



# Technical Assistance Consultant's Report

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## INDIA: Regulation and Supervision of Derivative Instruments

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Prepared by

**International Business & Technical Consultants, Inc., Virginia, USA**  
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For Ministry of Finance, Department of Economic Affairs

This consultant's report does not necessarily reflect the views of ADB or the Government concerned, and ADB and the Government cannot be held liable for its contents.

**Asian Development Bank**

# **Regulation and Supervision of Derivative Instruments**

ADB Project No. TA 4203-IND

## **FINAL REPORT**

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# Regulation and Supervision of Derivative Instruments

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# **ADB – TA4203 IND - Regulation & Supervision of Derivative Instruments**

## **Regulation and Surveillance of the Derivatives Markets in India**

### **Introduction**

The objective of this Final Report is to provide an account of both, the field analysis carried out in India and the Study Tour to South Korea and Australia organized by International Business & Technical Consultants, Inc. (IBTCI.) This Final Report encompasses and describes the activities, findings, conclusions and recommendations of the consultants while implementing the study on Regulation and Surveillance of the Derivatives Markets in India and sponsored by the Asian Development Bank for the benefit of the Indian regulatory and supervisory institutions dealing with derivative instruments. The report has been structured in two parts reflecting, first, the field investigation that was conducted in India in February, 2004, and, second, the study tour which was carried out in November, 2005.

Part 1 of the report provides a background of the derivatives markets in India focusing on structure of regulation and risk management. The field investigation was carried out by Mr. Charles Rubin, an IBTCI consultant, and Ms. Susan Thomas, a consultant hired directly by the ADB. The Study tour was also part of a larger ADB-funded technical assistance effort provided to the Securities and Exchange Board of India under the direction of the Government of India's Ministry of Finance. Part 2 of this report includes an account of the experience and opinions of the Study Tour participants while they visited pertinent institutions from South Korea and Australia. Part 2 was previously submitted as a separate document but was merged into this final report to make it integral part of this final deliverable.

## **PART 1. FIELD INVESTIGATION**

### **1. Objective**

The objective of project ADB – TA4203 IND with respect to the field analysis was to review and recommend improvements to the prevailing regulatory and surveillance program of exchange traded security derivative products and their underlying securities in India.

The consultants were also required to focus upon the methodology of determining market risk and its containment via the margining systems that are designed to contain this risk, as having adequate margin systems is a primary tool in maintaining financially healthy markets and its participants.

### **2. Approach**

Besides drawing upon their own experiences and knowledge of these markets, the consultants' approach was to interview some of the people responsible for determining and maintaining the overall compliance of security derivatives regulations. Consequently, the consultants asked about how these functions are organized, about the nature of exchange member examinations or inspections and the risk containment or margin system. They also asked about any weaknesses that they thought existed and how improvements could be made. To this end, the consultants spoke with some of the staff representing the Security and Exchange Board of India ("SEBI"), the National Stock Exchange ("NSE"), the Stock Exchange, Mumbai ("BSE"), the Reserve Board of India ("RBI"), and some key security derivative intermediaries or brokers.



### **3. Market Background:**

Derivative markets in India exist in the Over the Counter ("OTC") market and on stock exchanges. While our mandate technically covered all derivatives markets in India, we focused upon exchange traded equity derivative contracts. India trades derivatives of underlying securities and security indices on its two major exchanges:

1. Interest rate futures started trading on the NSE and the BSE in March 2003.
  - The contracts traded are futures on a notional 90-day Bill and a 10-year bond.
2. Equity futures and options, on both the index as well as individual stocks.
  - Index futures started trading in November 2000.
  - Index and individual stock options started trading in May 2001.
  - Individual stock futures started trading in November 2002.
3. Commodity futures.
  - Futures on a large set of commodities traded in India across several small local exchanges through the end of the sixties.
  - In the seventies, futures on a set of six commodities (e.g., pepper, jaggery, jute, potatoes) were permitted to start re-trading.
  - Cotton futures started trading in 2000.
  - In December 2003-January 2004, three nation-wide, electronic exchanges became operational to trade in a wide variety of commodity futures, including gold, silver, various oils and oilseeds.

These national exchanges are still quite nascent and therefore, were not included in the interviews for this project.

Indian equity derivatives have been traded on national exchanges since 2000. However, over year previous to this analysis (2003), these markets saw tremendous growth.

Part of the reason for this growth was a shift away from account-period settlement to rolling settlement in the spot equity market in 2001. The equity derivatives markets were a natural destination for the vast majority of the trading audience who were used to taking quasi-futures positions on stocks in the account period settlement of the spot market. This was the source that fueled the growth of the futures market, particularly single stock futures, which as of this writing, is the only country where single stock futures are traded.

It speaks well for the development of the regulatory and risk management of these markets that such high growth has been achieved. For a sense of scale, the last point at which high volumes were seen in the equity markets, the markets collapsed under the growth. In marked contrast, the current market systems have been robust to large volumes as well as more than one instance of large shocks and volatility. In fact, the consultants were informed that the value of equity derivatives traded is approximately 2 ½ times the value of the underlying equities that are traded. This is no small part because of the real-time risk management that is being done at the clearing corporation monitoring and managing the risk of open positions at the level of individual clients. Real-time risk management or margining for these markets are currently only being achieved in India.

There are some unique aspects of these markets. In particular:

1. Compared to other countries, an unusually large fraction of the volumes are concentrated in the near-month contract. The exchanges today trade one-, two- and three-month out contracts.



2. There is a preponderance of trading in futures as compared with options, particularly in the case of single stock contracts. This futures / options volume relationship is in stark contrast to the patterns seen in other markets in the world.
3. Most of the volumes at the time of the analysis could be attributed to retail participants. There were less than 15% of the traded volumes that was placed by institutions – such as banks, mutual funds, pension funds, insurance companies, either domestic or international – which were the largest source of the volumes in other countries. This indicates a large upside of business potential once institutional customers get more involved this market.

This could point to some specific areas of deficiency in the current markets. The first could be that most of the current participants have constraints on access to long-term capital. For example, this could be one reason why positions are concentrated in short term contracts and rolled over at expiration, rather than a starting position in the longer-term contracts. The second could be that there is still a lack of knowledge based trading being done, using calculated estimates of risk and return. For example, why are there such few contracts open in options despite options being the “safer contracts” for the retail individual? Concentration in the near-term contracts may also be attributable to the relative lack of institutional participation. There could be regulatory constraints and/or barriers to entry of the larger participants – such as insurance companies, banks, foreign institutional investors, mutual funds – that once removed, could enlarge the scope and structure of the derivatives market trading patterns.

In this report, the consultants focused mainly on the structure of regulation and risk management in the equity derivatives markets. This is primarily because the interest rates futures markets have not yet gained volumes, and the move of the commodity futures from a fragmented to a national market has been very recent. In both cases, the risk management for systemic risk could be considered very similar to that used in the equity derivatives markets. However, the regulatory framework is quite different across these three underlyings. We will briefly touch upon the differences towards the end of this report.

#### **4. Development of the Current Regulations on the Equity Derivatives Market**

The current regulatory framework governing trading equity derivatives follows a two-tier structure: the implementation of trading, clearing and settlement is designed and monitored by the exchanges. The broad directives for regulation are put in place by SEBI.

The first set of SEBI regulations for the equity index derivatives market was framed by the L. C. Gupta committee.<sup>1</sup> The regulatory framework for the risk management of these contracts were framed by the SEBI advisory committee on risk management, chaired by Prof. J. R. Varma. This committee has released two reports<sup>2</sup>: the first in June 1998 and the second in September 2002.

These main thrust of these reports were:

1998 : (Prior to the start of derivatives trading.)

- Transactions would be done through the two-tier structure of clearing member – trading member.
- Margins would be calculated and collected at the client level.
- Position limits on open interest would be imposed at the level of the client and the trading member.

<sup>1</sup> The report can be found at <http://www.sebi.gov.in/commreport/lcgupta.html>

<sup>2</sup> <http://www.sebi.gov.in/>



2002: (At this time, the markets were trading index futures and options, as well as in single stock options. Individual stock futures were being proposed.)

- Guidelines were proposed for the selection of individual stock futures.
- Position limits and the volatility estimators for calculating margins were also prescribed.
- Participation by mutual funds was clarified to include non-hedge based transactions as well.
- The legal framework governing trading, clearing and settlement of the derivative market – i.e., the Regulations and Bye-laws of derivative segment – was to be kept separate from the cash market segment. However, the co-mingling of the operational and functional modalities was left to the discretion of the exchanges.
- Therefore, an exchange could use the same trading, clearing and settlement systems to transact in both the cash market as well as in derivatives.
- The report recommended that market surveillance and monitoring systems be integrated between cash and derivatives markets.
- There is a first cut attempt at permitting cross-margining between the cash and the derivatives market. However,
  - Cross-margining between cash and derivatives could be done only at the client level.
  - Portfolio Value-at-Risk (“VaR”), with offsets for opposite holdings in products of correlated underlyings, was not permitted.

## **5. Major Issues:**

We examined the issues of regulation and supervision from the level of principles and implementation. We noted that the market was still very young – three years since the start of index futures and one year since the start of the single stock futures, and the start of the explosive growth phase of this market. Thus, it would be expected that there are a large number of issues to be analyzed and considered in the improvement of regulations for these markets.

In order to identify the issues, we spoke with three major participants in this market – the regulator, the exchanges and the intermediaries. Each had a different perspective on the quality of regulations governing derivatives markets in India.

The representative of the **regulator**, SEBI, of the equity derivatives market appeared to be of the belief that the current regulatory framework was a sufficient one, with no major improvements required. The focus within SEBI was shifted towards improving market surveillance and monitoring systems, and towards increasing the basket of products that could be traded on the derivatives exchanges in India.

The **exchanges** feel a need for more flexibility while operationalising the regulations. In the current environment, exchanges have the responsibility of ensuring a proper implementation of regulation, and the monitoring and safety of practices on both the cash and derivatives markets. Most of the regulations and changes in regulations naturally apply equally to the underlying and their derivatives. However, while exchanges have full freedom in operationalising regulations for the cash market, they have to obtain permissions from SEBI before these can be operationalised on the derivatives market. Often the delays run between three to six months, during which time, the regulations governing the cash and derivatives markets have a regulatory gap. This can have an adverse impact of worsening the liquidity and market quality. In a rapidly changing and adjusting environment, this could



also mean that the exchanges take the risk that the current systems are out of sync with the regulations required on the derivatives market.<sup>3</sup>

The **intermediaries** face a problem in the amount of margining. They also face operational difficulties with the collection of margins across the entire country. While the movement of securities was not a problem, the movement of funds was a serious concern in operationalising the regulatory demands in derivatives markets. Exchange regulations prohibit members funding their client positions. This means that members collect "excess" margins from their clients as contingency in the case of increased mark-to-market losses. With electronic funds transfer in place, these operational difficulties would be eased.

Based on the discussions with the market participants, there are three areas where the current regulatory framework could be improved. These are: the level of margins, the separation of the cash and the derivatives markets and the need to re-examine the regulatory framework at pace that matches the development in the market. We deal with each in the following:

a. **Levels of Margin:**

A strong consensus that emerges is that the Indian derivatives market is "over margined" and "over compliant". Neither of these are necessarily problems from the point of view of controlling for the systemic risk of the market, especially during the nascent stages of developing a new market. However, as the market goes past the initial stages when participants get familiar with the new product and infrastructure, the focus shifts to the second stage. Here, the target is to widen the functionality, spread the participation in order to deepen the liquidity and increase the efficiency of using these products. In this stage, both these characteristics of too much margins and compliance can prove to be serious bottlenecks to development.

Margin systems are put in place to control for counter-party credit risk that used to cascade into systemic default in the face of large market movements. The strength of the Indian market risk control is that member integrity is based purely on the initial margins that the member deposits with the clearing corporation rather than their net worth. On the derivatives market, margins are collected upfront before the trades can be placed. Margins are calculated at the level of the client, the trading member through whom the client places trades, and the clearing member through whom the clearing of all trades is done. Mark-to-market losses have to be paid at the end of the every day. Settlement is done on a T+1 basis. Therefore, the margins collected have to cover at most one day of market risk. The system automatically shuts down the trading terminal of the trading or the clearing member when the risk of the positions reaches the prescribed level of margins at the clearing corporation.

However, the capital that a member has to deposit is several times out of line with the market risk that the margins are supposed to cover. It has the following limitations:

- The positions in a portfolio of a client are margined separately. Two offsetting positions in contracts on two different underlyings do not have any margining benefits.
- For example, a long position on the index futures and a short position on a single stock futures contract where the stock has a 95% correlation with the index have no margin benefit.
- There is no cross-margining across the cash and its related derivatives position.

<sup>3</sup> For example, when the index futures market first began, a contract size of 200 units of Nifty amounted to the SEBI prescribed Rs. 200,000 position size. By 2003, 200 units of Nifty was Rs. 400,000. The exchanges were unable to change the contract size without permission from SEBI.



For example, a client who is short an individual stock futures contract does not get any margin benefits if she owns the underlying stock.

Such principles lead to a situation where an excess of margins rest with the clearing corporation.

As an example, let's take a situation where a client has Rs. 5 million in a long Nifty futures position, and Rs. 5 million in a long Reliance futures position. Nifty has a volatility value of 1.73 and Reliance has a value of 2.03. The covariance between the two underlyings is 2.933.

The volatility value for the joint portfolio of Rs.10 million works out to be 1.80. Using the rule of 3.5 times the volatility of the underlying, the margin for this portfolio is 630, 481. However, the margin that the client has to put up with the clearing corporation is the sum of the individual VaR of the two positions, which is 658, 000, an excess of 27, 519.

Things become dramatically worse when there is a client who has Rs. 5 million in a long Nifty futures position, and Rs. 5 million in a short Reliance futures position. The volatility value for the joint portfolio of Rs.10 million works out to be 0.56, and the margin for the portfolio is 195, 482. However, the margin that the client has to put up with the clearing corporation is 658, 000, an excess of 462, 518!

What is most relevant about this example is that the safer client position (with a lower value of 0.56), the client is being penalized at a much higher level than a more risky client position (with a higher value of 1.80). This could set up negative incentives for a client to take care in entering portfolio positions that are less risky.

Thus, apparently small errors in margining systems can have a significant impact on (a) the efficiency of the capital available in the system and (b) the risk taking practices of individuals. In the case of capital, the efficiency of capital usage is reduced. To the extent that larger amounts of capital are required per position, current margin deposits should be sufficient for larger positions taken. However, from a risk containment perspective, this is not bad. In the risk taking by individuals, to some degree, the system promotes taking higher risk than lower risk.

Thus, both of these issues may have a negative impact on the quality of the derivatives markets.

This becomes a potential problem particularly when faced with the question of expanding the participant base in the markets. In comparison with markets outside of India, the regulatory pressure of high margins and systems that do not support rapid transfer of funds could become barriers that prevent a larger participation in these markets by foreign institutional investors. Most of the regulations are explicitly oriented towards a development of a retail order flow and do not address the problems and issues raised in the context of foreign funds.<sup>4</sup>

In order to resolve this issue, there are two levels of cross-margining that are possible: one at the level of offsetting derivatives positions on different underlyings, the other at the level of offsetting derivatives positions against cash.

#### **1. Offsets for positions in different underlyings:**

Since the clearing corporation can track all the client positions in the derivatives contracts, there is no barrier to permitting offsets for positions on different

<sup>4</sup> For example, there are instances of regulatory domain overlaps that cause operational difficulties for a foreign investor. For example, SEBI regulations require that all deposits that are retained with the member have to be paid interest. However, RBI regulations forbid paying interest on these deposits to FIIs for fear of arbitrage on the interest rate parity. This raises the barriers for FIIs to participate in this market.



underlyings. This requires models of how much is the offset to be used between two specific underlyings. But there is standard technology that is available in the finance industry, which if it is used, even with some amount of a safety margin<sup>5</sup>, could lead to higher levels of efficiency in capital used, as well as provide the correct incentives for individuals in their risk taking on the equity derivatives markets.

## **2. Offsets between the derivatives and the underlyings:**

Currently, margining in the cash market is being done at the level of the brokers, while it is done at the level of the clients in the case of derivatives. Therefore, the systems to track client level positions in the underlying market are yet to be developed.

The (Advisory Committee on Derivatives) ACD report of September 2002 does recommend that underlying shares that are pledged to the clearing corporation could be used for the purpose of cross-margining derivatives based on that underlying. The simplest position to cross-margin would be a short position in futures or call options in the underlying and underlying shares pledged to the clearing corporation. However, there are currently no systems in place to accommodate this, even though there are no obvious barriers to their existence.

### **b. Separation Between Cash and Derivatives Markets:**

Traditionally, exchanges that trade the underlying and the derivatives have been separate entities. The rationale for this is that both of these products deal with the same information – i.e., information about the firm – but offer the investor/trader different economic and financial functions. Information revealed in one market is almost always relevant to the other. This has always been exploited in the design and implementation of surveillance and monitoring systems at the underlying and the derivatives markets. Today, these relationships are being strengthened by information sharing agreements and memorandum of understanding between the underlying and the derivatives markets.

India is in a relatively unique position of having these two products trade, clear and settle using the same infrastructure, thus avoiding much of the contractual agreements that exchanges the world over are drafting.

The ACD report of September 2002 makes a strong recommendation for the unification of the monitoring and surveillance of the cash and the derivatives markets. However, the report also mandates a separation between the executive and various operational committees of the cash and derivatives exchanges. As a consequence, the decision and action taken in response to surveillance alerts by the exchanges on various issues are fragmented between the two markets. This often ends in misleading outcomes and incorrect signals to market participants.

For example, there are two arbitration committees at the exchanges. The members in the two exchanges are almost always the same, with a portfolio of positions spanning both. There could be cash positions, which if taken in isolation, could be risky and vulnerable to a

<sup>5</sup> For example, one of the factors driving down the volatility of the joint portfolio of long Nifty and short Reliance futures is the high covariance between Nifty and Reliance. The higher the covariance, the higher the offset. For two underlyings with zero covariance, the VaR of the portfolio will be the same as the VaR from the current margining system.

The covariance is a reasonably difficult number to estimate. And the problem of estimation is exacerbated in the attempt to model the dynamics of the covariance. As a first step, the covariance can be set to half that of the estimated value, which gives a smaller benefit of an offset to the client portfolio. However, this would be a more efficient margining system compared to the current one.



penalty, but which may not contribute to systemic risk if taken in conjunction with the derivatives position. The current organizations of the exchanges do not take such situations into account, and prove to be operationally cumbersome to both the exchanges and the members.

It was the consultants' understanding that the two major Indian exchanges that trade both the underlying and the derivatives already have rules and bye-laws that are common between the two. There has been a largely artificial barrier that is in place today for the regulations. This can be readily remedied. Once there is an integration of the regulations between the underlying and the derivatives markets, some of the operational difficulties that the exchanges face in terms of implementing and operationalising regulations for the underlying as separate from the derivatives could be removed.

This would also be beneficial to a more rapid deployment of a more integrated margin system as suggested in the previous section.

### **c. Need For a Re-Examination of the Regulatory Framework:**

When the L. C. Gupta committee report was first drafted in 1998, there were various aspects of the regulations that the report explicitly maintained should be re-examined/removed/modified with the development of the market. For example, the recommendation that index futures should be the product that the market should start with was made with the caveat that when the market in index futures became developed, other products such as index and stock options, or stock futures could be introduced.

There were other aspects of the regulations that did not come with a similar re-examination and revision clause. For example, the entire separation between the cash and the derivatives market was a sound recommendation in 1998 when the financial market infrastructure of trading, clearing and settlement was a lot less robust compared to what is in place in 2003. Today, it is economically inefficient if there is no integration of several, if not all, aspects of the underlying and the derivatives market.

But after the L. C. Gupta committee framed the first set of regulations, there have been revisions in terms of the implementation of the regulations, but no serious re-think of the regulations themselves. Given the explosive growth of the marketplace in terms of the type, number and traded volumes of products, the number and quality of participants and intermediaries, the proof that the institutional structures of trading, clearing and settlement are sound, and with the anticipation of additional market activity attributable to greater institutional account participation, there must also be an accompanying effort to rethink the regulatory framework itself.

Some of these might be on the mundane, micro-level, such as the need for transparency in ad-hoc margins that are imposed by the regulator or the exchanges in times of unanticipated large market movements.

There will also need to be a focus on broad-level, macro-level issues. For example, there is discussion today in the market on the need for cross-margining between products of different underlyings, and between the underlying and the derivative products. However, the discussion is restricted only to the equity and equity derivatives markets. Today, there are several other financial markets and products that are developing, which will make additional financial assets available to the Indian investment public in a year's time, such as the commodity and the interest rates markets. Eventually, there will be financial markets that could trade derivatives on real estate and foreign exchange. For efficiency of these markets and their contribution to the economy, these will need to be interlinked, as all asset markets are. Further down the road, the regulation will have to account for access to foreign owned assets and derivatives thereof.

There must be a regulatory preparedness to deal with these issues, before their occurrence or as they occur. We have seen the need for reexamining the regulations and their



implementation with the tremendous growth of the derivatives markets. This will be a trend that will only continue, and there is an urgent need to match the pace of market development and growth with regulatory reform.

## **6. Other Issues:**

In our discussions with the regulators, the exchanges and the intermediaries, other issues or concerns were raised:

1. It would add to the credibility of the entire marketplace if intermediaries (or brokers) acquired some type of professional malpractice protection. In the event a broker or its representative is guilty of any such practices (e.g., account churning, front running, violation of account objectives), the award to the customer may jeopardize the financial health of the broker, or perhaps he would not be able to pay. This would be devastating, and would tend to erode confidence in the entire industry. In most countries, such professional malpractice protection is required. It is usually obtained by securing insurance for this purpose. However, it can be obtained via a "mutual insurance" scheme, much like the settlement guarantee fund, where the participants make deposits, usually cash, into the fund. These deposits may be treated as assets or expenses for the participants.
2. In discussions with the RBI, they expressed concerns about accounting standards and disclosure, especially regarding derivatives and hedging. They said that what is needed is "fair value" accounting, rather than "book value" accounting.
3. Brokers did not agree with the requirement that for trades greater than .5% per day, per broker of a company's market cap, the principal (buyer and/or seller) must be divulged at that time. We agree with the brokers. This only leads to the buyer or seller splitting this transaction among several brokers, thus incurring additional transaction costs. The primary reason why the large buyer or seller doesn't want to be revealed at this time is because if he "showed" a large order or if he was revealed as the buyer or seller, the market would "run away", knowing that there would be much more "stock to follow." This creates an artificial "brake" on the market.
4. Both brokers that were visited made this margin related point. Because of the current systems operation, when a customer wanted to "roll out" his futures position from a month where the contract was expiring to another month, the broker is saddled with depositing the equivalent of 3 times the required margin during that day. (Everything works out by day's end). The consultants recommend that the margin system should be reviewed to correct this situation.
5. Although position limits are determined by the amount of margin deposited by the broker, there are maximum position limits based upon not having a broker hold more than a certain percentage of the open interest. We agree with this constraint. However, there is also a maximum constraint based upon a fixed arbitrary money amount that is applicable to all brokers. Consideration should be given to having this arbitrary amount predicated each broker's net or liquid capital.
6. As stated above, there is a maximum position that may be held (at the trading broker level) that is based upon a percentage of the open interest in that contract. This is fine when these positions are initially established, but as the open interest gets reduced, the trading broker's total position may exceed these limits. This causes a major problem for the broker because he now must arbitrarily select and liquidate (all or part) of one of his customer's position. This rule should be reviewed in order to allow more flexibility, and thereby conform more to the customer's financial objectives.



## **PART 2. STUDY TOUR**

### **7. Objective of the Study Tour**

The objective of the ADB/IBTCI Study Tour, which was integral part of a Regulation and Supervision of Derivative Instruments project in India (ADB Project No. TA 4203-IND), was to understand and appreciate the regulation of derivatives markets in South Korea and Australia through discussion meetings with the regulatory bodies and exchanges, and learn how these systems, products, and organization structure may benefit the derivatives market in India. The focus was on discussing the organizational structure of the regulators, how is market risk controlled and development of new products.

In February of 2006, following a request from ADB, the Tour participants were requested to fill out a questionnaire designed to elicit their opinions on several aspects of the Study Tour. After several requests for responses made between February and May 2006, only two responses from participants were obtained. After another month of renewed requests, it was concluded that there would be no more filled questionnaires forthcoming. The questionnaires are included unedited in Annex 1 of this report. However, some comments coming from the questionnaires were integrated in this final version of the report.

### **8. Tour Participants**

The Study Tour Group was composed of five participants who had been selected by the Ministry of Finance and ADB. This group included representatives of various pertinent Indian organizations, including the Security and Exchange Board of India (SEBI); the National Stock Exchange (NSE); the National Securities Depository, Ltd. (NSDL); the Bombay Stock Exchange (BSE); and the Legislative Department of the Ministry of Law and Justice of the Government of India.

1. Nehal Vora, Asst. General Manager, SEBI, Mumbai
2. Suprabhat Lala, Manager (Capital Market), NSE, Mumbai
3. V. R. Narasimhan, Senior Vice President, NSDL, Mumbai
4. K. A. Bulsara, Deputy General Manager, BSE, Mumbai
5. V. K. Bhasin, Joint Secretary & Legislative Counsel, Legislative Department, Ministry of Law & Justice, Government of India, New Delhi

In addition to the five participants the group included the Study Tour Guide, Mr. Charlie Rubin, consultant, IBTCI

The Study Tour trip took eleven days from departure to arrival back in India. In the course of this period, the delegation spent three and one-half days on each Seoul and Pusan in South Korea and Sydney, Australia. The Study Tour Program is included in Annex 2, of this report.

## **9 South Korea**

### **a. People that we met in South Korea**

In Seoul, Korea, we met with John Dong-hoon SHIN, Manager Market Oversight Services, Korea Exchange (KRX), Junghoon Hwang, of the International Cooperation Team, Financial Supervisory Services (FSS), the government regulator, Dr. Young-Je Cho, Team Head of Capital Market Supervision Team, Securities Supervision Department, FSS, Gyemyung Choi, Team Head of Futures Business Supervision Team, Securities Supervision Department, FSS, Lee Jeong Man, Associate of Futures Business Supervision Team, Securities Supervision Department, FSS, Kyung Soo Kim, Senior Associate Capital Market Supervision Team, Securities Supervision Department, FSS, Chang-Hyun Yun, Professor of Finance, The University of Seoul and also of the Korea Association of Risk Professionals (KARP), Jung-Yong Jeon, of KARP, John Jeon of KARP, and Kangkyoung Lee, Director of KARP.



In Busan, Korea, from the KRX, we met with Bae-Yong Kim, Rules & Regulation / Manager, Futures Market Division, and Suk-Ho Jung, Rules & Regulation I / Manager, Futures Market Division.

**b. Summary/Highlights of Findings in Korea**

- We toured the KRX and learned of their history, their participants, their products and related activity, including turnover and volatility, their foreign relationships, their risk management system, their risk concerns regarding price manipulation and speculation, and future strategies and products. As in India, the trading and settlement functions on the KRX are electronic. Currently, there are no agricultural commodity markets in Korea, but when established, they will be part of the KRX, which handles all of the exchange traded securities and derivative products in Korea.
- We also were informed of the regulatory structure in Korea, and how they conduct their surveillance and operations.
- The KRX is an SRO (Self Regulatory Organization), performing the appropriate surveillance, etc. with the FSS having oversight responsibilities. This is similar to the US model, and an environment that should be considered in India.
- We learned that all infractions and improprieties are divided into major and minor violations. Insider trading and price manipulations are designated as major violations, and are defined in their securities act. All other violations are minor.
- The major products of the KRX are their index options. In fact, in terms of activity, they are the largest index options exchange in the world. KRX also trades a few selected individual stock options, but there is hardly any futures activity.
- In 2005 through October, more than 10 million contracts of stock index options were traded, compared to less than 200,000 contracts of stock index futures. In fact there has been a decline in stock index futures activity. These futures and options trading activities are the reverse of the Indian market, where most of the derivative activity is in futures, not options.
- Of the total trading activity in interest rate products (options and futures) and stock index products (options and futures), more than 99% are the stock index products.
- Since 2000, in terms of (option and futures) trading value, approximately half is attributable to individuals, and the other half attributable to institutional and foreign investors.
- Since India would like to expand their option activity, much attention on the Tour was devoted to exploring why and what made the KRX the leader in these option contracts. Although this question was posed to almost all of the Koreans that we met, none could give a financial answer. It seems that the boom in option trading is attributable to the speculative and cultural nature of Koreans. The low margin rates give the allure of high potential profits from these financial products. It was estimated that over 90% of options expire, unexercised. This means that retail customers, the ones that usually buy options, lose money, and the institutions, those that primarily sell covered calls, make the money. This is a very typical scenario. In the US, unexercised options have run in the 80% range. We found out at our meeting with KARP that a study of option purchases was made and the results indicated that retail customers trading options get "wiped out" in an incredible average of 40 days. This high trading volume, although good for business, has created a major concern – high speculation and resultant losses among retail customers - for the industry.
- In Korea (as well as in Australia), the market risk control, margin calculations and the entire margin collection process was less adequate than the current system in India. Basically, Korea uses SPAN as its margin analysis basis, with an initial margin of



15% and maintenance at 10%. Other differences include that in Korea, there exist "start of day" daily price (trading) limits, which is not the case in India. Also, the determination of the closing or settlement price was different. In Korea, as in the US, there is the notion of a "closing range" for all derivative or commodity contracts. Throughout the tour, we did not have much of a discussion on market risk control, since the participants felt that India has a superior model, and that there was little to learn from these two countries that could improve this Indian model.

- For Korea, their new and soon-to-be-developed products are additional index options and futures and additional interest rate futures. Futures and options settle with delivering the underlying commodity, not cash (as in India), but they are also now considering a cash delivery. (Perhaps this will reduce the current retail activity and speculation, which is a major concern).
- Because of the overnight risk associated with cash deliveries, India should consider delivering the underlying security for these derivative products, at least for their options contracts, where current activity is quite low. This delivery mechanism could help "jump start" this product. This, of course, would necessitate brokers in India that have access to a reliable securities lending / borrowing control system, which currently does not exist. Since brokers do not have access to such systems, a national automated securities lending / borrowing system could be developed by one of the depositories (such as the system being developed in Egypt). Lending and borrowing securities also creates additional interest income (for lenders and borrowers). In the US, this is a major source of revenues and profits for borrowers (brokers) and lenders (custodian banks and other customers).
- Although this point is well known among those familiar with the Indian securities derivatives market, it is worth noting here. In establishing (futures and options) contract value or size, the international standard is to determine a fixed quantity (e.g., 100 shares for stock derivatives, \$100,000 par value for bond derivatives, 100 ounces for gold derivatives, etc.), which when multiplied by the current price results in the contract value. In India, the contract size methodology is stated with a fixed initial contract value of Rs. 200,000, and then by dividing the current price into that value, the contract quantities (of different amounts) is determined. The point here is that when considering delivering of the underlying, instead of cash, this issue (of different contract quantity amounts) must be part of the discussion.
- It was agreed by the Tour participants that in order to create a more viable options market in India, more education would also be needed.
- From among all the organizations visited by in Seoul and Pusan, the Tour participants agreed that all four organizations selected for the program were relevant to the purpose of the Tour but the most relevant were the Korea Exchange and the Financial Supervisory Services. The most informative were The Korea Exchange and The Korea Association of Risk Professionals. Unfortunately, the Tour participants also agreed that The Financial Supervisory Services was the least informative, mainly because of difficulties due to language and no availability of adequate translation.

## **10. Australia**

### **a. People that we met in Australia**

In Australia, from the Australian Securities & Investments Commission (ASIC), we met with Andrew Crain, Director of International Relations, and John Krslovic, Senior Market Analyst, Markets Regulation. From the Australian Prudential Regulation Authority (APRA), we met with Brett Harper, Head of Balance Sheet and Market Risk, Policy Research and Consulting. From the SFE Corporation Limited, formerly the Sydney Futures Exchange, (SFX), we met



with Anne T. Brown, General Manager, Risk and Compliance, and Anthony Collins, Senior Manager, New Business. From the Reserve Bank of Australia (RBA), we met with Darren Flood, Senior Manager, Payments Systems Stability, Payments Policy Department, and with Matthew Dive, Manager, Payments Systems Stability, Payments Policy Department. Lastly, from the Australian Stock Exchange (ASX), we met with Michael Holubko, National Manager, Derivatives Trading, David Holthouse AO, Senior Advisor, International Affairs, and Mark Blair, National Manager, International Affairs.

**b. Summary/Highlights of Findings in Australia**

- We learned of the “split” government oversight in Australia. Basically, ASIC is the government regulator for all financial activities, whereby all financial entities require ASIC licensing. There are no separate licenses for being a broker, dealer, bank, etc. There exists a single Australian Financial Services license. Differentiating the regulatory structure from that of India, ASIC includes the responsibilities of both SEBI and the Department of Company Affairs. It was suggested that this framework should be considered for India.
- As we found in Korea, where there is only one exchange, in Australia, the two major exchanges (ASX and SFE), which also trade and settle electronically, are set up as SROs (Self Regulatory Organizations), with ASIC having oversight responsibilities. This SRO concept, which is also the environment in the US and may be considered to be the “international best practice”, is the primary structural difference between India and the two countries we visited. It affects much of how the regulator and exchanges function and operate, and the roles that they play, including the administering of the surveillance and enforcement activities.
- Another major difference between the Indian environment and many other countries, including Korea, Australia, and the US, is that India’s regulations, policies, financial products, etc. emanate from SEBI in a “top down” manner, where SEBI appears to be very involved in the determination of exchange rules, policies, financial products, etc. These other countries operate in a “bottom up” manner where the regulator allows more exchange flexibility and approves (or rejects) the exchange rules, procedures, products traded, etc. We believe that this promotes a more competitive exchange environment, and India should strongly consider adapting this structure.
- APRA, another government agency, focuses on prudential risk. It is the watchdog for bankruptcies, insolvencies, etc. and focuses almost exclusively on the financial health of banks, insurance companies and mutual funds.
- Due to the income tax structure, in which corporate taxes are 30% compared to 49% for individuals (with an annual income of more than \$6,000 AUD), there are approximately 1.6 million companies in Australia, of which 1700 are public and exchange traded.
- ASX is primarily a cash market for securities, but also has developed some derivative products, such as index options, index futures, and warrants. Currently, the open interest of index options is approximately 200,000 contracts, compared to only 15,000 futures contracts.
- The ASX averages 87,500 daily transactions. Its customer profile is 40% domestic institutions, 30% foreign, 22% retail and 8% banks and others. It is the 2<sup>nd</sup> largest stock market in the Asia Pacific (Japan is first), and one of the top 10 options markets in the world.
- The SFE is the primary futures (including other derivatives) exchange, with 85% of its activity in interest rate futures. Further investigation of the SFE interest rate futures success should be explored by India in order to try to replicate the SFE’s success. Futures trading accounts for 95% of its business, with only 5% for options trading.



During 2004, an average of more than 200,000 futures and options contracts traded each day (representing an annual turnover of more than 54 million contracts), positioning the SFE as one of the leading derivatives exchanges in the Asia Pacific region.

- The cash debt market, the largest market in Australia, is an over-the-counter (OTC) institutional market that is unregulated (by ASIC).
- The Contract for Difference (CFD) is a popular financial product that allows a dealer to act as a “quasi futures exchange” with its customers. It has had “explosive” growth. This product provides for its customers the leverage of a futures contract with the dealers arbitraging or offsetting the customer’s position on the ASX (cash market). The CFD is a bi-lateral agreement between dealer and customer for a specific quantity, and may be of any duration. This is different than an exchange traded product, which deals in standardized contracts.
- The market risk / margin system is based upon SPAN (for the SFE) and TIMS (for ASX). Where applicable, cross margining and spread rates are utilized. Again, not much was discussed on this subject since the Indian system appears to be superior. Rather than the regulator establishing the margin rules (as in India), ASIC allows each exchange to adopt its own margin rules, products, etc. It then approves of them or seeks further clarification or information prior to giving its approval.
- Australia is heavily dominated by worldwide organizations that require licensing to do business there. Thus, they have a somewhat different business outlook.
- Both the ASX and SFE are demutualized and its shares are publicly traded on the ASX.
- The SFE is actually established as part of the public holding company. Under the holding company are the SFE, its clearing house, and Astraclear, which clears the OTC debt market trades. It was suggested that the Indian depositories should incorporate or at least consider the capability of clearing cash market government bonds on a DVP basis as is currently being performed by Astraclear. Currently, Astraclear’s average daily settlement is approximately \$20 billion AUD.
- The SFE is opened for business more than any other exchange in the world. It is opened 24 hours per day for 5 ½ days. It opens with the first exchange opening (in New Zealand) and closes with the close of the last exchanges (in the US).
- The SFE employs a real time surveillance system and performs “stress testing”, which simulates various extreme price and volume scenarios and its affect on the market. It was suggested that this activity should be considered in the Indian marketplace.
- One of the SFE’s more interesting products is an intra-day option, which expires at the end of each day. The premiums for these options would be fairly “cheap” due to the very short time factor. This product is another device for potentially “jump starting” India’s options program, and should be considered.
- At the RBA, we were apprised of the structure and regulations of the clearing and settlement operations in Australia, since it regulates all of the clearing houses.
- The ASX has modeled their options trading after the CBOE (Chicago Board of Options Exchange), and it has been quite successful. Like Korea and unlike the system in India, deliveries are made with the physical (electronic) securities, not cash. This is accommodated by brokers having the ability to facilitate and control their securities lending and borrowing activities. This situation and as it relates to India was discussed in Section III.



- The ASX has had much success (in their opinion) trading warrants. They attribute its success to aggressive marketing, aggressive brokers (motivated by relatively high commissions), and a good product. They have also introduced “installment warrants”, in which the buyer pays the premium, but the payment for the strike price is reduced by the dividends paid. These installment warrants have experienced greater growth than the traditional warrants, whose daily volume has more than tripled since the year 2000, its first year of trading.
- Warrants are another derivative product that should be given serious consideration in India.
- To encourage market makers, besides giving them a fee discount, the ASX has a “robust” trading system that accommodates market makers – such as with priorities in obtaining quotes, changing quotes, and order throughput. The system also accommodates block transactions by easily facilitating basket or program trades.
- There has been a significant growth in trading and brokerage firms in Australia because, unlike in India, firms in the cash market may clear through other organizations. This should be considered in India, especially since India has already been successful with having “introducing” brokers for its securities derivatives trading.
- From among the five entities visited in Australia, there were three of them where there was agreement among all participants about being the most relevant. This includes the Australian Stock Exchange, SFE Corporation Limited which formerly had been the Sydney Futures Exchange, and the Australian Securities & Investments Commission. There was less unanimity on the relevance of the Australian Prudential Regulation Authority. Also, the Tour participants indicated that both SFE Corporation and the Australian Stock Exchange had been the most informative. The least relevant organization for purposes of the study was found to be the Reserve Bank of Australia.

## **11. Conclusions**

From the responses at our final “wrap up”, and the information included in the questionnaires, the participants appeared to have gained much from this Tour and seemed quite satisfied. It certainly was worthwhile and meaningful as there was much to think about and consider in making India more productive.

The visits to both countries included in the Tour proved to be very useful and beneficial. Regarding which derivatives generate most of the activity, Australia, which trades mostly in futures, is more like India, whereas Korea trades mostly in options. However, there were many other similarities and differences, as indicated in this report.

The overall level of interest and the degree of engagement of the participants with the host organizations was at a very high level. The participants’ questions focused primarily on the functions and activities that related to their individual jobs.

Beyond the learning of other ways to do things, and other points of view, it allowed the participants to meet and establish contacts with others in the world, which could result in future improvements and benefits.

By considering and implementing some or many of the points made in sections III and IV, much could be gained by the Indian derivatives market. As stated above, the main focus of the participants was to develop new products or get ideas for different procedures and rules that would enhance India’s current products, such as considering delivering the underlying, instead of cash, for option contracts.



**ANNEX 1****QUESTIONNAIRE ON THE STUDY TOUR  
TO SOUTH KOREA AND AUSTRALIA****Objective**

The objective of this ADB/IBTCI Study Tour was for the participants to understand and appreciate the regulation of derivatives markets as practiced in Korea and Australia in order to ascertain the extent to which there were approaches, practices, regulations and institutional arrangements that could be emulated in India.

The objective of this questionnaire is to learn from each of you the opinions that you have from various aspects of the Study Tour and from the contents of the report that was submitted to ADB in draft form.

**Questionnaire**

**NOTE:** There is no limit imposed on the length of your response. However, in responding, we would encourage you to be as comprehensive as possible.

**South Korea****1. Was the overall program organized in South Korea useful and informative?**

Yes, the overall program organized in South Korea was useful and informative. However, it would have served better if a broad outline on the South Korean Markets was available with us before the trip. This would have led to more pointed discussions leading to better results of the meetings organized.

**2. Were the organizations that you visited relevant to the purposes of the Study Tour?**

Most of the organizations visited were relevant to the purpose of the Study Tour. However a visit to some of the market intermediaries would have provided a better understanding of the market with the problems of implementation (if any) of the policies framed by the regulators and exchanges.

**3. Could you indicate which organization that you visited was**

Most relevant	KRX and FSS
Least relevant	None
Most informative	KRX and KARP
Least informative	FSS

**4. Were the hosts in each organization generally well prepared and able to explain the roles and responsibilities of their respective institutions?**

More or less the hosts in each organisation were generally well prepared. However language did prove to be a barrier sometimes in expressing the true answers in the right perspective.

**5. Could you cite one or two aspects that were discussed as being of special interest and relevance to your own responsibilities in India?**

The issues of investor education being conducted to young students from schools wherein special video capsules are shown by KRX to imbibe investment culture into the Korean population were interesting as a measure to continue high volumes in the Korean markets.



Another issue which was particularly interesting was the variety of sophisticated home trading systems and mobile trading being introduced to increase volumes among the households in Korea.

A third issue which was interesting to note was the co-operation between the regulators and the risk professionals (KARP) and the communication between them for new areas of research which could be used by the regulators for prescribing better policies.

**6. Did you learn anything that, in your view, would have application in India?**

The measures taken by Korea to increase the volumes in options products could have a useful application in India. Initiatives taken by Korea in merging the regulatory functions into one body with a subsidiary performing the operational functions could have useful application in India.

**Australia**

**7. Was the overall program organized in Australia useful and informative?**

Yes.

**8. Were the organizations that you visited relevant to the purposes of the Study Tour?**

Most of them were relevant to the purposes of the Study Tour.

**9. Could you indicate which organization that you visited was ...**

Most relevant        SFE, ASX, ASIC

Least relevant        APRA and RBA

Most informative     SFE and ASX

Least informative    RBA and APRA

**10. Were the hosts in each organization generally well prepared and able to explain the roles and responsibilities of their respective institutions?**

The hosts in SFE, ASX and ASIC were very well prepared. The hosts in APRA and RBA probably needed to be briefed more on the purpose of the visit.

**11. Could you cite one or two aspects that were discussed as being of special interest and relevance to your own responsibilities in India?**

Interest rate futures at SFE.

**12. Did you learn anything that, in your view, would have application in India?**

Interest rate futures do have a wide scope of application in India.

**13. Could you indicate which country, in your view, offered the best/most comprehensive and relevant program?**

Each country had its own relevance in contribution to the Study Tour. A comparison between the two would be difficult as each country had its own distinctive characteristics which were unique in nature. However on the whole the exchanges at both the countries were better prepared and equipped in providing a better perspective to the purpose of the Study Tour.

**14. Could you elaborate on the technical aspect that you learned that was of most interest to you?**

The policy initiatives taken by both the countries in developing options as a product were interesting in terms of content as well as future areas of development for India.



- 15. Could you please comment on the usefulness of the Study Tour to you? Did the Study Tour live up to your expectations?**

The Study Tour was useful in providing a bird's eye-view to the derivative markets in both the countries. However there was a need to provide some pre Study Tour material which gave an introduction to the derivative markets in each country so the basic questions on introduction of each market could be avoided and that time could have been spent on more pointed questions. The Study Tour was useful but needed more structured planning for better utility and purpose to the visit.

- 16. Since your return to India, has there been any aspect that you learned during the Tour that you have been able to use in the course of your current activities?**

No.

- 17. Could you please comment on any aspect that was not covered in this questionnaire that you think merits discussion?**

It would be useful to know the feedback of the host officials on our visit to their country.

- 18. Was the Study Tour organized in accordance with your expectations?**

By and large the organization was as per expectations, except that the arrangements in Australia could have been better. Also the arrangements were communicated at the fag end of the proposed tour leaving very little breathing space to arrange the visas and other travel arrangements.

- 19. Could you elaborate on what you found to be the best aspect of the Tour's organization? Could you also indicate what the least satisfactory aspect was?**

The best aspect of the Study Tour was the opportunity to meet key officials from the exchanges and regulators. The least satisfactory aspect was the organization of the Study Tour.

- 20. Compared with other Study Tours that you have participated in, does this Study qualify as better, equal or worse than the others?**

More or less equal.

Thank you very much for your cooperation



## **QUESTIONNAIRE ON THE STUDY TOUR TO SOUTH KOREA AND AUSTRALIA**

### **Objective**

The objective of this ADB/IBTCI Study Tour was for the participants to understand and appreciate the regulation of derivatives markets as practiced in Korea and Australia in order to ascertain the extent to which there were approaches, practices, regulations and institutional arrangements that could be emulated in India.

The objective of this questionnaire is to learn from each of you the opinions that you have from various aspects of the Study Tour and from the contents of the report that was submitted to ADB in draft form.

### **Questionnaire**

**NOTE:** There is no limit imposed on the length of your response. However, in responding, we would encourage you to be as comprehensive as possible.

### **South Korea**

1. **Was the overall program organized in South Korea useful and informative?**

Yes.

2. **Were the organizations that you visited relevant to the purposes of the Study Tour?**

KRX visit in Seoul and Busan were great. However, visit to FSS although may be relevant was not informative enough.

3. **Could you indicate which organization that you visited was**

Most relevant      KRX & FSS

Least relevant      -

Most informative      KRX

Least informative      FSS

4. **Were the hosts in each organization generally well prepared and able to explain the roles and responsibilities of their respective institutions?**

Personnel in FSS had major communication problems and could not explain in English. The KRX officials were very well prepared.

5. **Could you cite one or two aspects that were discussed as being of special interest and relevance to your own responsibilities in India?**

It appeared that compliance issues were of not any major concern as it was classified as a Minor Offence. However, the accent was more on price manipulation and insider trading. We were also very impressed with their volume of Options Trading as it has not taken off well in India.

6. **Did you learn anything that, in your view, would have application in India?**

Yes. The spread of education to the masses and their involvement in trading was very interesting as in India, very little of the savings enters in the capital market. Also, the size of the contract being low according to us was a very useful way of popularizing the products and getting retail participation, which is not the case in India



**Australia**

- 7. Was the overall program organized in Australia useful and informative?**  
Yes it was.
- 8. Were the organizations that you visited relevant to the purposes of the Study Tour?**  
Almost all except the RBA
- 9. Could you indicate which organization that you visited was ...**
- |                   |                      |
|-------------------|----------------------|
| Most relevant     | ASX, SFE, ASIC, APRA |
| Least relevant    | RBA                  |
| Most informative  | ASX, SFE, ASIC       |
| Least informative | RBA                  |
- 10. Were the hosts in each organization generally well prepared and able to explain the roles and responsibilities of their respective institutions?**  
Yes. However, the information gleaned at the RBA was rather irrelevant.
- 11. Could you cite one or two aspects that were discussed as being of special interest and relevance to your own responsibilities in India?**  
The set-up of the regulatory structures was quite different as we have a kind of super regulator for capital markets in SEBI, whereas in Australia, these responsibilities are shares between ASIC and APRA. The issue of having a super regulator on the lines of FSA in the UK is a hotly debated topic in India at present.
- 12. Did you learn anything that, in your view, would have application in India?**  
The product Contract for Differences (CFD) was very interesting and could be introduced in India.
- 13. Could you indicate which country, in your view, offered the best/most comprehensive and relevant program?**  
Australia. Although a visit in the future to London and Washington / New York / Chicago, would also be very useful and productive.
- 14. Could you elaborate on the technical aspect that you learned that was of most interest to you?**  
CFDs.
- 15. Could you please comment on the usefulness of the Study Tour to you? Did the Study Tour live up to your expectations?**  
Very useful and informative. Besides the technical gains we also benefited from meeting with our counterparts in these two vibrant players in the global market and the experience was great.
- 16. Since your return to India, has there been any aspect that you learned during the Tour that you have been able to use in the course of your current activities?**  
We have put up a note on certain products, etc. that could be launched – the issue is under discussions.
- 17. Could you please comment on any aspect that was not covered in this questionnaire that you think merits discussion?**  
No.



**18. Was the Study Tour organized in accordance with your expectations?**

Yes. Although the hotel arranged in Sydney could have been better. There was no breakfast included in the package and in spite of IBCTC booking well in advance we were not given rooms on the same floor which could have led to a better bonding between participants.

**19. Could you elaborate on what you found to be the best aspect of the Tour's organization? Could you also indicate what the least satisfactory aspect was?**

The schedule was very well arranged. However, I felt that ideally:

- 1) The tour guide could have been better informed about the country we visited and also as to the organizations we visited as well as their basic functions.
- 2) Also, we could have been given a brief of the organizations to be visited so that we could give our views on the same and maybe tweak the schedule a bit so as to make it more relevant to us.
- 3) We would have loved to see live trading but could not do so at any organization we visited.

**20. Compared with other Study Tours that you have participated in, does this Study qualify as better, equal or worse than the others?**

Maybe a complimentary half day or full day city tour or an expedition to some local places of interest would have been ideal for the participants to share notes and bond as a team. I have found this to be useful on other study tours

Thank you very much for your cooperation



**ANNEX 2****ADB Project No. TA 4203-IND - Contract No. 2 (1977)****Review of Regulation & Supervision of Derivatives Instruments of****Securities and Exchange Board of India (SEBI)****STUDY TOUR TO KOREA AND AUSTRALIA - PROGRAM**

**Objective:** To appreciate and understand the regulation of Derivatives Markets in Korea and Australia through discussion meetings with the regulatory bodies and other related organizations.

**Coordination:** Dr. Shashank Saxena, Joint Director, Department of Economic Affairs, Ministry of Finance, Government of India ([ssaksena@nic.in](mailto:ssaksena@nic.in); Tele/fax: + + 91-23092882) in coordination with Mr. Renato M. Limjoco, Lead Financial Sector Specialist ([rlimjoco@adb.org](mailto:rlimjoco@adb.org); Telephone (632) 632-6490) and Ms. Ma. Isabel J. Martin, Assistant Project Analyst ([mimartin@adb.org](mailto:mimartin@adb.org); Telephone (632) 632-6250), Asian Development Bank.

**Participants:** As per Dr. Saxena information to IBTCI, the following individuals from India will participate.

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**5. Mr. V. K. Bhasin, Joint Secretary & Legislative Counsel, Legislative Department, Ministry of Law & Justice, Government of India, New Delhi**

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**IBTCI Consultant to accompany the India delegation:****Charles Rubin, Consultant, Tucson, Arizona, USA**

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**TRAVEL PLANS**

**Travel Plan for Charles Rubin**

Fri, Nov 4: UNITED AIRLINES, UA 6509  
 Operated by /UNITED EXPRESS/SKYWEST  
 From: TUCSON, AZ (TUS) Departs: 8:33am To: LOS ANGELES, CA (LAX) Arrives: 9:02am  
 From: LOS ANGELES Departs: 11:20am To: SEOUL INCHEON INT, KOREA Arrives: 5:40pm (Sat)  
 Thu, Nov 10-Fri, Nov 11: KOREAN AIR, KE 0811  
 From: SEOUL KOREA Departs: 7:05pm To: SYDNEY, AUSTRALIA (SYD) Arrives: 7:25am (Fri)  
 Thu, Nov 17: KOREAN AIR, KE 0812  
 From: SYDNEY, AUSTRALIA (SYD) Departs: 9:10am TO: SEOUL Arrives: 5:40pm  
 From: SEOUL KOREA Departs: 7:30pm To: LOS ANGELES Arrives: 1:20pm  
 From: LOS ANGELES, CA (LAX) Departs: 6:12 pm To: TUCSON, AZ (TUS) Arrives: 8:35pm (Fri)

**Travel Plan of Indian Participants**

**Korean Airways**

06 NOV KE656 06NOV BOMBAY SEOUL DEP 0430 ARR 1510 (Sun)  
 10 NOV KE811 10NOV SEOUL SYDNEY DEP 1905 ARR 0725 (Fri)  
 16 NOV QF123 16NOV SYDNEY MUMBAI DEP 0955 ARR 1630

Note: Charles Rubin will arrive one day early on Saturday, November 5 and depart one day later on Thursday November 17, 2005.

**Train travel roundtrip SEOUL – BUSAN for all participants**

**Fare Standard one way - about 45,000 Won, First Class 100,000 Won,**

**Suggested trains**

**Tuesday November 8 2005 – Gyeongbu Line –**

Train No. 9 – Depart Seoul 10.00 a.m. Arrive Busan 12.42 a.m.  
 Train No. 26 – Depart Busan 7.00 p.m. Arrive Seoul 19.40 a.m.

**TOUR PROGRAM**

**SEOUL, KOREA**

**Saturday November 5, 2005**

Arrival in Seoul, Korea Charles Rubin

**Sunday November 6, 2005**

Arrival in Seoul, Korea Indian participants

Participants meet with Charles Rubin on arrival for warming up session/preparation for meetings.

Sat, Nov 5-Thu, Nov 10: INTERCONTINENTAL INTERCONTINENTAL COEX SEOUL  [map](#)

Address: 159 SAMSEONG-DONG GANGNAM-GU 135 975	Check In: Nov 5 Check Out: Nov 10
Phone: 82-2-3452-2500	FAX: 82-2-3430-8000
Room Type: GOVERNMENT RATE ID REQ	Room(s): 1
Status: Confirmed	Rate: 210000 KRW / night
Client ID #:	Corp Discount #:
Confirmation: 62979112	
Guarantee: Room is guaranteed for late arrival	
Cancellation: Cancel by 6:00pm on day of arrival to avoid a penalty.	



**MEETINGS****Monday November 7, 2005**

7.30 a.m. to 8.00 a.m. - Breakfast

8.00 a.m. to 9.00 a.m. – Delegation meeting to discuss program

10.00 a.m. to 11.30 a.m. – Meeting with Market Oversight Committee, Korea Exchange (KRX) – Seoul

11.30 a.m. to 12.00 noon - PR tour Market Oversight Committee, Korea Exchange (KRX), Seoul,

12.00 p.m. to 1.30 p.m. - Luncheon hosted by KRX (Inform special dietary concerns)

1.30 p.m. to 2.00 p.m. - Head to Financial Supervisory Service of Financial Supervisory Commission (Acronym in Korean - FSS)

2.00 p.m. to 3.00 p.m. - Meeting with Mr. Cho, Young-Je, Team Head of Capital Market Supervision Team, Securities Supervision Department, FSS, Seoul

3.00 p.m. to 4.00 p.m. - Meeting with Mr. Choi, Gye-Myung, Team Head of Futures Business Supervision Team, Securities Supervision Department, FSS, Seoul

Arranged by

Mr. Junghoon Hwang

International Cooperation Office

Financial Supervisory Service (FSS)

27 Yoido-dong, Youngdeungpo-gu, Seoul, Korea 150-743

Tel: +82-2-3786-7892 Fax: +82-2-3786-7899

[Junghoon.Hwang@fss.or.kr](mailto:Junghoon.Hwang@fss.or.kr)

**Tuesday November 8 2005**

7.30 a.m. to 8.00 a.m. - Breakfast

8.00 a.m. to 9.00 a.m. – Delegation meeting to discuss program and review meetings previous day

**Travel by Korea Train Express (KTX) by bullet train to Busan, 3 hours journey** - Please see above suggested schedules for train and fare – Charles Rubin has advance for tickets. Mr. Hwang has offered assistance for travel and other arrangements

2.00 p.m. to 3.30 p.m. – Meeting with Futures Market, Korea Exchange (KRX), Busan

Evening – return to Seoul

**Wednesday, November 9, 2005**

7.30 a.m. to 8.00 a.m. - Breakfast

8.00 a.m. to 9.00 a.m. – Delegation meeting to discuss program and review meetings previous day

**During the day** - Meeting with Professor/Experts (**to be arranged and confirmed**)

**Thursday, November 10, 2005**

8.00 a.m. to 9.00 a.m. – Breakfast

9.00 a.m. or later - Delegation meeting to discuss program and review meetings previous day and wrap up Korea visits observations

**During the day** – currently free (meetings to be arranged and confirmed)

**Afternoon** - leave for Sydney, Australia – flight at 7.00 p.m.



**TOUR PROGRAM - AUSTRALIA**

Fri, Nov 11-Wed, Nov 16: SHANGRI LA HOTELS SHANGRI-LA HOTEL SYDNEY  [map](#)

**Address:** 176 CUMBERLAND STREET  
SYDNEY NSW 2000  
**Phone:** 61 2 92506000  
**Room Type:** -GOV-GOVERNMENT RATES  
**Status:** Confirmed  
**Client ID #:**  
**Confirmation:** 89251069  
**Guarantee:** Room is guaranteed for late arrival  
**Cancellation:** Cancel 24 hours prior to arrival to avoid a penalty.

**Check In:** Nov 11  
**Check Out:** Nov 16  
**FAX:** 61 2 92506250  
**Room(s):** 1  
**Rate:** 240.00 AUD / night  
**Corp Discount #:**

**MEETINGS**

**Friday, November 11, 2005**

**9.00 a.m. to 9.30 a.m.** - Breakfast

**10.30 a.m. to 12 noon** - Commodities Derivatives Regulation Authorities Australian Securities and Investment Commission (ASIC)

ASIC Staff to meet: Tracey Lyons, Director Markets Regulation office, International Relations

Address

Level 18, No 1 Martin Place  
Sydney NSW 2000  
Australia  
Phone (02) 9911 2000  
(International: +612 9911 2000)  
Fax (02) 9911 2333

Contact person

Noeleen Hudson  
Executive Assistant to  
Director, International Relations  
Ph: (02) 9911 2254  
Fax: (02) 9911 2010 Ext: 22254  
[Noeleen.Hudson@asic.gov.au](mailto:Noeleen.Hudson@asic.gov.au)

**2.00 p.m. to 3.30 p.m.** - Visit to the Australian Prudential Regulatory Authority (APRA) and discussions

Meeting with- Brett Harper, Head of Balance Sheet and Market Risk in APRA's Supervisory Support Division

Location:

Australian Prudential Regulatory Authority (APRA) office  
26<sup>th</sup> floor, 400 George Street (nearest cross St is King St)  
Sydney

At the reception area, please ask for Mr Brett Harper.

Arranged by –

Chris Gaskell, Head of International Relations  
[Chris.Gaskell@apra.gov.au](mailto:Chris.Gaskell@apra.gov.au)

Contact person

**Ms Nelun Jayasinghe**  
Senior Analyst International Relations



Australian Prudential Regulatory Authority  
Ph: + 61 2 9210 3482  
Fax: +61 2 9210 3420  
[Nelun.Jayasinghe@apra.gov.au](mailto:Nelun.Jayasinghe@apra.gov.au)

**Saturday, November 12, 2005**

**Free**

**Sunday, November 13, 2005**

**Free**

**Monday, November 14, 2005**

**7.30 a.m. to 8.00 a.m. - Breakfast**

**8.00 a.m. to 9.00 a.m. – Delegation meeting to discuss program and review meetings previous day**

**10 a. m. to 11.30 a.m.** Visit to the Sydney Futures Exchange Corporation and discussions

Meeting with - Anthony Collins, Senior Manager - New Business & Commodities and Anne Brown, General Manager - Risk and Compliance

Arranged by –

Anthony Collins, Senior Manager - New Business & Commodities

Tel: 612 9256 0664

Fax: 612 9256 0144

[ACollins@sfe.com.au](mailto:ACollins@sfe.com.au)

**2.00 p.m. Onwards – Wrap up meeting first detailed session**

**Tuesday, November 15, 2005**

**7.30 a.m. to 8.00 a.m. - Breakfast**

**8.00 a.m. to 9.00 a.m. – Delegation meeting to discuss program and review meetings previous day**

**11 a. m. - 12:20 p. m.** Visit to the Reserve Bank of Australia and discussions with Darren Flood, Senior Manager, Payments System Stability and Matthew Dive, Manager, Securities Settlement, Payments Policy Department (Ph. 612 9551 8781), confirmed by Darren Flood

Location

The Reserve Bank of Australia  
65 Martin Place, Sydney NSW 2001  
AUSTRALIA

Arranged by

Darren Flood

Senior Manager

Payments System Stability

Payments Policy Department

Telephone: (61) 02 9551 8703

[floodd@rba.gov.au](mailto:floodd@rba.gov.au)

**2.30 p.m. to 3.30 pm.** Visit to the Australian Stock Exchange in Sydney, Sydney

Location:

Australian Stock Exchange  
Exchange Centre  
20 Bridge Street, Sydney

ASX Representative to receive at Ground Floor Reception area

**Ms Margaret Triggs**

Corporate Relations, ASX



Meeting Location

Level 8, Perth Room  
Australian Stock Exchange

Meeting Program

Introduction – Mr. David Holthouse AO, Senior Advisor, Corporate Relations

Discussion on operation and regulation of ASX derivative market – Mr. Michael Holubko  
National Manager Derivatives Trading

General overview of ASX supervision & corporate governance - Mr. Mark Blair  
National Manager, International Affairs

Arranged by

**Tania Singh**

Corporate Relations Adviser  
Australian Stock Exchange Limited  
Level 3, 530 Collins St, Melbourne VIC  
Sydney Australia  
T: +61 3 9617 7889  
F: +61 3 9614 7124  
E-mail: [tania.singh@asx.com.au](mailto:tania.singh@asx.com.au)  
[www.asx.com.au](http://www.asx.com.au)

**4.00 p.m. Onwards** – Wrap up meeting conclusion

**Wednesday, November 16, 2005**

Return travel home for Indian delegation

**Thursday, November 17, 2005**

Return travel home for Charles Rubin



