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A Review of the SEBI Derivatives Committee Report: *A Regulator Framework for Derivatives Trading*

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Price Waterhouse LLP
1616 North Fort Meyer Drive
Rosslyn, VA 22209
USA
Tel (703) 741-1000
Fax (703) 741-1616

Financial Institutions Reforms and Expansion (FIRE) Project
128. T. V. Industrial Estate
Worli, Mumbai 400 025
Telephone: 4946630, 4963599
Fax : (91 22) 4963555

Price Waterhouse LLP

November 26, 1997

Dr. LC Gupta
The Society for Capital Markets Research & Development
32 Raja Enclave Group Housing Society
Rohini Marg, Ashiana Crossing
Pitampura, New Delhi

Dear Dr. Gupta:

Subject: LC Gupta Committee Report on Derivatives (Parts 1 and 2)

Reference: Review by Ms. Kate Hathaway

Dear Dr. Gupta:

Ms. Kate Hathaway, a Price Waterhouse LLP (PW) consultant and former Chief of Staff with the Commodities Future Trading Commission (CFTC), has reviewed the Gupta Derivative Committee report, Parts 1 and 2, in detail and her specific observations and recommendations are enclosed. This work was carried out under the USAID sponsored Financial Institutions Reform and Expansion (FIRE) project

Though Ms. Hathaway reviewed Parts 1 and 2 of the report released in September and October respectively, all the points covered in Ms. Hathaway's report are directly relevant to the latest draft distributed November 20, 1997.

Ms. Hathaway's main recommendations regarding the final version of the report to be issued by the Committee are:

- The report should avoid swings from "micro-management" goals (i.e., "the per half hour capacity of the computers and the network should be double the peak load seen in any half hour of the preceding six months") to broad policy pronouncements (i.e., "the derivatives clearing house should be independent").

  Instead, the report should focus on developing a regulatory framework that creates and maintains a market environment that will inspire investor confidence and promote market growth while helping regulators, both oversight and self-regulators, and market participants, organise and understand the information they need to appraise the risks potentially associated with derivatives trading and to manage those risks. To fulfil this purpose, the final report requires reorganisation, clarification of goals and objectives, and detailed descriptions of provisions that provide a means of reaching the goals.

- If the Committee does not believe the report should suggest or recommend the regulatory provisions then it should instruct SEBI to provide detailed guidelines for the exchange and clearing house to follow when writing and implementing rules.

- In successful developed and emerging derivative markets, related regulatory structures were developed to lay out the rules of the game and the provisions that ensure fair implementation and enforcement. That is the kind of regulatory framework that is required now for the first derivatives market in India.

- The report should recommend SEBI should adopt international practices such as:

  ⇒ Conducting periodic reviews to examine how exchanges enforce their own rules for audit trails, trade practices, market surveillance, and member disciplinary programs;

  ⇒ Reviewing new exchange rules by examining them (prior to their implementation or during a predetermined set period after immediately after their implementation to determine whether they comply with the law);

  ⇒ Taking enforcement action against exchange members, nonmembers, and on occasion, exchanges;

  ⇒ Having the authority to conduct oversight and enforcement activities;

  ⇒ Overseeing exchange sales practice audits by conducting regular reviews of the exchanges programs to determine whether they meet SEBI standards and ensuring the adequacy and proper coordination of exchange efforts;

  ⇒ Developing a strong enforcement capability at SEBI which:

    ◊ can conduct investigations of current or potential violations of the Act and regulations and prosecute these offenses,

    ◊ has the authority to subpoena documents and witness testimony, and

    ◊ requires that all enforcement cases must be approved by the chairman or full regulatory board or commission before they can be brought;

  ⇒ Compelling each exchange to maintain a market surveillance program; and

  ⇒ Requiring SEBI's staff to assess the adequacy of exchange market surveillance programs as part of its rule enforcement review program with the SEBI also having the parallel ability to conduct its own surveillance of market activities.

Price Waterhouse would like to bring to the committee's attention that it has been providing assistance to SEBI and NSE in the area of derivatives under the FIRE project since January 1996. This support has included over 400 person days of direct technical assistance by international derivatives specialists with experience in the US and other markets working directly with SEBI and NSE in India. These specialists include:

1. Mr. William Barclay, Vice President of Strategic Planning for the Chicago Board Options Exchange (CBOE);

2. Ms. Kate Hathaway, formerly Chief of Staff of the Commodities Futures Trading Commission (CFTC);

3. Mr. Michael Gorham, formerly Vice President of International Market Development at the Chicago Mercantile Exchange (CME);

4. Mr. Paul Litteau, formerly an Examiner Supervisor with the National Securities Dealers Association (NASD) and a registered Series 4 Options Principal; and

5. Ms. Rosemary McFadden, formerly the President and Chief Operating Officer of the New York Mercantile Exchange.

Based on the cumulative experience these experts, with well over 75 years of direct involvement in the derivatives industry between them, and other PW/FIRE specialists who have worked with SEBI and NSE, PW/FIRE is in a unique position to provide an unbiased review of the Derivative's Committee report. Based on this, PW presents the enclosed balanced view and recommendations which we hope the SEBI Derivative Committee members will take into account in finalizing the Derivatives Committee report.

If you or any of the Committee members have any questions about the contents of the enclosed recommendations, please do not hesitate to contact me at the PW/FIRE office in Worli, Mumbai at telephone (022) 496-3599, 497-3216/88 or fax (022) 496-3555. Thank you.

Sincerely,

W D Grubb

W. Dennis Grubb
Principal Consultant - Capital Markets

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I. EXECUTIVE SUMMARY

A. PART ONE

The draft Gupta report, presented in two parts, captured the recommendations of the Securities Exchange Board of India (SEBI) Committee on Derivatives. Mr. DR Mehta, Chairman of SEBI, instructed the committee to include draft derivatives regulations in the draft report. Mr. Mehta also instructed SEBI to prepare guidelines to review exchange bye-laws, rules and regulations.

Part One, dated September 1997, takes a *broad brush* approach in its discussion of derivatives markets, which is the stated objective of the report, to" *create a wider understanding about how and what economic purpose derivatives can serve. . ..*" The report effectively takes the technical subject and presents it in an understandable, direct style. It also makes the following prudent policy recommendations:

- Phase in futures trading,
- Establish a market co-ordination mechanism between the Reserve Bank of India (RBI) and SEBI, and
- Correct certain financial infrastructure problems, including areas that require further reform in the cash equities market,

without these financial infrastructure corrections a derivatives market will not be completely successful in India.

B. PART TWO

Part Two of the L.C. Gupta Committee Report, dated September 1997, touches on most of the relevant issues relating to the regulation of derivatives markets and products. Part Two sets the context for the report when it states the Committee has "*kept in view the objectives which the regulatory system for financial markets should clearly subserve,*" and has used these objectives as a guide in designing a regulatory framework.

Most of the objectives mentioned in the report can be 'subsumed' within the broad international regulatory goals: *financial safety, fairness, market efficiency and integrity.* Financial safety was omitted from the list of regulatory goals presented in the report. The lack of focus specifically on financial safety issues caused the related issue of systemic risk and all the regulatory provisions that address it to go unmentioned. This major omission should be addressed in the final report.

Most of the international regulatory objectives are conceptually in the report. However, a framework that can be implemented requires more than citing objectives and goals. The methods of reaching those goals, supporting programs and provisions that facilitate reaching those objectives, also must be provided. The purpose of a regulatory framework is to meet the desired regulatory goals with provisions that also create and maintain a market environment that inspires investor confidence and promotes market growth. Furthermore, the regulator must ensure the provisions used to protect the marketplace and participants will produce no unexpected and deleterious side effects.

The goals and objectives stated in the report do not meet that standard. Objectives need to be clarified and the provisions that will accomplish the goals defined. The Gupta Report makes a number of recommendations about specific issues:

- It supports a **separate exchange** and implies market co-ordination should be sought. But, it makes no reference to regulatory provisions that would support and facilitate market co-ordination; and there is no reference to market disruption and surveillance related issues.

- It supports an **independent clearing corporation**; however, more information about the criteria a clearing house must meet to be designated or approved by SEBI, as well as information about the provisions governing the clearing house operations and organisation is necessary to develop a workable framework.

Not only does the Committee advocate a legally and functionally independent clearing corporation, it supports the concept of a single national clearing corporation. In this context the report addresses : (a) margin collection rules, (b) Electronic Funds Transfer (EFT) facilities, (c) exposure limits, (d) cross margining, and (e) Value-at-Risk (VAR) risk management models for risk assessment at the clearing corporation.

It does not address many other financial integrity issues, including provisions regarding:

- The adequacy of the clearing and payment facilities,
- Margins, types and amounts, calculation and haircuts,
- Acceptable forms of collateral as margin, percentage of each type acceptable;
- Letters of credit (LOC);
- Criteria for banks issuing LOCs;
- Timing for pays and collects;
- Compliance with financial reporting , and
- Customer protection in situations of default.

The L.C. Gupta Report **adopts the approach of self-regulation coupled with regulatory oversight**. The Committee's strong directive emphasising the need for an effective self-regulator also clarifies SEBI's role as an active oversight regulator providing over-all supervision and guidance to the exchange and clearing house.

Unfortunately, the report does not tell SEBI what steps it should take to accomplish these oversight tasks. Nor does the report :

- Provide guidelines SEBI should use in reviewing exchange rules, regulations, bye-laws, etc.;

- Instruct SEBI to develop guidelines or standards against which exchange rules, regulations, etc. will be approved; or

- Explain what is meant by providing appropriate guidance and overall supervision of the process.

The report expresses two Committee positions regarding **rules and regulations for derivatives markets** that are not in complete harmony.

This report begins by focusing on (a) the unique economic purpose of derivatives markets, and (b) their highly leveraged nature. In this section of the report, it directs the exchange, as a self-regulator, to design new, stricter regulations that address these characteristics of derivatives markets.

Meanwhile, the oversight regulator is instructed to disregard the (a) unique economic purpose of derivatives markets and (b) their highly leveraged nature, and (c) the forthcoming new exchange regulations. The reports instructs SEBI to review existing cash market regulations, and with minor revisions, apply them equally to both cash and derivatives markets.

First, trying to adapt current cash equities market regulations, at the exchange or at SEBI, to a new derivatives market will produce its own unexpected problems which will most likely be costly and perhaps irreversible.

Second, the oversight regulator and the self-regulator are participants in a joint effort. The roles are linked and both must operate from rules and regulations designed to address the special nature and high risk of derivatives markets. While self-regulation emphasises reliance on industry knowledge and expertise in devising solutions to regulatory problems, the oversight regulator must provide overall supervision and define the scope of regulation and the minimum standards that must be met.

Under **broker-client relationships,** the report raises several sales practices provisions:

- Testing and registration;
- Capital adequacy;
- Know-Your-Customer rules; and
- Segregation of customer funds.

It fails to mention one other important customer protection area: order execution and the uses of an audit trail to ensure brokers do not disadvantage their customers in the trading process.

C. CONCLUSIONS

The underlying reason for a regulatory framework is to create and maintain a market environment that will inspire investor confidence and promote market growth. Investors, whether they are hedgers or speculators, go to markets where there is financial safety, where they know market participants are treated equitably and fairly, and where the market functions efficiently.

A framework should help regulators, both oversight and self-regulators, and market participants, to organise and understand the information they need to appraise the risks potentially associated with derivatives trading and to manage those risks. Therefore, the supporting regulatory programs and provisions that provide the means of reaching the goals also must be presented and the provisions used to achieve regulatory goals have to be analysed to ensure they produce no unexpected market side effects. For the Committee's reference, Appendix A presents a list of major regulatory programs used in some jurisdictions to oversee derivative markets self-regulators.

Based on this standard the framework outlined in the draft report requires reorganisation, clarification of goals and objectives, more detailed description of provisions that provide a means of reaching the goals.

If the Committee does not believe this report should suggest or recommend the regulatory provisions that should be used to reach certain goals then it should instruct SEBI to provide detailed guidelines for the exchange and clearing house self regulatory organisations (SROs) to follow when writing and implementing rules.

Looking at other emerging markets over the past 15 years, it is clear certain conditions permit markets to develop and flourish. Primary among them is the market's own realisation that to prosper it must provide fundamental assurances that the rules of the game are fair and will be equitably applied and that obligations undertaken or fiduciary responsibilities assumed will be enforced.

In these successful markets, related regulatory structures, either governmental or proprietary, were developed to lay out the rules of the game and the provisions that ensure fair implementation and enforcement. That is the kind of regulatory framework that is required now for the first derivatives market in India.

II. Background

The L.C. Gupta Committee Report is virtually complete. The draft Gupta report, presented in two parts, captured the recommendations of the Securities Exchange Board of India (SEBI) Committee on Derivatives. Mr. DR Mehta, Chairman of SEBI, instructed the committee to include draft derivatives regulations in the draft report. Mr. Mehta also instructed SEBI to prepare guidelines to review exchange bye-laws, rules and regulations.

Part One, dated September 1997, takes a *broad brush* approach in its discussion of derivatives markets, which is the stated objective of the report, to" *create a wider understanding about how and what economic purpose derivatives can serve. . ..*" Part One of the report is presented in Appendix B.

Part One effectively takes the technical subject and presents it in an understandable, direct style. It also makes the following prudent policy recommendations:

Part Two of the L.C. Gupta Committee Report touches on most of the relevant issues relating to the regulation of derivatives markets and products. As one would expect in a draft Committee report, there are several areas not addressed and points that need clarification. This review focuses in more detail on various aspects of issues the Committee addressed. Part Two of the report is presented in Appendix C.

III. COMMENTS ON PART ONE

A. PRESENTING THE BIG PICTURE

Equally important as creating a wider understanding about the economic purpose of derivatives, Part One of the report :

- Recognises the importance of the economic purpose of derivatives;
- Underscores the importance of the price discovery and risk shifting functions of derivatives to the growth and development of emerging market economies;
- Recommends futures trading be appropriately phased in; thereby allowing an appropriate regulatory framework to develop hand-in-hand with the market;
- Recognises the importance of establishing a co-ordination mechanism between financial regulators the Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI) at the outset; and
- Recognises financial infrastructure problems that exist, including areas that require further reform in the cash equities market.

B. CLARIFYING FACTS

Part One of the draft report also had some omissions and areas that require clarification. Many of these points were brought out and discussed at the Committee meeting held to discuss the report draft. For instance the report did <u>not</u>:

- Characterise clearly how the cash market relates to and interacts with the derivatives market [e.g., para 3.3 (7) and para 3.7 (1) and (para 3.9)];
- Make clear that volatility occurs in both underlying and derivatives markets and margin, in turn, is determined based on the volatility in the respective market;
- Present correct information about the concept of mutualized risk and the function of an adequately capitalised, effectively managed and regulated clearing house that clears derivatives transactions;
- Mention the highly leveraged nature of derivatives markets nor the magnitude of risk that can be involved, i.e., one can lose more than one originally invests; and
- Make clear that futures trading is a zero sum game, i.e., for every profit there is a corresponding loss.

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C. CONCLUSION

To summarise, Part One adds information, and hopefully, increases the general understanding of the economic purpose of derivatives. It also makes some prudent policy recommendations: (a) phase in futures trading, (b) establish a co-ordination mechanism between financial regulators, as well as markets; and (c) correct certain financial infrastructure problems, including areas that require further reform in the cash equities market. Without these necessary reforms, a derivatives market will not succeed and flourish in India.

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IV. COMMENTS ON PART TWO

Part Two of the L.C. Gupta Report is entitled a ***Regulatory Framework for Derivatives Trading***. At the outset the report makes two essential points:

- Derivatives markets serve an economic purpose[1] -- they assist business growth by enabling businesses and individuals to protect themselves from possible adverse market movements, manage or offset exposures, by purchasing certainty about future prices for the business community.

- Derivatives products are highly leveraged and require strong regulation, in addition to cash market regulation.

Part Two sets the context for the report when it states the Committee has "*kept in view the objectives which the regulatory system for financial markets should clearly subserve,*" and has used them as a guide in designing a regulatory framework. Focusing on the objectives or purpose of regulations should produce a comprehensive, rational framework for regulating a market. Experience shows, in developed and emerging derivatives markets alike, that regulations frequently have unexpected and unwanted side effects that can sometimes have deleterious effects.

A. THE GUPTA REPORT'S REGULATORY OBJECTIVES

The report lists six "guiding objectives:" fairness, market integrity, safeguard for clients' moneys, competent and honest service, quality of markets, and innovation. Most of these objectives can be 'subsumed' within the broad regulatory goals recognised by international derivatives regulators:[2] ***financial safety, fairness, market efficiency and integrity***. Other objectives cited in the report are probably based, as they are in all jurisdictions, on national experience: an existing, national legal system that generally recognises financial services transactions and national experience in regulating other financial services transactions.

1. Organizing and defining regulatory goals

The Gupta report organises and defines some regulatory goals and provisions differently than the international regulatory community does. However, the grouping or organisation of regulatory goals is not necessarily important, since regulations or guidelines can serve more than one objective.

a) Provisions that address specific goals

Under *fairness*, the Gupta Report calls for:

[1] The second widely recognized economic purpose of derivatives markets, not mentioned in the Gupta report Part Two, is the public dissemination of price information. By providing effective price signals concerning exchange rates, indices, etc. , derivatives thereby facilitate transactions in the cash market and render both markets more efficient.

[2] The IOSCO Technical Committee agreed in 1990 that these regulatory objectives could be achieved in various jurisdictions by different means and that regulation need not be identical to adequately address these common regulatory goals.

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- Trading rules that ensure trading is conducted in a fair and transparent manner;
- Spécific regulations for sales practices of "dealers" of derivatives;
- Stronger internal control systems at the user-firm, especially controls that limit exposure of speculative accounts;[3] and
- Broker/dealer disclosure of risks to clients.

The first regulatory objective addresses three distinct areas:

- Trading rules are trade practice rules that deal with the regulation of the marketplace -- not the market participants as seems to be implied here;
- Sales practices rules and risk disclosure rules apply to broker client relationships – usually involving retail customers and not end-users which are usually commercial firms; and
- Internal control systems or risk management systems at the user- or end-user firm.

Two of these areas (trade practice and sales practice -- including risk disclosure) certainly pertain to *fairness* as a regulatory goal in some respects; internal risk control management, however, is not a provision used to address *fairness*.

These distinctions are important because regulations must be designed to address specific concerns or potential problems. Using the wrong regulatory provision or tool to deal with a specific concern can create problems for the market and/or market participants rather than resolving or preventing difficulties.

a) Defining regulatory goals

Under the term *market integrity* the report lists provisions that minimise financial default. The International Organisation of Securities Commissions (IOSCOs) identifies these provisions as methods used to achieve *financial safety*. The Gupta report's term *market quality* translates as IOSCO's common regulatory goal of *market integrity*.

There is no problem with changing terminology of regulatory goals or unbundling broader goals into more specific ones as the Gupta report does; e.g., competent and honest service is cited as a individual goal rather than part of the broader goal of *fairness* which generally includes customer protections in many jurisdictions.

A problem does arise, however, when *financial safety*, including financial integrity of the clearing house and market participants, is not cited as a specific regulatory objective. Most

[3] The statement that most mishaps in the derivatives markets have occurred because of inadequate controls at the user-firm is not correct. While some defaults and other mishaps can be attributed to inadequate internal risk management that does not necessarily translate to inadequate control of overall exposure, and furthermore, there are many other situations in which the user- firm or end-user was not at fault, e.g., Proctor and Gamble vs. Bankers Trust.

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likely one consequence of this omission is the exclusion of the related issue of systemic risk and the regulatory provisions to address it. Other issues and provisions that should be addressed include:

- The adequacy of the clearing and payment facilities;
- Margins, types and amounts, calculation and haircuts;
- Acceptable forms of collateral as margin, percentage of each type acceptable;
- Letters of credit (LOCs);
- Criteria for banks issuing LOCs;
- Timing for pays and collects;
- Compliance of market intermediaries;
- Customer funds protection in situations of default; and
- Financial reporting and record keeping by financial intermediaries.

a) Criteria for an effective regulatory framework

Since the basis for choosing regulatory objectives can vary widely, what is the benchmark against which a regulatory framework should be measured? What are the criteria it must meet to be effective?

The underlying reason for a regulatory framework is to create and maintain a market environment that will inspire investor confidence and promote market growth. Investors, whether they are hedgers or speculators, go to markets where there is financial safety, where they know market participants are treated equitably and fairly, and where the market functions efficiently.

A framework should help oversight and self-regulators and market participants to organise and understand the information they need to appraise and manage the risks potentially associated with derivatives trading. Therefore, the supporting regulatory programs and provisions that provide the means of reaching the goals also must be presented and the provisions used to achieve regulatory goals have to be analysed to ensure they produce no unexpected market side effects.

Based on this standard the framework outlined in the draft report requires reorganisation, clarification of goals and objectives, detailed descriptions of provisions that provide a means of reaching the goal.

If the Committee does not believe this report should suggest or recommend the regulatory provisions that should be used to reach certain goals then it should instruct SEBI to provide guidelines for the SROs to follow when writing and implementing rules.

B. SHOULD DERIVATVES TRADING BE CONDUCTED ON A SEPARATE EXCHANGE?

The *separateness* of the derivatives exchange has long been an important issue before the Committee. The Gupta Report summarises the arguments on each side of the question.

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1. Committee Recommendations

The central recommendation of the Gupta report concerning a new derivatives exchange is presented, without conviction, in the negative, "a separate exchange for futures trading need not be insisted upon." The rationale given to support the recommendation is that the cost of setting-up a separate exchange will involve high costs and more time because of the expense of information technology networks and the expertise required to run an exchange
The report also calls for:

- Trading through online screen-based trading systems,
- A independent clearing corporation,
- Online surveillance capabilities,
- Price and position limits, and
- Real time dissemination of market information via at least two "vending networks."

The recommendations in this section of the report blend broad policy pronouncements with micro-management decisions which could be potentially misleading or even possibly damaging when made out of context with the relevant technical issue as they are here. For instance, stipulating computer and network capacity puts the Committee in a very vulnerable position should the statement in the report they have approved regarding required capacity at some future point be judged wrong. In contrast, the recommendation that the clearing corporation be independent provides broad policy guidance.

The exchange should ensure members have the technical capability and knowledge necessary to trade index futures rather than "the capability to do program trading" as recommended in the draft report.

2. Independence and Coordination

The functional, financial and legal independence [not geographical separateness] of the derivatives exchange from the existing cash market exchange are the issues that have regulatory significance. The exchange facility can be located within the same building as the current stock market. In fact, the New York Stock Exchange offered a index futures contract for trading under the auspices of the New York Futures Exchange [4] in 1986.

The functional, financial and legal independence of a derivative exchange are important for the reasons cited in the Gupta report:

- Potential for conflicts of interest;
- Increased possibilities for trade practice abuses and manipulation; and
- Other legal and financial concerns.

[4] The New York Stock Exchange created a separate legal entity, the New York Futures Exchange, which began trading the NYSE CM Stock Index and the Commodity Research Bureau Index in 1986 on the floor of the New York Stock Exchange.

The draft report also refers to "the importance of co-ordinated supervision" during the October 1987 stock market crash citing exchange level supervision of cash and futures markets. The reports states co-ordination is facilitate by cash and futures trading occurring on the same exchange. The importance of cash and futures market co-ordination[5] is mandatory if price convergence between markets is to occur . Without price convergence, futures transactions will not efficiently serve as a hedging instruments for cash market activities.

To further ensure that futures and cash market practices are co-ordinated the report should recommend Indian market regulators address:

- Short selling;
- Stock lending and borrowing;
- The depository mode of stocks in the stock index; and
- Convergence of different settlement cycles.

After the crash of 1987 in the US, the of co-ordination of market trading floor activities (opening, closings and trading halts) and communication between cash and futures market trading floors, and between exchanges and government regulators via dedicated telephone lines (using the "hoot 'n' holler" systems) during periods of extreme volatility or market disruptions became part of the reforms implemented. Communication among US market regulators equivalent to the RBI, the Ministry of Finance, and SEBI in India was also emphasised after the 1986 market crash through the creation of the President's Financial Markets Task Force which continues to meet today.

As a regulatory framework, the report should also recommend provisions that facilitate market co-ordination including inter-market (between exchanges) surveillance activities, such as information sharing.

C. *SELF REGULATION VERSUS DIRECT REGULATION*

Most jurisdictions rely upon varying degrees of self-regulation coupled with regulatory oversight as the primary means of ensuring regulation over secondary markets. The report adopts this approach and recommends SEBI function as an oversight regulator with the exchange acting as the self-regulator.

1. *Effective Self-Regulation*

Self-regulation emphasises reliance on industry knowledge and expertise in devising solutions to regulatory problems. Further, regulatory costs can thereby be assessed directly on the industry. However, the criteria to qualify as an SRO, and subsequently, the minimum performance standards of an SRO must be defined by the regulator. In addition, the SRO must have the authority it requires to effectively regulate its members.

[5] The emphasis is on market linkages and on the terms and conditions of futures contracts paralleling those of the underlying cash market.

The report calls for formulation of detailed exchange-level rules and regulations including creation of effective monitoring and enforcement mechanisms covering many aspects of the exchange's operations:

- Entry requirements for members;
- Rules governing contract design;
- Sales practice procedures covering broker-client relationships;
- Risk disclosure to clients or customers;
- Trade practice rules;
- Reporting requirements;
- Inspection capabilities; and
- Dispute resolution mechanisms for customers.

The report should also make recommendations regarding the exchange's:

- Trading systems operational capabilities, including:
  - ◊ Providing necessary transaction services (making and filing of records with respect to all aspects of the transaction); and
  - ◊ Prohibiting dissemination of false or misleading information which may tend to affect the price of a product or instrument.

- Ability to carry out self-regulatory programs, including:
  - ◊ Risk management controls;
  - ◊ Market surveillance;
  - ◊ Compliance programs;
  - ◊ Disciplinary programs;
  - ◊ Arbitration procedures;
  - ◊ Code of conduct for members;
  - ◊ Dispute resolution programs for members; and
  - ◊ Compliance with all the regulatory requirements of the oversight regulator.

2. *Oversight Regulation*

The policy decision to adopt a self-regulatory approach is a key factor shaping perhaps all other regulatory decisions. The report's strong directive emphasising the need for an effective self-regulator also clarifies SEBI's role as an active oversight regulator providing overall supervision and guidance to the exchange and clearing house.

The report recommends that SEBI:

- Promulgate rules about exchange governance -- specifically the composition of the governing board of the derivatives exchange;

- Vet the derivatives exchange rules, regulations, bye-laws, and the proposed derivatives contracts;

- Review and approve any changes in exchange rules, regulations and bye-laws before they can become effective;

- Act as the regulator of last resort: and

- Ensure the successful launch of futures trading in India by providing appropriate guidance and overall supervision of the process.

Unfortunately, the report does not tell us what steps SEBI should take to accomplish these tasks. Nor does the report :

- Specify the powers of the governing board or how those should be determined;

- Provide guidelines SEBI should use in reviewing exchange rules, regulations, bye-laws, etc.;

- Instruct SEBI to develop guidelines or standards against which exchange rules, regulations, etc. will be approved;

- Explain what is meant by providing appropriate guidance and overall supervision of the process;

- Provide criteria which an exchange must meet to qualify as a market to trade derivatives;

- Provide criteria an exchange or other organisation must meet to qualify as an SRO: or

- Call upon SEBI to establish minimum performance standards exchange self-regulatory programs must meet.

3. To Write New Rules or Not To Write New Rules

The report expresses two positions regarding rules and regulations for derivatives markets.

a) To SEBI:

Regarding SEBI, the report says,

> since the . . . rules and regulations regarding stock exchanges and broker/dealers are of general and over-riding

nature, they could be reviewed and designed to be applicable equally to derivatives exchanges also,

b) To the exchanges:

The report directs the exchanges:

all the regulations have to be much stricter for derivatives trading than the existing regulations for cash trading. As such the regulations will have to be newly designed rather than copied from the existing stock exchange rules and regulations.

These two general statements provide conflicting directions.

This report begins by focusing on (a) the unique economic purpose of derivatives markets, and (b) their highly leveraged nature. This section of the report directs the exchange, as a self-regulator, to design new, stricter regulations that address these characteristics of derivatives markets.

Meanwhile, the oversight regulator is instructed to <u>disregard</u> the (a) unique economic purpose of derivatives markets and (b) their highly leveraged nature, and (c) the forthcoming new exchange regulations. The reports instructs SEBI to review existing cash market regulations, and with minor revisions, apply them equally to both cash and derivatives markets.

First, trying to adapt current cash equities market regulations, at the exchange or at SEBI, to a new derivatives market may produce unexpected problems and side effects which will most likely be costly and perhaps irreversible.[6]

Second, the oversight regulator and the self-regulator are participants in a joint effort. The roles are linked and both must operate from rules and regulations designed to address the special nature and high risk of derivatives markets. While self-regulation emphasises reliance on industry knowledge and expertise in devising solutions to regulatory problems, the oversight regulator must provide overall supervision and define the scope of regulation and the minimum standards that must be met.

The Committee must provide both the exchange and the oversight regulator the discretion to assess existing rules and regulations and determine when they are appropriate, need revision, or when new rules are needed.

[6] For further discussion see *International Approaches To Derivatives Market Regulations: Common Global Regulatory Objectives*, Financial Institutions Reform and Expansion (FIRE) Project and US Agency for International Development (USAID/India), 23 October 1997.

4. *Specific Recommendations Regarding New Rules*

The Gupta Committee report did make brief recommendations concerning a number of items related to regulatory goals, including:

- In relation to *market integrity/quality*:
  - ◊ Exchange audits of its member/brokers and their frequency; and
  - ◊ Inspection capabilities of the exchange self-regulatory staff.

- In relation to *fairness*:
  - ◊ Mechanisms to address customer grievances.

- In relation to *market integrity and fairness*:

  - ◊ The non-transferability of equity exchange membership to derivatives membership, that is equity exchange membership does not automatically translate into derivatives membership.

- In relation to oversight regulation:
  - ◊ New derivatives related resources for SEBI:
    - * A Derivatives Advisory Council at SEBI to tap outside expertise;
    - * A derivative cell at SEBI; and
    - * An economic research wing at SEBI.

Again a good deal more information and detail are necessary to create a regulatory framework. In relation to exchange audits of its member/brokers and the exchange's inspection capabilities the report should outline:

- Sales practice requirements for brokers;

- Scope of sales practice audits as well as their frequency; and

- Record keeping requirements for brokers, including:

  - ◊ Audit trails including customer order entry and exit times;

  - ◊ Monthly records of transactions (affecting asset, liability, income, expense) capital accounts, net capital an minimum financial requirements;

  - ◊ Investment of customer funds;

  - ◊ All transaction generated papers and documents, including records of customers' orders;

  - ◊ Transaction activity associated with each customer account; and

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◊ Accessibility of books and records -- the period of retention and location at which records must be accessible.

Another important regulator program that addresses market integrity but not mentioned in the report is market surveillance.

D. *THE CLEARING CORPORATION*

1. *One National Clearing Corporation*

Not only does the report advocate a legally and functionally independent clearing corporation, it supports the concept of a single national clearing corporation.

2. *Margin Collection Rules*

The report called all market participants to pay margin, including institutions; and it called for mark-to-market margin to be collected before the open on a next day basis. Absent such arrangements the report stated net worth and initial margin requirements should be higher. Because of their concern about the collection of margin, the report suggested margin collection from clients not be left to broker/dealers. The report called upon SEBI to require derivatives exchanges "to ensure, through systems of inspection, reporting, etc. that margins are collected from all clients without exception."

The report does not specify the scope of the inspections or reporting suggested nor does it speak to SEBI's enforcement of these requirements if SEBI does not have its own inspection/reporting requirement for the SRO regarding the SRO responsibility to ensure margin is collected from all clients.

3. *Electronic Funds (EFT) Transfer facilities*

The Gupta report emphasised establishing Electronic Funds Transfer (EFT) facilities for the quick transfer of margin payments. This facility requires the central bank's co-operation and cannot be accomplished by the exchanges or SEBI alone or together.

4. *Exposure Limits*

The report advocated exposure limits for each broker/member be linked to initial margin and computed on a gross basis. In conjunction with the exposure limits, according to the report, traders should be asked to declare proprietary and customer trades.

The report neglects to indicate how the SRO or SEBI will ascertain trader compliance with a rule requiring trade declaration and how such a rule can be enforced. Furthermore, there is no recognition that the SRO will have to have direct access to information about a broker's clients and access to the records of each trade for that customer.

5. *Cross Margining*

Cross-margining was not supported in the Committee report, at least not at this early stage in the life of India's derivatives market. Since the systems required to consolidate positions

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across all exchanges are not available, it would not now be possible to proceed with cross margining in an equitable manner.

6. *Value-at-Risk (VAR) Risk Management Models*

Finally, the report advocates the use of value-at-risk (VAR) models to assess each member's exposure to the clearing house throughout the day. The goal being that "at no point should a members VAR exceed a 99 percent" confidence level, that is 99 percent of the time the 'good funds' available at the clearing corporation would be sufficient to cover a member's exposure for one day.

The choice of VAR as the methodology to ensure adequate margins is a curious one. The exchange should have a risk-based margining system to ensure sufficient margin without burdening the system with over margining. There are several well know internationally recognised standards in the industry for cost effective risk management. Two of the these systems are the Standard Portfolio Analysis of Risk system (SPAN) and the Theoretical Intermarket Margin System (TIMMS). Both calculate margin using a portfolio evaluation model. Both system employ stress testing for extreme volatility and both allow the integration of cash and derivatives market positions and access risk accordingly.

a) The Origins of VAR

Value at risk (VAR) models were developed at Chase Manhattan Bank to analyse, control and report trading risk in a consistent and reliable manner. VAR is a statistically based model which estimates with a specified degree of certainty (you can pick the degree you want) the maximum loss a firm or bank could suffer in the face of specified adverse (not extreme) market moves.

The Basle Committee on Banking Supervision (Basle Committee) of the Bank for International Settlements proposed the use of VAR models for the purposes of calculating one uniform level of capital adequacy for market risk across all member banks. One significant motivating factor for the Basle Committee in considering VAR was that most of its member banks also had to comply with the European Union's Capital Adequacy Directive (CAD) which recognised VAR as a method of calculating market risk.

b) Consequences of VAR for Regulators

VAR models pose many problems for regulators:

- VAR and stress testing measure different types of risk. VAR calculates risk based on the assumption that future events will mirror past events; whereas, stressing tests when used to determine market risk assess the potential loss a firm may face in certain extreme circumstances (not just under day-to-day circumstances);

- The regulator must play a more active and involved role when VAR models are used. Regulators must determine or specify certain parameters for the models that will be used to calculate regulatory capital. If the corporation that

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is using the model is permitted to determine its own parameters there then is no uniformity across firms or corporations.

- One concern of the Basle Committee was that banks would seek parameters that would produce the desired result not the most prudential level of capital adequacy;

- Regulators have to determine how large a 'cushion of capital' must be held by the bank or firm over and above that implied by the model to cover the risk of extreme adverse market moves since these are not captured in the model; and

- VAR models tend to produce results that favour larger portfolios, i.e., they indicate lower levels of risk.

In terms of financial integrity, provisions regarding the qualifying criteria for a clearing house, standards of adequacy for the clearing and payment facilities, credit and margins, compliance with financial reporting, and customer protection in situations of default need to be addressed since they have not been in this report. Other financial safety issues that need to be addressed include:

- The adequacy of the clearing and payment facilities,
- Margins, types and amounts, calculation and haircuts,
- Acceptable forms of collateral as margin, percentage of each type acceptable;
- Letters of credit (LOC);
- Criteria for banks issuing LOCs;
- Timing for pays and collects;
- Compliance with financial reporting;
- Customer protection in situations of default; and
- Financial reporting requirements which each SRO must adopt and submit for approval:
    - ◊ Audit/inspection procedures.
    - ◊ Brokerage firm (or broker) responsibilities independent of SRO.

E. BROKER-CLIENT RELATIONSHIPS AND DERIVATIVES SALES PRACTICES

1. Testing and Registration

The Gupta Report puts itself on the record for mandatory broker qualification and registration. This requirement is only at the broker/dealers level. Testing and registration also must extend to the sub-broker level where individuals are compensated for generating order flow.

Again the report does not speak to qualification requirements, testing or registration procedures. This is an area where fairness is an issue the SRO must address.

2. *Capital Adequacy*

The Gupta Report supports the current Indian practice of not relying on net worth to determine capital adequacy. Since balance sheet figures supplied to satisfy questions concerning net worth are not reliable, "principal reliance has to be placed on the capital and margins actually deposited by the broker/dealers with the exchange." Capital adequacy requirements must be satisfied independently in each market and at each exchange.

Mirroring the Singapore International Monetary Exchange Authority, the Committee recommends a two-level membership and a two-tiered margining system. Clearing members with higher capital requirements and non-clearing members with lower requirements. One of the benefits of a two-tier membership/margining system, according to the report is additional traders will enter the derivatives market.

The report sets the minimum "net worth" requirement at Rs 300 lakh with an initial deposit of liquid assets worth Rs. 50 lakh. These numbers are cited based on one implied rationale:

> the minimum capital adequacy requirement involves balancing the need for ensuring market integrity against the need for having sufficient participation of broker/dealers and sufficient competition. Too high a requirement may keep Indian firms out the of market.

The report provides no information or incite into the decision-making process used to arrive at the Rs. 300 lakh and Rs. 50 lakh thresholds.

One regulatory factor that relates to fairness in the marketplace and also has a lot to do with confidence and growth in the market is regulatory transparency -- or knowing the rules of the game. Not just regulatory transparency in relation to government regulation, but also and maybe more importantly, transparency of exchange rules and regulations. The reasons, scientific, common sense or otherwise, behind this important policy decision are important to potential members, members of other exchanges and many others for prudential reasons.

This approach to capital adequacy (and net worth) is unique. While the approach of relying principally on the capital and margins actually deposited by the broker/dealers with the exchange theoretically should offer some level of financial protection to the exchange/clearing house, it breaks down at the customer level, if firms (brokers) are not required to comply with standards for minimum capitalisation and significant questions arise about customer funds protections during firm insolvency.

Despite current difficulties with the reliability of net worth statements, using net worth as the basis for determining capital adequacy coupled with requirements for continuous compliance with a net capital rule should be the regulatory goal SEBI should pursue.

3. Know Your Customer Rules

Tough know-your-customer rules are proposed in the report especially in relation to options, along with risk disclosure statements for each customer opening a derivatives account, and a detailed customer or client registration form and procedure.

4. Segregation of Customer Funds

The report supports segregation of customer funds, but does not address:

- Creation of special bank account;
- An account for customer use only, there is no right of offset or other claim by the bank despite any market situation;
- Records of transactions conducted through the special account

Another customer protection area not mentioned is order execution and the uses of an audit trail to ensure brokers do not disadvantage their customers in the trading process. Customer orders should be time-stamped and regulations prohibiting front running should be strictly enforced.

V. CONCLUSIONS

Part Two of the Gupta Report mentions most of the major objectives and issues facing self - and oversight regulators in a new derivatives market.

However, the report is loosely structured. It swings from specific 'micro-management' goals or recommendations, e.g., software at the clearing corporation that should assess the Value at Risk (VAR) of one member's exposure to the clearinghouse; to broader policy pronouncements or recommendations, e.g., the derivatives clearing house should be independent. The current approach makes it difficult to determine the report's priorities -- or how the pieces of information presented fit together. It is similar to having pieces of a jig-saw puzzle, but no picture of what the finished picture is supposed to look like.

The underlying reason for a regulatory framework is to create and maintain a market environment that will inspire investor confidence and promote market growth. Investors, whether they are hedgers or speculators, go to markets where there is financial safety, where they know market participants are treated equitably and fairly, and where the market functions efficiently.

A framework also should help regulators, both oversight and self-regulators, and market participants, to organise and understand the information they need to appraise the risks potentially associated with derivatives trading and to manage those risks. Therefore, the supporting regulatory programs and provisions that provide the means of reaching the goals also must be presented and the provisions used to achieve regulatory goals have to be analysed to ensure they produce no unexpected market side effects

Based on this standard the framework outlined in the draft report requires reorganisation, clarification of goals and objectives, detailed descriptions of provisions that provide a means of reaching the goals.

If the Committee does not believe the report should suggest or recommend the regulatory provisions then it should instruct SEBI to provide detailed guidelines for the SROs to follow when writing and implementing rules.

Looking at other emerging markets over the past 15 years, it is clear certain conditions permit markets to develop and flourish. Primary among them is the market's own realisation that to prosper it must provide fundamental assurances that the rules of the game are fair and will be equitably applied and that obligations undertaken or fiduciary responsibilities assumed will be enforced.

In these successful markets, related regulatory structures, either governmental or proprietary, were developed to lay out the rules of the game and the provisions that ensure fair implementation and enforcement. That is the kind of regulatory framework that is required now for the first derivatives market in India.

APPENDIX A:

EXAMPLES OF SOME MAJOR DERIVATIVES MARKET REGULATORY PROGRAMS IN OTHER JURISDICTIONS WHICH SEBI SHOULD CONSIDER ADOPTING

A. TRADE PRACTICE SURVEILLANCE

1. **Methods of ongoing oversight of all exchanges:**

a. Through periodic reviews which examine how exchanges enforce their own rules for: audit trails, trade practices, market surveillance, and member disciplinary programs. These reviews can focus on how exchanges:

(1) monitor and follow-up abuse of rules that govern trading practices. (A regulator can accomplish this by reviewing the exchange's computerised records of exchange trading); and

(2) use an audit trail or trade tracking programs, to determine when a when customer's orders are filled (as compared to broker's orders), for example;

(3) investigate broker/customer complaints,

(4) investigate other violations,

(5) enforce member disciplinary program.

b. Through reviews of new exchange rules by examining them (prior to their implementation or during a predetermined set period after immediately after their implementation to determine whether they comply with the law):

2. SEBI should have the authority, under the law, to take enforcement action against exchange members, nonmembers, and on occasion, exchanges.

3. Under the law, SEBI should have the authority to conduct oversight and enforcement activities:

a. Each exchange must, as part of its application for designation as an exchange, provide for compliance with all of the requirements applicable to exchanges according to SEBI

(1) The exchange should be designated to trade as a derivatives exchange by SEBI before the exchange may apply for designation of futures contracts to be traded on the exchange.

b. On SEBI request, an exchange is required to establish continued compliance with the requirements of exchange designation.

c. Each exchange must enforce its own bylaws, rules, regulations, and resolutions.

d. The SEBI may investigate the operations of exchanges as it deems necessary.

e. Each exchange must use due diligence to maintain a continuing compliance program.

B. **Sales practice surveillance**

The regulator oversees SRO sales practice audits by conducting regular reviews of the SROs' programs to determine whether they meet Commission standards and to ensure the adequacy and proper co-ordination of SRO efforts.

C. **Enforcement**

1. The enforcement unit conducts investigations of current or potential violations of the Act and regulations and prosecutes these offenses.

2. Enforcement has the authority to subpoena documents and witness testimony.

3. All enforcement cases must be approved by the chairman or full regulatory board or commission before they can be brought.

D. **Market surveillance**

1. Each exchange must maintain a market surveillance program.

2. Regulator's staff assesses the adequacy of exchange market surveillance programs as part of its rule enforcement review program. It focuses on surveillance of:

a. price movements,

b. changes in price relationships (among futures, between markets, futures v. cash),

c. open interest and changes in open interest,

d. concentrations of positions among clearing members,

e. volume of trading and changes therein,

f. trading liquidity and the magnitude of successive price changes,

g. deliverable supplies,

h. deliveries (concentrations in the making or taking of deliveries), and

i. market news and gossip.

3. The regulator also can conduct its own surveillance of market activities.

APPENDIX B:

DERIVATIVES COMMITTEE REPORT - PART I

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Inward Mail 10
Date:- 12/9
Name:- DG

भारतीय प्रतिभूति
और विनिमय बोर्ड
Securities and Exchange Board of India

DIVISION CHIEF
SECONDARY MARKET DEPARTMENT

SMD/POLICY/DT/ 3553 /97
September 10, 1997.

Shri. W. Dennis Grubb.
Price Waterhouse LLP.
128, T.V. Industrial Estate,
Worli, Bombay 400 025.

Dear Shri Grubb,

Please find enclosed the draft Derivatives Committee Report - Part I, forwarded by Dr. L.C. Gupta. You are requested to send your views/suggestions if any, within a period of two weeks. The next meeting of the Committee is scheduled to be held at 11:00 a.m. on October 03, 1997, to finalise the report. You are requested to make it convenient to attend the meeting.

Yours sincerely,

Parakh

N. PARAKH

encl.: a/a

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. L. C. GUPTA
ctor and Member-Secretary

Phone : 7015565
7012955
Fax : 7012955

THE SOCIETY FOR CAPITAL MARKET
RESEARCH AND DEVELOPMENT

32. RAJA ENCLAVE GROUP HOUSING SOCIETY
ROHINI MARG. ASHIANA CROSSING. PITAMPURA.
NEW DELHI-110 034

Sept 6, 1997

MEMORANDUM ON THE DRAFT OF DERIVATIVES COMMITTEE REPORT - PART I

Herewith enclosed is **Draft Report - Part 1** for your kind perusal and suggestions. It would be most helpful if specific suggestions can be sent to me by fax in the form of a brief note, comment, etc. The various suggestions received can then be discussed at the next meeting of the Committee to be called very soon.

The main objective of Part I is to sell the idea of derivatives which are not understood sufficiently widely.

Derivatives will command respectability only if they are seen as serving important economic purpose. Part 1 of the report presents derivatives as a step towards market **development**, as distinct from market **regulation.** Many constructive uses of derivatives are explained in simple non-technical language.

While the focus is on equity derivatives, a much wider perspective has been maintained. Specific policy guidance is also provided about how the futures trading may be phased and about certain reforms of the cash market as a pre-requisite for the futures market.

Part 1 of the report can be separately presented to induce greater constructive interest. Part 2 will present the regulatory framework. That becomes much easier now.

I am grateful for your utmost cooperation and your valuable contribution to the discussions. I have personally gained in this process.

LCGupta

(L.C. GUPTA)

For private
circulation only

SEBI COMMITTEE ON DERIVATIVES

Draft Report - Part I

September [illegible], [illegible]

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APPENDIX - 2 (continued)

NSE, Nov.94-Jul.97

Percent Returns

	ACC	Maximum % Return	(NSE)	
YEAR	**1d Lag**	**2d Lag**	**3d Lag**	**4d Lag**
1994	1.83	2.20	3.73	3.09
1995	6.25	7.63	10.13	13.54
1996	7.00	11.07	14.93	15.64
1997	11.77	15.54	17.67	23.01
		Minimum % Return		
1994	-4.28	-5.07	-6.35	-6.55
1995	-5.43	-7.76	-10.16	-13.78
1996	-9.49	-13.51	-14.86	-18.04
1997	-10.00	-16.50	-17.24	-18.27

	ITC	Maximum % Return	(NSE)	
YEAR	**1d Lag**	**2d Lag**	**3d Lag**	**4d Lag**
1994	4.00	4.00	5.87	5.33
1995	9.15	10.64	11.45	12.78
1996	11.46	18.40	24.45	23.27
1997	9.67	14.02	18.49	25.46
		Minimum % Return		
1994	-5.54	-5.06	-5.30	-6.25
1995	-6.41	-8.27	-8.89	-9.66
1996	-7.00	-12.11	-14.94	-17.39
1997	-10.00	-12.11	-14.94	-17.39

	TISCO	Maximum % Return	(NSE)	
Year	1d Lag	2d Lag	3d Lag	4d Lag
1994	3.16	5.69	6.74	4.84
1995	8.57	8.72	11.72	14.34
1996	14.53	21.21	25.98	18.89
1997	8.52	11.29	12.19	14.73
		Minimum % Return		
1994	-9.82	-12.31	-14.78	-17.14
1995	-9.28	-12.82	-15.97	-14.74
1996	-11.13	-15.79	-16.38	-18.19
1997	-9.88	-11.68	-12.55	-15.04

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DERIVATIVES IN INDIA: A FRAMEWORK OF ECONOMIC PURPOSE

C O N T E N T S

DERIVATIVES IN INDIA: A FRAMEWORK OF ECONOMIC PURPOSE

I. Introduction

Appointment of the Committee

1.1 The Committee was appointed by the Securities and Exchange Board of India (SEBI) by a Board resolution dated November 18, 1996 in order "to develop appropriate regulatory framework for derivatives trading in India". While the Committee's focus is on equity derivatives, it has maintained a broad perspective of derivatives in general.

1.2 Before prescribing a regulatory framework for derivatives, the Committee feels that it is necessary to examine how the derivative fit into the framework of economic purpose. Clarity in this regard will go a long way in evolving a more intelligent regulatory frame. Since there exists widespread misgivings bordering on antipathy about derivatives even among the intelligentsia, the Committee decided to explore and explain their economic purposes in some detail in this report. Derivatives will not command respectability if public misunderstanding continues. That is why the Committee attaches considerable importance to the creation of wider understanding about how and what economic purposes can derivatives serve and what types of derivatives can be the most useful. These aspects are covered in this part of the Committee's report. The Committee's detailed proposals about regulations for

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derivatives will be presented separately. There is some advantage, by way of greater clarity, if the nitty-gritty of regulations is kept separate from the explanation of their fundamental underlying purpose.

1.3 SEBI's statutory responsibility covers both development and regulation of the capital market. As the Indian capital market cannot yet be called a developed one, much work in the developmental area, as distinct from regulatory area, will be needed. The developmental task involves visualising how the market's trading architecture or arrangement can be improved with a view to enhancing the economy's growth and efficiency. In a market economy, economic growth and welfare are greatly influenced by how markets work. If the market mechanism allocates resources inefficiently, the entire economy suffers, even though a few people may make huge gains out of market inefficiencies and may, therefore, not mind them or may even resist change. Market regulation, as distinguished from market development, is focused on ensuring the market's integrity, fairness in dealings and protection of investors (consumers). Concentrating entire attention on market regulation only may fail to bring about desired development.

Derivatives: important step
towards market development

1.4 The Committee envisages derivatives trading to be a significant developmental step with regard to the Indian capital market and would like that the structuring of the derivatives system should be guided by objective of accelerating the market's development and efficiency. In fact, the introduction of even one type of financial futures would constitute a landmark in India's over-all financial development as it would create incentives for further development in this direction. How futures trading will impact the market may not be clear to many people. For the above reason, the Committee has thought it necessary to clarify this aspect before taking up the framing of regulations.

Committee's main conclusions

1.5 The main conclusions, to which the Committee has arrived after full examination may be stated in a nutshell at the outset. The Committee is strongly of the view that there is urgent need for introducing equity derivatives in India from the viewpoint of market development because the Indian market lacks hedging facility against market risk to which equityholders are exposed. The hedging facility has become necessary for institutional equityholders, such as mutual funds and other investment institutions, which have been accumulating equity portfolios. Futures trading through derivatives may be appropriately phased, starting with stock index futures. Apart from protecting financial institutions, the introduction of stock index futures will enhance the efficiency and liquidi of the cash market in equities through arbitrage transactions. It will also create pressures for reforming the cash market. While the Committee clearly recognises the need also for currency and interest rate derivatives, decisions in this regard lie with the RBI.

1.6 The Committee feels that the cash market system in Indian equities would have to be purged of certain 'crucial weaknesses if it is to serve as a solid base for index futures. Some of these weaknesses have remained untouched so far. A full explanation will be given in later pages.

1.7 As there has been considerable controversy surrounding derivatives, the Committee has closely examined all aspects of the introduction of equity derivatives, including the nature and uses of the various derivative products, and the opinions of potential market participants (including hedgers and speculators). In the Committee's opinion, both the cash and the futures markets would undoubtedly have to be subjected to stricter discipline once the futures trading starts. The consequences of the lack of discipline can be disastrous because derivatives involve high leverage.

Derivatives misunderstood

1.8 The Committee noted that derivatives are a widely misunderstood term in India. A few well-publicised debacles involving derivatives trading in other countries had created widespread apprehensions in Indian public mind also. In the Committee's opinion, such apprehensions are due to ignorance and not at all warranted. A considerable body of advanced economic literature clearly recognises

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the efficiency-enhancing effect of derivatives on the economy in general and the financial markets in particular. Nevertheless, the Committee feels that there is need for educating the public opinion. This has been kept in view even while drafting the present report.

Derivatives concept

1.9 A derivative product, or simply "derivative", is to be sharply distinguished from the underlying cash asset, i.e. the asset bought/sold in the cash market on normal delivery terms. The word "derivative" indicates that it has no independent value, i.e. its value is entirely "derived" from the value of the cash asset.

Hedging technique

1.10 The main point is that derivatives are forward or futures contracts, i.e. contracts for delivery and payment on a specified future date. They are meant essentially to facilitate hedging of price risk of the cash asset. In the market's idiom, they are "risk management tools". Such usage of forward/futures contracts as hedging techniques is a well-established practice since long in commercial and industrial operations. Their application to financial transactions emerged only about 25 years ago.

1.11 The following example illustrates the hedging technique in general. The market price of raw material is often an important source of risk for a processor or manufacturer. For instance, a maker of gold jewellery may have accepted

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an export order to be delivered over the next three months. If, in the meanwhile, the price of gold (the raw material for jewellery) in the cash market rises, the jewellery maker's profit from his manufacturing and exporting activity can be wiped out. Such price risk can make jewellery making and exporting uneconomic. The availability of gold futures alleviates the manufacturer-exporter's problem. He can buy gold futures. Any loss caused by rise in price of gold to be purchased for the export order will then be offset by profit on the futures contract. Any extra profit due to fall in gold price will also be offset by loss on the futures contract. Thus, hedging is the equivalent of insurance facility against risk from market price variation. A world without hedging facility is like a world without insurance with respect to the particular kind of risk.

1.12 The manufacturer-exporter in the example given above could, of course, have bought all the raw material requirement in advance but that would have entailed heavy interest, insurance and storage costs. Thus, the facility of futures trading offers a cost-efficient and convenient way for hedging against price risk.

II. Financial Derivatives

Types

2.1 The Committee is mainly concerned with equity-based derivatives but it has tried to examine the need for

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derivatives in a broad perspective for creating a better understanding and showing inter-relationships. Broadly speaking, financial transactions and asset-liability positions are exposed to three kinds of price risk, viz:

(a) **exchange rate** risk (where the position involves a foreign currency, as in the case of imports, exports, foreign loans and investments).

(b) **interest rate** risk (as in the case of fixed-income securities, like treasury bond holdings whose market price could fall heavily if interest rates shot up), and

(c) **equities "market risk"**, also called "systematic risk", (which cannot be diversified away because the stock market as a whole may go up or down from time to time).

The above classification of price risks explains the emergence of (a) currency futures, (b) interest rate futures and (c) equity futures respectively. Equity futures have been the last to emerge.

Futures vs. Forward contracts

2.2 The Committee favours the introduction of "futures" wherever possible. As both forward contracts and futures contracts can be used for hedging, it is important to understand the distinction between the two and their relative merits. Forward contracts are private bilateral contracts. They are exposed to default risk by a counterparty. Each forward contract is unique in terms of

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contract size, expiration date and the asset type/quality. The contract price is not transparent as it is not publicly disclosed. Since the forward contract is not typically tradable, it has to be settled by delivery of the asset on the expiration date.

2.3 In contrast, futures contracts are tradable, standardised contracts. They are standardised in terms of size, expiration date and all other features. They are traded on specially designed exchanges. Hence, they are liquid and transparent. Their market prices and trading volumes are regularly reported. The futures trading system has effective safeguards against defaults in the form of Clearing House guarantees for trades and the daily cash adjustment (mark-to-market) to the accounts of trading members based on daily price change. Futures are far more cost-efficient than forward contracts for hedging.

Moves towards futures in India

2.4 Forward contracts are presently being used in India to provide forward cover against exchange rate risk. There are no "financial futures" in India at present. The Committee's recommendations, if accepted, will result in the establishment of the first financial futures market in India. Currency and interest rate futures, which the RBI is considering, may also arise alongside.

2.5 The feasibility of an effective futures market in any asset depends on certain pre-conditions, particularly the

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existence of a well-developed and active cash market. Even where a futures market exists, forward contracts are not ruled out and can continue to be used for small transactions or where a tailored contract is desired.

2.6 An interesting thing is that the dealers providing forward risk cover will need the futures market for hedging the risk which they have accepted.

Currency and interest rate derivatives

2.7 Since matters of foreign exchange and interest rates lie in the RBI's sphere, the decisions about introducing and regulating futures trading in currency and interest rates will have to be taken by the RBI rather than by SEBI.

2.8 There has been some debate as to whether our debt market is sufficiently developed for a successful launch of interest rate futures. The emerging view seems to be that, with de-regulation of interest rates, the debt market has started growing fast and that this growth will be assisted further by the introduction of debt futures as a result of arbitrage transactions between the futures and the cash markets. The RBI has already taken several steps during the last few years in order to activate the debt market.

2.9 The recent report of the RBI-appointed Committee on Capital Account Convertibility (Tarapore Committee) has expressed the view that "time is ripe for introduction of futures in currencies and interest rates to facilitate

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various users to have access to a wide spectrum of cost efficient hedge mechanism" (p.124). In the same context, the Tarapore Committee has also opined that 'a system of trading in futures ... is more transparent and cost-efficient than the existing system (of forward contracts)".

2.10 Even after a policy decision has been taken, the actual establishment of futures exchanges for any of the financial derivatives would require much detailed planning and effort.

2.11 The Committee recognises that the basic principles underlying the organisation and regulation of markets in all kinds of financial futures are the same and that the trading infrastructure may be common or separate, partially or wholly. Once learning has been acquired from the actual conduct of one kind of financial futures market, other kinds of financial futures are likely to follow soon.

SEBI-RBI coordination mechanism

2.12 The Committee feels that it would be desirable to establish a formal mechanism for coordination between SEBI and RBI in respect of financial derivatives markets because all financial markets are inter-related and some overlapping of jurisdictions can occur, for example, in respect of trading arrangement for bond futures.

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III. Equity Derivatives

Choices of derivative instruments

3.1 In regard to equity derivatives, the Committee considered both stock index derivatives and individual stocks derivatives. International experience shows the former to be far more popular than the latter. This appears to be potentially the case in India too.

Survey of potential participants

3.2 Through a questionnaire-based survey, among potential users of financial derivatives in India, such as mutual funds, other financial institutions, commercial banks, investment bankers, and stockbrokers, the Committee explored the likely nature of potential demand for equity derivatives of each kind. Interestingly, the survey findings placed index futures much higher than individual stock futures in terms of both priority and desirability (see Appendix 1). The order of over-all preference in India, according to the Committee's survey, is as follows:

I. Stock Index Futures

II. Stock Index Options

III. Individual stock options, and

IV. Individual stock futures.

The readiness to participate in both stock index futures and stock index options is also distinctly higher compared to individual stock options/futures (see Appendix 1, Q.No.3(a)).

Stock Index Futures: most preferred derivative

3.3 There are many reasons for strong preference shown for index futures not only in India but also in all countries. This is because of the advantages listed below :

(1) Institutional and other large equityholders think in terms of portfolio hedging mainly.

(2) Index futures are the most cost-efficient hedging device. Hedging through individual stock futures is costlier.

(3) Stock index cannot be easily manipulated whereas individual stock price is manipulated easily, more so in India. This is partly because an individual stock has a limited supply which can be cornered. Even large companies in India, like Reliance Industries Limited and State Bank of India, have complained about their share prices being manipulated by certain interested parties. The supply of stock index contracts is unlimited and rules out any possibility of cornering. Of course, manipulation of stock index can be attempted by influencing the cash prices of its component securities but the possibility of such manipulation is not high and is minimised by designing the index carefully.

(4) Stock index futures are more liquid and more popular than individual stock futures. The responses to the Committee's questionnaire points to the same.

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(5) Stock index, being an average, is much less volatile than individual stock price (see Appendix 2). This implies much lower capital adequacy and margin requirements in the case of index futures than in the case of individual stock futures. Since there has to be clearing house guarantee, the risk of the clearing house going bankrupt is extremely remote in case of index futures trading.

(6) Futures on individual stocks can be used as a vehicle for manipulating their prices in the cash market.

(7) In the case of individual stocks, the positions which remain outstanding on the expiration date have to be settled by physical delivery. This is an accepted principle everywhere. It is necessary for ensuring that futures and the cash market prices remain firmly tied to each other. In the case of index futures, physical delivery is impractical. Index futures are cash settled all over the world on the premise that the index value is derived independently from the cash market and can be safely accepted as the settlement price.

(8) Regulatory complexity is likely to be less in the case of stock index futures than for other kinds of equity derivatives.

3.4 While recognising the great merit of stock index futures, the Committee is of the view that since the Indian cash market in equities is not a purely delivery-based cash market but a mixture of cash and forward trading, this affects the validity of the cash market as a basis for a futures market and may compound the existing problems unless the cash market is reformed, as explained later in this report. The cash market often behaves erratically for the above reason. In developed markets, much attempt has been made to enhance the influence of fundamental factors by providing plethora of economic information on demand, supply, etc., relating to the particular commodity or asset.

3.5 The important question is how to ensure that fundamental factors adequately enter into the price discovery process in the cash market and, through it, in the futures market. The stock price index alone will not be able to tell whether the stock market's over-all price level is unreasonably high or low. This can be known only by relating stock prices to earnings (i.e. by price-earnings ratio). For this reason, the Committee feels that the average P/E ratio of the companies comprising the stock index can provide a useful indication.

3.6 The Committee, therefore, recommends that for the stock index used for futures trading, there must be a requirement that average P/E ratio of the index should be made available on daily basis as essential market information.

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Strategic uses of index futures by institutions

3.7 It was represented to the Committee by mutual funds and other financial institutions that they were handicapped in their investment strategy because of the non availability of portfolio hedging facility in India. They need derivatives not for generating speculative profits but for strategic purposes of controlling risk or restructuring portfolios. Given below are some practical examples from a presentation made before the Committee by some institutional representatives:

(i) **Reducing the equity exposure in a mutual fund scheme:** Suppose that the UTI decides to reduce its equity exposure in the US-64 Scheme from, say, 40% to 30% of the corpus. Presently, this can be achieved only by actual selling of equityholdings. Such selling entails three problems: first, it is likely to depress equity prices to the disadvantage of the UTI and the whole market; second, it cannot be achieved speedily and may take some months, and third, it is a costly procedure because of brokerage, etc. The same objective can be achieved through index futures at once, at much less cost and without disturbing the cash market. The UTI may immediately sell index futures, thus leaving the cash market undisturbed. The actual sale of equityholdings may be done gradually depending on market conditions in order to realise the best possible prices. As unloading of holdings progresses, the index futures transaction may be unwound by an opposite transaction to the same extent.

ii) **Investing the funds raised by new schemes:** When a new scheme is floated, the money raised does not get fully invested for considerable time. Suitable securities at reasonable prices may not be immediately available in sufficient quantity. Rushing to invest the whole money is likely to drive up prices to the disadvantage of the scheme. Timing is important in the case of equity schemes. If the scheme is launched to take advantage of low equity prices, such advantage may be lost due to delay in acquiring suitable securities as the market situation may change. The availability of stock index futures can take care of this entire problem.

(iii) **Partial liquidation of portfolio in case of open-ended fund:** In the case of an open-ended scheme, repurchases may sometimes necessitate liquidation of a part of the portfolio but there are problems in executing such liquidation. Selling each holding in proportion to its weight in the portfolio is often impracticable. Some of the holdings may be relatively illiquid. Rushing to the cash market to liquidate would drive down prices. The price actually realised may be different from the price used in NAV computation for repurchase. The timing of liquidation may not be right because of market depression. Stock Index Futures can help to overcome these problems to the advantage of unitholders.

(iv) **Preserving the value of portfolio during times of market stress:** There are times when the main worry is the possibility that the value of the entire equity portfolio may fall substantially if, say, event "X" occurs. Sale of Stock Index Futures can be used to insure against the risk. Such insurance is specially important if the accounts closing date is nearby because the yearly results will get affected if the risk materialises. Stock index futures can neutralise such risk.

(v) **International investors:** The buying and selling operations of FIIs presently cause disproportionate price-effect on the Indian equities market because all transactions are through the cash market only. This is an important factor making the Indian equities market highly volatile from day to day. The FIIs' buying/selling is aimed at either increasing or reducing their exposure to the Indian equities market. In other words, what the FIIs buy/sell is a "piece" of the whole Indian equities market. If stock index futures are available, this can be carried out with greater speed and less cost and without adding to market volatility. The FII flows show sudden changes from time to time. While trying to maximise the net inflow of FII portfolio investment, its disturbing effects on the cash market for Indian equities will be minimised by making available stock index futures. The availability of such a hedging device is likely to increase the international investors' appetite for

Indian equities.

3.8 Mutual funds in India are presently restrained by the regulations from using derivatives even for hedging purposes. The regulations need to be changed appropriately. While prohibition on the use of derivatives by mutual funds should be withdrawn, the Committee feels that it is necessary to ensure that derivatives are not used by mutual funds purely for speculation. The Trustees of each mutual fund should be required to lay down a formal policy and detailed rules about what, how and within what limits, derivative products may be used for purposes of any scheme and the authorisation procedure. In the case of mutual funds, the use of derivatives should be for risk reduction or for strategic portfolio restructuring. Of course, there have to be disclosure requirements in the offer document of the scheme concerned.

Beneficial effects of futures on cash market

3.9 The Committee is also of the view that arbitrage transactions between the index futures market and the cash market for equities is likely to have a beneficial effect on the functioning of the cash market. The futures market is supposed to lead the way for price discovery (real value) for the cash market. This pre-supposes that the futures market and the cash market are separate from each

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other and have a predictable price relationship which is based on fundamental factors.

Phasing needed

3.10 The Committee believes that equity derivatives to be introduced in India should be left to the market forces under over-all general supervision of SEBI. It is likely to be an evolutionary process, as has been the case in other countries. The Committee would like to suggest that stock index futures would be the best starting point for derivatives in India. Since there is so little understanding in India about derivatives, it is important to proceed in a phased manner with caution. That is why the Committee has done considerable exploration into many related issues concerning derivatives market so as to be able to provide helpful guidance both to market players and to the policymaking and regulatory authorities.

3.11 As local players acquire familiarity with the system of derivatives and as they develop sufficient capabilities and experience to participate effectively in the derivatives market, more kinds of derivative products may be introduced. This will take care of the fear, expressed by some members during discussions, that the Indian derivatives market may become dominated by foreign players. Experience of other countries shows that as the derivatives markets grew, the design and variations of derivative products became ever more complex. In any case, it has to be gradual process, taking into account our situation and needs.

Hedgers vs. speculators

3.12 Hedging is the key aspect of derivatives. The U.S. Commodity Futures Trading Commission (CFTC), the futures regulatory authority, while considering proposals for approval of a new derivative product, particularly examines the ability of the product to provide hedging. While the Committee has also emphasized the hedging aspect of derivatives, it fully recognises that the derivatives market's capacity to absorb buying/selling by hedgers is directly dependent on the availability of speculators to act as counter-parties to hedgers. Hedging will not be possible if there are no speculators.

3.13 Hence, for the above reason, decisions about many aspects of derivatives trading, e.g., contract size, design and duration, should attempt to strike a balance between the needs of the commercial hedgers and the need to attract an adequate number of well-capitalised speculators who are prepared to take upon themselves the price risk which hedgers want to give up. The truth is that a futures market, to be effective, should have both hedging participation and speculative appeal. Several research studies of futures markets in the U.S. have shown that hedging activity roughly accounts for about 50-60 per cent of the market's total volume.

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IV. Cash Market Strengthening: Crucial Pre-requisite

4.1 The Committee agrees with the universal proposition that a pre-requisite of an effective futures market is the existence of a strong cash market. After all, derivatives, whether related to commodities or financial assets, derive their value from the cash asset. Introduction of futures trading should be preceded by a review of the cash market's working to determine any particular weaknesses which may affect the effectiveness of the futures market.

4.2 In order that fundamental factors are able to exert their full influence on price formation, the cash market should be a true cash market, i.e. delivery-based. A cash market without deliveries is not a true cash market.

4.3 The constant feed-back between the cash market and the futures market through arbitrage can be expected to keep the two in alignment with each other and to ensure that prices in both markets remain tied to underlying fundamental factors.

Cash market weakness

4.4 The Committee would like to draw attention to the the need for removing the following weaknesses of the Indian equities market in order to provide a solid foundation for a futures market.

(a) Mixing of cash and forward transactions

(i) Traditionally, the Indian equities mar ket has been a queer mixture of cash and futures market, in which cash transactions involving delivery (all institutional transactions are of this kind) and futures transactions with no intention of delivery, are conducted simultaneously without being distinguished. In fact, the dominant transactions are the non-delivery transactions (which are the equivalent of futures/forward transactions). In the most active scrips, deliveries are just around 5 per cent of the trading volume; in many others, around 20-30 per per cent. The market community in India is used to this traditional system for so long that it is unable to recognise its illogic and adverse effect on the market's economic efficiency.

(ii) A mixed cash-cum-carry forward system is not a very sound basis for creating a futures market because (a) the carry forward system has no transparency, (b) the influence of fundamental factors is greatly weakened due to dominance of short term speculation and (c) creating a futures market on such a basis may have the effect of compounding the existing weaknesses. In fact, studies have shown Indian equity market's behaviour to be bordering on bizarre or diverging from fundamentals and highly volatile. This is the result of mixing of cash and forward trades.

(iii) All over the world, re-engineering of stock markets has aimed at clearer separation between cash and futures markets, instead of mixing them. Separation promotes the market's economic efficiency. This has led to the adoption of the rolling settlement system because such a system ensures that cash markets will function as genuine cash markets. The system, of course, permits borrowing and lending of securities, but no carry forward. Not even futures markets permit carry forward from one settlement to another in the way practised in India.

(iv) The traditional Indian trading system in stock exchanges was originally patterned on the lines of the U.K. system. The U.K. has shifted to rolling settlement recently. However, even earlier, its fortnightly settlement system always emphasized settlement by delivery, unlike in India. It is true that the London Stock Exchange (LSE) had contangos (equivalent to carry forward trades) but according to information provided by LSE authorities, contangos were negligible. Also, according to the same source, the "squaring up" or "closing" business (i.e. offsetting of buying and selling transactions within the same settlement) in London accounted for only about 5% of customer business whereas the bulk of Indian trading is of squaring up kind.

(b) **Differences in trading cycles among stock exchanges**

(i) If all stock exchanges were on rolling settlement system, it would not have been a problem. Indian stock exchanges now mostly have a weekly trading cycle but the cycles are not uniform. For example, the weekly trading cycle on the NSE is from Wednesday to Tuesday and on the BSE from Monday to Friday. Because of the difference in trading cycles, brokers having membership of both the exchanges can go on circulating their trades continuously from one exchange to the other without ever having to deliver. Speculating clients can do likewise by engaging one broker from NSE and another from BSE. Such circular trading is a complete travesty of the cash market and an abuse of the market system, made possible simply by deliberately keeping the trading cycles different. It has been encouraged by low brokerage [as low as (0.02-0.05 per cent)] on such non-delivery trades.

(ii) It appears that stock exchange members have acquired a vested interest in keeping trading cycles different in order to deliberately generate arbitrage opportunity. As the expiration dates for trading cycles differ by a few day between exchanges, prices for the same securities on two exchanges tend to differ often by 0.5-1.5 per cent. The price difference on the expiration day of trading cycles is larger than on other day. The Committee feels that keeping trading cycles different among stock exchanges is serving only the interests of speculators and not that of genuine investors nor of market development. As explained above, the differences in trading cycles spoils the character of the cash market.

(iii) Stocks included in the well-known stock indices are traded on both NSE and BSE. If prices on these two exchanges are not the same, it creates a tricky situation as the value of the same index, if computed separately from NSE and BSE prices, may not be the same. The question is: which value should the futures market track?

(iv) The Committee suggests that serious consideration should be given to implement a uniform trading cycle among all exchanges till such time as the rolling settlement can be adopted in India. This will be an important step towards achieving a coordinated but pro-competitive nationwide market. It would greatly benefit genuine investors and enhance market liquidity. It would also eliminate circular trading which has become a rampant evil. This reform is being recommended so that the cash market can provide a sound and reliable basis for creating a futures market.

(c) Weakness of stock exchange administrative/monitoring machinery

The Committee members are emphatic that derivatives trading would require much more stringent monitoring and much higher standard of discipline than what the tradition has been in Indian stock exchanges. Much has been done by SEBI to improve matters in this respect. Much more still remains to be done, specially in the direction of ensuring that the enforcement machinery within stock exchange is independent from control of trading members. The position of the Executive Directors of stock exchange vis-a-vis the elected members of the Board of Directors of stock exchanges also needs to be further strengthened.

(d) Depository system inadequacy

The Committee has considered whether all the securities composing a stock index, used for index futures, should necessarily be in depository mode. It is recognised that while index-based derivatives trading does not itself involve deliveries, it gives rise to arbitrage transactions between the index derivatives market and the cash market. Settlement problems of the cash market have the effect of impairing and weakening the arbitrage process by making it risky and costly. As mentioned earlier, the arbitrage mechanism keeps the two markets in alignment. For this reason, it is highly desirable to have all the scrips of the particular index in the depository mode. However, it is felt that this need not be insisted upon as a prior condition in order to avoid delay in the introduction of derivatives trading. What is needed is acceleration of the progress of the depository system which has already been put into place. Of course, trading futures and options on individual scrips should be allowed only if the scrips in question are in the depository mode.

V. Some Final Comments

5.1 The Committee has no doubt that the introduction of financial derivatives in the form of traded futures, including equity futures, currency futures and interest rate futures, would be a giant step towards the further development of the Indian financial markets by providing cost-efficient risk-hedging facilities not available at present. The Committee has recommended above that immediate steps be taken in this regard.

5.2 On the basis of its survey, the Committee is convinced that there exists considerable interest among local players (both hedgers and speculators) in all the three main types of derivatives, the maximum interest being in stock index futures.

5.3 While starting stock index futures, certain crucial weaknesses in the equities cash market, arising from mixing of cash and forward trades, should be set right in order that it is validly a cash market and can be relied upon to provide a sound foundation for futures trading. If the weaknesses are not removed, the danger is that they may get compounded as a result of the futures trading. If the weaknesses are removed, the arbitrage operations between the cash and the futures market will help to enhance the efficiency of both by keeping them tied together and also to the fundamentals.

5.4 It is not being suggested that the introduction of futures should necessarily wait till all the weaknesses are completely removed. This would be unrealistic because perfection may really never be attained. A more practical approach is to draw up a programme of improvements which can go on simultaneously with phased introduction of futures. A reasonable time can be allowed for the removal of the weaknesses but ignoring them would be dangerous over the long term.

5.5 In this part of the report, the Committee has presented its over-all view of economic role of derivatives in general and equity derivatives in particular with regard to their potential contribution to the market's further development through the provision of cost-efficient hedging facility, specially for the benefit of institutional equityholders. The second part of the report will present the Committee's recommendations with regard to the regulatory framework for derivatives.

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Appendix -1

SEBI COMMITTEE ON REGULATION OF DERIVATIVES

TOTAL QUESTIONNAIRES 112

(For questions where the respondent left a particular alternative blank is considered as a negative response)

Q. No.	Question	No. of people who responded out of total questionnaires	People in agreement out of total questionnaires	
			Number	%
1a.	Which risks are of most concern in your operations?			
i)	Systematic risk	96	96	85.71
ii)	Interest rate risk	36	35	32.25
iii)	Exchange rate risk	29	27	24.11
iv)	Default risk	71	71	63.39
v)	Asset-liability mismatch	24	23	20.54
vi)	Any other	12	11	9.82
1c.	Are you handicapped because index based futures and options are not available in India?	100	85	75.89
2a.	Is there a need for having			
i)	Stock Index Futures	105	98	87.5
ii)	Stock Index Options	102	92	82.14
iii)	Futures on Individual Stocks	96	71	63.39
iv)	Options on Individual Stocks	103	90	80.36
v)	Interest rate futures	88	68	60.71
vi)	Currency futures	86	67	59.82
2b.	Which of the above do you favour most?			
i)	Stock Index Futures	74	73	65.18
ii)	Stock Index Options	45	45	40.18
iii)	Futures on Individual Stocks	24	22	19.64
iv)	Options on Individual Stocks	33	32	28.57
v)	Interest rate futures	21	21	18.75
vi)	Currency futures	14	14	12.5
3a.	In which of the following would you like to participate?			
i)	Stock Index Futures	94	92	82.14
ii)	Stock Index Options	86	82	73.21
iii)	Futures on Individual Stocks	67	61	54.46
iv)	Options on Individual Stocks	82	78	69.64
v)	Interest rate futures	52	43	38.39
vi)	Currency futures	46	37	33.04

Q. No.	Question	No. of people who responded out of total questionnaires	People in agreement out of total questionnaires	
			Number	%
3b.	Which of the derivative products mentioned above should be introduced first?			
i)	Stock Index Futures	73	73	65.18
ii)	Stock Index Options	44	44	39.29
iii)	Futures on Individual Stocks	14	14	12.5
iv)	Options on Individual Stocks	15	15	13.39
v)	Interest rate futures	13	13	11.61
vi)	Currency futures	7	7	6.25
4a.	In the case of the first four products, mentioned in the previous question will you like to participate as:			
i)	hedger	80	78	69.64
ii)	dealers/speculator	49	44	39.29
iii)	broker	75	72	64.29
iv)	option writer	45	40	35.71
v)	any other (please specify)	8	6	5.36
4c.	Which derivative product is likely to be most popular in India?			
i)	Stock Index Futures	63	63	56.25
ii)	Stock Index Options	40	40	35.71
iii)	Futures on Individual Stocks	23	23	20.54
iv)	Options on Individual Stocks	38	38	33.93
v)	Interest rate futures	8	8	7.14
vi)	Currency futures	7	7	6.25
5a.	Which derivative product are needed in India for improving stock market efficiency?			
i)	Stock Index Futures	66	66	58.93
ii)	Stock Index Options	47	47	41.96
iii)	Futures on Individual Stocks	35	35	31.25
iv)	Options on Individual Stocks	36	36	32.14
v)	Interest rate futures	6	6	5.36
vi)	Currency futures	2	2	1.79
6a.	Do you expect that the trading in Stock Index Futures and Options in India will:			
i)	Grow very fast	37	37	33.03
ii)	Grow moderately	46	46	41.07
iii)	Grow Slowly	18	18	16.07

Q. No.	Question	No. of people who responded out of total questionnaires	People in agreement out of total questionnaires	
			Number	%
iv)	Not grow much	2	2	1.79
v)	Can't say anything	2	2	1.79
11.	What contract maturity periods would interest you for trading in:			
i)	Stock Index Futures and Options			
	3 mnths	94	93	83.04
	6 mnths	71	70	62.5
	9 mnths	38	37	33.04
	12 mnths	36	35	31.25
ii)	Futures and Options on individual stocks			
	3 mnths	89	88	78.57
	6 mnths	61	60	53.57
	9 mnths	28	27	24.11
	12 mnths	32	31	27.68
12.	In case of Options do you favour:			
i)	American	80	79	70.54
ii)	European	36	30	26.79

	NIFTY	Maximum % Return	(NSE)	
YEAR	1d Lag	2d Lag	3d Lag	4d Lag
1994	1.98	3.20	3.63	3.26
1995	4.16	7.68	6.93	8.29
1996	5.61	10.84	11.59	11.40
1997	6.12	11.10	13.84	14.33
		Minimum % Return		
1994	-2.41	-3.85	-4.26	-5.52
1995	-3.91	-5.92	-7.21	-7.48
1996	-3.40	-5.51	-6.65	-7.41
1997	-8.46	-8.58	-8.51	-8.77

	SBI (New)	Maximum % Return	(NSE)	
YEAR	1d Lag	2d Lag	3d Lag	4d Lag
1994	5.58	8.53	12.45	15.60
1995	7.60	10.50	12.67	17.17
1996	7.07	13.64	19.28	20.30
1997	16.01	13.79	17.10	20.39
		Minimum % Return		
1994	-3.20	-5.48	-5.59	-6.76
1995	-8.25	-14.30	-14.83	-14.48
1996	-5.86	-9.58	-12.83	-15.31
1997	-9.97	-15.47	-15.60	-17.36

	RELIANCE	Maximum % Return	(NSE)	
YEAR	1d Lag	2d Lag	3d Lag	4d Lag
1994	3.68	7.27	7.19	4.63
1995	10.74	14.65	15.70	16.97
1996	20.77	27.48	29.75	36.01
1997	13.85	12.67	16.47	19.49
		Minimum % Return		
1994	-4.41	-8.33	-7.83	-9.15
1995	-10.97	-14.35	-15.40	-14.60
1996	-9.74	-13.80	-13.76	-13.38
1997	-10.97	-14.35	-15.40	-14.60

APPENDIX C:

DERIVATIVES COMMITTEE REPORT - PART II

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भारतीय प्रतिभूति
और विनिमय बोर्ड

Securities and Exchange Board of India

DIVISION CHIEF
SECONDARY MARKET DEPARTMENT

Inward Mail
Date:- 10/18 Grubb
Name:- D.G

SMD/POLICY/DT/4543/97
October 17, 1997.

Shri. W. Dennis Grubb.
Price Waterhouse LLP.
128, T.V. Industrial Estate,
Worli, Bombay 400 025.

Dear Shri. Grubb,

This is in continuation of our previous letter No.: SMD/POLICY/DT/4365/97 dated October 08, 1997. Please find enclosed the Draft of the Dr. L.C. Gupta Committee Report - Part II (Regulatory Framework). You may like to forward your written comments for circulation in the next meeting of the Committee which is scheduled to be held at 10:00 a.m. on Friday, October 24, 1997, at SEBI, Mittal Court, Nariman Point, Mumbai.

WDG / HATHAWAY / GORHAM / Grubb to ATTEND.

Yours sincerely,

N Parakh

N. PARAKH.

<u>Draft only</u>

SEBI COMMITTEE ON DERIVATIVES

Draft Report - Part II
(Regulatory Framework)

September 1997

REGULATORY FRAMEWORK FOR DERIVATIVES TRADING

CONTENTS

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REGULATORY FRAMEWORK FOR DERIVATIVES TRADING

I. Guiding Objectives

1.1 Part I of this report brought out that derivatives have a wide array of uses in commercial, industrial and financial businesses for the purpose of hedging against unwanted price risk. As such, they serve an important economic purpose. It was shown that there is, in fact, a clearly felt need for such hedging instruments.

1.2 At the same time, the Committee has noted that there are dangers to be guarded against, specially because derivatives inherently involve high leverage. For this reason, there is need for creating a strong regulatory framework, in addition to the cash market regulation.

1.3 While designing the regulatory framework for derivatives trading, the Committee has kept in view the objectives which the regulatory system for financial markets should clearly subserve. The objectives provide useful guidance for designing the regulatory framework.

Regulatory objectives specified

1.4 The Committee considers the following regulatory objectives as particularly important :

(a) **Fairness:** The trading rules should ensure that trading is conducted in a fair and transparent manner. In this context, sales practices adopted by dealers for derivatives would require specific regulation. Most of the widely reported mishaps in the derivatives market have taken place because of inadequate internal control system at the user-firm itself. The overall exposure has not been controlled and the use of derivatives has

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been more for speculation than for risk hedging. In some cases, derivatives brokers/dealers also failed to disclose potential risk to the clients.

(b) **Market integrity:** The trading system should ensure that the market's integrity is safeguarded by minimising the possibility of defaults. This requires framing appropriate rules about capital adequacy, margins, clearing corporation, etc.

(c) **Safeguard for clients' moneys:** Moneys and securities deposited by clients with the trading members should be kept in separate client's account. Financial integrity of system.

(d) **Competent and honest service:** The eligibility criteria for trading members should be designed to keep out incompetent elements so that investors/clients can be served well. This makes it necessary to prescribe qualification for derivatives brokers/dealers or the person appointed by them in terms of a knowledge base.

(e) **Quality of markets:** The concept of "Quality of Markets" goes well beyond market integrity and aims at enhancing important market qualities, such as cost-efficiency, liquidity and price-discovery. This is a much broader objective than market integrity.

(f) **Innovation:** While curbing any undesirable tendencies, the regulatory framework should not stifle innovations which further economic progress.

1.5 The Committee has set out the objectives in order to provide a clear direction for formulating regulations. The meaning and purpose of each regulatory provision can be understood better in the light of the objectives which can be regarded also as the touchstone for testing the adequacy/inadequacy of the regulatory framework.

1.6 In the Committee's view, as elaborated later in this report, the sharing of regulatory responsibility between the exchange conducting derivatives trading on the one hand and SEBI on the other, has to be designed specially to maximise regulatory effectiveness and to minimise regulatory costs.

Major issues concerning regulatory framework

1.7 The Committee's attention had been drawn to several important issues in connection with derivatives trading. The Committee has considered such issues, some of which have a direct bearing on the design of the regulatory framework. They are listed below :

(a) Should a derivatives exchange be organised as independent and separate from an existing stock exchange?

(b) What exactly should be the division of regulatory responsibility, including both framing and enforcing the regulations, between SEBI and the derivatives exchange?

(c) How should we ensure that the derivatives exchange will effectively fulfill its regulatory responsibility.

(d) What criteria should SEBI adopt for granting permission for derivatives trading to an exchange?

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(e) What conditions should the clearing mechanism for derivatives trading satisfy in view of high leverage involved?

(f) What new regulations or changes in existing regulations will have to be introduced by SEBI for derivatives trading?

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II. Should Derivatives Trading be Conducted in a Separate Exchange?

2.1 A major issue raised before the Committee for its decision was whether regulations should mandate the creation of a separate exchange for derivatives trading, or allow an existing stock exchange to conduct such trading. The Committee has examined various aspects of the problem. It has also reviewed the position prevailing in other countries. Exchange-traded financial derivatives originated in USA and were subsequently introduced in many other countries. Organisational and regulatory arrangements are not the same in all countries. Interestingly, in U.S A., for reasons of history and regulatory structure, futures trading in financial instruments, including currency, bonds and equities, was started in early 1970s, under the auspices of commodity futures markets rather than under securities exchanges where the underlying bonds and equities were being traded. This may have happened partly because currency futures, which had nothing to do with securities markets, were the first to emerge among financial derivatives in U.S.A. and partly because derivatives were not "securities" under U.S. laws. Cash trading in securities was under the Securities and Exchange Commission (SEC) while derivatives or futures trading was under the Commodities Futures Trading Commission (CFTC). In other countries, the arrangements have varied.

Arguments for allowing <u>existing stock exchanges</u> to start futures trading:

The Committee has examined the relative merits of allowing derivatives trading to be conducted by an existing stock exchange vis-a-vis a separate exchange for derivatives. The arguments for each are summarised below.

(a) The most weighty argument in this regard is the advantage of synergies arising from the pooling of costs of expensive information technology networks and the sharing of expertise required for running a modern exchange. Setting-up a separate derivatives exchange will involve high costs and require more time.

(b) The recent trend in other countries seems to be towards bringing futures and cash trading under coordinated supervision. The lack of coordination was recognised as an important problem in U.S.A. in the aftermath of the October 1987 market crash. Exchange-level supervisory coordination between futures and cash markets is greatly facilitated if both are parts of the same exchange

Arguments for setting-up separate futures exchange:

(a) The trading rules and entry requirements for futures trading would have to be different from those for cash trading, which may lead to conflict of interest.

(b) The possibility of collusion among traders for market manipulation is greater if cash and futures trading are conducted in the same exchange.

(c) A separate exchange will start with a clean slate and would not have to restrict the entry to the existing members only but the entry will be thrown open to all potential eligible players.

X **From the regulatory angle, a separate exchange for futures trading seems to be a neater arrangement.**

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Recommendation of the Committee :

2.5 Taking into account all aspects, the Committee recommends as follows : Considering the constraints in infrastructure facilities, a separate exchange for futures trading need not be insisted upon. The balance of advantage in the present Indian situation lies in favour of allowing one or more existing stock exchanges to start futures trading provided they fulfill the following conditions :

1. The trading should take place through an online screen-based trading system, which also has a disaster recovery site. The per-half-hour capacity of the computers and the network should be atleast double of the peak load seen in any half-hour of the preceding six months.

too low

2. The clearing of the derivatives market should be done by an independent clearing corporation, which satisfies the conditions listed ahead.
3. The exchange must have a online surveillance capability which monitors positions, prices and volumes in realtime so as to deter market manipulation. Price and position limits should be used for improving market quality.
4. Information about trades, quantities, and quotes should be disseminated by the exchange in realtime over atleast two information vending networks which are accessible to investors in the country.
5. Prior to trading index derivatives, the exchange should ensure that trading members have the capability to do program trading.

By Laws - Approved by SEBI

III. Division of Regulatory Responsibility

Two levels of regulation

3.1 The task entrusted to the Committee is to develop the "regulatory framework for derivatives trading". Such regulatory framework really comprises two distinct levels, viz.(1) a derivatives exchange's own operational rules and regulations and (2) SEBI rules and regulations with which the exchange and its members must comply. The Committee feels that **since SEBI rules and regulations regarding stock exchanges and brokers/dealers are of general and over-riding nature, they could be reviewed and designed to be applicable equally to derivatives exchanges also.**

Exchange-level regulation.

3.2 A crucial pre-condition for the success of derivatives trading is that the derivatives exchange should be capable of acting as an effective self-regulator on its own. In the Committee's opinion, the **derivatives exchange, being in day to day touch with the market, will be in a much better position than SEBI to spot a problem and take prompt corrective action, whereas SEBI will first have to enquire, collect all the facts and go through a certain statutory procedure before acting. This consideration has led the Committee to emphasize that a derivatives exchange should be designed, right from the start, as a competent and effective self-regulating organisation** in every possible way. Since this depends much on the governance structure, the Committee recommends that SEBI should lay down separate rules about the composition of the Governing Board of a Derivatives Exchange (or Derivatives Division of an exchange). ~~**In general, the Committee**~~ **is of the view that the trading**

SRO

~~**interests should not dominate the Governing Boards of the Derivatives Exchange or the Derivatives Division of an Exchange.**~~ Need expression on Board

3.3 **Most of the new regulations required for derivatives trading are exchange-level regulations. Such regulations have necessarily to be very detailed and highly technical.** It will require the formulation of detailed rules, regulations and bye-laws and the creation of a really effective monitoring and enforcement mechanism, covering all aspects of the exchange's operation. The exchange-level regulations ~~include entry~~ requirements for derivatives traders/members, ~~design of derivatives~~ contracts, broker-client relationship including sales procedures and ~~risk disclosure to~~ clients, trading and reporting procedures, margining, ~~clearing, settlement~~ and dispute resolution. In the Committee's opinion, a derivatives exchange must necessarily be consciously designed to play the role of effective self-regulator. This is so important that if there is any doubt in the exchange's ability in this regard, it is better not to allow it to conduct derivatives trading. The role of SEBI will be to provide over-all supervision and guidance to the exchange and to act as the regulator of last resort.

3.4 The Committee is of the view that **all the above regulations have to be much stricter for derivatives trading than the existing regulations for cash trading. As such, the regulations will have to be newly designed rather than copied from the existing stock exchange rules and regulations.** Another demanding requirement is that derivatives trading, clearing, settlement, margining, reporting and monitoring, all involve the application of most modern on-line screen-based systems which should be designed to be both fool-proof and fail-proof.

3.5 **The Committee also feels that every derivative trader/member (not just 10 per cent of them) should be inspected by the derivative exchange**

Quality

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annually, both to provide guidance in the initial years and to check compliance. This is particularly important at the initial stage of derivatives trading. The derivative exchange should be required to have a strong inspection department. Its staff should be given specialised training for the purpose. As regards the division of regulatory responsibility, the Committee recommends that the following conditions should be satisfied :

1. The derivatives market should be controlled by a governing council ~~which will not have representation~~ of ~~trading/clearing members beyond 40%~~
2. The exchange should have arbitration and investor grievances redressal mechanism operative from atleast the four major metros.
3. The exchange should have an adequate inspection capability.
4. If derivatives trading is to take place at an existing cash market, it should be done in a distinct segment with a distinct membership; i.e., all members of the existing cash market would not automatically become members of the derivatives market.

SEBI

3.6 SEBI's Regulatory Responsibility

3.6.1 SEBI should vet the derivatives exchange's rules, regulations, bye-laws, and of the proposed derivative contracts before allowing derivatives trading to start. Any change in the rules, regulations, bye-laws of the Derivative Exchange would need prior approval of SEBI.

How. Very important to give public confidence - regulator can do!

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The Committee feels that **SEBI need not be involved in framing exchange-level rules but it should certainly have the competence to be able to evaluate them, identify deficiencies and suggest improvements.** Its regulatory staff should have a thorough understanding of the theory and practice of financial derivatives so that it can provide guidance and can evaluate various kinds of derivative products. SEBI's overseeing function cannot be delegated. SEBI will have to acquire the necessary expertise by training its own people and recruiting some specialised personnel. SEBI will function as an overseeing authority. It would have to be closely involved in guiding this new and complex development along right lines. It would have to ensure a successful launch of futures trading in India by providing appropriate guidance and over-all supervision of the process. Such success will be beneficial for the country's economy and will bring credit to SEBI. **SEBI's obligation to oversee the functioning of derivatives exchange is bound to be a demanding task in terms of new knowledge and understanding required by its staff.**

3.6.2 Derivative Contract review process: The Committee suggests that before starting trading in a new derivatives product, the derivatives exchange should submit the proposal for SEBI's approval, giving (a) full details of the proposed derivatives contract to be traded (b) the economic purposes it is intended to serve (c) its likely contribution to the market's development and (d) the safeguards incorporated to ensure protection of investors/clients and fair trading. SEBI officers should be in a position to provide effective supervision and constructive guidance in this regard. According to the information provided to the Committee by courtesy of Price Waterhouse LLP under USAID's FIRE Project, more than 90 per cent of jurisdictions with established derivatives markets use a contract review procedure as a threshold test to permit a new derivatives contract to trade on an authorised derivative exchange. Various jurisdictions use different phrases to describe the outcome of a positive review; e.g., the contract is *recognized, designated or authorized,* etc., to trade on a certain exchange. In many jurisdictions this careful selection of phrasing reflects a legal concern about providing any trading instrument with a government imprimatur or guarantee and the concomitant liability.

SEBI Derivative Cell, Advisory Council and Economic Research Wing

3.7 In view of what has been said above, the Committee recommends the following steps to be taken by SEBI :

a) SEBI should immediately create a special **Derivatives Cell** because derivatives demand special knowledge. It should encourage its staff members to undergo training in derivatives and also recruit some specialised personnel.

b) A **Derivatives Advisory Council** may also be created to tap the outside expertise for independent advice on many problems which are bound to arise from time to time in regard to derivatives.

c) From the policy and regulatory angles, the economic aspects of derivatives trading is very important. SEBI should urgently consider the creation of an **Economic Research Wing** which will be useful to SEBI in many ways. Economic questions arise even with regard to capital market systems and development. SEBI, as the country's capital market authority, should be regularly bringing out relevant data. The Research Wing could also undertake specific studies.

Conclusion

The division of regulatory responsibility at two levels as suggested above by the Committee, is aimed at securing the triple advantages of (a) permitting desirable flexibility, (b) maximising regulatory effectiveness and (c) minimising regulatory cost.

IV. Clearing Corporation

4.1 In the Committee's view, the clearing mechanism should be organised as a separate and independent entity, preferably in the form of a Clearing Corporation. The clearing mechanism is the centre-piece of a derivatives market, both for implementing the margin system and for providing trade guarantee. Clearing Corporation becomes the legal counterparty to each trade executed on a derivatives exchange. Hence, if one party to a trade defaults, then the other party is not adversely affected. The Clearing Corporation needs to absorb any loss arising on account of default by one party. This would protect the reputation of the exchange and would minimise the default risk of the trading member as the risk of insolvency of an individual party will be replaced by the risk of insolvency of the Clearing Corporation. The credibility of the Clearing Corporation therefore will have to be assured.

4.2 The Clearing Corporation will collect initial (i.e. upfront) margin linked with the exposure limits of the broker/dealer. The Clearing Corporation will enforce the 'mark-to-market margin' system. In case of failure of a clearing / trading member, the Clearing Corporation should have recourse to unable the Clearing / trading member to stop further increase in his exposure.

4.3 The upfront margin should be set taking into account the volatility of the underlying market. For fixing capital adequacy requirement, account should be taken of stock price volatility in India in the worst scenario. The Committee had before it data on volatility, both in terms of **standard deviation** of returns over 1-day, 2-day, 3-day and 4-day holding periods and also in terms of **largest** 1-day, 2-day, 3-day and 4-day fluctuation in the case of stock index as also for five leading individual scrips for recent years. The Committee noted that stock index volatility in India is several times higher than that in the developed markets. It also noted that volatility of prices of several leading individual scrips was 2-3 times higher than that of stock index, implying that capital adequacy requirements for individual stock futures and options would have to be substantially higher than that for index futures and options under abnormal market movements. The Committee feels that the Clearing Corporation should continuously analyse the value at risk and may modify the margin requirements to safeguard the market. The dual objective has to be to guaranteeing its own solvency and avoiding unnecessary tying up of members' capital should be the basis of quantum of the margin to be collected.

4.4 The Committee recommends that the Clearing Corporation will be totally independent from the control of trading interests. Its Governing Board should be immune to any interference or direct/indirect pressure by trading interests, preferably by not giving any representation to such interests in the governance of the Clearing Corporation.

4.5 The Committee feels that ideally a single National Clearing Corporation for all the stock exchanges would be the most efficient arrangement. This may be difficult to achieve immediately but should remain the ultimate goal to be achieved. Efforts should continue to be made in this direction.

Maximum exposure limit:

4.6 Apart from the mimimum networth requirement, there should be a maximum exposure limit computed on gross basis for each broker/dealer. Such exposure limit should be linked to the amount of upfront margin kept by a broker/dealer as deposit with the exchange / Clearing Corporation in the prescribed liquid assets. It was strongly represented to the

Committee that, in Indian context, the minimum networth requirement has not proved adequate

Mark-to-market margins.

4.7 The Committee feels that even the system of mark-to-market margins on daily basis will not be adequate for safeguarding the market's integrity unless the margins are actually collected before the start of the next day's trading. Even a day's delay in actual collection of mar-to-market margin can pose a serious threat to the market's integrity. The Committee noted that electronic funds transfer (EFT) was not yet pervasive in India. If the mark-to-market margins cannot be collected before the start of next day's trading, the networth requirement and initial deposit with the exchange would have to be higher. The Committee recommends that the aim should be to collect mark-to-market margins before the next day's trading starts. For this purpose all derivatives dealers/brokers should be required to be connected to Electronic Funds Transfer Facility. The capital adequacy requirement for derivatives trading should be finally decided after taking into account both the extent of volatility and the time taken for funds transfer from dealers/members to the exchange.

Cross-margining

4.8 At the initial stage of derivatives market in India, the Committee does not favour cross-margining which takes into account a dealer's combined position in the cash and derivative segments and across all stock exchanges. The Committee recognises that cross-margining is logical and would economise the use of a trading member's capital, but a conservative approach would be more advisable until the reliability of systems has been fully established. The systems capability has to emerge before adopting sophisticated systems.

Margin Collection from clients

4.9 In the Committee's view, collection of initial and mark-to-market margins by brokers from their clients should be insisted upon in the case of derivatives trading. In other words, margin collection from clients should not be left to the discretion of brokers/dealers. SEBI should require derivatives exchanges to ensure, through systems of inspection, reporting, etc., that margins are actually collected from all clients without exception, including financial institutions. This is necessary because of the high leverage and consequently higher risk involved in derivatives trading. Two indirect methods of ensuring this should also be adopted, viz (1) exposure limits for dealers/traders in relation to upfront margin deposited with the exchange should be fixed on gross basis and not on net basis, and (2) brokers/dealers should be required to disclose to the exchange the trading done on their own behalf separately from trading on clients' behalf. The trading volume should also be divided into sales and purchases.

As regard eligibility of the Clearing Corporation, Committee would make following recommendations :

1. The clearing corporation must perform full novation, i.e. the clearing corporation should interpose itself between both legs of every trade, becoming the legal counterparty to both.
2. The clearing corporation should have the capacity to monitor the overall position of members across both cash and derivatives markets for those members who are participating in both.
3. Software at the clearing corporation should assess the "Value at Risk" that the position of the member imposes upon the clearing corporation. At no time, intra-day, should the value at risk at a 99% level of the position exceed the good funds with the clearing corporation. Good funds here is defined as

the membership deposit, initial margin and mark-to-market margin collected by the clearing corporation.

4. In the event of unusual member positions, the clearing corporation should charge special margin over and above the normal margins.

5. The clearing corporation must establish facilities for electronic funds transfer (EFT) for swift movement of margin payments. In situations where EFT is unavailable, the clearing corporation should collect correspondingly larger initial margin to cover the potential for losses over the time elapsed in collection of mark to market margin.

6. Initial margin and the daily mark to market margin should be calculated on the position of each customer separately. Positions taken by the member on own account would be treated like one more customer.

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V. Broker-Client Relationship and Derivatives Sales Practices

Entry requirements for brokers/ dealers in derivatives

5.1 The Committee is strongly of the opinion that the rules for admission of brokers/dealers for futures trading have to be far more stringent than for cash trading.

5.2 **Knowledge requirement:** The derivatives brokers/dealers should be mandatorily required to qualify for certification by undergoing a prescribed course of instruction and a qualifying examination before being allowed into such trading.

5.3 **~~Capital adequacy~~:** The experience of Indian exchanges has been that the credibility of the balance sheet figures of networth is questionable and that, in any case, a broker's or dealer's stated networth is very often not available to meet the claims payable to the exchange. Hence, for effectively ensuring capital adequacy, principal reliance has to be placed on the capital and margins actually deposited by the brokers/dealers with the exchange. As regards capital adequacy requirement, the Committee agreed on the following aspects :

(a) The absolute amount of minimum capital adequacy requirement for derivative brokers/dealers has to be much higher than for cash market. Further, if a broker/dealer is involved both in cash and futures segments, or in several exchanges, the capital adequacy requirement should be satisfied for each exchange/segment separately. A decision on minimum capital adequacy requirement involves balancing the need for ensuring market's integrity against the need for having sufficient participation of brokers/dealers and sufficient competition. Too high a requirement may keep most Indian firms out of the derivatives market.

(b) Capital Adequacy Norms : In order to somewhat ease the constraint on participation in the derivatives market due to high capital adequacy requirements, the Committee recommends that consideration may be given to a two-level system of members, viz., Clearing Members and Non-Clearing Members, as found in several countries, an example being the Singapore International Monetary Exchange. Under such a system, networth requirement for the Clearing Members is higher than for the Non-Clearing members. The Non-Clearing members have to depend on the Clearing Members for settlement of the trades. The Clearing Member has to take responsibility for the non-clearing member's position so far as the Clearing Corporation is concerned. The Clearing Member thus becomes the guarantor for the Non-Clearing members. In a sense, a Clearing Member has a number of satellite traders for whom he takes financial responsibility towards the Clearing Corporation. The advantage of the two-level system is that it can help to bring in more traders into derivatives trading, thus enhancing the market's liquidity.

1. When an exchange has an existing cash market, members of the cash market will not automatically become members of the derivatives market. Members of the derivatives market will have to satisfy the eligibility conditions of the derivatives market which are defined here.
2. Traders who work at the brokerage firm must has passed a certification program which is considered adequate by SEBI.

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3. Members should have a minimum net worth of Rs.300 lakh and will make a deposit of liquid assets worth Rs.50 lakh. The clearing corporation can also permit clearing members to clear the trades of other trading members.

Special regulatory focus needed

5.4 The Committee has identified broker-client relationship and sales practices for derivatives for special regulatory focus. The potential risk involved in speculating (as opposed to hedging) with derivatives is not understood widely. The risk and complexity varies among derivative products. While some derivatives are relatively simple, many others are highly complex and require additional safeguards from investors' viewpoint. In the case of pricing of complex derivatives contracts, there is a real danger of unethical sales practices. Clients may be fooled or induced to buy unsuitable derivatives contracts at unfair prices and without properly understanding the risks involved. Many widely reported legal disputes between broker-dealer and the client have arisen in U.S.A. on some such ground. That is why it has become a standard practice in other countries to require a "risk disclosure document" to be provided by broker/dealer to every client in respect of the particular type of derivatives contracts being sold.

5.5 Also, derivatives brokers/dealers are expected to know their clients and to exercise care to ensure that the derivative product being sold by them to a particular client is suitable to his understanding and financial capabilities. Derivatives may tempt many people because of high leverage, which is a double-edged instrument, having, at the same time, the potential of high profitability on the margin money invested and high risk. The concept of 'know-your-client' needs to be implemented and every broker trader should obtain a client identity form as per Annexure I.

Complexity of options

5.6 The Committee enquired into sales practice regulations relating to derivatives in U.S. in order to learn from the experiences of U.S. regulatory authorities. The U.S. authorities have recognised that derivatives, based on options trading strategies, could be highly complex. Hence, there is a special regulatory regime for options. This is instructive for Indian authorities. In order to give a concrete idea about what the regulation of sales practices, particularly for complex type of derivatives, may involve, some special features found in the U.S. are enumerated below :

(a) The options trading rules of a derivative exchange require heightened suitability standards. Such rules prohibit brokers-dealers from recommending to any client any options transaction unless they have reasonable grounds to believe that the entire recommended transaction is not unsuitable for the customer on the basis of information furnished after reasonable inquiry concerning the customer's investment objectives.

(b) In addition, the rules prohibit brokers-dealers from recommending opening options transaction unless they have a reasonable basis for believing that the customer has such knowledge and financial experience that he or she can be expected to be capable of evaluating, and financially able to bear, the risks of the transaction.

(c) The broker-dealer must seek to obtain and verify specific categories of information about its options customers including, but not limited to, their net worth, annual income and investment experience and knowledge. A separate approval also may be required for trading in particular types of options

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strategies and types of options contracts, such as foreign currencies.

(d) In addition, the approval of account opening must be in writing and can be made only by a senior options supervisor who must ensure that investors are offered an explanation of the special characteristics and risks applicable to the trading of options.

(e) The derivatives exchange also requires that all the supervisory and sales personnel pass a general securities examination that includes options materials. People selling or supervising the sale of options on debt securities or foreign currency also must pass a separate interest rate options or foreign currency examination.

(f) The exchange also requires the brokers-dealers to keep a current customer complaint log for all options-related complaints which include: (a) the name of the complainant; (2) the date when the complaint was received; (3) the sales person servicing the account; (4) a description of the complaint; and (5) a record of the action taken.

(g) In addition, the broker-dealer firm is required to submit all sales literature and educational material to the exchange for pre-use approval.

(h) The disclosure document about options should contain information describing the mechanics and risks of options trading, transaction costs, margin requirements and tax consequences of margin trading. The broker-dealer must provide a copy of this document at or prior to the time such customer's account is approved for standardized options trading.

(i) There are also special trading rules applicable to the options markets. These rules include separate surveillance procedures, front-running prohibitions and position limits.

The Committee feels that there has to be clear realisation about the imperativeness of sales practices regulation for derivatives. It should be the responsibility of the Derivatives Exchange, as a self-regulatory organisation, to enforce this under the general oversight of SEBI. A sample of Risk Disclosure Document is enclosed at Annexure II.

Conclusion

1. The "know your customer" principle should be rigidly adhered to. The client should be registered. Customers should read a risk disclosure document prior to registration.
2. Margins must be paid by customers to brokers.
3. Broker / dealer will keep separate account for the money for securiities belonging to the client.

VI. Other Guidelines

6.1 While the Committee would not like to go into micro-management of derivative exchanges, it is important to point out main issues involved in exchange-level regulations for derivatives trading and how these have to be different from cash trading regulations. Since this has implications for SEBI's overseeing role, the Committee has tried to derive some general guidelines relating to important aspects of exchange-level regulations, such as entry requirements for derivatives brokers/dealers, account opening and sales practices for derivatives trading, margining system, suitability of index used for index futures, etc. The significant points are summarised below.

Selection of Index for Stock Index Futures/Options

6.2 There are several issues relating to the choice of index for stock index derivatives. The Committee went into the criteria for selection of index for Index Futures and Options without the intention of prescribing any particular Index. It is of the view that the most important criterion is that the index chosen should be difficult to manipulate. This could be ensured by including only those securities which qualify in terms of minimum "impact cost".

6.3 At the same time, the Committee recognised that any index selected for derivatives trading should be popular and easily understandable by investors. There will be room for more than one index futures as and when market grows. It would be best to leave the choice of index to the market, specially the users of derivatives. In due course, the emergence of competition in derivatives trading would provide a wider choice of indices to the users so that they could match their portfolios as best as possible.

6.4 The index used for derivatives would have to be periodically revised. Such revision should be done in a transparent manner. Deletion or inclusion of a scrip in the Index could lead to potential abuse as it is a price-sensitive information. The Committee was told that the international practice was to give an advance notice of 5 weeks to market participants to adjust their positions before implementing the revised index. The exact contract design will have to be determined by the exchange taking into account the needs and chances of success of the particular contract.

1. The contract which is proposed for trading should be submitted to SEBI for approval giving (a) full details of the contract, (b) the economic purpose that the contract will serve.
2. Index futures should precede index options in terms of the sequencing. Index options could be launched when trading in index futures has stabilised.
3. Delivery of shares upon option exercise should only be done using dematerialised shares. SEBI will only allow options on individual securities after being amply convinced that the underlying cash market for these securities is highly liquid.

Use of derivatives by corporate clients and mutual funds

SEBI Mutual Fund Regulations

6.5 The SEBI (Mutual Fund) Regulations presently prohibit the use of derivatives by mutual funds. Part 1 of the Committee's Report has shown that mutual funds will be among the most important beneficiaries of hedging facility through stock index derivatives. Hence, the regulatory

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prohibition mentioned above should be withdrawn. Instead, the Board of Trustees of mutual funds should be required to lay down a formal policy and detailed rules about what derivatives are allowed to be used, within what limits and for what purposes, for which schemes, and also the authorisation procedure.

6.6 Since derivatives trading is a new area in India and would have to evolve and develop gradually over time, the Committee feels that too much rigidity should be avoided. There should be room for flexibility and dialogue in order to facilitate timely changes as and when necessary on the basis of the experience gained.

6.7 The Committee recommends that in the case of corporate clients, banks, financial institutions and mutual funds, they should be allowed to trade derivatives only if and to the extent authorised by their Board of Directors/Trustees. Such authorisation should also specify the purposes for which derivatives trading may be undertaken, the authority level for giving approval in this regard and the type of derivatives contracts permissible. Derivative broker/dealer may execute orders for such clients only if accompanied by the necessary authorisation of the client's Board of Directors/Trustees.

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VII. Summing up

7.1 Summing up the Committee's recommendations on regulatory framework for derivatives trading, the Committee would like that the focus area of derivatives trading regulation should be exchange-level regulation, i.e. rules, regulations and bye-laws of the derivatives exchange.

7.2 SEBI, as the overseeing authority, will have to review and approve them and specially keep an eye on ensuring fair deal to clients. SEBI should develop the competence required among its personnel. It should create a special Derivatives Cell and also a Derivatives Advisory Committee.

7.3 Many of the SEBI's important regulations relating to exchanges, brokers-dealers, prevention of fraud, investor protection, etc., are of general and over-riding nature and hence, these regulations would also be applicable to derivatives exchanges and their members. However, these Regulations need to be reviewed and suitably strengthened.

7.4 For ensuring the success of derivatives trading, the Committee has placed considerable emphasis on the self-regulatory competence of derivatives exchanges under the over-all supervision and guidance of SEBI. Derivatives trading could be more problematic than cash trading if such self-regulatory competence is absent or inadequate at the exchange-level.

PIN CODE : ____________

STATE : ____________________________

COUNTRY : ____________________________

NATIONALITY ____________________________

TELEPHONE NUMBER : (OFFICE) __________(RES) ____________

FAX NO / TELEX NO : __________ _________

RESIDENTIAL STATUS : INDIAN / NRI / OTHERS ______________

PASSPORT NO : ______________________________________

OCCUPATION : ______________________________________

MARITAL STATUS : SINGLE / MARRIED

(STRIKE OUT WHICH IS NOT APPLICABLE)

INVESTOR TYPE

INDIVIDUAL / HUF / PARTNERSHIP FIRM / FOREIGN INSTITUTIONAL INVESTOR / FINANCIAL INSTITUTION / MUTUAL FUNDS / NBFC'S

FOR INDIVIDUAL (IF EMPLOYED) :

EMPLOYER'S NAME :

DESIGNATION :

WORKING WITH THE PRESENT EMPLOYER SINCE : _____ YRS

_____ MTHS

FOR INDIVIDUAL (IF SELF EMPLOYED) :

ESTABLISHMENT NAME :

DESIGNATION :

ESTABLISHED SINCE : _____ YRS _____ MTHS

FOR HUF :

EMPLOYER'S NAME :

DESIGNATION :

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ANNEXURE -1

FORMAT OF THE CLIENT REGISTRATION FORM

(THIS INFORMATION IS THE SOLE PROPERTY OF THE TRADING MEMBER / BROKERAGE HOUSE AND WOULD NOT BE DISCLOSED TO ANYONE UNLESS REQUIRED BY LAW)

FOR OFFICE PURPOSES :

CLIENT CODE : ______________
(TO BE INSERTED BY THE BROKERAGE FIRM)

SALESMAN CODE : ______________
(EMPLOYEE CODE / SUB BROKER CODE ASSIGNED BY THE BROKERAGE FIRM)

VERIFIED BY ______________

AUTHORISED BY : ______________

PHOTOGRAPH

CLIENT INFORMATION :

NAME OF THE CLIENT : ______________ (SURNAME) ______________ (NAME) ______________ (FATHER'S / HUSBAND'S NAME)

SEX : MALE / FEMALE

DATE OF BIRTH : ☐☐ ☐☐ ☐☐☐☐
D D M M Y Y Y Y

AGE : ________ YEARS

PRESENT ADDRESS : ______________

____

____

____

CITY : ______________

PIN CODE : ______________

STATE : ______________

COUNTRY : ______________

TELEPHONE NUMBER : (OFFICE) ______________ (RES) ______________

FAX NO / TELEX NO : ______________

PERMANENT ADDRESS : ______________

____

____

____

CITY : ______________

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WHETHER KARTA / FAMILY MEMBER :

FOR PARTNERSHIP FIRM / CORPORATES / BANKS / FOREIGN INSTITUTIONAL INVESTOR / FINANCIAL INSTITUTION / MUTUAL FUNDS / NBFC'S :

NAME : ______________________________

SEBI REGISTRATION NO (IF APPLICABLE) : ______________________________

NO OF DIRECTORS OF THE ENTITY : ______________________________

NAMES AND ADDRESSES OF THE DIRECTORS OF THE COMPANY :

____

____

BANK REFERENCES

BANK NAME : (MULTI BANKS THEN GIVE DETAILS)

BRANCH :

ACCOUNT NO :

ACCOUNT TYPE : SAVINGS / CURRENT /NRI

TELEPHONE NUMBER(S) : ______________________________

FAX NO / TELEX NO : ______________________________

INVESTMENT AVENUES

DO YOU WANT TO TRADE ON ANY SPECIFIC STOCK EXCHANGE FOR:

(PLEASE TICK IN THE RELEVANT BOXES)

1. WHOLESALE DEBT MARKET ☐
2. CAPITAL MARKET ☐
3. FUTURES & OPTIONS MARKET SEGMENT ☐
4. ANY OTHER SEGMENT (PLEASE SPECIFY) ☐

COLLATERAL'S SUBMITTED WITH THE BROKERAGE FIRM

COLLATERAL'S	DECLARED VALUE	% HAIRCUT	ASSIGNED VALUE
1. CASH			
2. MARKETABLE SECURITIES			
3. BANK GUARANTEES			
4. IMMOVABLE PROPERTY			
5. JEWELRY			
6. OTHERS (SPECIFY)			

REFERENCES

CLIENT INTRODUCED BY : ____________ ____________ ____________
(SURNAME) (NAME) (FATHER'S/ HUSBAND'S NAME)

INTRODUCING CLIENT CODE : __________ ______________________

INTRODUCER'S BANK A/C NO : ______________________

THE DETAILS FURNISHED BY ME / (NAME OF THE ENTITY) ARE TRUE TO THE BEST OF MY / (NAME OF THE ENTITY) KNOWLEDGE AND BELIEF. IN CASE IF ANY OF THE ABOVE INFORMATION IS FOUND TO BE FALSE OR UNTRUE THEN I AM / (NAME OF THE ENTITY) TO BE HELD LIABLE FOR IT.

(SIGNATURE OF THE INDIVIDUAL CLIENT)

IN CASE OF HUF THEN

(SIGNATURE OF THE KARTA)

INCASE OF PARTNERSHIP FIRM / FOREIGN INSTITUTIONAL INVESTOR / FINANCIAL INSTITUTION THEN

(SIGNATURE OF THE DIRECTORS OF THE COMPANY ATTESTED BY THE COMPANY SEAL.

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PLEASE ATTACH A COPY OF THE FOLLOWING (ONLY RELEVANT):

1. COPY OF THE BALANCE SHEET FOR THE LAST 2 FINANCIAL YEARS
2. COPY OF THE PARTNERSHIP DEED IN CASE OF A PARTNERSHIP FIRM
3. COPY OF THE BOARD OF DIRECTORS' APPROVAL FOR PARTICIPATION IN DERIVATIVES TRADING.
4. IN CASE OF AN INDIVIDUAL THEN KINDLY SUBMIT A COPY OF
   - PASSPORT
   - RATION CARD

- __ NO OF PHOTOGRAPHS (AS PER REQUIREMENTS OF THE BROKER)

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ANNEXURE -II

RISK DISCLOSURE DOCUMENT

(THIS DOCUMENT SHOULD BE READ BY EACH AND EVERY PROSPECTIVE CLIENT BEFORE ENTERING INTO DERIVATIVES TRADING

This brief statement does not disclose all of the risks and other significant aspects of derivatives trading. In light of the risks, you should undertake such transactions only if you understand the nature of the contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Risk of loss in trading in derivatives can be substantial. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

RISKS INVOLVED IN TRADING IN FUTURES CONTRACTS

Effect of "Leverage" or "Gearing"

The amount of initial margin is small relative to the value and the time to expiry of the futures contract, so the transactions are 'leveraged' or 'geared'. The Index futures contracts available for trading are 3 month futures contract i.e. a near month expiration contract, a 2 month expiration contract and a 3 month expiration contract. Thus at any point of time there exists 3 contracts available for trading.

Stock index futures trading, which is conducted with a relatively small amount of margin, provides the possibility of great profit or loss in comparison with the principal investment amount. But transactions in futures carry a high degree of risk.

An investor should therefore completely understand the following statements before actually trading in stock index futures and also trade with caution while taking into account one's circumstances, financial resources, etc.

A If the futures price moves against an investor, the investor may lose a part of or whole margin equivalent to the principal investment amount in a relatively short period of time. Morever, the loss may exceed the original margin amount.

B. If the amount of valuation loss resulting from a change in the futures price or the substitute securities value exceeds a certain predetermined amount, the investor is required to deposit additional margin by a given deadline, generally on a daily basis.

C. If an investor fails to deposit the additional margin by the deadline or if an outstanding debt occurs in the investor's account, the trading member may liquidate a part of or the whole outstanding position. In this case, the investor is liable for the loss.

D. Under certain market conditions, an investor may find it difficult or impossible to execute transactions. For example, this situation can occur when the price of a futures contract reaches a price limit or when there are insufficient bids or offers.

E. In order to maintain market stability, the following steps may be adopted : changes in the margin rate, increases in the cash margin rate or others. These new measures may be applied to the existing open interests. In addition, if the margin falls below the required level due to the measures implemented, the shortfall must be met promptly within a given time.

Investors must keep in mind that the aforementioned statements cannot disclose all the risks and the characteristics of futures trading. Therefore, investors contemplating trading in the futures market should do so after understanding the mechanisms and the relevant provisions of such trading.

Risk-reducing orders or strategies

The placing of certain orders (e.g., "stop-loss" orders, or "stop-limit" orders) which are intended to limit losses to certain amounts may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as "spread" positions, may be as risky as taking simple "long" or "short" positions.

Suspension or restriction of trading and pricing relationships

Market conditions(e.g., illiquidity) and/or the operation of the rules of certain markets (e.g., the suspension of trading in any contract or contract month because of price limits or "circuit breakers") may increase the risk of loss liquidate/offset positions.

Deposited cash and property

You should familiarise yourself with the protections accorded to the money or other property you deposit particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specific legislation or local rules. In some jurisdictions, property which has been specifically identifiable as your own

will be pro-rated in the same manner as cash for purposes of distribution in the event of a shortfall.

Commission and other charges

Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

Trading facilities

The Exchange offers electronic trading facilities which are computer-based systems for order-routing, execution, matching, registration or clearing of trades. As with all facilities and systems; they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or member firms. Such limits may vary; you should ask the firm with which you deal for details in this respect.

Off-exchange transactions

In some jurisdictions, and only then in restricted circumstances, firms are permitted to effect off-exchange transactions. The firm with which you deal may be acting as your counterparty to the transaction. It may be difficult or impossible to liquidate an existing position, to assess the value, to determine a fair price or to assess the exposure to risk. For these reasons, these transaction may involve increased risks. Off-exchange transactions may be less regulated or subject to a separate regulatory regime. Before you undertake such transactions, you should familiarize yourself with applicable rules and attendant risks.

I hereby acknowledge that I have received and understood this risk disclosure statement.

Customer Signature (If Partner, Corporate, or other Signatory, then attest with company seal.)

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