

Securities Scam: Genesis, Mechanics and Impact

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Abstract

The term "securities scam" refers to a diversion of funds to the tune of over Rs. 3500 crores from the banking system to various stockbrokers in a series of transactions (primarily in Government securities) during the period April 1991 to May 1992. The scam has for several months become a permanent feature of the front pages of the newspapers. Despite the massive media coverage of the scam, most readers found it hard to understand it particularly when they were confronted with arcane terms and acronyms like ready forward, double ready forward, SGL, PDO, BR, PMS etc. Nevertheless an understanding of the scam is a prerequisite for any meaningful analysis of policy alternatives to improve the functioning of the financial system.

This paper presents a plausible reconstruction of how the scam originated, how it was perpetrated, and what would be its aftermath. The paper is expository in nature and the authors make no claims to omniscience.

The paper goes on to discuss the response of the government to the scam in terms of 1) discovering and punishing the guilty, 2) recovering the money, and 3) reforming the system. While agreeing with the importance of discovering and punishing the guilty, the paper argues that the attempt of the government to recover the money by such measures as the tainted shares law which cause severe and unjustified hardship to genuine and innocent investors is misguided.

Turning to the arena of reforms of the financial system, the paper argues that the origins of the scam lie in overregulation of our markets. It recommends that normal transactions must be allowed to be done openly and transparently, and the role of brokers as market makers must be recognized. The second lesson from the scam is that artificial insulation of closely related markets from each other is counterproductive in the long run. Artificial barriers between the money market and the capital market, between the market for corporate securities and the market for government securities and between the formal money market and the informal one must be eliminated.

Securities Scam: Genesis, Mechanics and Impact

Introduction

In April 1992, the first press report appeared indicating that there was a shortfall in the Government Securities held by the State Bank of India. In a little over a month, investigations revealed that this was just the tip of an iceberg which came to be called the *securities scam*, involving misappropriation of funds to the tune of over Rs. 3500 crores (about \$ 1.2 billion). In an ever expanding ambit, the scam has engulfed top executives of large nationalized banks, foreign banks and financial institutions, brokers, bureaucrats and politicians. The functioning of the money market and the stock market has been thrown in disarray. The scam has generated such immense public interest that it has become a permanent feature on the front pages of newspapers. A large number of agencies, namely, the Reserve Bank of India (RBI), the Central Bureau of Investigation (CBI), the Income Tax Department, the Directorate of Enforcement and the Joint Parliamentary Committee (JPC) are currently investigating various aspects of the scam.

In an attempt to expedite legal processes, the government responded to the scam with promulgation of an ordinance and setting up of a special court to try those accused in the scam. The ordinance ordered attachment of property of all the accused and voided all transactions done by the accused brokers and their firms after April 1, 1991. These extraordinary measures were so harsh that even the purchases made by genuine investors were invalidated, if the shares at some stage had been routed through the accused brokers. This led to the creation of what came to be known as "tainted" shares. The tainted shares were worthless in the market as they could not be sold. This created a panic among investors and brokers and led to a prolonged closure of the stock exchanges along with a precipitous drop in the price of shares. In less than 2 months following the discovery of the scam, the stock prices dropped by over 40%, wiping out market value to the tune of Rs. 100,000 crores. The scam also had an impact on the liberalization policies being pursued by the government with several reform measures being put on hold.

As is to be expected, everyone is trying to disown the responsibility for the scam. The RBI has blamed the commercial banks, charging them with negligence and extensive violation of banking regulations. The commercial banks are in turn blaming the RBI for inefficient functioning and ineffective supervision. The brokers are being accused by all of downright fraud. The government has chosen the ubiquitous term "systems failure" to describe the reason for the scam. All this has left a lay reader thoroughly confused. The daunting nature of the task of understanding the scam is clear from the arcane terms and acronyms used to describe the scam: ready forward, double ready forward, SGL, PDO, BR, PMS etc. Comprehending these terms however is essential for understanding the ramifications of the scam.

In this paper we first present a plausible reconstruction of how the scam originated and how it was perpetrated. We then discuss the aftermath of the scam, and critically examine the government's response to the scam, before suggesting policy initiatives required to clean up the financial system. The paper is essentially expository in nature and is based on our analysis of the available published material on the scam as well as our discussions with several participants in the securities markets.

The Two Securities Markets

The scam was in essence a diversion of funds from the banking system (in particular the inter-bank market in government securities) to brokers for financing their operations in the stock market. A clear understanding of the government securities market and the stock (corporate securities) markets is a prerequisite for understanding the scam. A brief comparative description of these two markets is as follows:

<i>Characteristic</i>	<i>Government Securities Market</i>	<i>Stock Market</i>
Securities	<ul style="list-style-type: none"> • Government Securities • PSU (Public Sector Undertakings) Bonds • Units of the Unit Trust of India 	Corporate Securities (shares and debentures)
Trading Volume	Rs. 3000 - 4000 crores (over \$ 1 billion) a day	Rs. 50 - 200 crores (\$15 - 70 million)
Market Capitalization	Rs. 100,000 crores	Rs. 250,000 crores (at BSE Sensitive Index of 4500)
No of Transactions	250 per day	50,000 per day
Players	<ul style="list-style-type: none"> • Banks • Financial Institutions 	<ul style="list-style-type: none"> • Individuals • Companies • Financial Institutions
Inter-mediaries	About a dozen brokers approved by the Reserve Bank of India (RBI)	About 500 brokers in the Bombay Stock Exchange
Finance	Money Market ("Formal" market)	<i>Badla</i> Finance Market ("Informal" Money Market)
Cost of Finance	18-20%	35-40%

The crucial part of the comparison however is the last element which indicates that the cost of finance in the informal money market which finance stock market operations is

about twice that of the formal market in which banks lend to each other against government securities.

We would like to add here that the difference in the cost of finance in the two markets cannot be attributed to the difference in the level of risk. Since badla finance is made available to a stock broker for a short duration (typically a fortnight) and there are institutional safeguards against default by the broker, operators in the market do not regard badla finance as highly risky. Though there is no published data, the historical default rates (as a percentage of the total quantum of credit outstanding) in badla finance are believed to be quite low. A comparison with returns available in low grade long term corporate debentures indicates that the interest rate in the badla market is disproportionately high in relation to its risk. It is important to distinguish between (a) free markets where different instruments offer different yields determined by their risk and liquidity and (b) artificially segmented markets where similar or slightly different instruments provide vastly different yields totally unrelated to risk or any other characteristic. The phenomenon of high interest rates in badla finance is mainly due to artificial segmentation of the markets.

It is quite clear therefore that there were enormous profits to be had for anybody who could find a way of breaching the artificial wall separating the two markets and arbitrage between them. That in essence was what the scam was all about. To understand the motivation of different players involved in such diversion, it is necessary to examine the changes in the economic environment that preceded the discovery of the scam, and how these changes were affecting the principal players in both markets.

Liberalization of the Economy

After assuming office in June 1991, the new government accelerated the process of economic liberalization under the auspices of the International Monetary Fund (IMF). The opening up of the Indian economy as a result of these measures promised an unprecedented growth and prosperity for the private corporate sector as new sectors of the economy were being allowed private participation and various administrative impediments were being removed. Anticipating the good tidings for the private sector, the stock market started booming - the Bombay Stock Exchange Sensitive Index (Sensex) rose from around 1000 in February 1991 to a peak of 4500 in March 1992 just before the scam came to light. This meant an enormous increase in the scale of finance required by operators in the stock market. Heavy margins imposed by the Bombay Stock Exchange on settlement trading added to the funds requirement.

At the same time, the new free market philosophy confronted the public sector with new challenges. There was immense pressure on the public sector to perform - to perform in financial terms. The nationalized banks too were under the same pressure to improve their bottom line. The proposed increase in capital adequacy requirement (mandated by the Narasimham Committee report) added to the pressure on the banks.

Another innovation in the banking sector in the period preceding the scam was the Portfolio Management Scheme (PMS). Shorn of the verbiage, in operational terms, PMS was simply a deposit which was not subject to interest rate ceilings or to reserve requirements. The scheme was designed to permit deployment of large amounts of surplus cash available with several public sector undertakings (PSUs) particularly in the oil sector. A large part of this surplus cash resulted from borrowings in the international markets (by PSUs, at the instance of the government) to bolster the country's precarious foreign exchange reserves. An intense competition developed among the banks for these funds as they were unfettered by reserve requirements.

To compete for PMS funds from the PSUs as well as to enhance their own profitability, banks were forced to look for higher returns. This was happening at the same time when there was a growing need for funds in the informal money market to finance stock market operations at very high rates of interest. The time was therefore most appropriate for somebody to find innovative ways of diverting funds from the banking system to the stock market. Brokers who were operating in both the markets were ideally placed to do this, and thus the scam was born.

The Ready Forward Deal

The crucial mechanism through which the scam was effected was the ready forward (RF) deal. The RF is in essence a secured short term (typically 15 day) loan from one bank to another bank. The lending is done against government securities, exactly the way a pawnbroker lends against jewellery or other valuables.

In form, however, the RF is not a loan at all. The borrowing bank (Bank 2) actually *sells* the securities to the lending bank (Bank 1) and buys them back at the end of the period of the loan at (typically) a slightly higher price. The price difference represents the interest on the loan.

The RF is what in other countries is known as repo or repurchase agreement. It is a very safe and secure form of lending and is very common throughout the world. The US repo market, for example, is about a hundred times larger than the Indian RF market.

The RF in India serves two main purposes:

- Like repo markets around the world the RF deals provide much needed liquidity to the government securities markets.
- The RF deals are an important tool in the hands of the banks to manage their Statutory Liquidity Ratio (SLR) requirements. Banks in India were required to maintain 38.5% of their demand and time liabilities (DTL) in government securities and certain approved securities which are collectively known as SLR securities. RF helps in managing this requirement in two ways:

- A bank which has a temporary surge in DTL may not want to buy SLR securities outright and then sell them when the DTL comes back to normal. Instead it can do an RF deal whereby it effectively borrows the securities from a bank which has surplus SLR securities. An RF in SLR securities can thus be seen either as lending of money or as borrowing of securities.
- An RF deal is not legally a loan. The amount borrowed by a bank under RF is not regarded as a part of the bank's liabilities. Therefore it is not a part of its DTL, and does not attract the SLR requirement. Had the bank borrowed outright, it would have had to maintain 38.5% of the borrowing in SLR securities.

The Mechanics of the Scam

As explained above, a ready forward deal is, in substance, a secured loan from one bank to another. To make the scam possible, the RF had to undergo a complete metamorphosis: it had to become an unsecured loan to a broker. How was this transformation brought about?

The three crucial steps to effect the metamorphosis were:

- The settlement process in the government securities market became broker intermediated, that is, delivery and payments started getting routed through a broker instead of being made directly between the transacting banks.
- The broker through whom the payment passed on its way from one bank to another found a way of crediting the money into his account though the account payee cheque was drawn in favour of a bank.
- While the above two steps transformed an RF deal from a loan to a bank into a loan to a broker, it would still be a secured loan. However, the brokers soon found a way of persuading the lending bank to dispense with security for the loan or to accept worthless security.

We shall now elaborate on each of these steps, in order to clearly understand the modus operandi used in the scam.

Settlement Process

The normal settlement process in government securities is that the transacting banks make payments and deliver the securities directly to each other. The broker's only function is to bring the buyer and seller together and help them negotiate the terms, for which he earns a commission from both the parties. He does not handle either the cash or the securities.

During the scam, however, the banks or at least some banks adopted an alternative settlement process which was similar to the process used for settling transactions in the

stock market. In this settlement process, deliveries of securities and payments are made through the broker. That is, the seller hands over the securities to the broker who passes them on to the buyer, while the buyer gives the cheque to the broker who then makes the payment to the seller. In this settlement process, the buyer and the seller may not even know whom they have traded with, both being known only to the broker.

There were two important reasons why the broker intermediated settlement began to be used in the government securities markets:

- The brokers instead of merely bringing buyers and sellers together started taking positions in the market. In other words, they started trading on their own account, and in a sense became market makers in some securities thereby imparting greater liquidity to the markets.
- When a bank wanted to conceal the fact that it was doing an RF deal, the broker came in handy. The broker provided contract notes for this purpose with fictitious counterparties, but arranged for the actual settlement to take place with the correct counterparty.

Account Payee Cheques

A broker intermediated settlement allowed the broker to lay his hands on the cheque as it went from one bank to another through him. The hurdle now was to find a way of crediting the cheque to his account though it was drawn in favour of a bank and was crossed account payee.

As it happens, it is purely a matter of banking custom, that an account payee cheque is paid only to the payee mentioned on the cheque. In fact, exceptions were being made to this norm, well before the scam came to light. Privileged (corporate) customers were routinely allowed to credit account payee cheques in favour of a bank into their own accounts to avoid clearing delays, thereby reducing the interest lost on the amount.

Normally, if a customer obtains a cheque in his own favour and deposits it into his own account, it may take a day or two for the cheque to be cleared and for the funds to become available to the customer. At 15% interest, the interest loss on a clearing delay of two days for a Rs. 100 crore cheque is about Rs. 8 lacs. On the other hand, when banks make payments to each other by writing cheques on their account with the RBI, these cheques are cleared on the same day. The practice which thus emerged was that a customer would obtain a cheque drawn on the RBI favouring not himself but his bank. The bank would get the money and credit his account the same day. This was the practice which the brokers in the money market exploited to their benefit.

Dispensing with the Security

The brokers thus found a way of getting hold of the cheques as they went from one bank to another and crediting the amounts to their accounts. This effectively transformed an RF

into a loan to a broker rather than to a bank. But this, by itself, would not have led to the scam because the RF after all is a secured loan, and a secured loan to a broker is still secured. What was necessary now was to find a way of eliminating the security itself!

Three routes adopted for this purpose were:

- Some banks (or rather their officials) were persuaded to part with cheques without actually receiving securities in return. A simple explanation of this is that the officials concerned were bribed and/or negligent. A more intriguing possibility is that the banks' senior/top management were aware of this and turned a Nelson's eye to it to benefit from higher returns the brokers could offer by diverting the funds to the stock market. One must recognize that as long as the scam lasted, the banks benefited from such an arrangement. The management of banks might have been sorely tempted to adopt this route to higher profitability.
- The second route was to replace the actual securities by a worthless piece of paper - a fake Bank Receipt (BR). This is discussed in greater detail in the next section.
- The third method was simply to forge the securities themselves. In many cases, PSU bonds were represented only by allotment letters rather than certificates on security paper. And it is easier to forge an allotment letter for Rs. 100 crores worth of securities than it is to forge a 100 rupee note! Outright forgery of this kind however accounted for only a very small part of the total funds misappropriated.

Bank Receipt

In an RF deal, as we have discussed it so far, the borrowing bank delivers the actual securities to the lender and takes them back on repayment of the loan. In practice, however, this is not usually done. Instead, the borrower gives a Bank Receipt (BR) which serves three functions:

- The BR confirms the sale of securities.
- It acts as a receipt for the money received by the selling bank. Hence the name - bank receipt.
- It promises to deliver the securities to the buyer. It also states that in the meantime the seller holds the securities in trust for the buyer.

In short, a BR is something like an IOU (I owe you securities!), and the use of the BR de facto converts an RF deal into an unsecured loan. The lending bank no longer has the securities; it has only the borrower's assurance that the borrower has the securities which can/will be delivered if/when the need arises.

Advantages of using BRs

There were several reasons why BRs came to be used in lieu of the actual securities:

- BRs were very convenient for RF deals because delivery was not needed. BRs could simply be cancelled and returned when the deals were reversed.
- In case of PSU bonds, actual delivery was almost impossible because of a variety of reasons, such as non-existence of certificates, or a single certificate for investment of several hundreds of crores of rupees.

In case of government securities, the RBI had issued a directive that BRs should not be used. The reason was that, for these securities, the RBI, through its Public Debt Office (PDO), acts as the custodian. Physical securities are never issued, and the holding of these securities is represented by book entries at the PDO. The ledger in which the PDO maintains these accounts is called the Subsidiary General Ledger (SGL), and these securities are referred to as SGL securities. When a holder of these securities sells them and wishes to transfer them to the buyer, he fills up an SGL transfer form and gives it to the buyer. This SGL form can be compared to a cheque: the buyer deposits it into his SGL account at the PDO, and the PDO makes a book entry reducing the holding of the seller and increasing that of the buyer.

Because of this facility, the RBI does not permit use of BRs for these securities. Had the PDO functioned efficiently and carried out its bookkeeping without delays, RBI would have been justified in not permitting use of BRs for government securities. Unfortunately, the PDO was very inefficient and laggardly in its functioning. This was a very serious matter because, like a cheque, an SGL form can also bounce if the seller does not have sufficient holding of securities in his SGL account. The buyer needs to be informed about this promptly; else, he may resell the same securities by issuing his own SGL forms in the belief that he has sufficient balance in his account. The inefficiency of the PDO made the SGL form an inconvenient and unreliable instrument, and banks preferred to use BRs even for the SGL securities, in violation of the RBI's directive.

BRs Issued without Backing of Securities

As stated earlier, a BR is supposed to imply that the issuer actually has the securities and holds them in trust for the buyer. But in reality the issuer may not have the securities at all. There are two reasons why a bank may issue a BR which is not backed by actual securities:

- A bank may shortsell securities, that is, it sells securities it does not have. This would be done if the bank thinks that the prices of these securities would decrease. Since this would be an outright sale (not an RF!), the bank issues a BR. When the securities do fall in value, the bank buys them at lower prices and discharges the BR by delivering

the securities sold. Short selling in some form is an integral part of most bond markets in the world. It can be argued that some amount of shortselling subject to some degree of regulation is a desirable feature of a bond market. In our opinion, an outright sale using a BR which is not backed by securities is not harmful per se though it violates the RBI guidelines.

- The second reason is that the bank may simply want an unsecured loan. It may then do an RF deal issuing a "fake" BR which is a BR without any securities to back them. The lending bank would be under a mistaken impression that it is making a secured loan when it is actually advancing an unsecured loan. Obviously, lenders should have taken measures to protect themselves from such a possibility. This aspect will be examined later when we discuss the banks' control system in general and counterparty limits in particular.

During the scam, the brokers perfected the art of using fake BRs to obtain unsecured loans from the banking system. They persuaded some small and little known banks - the Bank of Karad (BOK) and the Metropolitan Cooperative Bank (MCB) - to issue BRs as and when required. These BRs could then be used to do RF deals with other banks. The cheques in favour of BOK were, of course, credited into the brokers' accounts. In effect, several large banks made huge unsecured loans to the BOK/MCB which in turn made the money available to the brokers.

Control Systems

The scam was made possible by a complete breakdown of the control system both within the commercial banks as well as the control system of the RBI itself. We shall examine these control systems to understand how these failed to function effectively and what lessons can be learnt to prevent failure of control systems in the future.

The internal control system of the commercial banks involves the following features:

- Separation of Functions: The different aspects of securities transactions of a bank, namely dealing, custody and accounting are carried out by different persons. Dealing refers to the decision about which transactions are to be entered into with which parties. Custody involves receiving and delivering securities/substitute instruments and cheques for the transactions done. Accounting involves maintenance of the investment account of the bank and its reconciliation with the SGL account of the bank maintained by the PDO of the RBI.

Closely related to separation of functions is the notion of double custody. Just as the currency chests in the banks are under double custody where two people have to collaborate to open it, the securities too are usually under double custody. The assumption underlying double custody is that two individuals are unlikely to have a criminal intent at the same time!

In many banks like the National Housing Bank, these controls did not exist. In others, such as the State Bank of India, they existed but broke down partially or wholly because of the negligence of one or more of the functionaries.

- Counterparty Limits: The moment an RF deal is done on the basis of a BR rather than actual securities, the lending bank has to contend with the possibility that the BR received may not be backed by any/adequate securities. In effect, therefore, it may be making an unsecured loan, and it must do the RF only if it is prepared to make an unsecured loan. This requires assessing the creditworthiness of the borrower and assigning him a "credit limit" up to which the bank is prepared to lend. Technically, this is known as a counterparty limit. Strictly, a counterparty limit is required even if an RF is done against actual securities because the securities may decline in value and the RF may end up becoming only partly secured though it was fully secured to begin with.

Most of the foreign banks with the exception of the Standard Chartered Bank had very strict counterparty limits and were thus protected from lending too much against fake BRs. For a bank like the Bank of Karad, a reasonable counterparty limit may have been Rs. 50 *lacs* so that an RF for several hundred crores would be flatly refused. The Standard Chartered Bank either did not have or did not adhere to such limits and agreed to do these RFs.

The control system of the RBI should ideally involve the following:

- The PDO keeps track of the aggregate of each type of government security claimed by all the banks and ensures that the figures tally with the aggregate value of the securities at the end of each day. If all BRs are backed by securities, the seller's investment account would decrease and the buyer's account would increase by the transaction amount, leaving the aggregate unchanged.
- A reconciliation of the SGL securities claimed by each bank through mandatory periodic statements with the total holding as recorded in the SGL account (of the bank) at the PDO, would help in pin-pointing the banks whose accounts need to be investigated.

These simple control mechanisms were not being operated by the PDO. What is more surprising is that even when discrepancies were discovered, such as when some SGL forms sent to the PDO bounced because of inadequate inventory of securities in the seller's account, the intimation regarding the inadequacy of securities was communicated to the buyer leisurely, may be through a letter by ordinary post, which could take days to reach. In the mean time, if the buyer sells the same securities on the strength of the SGL sent to the PDO, it could start an ever expanding chain of bounced SGLs! It appears that the PDO was not particularly perturbed by such possibilities.

- The RBI is expected to carry out site inspections and other audits of the investment accounts and procedures of the banks. These were not quite comprehensive and even when some irregularities were detected, the RBI did not act decisively against the erring banks.

Other Aspects of the Scam

There are several aspects of the scam which are closely related to the securities markets, but which are different from the operational aspect of the markets. These pertain to information that can cause significant changes in the prices of securities as well as the information supplied by the commercial banks on their financial performance. We need to understand these to appreciate the motivation for certain kinds of transactions that are entered into in the market.

Coupon Changes and Insider Trading

During the period from September 1991 to June 1992, the government raised the interest (coupon) rate on its fresh borrowing three times. On each occasion the coupon rate was increased by 1/2%, thereby raising the coupon rate from 11.5% to 13% during this ten month period. The major implication of raising interest rate on new borrowings is that it would trigger a fall in the market prices of the old loans which are pegged at the old (lower) interest rates. The price of the 11.5% Government Loan 2010 dropped by 3% to 5% with each coupon rate hike.

If anyone has advance information about these changes in the coupon rates, he could make enormous amounts of riskless profit by shortselling the old securities just before the announcement of rate hike and buying back (covering his position) after the prices have fallen. Somebody who took a short position of Rs. 500 crores before the coupon hike of September 1991 could have made a profit of Rs. 15 crores, practically overnight! Since several persons in the Finance Ministry and the RBI are likely to be aware of the impending hike in the coupon rate, the chance of leakage of this all important information is always there. There have been several allegations in this regard.

However, it will probably be very difficult to prove with any degree of certainty that there was insider trading based on information about coupon rate changes, because of the size of the market. With a daily trading volume of Rs. 3000 - 4000 crores, it would have been very easy for anyone to take a position (based on inside information) of Rs. 500 or even Rs. 1000 crores without anyone suspecting anything untoward.

Window Dressing Bank Balance Sheets

Most banks carry investments in their books at their cost of acquisition and do not mark it down to market. This creates serious distortions during a period when, as shown in the preceding section, the prices of securities are falling. If one assumes that prices of government securities fell by about 5% over the last year, then on an aggregate holding of these securities by the banking system of Rs. 70,000 crores, the paper loss of the banks would be Rs. 3,500 crores. A 10% fall in the prices of PSU bonds would imply a further paper loss of about Rs. 800 crores to the banks (based on the assessment that banks hold about Rs. 8000 crores worth of PSU bonds). Under the current system of accounting, these losses are recognized only when the securities are sold.

This means that a bank would be reluctant to sell these securities and show the loss in its books. It was in this context that the banks and the brokers resorted to innovative methods of window dressing the bank balance sheet. The basic idea is as follows:

- a) The bank sells the securities trading at a discount to a broker at face value or at a price which is much higher than the prevailing market prices. The broker incurs a huge loss in this transaction as he will have to resell the securities to some other bank at market prices.
- b) The bank then buys some other securities from the same broker at prices well above market prices. The broker therefore makes a huge profit in the second transaction which compensates him for the loss incurred in transaction (a).

Thus, the net result of the two transactions is that neither the bank nor the broker make any profit or loss. Then why would these transactions be done? The reason is that while the profit earned through transaction (a) would improve the bottom line (profit) for the bank, the loss suffered by the bank in transaction (b) would not be reflected in its profit and loss account at all. The securities bought would simply appear in the bank's balance sheet at inflated values! It is a most ingenious way of creating paper profits. As far the broker is concerned, the price in transaction (a) can be as high as the bank wants so long as he gets a correspondingly higher price in transaction (b).

What the scam investigations have revealed is that window dressing of this kind was rampant. Instances have been recorded of the same broker selling the same security on the same day to different banks at vastly different prices. This makes it very difficult to fathom the motives for a single transaction in isolation from other transactions done by a bank. Unless one can put together the entire series of transactions, it is impossible to know whether the banks or the brokers have been the net gainers through all the manipulative transactions. It is conceivable that some brokers were willing to absorb a part of the losses as a quid pro quo for other "services" which the banks provided them.

It is interesting to note that even the pure RF deal involves an element of window dressing. The lending bank shows the interest received as an income in its profit and loss

account. But the borrowing bank does not show the interest paid as an expense, because it simply carries the investment in its books at the higher repurchase price.

It is, in fact, quite likely that the enormous increases in the profits that some of the banks reported in 1992 over the previous year, can at least in part be explained by use of such "creative" accounting practices.

Where has all the money gone?

It is becoming increasingly clear that despite the intensive efforts by several investigating agencies, it would be impossible to trace all the money swindled from the banks. At this stage we can only conjecture about where the money has gone and what part of the misappropriated amount would be recovered. Based on the result of investigations and reporting so far, the following appear to be the possibilities:

- A large amount of the money was perhaps invested in shares. However, since the share prices have dropped steeply from the peak they reached towards end of March 1992, the important question is what are the shares worth today? Till February 1992, the Bombay Sensitive Index was below 2000; thereafter, it rose sharply to peak at 4500 by end of March 1992. In the aftermath of the scam it fell to about 2500 before recovering to around 3000 by August 1992. Going by newspaper reports, it appears likely that the bulk of Harshad Mehta's purchases were made at low prices, so that the average cost of his portfolio corresponds to an index well below 2500 or perhaps even below 2000. Therefore, Mehta's claim that he can clear all his dues if he were allowed to do so cannot be dismissed without a serious consideration. Whether these shares are in fact traceable is another question.
- It is well known that while Harshad Mehta was the "big bull" in the stock market, there was an equally powerful "bear cartel", represented by Hiten Dalal, A.D. Narottam and others, operating in the market with money cheated out of the banks. Since the stock prices rose steeply during the period of the scam, it is likely that a considerable part of the money swindled by this group would have been spent on financing the losses in the stock markets.
- It is rumoured that a part of the money was sent out of India through the havala racket, converted into dollars/pounds, and brought back as India Development Bonds. These bonds are redeemable in dollars/pounds and the holders cannot be asked to disclose the source of their holdings. Thus, this money is beyond the reach of any of the investigating agencies.
- A part of the money must have been spent as bribes and kickbacks to the various accomplices in the banks and possibly in the bureaucracy and in the political system.

- As stated earlier, a part of the money might have been used to finance the losses taken by the brokers to window-dress various banks' balance sheets. In other words, part of the money that went out of the banking system came back to it.

In sum, it appears that only a small fraction of the funds swindled is recoverable.

Impact of the Scam

The immediate impact of the scam was a sharp fall in the share prices. The index fell from 4500 to 2500 representing a loss of Rs. 100,000 crores in market capitalization.

Though one may be tempted to blame the steep decline in prices on the scam, we think that the reason for this fall was not scam directly. Purely technically speaking, scam just resulted in withdrawal of about Rs. 3,500 crores from the market, which for a market of the size of Rs. 250,000 crores (at an index level of 4500) is a very small amount, and therefore should have little impact on the prices. There were however two major reasons for the fall, both related to the government's knee jerk response to the scam. First was the phenomenon of tainted shares which created panic in the market and second was the perceived slow down of the reform process which destroyed the very foundation on which the boom was based. We now take a look at both these factors.

The government set up a special court and promulgated an ordinance with several draconian provisions to deal with the scam. Sections (3) and (4) of the ordinance attached the properties of all individuals accused in the scam and also voided all transactions that had at any stage been routed through them after March 31, 1991. Since the accused were active brokers in the stock markets, the number of shares which had passed through their hands in the last one year was colossal. All these shares became "tainted" shares, and overnight they became worthless pieces of paper as they could not be delivered in the market. Genuine investors who had bought these shares well before the scam came to light and even got them registered in their names found themselves being robbed by the government. This resulted in a chaotic situation in the market since no one was certain as to which shares were tainted and which were not.

The government's liberalization policies came under severe criticism after the scam, with Harshad Mehta and others being described as the products of these policies. Bowing to the political pressures and the bad press it received during the scam, the liberalization policies were put on hold for a while by the government. The Securities Exchange Board of India (SEBI) postponed sanctioning of private sector mutual funds. Implementation of some aspects of the Narasimham Committee recommendations on the banking system were also delayed. Some question marks arose regarding privatization as the chairman of the committee looking into this ended up in jail on charges of involvement in the scam. The much talked about entry of foreign pension funds and mutual funds became more remote than ever. The Euro-issues planned by several Indian companies were delayed

since the ability of Indian companies to raise equity capital in world markets was severely compromised.

Policy Responses Required

It is clear that the government, the RBI and the commercial banks are as much accountable as the brokers for the scam. The brokers were encouraged and abetted by the banks to divert funds from the banking system to the stock market. The RBI too stands indicted because despite knowledge about banks over-stepping the boundaries demarcating their arena of operations, it failed to reign them in. The looting was done with active connivance and sometimes full knowledge of the very individuals who were supposed to guard against such a possibility. What has been the response of the government so far and what needs to be done to ensure that such scams do not recur in the future? The response of any government to a scam of this kind would have three main facets:

1. Discover and punish the guilty. This task has been entrusted to the Central Bureau of Investigation (CBI) and to the Joint Parliamentary Committee (JPC). A special court has also been set up to facilitate speedy trial.
2. Recover the money. The draconian provisions of the Ordinance for attachment of property and voiding of transactions with the consequent creation of "tainted" shares were attempts in this direction.
3. Reform the system. The government's response so far has consisted of measures like banning of RF deals and going slow on liberalization.

There cannot be two opinions on the need for identifying and punishing the guilty. The principal objective behind punishing the offenders is more to deter future offenders. However, the government must ensure that not only the obviously guilty (the brokers) but also the not so obviously guilty (the bank executives, the bureaucrats and perhaps the politicians) are identified and brought to book. Investigations of this kind are necessarily time consuming and expensive, but they have to be gone through so that the credibility of the system is restored. A rule of thumb which is often quoted throughout the world is that investigation of any fraud will cost as much as the magnitude of the fraud itself. One can, therefore, expect the real costs of the scam investigation to be of the order of a couple of thousand crores at least.

While recovery of the money swindled from the banks is important, the method employed by the government to do that is extremely ham handed and unfair. While governments have, at all times, claimed special powers to recover dues like land revenue and taxes, the same principle cannot be extended to recovery of amounts which the government owned organizations (or for that matter, the foreign banks) have lost by their own negligence and

complicity. There can be no justification for such measures as the "tainted" shares law which harass genuine innocent investors irrespective of the magnitude of the loss incurred.

The most constructive response to the scam would be in the arena of reforms of the financial system. In our view, the origins of the scam lie in over-regulation of our markets. The regulations in the money markets were such that thoroughly legitimate and essential transactions could not be put through openly, but had to be disguised and camouflaged. The role of the brokers and of some of the banks as market makers was not recognized and they could perform these important and useful functions only by subterfuge. The payment and clearance system was so antiquated and cumbersome that totally indefensible methods had to be adopted to achieve speedy funds transfers. The net result of all these was a total lack of transparency in the operations in the money market. Irregularities of all kinds were so common that no suspicions were aroused even by highly irregular transactions. The situation was an ideal environment for a scam to germinate and grow to alarming proportions. We would even argue that some of the control systems in the banks broke down because they had been deliberately allowed to weaken by both the commercial banks as well as the RBI in order to facilitate normal transactions in violation of the RBI guidelines.

The other lesson from the scam is that artificial insulation of closely related markets from each other is counterproductive in the long run. Just as water finds its own level, money also seeks out the highest levels of return after due adjustments for risk and liquidity. Even after ten years of progressive liberalization of our financial markets, artificial barriers exist between the money market and the stock market, between the market for corporate securities and the market for government securities and between the formal money market and the informal one. Integration of these markets with the attendant equalization of returns in these markets, in our view, is a matter which should be accorded the highest priority in the agenda for financial reforms. This integration will allow a coherent yield curve to emerge covering the entire financial markets.

In this context, the policy responses of the government in the direction of further regulation and controls, typified by the ban on RF deals appears to be quite misguided. Notwithstanding the repeated statements by the Prime Minister and the Finance Minister to the contrary, there are signs that the pace of liberalization has slowed down. This would be most unfortunate as the surest way of preventing scams of this type in the future would be to quickly bring the liberalization process to its logical conclusion by integrating the various financial markets. In this connection, the recommendations of the Nadkarni Committee, set up in the wake of the scam, to examine the functioning of the money market, that RF deals be permitted and that the entire settlement and clearing system be streamlined and computerized are to be welcomed.