

# Evolution of the Indian Derivatives Market: Navigating Price Volatility and Risk in a Post-1991 Economy

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**Abstract:** Starting from 1991, the liberalization of economic policies ushered in a new era for the Indian economy, compelling domestic companies to engage with global markets. In the pre-1990s, strict controls were in place for pricing numerous commodities, metals, and assets. For those not under direct control, prices were heavily influenced by regulated input prices, resulting in a scenario characterized by limited uncertainty and subsequently, subdued price volatility.

However, the post-1991 era marked a significant departure as deregulation commenced. This led to the freeing of prices for most commodities, along with partial deregulation of exchange rates. Simultaneously, trade controls were dismantled, interest rates were lowered, substantial changes were made to facilitate the entry of foreign institutional investors into the capital market, and government securities began to be priced based on market dynamics. As a result, the Indian market witnessed an escalation in price volatility across various goods and services, affecting both producers and consumers.

Furthermore, the introduction of market-driven exchange rates and interest rates introduced an element of unpredictability and instability, impacting the valuation of portfolios and securities. Consequently, the need to mitigate risks gave rise to the utilization of diverse derivatives for hedging purposes. This study focuses on examining the Indian capital market's utilization of derivatives.

**Keywords:** Indian economy, liberalization, exchange rates, interest rates, foreign institutional investors, government securities, portfolio valuation, securities, risk mitigation, derivatives, hedging, Indian capital market.

## INTRODUCTION TO CAPITAL MARKET

The Capital Market pertains to long-term financing, involving maturity periods exceeding one year. Within the Capital Market, the focus is on stock markets, where primary market issuance of shares or common stock facilitates funding and secondary market activities enable subsequent trading. Additionally, the Capital Market encompasses the Bond Market, where primary market bond issuance is followed by secondary market trading.

The financial system of any nation is intricate, encompassing various components such as financial institutions (banks, NBFCs - Non-Banking Financial Companies), regulators, and products. The Indian Financial System can be broadly categorized into two domains: institutions and regulators related to banking and allied services, and those connected with the financial market. The banking sector includes entities like the Reserve Bank of India, Public Sector Banks, Private Sector Banks, Co-operative Banks, and Foreign Banks. Significant roles are also played by NBFCs, along with organizations like LIC and GIC.

Over the past decade, the global landscape has witnessed substantial growth in international trade and business due to the forces of globalization and liberalization. Consequently, there has been a marked increase in the demand for international monetary transactions and financial instruments worldwide. In this context, alterations in interest rates, exchange rates, and stock market valuations across various financial markets have introduced amplified financial risks for businesses. These adverse changes have posed serious threats to the very viability of businesses. To effectively manage such risks, novel financial instruments have emerged within financial markets, commonly referred to as financial derivatives. The fundamental objective of these instruments is to offer price commitments for forthcoming dates, thereby offering a safeguard against unfavorable shifts in future prices and thereby mitigating financial risks. Beyond this, they also present prospects for individuals prepared to engage in greater risk-taking to generate profits. To put it differently, these instruments effectively enable the transfer of risk from those aiming to evade it to those who are prepared to embrace it.

## OBJECTIVE OF THE STUDY

To investigate the development of the Capital Market within India.

To evaluate the effectiveness of the Derivative Market in India.

To examine the elements that contribute to the expansion of Derivative Markets.

#### RESEARCH METHODOLOGY

It remains crucial to exercise skepticism towards the information sourced, particularly as the data might have been gathered to address disparate research objectives. Additionally, numerous secondary sources lack explicit details regarding the study's intent, data collection methods, analysis techniques, and interpretations, which can impede the researcher's ability to gauge their relevance. To counter this challenge, I have employed a triangulation approach, utilizing multiple independent sources to cross-reference the secondary data.

To compile information regarding the research problem, I have drawn from Research Journals, Trade Magazines, Annual Reports of Banks, and online resources. When assessing the "Evolution of derivatives and important factors," a concerted effort has been made to incorporate the most current materials available. To access the latest advancements in this realm, I have extensively relied on articles published in academic journals and trade magazines. Additionally, secondary information from online discussion forums has been incorporated.

#### FINDINGS AND DISCUSSIONS

Beginning in 1991, the Indian economy underwent a transformative phase with the liberalization of economic policies, compelling Indian enterprises to engage with the global markets. Prior to this period, governmental control extended to prices of numerous commodities, metals, and assets. Items not under direct control still adhered to regulated input-based pricing. This environment yielded limited uncertainty and consequently, price volatility remained restrained. However, post-1991, a series of deregulatory actions were initiated, freeing up prices of most commodities. Additionally, there was a partial deregulation of exchange rates, elimination of trade constraints, reduction of interest rates, substantial changes facilitating foreign institutional investors' participation in the capital market, and the adoption of market-driven pricing for government securities. Consequently, the impact was heightened volatility in prices of goods and services in India,

impacting both producers and consumers. The introduction of market-driven exchange and interest rates exacerbated instability in portfolio and securities values. This led to the emergence of hedging strategies using diverse derivatives to mitigate various associated risks.

Futures trading, in this context, emerged as a pivotal mechanism for risk reduction across multiple sectors like agriculture, production, export, import, investment, banking, and trade. These mechanisms are vital for any nation's economic landscape. Alan Greenspan, the then Chairman of the US Federal Reserve Board, highlighted the economic efficacy of these derivative products, emphasizing their role in segregating and transferring risks to those best equipped to handle them. The proliferation of derivative markets across different countries significantly contributed to balance of payments through fees and charges levied on foreign participants for utilizing these platforms.

Furthermore, in the contemporary landscape, a nation's economic progress hinges significantly on its service sector, which has gained prominence alongside agriculture and industry. Services have evolved into a cornerstone of the future economy. India has already traversed the transformative paths in industry and agriculture, now extending this transformation to services, including financial futures. Equipped with the necessary infrastructure and potential, India is primed to accommodate a broad spectrum of financial futures trading, encompassing areas like stock market indices, treasury bills, gilt-edged securities, foreign currencies, cost of living indices, and more. Collectively, these factors underscore the immense potential for the expansion of financial derivatives markets within India.

#### The evolution of derivatives

In India can be mapped from a period of controlled economic circumstances to a landscape where daily price fluctuations are the norm. The impetus behind introducing risk management tools gained momentum in recent times, owing to the push for liberalization and the active involvement of the Reserve Bank of India (RBI) in establishing the currency forward market. Derivatives now stand as a fundamental element of the liberalization strategy, providing a mechanism to proficiently mitigate risks.

In response to the evolving market demands, the National Stock Exchange (NSE) took the lead in setting up derivative markets in India. This initiative

materialized in July 1999, marking the official commencement of derivatives trading within the nation.

Date	Progress
14 December 1995	NSE asked SEBI for permission to trade index futures.
18 November 1996	SEBI setup L. C. Gupta Committee to draft a policy framework for index futures.
11 May 1998	L. C. Gupta Committee submitted report.
7 July 1999	RBI gave permission for OTC forward rate agreements (FRAs) and interest rate swaps
24 May 2000	SIMEX chose Nifty for trading futures and options on an Indian index.
25 May 2000	SEBI gave permission to NSE and BSE to do index futures trading.
9 June 2000	Trading of BSE Sensex futures commenced at BSE.
12 June 2000	Trading of Nifty futures commenced at NSE.
31 August 2000	Trading of futures and options on Nifty to commence at SIMEX.
June 2001	Trading of Equity Index Options at NSE
July 2001	Trading of Stock Options at NSE
November 9, 2002	Trading of Single Stock futures at BSE
June 2003	Trading of Interest Rate Futures at NSE
September 13, 2004	Weekly Options at BSE
January 1, 2008	Trading of Chhota(Mini) Sensex at BSE
January 1, 2008	Trading of Mini Index Futures & Options at NSE
August 29,2008	Trading of Currency Futures at NSE
October 2,2008	Trading of Currency Futures at BSE

**Source:** Compiled from BSE and NSE

Commodity futures trading in India had its beginnings in the 1950s. However, the subsequent decade of the 1960s witnessed a notable decline in futures trading. Multiple markets were shuttered, often because speculative activities were believed to be driving price increases in various commodities. Consequently, in 1969, the Central Government enacted a ban on derivatives trading through an official notification.

A reversal of this trend emerged in the late 1990s, with a significant resurgence of futures markets in India. As a result, the Central Government lifted the ban on futures trading in October 1999. During this period, there were noteworthy developments in specific sectors. For instance, the Civil Supplies Ministry expressed a willingness to introduce futures trading in Basmati rice. Furthermore, the Indian Pepper and Spice Trade Association were granted permission to transform its Pepper Futures Exchange into an International Pepper Exchange, which materialized on November 17, 1997, in the form of the India Pepper and Spice Trade Association-International Commodity Exchange (IPSTA-ICE) in Kochi.

Likewise, the Cochin Oil Millers Association advocated for the incorporation of futures trading in coconut oils in June 1996. The Central Minister for Agriculture expressed support for both domestic and international futures trading. A new coffee futures exchange, the Coffee Futures Exchange of India, was set up in Bangalore. The Central Government

proposed in August 1997 that Indian companies exposed to commodity prices should be allowed to utilize foreign futures and option markets. This trend extended beyond commodities to encompass financial futures as well.

The Reserve Bank of India (RBI) established the Sodhani Expert Group, which proposed substantial liberalization of the forward exchange market and recommended the establishment of rupee-denominated derivatives in financial instruments. The RBI accepted several of these recommendations in August 1996. Another pivotal step occurred when the Securities and Exchange Board of India (SEBI) constituted the Dr. LC. Gupta Committee to formulate a regulatory framework for derivatives trading. Although the committee's primary focus was on equity derivatives, it considered derivatives holistically.

On May 11, 1998, the SEBI Board approved the recommendations of the Dr. L. C. Gupta Committee, paving the way for the phased introduction of derivatives trading in India, beginning with stock, index futures, index options, and options on stocks. The Board also endorsed the 'Suggestive Bye-Laws' recommended by the Committee to regulate and oversee the trading and settlement of derivative contracts in India. Subsequently, the SEBI appointed the J.R. Verma Committee to address the operational aspects of derivatives markets.

In order to address the legal recognition of derivatives as securities under the Securities Contract Regulation Act, the Securities Law (Amendment) Bill, 1999 was introduced. As a result, in December 1999, a new framework was approved, officially designating 'Derivatives' as 'Securities'. However, due to procedural formalities, the launch of Index Futures was delayed by over two years. In June 2000, the National Stock Exchange and the Bombay Stock Exchange initiated stock index-based futures trading in India. Nonetheless, the growth of this market did not meet initial expectations, primarily due to limited awareness about the product and its mechanisms among market participants and investors.

Factors contributing to the growth of derivatives:

Certainly, here are the key contributing factors to the growth of derivatives, presented in bullet points:

Price Volatility:

Prices of commodities, local and foreign currencies are determined by market forces through the interaction of demand and supply. This interaction leads to rapid changes in prices over short periods, known as "price volatility." Price volatility encompasses the speed, frequency, and magnitude of price fluctuations. Such fluctuations expose individuals, companies, and governments to risks due to uncertain price changes.

Market Globalization:

The breakdown of systems like the BRETTON WOODS agreement eliminated fixed exchange rates and gold-backed dollar convertibility. Globalization and industrialization transformed underdeveloped nations into significant market players, adding new dimensions to markets. Instances like the Mexican and Asian currency crises underscored the impact of price volatility on markets.

Technological Advancements:

Advances in communication and data processing have accelerated the dissemination of information to markets. Previously time-consuming information can now be obtained almost instantly, influencing market decisions quickly. Equities also experience rapid price fluctuations, driving the use of derivatives like futures and options for hedging against adverse price movements.

Advancements in Financial Theories:

Ongoing developments in financial theories have led to the creation of more sophisticated derivative instruments. These theories provide frameworks for understanding and managing risk associated with price fluctuations. Financial models and tools help market participants make informed decisions when utilizing derivatives for risk management. These factors collectively contribute to the explosive growth of derivatives trading, enabling market participants to manage and mitigate risks arising from price volatility and other market dynamics.

## CONCLUSION

A derivative product, often referred to simply as a 'derivative', must be distinctly separated from the underlying cash asset. The cash asset pertains to the item bought or sold in the cash market under standard delivery terms. Consequently, the term 'derivative' signifies its lack of independent value. In essence, its worth is completely 'derived' from the value of the cash asset. The crucial distinction lies in derivatives being forward or futures contracts, specifying delivery and payment on a predetermined future date. Their primary purpose is to aid in hedging the price risk associated with the cash asset. Within market terminology, they are recognized as 'Risk Management Tools'.

Commodities futures trading in India was initially introduced in the 1950s; however, the 1960s witnessed a substantial decline in futures trading. Multiple markets were shut down, often attributing the rise in prices of various commodities to speculation within these markets. Consequently, in 1969, the Central Government prohibited trading in derivatives through an official notification. The late 1990s marked a contrasting trend – a significant resurgence of futures markets in India. This led to the Central Government lifting the ban on futures trading in October 1999. The Ministry of Civil Supplies also consented to the inception of futures trading in Basmati rice. Additionally, in 1996, the Indian Pepper and Spice Trade Association received authorization to transform its Pepper Futures Exchange into an International Pepper Exchange. The research has underscored the integral role of derivatives in India's capital market.

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