

Discussion paper on Margin Trading and Securities Lending

[This discussion paper on Margin Trading and Securities Lending has been prepared by SEBI based on the proposals received from the market participants. Contents of this paper do not necessarily reflect the views of SEBI. Paper is placed on the web site to invite public comments, which would help SEBI in formulating a scheme to meet the interest of all stakeholders in the market.. The comments on this paper may please be forwarded to Shri P. K. Bindlish at pkb@sebi.gov.in, within 21 days]

Structure of the paper

This paper is broadly divided into six parts as follows:

Part 1 – This part captures the basic nuances of the margin trading. Topics covered include the theoretical perspective, value drivers, mechanism and risks in the margin trading.

Part 2 – This part deals with the present status of funds lending and borrowing mechanism and describes the number of alternative business models for the purpose.

Part 3 – This elaborates on the present structure of the securities lending and proposes number of business models to infuse efficiency in the system. As the client trades on the borrowed securities by paying margin, this may be treated as the margin trading on the sell side.

Part 4 – This part deals with the concept of Securities Banking, originating from one of the proposed business models for the securities lending and borrowing. This proposal is expected to unlock the values from the idle holdings of the small investors.

Part 5 – This part deals with the creation of an independent organization for margin trading and securities lending.

Part 1 - Theoretical Perspective

1.1 Meaning of margin trading

Normally investors trade in securities on the strength of owned funds and securities. However, sometimes, based on their outlook about the market and some specific securities in particular, they intend to trade beyond owned resources. This trading in the securities is supported by the borrowing facility for funds and securities, in the system. While trading with the borrowed resources, investors are required to put in a margin (good faith deposits) with the intermediaries and this phenomenon is called margin trading. This margin is usually a percent of the value of the proposed transaction.

Therefore, broadly speaking, margin trading is a trading in the securities market with the borrowed resources – funds or securities. As margin trading is providing a facility to investors to trade in the market with the margin money, it essentially is a leverage mechanism. Globally, in all the major markets the facility of the margin trading and securities lending is available to the investors. However, it would be pertinent to mention here that the business models for the margin trading and securities lending are different in different markets.

1.2 Value drivers of the margin trading

Prices of the securities in the market are determined by the free interaction of demand and supply forces. Anytime availability of the buyer and seller in the system constitutes the essential ingredient of the Capital Market; it ensures the liquidity in the system, which is the hall mark of success of any market across the globe.

As margin trading can be done on both the sides i.e. buy and sell, it helps in increasing demand for and supply of securities and funds in the market, which in turn contributes towards better liquidity and smooth price formation of securities. Further, with contracting settlement cycles, it becomes important to provide for this facility of

supporting buy and sell sides of trades for smooth settlement i.e. to reduce the fail trades.

Margin trading also facilitates the price alignment across the markets through facilitating the arbitrage. For instance, in case of the mis-pricing between cash and derivatives market, margin trading supports the transactions in the cash market to facilitate the arbitrage between the cash and derivatives, which results in the better price alignment across the markets.

Margin trading also facilitates the hedging. For instance, if an investor holds say call options (right to buy the stocks) to be exercised only after a specific period of time, he may sell the securities in the cash market on margin trading and hedge his risk. Similarly, the shares under say ESOP to be available to the employees after a while may be hedged with the help of the margin trading.

Further, margin trading and trading of derivatives generally complement rolling settlement, where the time for round about transactions is limited to a day. This is why the markets having the rolling settlements generally provide for the facility of margin trading. This is important for the efficiency of the market and smooth settlement in the rolling settlement environment.

Physical settlement in the derivatives specially American Options also requires the availability of the funds and the securities for the smooth settlement of the trades. Funds and securities lending and borrowing become critically important in the environment when the derivatives are settled through the physical delivery.

Based on the above points, it may be said that the margin trading performs the important function in any securities market and improves the efficiency and effectiveness of the whole system.

Here, it may be slightly out of context but important to see what has happened to the market liquidity after the introduction of the rolling settlement. General perception is that post rolling settlement period, the liquidity in the market has declined. But, the data available does not substantiate that. Actual data on trading after the compulsory

rolling settlement, collected from BSE and NSE is produced below. It clearly reveals that though there has been a sharp decline in volumes in terms of value, the decline in terms of quantity traded is not so sharp. The decline in value is because of low prices of stocks. In fact, the number of trades shows a continuous increasing trend over the period of time.

Turnover on NSE

Month/Year	No. of Trades (Lakh)	Traded Quantity (Lakh)	Turnover (Rs. cr.)
Nov 94-Mar 95	3	1,391	1,805
1995-96	66	39,912	67,287
1996-97	264	135,561	295,403
1997-98	381	135,685	370,193
1998-99	546	165,327	414,474
1999-00	984	242,704	839,052
2000-01	1,676	329,536	1,339,510
2001-02	1,753	278,408	513,167
Apr-Nov 02	1,571	241,111	399,804

Source: SENEWS, a publication of NSE.

Trading Volume on NSE

Month	Equity market					NIFTY Securities		
	No. of Trades	Traded Qty. (lakh)	Turnover (Rs. crore)	Market Cap at the end of Month (Rs. crore)	Turnover Ratio	Turnover (Rs. crore)	Market Cap at the end of Month (Rs. crore)	Turnover Ratio
Apr-2001	11440710	20782	35616	653720	0.05	21436	295655	0.07
May-2001	14143457	25715	48329	592437	0.08	26235	306923	0.09
Jun-2001	13306788	22336	42783	569797	0.08	23762	291840	0.08
Jul-2001	9909773	13142	27228	574260	0.05	17322	282608	0.06
Aug-2001	11164148	15937	29417	575242	0.05	18564	281798	0.07
Sep-2001	13536286	17342	35323	509105	0.07	24286	245484	0.10
Oct-2001	14081043	19799	35326	535846	0.07	23518	261567	0.09
Nov-2001	15280764	25349	42132	581386	0.07	26411	287190	0.09
Dec-2001	17665128	31777	54468	552908	0.10	27236	285007	0.10
Jan-2002	21312086	34384	68719	563683	0.12	45065	332606	0.14
Feb-2002	17736623	28552	49564	621523	0.08	33351	353262	0.09
Mar-2002	15745460	23294	44262	636861	0.07	27340	349402	0.08
Apr-2002	20111875	28798	53320	649551	0.08	26428	336422	0.08
May-2002	21658826	35303	54979	631609	0.09	26174	324757	0.08
Jun-2002	18924464	38519	44241	659991	0.07	21544	333921	0.06
Jul-2002	21141771	36821	51398	608643	0.08	26994	302703	0.09
Aug-2002	19142025	26000	46113	632618	0.07	24059	319178	0.08
Sep-2002	18468365	25581	46499	599603	0.08	23658	304188	0.08
Oct-2002	20112540	26458	51902	606788	0.09	31965	307084	0.10
Nov-2002	17493882	23631	51351	645388	0.08	37576	338951	0.11

Source: NSE

Trading Volume on BSE

Month	Equity Market					Sensex Securities		
	No. of Trades	Traded Qty. (lakh)	Turnover (Rs. crore)	Market Cap at the end of Month (Rs. crore)	Turnover Ratio	Turnover (Rs. crore)	Market Cap at the end of Month (Rs. crore)	Turnover Ratio
Apr-01	9535480	140	23876	567729	0.04	14099	261791	0.05
May-01	11964108	181	31868	595897	0.05	15616	270179	0.06
Jun-01	10478112	154	25451	553231	0.05	11387	257151	0.04
Jul-01	7799330	99	17244	531576	0.03	9084	248692	0.04
Aug-01	7908335	102	17444	523036	0.03	9393	244849	0.04
Sep-01	9521364	110	21593	456263	0.05	13296	212152	0.06
Oct-01	9979539	122	21922	481851	0.05	13335	225564	0.06
Nov-01	10726640	167	24407	535724	0.05	12883	248080	0.05
Dec-01	12046834	193	30033	532329	0.06	12497	246231	0.05
Jan-02	14381717	210	39169	544397	0.07	19337	262341	0.07
Feb-02	12146847	183	28572	596716	0.05	15333	282257	0.05
Mar-02	11233249	160	25719	612224	0.04	12419	274902	0.05
Apr-02	13500499	183	28874	625587	0.05	9883	265240	0.04
May-02	13928734	218	28138	605065	0.05	8232	251615	0.03
Jun-02	12916446	271	23320	637753	0.04	8018	261191	0.03
Jul-02	14486621	284	26724	584042	0.05	9622	240507	0.04
Aug-02	11504651	156	23780	605303	0.04	9062	256093	0.04
Sep-02	10611048	156	24410	570273	0.04	9749	240811	0.04
Oct-02	11366169	158	27641	563750	0.05	11940	241799	0.05
Nov-02	9624894	136	25981	601289	0.04	13612	264717	0.05

Source: BSE

1.3 Motivation behind the margin trading

The margin trading enables a client to purchase / sell more and thus increases his profits if the prices move on expected lines. It also amplifies his loss if the prices behave contrary to his expectations. This amplification effect emanating from leveraged nature of the transaction is the main motivation for a client to undertake margin trading. For example, an investor purchases Rs. 100 worth of securities, with his own money of Rs. 50 (margin of 50%) and borrowed money of Rs. 50. If the price of the security goes up by 10%, he will earn a return of 20%. Conversely, if the price falls by 10%, he will lose 20%. Thus margin trading exposes a client to the potential of higher gains / losses.

The Table 1 illustrates the amplification effect of margin trading. It assumes that the tenure of loan as well as the investment is one year. Two clients (I and II) have invested same amount of Rs. 100 in a securities portfolio, which provide similar returns. While client I has used his own funds only, the client II has used margin debt to the extent of 50%. If the portfolio returns 20%, the client I earns a return of 20%, while the client II earns 25%. When the portfolio returns 10%, client I and II earn 10% and 5% respectively. The client II gets higher return / suffers higher loss than client I because he has financed his portfolio partially by margin debt. Further, if the portfolio return exceeds the margin rate (interest cost), the client gets a higher return than the portfolio return. If, however, portfolio return is lower than the margin rate, the client gets a return lower than the portfolio return. Thus, it is profitable if portfolio return exceeds the margin rate. If portfolio return is lower than the margin rate, it is a losing proposition to do margin trading.

Table 1: Profitability: Margin trading Vs. Self financing

Particulars	Client I		Client II	
	Return (20%)	Return (10%)	Return (20%)	Return (10%)
Self finance (Rs.)	100	100	50	50
15% Debt (Rs.)	0	0	50	50
Total (Rs.)	100	100	100	100
Return (%) from portfolio	20	10	20	10
Profits (Rs.)	20	10	20	10
Interest payable (Rs.)	0	0	7.5	7.5
Net profit (Rs.)	20	10	12.5	2.5
Return (%) to client	20	10	25.0	5.0

As mentioned earlier, margin trading amplifies the return in either direction. Any change in portfolio return causes a much higher change in the return for the client. Table 2 illustrates this. If the extent of margin is 50%, and the value of portfolio depreciates by 50%, the client loses 100% of his own funds. The workings in table 2 ignore interest cost which is usually high and compounded on daily basis. This

means, if interest is taken into account, the client loses more than his investment. The value of portfolio will not fall below Rs. 50, as the lender would dispose off the securities at Rs. 50. If the value of portfolio changes by 10%, the return for the client changes by 20%. Change in value of portfolio by 20% causes 40% change in return for the client. Thus, if the portfolio consists of volatile securities, the client runs higher risk.

Table 2: Impact of changes in prices on profitability

(Amount in Rs.)

Own funds (Margin)	Margin Debt	Cost of Portfolio	Value of Portfolio	Surplus after repayment of debt	Profit / Loss	Return (%)
50	50	100	50	0	-50	-100
50	50	100	60	10	-40	-80
50	50	100	70	20	-30	-60
50	50	100	80	30	-20	-40
50	50	100	90	40	-10	-20
50	50	100	100	50	0	0
50	50	100	110	60	10	20
50	50	100	120	70	20	40
50	50	100	130	80	30	60
50	50	100	140	90	40	80
50	50	100	150	100	50	100

Further, the client gets different returns from the same portfolio if the portfolio is financed by different levels of margin. Assume that a client purchases Rs. 100 worth of securities which returns 20%. If the purchase is financed by own money of Rs. 50 and borrowed money of Rs. 50 (margin of 50%), the client would earn 30%. However, if margins were 25% and 75%, the client would earn returns of 50% and 23.3% respectively. Table 3 makes it clear that the lower the margin, higher is the amplification effect. Hence lower the margin or higher the amount of funds borrowed, the greater is the risk to client.

It clear, thus, that the more volatile the price of the securities and the lower the extent of margin, greater is the amplification effect, and there is possibility of making larger gains or losses.

Table 3: Impact of different levels of margins on profitability

Particulars	Extent of Margin		
	25%	50%	75%
Self finance (Rs.)	25	50	75
10% loan (Rs.)	75	50	25
Total (Rs.)	100	100	100
Return (%)	20	20	20
Profit (Rs.)	20	20	20
Interest payable (Rs.)	7.5	5	2.5
Net profit (Rs.)	12.5	15	17.5
Return to client (%)	50	30	23.3

The lender has also a motivation. He earns interest on the funds at a rate higher than the bank rate. In case the lender happens to be the broker, which is often the case, he also earns higher brokerage on higher volumes of trades, that too, without any additional risk.

The market is benefited in terms of better price discovery and higher liquidity which help in better allocation of resources.

As discussed in case of the buy side, on the sell side also, one may see the impact of the margin trading. In other words, an investor may sell the securities short and borrow to deliver in the market based on a certain perspective. Following example would elaborate on the concept:

Let's say that an investor thinks that company ABC has a poor outlook in the coming months. Right now the stock is trading at say Rs. 100, but investors sees it trading at

much lower than this price in the near future. Therefore, he decides to do a short sell on this share. He may do so. But because the cash market is settling trades on rolling settlement basis, investor would need to borrow the securities and deliver to the market. Let us assume he does so. After say 15 days, when the market goes down as per his expectations, he would buy the stock from the market and return to the lender. His cash flows would be as follows:

Day 1		
Borrowed and Short Sold 1,000 shares of stock ABC at Rs.		
100		Rs. 1,00,000
Day 15		
Bought and Returned 1,000 shares of stock ABC at Rs. 90		Rs. 90,000
Gross profit*		Rs. 10,000

*Excluding brokerage, borrowing costs and other incidental expenses in the transaction.

It may be seen that the gross profit in the deal is Rs. 10, 000. Net profit from the transaction may be arrived at after the adjustment for the costs mentioned under the * mark. It is apparent that the short selling would be profitable only if the return on the stock is more than the cost involved in the transaction. In other words, the strategy can also be risky because there is no guarantee that the price of a short stock would drop. If the price goes in contrary to the expectations of the investor, because he would still have to cover the short sale and return the securities, he may incur substantial losses.

Further, as mentioned in case of the buy side margin trading, different margin levels would result in the different cost structures for the clients and so the different returns.

Here, it would be pertinent to mention that the motivation behind the lender of the securities is to unlock the values from his idle securities. He is just lending the securities for a specific price (cost of borrowing the securities) to the borrower. It may be noted that all the corporate benefits declared during the lending period would belong to the lender and borrower would have no right whatsoever on these corporate benefits. In other words, the securities are lent to the borrowers for the limited purpose of covering their position against the short sale in the market.

Having discussed the basics of the margin trading, note now discusses the specific business models for funds and securities lending and borrowing mechanisms. Now, paper takes up these two (funds and securities) separately to fully elaborate on the concepts.

1.4 Mechanism of margin trading

It is necessary to understand the mechanism to fully appreciate the risks in margin trading. In a typical transaction, a client interested to do margin trading is required to sign an agreement with the lender of funds (usually the broker) to formalise the arrangement for margin trading. The agreement provides for the margin rate and the extent of margin. The margin rate is the prime lending rate / bank rate plus a mark up depending on exposure in the margin account. The interest is normally compounded on daily basis. The agreement provides for two types of margins, namely the initial margin and the maintenance margin. The initial margin is the portion of purchase value which the client deposits with lender of funds before the actual purchase. After the agreement, the client opens a margin account and deposits initial margin amount, based on which the lender executes purchase order on behalf of the client. The securities so purchased are kept as collateral with the lender. In addition to initial margin, the client is required to maintain a certain minimum equity in the margin account. The equity is nothing but the net value of portfolio, that is, the value of portfolio less the margin debt. This equity should be a certain percentage of the market value of securities. This percentage is called maintenance margin. If the equity is less than the maintenance margin, the client is called upon to bring in the shortfall. For example, assume that the initial and maintenance margins are 50% and 25% respectively. A client has bought securities for Rs. 100. The price depreciates by 40%. The value of portfolio reduces to Rs. 60. The equity becomes Rs. 10 (Rs. 60 – Rs. 50 (debt)), which is less than Rs. 15 (25% of the value of securities). The client is required to bring in Rs. 5. When the equity in the margin account falls below the maintenance margin, the lender makes a margin call. If margin call is not met, the lender can sell the collateral, partially or fully, to increase the equity. However, when price falls to an extent that the equity becomes zero, the lender, in stead of making margin call, usually sells off the securities to recover the debt. If he waits and prices

fall further, he would not be able to recover the debt from collateral. In the above example, the lender would make margin call, when the portfolio depreciates by 33.33%. If margin call is not met or if the equity reduces to Rs. 0, the lender sells off the collateral. If the minimum and maintenance margins were 50%, margin call will be made with smallest depreciation in the value of portfolio. The lender is not generally required make a margin call or notify the client that the equity has reduced below minimum. It is for the client to find out for him self and make payment accordingly. The client is required to repay the debt and interest as per agreement and till the full repayment is made, the collateral remains with the lender. In case he wants to sell the securities earlier, the proceeds go to the lender first to the extent of debt.

The Graph 1 presents the equity when the value of portfolio appreciates and depreciates and the time for margin call, assuming initial and maintenance margin of 50% and 25% respectively. When portfolio appreciates, there is no need to make margin call. There is also no need for margin call for depreciations upto 33.33%. If portfolio depreciated by 33.33% - 50%, the margins calls are made. If it depreciates by more than 50%, no margin calls are made and the collaterals are disposed off.

Graph 1: Equity and Margin Call under Margin Trading

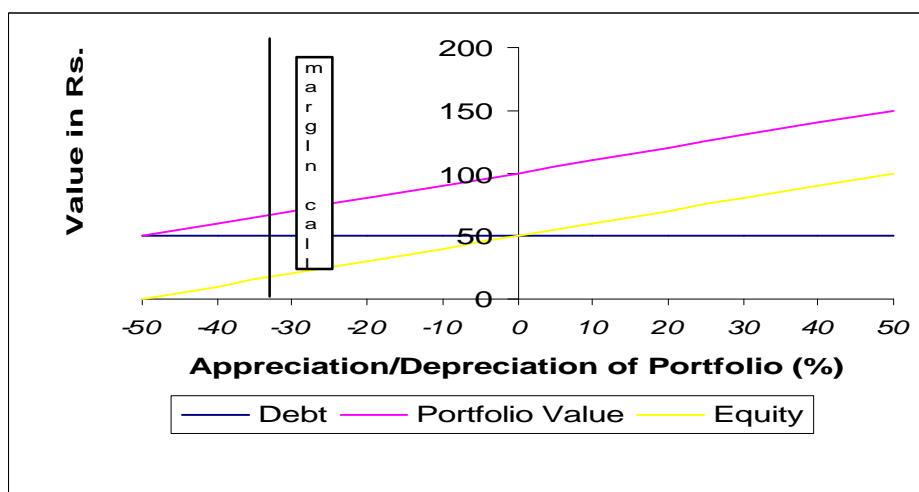


Table 4 presents the extent of depreciation required in a portfolio to warrant margin call. For example, if the initial margin is 60% and maintenance margin is 20%, the

margin call will be made only when the portfolio depreciates by more than 50%. This is given by the formula: $(\text{Initial Margin} - \text{Maintenance Margin}) / (1 - \text{Maintenance Margin}) * 100$. Lower the maintenance margin, given initial margin, higher is the depreciation in value of portfolio required for margin call. Similarly, given the maintenance margin, higher the initial margin, higher is the depreciation in value of portfolio required for margin call.

Table 4: Level of Depreciation in Portfolio required for Margin Call

Maintenance Margin	Initial Margin												
	0.60	0.55	0.50	0.45	0.40	0.35	0.30	0.25	0.20	0.15	0.10	0.05	
0.60	0.00												
0.55	11.11	0.00											
0.50	20.00	10.00	0.00										
0.45	27.27	18.18	9.09	0.00									
0.40	33.33	25.00	16.67	8.33	0.00								
0.35	38.46	30.77	23.08	15.38	7.69	0.00							
0.30	42.86	35.71	28.57	21.43	14.29	7.14	0.00						
0.25	46.67	40.00	33.33	26.67	20.00	13.33	6.67	0.00					
0.20	50.00	43.75	37.50	31.25	25.00	18.75	12.50	6.25	0.00				
0.15	52.94	47.06	41.18	35.29	29.41	23.53	17.65	11.76	5.88	0.00			
0.10	55.56	50.00	44.44	38.89	33.33	27.78	22.22	16.67	11.11	5.56	0.00		
0.05	57.89	52.63	47.37	42.11	36.84	31.58	26.32	21.05	15.79	10.53	5.26	0.00	

1.5 Risks for Client

Leveraged portfolio generates an amplified effect for each rupee of investment. The higher the leverage, the higher is the amplification effect. Since markets can move in either direction, leveraging becomes a double edged sword. A client is likely to lose lots of money or gains lots of money when he transacts on margin. This amplification effect can be devastating when stock prices go down. Further the increase in risk associated with margin trading is compounded by the riskiness of the portfolio. A portfolio becomes risky if the prices of constituent securities are highly volatile or the portfolio is concentrated in a very small number of assets. Leveraging a risky portfolio may be asking for trouble at times. A client generally faces the following risks:

- (i) The client is exposed to potential of higher loss.
- (ii) In falling market, the client may lose more money than he has invested.

- (iii) If the value of securities purchased on margin falls, the client has to provide additional funds to avoid forced sale of the securities.
- (iv) The client may have to deposit additional cash on short notice to cover market losses.
- (v) The lender may sell some or all of the securities at the current price without consulting the client to pay off the debt to itself. The current price may not be the best price at which investor would have liked to sell.

1.6 Risks for Lender

Generally brokers lend/arrange funds and securities for clients doing margin trading. Some markets have special purpose vehicles which lend funds / securities. The requirement of initial margin, maintenance of margin, right to sell the collateral etc. protect the lender. The lender, however, needs to follow prudent risk management practices so as to ensure recovery of principal and interest and act swiftly to make margin calls or sell the securities in time. In the event of loss to a client, the loss to lender is limited to transaction cost that he would incur on selling the collateral, liquidity risk that he may not be able to sell the collateral and loss of interest on the margin debt.

1.7 Risk for Market

If the lenders have risk management systems in place and act swiftly, they do not carry any risk, except to the extent mentioned earlier paragraph. If they have no risk, the margin trading does not pose any risk to market. Besides, when the positions taken by brokers in cash / derivatives market are fully secured by adequate collateral, their involvement in margin trading as lenders do not affect the market integrity at all.

However, the margin trading has tendency to contribute to volatility and price manipulation. In case of rising market, the value of equity in the margin account rises, which enables a client to take still larger and larger positions. This fuels a continuous rise in prices. For example, a client holds a portfolio of Rs. 100, financed

by margin debt with initial and maintenance margin rates of 50%. Let us assume that the value of portfolio increases to 160. The value of equity, thus, increases to Rs.110, based on which the client can hold a portfolio of Rs.220. This would enable him to buy additional securities for Rs.60. In case of falling market, the lenders liquidate positions to meet margin calls or to recover debt. This fuels a continuous fall in prices. This accentuating effect of margin trading is controlled by securities lending in case of rising market and by restrictions on short selling in case of falling market.

1.8 US scenario

The Federal Reserve Board and self-regulatory organizations, such as the NYSE and NASD, have rules that govern margin trading. Brokerage firms can establish their own requirements as long as they are at least as restrictive as the Federal Reserve Board (FRB) and SRO rules.

Before trading on margin, the NYSE and NASD, for example, require a client to deposit with the broking firm a minimum of \$2,000 or 100% of the purchase price, whichever is less. This is known as the "minimum margin." According to Regulation T of the FRB, the client may borrow up to 50% of the purchase price of securities and the client has to bring in balance 50%, which is called 'initial margin'. Some firms require the client to deposit more than 50% of the purchase price. This facility is available only for select securities.

After the client has bought the securities on margin, the NYSE and NASD require him to keep a minimum amount of equity in the margin account. The rules require the client to have at least 25% of the total market value of the securities in the margin account at all times. This 25% is called the "maintenance margin." In fact, many broking firms have higher maintenance requirements, typically between 30 to 40%, and sometimes higher depending on the type of stock purchased.

The SEC generally follows a hands-off approach. It does not prevent a broker from engaging in any fund based activity. It only limits the aggregate indebtedness of a broker towards all other persons to 1500% of its net capital.

It may, however, be noted that Regulation T is issued by FRB under the Securities Exchange Act, 1934 with the objective to regulate extensions of credit by brokers. It does not preclude any SRO or the broker himself from imposing additional requirements.

Part 2 - margin trading – Funds lending and borrowing

2.1 Present status of margin trading

There was an apprehension that brokers would not be able to lend funds for margin trading in view of provisions in the Securities Contracts (Regulation) Rules, 1957 as the Rules do not permit a broker to take up any fund based activity. This was examined by SEBI in 1997 and a view was taken that a broker can not lend funds as a regular business activity or lending of funds can not be his prime activity. However, he can lend / borrow money if it is incidental to securities transactions. A clarification in this regard was issued in 1997. In view of this clarification, some brokers are reportedly doing the margin trading. However, some brokers have sought clarification whether they can do the margin trading. It is assumed that the brokers who are undertaking the margin trading are following some standard laid down norms for the purpose.

The market witnessed major reforms in 2001. The deferral products, such as MCFS, ALBM, BLESS etc. were banned and compulsory rolling settlement on T+5 basis was introduced in a big way in July 2001. The market participants apprehended that these reforms may affect the market liquidity. It was, therefore, felt necessary to provide the facility of margin trading in more explicit and organised way.

To supplement the resources of the brokers, it was considered necessary to make available a line of credit to them from banks for margin trading. Based on the recommendations of RBI-SEBI Standing Technical Committee, RBI issued guidelines in November 2001 in this regard. It provides that the Board of each bank should formulate detailed guidelines for lending for margin trading subject to the following parameters:

(i) The finance extended for margin trading should be within the overall ceiling of 5%, prescribed for exposure to capital market.

(ii) A minimum margin of 40% should be maintained on the funds lent for margin trading. The bank should put in place an appropriate system for monitoring and maintaining the margin of 40% on a regular basis.

(iii) The shares purchased with margin trading should be in dematerialised mode, under pledge to the lending bank.

(iv) The bank's Board should prescribe necessary safeguards to ensure that no "nexus" develops between inter-connected stock broking entities/stockbrokers and the bank in respect of margin trading.

These guidelines are in continuation of RBI's general circular, which restricts loan to an individuals against security of securities upto Rs. 10 lakh (Rs. 20 lakh for demat securities).

Despite these enabling provisions, margin trading has not taken off. The market participants feel that the following are the bottlenecks:

- a. Though RBI has issued the enabling guidelines, most of the banks have yet to formulate their internal guidelines and design the systems to get into and manage the margin trading. A few banks, who have these guidelines and systems in place, have already reached the ceiling of 5%, permitted under RBI guidelines.
- b. Banks are not clear on various issues including how the collateral will be pledged to the lending bank, how to avoid nexus or how to ensure proper end use of funds.
- c. The role of brokers under the margin trading guidelines of RBI is not quite clear.
- d. The limit of Rs. 10 lakh (Rs. 20 lakh for demat securities) on security of securities for an individual discourages clients to get into margin trading in a big way.

- e. Most brokers are not sure if margin trading is incidental to the securities transactions and that they are permitted to do so.
- f. The lending and borrowing of funds can be carried on by the entities, registered under the Money lenders Act only. The brokers are not sure whether they are required to be registered under the Money Lenders Act for carrying on margin trading.

2.2 Suggested Business Models

In view of the above discussion, it may be clear that margin trading is available in the Indian Capital Market through the brokers or through the banking system. Further, the existing structure of margin trading in the country is the Over the counter (OTC) structure. Market believes that some alternative structures for the margin trading may be explored, which ensure the following three things:

- ? Transparency of the system.
- ? Financial integrity of the system.
- ? Level playing field with equal opportunity to all stake holders in the market.

Accordingly, market participants have suggested a variety of models for margin trading. Some of them are produced below:

1. Financing by the brokers.
2. Financing by the clearing corporation/Exchange.
3. Direct financing by the banks and financial institutions to the investors.
4. Financing by the specialized institutions like "Limited purpose banks".

Indeed, all the above business models are not exclusive of each other. There may be a situation wherein the financing takes place from brokers and brokers in turn get themselves financed from the banks and financial institutions.

2.3 Model 1 - Financing by the brokers.

Model one involves brokers as the prime financier to their clients on the purchase transactions. This is a business model, where a client interested in margin trading signs an agreement with the broker. The agreement provides for the salient term of the contract, which are bilaterally decided. This agreement broadly provides for the margins, collateral and the rights of the lender, specially in case of default by the client on the margin payments.

In this model, brokers finance the deals of the clients either with their own money or the money arranged from some other sources. The credit risk is borne by the brokers and they manage their risk by keeping the securities received from the purchase transaction of clients, as collateral. Further, as the settlement in the market has already taken place against the trade of the client, there is no settlement risk in the system. This margin trading transaction is OTC transaction, which like all other OTC deals, is not transparent and suffers from the inadequate transparency.

However, this model provides for tremendous trading flexibility to both the intermediaries and the clients. It is assumed that the borrowing rates etc. would be taken care of by the competition in the market. Probably, because of the trading flexibility only, this model is liked globally.

This model is the model followed by number of markets across the globe including U.S. with certain pre-determined margin requirements. For instance, in U.S., brokers can finance their clients with minimum 50% margin requirement i.e. 50% of the purchase money has to come from the clients. Brokers, in fact, may demand more from the clients depending on their risk perception.

Some market participants advocate that this model is most suitable and suggest that the issues of concern in the model may be addressed through issuance of efficacious guidelines on the subject. The guidelines proposed are the following:

- a) Model agreement to be entered into between the client and the broker.

- b) Minimum initial margin and margin call provisions – the minimum initial margin may be say 50 percent and the margin calls may be made at minimum say 30 percent.
- c) Provisions for liquidation of collateral in case of failure to meet the margin calls by the investors.
- d) Disclosure by the brokers to the stock exchanges containing the details of investors and securities funded. The periodicity of such disclosures may be daily, weekly or monthly. Stock exchanges to disseminate the gross position to the market.
- e) Selection of the securities for margin trading – the securities may be as contained in BSE Sensex, Nifty 50 and BSE 100 etc.
- f) Total indebtedness of the broker may be linked to his networth. Further, there may be limits for which market has proposed the range of debt to equity ratio from 2:1 to 5:1. In U.S., this limit is 15:1. In India, Primary Dealers in the Money market have the limit of 6:1.
- g) The amount to be lent by the broker also needs to be linked with the net-worth of the broker. It may be provided that the total lending by the broker would not exceed a multiple of the net-worth of the broker.
- h) The broker should be permitted to borrow the funds for this purpose. The total borrowing should not grow beyond a multiple of the net-worth of the broker. These borrowings may include all the borrowings made by the broker.
- i) There may be limits on the financing to the client in a scrip and the total portfolio. This would avoid the concentration scrip wise and investor wise.
- j) For margin trading, one client should deal with only one broker. This may be implemented through the single client ID. Till then brokers may take the undertaking from the clients that for the margin trading purpose, he is dealing with him only.

2.4 Model 2 - Financing by the clearing corporation/Exchange.

Second model involves the clearing corporation/exchange as financier of the purchase deals, on margin. It must be clear that the Clearing corporation/exchange may not have their own funds and just be an intermediary for the transaction between the actual financier and the clients. In other words, funds would essentially come from some other financier say banks and financial institutions. Clearing

corporation/Exchange is made intermediary from the point of view of the risk management from mere the lending entity. The idea is that banks and financial institutions would be more comfortable financing through clearing corporation/exchange than the individual brokers or their clients, direct. In these cases, counterparty risk is borne by the clearing corporation/exchange.

It is argued that the banks are allowed by the RBI to finance the securities market deals on the margin but they are not doing it because of their discomfort with the intermediaries in the securities market. Further, it is assumed that they would be comfortable financing brokers and clients through clearing corporation/ exchange. This business model needs the support from the clearing corporation/house of the exchange and they must be willing to be an intermediary between the clients/brokers and the financing banks/ financial institutions. This model basically bridges a gap between the financiers and the borrowers in the securities market.

In this case, lender would lend the money to the exchange/ clearing corporation/house of the exchange and exchange in turn would lend money to the brokers/clients through the online trading platform.

This model assumes the lending of the funds through the online trading platform created by the exchanges. In this model, all demand for and supply of funds for securities transactions would consolidate and the price of the funds would be discovered by the system. Any body and every body including banks can lend money through this platform and any client can borrow funds from this platform through a broker. This model automatically ensures better price discovery for funds (lenders and borrowers get most competitive rates) and effortless disclosure for the benefit of all market participants and risk management. Since the parties would be with anonymous counterparties, it is essential that the clearing corporation retains collateral on behalf of lenders and provides counter party guarantee.

The Stock Exchange, Mumbai has proposed a model on the above lines. It envisages that the buyers of securities would indicate at the time of placing buy order for securities (limited to BSE-100) if it would be financed under margin trading. The stock brokers, on their own behalf and on behalf of their clients, would indicate

to BOLT system the amount of finance required under margin trading and the maximum acceptable interest rate. The exchange would ascertain the amount required for margin trading by all buyers on a daily basis and disclose the same to market participants. The intending financiers, who are registered with the exchange for this purpose, would make competitive offers to lend funds for margin trading by indicating the quantity of funds, desired interest rate etc, through their brokers. The best offers would be accepted upto total funds required in the system. Based on the rates of various accepted offers, a weighted average rate will be worked out. The lender of the funds would get the actual interest rates indicated by them whereas the borrowers would be charged the weighted average rate. The exchange would levy a certain mark up over the interest rate in the system to cover administrative expenses. The shares against which finance have been availed of would be kept with the clearing house. The accounts of the lenders would be debited or credited directly by the exchange for the amounts borrowed from and repaid to them. BSE has proposed a risk management system comprising of security selection, 40% initial margin, maintenance margin, concentration margin, exposure limits, financing limits, collateral and a margin guarantee fund.

Alternative to this model may be that the exchange would provide the trading platform for the anonymous borrowing and lending of funds. This is variant to the model described above because in this case, exchange/ clearing corporation would just facilitate the trades.

There are also the views that the returns on the lending should not be linked to the scrip financed. Further, exchange if is guaranteeing the trade, should do it from a separate settlement guarantee fund, created for the dedicated purpose of the funds lending and borrowing.

Sources of funds to the market, in all the alternative models may be from banks/ financial institutions or private financiers. There have been concerns on the funding from the private financiers in the market. Some market participants think that there may be a ceiling on the lending by a private financier to the market as a whole, irrespective of the mode of the financing i.e. direct financing to the clients or financing to the clients through the brokers.

2.5 Model 3 - Direct financing by the banks and financial institutions to the investors.

The third model assumes that the banks and financial institutions would finance the clients direct. As of now, as per the RBI directives, Banks may finance only through the brokers. But, as mentioned above, Banks are not at all active on the margin trading front.

Following is suggested by the market participants on the RBI's existing scheme on margin trading:

1. RBI needs to encourage banks to take up the activity. Market needs to appreciate that the Securities Market and the Economy's growth are tightly intertwined.
2. RBI guidelines need to be clear on how to avoid nexus between interconnected stock broking entities/stock brokers and the banks in respect of margin trading.
3. The role of brokers under the margin trading guidelines of RBI may be made clear.
4. The limit of Rs. 10 lakh (Rs. 20 lakh for demat securities) on security of securities for an individuals may be increased.
5. Margin level of 40% are too high and may be reduced to say 20% to encourage the activity.
6. At present, margin financing is covered within the 5% overall ceiling of bank for exposure to the capital market. There is a need of apportioning some dedicated percentage of the funds say 5% to the margin trading.
7. Going by the conservative attitude of the banks, it would be difficult to see any activity in the market without bridging a gap between the financiers (banks and financial institutions) and the financees. There is a need of some intermediary say

exchange/clearing corporation to carry out the risk containment measures. Model two elaborated above does the same thing.

8. Scheme envisages the pledge of the securities in favor of the financing bank. Banks may be allowed to outsource the risk management without insisting of the pledge in their favor. This may be done as envisaged in the proposed second model wherein the Clearing corporation/exchange would do the risk management.

2.6 Model 4 – Financing by the specialized institutions like “Limited purpose banks”.

Creation of the special bank say “limited purpose bank “ for the margin trading is another idea to give a fillip to the margin trading activity. This assumes that a dedicated entity can undertake the activity of financing the securities market trades.

It is felt that the dedicate bank may do things in an organized manner with available resources. People interested in lending the funds to the market may deposit their money with this limited purpose bank and borrowers may borrow from this bank. This bank may finance the clients in number of alternative following ways:

✍ Bank may finance the clients direct.

✍ Bank may finance the clients through the brokers of the exchanges.

✍ Bank may finance the clients through the clearing corporation/exchange through an on-line trading platform.

In the first two cases, bank would manage its risk itself. But, in the last scenario, exchange/clearing corporation would manage the risk for the bank.

Advantages of this model are many:

1. It would be easy to track, who is financing in the market and to what extent. This would help avoid any nexus built up between the financiers, brokers and issuer companies.
2. Total quantum of the financing would be known to the market at any point in time. Limits on the financing to a client, scrip wise and total portfolio, would be easy to impose and monitor.
3. This would make the risk management effective.
4. Audit trail would be easy to manage.

Only issue in this model is the creation of a fresh infrastructure. Building a nationwide bank would require both money and time. But, that may be navigated with co-ordinated efforts of the market participants. Another opinion on the issue is that the existing infrastructure of the banks/financial institutions/exchanges may be leveraged on for the purpose.

This model is further dealt with in the part 5.

Part 3 - Securities lending and borrowing

Selling short on margin is the other dimension of the business. It has been argued by the market that margin trading on both the buy and the sell sides should be in place to provide the equilibrium and efficient price discovery. At present, securities borrowing and lending facility is available in the market but market participants think there are alternative ways to approach the securities lending in efficient and effective manner. Issues covered under part 3 are present state of securities lending and borrowing and alternative business models for the same.

3.1 Present state of Securities lending and borrowing

SEBI approved the Securities Lending Scheme, which came into existence on Feb. 6, 1997 and is called as SLS, 1997. According to the SLS, securities can be lent and

borrowed through an approved intermediary, which is duly registered with SEBI. As of now, there are eight entities, which are registered with SEBI as approved intermediaries, under the SLS (list enclosed at annexure A). Borrowers and Lenders do transact through these intermediaries as per the procedure laid down in the said scheme.

It is important to describe the existing business model of these approved intermediaries. These intermediaries deal with the lenders and borrowers on one to one basis. It essentially means lenders lend the securities to the approved intermediaries and they in turn lend them to the counterparties i.e. borrowers. Full credit risk on the securities lent is born by the approved intermediaries. Therefore, in a broader sense, in these transactions intermediaries provide full novation in lending and borrowing transactions. It may also be noted that the existing market for the securities lending and borrowing is an over the counter market (OTC market).

As these approved intermediaries have limited geographical reach, facility of borrowing and lending of securities is not available to the widely scattered retail segment of the securities market. Limited participation in the securities borrowing and lending market and lack of competitive forces have resulted in the cost of borrowing of securities being exorbitantly high, which renders the securities borrowing transactions uneconomical.

It is felt in the market that there is an urgent need to redefine the existing securities lending and borrowing mechanism/ or discover the alternative business models to ensure wider participation, at the reasonable cost and in a transparent manner. It is felt that a transparent, online trading platform may be created for the efficient securities lending and borrowing mechanism.

3.2 Business Models for securities lending and borrowing

Following four business models are proposed for the consideration:

1. Online trading platform with limited number of participants on the supply side.
2. Online trading platform with investors independently on supply side.

3. Lending through the depositories.
4. Lending through the special purpose bank.

Model 1 – Online trading platform with limited number of participants on the supply side.

Model 1 visualises the lending and borrowing of securities to take place through a transparent online trading platform. This platform may be created by any interested entity including depositories in the market. Alternatively, exchanges may offer this facility through their existing trading platforms. It is also possible that these intermediaries would leverage on each others competencies and infrastructure and pool down resources to provide efficient mechanism to the market. For instance, depositories may offer the securities lending and borrowing mechanism through using the exchanges' infrastructure. It may be left to the market forces, assuming that the market is prudent enough to analyse the economic dynamics of the business.

Now, all the borrowers, who would have short position in the market, would put in their requirements through brokers on the online computer system with number of securities required and their borrowing horizon. Supply side would offer the shares indicating the associated costs. Lending and borrowing transactions would be matched through the automated system in a transparent environment on price and time priority basis.

Intermediary, managing the online platform for the securities lending and borrowing purpose, would be responsible for the clearance and settlement of all said transactions. It is also thought that this session of the lending and borrowing could take place simultaneous to the normal trading sessions.

However, it may be noted here that this session of Securities Lending and Borrowing would have no linkage whatsoever with the actual trading session at the exchanges. In other words, the exchange trading and settlement system would be independent of the Securities Lending and Borrowing Mechanism, which is being proposed.

Now, there are certain issues in the proposed system, which are elaborated on here:

a) Which securities would be eligible to participate in the proposed lending and borrowing mechanism: Though, theoretically speaking, all the securities listed and traded on the exchanges should be eligible to participate in the proposed mechanism, globally, wherever the securities lending and borrowing facility is available, securities eligible for the same are clearly defined. Decision on eligible securities is based on the following:

1. Liquidity in the scrips.
2. Avoid the participation of scrips with low liquidity in the borrowing and lending mechanism, which in turn would reduce the chances of manipulation through the use of system.

Further, in India, as market is moving towards the T + 2 rolling settlement environment, only the electronic form of shares may be lent in the market. This would also keep the cost of transactions low. It is assumed that this move would also encourage the investors to convert their physical holding into electronic form to create values from their idle holdings.

b) Who can lend the securities: Strictly speaking, anyone who has the securities would be eligible to participate in the lending process. But, this model limits the lenders to only the DPs, Custodians and other approved intermediaries under the Securities Lending Scheme, 1997 of SEBI. This feature of the limited number of professional parties on the supply side of securities is a very important feature of this model. This is expected to professionalize the operating environment at the securities lending and borrowing front. This also leads to the other dimension of the business called securities banking. This concept of the securities banking is defined in the part IV of this paper.

c) Who can borrow the securities: Again, anyone operating in the market should be eligible to borrow the securities. However, any borrower has to go through his broker to borrow securities. Broker would borrow the securities for its client/ clients as an

intermediary on the system. If an entity is debarred under any specific regulation, it would not be eligible to borrow the securities (for example - FII's).

This model also proposes the borrowing of securities strictly for the specific purpose of delivering in the market against a sale obligation of the borrower. This is also proposed with an objective to avoid any price manipulation attempt. This would be with exemption to DPs and other approved intermediaries, who can borrow to meet their temporary short fall of securities.

d) What can be the duration of the lending: This model appreciates the problem of duration match, for lending and borrowing, on the system because different borrowers would have the different time horizons in their minds. Therefore, it is proposed to standardize the time horizon for the borrowing. It may be packed to say, 7 days, 14 days and so on with multiple of 7 days each. In any case, the maximum limit on one time borrowing to 12 weeks. It essentially means that if someone is interested in borrowing for say 24 weeks, he would be required to roll over the position after say 12 weeks of the first time borrowing.

This standardization would mean that even if someone wants to borrow the securities for less than 7 days, he / she would incur the cost of borrowing for at least 7 days. Though it is true that this would cause some inconvenience to the borrowers for the broken period but this is proposed with an objective to create a standardized contract for online trading with liquidity consideration in mind. However, there would not be any limitation on the borrower returning the securities before the completion of initial borrowing period. It may also be noted that it would generate the return for minimum seven days to the lender.

e) What are the risk containment measures and prudential norms for the lenders: Once the borrowers and lenders are matched by the laid down system, securities would move from the lenders to the borrowers. Borrowers in turn would use these securities to settle their trades on the exchange. Sales proceeds from the short positions would be retained by the clearing corporation/ house of the exchange or the trading platform manager. This entity would guarantee the return of the securities to the lenders. In addition to the sales proceed, borrower would pay margin to

provide for the potential losses. This margin may be described by the regulator. In global markets, this margin varies and is generally around 40% to 50% of the value of the transactions. Further, securities may be marked to market on daily basis to cover up the losses, which have taken place during the day.

[Other sophisticated practices like margining of short sales on VAR basis may also be adopted, but that would make the margining slightly more complex and dynamic.]

Alternatively thought is that as the securities are anyway borrowed to meet the settlement obligation in the regular market, the securities so borrowed may not be received by the borrowers but shall be delivered to the settlement account with the Clearing Corporation, direct. This would make the audit trail of securities borrowed and returned easy.

Further, complete segregation of borrowed securities and the regular market obligations would be maintained by the clearing corporation/exchange.

This securities borrowing and lending mechanism is assumed to offer an efficient, transparent and effective system to the market. It will have following distinctive advantages:

1. The wider participation :- Common trading platform for all would ensure very wide participation from the market participants across the country.
2. Reasonable cost of borrowing :- Equally accessible market to all would create competitive environment and reduce the cost of transaction. Further, prices would be the market determined prices through the free interaction of demand and supply forces.
3. Transparency:- Online order driven price and time priority basis system would ensure the transparency in the system.

Model 2 – Online trading platform with investors independently on supply side.

The model 1 assumes the availability of only the professional entities like DPs, Custodians and approved intermediaries on the supply side of the securities. It should not be construed that the individuals would not be given the opportunity to participate in that model. Indeed, the model proposes the participation of the individuals in the system through the organizations/systems like DPs and other approved intermediaries under SLS scheme of 1997. It is done to deliver the better values to the market in terms of discipline and structure. Further, economies of scale and scope, enjoyed by the institutions would deliver additional values.

An alternative to the model 1 may be the model, where in everyone is given the independent chance to participate on the supply side. In other words, individuals would provide the supply side quote on their own through their brokers. Some market participants think that giving independent choice to the investors through brokers would be better.

Here, it may be noted that other issues raised in the model 1 like the risk management, selection of securities etc. would also be the part of this model and regulators would have to decide on the certain parameters of this market. Further, on borrowing side, there is no limit and even the individuals can borrow through their brokers, as described in the model 1.

Salient features of this model would be as follows:

1. The Clearing Corporation / Stock Exchange would act as an Approved Intermediary.
2. Stock Exchange to extend their trading platform to provide a nation wide access to the participants.
3. All investors shall be allowed to borrow and lend securities through the trading facilities with Trading Members of the Exchange / Clearing Members, Custodians, Depository Participants and Banks.
4. The rate of borrowing shall be determined on screen based trading system in the continuous market session.
5. The lenders of the security shall deliver securities to the Clearing Corporation towards meeting the settlement obligation of the borrower of securities.

6. The borrowers and lenders shall be identified by making use of unique client code which will be captured at the time of order entry. This will also be used to ensure an audit trail of the return of securities borrowed at the end of the prescribed tenure.
7. The tenure for borrowing shall be for a maximum of 7 days. Another opinion is that the borrowing facility for the different time horizons may be made available to the market participants.
8. The risk shall be managed by Clearing Corporation by
 - i. Implementing appropriate risk containment measure and use of effective margining system.
 - ii. By position monitoring to ensure that the borrowing is within the specified limits as also the overall exposure limits.
 - iii. Ensuring return of securities by use of collateral deposited with the Clearing Corporation.

Advantages of the model

It must be clear that the broad difference between the first and the second model is that in first model only DPs and approved intermediaries are on the supply side and in second model all the individual investors are required to put in their independent quotes on the trading terminal for borrowing and lending of securities. This model would provide the following advantages as mentioned in the previous model:

1. Nationwide trading platform which already exists and reaches the entire investors.
2. Screen based continuous market session will ensure transparency, efficiency and market driven price discovery.
3. Clearing Corporation already has the track for managing risk by having a mechanism for collecting collateral nationwide.
4. Clearing Corporation being in a position to monitor exposure segment wise shall ensure that borrowing is within specified limits.
5. Clearing Corporation would ensure that the borrowing is done towards settlement obligation and also ensure that the securities so borrowed are returned to lenders.

3.4 Model 3 – Lending through the depositories.

Another model may be the securities lending and borrowing model followed by the Singapore Exchange Ltd. In this model, depository becomes the major supplier of the securities. This model envisages the securities to be available from the big investors, who get themselves registered with the Depository for this specific purpose. It may be noted that under the Singapore Exchange Ltd. Model, the payment to the lender of securities is fixed and linked to the value of the securities.

This model further envisages investors borrowing the securities through their depository participants. For that purpose, depository participants are registered with the Depository as authorized borrowers for their clients. Again, in the Singapore model, Depository charges fixed rate of interest from the Depository Agents (DAs) for their borrowing for clients. But, it is interesting to note that the DAs determine their own lending rates, while lending to the individual clients.

It may be noted that it is basically a two tier model for the borrowing of the securities. First, depository is lending the securities to the DAs and then DAs are lending the securities to the investors (their clients).

It is important to mention here that in case of Singapore exchange, Depository called the Central Depository (CDP) is the clearing and depository division of the Singapore Exchange. Therefore, this kind of model may be created in India by the collaborative efforts of the clearing corporation/ house and the depositories. Only disadvantage in this model is that only the big investors would be eligible to be the part of the supply side and would get themselves registered with depositories. Other small investors may not be able to enjoy the values created through the system.

Indeed, the model 1, suggested above is the refined version of this model wherein even the small investors would be eligible to participate in the lending process through their depository participants. Accordingly, some market participants feel that the model 1 scores over the instant model in terms of values to the investors at large.

3.5 Model 4 – Lending through the special purpose bank.

Creation of the special bank say “limited purpose bank“ for the securities lending and borrowing is another idea given by the market participants. This assumes that a dedicated entity can undertake the activity of supporting the securities market trades.

It is felt that the dedicate bank may do things in an organized manner with available resources. People interested in lending the securities to the market may deposit their securities with this limited purpose bank and borrowers may borrow from this bank. As described in case of the funds borrowing and lending, this bank may lend the securities to clients in number of alternative following ways:

✍ Bank may lend the securities to clients direct.

✍ Bank may lend the securities to clients through the brokers of the exchanges.

✍ Bank may lend the securities clients through the clearing corporation/exchange through an on-line trading platform

In the first two cases, bank would manage its risk itself. But, in the last scenario, exchange/clearing corporation would manage the risk for the bank.

Advantages of this model are many:

1. It would be easy to track, who is lending the securities in the market and to what extent. This would help avoid any nexus built up between the lender of the securities, brokers and issuer companies.
2. Total quantum of the securities lent would be known to the market at any point in time. Limits on the client wise borrowing would be easy to impose and monitor.

3. This would make the risk management effective.

4. Audit trail would be easy to manage.

Only issue in this model is the creation of a fresh infrastructure. Building a nationwide bank would require both money and time. But, that may be navigated with co-ordinated efforts of the market participants. Another opinion on the issue is that the existing infrastructure of the banks/financial institutions/exchanges may be leveraged on for the purpose.

This model is further dealt with in the part 5.

All these models mentioned above may not be mutually exclusive. Therefore, there is always a possibility of having multiple models in the system. Indeed, they co-exist in the market and global markets bear testimony to it.

Some market participants think that another important issue is that some institutions, specially the foreign investors, may have the requirement to managing their own collateral as per their charters. Now, if India chooses to have only the model 1, they would not be able to participate in the deal as the sales proceeds from the short sale would be retained by the Clearing corporation/house or the managing party of the trading platform. Therefore, a system needs to be evolved for this kind of deals.

Part 4 - Concept of the securities banking

4.1 Introduction

Securities Banking concept goes with the model 1 suggested above for the securities lending and borrowing. This concept envisages the depositories/ depositories participants to become the securities banks i.e. lend securities, earn return and share that with their customers/clients. As a whole, the concept imagines that the involvement of the depositor participants in the securities lending and borrowing mechanism on the supply side would result in the value creation process for the individual small investors, scattered across the country. This would create an

absolutely fresh opportunity for the DPs/ Depositories to create values and to a certain extent address the issue of the cost of holding the electronic form of shares.

On the operational side, it assumes that the contract agreement between DPs and clients may have a standard clause wherein clients authorize the DPs to utilize their shares for stock lending and borrowing purposes (like in banks, it is understood by the customers that the bank would utilize the money for lending purpose). Now, DPs may use these shares for lending and generate money. Values generated from the business may be passed on to the clients/ customers in terms of first reduction in cost of operating an account and then as interest on shares kept with DPs.

Indeed, a scenario may be visualized when DPs would offer different options of accounts like current account, savings account or term/fixed accounts to their customers. These fixed deposits would have different lock-in periods with different interest rates.

Further, as fixed deposit may be broken prematurely by the clients, these intermediaries may have two choices – either don't offer the premature option to the investors on their fixed deposits of securities or offer the option and in case of any unexpected shortfall, borrow the securities from the market based on their needs. As mentioned above in the model one for securities lending, these depository participants would be allowed to borrow the securities for their temporary shortfall along with the actual short sellers in the market.

Therefore, concept envisages that depository participants may transform themselves into a full fledged securities banks, over the period of time. In that case, prudent risk management practices of banking may be imported to demat industry. They need to just tailor the existing banking practices to suit to the best requirements of these new generation securities banks.

This model would demand the risk management systems to be laid down. This may include the restrictions on the total lending capabilities of the lenders. For instance, these intermediaries may not lend more than say X% of their holdings in each category (current account, savings account, different durations fixed deposits) /

subject to the overall ceiling of Y% on the total lendable securities available with them. This would ensure some liquidity with the lenders at the same time they would not venture into business of borrowing securities to lend further.

(Percentage X and Y needs to be defined by the regulator from time to time).

4.2 Important issues in this model

There are certain other issues in this model. They are mentioned below:

- ? All the securities parked with the DP would implicitly be available with DP for lending purposes unless the client has explicitly denied for the same.
- ? DPs and custodians may be registered with the intermediary managing the trading platform (exchange or the depository) for the securities lending and borrowing, for the limited purpose of securities borrowing and lending.
- ? All DPs by virtue of their status would be eligible to lend the securities on the proposed system. Here, as the broker members of the exchanges are also allowed as DPs, regulator may need to revise the eligibility criterion for being DP itself. Alternatively, to start with, only few strong DPs may be allowed to lend.
- ? Alternative model may be that only the Depository is allowed to lend the security and the depository in turn appoints its DPs, based on their strengths, to participate in the proposed lending and borrowing mechanism.

Part 5 – Independent organization for margin trading and securities lending

The idea of funds and securities lending and borrowing through an independent entity has been discussed in the part 2 and part 3 of the report under the section of proposed business models. Now, thinking is that a single dedicated entity may undertake both the funds and securities lending activities. In other words, it is envisaged that the independent entity may have a nationwide presence and all the interested lenders of the funds and the securities to the market may use that as

intermediary. Similarly, all the borrowers of the funds and the securities would be approaching this entity for the purpose.

It is felt that this dedicate bank may do things in an organized manner with available resources – both funds and the securities. People interested in lending the funds and securities to the market may deposit them with this limited purpose bank and borrowers may borrow from this bank. As described somewhere else in this paper, business models for the lending funds and securities to the ultimate clients may be different as follows:

✍ Bank may lend the funds and securities to clients, direct.

✍ Bank may lend the funds and securities to clients through the brokers of the exchanges.

✍ Bank may lend the funds and securities to clients through the clearing corporation/exchange through an on-line trading platform.

In the first two cases, bank would manage its risk itself. But, in the last scenario, exchange/clearing corporation would manage the risk for the bank.

Advantages of this model are many:

1. It would be easy to track, who is lending the funds and securities in the market and to what extent. This would help avoid any nexus built up between the lender of the funds and securities, brokers and issuer companies.
2. Total quantum of the funds and securities lent would be known to the market at any point in time. Limits on the client wise borrowing would be easy to impose and monitor.
3. This would make the risk management effective.

4. Audit trail would be easy to manage.

Only issue in this model is the creation of a fresh infrastructure. Building a nationwide bank would require both money and time. But, as mentioned earlier, that may be navigated with co-ordinated efforts of the market participants. Another opinion on the issue is that the existing infrastructure of the banks/financial institutions/exchanges may be leveraged on for the purpose.

Part 6 - Conclusion

Topic may be concluded with the following important points:

Margin trading has features similar to other forms of leveraged trading mechanism such as ALBM, BLESS or MCFS, which were banned recently.

Globally, it is believed that the facility of the securities and funds borrowing facility is important to support the rolling settlement and the physical settlement of the derivatives. It is also important from the perspective of the better price discovery, efficiency of the system, hedging and arbitrage as explained in detail under the head value drivers.

Margin trading internationally is an activity outside the purview of the exchanges. But, exchanges and clearing house/ corporations are generally there to facilitate the transactions. The same situation is envisaged in the proposed models in the Indian Securities Market.

In the proposed systems, it is assumed that at no point in time, money or securities lending would be clubbed with the actual settlement of the normal trading on the exchanges, before or after the execution. These would essentially be independent activities.

All the proposed models assume that a person would not be able to lend the funds or the securities, until he/she holds them in advance. In other words, nobody would be able to lend against his/her future proceeds.

Based on the comments from the public, SEBI would prepare an approach paper which will be taken to secondary market advisory committee (SMAC). Recommendations of this SMAC will be posted on the web-site for the comments of public once again before final decision on the subject.