 1992 and recognized as a stock exchange in April 1993, pursuant to the recommendations of the High-Powered Committee on the Establishment of New Stock Exchanges headed by **M. J. Pherwani**. The primary national objective was to construct a modern, technology-driven, transparent nationwide exchange that would break the localized monopoly and broker cartels of the physical trading floors.

Key historical milestones and institutional features of the NSE include:

- **Nationwide VSAT Network:** When NSE launched its Wholesale Debt Market in June 1994 and Capital Market (Cash) segment in November 1994, it became the first exchange in India to operate a fully automated, screen-based satellite trading network utilizing Very Small Aperture Terminal (VSAT) communications, connecting brokers across hundreds of Indian towns simultaneously to a central mainframe.
- **First Purely Demutualised Exchange:** NSE was conceived from its inception as a demutualised corporation promoted by leading domestic financial institutions (IDBI, ICICI, LIC, GIC, SBI). Trading brokers were granted trading permits without being permitted to hold equity ownership, setting the gold standard for Indian corporate governance.
- **Premier Global Derivatives Hub:** NSE pioneered exchange-traded financial derivatives in India, launching NIFTY 50 Index Futures in June 2000, followed by Index Options, Stock Options, and Single Stock Futures. For multiple consecutive years, the Futures Industry Association (FIA) has ranked NSE as the world's largest derivatives exchange by contract volume.
- **Core Operational Segments:**
  - *Capital Market (CM) Segment:* Electronic trading in equity shares, preference shares, ETFs, and closed-end mutual fund units.
  - *Futures & Options (F&O) Segment:* Multi-asset derivatives trading on equity indices and individual blue-chip underlying stocks.
  - *Wholesale Debt Market (WDM):* High-value institutional trading in sovereign Government Securities (G-Secs), State Development Loans (SDLs), and corporate debentures.
  - *Currency Derivatives Segment (CDS):* Exchange-traded currency futures and options contracts on currency pairs (USD-INR, EUR-INR, GBP-INR, JPY-INR).
  - *Social Stock Exchange (SSE):* A novel, specialized segment launched under SEBI guidelines enabling Non-Profit Organizations (NPOs) and For-Profit Social Enterprises (FPEs) to mobilize social impact capital by issuing Zero Coupon Zero Principal (ZCZP) instruments.

2. The Bombay Stock Exchange (BSE)

The **Bombay Stock Exchange (BSE)**, located on the historic Dalal Street in Mumbai, is the oldest stock exchange in Asia. Founded in 1875 by a pioneering group of native stockbrokers under the visionary leadership of **Premchand Roychand** (the "Cotton King" and "Big Bull" of 19th-century Bombay), it was originally named *"The Native Share & Stock Brokers' Association."*

Key historical milestones and architectural features of the BSE include:

- **First Permanent Recognition:** In 1957, BSE became the very first stock exchange in India to be granted permanent statutory recognition by the Government of India under the SCRA, 1956.
- **Transition to BOLT:** For over a century, BSE operated as an open-outcry floor where thousands of brokers congregated in the historic trading ring. In March 1995, BSE successfully transitioned its entire trading universe to the electronic **BSE On-Line Trading (BOLT)** system.
- **Corporatisation & Demutualisation (2005):** Under SEBI mandates, the historic mutual association was corporatised in 2005 as BSE Limited. In 2017, BSE created history by becoming

the first stock exchange in India to successfully launch its own IPO and list its equity shares on the NSE.

- **SME Platform Leadership:** BSE pioneered the dedicated **BSE SME Platform** in March 2012, facilitating capital mobilization for small-and-medium enterprises with relaxed listing thresholds, incubating emerging entrepreneurial corporations.
- **India International Exchange (India INX):** Established in January 2017 at the Gujarat International Finance Tec-City (GIFT City), India INX is BSE's wholly owned international exchange, operating 22 hours daily across global time zones in foreign currencies (predominantly USD) under the regulatory oversight of the International Financial Services Centres Authority (IFSCA).

3. Commodity Derivatives Exchanges in India

Beyond financial claims on corporate balance sheets, the secondary market encompasses trading in physical commodity derivatives. Modern commodity exchanges serve as vital national platforms where producers, agricultural processors, mining conglomerates, jewelry manufacturers, and corporate exporters can execute forward pricing and hedge against adverse price volatility in essential raw materials.

Physical Commodity Spot Markets versus Commodity Derivatives

It is vital to distinguish between physical spot markets and financial derivative exchanges:

- **Physical Spot Markets (Mandis):** Regulated under state Agricultural Produce Market Committee (APMC) statutes, these local marketplaces involve the immediate physical delivery and instant cash payment for physical commodities (such as wheat, cotton, or turmeric) upon inspection.
- **Commodity Derivatives Exchanges:** Nationwide electronic exchanges trading standardized **Commodity Futures and Options Contracts**. Participants do not trade the physical sacks of grain or bars of metal on the floor; rather, they trade standardized legal agreements specifying the quality grade, quantity lot, delivery location, and future settlement date. While physical delivery can occur at certified depository warehouses upon contract expiration, over 95% of commodity derivative contracts are financially cash-settled or closed out prior to maturity for pure price risk hedging.

Premier Indian Commodity Exchanges

The organized commodity derivatives ecosystem in India is dominated by two specialized exchanges:

1. Multi Commodity Exchange of India Limited (MCX)

Inaugurated in November 2003 and headquartered in Mumbai, **MCX** is India's largest and dominant commodity derivatives exchange, commanding over 90% market share in the non-agricultural commodity segment. In 2012, MCX became the first Indian exchange to list publicly on a domestic stock exchange.

- **Precious Metals & Bullion:** The sovereign benchmark for domestic Gold and Silver pricing (Gold 1kg, Gold Mini, Gold Guinea, Gold Petal, Silver 30kg, Silver Mini, Silver Micro).
- **Base Metals:** Industrial futures and options on Copper, Aluminum, Zinc, Lead, and Nickel, extensively used by automotive and electrical manufacturers to hedge raw material input costs.
- **Energy:** Benchmark contracts in Crude Oil and Natural Gas, directly correlated with international West Texas Intermediate (WTI) and Brent crude movements.

2. National Commodity and Derivatives Exchange Limited (NCDEX)

Established in December 2003 and headquartered in Mumbai, **NCDEX** is India's premier agricultural commodity derivatives exchange, promoted by national institutional shareholders including LIC, NABARD, NSE, and PNB.

- **Agricultural Specialization:** NCDEX focuses predominantly on agricultural commodities that cannot be imported easily, establishing national price benchmarks for pulses (Chana), spices (Jeera, Turmeric, Coriander), oilseeds (Soybean, Mustard Seed, Castor Seed), and fibers (Cotton).
- **FPO Integration:** NCDEX works closely with Farmer Producer Organizations (FPOs), training agricultural cooperatives to use electronic hedging to lock in profitable selling prices prior to harvest, liberating agrarian producers from distress selling to middlemen.

The Regulatory Consolidation: FMC Merger into SEBI (2015)

Historically, commodity futures markets were regulated by an autonomous body under the Ministry of Consumer Affairs designated as the **Forward Markets Commission (FMC)** under the Forward Contracts (Regulation) Act, 1952 (FCRA). However, the FMC possessed weak statutory enforcement powers, lacked independent investigative authority, and could not impose severe financial penalties on rogue operators—a structural limitation catastrophically demonstrated during the ₹5,600-crore National Spot Exchange Limited (NSEL) payment default crisis in 2013.

To eliminate regulatory fragmentation and unify Indian capital market oversight, the Central Government executed a historic institutional reform in **September 2015**: the FMC was formally dissolved and merged entirely into the **Securities and Exchange Board of India (SEBI)**. Under SEBI's comprehensive regulatory oversight, commodity derivatives were integrated under the SCRA, clearing corporations were introduced to provide central counterparty settlement guarantees for commodities, mutual funds and foreign portfolio investors were progressively permitted to participate in commodity derivatives, and electronic Negotiable Warehouse Receipts (eNWRs) were instituted through dedicated commodity repositories (such as CCRL and NERL).

4. Major International Stock Exchanges and Global Financial Centers

Global financial capital operates as an integrated, interconnected network spanning multiple time zones. The world's leading stock exchanges represent massive concentrations of capital that dictate international asset pricing, currency exchange valuations, and cross-border investment flows:

1. New York Stock Exchange (NYSE) — Wall Street, United States

Founded on May 17, 1792, under the historic *Buttonwood Agreement* signed by 24 stockbrokers in lower Manhattan, the **New York Stock Exchange (NYSE)**, owned by Intercontinental Exchange (ICE), is the undisputed titan of global finance. It stands as the world's largest stock exchange by aggregate market capitalization of its listed securities (exceeding $28 trillion).

- **Hybrid Market Model:** Unlike purely digital matching engines, NYSE uniquely maintains a hybrid architecture combining high-speed automated electronic matching with physical floor trading conducted by **Designated Market Makers (DMMs)**. DMMs possess affirmative regulatory obligations to maintain continuous two-way liquidity, dampen volatility, and facilitate orderly opening and closing auctions.
- **Blue-Chip Prestige:** Listing on the NYSE represents the pinnacle of global corporate achievement, hosting iconic multinational conglomerates such as Berkshire Hathaway, JPMorgan Chase, ExxonMobil, Walmart, and Johnson & Johnson.

2. NASDAQ Stock Market — United States

Founded in 1971 by the National Association of Securities Dealers (NASD), **NASDAQ** (National Association of Securities Dealers Automated Quotations) originated as the world's first electronic stock market, eliminating the physical trading floor entirely in favor of an automated telecommunications network.

- **Technology & Innovation Focus:** NASDAQ established itself as the global epicenter for disruptive technological innovation, venture-backed enterprises, and digital biotechnology giants. It hosts the world's highest-valued corporate enterprises, including Apple, Microsoft, Alphabet (Google), Amazon, NVIDIA, Meta, and Tesla.
- **Market Structure:** Operates as a pure electronic order-driven market with multiple competing market makers posting quotes across three listing tiers: the NASDAQ Global Select Market, NASDAQ Global Market, and NASDAQ Capital Market.

3. London Stock Exchange (LSE) — United Kingdom

With origins tracing back to Jonathan's Coffee-House in 1698, the **London Stock Exchange (LSE)** is one of the world's oldest and most international financial exchanges, serving as the financial gateway connecting Europe, the Americas, and Asia.

- **International Order Book (IOB):** LSE operates the world's most active platform for trading Global Depository Receipts (GDRs) from emerging markets, including leading Indian corporate enterprises.
- **Alternative Investment Market (AIM):** LSE's globally renowned sub-market launched in 1995 designed specifically for young, high-growth, venture-stage enterprises, utilizing a flexible, principle-based regulatory regime supervised by Nominated Advisors (NOMADs).

4. Tokyo Stock Exchange (TSE) — Japan

Established in 1878 and operating under the corporate umbrella of **Japan Exchange Group (JPX)**, the Tokyo Stock Exchange is the premier financial capital market of the Asia-Pacific region.

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- **Market Restructuring (2022):** To enhance international competitiveness and eliminate complacency, TSE restructured its historic First and Second Sections into three streamlined segments: the *Prime Market* (globally focused mega-caps with stringent corporate governance and ESG standards), the *Standard Market* (mid-cap domestic enterprises), and the *Growth Market* (emerging entrepreneurial start-ups).
- **Flagship Index:** Home to the globally tracked Nikkei 225 and TOPIX indices.

5. Hong Kong Stock Exchange (HKEX) — Hong Kong

Operated by Hong Kong Exchanges and Clearing Limited (HKEX), the Hong Kong Stock Exchange serves as the indispensable institutional bridge connecting international institutional investors with the booming economic powerhouse of mainland China.

- **The Stock Connect Architecture:** Operates the groundbreaking *Shanghai-Hong Kong Stock Connect* and *Shenzhen-Hong Kong Stock Connect*, mutual market access platforms permitting international investors in Hong Kong to trade eligible Chinese A-shares (Northbound Trading) while enabling mainland domestic investors to purchase Hong Kong-listed shares (Southbound Trading).
- **Listing Hub for Chinese Tech Giants:** Hosts the primary and secondary listings of prominent Asian technology conglomerates, including Tencent, Alibaba, Meituan, and Baidu.

Comparative Summary: Premier Global Stock Exchanges

Stock Exchange	Founding Year	Headquarters	Flagship Index	Unique Trading & Regulatory Feature
NYSE	1792	New York, USA	Dow Jones, NYSE Composite	World's largest market cap; hybrid trading floor with Designated Market Makers (DMMs).
NASDAQ	1971	New York, USA	NASDAQ 100, NASDAQ Composite	Pioneer in automated electronic trading; global epicenter for high-tech mega-caps.
LSE	1698	London, UK	FTSE 100	World's most international capital market; home to the high-growth AIM market.
TSE (JPX)	1878	Tokyo, Japan	Nikkei 225, TOPIX	Premier Asian market; restructured into Prime, Standard, and Growth tiers.
HKEX	1891	Hong Kong	Hang Seng Index	Primary gateway to Chinese equity; operates cross-border Stock Connect channels.
NSE	1992	Mumbai, India	NIFTY 50	World's largest derivatives exchange by contract volume; pioneer in demutualised governance.

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Stock Exchange	Founding Year	Headquarters	Flagship Index	Unique Trading & Regulatory Feature
BSE	1875	Mumbai, India	S&P BSE SENSEX	Asia's oldest stock exchange; Dalal Street heritage with modern BSE SME leadership.

5. Risk Management Frameworks in Commodity and Stock Exchanges

To insulate the financial ecosystem against counterparty default, catastrophic price shocks, and insolvency cascades, modern exchanges deploy sophisticated, real-time risk mitigation architectures:

Comprehensive Margining Architecture

- **Value at Risk (VaR) Margin:** A statistically computed margin designed to cover the maximum potential loss that a trading position could experience over a 1-day or multi-day horizon at a 99% statistical confidence interval. VaR is recomputed dynamically throughout the trading session based on updated price volatility.
- **Standard Portfolio Analysis of Risk (SPAN) Margining:** The universal risk margining algorithm used in derivatives and commodity trading. Developed originally by the Chicago Mercantile Exchange (CME) and deployed across Indian exchanges, SPAN evaluates the overall risk of an entire portfolio of correlated contracts, simulating hundreds of adverse market scenarios to compute the precise net collateral margin required.
- **Extreme Loss Margin (ELM):** An additional buffer margin charged over and above the VaR or SPAN margin to absorb catastrophic tail-risk events that fall outside standard statistical distribution models.
- **Mark-to-Market (MTM) Margin:** The continuous daily settlement of paper profits and paper losses. At the conclusion of every trading session, every open position is re-valued against the official closing price. Losses are debited from the trader's ledger and credited to winning accounts, preventing uncollateralized loss accumulation over time.

Warehousing Infrastructure and Electronic Negotiable Warehouse Receipts

Unlike equity shares which exist purely as electronic ledger entries, commodity derivative contracts involve physical deliverables: agricultural harvests, crude oil barrels, and bars of precious metals. The integrity of physical settlement rests upon secure warehousing infrastructure:

- **WDRA Accreditation:** Commodity warehouses designated by exchanges must be registered and inspected by the **Warehousing Development and Regulatory Authority (WDRA)**, adhering to stringent standards of fire safety, security, pest control, and climate-controlled storage.
- **Assaying and Quality Certification:** Independent third-party assaying laboratories extract samples and certify that physical commodities meet exact exchange contract specifications (e.g., moisture content in grain, fineness of gold) prior to issuing warehouse credits.

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- **Electronic Negotiable Warehouse Receipts (eNWRs):** Once physical goods are deposited in an exchange-accredited warehouse, paper receipts are abolished. The depositor receives an *eNWR* issued through registered commodity repositories—such as the Central Commodity Repository Limited (CCRL) or National E-Repository Limited (NERL). These digital receipts can be traded on commodity exchanges, pledged as collateral with commercial banks for instant working capital loans, or delivered to settle futures contracts.

6. GIFT City and the Strategic Evolution of GIFT Nifty

A crowning milestone in the global integration of Indian capital markets was the creation of the **Gujarat International Finance Tec-City (GIFT City)** in Gandhinagar, Gujarat, housing India's maiden International Financial Services Centre (IFSC) under the unified regulatory oversight of the **International Financial Services Centres Authority (IFSCA)**.

The Historic Transition from SGX Nifty to GIFT Nifty

For more than two decades, international institutional investors who could not directly access the domestic Indian market traded the US Dollar-denominated Nifty 50 futures contract on the Singapore Exchange (SGX Nifty). This offshore arrangement meant that a massive portion of Indian equity price discovery and trading liquidity occurred outside Indian sovereign jurisdiction.

In **July 2023**, through a historic bilateral partnership between the National Stock Exchange of India and the Singapore Exchange, the entire international trading liquidity was repatriated to India through the **NSE International Exchange (NSE IX)** in GIFT City. Renamed the **GIFT Nifty**, this dollar-denominated index future trades for nearly 21 hours daily across Asian, European, and US trading sessions. It provides real-time early morning direction for domestic Mumbai markets while allowing global sovereign funds and institutional investors to trade Indian equity derivatives under favorable tax and regulatory frameworks within Indian territory.

7. Global Financial Linkages and Capital Market Integration

In modern financial economics, national stock markets no longer operate in geographic isolation. The convergence of high-speed telecommunications, cross-border banking networks, and the deregulation of global capital flows has forged an interdependent **24-Hour Global Trading Cycle**:

- **Chronological Trading Continuity:** The global financial day opens in Wellington and Sydney, rolls westward into Tokyo and Hong Kong, shifts to Mumbai and Dubai, transitions into London, Frankfurt, and Zurich, passes to New York, Chicago, and Toronto, and closes in San Francisco before restarting in the Asia-Pacific. A market-moving geopolitical event, economic data release, or technological breakthrough occurring at any hour is continuously absorbed and priced by whichever regional market is currently active.
- **Cross-Border Financial Contagion:** High integration generates systemic vulnerability to financial contagion. A collapse in US subprime mortgage derivatives in New York (2008 Lehman Brothers collapse) instantaneously triggered liquidity freezes in London, catastrophic stock market crashes in Tokyo and Mumbai, and deep industrial recessions worldwide.

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- **Foreign Portfolio Investors (FPIs) as Transmission Vectors:** Global institutional mega-funds (such as BlackRock, Vanguard, and sovereign wealth funds) allocate capital dynamically across developed and emerging economies based on relative interest rate differentials established by the US Federal Reserve, foreign exchange movements, and sovereign credit ratings. Sudden capital flights or massive inflows by FPIs create profound waves of volatility across domestic Indian equity and bond markets.

8. Market Microstructure and Technological Evolution of Modern Exchanges

The operational landscape of modern stock and commodity exchanges is dictated by rapid advancements in market microstructure and computer engineering:

Binary Protocols and High-Throughput Matching Engines

Historical trading engines communicated via text-based protocols (such as Financial Information eXchange - FIX protocol). While highly standardized and flexible, text protocols impose computational overhead due to string parsing. Contemporary exchange engines have transitioned to high-performance, compact **Binary Message Protocols** (such as NSE's NEAT Binary protocol and NASDAQ's ITCH/OUCH architecture). Binary architectures transmit compressed byte arrays directly into system memory, reducing network round-trip packet latency to single-digit microseconds while handling order throughput exceeding 100,000 orders per second.

Tick-by-Tick (TBT) Market Telemetry

Traditional retail trading terminals receive consolidated market data snapshots refreshed once every second or half-second. In contrast, institutional algorithmic desks subscribe to raw **Tick-by-Tick (TBT) Data Feeds** directly from the exchange matching engine. A TBT feed broadcasts an uncompressed chronological stream of every single order insertion, modification, cancellation, and trade execution as it occurs. This real-time telemetry enables high-speed statistical algorithms to construct exact replicas of the exchange order book and detect institutional liquidity flows instantly.

The Social Stock Exchange (SSE) Framework

In 2022, following SEBI regulatory notifications, India established a pioneering institutional segment: the **Social Stock Exchange (SSE)**, housed as a specialized division within the NSE and BSE. The SSE addresses the chronic funding deficit faced by social impact enterprises:

- **Eligible Entities:** Social enterprises are classified into *Non-Profit Organizations (NPOs)* and *For-Profit Social Enterprises (FPEs)* demonstrating primary social intent across 16 broad development areas recognized by SEBI (eradicating hunger, healthcare, education, environmental sustainability, gender equality).
- **Zero Coupon Zero Principal (ZCZP) Instruments:** NPOs raise capital on the SSE by issuing ZCZP securities. Unlike commercial bonds or shares, ZCZP instruments carry zero interest coupon payments and zero principal repayment obligations upon maturity. They represent pure philanthropic social investment vehicles that provide transparent, auditable project tracking,

requiring NPOs to submit mandatory annual *Social Impact Audits* conducted by certified Social Auditors.

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