

Question Paper

Security Analysis – II : October 2001

Part D : Case Study (50 Points)

- This part consists of questions with serial number 1 - 5.
- Answer all questions.
- Points are indicated against each question.
- Do not spend more than 80 - 90 minutes on Part D.

Case Study

Read the case carefully and answer the following questions:

1. Perform the industry life cycle analysis of the Indian Telecom industry.
(6 points)
2. Perform the Michael Porter analysis of Indian Telecom Industry.
(12 points)
3. Perform the SWOT Analysis of Mascon Telecom.
(8 points)
4. Calculate the RoE of Mascon Telecom by performing the five factor RoE analysis for the last four years. Analyze your findings.
(5 + 5 = 10 points)
5. Calculate the intrinsic value of the share of Mascon Telecom applying the following formula: (make suitable assumptions)

$$V = (0.35 \times P_{P/E}) + (0.35 \times P_{DDM}) + (0.30 \times P_H)$$

where,

- $P_{P/E}$ = The price as per the price to earnings ratio, assuming that $P/E = 14.0 + 2.0 EG + 0.65 DP$, where EG and DP are earnings growth and dividend payout ratio respectively taken in decimal form.
- P_{DDM} = The price as per the dividend discount model, assuming a super normal growth of 50% for 3 years, 25% for the next 2 years and which falls thereafter to the normal growth for the rest of the years.
- P_H = The price as per the H-Model, assuming an abnormal growth of 45% for the next 4 years and normal growth after that.

(Assume that the risk free rate is 7.89%, the market risk premium to be 8.26%, and the additional risk premium for investment in an unlisted company, which may list in the near future to be 8%.)

(14 points)

Telecommunications is one of the fastest growing service industries in the world. While the accent of growth is on the value added services, such as e-mail, cellular phones etc in the developed countries, the thrust is on improving basic telephone availability in the developing countries. This sector plays a crucial role in spurring growth, especially industrial and services, in any economy.

Multinational companies are investing in developing countries because of huge latent demand. Telephone penetration has reached saturation levels in the developed world. Telecommunications, historically has been a state initiated and controlled sector in all countries. The last two decades has witnessed a restructuring of the entire sector across the globe, in terms of privatization and competition. Opening up of economies and privatization in the developing countries has triggered influx of foreign capital and technology.

Telecom density in India is only 2 per 100, which is less than that of China (4.5 per 100) and world average (10 per 100). Cellular penetration is also low at 0.1% compared to China (1.1%) and Malaysia (2%). To improve penetration will imply an investment of over Rs600bn in the next 5 years.

The industry had received the Telecom Policy of 1994 with enthusiasm. It was hoped that this would usher in a new era in the telecom sector. Unfortunately, delays in implementation and resultant confusion have derailed the

same. The initial enthusiastic responses to bidding have given way to litigation and subsequent delays. Out of the 22 circles made available to the private sector for basic telecom services, only 2 are operational after 5 years.

Despite all the delays, India has managed to take steps towards privatization and introduction of competition in basic telecom services. The government has announced a new telecom policy, which clarifies the future role of BSNL. The new ISP policy will promote the use of Internet. All this aims to promote investments in the telecom sector. The sector will undergo a dramatic transformation in the next 2-3 years.

Earlier the bidding process was also adversely affected by Himachal Futuristic, which submitted bids of Rs850bn for 9 licenses leading to an impasse. The solution formulated by the policy makers to cap the number of licenses per company ostensibly, to avoid competition also led to confusion. The bids were made on optimistic demand estimates, which have not yet materialized. This has resulted in most of the companies facing cash losses. Most of the Indian partners do not have the strength to withstand long gestations and are selling out to their foreign collaborators. The new telecom policy has addressed this issue also.

A number of MNCs set up joint ventures for manufacture of telecom equipment in the last 3 years. The capacity build up outstripped demand from the service providers. Due to resource crunch, BSNL (the dominant single buyer) delayed placing orders. This resulted in an adverse impact on the bottom-line. A shake out of local players (including some PSUs) who are technologically not competitive is bound to happen.

MTNL and VSNL are two service companies that offer the best exposure to the telecom sector. MTNL is a local service provider in Mumbai and Delhi (services in the rest of country are provided by BSNL). VSNL, a monopoly gateway for international calls, will benefit from the rise in volumes with decline in international tariff rates. The monopoly status of both these entities is going to end in next 1-2 years. Although in terms of infrastructure, these companies are well positioned, given their track record in customer service, it remains to be seen how best they tackle competition under a decontrolled scenario.

We recommend an underweight on all equipment manufacturers in the face of competition from the global entities seeking market penetration by price-cutting with technologically superior products. Also, avoid investment in jelly filled cable (JFC) manufacturers where there is a glut. They will find it difficult to pass on increases in copper and plastic prices, despite BSNL's cost plus tender pricing. Delays in finalization of orders by BSNL have also adversely affected them. These stocks have rallied in the last quarter because of BSNL releasing some orders to the JFC segment.

The Indian telecom sector, like most other infrastructure sectors is controlled by the state. BSNL, reporting to the Ministry of Communications (MoC) is the key basic service provider in the country. Mahanagar Telephone Nigam Ltd (MTNL) is the operator in Mumbai and Delhi circles. By an act of Parliament, the Telecom Regulatory Authority of India (TRAI) was formed to be the regulatory agency. The key players in the sector are

Ministry of Communications - All the operations of this sector come under the purview of MoC. It is responsible for all major policy changes, planning, supervision, spectrum control etc.

Department of Telecommunications - DoT was formed in 1985 when the Department of Posts and Telecommunications was separated into Department of Posts and Department of Telecommunications. Till 1986, it was the only telecom service provider in India. It played a role beyond service provider by acting as a policy maker, planner, developer as well as an implementation body. In spite of being profitable, non-corporate entity status ensured that it did not have to pay taxes. DoT depended on GoI for its expansion plans and funding. Its pivotal role in the Indian telecom sector has got diluted after formation of TRAI. Corporatization of DoT to BSNL from October 2000 has been a step in right direction.

Telecom Regulatory Authority of India - TRAI, was founded to act as an independent regulatory body supervising telecom development in India. This became important, as earlier BSNL was a regulator as well as a player. Founded by an act of Parliament, the main functions of the body was to finalize toll rates and settle disputes between players. An independent regulator is critical as the sector witnesses competition.

Mahanagar Telephone Nigam Ltd (MTNL) - It was founded in 1986 when the Mumbai and Delhi circles were transferred from BSNL. MTNL provides basic telecom services in these two cities. Till recently, it enjoyed a monopoly position, which got diluted after the entry of the private sector in these two cities.

Videsh Sanchar Nigam Ltd (VSNL) - It enjoys a monopoly position in allowing international access to India. All incoming and outgoing calls to the country are routed through VSNL's gateways. This monopoly accorded to VSNL will go in a year's time.

The other entities in the sector under the control of MoC are the two public sector telecom equipment manufacturers, namely Indian Telephone Industries Ltd (ITI) and Hindustan Teleprinters Ltd (HTL). Both these companies are facing financial problems because of product obsolescence, poor management and over staffing.

Telecommunications Consultants India Ltd (TCIL), another PSU was founded in 1978 to undertake consultancy services in the field of telecom.

In addition, there are a number of telecom equipment manufacturers in the private sector. Of this, jelly filled cables is the biggest segment. The government through BSNL and others is the biggest buyer and enjoys an effective monopoly. BSNL orders are finalized by tender system. Given the resource crunch and delays in finalizing orders, most of these companies are facing financial problems.

TYPES OF SERVICE PROVIDERS

Service providers (carriers) are categorized as per service:

- Basic service is mainly voice communication. The subscriber's connection to the telecom network is called a direct exchange line (DEL) and people use it for talking.
- Basic services can be differentiated as per call destination into domestic and international. Domestic calls, both local and long-distance are routed through cables/ wireless links. International calls are routed overseas, mainly through satellite links. The international carriers of various nations liaison with one-another to ensure smooth operations and efficient call transfer. Major global carriers, mainly private operators from the developed nations, determine international call tariffs. Revenue sharing agreements exist between various international carriers.
- Value added services such as cellular telephony, paging, e-mail and VSAT network, which provide the subscriber greater ease of communication and enhance the utility of basic services network.

Some examples are :

Radio Paging

It is a one way wireless communication. The subscriber's pager, which is programmed to respond to a unique number/frequency, can receive messages only within the limits set by service provider as per the capability of his transmission equipment. Different service providers use different transmission frequency to prevent interference.

Almost 75% of the paging market is concentrated in USA and Japan where demand saturation has set in. Developing nations provide, with penetration rates of less than 0.5% are likely to show greater potential. Services are now widely available in a number of cities. Multiple operators in each city will offer wide choice to the customer. The payee subscribers' base stated to increase in India henceforth due to cheap rates and easy availability.

Electronic Mail

This has become very popular in the developed world as a cost-effective means of communication. It networks the subscriber's computers, enabling transfer of files. Alternate routing of packets ensures full confidentiality of information and provides inherent redundancy in case one route is dysfunctional. The destination network station assembles the packets, decodes the original file and transmits it to the addressee's computer 'mail box'.

With increasing dependence on computers and need for fast data access, e-mail popularity is ever growing. Internet is today linking over 5mn computers and serving 50mn users. ICNET, Datapro, RPG-Sprint, VSNL, HCL and Global Telecom used to provide this service. A stand-alone e-mail facility has lost its importance as most companies are using the Internet and intranets directly.

Cellular Services

It enables two-way, mobile, wireless communication via a portable handset. Area covered by the service provider is divided into cells, each with a Radio Base Station (RBS) connected to a Central Switching Centre (CSC) which monitors the entire system. In the midst of a call, if a subscriber moves across cells, CSC ensures handing over of the call between the adjacent RBS and the call is uninterrupted.

Cellular telephony is still growing at a rate of 50 % annually in even the developed nations, with technology upgradation. Cellular services are now becoming more popular in India.

VSAT Networks

It can transmit voice, fax, data using the subscriber's terminal connected to a Very Small

Aperture Terminal (VSAT). The VSAT sends data to a Central Hub Station (CHS) via dedicated transponder of a chosen satellite. CHS acts as a switching center and retransmits the data to the receiver VSAT, again via satellite. VSAT network is suitable for connecting remote locations and also for setting up a private network amidst nationwide spread of offices.

For fast, reliable, satellite communication, VSATs are popular in developed nations. A VSAT costs around Rs0.7mn. The need for real time information has resulted in an increased popularity of the same. Service licenses were issued in 1994 by BSNL to Hughes Escorts, Comsat Max, RPG, Wipro and Comnet. Hughes Escorts, the first to offer services has developed clients like Philips, HLL, P&G, Blue Dart etc. Nelco is installing a nationwide network of 150 VSATs for Tata group companies. Comnet has executed the NSE contract for providing 750 VSATs.

Revenue Sharing

As mentioned earlier, any telephone call can be to a party in India or overseas. Different sharing agreements exist for these two categories.

Local calls in Mumbai/ Delhi are handled by MTNL's own network. STD calls are routed onto BSNL's national network and ISD calls are routed onto VSNL's international gateways. MTNL pays BSNL network access charges of around 22.5% of MTNL's annual revenues, and an annual license fee of Rs900 per DEL (DELs calculated as on 1st day of a year). Even for ISD calls, MTNL makes no payment directly to VSNL but via BSNL-VSNL revenue sharing system. MTNL estimates that local calls constitute 30% of its revenues, STD calls constitute 42% and ISD calls 28%.

VSNL does not receive payments directly from end users and has no control over tariffs charged by BSNL or foreign carriers. VSNL's revenues are from inter-carrier revenue sharing agreements. The following revenue sharing between BSNL-VSNL (in force since April 1, 1993) was decided when the Re-US\$ rate was Rs31.6/US\$ and inter-carrier rate US\$1, so as to give VSNL Rs10 per call minute on incoming as well as outgoing calls. When an overseas subscriber calls an Indian party, the foreign carrier, VSNL and BSNL/ MTNL come into play. Hence, all the parties have a claim in the revenue pie, which has to be shared. The general sharing agreement is Incoming call - Foreign carrier bills caller. Receiver in India is not charged anything.

Global Scenario

Telecommunications is one of the fastest growing service industries in the world. In developed nations, with saturation of demand for basic services, the accent is on the value-added services. Developed nations are trying to augment basic services infrastructure and also introduce value-added services. Over the past decade most nations including Japan, USA, UK, Singapore, New Zealand have allowed private sector entry in telecom services. Others like India, China, France and Germany are following suit. In developed nations, even international services are offered by private operators but, in most developing countries, overseas carriers are State controlled. With competitive pricing causing reduction in tariffs charged for overseas calls from developed nations, the telecom carriers in these nations are lobbying for a steep reduction in inter-carrier revenue sharing amidst nations. At the same time Internet telephony i.e. voice services via Internet medium, is on the rise. This enables international connectivity at the price of a local call and eats into revenues of international carriers.

Indian Scenario

India operates a network comprising 23,527 exchanges with 19.1mn working connections as on Nov '98. India's tele-density of 2 fixed lines per 100 persons is less than China (4.5) and the world average is about 10. Tele-density in developed countries is about 45 per 100. Cellular penetration is at 0.1%, compared to 1.1% in China and 2% in Malaysia.

Particulars	1998
No. of exchanges	23,527
Capacity connections	22.64mn lines
Working connections	19.13mn lines
No. of villages	0.304mn
No. of PCOs	0.463mn
PCO population ratio	529

The Ninth plan target of is to have 23.7mn working connections. Other targets were to have a PCO in every village.

Growth of telephone connections (inclusive of MTNL)

	Lines added	Growth(%)
1996	2.2	22
1997	2.5	21
1998	3.2	22
1999	3.8	16

Note: Confirmed figure of 2000 is not available yet.

The basic telecom services network has expanded from 0.1mn connections at the time of independence to 22.6mn Direct Exchange Lines (DELs) as on March 31,1998. It has witnessed consistently high growth of 16-17% per annum during the last decade i.e. 1987-97. The growth was further accelerated to more than 20% during the Eighth Plan. During 1997-98, the growth rate was still higher at 22.4%. The main features of the present telecom network are:

- More than 23,400 telephone exchanges working in the country.
- A network of more than 22.6mn telephone connections with about 20% of the total connections working in the rural areas.
- STD/ISD facility is available to more than 90% subscribers.
- A network of about 0.46mn PCOs in urban areas.
- Availability of variety of services such as mobile radio telephone, paging, fax, data transmission, etc. to cater to the business and other needs of customers
- Cellular services are available in 4 metro cities and all other Circles except Andaman & Nicobar Islands and J & K.
- Six licenses for basic services have been granted for six states of M.P., Andhra Pradesh, Gujarat, Rajasthan and Maharashtra. Two operators M/s. Mascon Telenet Ltd. in M.P. and Hughes Ispat Ltd. in Maharashtra have started providing services.

There is huge latent demand for telephones in India. Waiting list in the metros has been brought down and MTNL claims that in some areas a customer can get a telephone on demand.

This is the reason why the government insisted on private sector participation in basic services as it lacked resources to set up this infrastructure. It is estimated that each DEL will cost about Rs.40,000.

New Telecom Policy

New telecom policy was announced keeping in mind the key role telecom plays in growth of any economy, and also to solve the licensing imbroglio. This was done to promote private sector participation in the telecom sector. Highlights are:

- Domestic monopoly of BSNL for long distance calls has ended.
- Role of TRAI was clarified. It was to act as an arbitrator in disputes between the parties concerned including the government. TRAI 's advice can be sought for tariff fixation but it is not binding on the players.
- Guidelines were set for entry of new players by paying one time license fees and subsequent revenue sharing with government. The quantum of both will be recommended by TRAI. The revenue sharing agreement will apply to areas where licenses are still not issued.
- The new policy allows cable networks to provide data and voice services subject to licensing. Inter connectivity between cable and basic service provider allowed.

The policy aims to establish a framework that defines the roles of BSNL, TRAI, the private sector and the government. It aims to license out 15 circles for basic services and 6 circles for cellular services as soon as possible. Out of the 15 vacant circles, five are in dispute and 2 have signed letters of intent.

Mascon Telecom Ltd

Mascon Telecom is a telecom equipment manufacturer which also has interests in various telecom-related services and products through its subsidiaries and joint ventures. Their activities include basic/ cellular services, Internet services, manufacture of telecom equipment, VSATs etc. The two subsidiaries of Mascon Telecom are Mascon Televenture and Mascon Telespatial. Mascon Televenture has two subsidiaries Mascon Cellular and Mascon Telenet. Mascon Telespatial also has two subsidiaries Mascon MT and Mascon MT Internet. The group has undergone significant restructuring in the recent past. The group has regrouped business based on the field

they are into. Mascon Tele Venture would be into telecommunications and Mascon Telespatial would be into services. Mascon Telecom's shares have been delisted from Calcutta, Delhi, Ludhiana and Mumbai stock exchanges. This was done after more than 90% shares were bought over by the promoters. Mascon Telecom plans to split the divisions into two parts, telecom services and telecom equipment. The telecom equipment would be under another company Mascon Teletech and the services would remain with Mascon Telecom. The shareholders would be given a mirror shareholding in the new company Mascon Teletech. This is a part of restructuring exercise for the company.

Mascon Telecom manufactures push button telephones and cordless phones. BSNL and MTNL are the two major customers of the company. BSNL and MTNL have a requirement of nearly 4mn phones per annum. The company has an installed capacity of 3.6mn phones per annum, to meet BSNL and MTNL's requirement of the phones. The company also has an installed capacity of 18,000 cordless phones. The utilization rates for the capacities of the push button telephones and cordless phones are 32.01% and 0.07% respectively. The boost in the telecom sector would bolster the growth in the sale of company's products. The company has divested its stake from Casio Mascon Mobile Communications Ltd. (CMMC) (into manufacturing pagers) and MSI Pvt. Ltd. These were joint ventures between Mascon and Casio Japan for CMMC and MSI Plc. UK respectively.

Background

Mascon Telecom Ltd, promoted in 1985 by S B Manohar, was set up to manufacture Electronic Push Button Telephones (EPBT). It is in the business of manufacturing push button telephones and cordless phones. It is a part of the Mascon Group. The group has interests in telecom services, both basic and cellular, Internet services, VSAT services and telecom equipment manufacturing. Mascon MT is in the business of Internet services under the brand name of "Mantraonline". Mascon Telenet Ltd. in technical collaboration with Telecom Italia started fixed line telephone operations in the state of Madhya Pradesh. 20% equity of Mascon Tele-Ventures was placed with EM Warburg Pincus & Co. Mascon Tele-Ventures Ltd. is the investing company in the Mascon Group. Mascon Tele-Ventures would be coming out with an offshore float within a year.

The various subsidiaries of the company are: Mascon Tele Ventures, Mascon Telenet Limited, Mascon Cellular Limited, Welldone Impex (India) Limited, Goa Telecommunications and Systems Limited and Mascon Telespatial Limited.

MTL, also exports its products to US and other countries. It recently set up an export division which will help the company participate in global tenders. Some of the company's international clients include Sprint, USA and Nepal Telecom, Nepal.

Business

The two products of the company are electronic push button telephones and cordless telephones.

Mascon Cellular Ltd has the license to provide cellular services in the Delhi region and is among the leading cellular operators in the country. It launched the automatic roaming in 160 cities across India and 27 countries across the world.

Mascon Telenet Ltd has licenses for providing fixed line (basic telecom) services in the Madhya Pradesh and cellular services in the Himachal Pradesh. The company became the first private operator to provide fixed-line services in the country. The service, which was launched in Jun 98, has developed a customer base of over 35,000 and also provides Internet services in the state.

Mascon BT has license to provide VSAT services. The company is the second largest service provider in the shared hub category and the fastest growing VSAT service provider in the country.

Mascon BT Internet has license to provide Internet services in Mumbai, Delhi and Bangalore. The service became operational from May 99 under the brand name Mantra Online.

Telecom equipment

Goa Telecommunications and Systems produced over 425000 telephone sets during the year i.e., a jump of 39% compared to the previous year. The company plans to increase the capacity to 1mn and also add certain value-added products including feature phones, Boss Secretary System, Caller Line Identification Phones etc.

Mascon Dura Line provides total engineering solutions for the telecom industry. The company registered revenues of Rs79mn but incurred losses to the tune of Rs11.5mn due to high interest cost and depreciation.

Financial analysis

Sales declined by 37%yoy during FY01. Lower sales can be attributed to a slowdown in orders from BSNL and MTNL. Operating profit margins have come under tremendous pressure due to under-utilization of capacity. Other income during FY01 jumped by more than three times to reach Rs67mn and included profit on sale of investments (Rs31mn) and profit on sale of software (Rs13mn). Interest costs have nearly doubled during the year as the company borrowed additional funds.

During the year the company made an open offer for acquisition of equity shares as a result of which public stake came down to less than 6% of its total paid up capital. The company borrowed an additional Rs68mn during the year. No details of the same have been given. Investments contribute a significant 51% of the total capital employed. Non trade investments of Rs2.7mn were sold off during the year and the entire investments were towards subsidiaries and joint ventures.

Profit and Loss statement of Mascon Telecom for the last 4 years.

(Rs. in million)

Period ended	Mar-98	Mar-99	Mar-00	Mar-01
No. of months	12	12	12	12
Gross sales	699.5	748.1	730.7	462.7
Excise duty	-87.4	-104.7	-103.5	-68.5
Net sales	612.1	643.4	627.2	394.2
Other income	51.6	91	17.7	67.1
Total income	663.7	734.4	644.9	461.3
Raw materials	436.9	459.3	428.3	291.9
Stock adjustment (Inc)/ Dec	-11.1	3.9	2.2	3.6
Cost of material	425.8	463.2	430.5	295.5
Employee cost	34.4	43.1	56.3	60.4
Power & fuel	4.6	5.9	9.5	8.3
Advertising/ promotion/ public	20.8	7.7	10.9	11.6
Other expenses	46.5	51.8	4.9	-5.2
Cost of sales	532.1	571.7	512.1	370.6
PBIDT	131.6	162.7	132.8	90.7
Interest & finance charges	7.4	5.6	10.8	20.5
PBDT	124.2	157.1	122	70.2
Depreciation	12.8	13	14.9	23.6
PBT	111.4	144.1	107.1	46.6
Provision for taxation	31	38.3	24.6	7.1
PAT	80.4	105.8	82.5	39.5
Dividend payout	23.2	37.2	37.2	37.5
Retained earnings	57.2	68.6	45.3	2.00

Balance Sheet of Mascon Telecom for the last 4 years.

(Rs. in Million)

Period ended	Mar-98	Mar-99	Mar-00	Mar-01
No. of months	12	12	12	12
SOURCES OF FUNDS				
Equity capital (Face value of Rs.10)	169	169	169	169
Capital reserve	4	404	404	404
Share premium account	451	451	451	451
Profit & Loss/ General reserve	118	186.6	231.9	233.90
Other reserves	6.8	6.8	6.8	6.8
Reserves and surplus	579.8	1048.4	1093.7	1095.7
Net worth	748.8	1217.4	1262.7	1264.7
Secured loans	160.8	72.6	99.9	83.2
Unsecured loans	57.4	0	0	68.4
Total debt	218.2	72.6	99.9	151.6
Capital employed	967	1290	1362.6	1416.3
APPLICATION OF FUNDS				
Gross block	222.3	213	379.6	402.1
Accumulated depreciation	-79.5	-58	-72.7	-87.4
Capital work in progress	8.1	14.6	0.3	0.8
Total fixed assets	150.9	169.5	307.3	315.5
Investments	141.2	696.6	791.5	783.3
Inventories	93	87.3	109	67.2
Sundry debtors	225.1	173.1	81.1	65.4
Cash & bank balance	37.5	70.7	48.2	52.5
Total loans & advances	473	248	192.4	323.1
Sundry creditors/ Acceptances	-109.8	-92.6	-102.4	-92.8
Other liabilities	-20.7	-21.6	-27.3	-60.4
Provisions	-23.2	-41	-37.2	-37.5
Net current assets	674.9	423.9	263.8	317.5
Capital deployed	967	1290	1362.6	1416.3

END OF PART D**Part E : Caselets (50 Points)**

- This part consists of questions with serial number 6 - 13.
- Answer **all** questions.
- Points are indicated against each question.
- Do not spend more than 80 - 90 minutes on Part E.

Caselet 1**Read the following caselet carefully and answer the following questions:**

6. a. What is the major difference between the 1992 scam of the stock market and the recent tumble of the markets?
- b. Do you advocate a single regulatory authority for all the financial markets? Elucidate.
- (5 + 8 = 13 points)**
7. Recently, SEBI chief D.R. Mehta announced that SEBI should not be held responsible for the crisis while the RBI stayed mum at this Juncture. How far, do you think, the SEBI has fulfilled the mandated role of protecting investors? Elucidate.

(6 points)

On Saturday, March 31, the UK Listing Authority moved from the London Stock Exchange Tower to the Financial Services Authority's main offices at Canary Wharf. The UK Listing Authority, which regulates the admission of companies to the Official List, was transferred to the FSA from the London Stock Exchange in May last year.

If this is one face of financial sector regulations, look at the other one: the scene shifts to Mumbai, India's financial capital. On Tuesday, April 3, capital market watchdog Securities and Exchange Board of India chief DR Mehta washed his hands off the crisis that has engulfed the market as well as a few banks. "SEBI can't be held responsible for what happened in the banking system," he said in no uncertain terms. What he did not say is: this is Reserve Bank of India's problem. Why should I bother about it?

On its part, the Indian central bank has been maintaining a deafening silence. Officially, it has not blamed SEBI, but there are indications that the central bank feels the buck should stop at SEBI.

After all, as early as in October 2000, RBI did inform SEBI about the 'unusual movements' of two banks' scrips. One of them is Global Trust Bank (the other being United Western Bank).

Weeks after the run on Madhavpura Mercantile Cooperative Bank, the Rs.137 crore fraud in Bank of India, the payment crisis in Calcutta Stock Exchange and suicides of a few bankrupt brokers, we are still a group of blind men feeling the elephant. Nobody has got a feel of the magnitude of the scam as yet.

Caselet 2

Read the following caselet carefully and answer the following questions:

8. What are the various parameters the investors should seek in the stocks, while investing?
(7 points)
9. What are the various attributes that have made stocks like Reliance, HLL and ITC perform better than the rest of the crowd?
(6 points)
10. Do you think that in next six years the Indian market is going to be bullish rather than bearish?
(6 points)

That we have been going through a bear market is no news. What is more surprising however, is the severity of the bear market. In a small exercise we at equity master calculated the returns if one bought one share in each of the Sensex scrips in November 1994 and held them for six years till October 2000.

The results were surprising, or rather shocking. Except for the five scrips, viz. HLL, ITC, Nestle, Glaxo and Reliance all, the other 26 scrips of the Sensex have given negative returns! In fact, destroyers of capital would be a better terminology. The list ranges from the auto majors Telco, M&M, Hind Motors and Premier Auto and engineering companies Bharat Forge, L&T, Siemens and Voltas to steel (Tata Steel, Mukand), textile (Bombay Dyeing, Century, Indian rayon, Grasim), cement (ACC) and paper (Ballarpur) companies.

In 1994, almost all these companies set out to set up huge capacities to prepare for a post-liberalization scenario. However, six years down the line most of these companies are down in the dumps, afraid of imports and not able to survive the chilly winds of competition. And with the World Trade Organization forcing the further opening up of the economy post 2001, most of these companies, with a few honorable exceptions of course are slated to go down the tube. Today it is even difficult to believe that it was scrips such as Century, Premier Auto and Voltas were called blue chips in the early nineties.

More importantly the promoters of these companies turned out to be paper tigers. There have been issues in business magazines which have carried the promoters of these companies as the best managers and these companies as the best managed companies. Any one investing on the basis of these opinions would be wondering what has hit them!

Coming to the winners, Hindustan Level remains the best company to have invested your money in. A part of the reason being that HLL consolidated operations in India over the past six years taking over Tomco (from the Tatas), Dollops (from Cadbury), Kwality (renaming it Kwality Walls) merging group companies Brooke Bond, Lipton, Ponds which has led the company in emerging as a Rs.100 bn conglomerate. Simultaneously, HLL continually focused on its rural distribution initiative, which has enabled it to emerge as a top of the scale mass market player.

Nestle has been following in HLL's footsteps, which almost the same pricing policies. It is emerging as a mass market player with a foray into mineral water and milk. ITC of course is a cigarette major with an almost 70 percent market share in the Indian market and its ability to raise prices is legendary despite excise duties comprising more than 50 percent of its turnover. Glaxo's top of the line prescription brands and continuous focus on disinvesting unproductive assets have enabled the company to emerge as one of the most respected

companies. The continuous backward integration (with huge capacities) right from fabrics, fibre intermediates, commodity plastics to basic building blocks has enabled Reliance to stay competitive and reap the benefits of economies of scale.

In this context it may be noted that the Indian stock market has witnessed five bull and five bear phases in past 10 years and on an average bear market have retraced 73% of gains of preceeding bull rally.

Caselet 3

Read the following caselet carefully and answer the following questions:

11. While the major stock exchanges in the country are in rough waters, the small exchanges are struggling for survival. What are the inherent weaknesses of Indian stock exchanges?

(6 points)

12. “Through demutualization i.e., separating ownership from trading rights, many of the problems faced by stock exchanges in India can be eliminated”. Do you agree with the statement? Discuss.

(6 points)

Stock exchanges in India are going through difficult times. The bigger exchanges at Bombay and Calcutta are in the eye of a storm with an unseemly payments crisis but all the smaller exchanges are struggling for survival too. In fact, the world over stock exchanges are carefully evaluating the changing landscape due to the challenges arising out of deregulation, globalization and technological advancements. Most exchanges are developing strategies to compete and stay relevant.

The forces that are changing the landscape of financial services – deregulation, globalization, and technological advances – drive the challenges faced by the stock exchanges. Globalization in the context of the stock exchanges refer to globalizing issuers, investors and intermediaries. And technology advances in communication (voice, internet & travel), and computing power support these developments.

In the case of exchanges this can lead to the need for global trading platforms that can be accessed by players all over the world with equal ease. In such a scenario small stock exchange will lose relevance and must energetically develop an approach for survival. This is important, for the countries in which they belong as capital exchanges, not just stock exchanges, must be viewed as national assets. While a global market place suits large players and large investors, mid-size players suffer. The local stock exchange will then only serve the bigger risks (mid-size players) by the more risk averse (smaller) investors. This will make the market quite illiquid. It is therefore in the national interest that the exchanges respond energetically to these challenges and reform.

How should the Indian exchanges respond to the strategic challenges they face? The answer is not simply more regulation. Our regulation currently is control oriented and often sparks a crisis by the severity of the controls imposed.

END OF PART E

END OF QUESTION PAPER

Suggested Answers

Security Analysis – II : October 2001

Part D : Case Study

1. Telecommunications is one of the basic services of an economy. Though the telecommunication industry in India is very old, the Govt. was the only player in the basic services till now. The industry is being opened to the private players off- late. The telecom density in India is only 2 per 100, which is less than that of half of china (4.5) and one-fifth the world average (10). The cellular penetration is also low at 0.1% compared to China and Malaysia. Considering all these facts we can say that the telecom industry in India is at a very nascent stage. As per the industry life cycle analysis on the Indian telecom sector, at this stage the industry could be put in is: **the pioneering stage.**

There is huge latent demand for telephones in India. The government insists on private sector participation in basic services as it lacked resources to set up this infrastructure. More over, with the increased participation of the private sector in the industry and the emphasis by the government for participation in the industry it is poised to grow at an exponential rate. Since the industry has been opened up in the recent past and there is huge latent demand in the industry, the classification of the industry under pioneering stage is plausible.

2. **Michael Porter** Analysis of the Indian Telecom Industry:

Threat of entry:

- It is low due to licensing by the government
- Economies of scale are high as small network can not be run profitably. Further considering the high fixed cost of infrastructure making the threat of entry low
- Product differentiation is available in terms of brand identification and customer loyalties which again make the threat of entry low.

Intensity of Rivalry among Existing players:

- The recent consolidation move by BATATA and BPL one can very well feel the heat being generated in the industry,
- The gigantic plans by Reliance, BSNL, MTNL and many others in Industry is a reflection of rival making efforts for getting greater pie.
- Of late the price cut by majority of the Cellular service providers also indicate the increasing competition.

Bargaining Power of Buyers

- Buyers today are more demanding in the terms of better quality and more services at competitive price
- Bargaining power of the buyers as a group is low however as the telecom is a hitech industry and shift of customer loyalty due better product by the rivals is always there.
- For companies whose buyers are BSNL and MTNL bargaining power of buyers is high.

Bargaining Power of Suppliers

- Suppliers are the Exchange manufacturer, Jelly filled Cable manufacturer and provider of software solutions.
- In the area of Jelly filled cable there is a glut and the big customers like BSNL are in a position to negotiate with them. Similarly, apart from having a scores of software suppliers in our country some of the players are having subsidiaries in the area of software solutions.

Threat of substitute product:

With the advent of broad banding and convergence technologies the greater use of cellular phones and the additional services is expected to be demanded by the customer. As of now entirely different product altogether is not being envisaged.

3. SWOT analysis of Mascon telecom:

Strengths:

1. The company is the first private sector company in providing the fixed line services. So it has the early mover advantage in the industry.
2. Strong presence in manufacturing as well as various telecom related services
3. The recent restructuring carried out by the company exhibits the focused approach by the management.

Weaknesses

1. Shares are not listed at stock exchanges. Hence, the company may lack proper corporate governance
2. 90% stake held by the promoter makes it a family held business. In the hitech area such closely held business is not warranted as it may not be able to attract the bright professionals to the company.
3. There has been continuous fall of net profit of the company for last three years.
4. Some of the company subsidiaries like Mascon Dura Line are making losses due to high interest cost.

Opportunities

1. The industry is in pioneering stage in India and is expected to grow exponentially.
2. New telecom policy augurs well for the future growth of the company.

Threats

1. Recent actions of the government sent confusing signals regarding its seriousness in sticking to the policy announcements.
2. BSNL , MTNL, alliance between BATATA and BPL and now Reliance may act fierce competitors in the market.

4.

PARTICULARS	1998	1999	2000	2001
PAT	80.4	105.8	82.5	39.5
PBT	111.4	144.1	107.1	46.6
PBIT	118.8	149.7	117.9	67.1
Net SALES	612.1	643.4	627.2	394.2
TA	1120.7	1445.2	1529.5	1607.0
NW	748.8	1217.4	1262.7	1264.7
I. PAT/PBT	0.722	0.734	0.770	0.848
II. PBT/PBIT	0.938	0.963	0.908	0.694
III. PBIT/SALES	0.194	0.233	0.188	0.170
IV. SALES/TA	0.546	0.445	0.410	0.245
V. TA/NW	1.497	1.187	1.211	1.271
ROE (%)	10.74	8.70	6.53	3.12

From the above analysis it is clear that there has been continuous fall in ROE over the last four years. Considering the opening of the sector and the pioneering stage of economy the result has been very discouraging. The details are as under:

- i. Increase in PAT/PBT over the period indicates improvement of tax administration over the years.
- ii. PBT/PBIT has increased from 1998 to 1999 however started falling after that which indicates increase in level of debt from 1999 onwards. In fact the factor has substantially reduced in the year 2001 because of 50 % increase of debt level in that year.
- iii. PBIT/SALES ratio has increased in 1999 but then on it has been continuously falling indicating the decrease in operating profit margin. The fall in Sales figure after 1999 indicates the fall in contribution level resulting in fall in gross profit margin.
- iv. There has been continuous fall in asset turnover in all years. Though the asset level has been continuously rising the sales has been falling after 1999 indicating fall in asset utilization.

- v. Though the total asset over net worth ratio (leverage) has fallen in 1999 may be because of maturity of debt in that year (the debt level fell from 218.2 to 72.6 mn in that year) . However, there has been subsequent increase in debt level resulting in increase of leverage subsequently albeit slowly.

Factor I and factor V have increased after 1999. However, larger decrease has been experienced by factors II, III and IV resulting in the fall of ROE.

5. Required rate of return = $7.89 + 8.26 + 8 = 24.15\%$

For EG $80.4 (1+g)^3 = 39.5$

$$\Rightarrow g = \left(\frac{39.5}{80.4} \right)^{1/3} - 1 = -0.21$$

For DP Average DP% = $\frac{23.2+37.2+37.2+37.5}{80.4+105.8+82.5+39.5} = 43.835\%$ i.e. 0.4384

Therefore, P/E = $14.0 + 2.0 \times (-0.21) + 0.65 \times 0.4384 = 13.865$

Price = $E_1 \times P/E$

$P_{P/E} = \frac{39.5 \times (1-0.21)}{16.9} \times 13.865 = \text{Rs.}25.60$

H-Model

$$P_0 = \frac{D_0 (1+g_n) + H(g_a - g_n)}{r - g_n}$$

Where

D_0 = Current dividend per share

g_n = Normal long term growth rate

g_r = Current growth rate

H = One half of the period during which g_a will level off to g_n .

Dividend growth rate $23.2 (1+g)^3 = 37.5$

$$\Rightarrow (1+g)^3 = 37.5 / 23.2 = 1.616$$

$$1+g = \sqrt[3]{1.616} = 1.1735$$

$$g = 1.1735 - 1 = 17.35\%$$

$D_0 = \frac{37.5}{16.9} = \text{Rs.}2.219$ per share

$P_H = \frac{2.219 \times (1+0.1735) + 2(0.45 - 0.1735)}{0.2415 - 0.1735} = 46.43$

DDM

$D_0 = \text{Rs.}2.219$ i.e. 2.22

Year	Dividend	PV @ 24.15%	PV(Dividend)
1	$2.22 \times 1.50 = 3.33$	0.8055	2.68
2	$3.33 \times 1.50 = 4.99$	0.6488	3.24
3	$4.99 \times 1.50 = 7.49$	0.5226	3.91
4	$7.49 \times 1.25 = 9.36$	0.4209	3.94
5	$9.36 \times 1.25 = 11.70$	0.3391	3.97
			17.74

$P_5 = \frac{11.70(1.1735)}{0.2415 - 0.1735} = \frac{13.73}{0.0680} = 201.91$

$PV(P_5) = 201.91 \times 0.3391 = 68.47$

Intrinsic value = $68.47 + 17.74 = \text{Rs.}86.21$

Hence, the intrinsic value of the stock is

$V_0 = (0.35 \times 25.60) + (0.35 \times 86.21) + (0.3 \times 46.43)$
 $= 8.96 + 30.17 + 13.91 = \text{Rs.}53.04$

Part E: Caselets

Caselet 1

6. a. There are similarities between the 1992 scam and this one, between Harshad Mehta and Ketan Parekh. But the major difference is: in 1992, it was a banking scam which spilled over to the capital markets while this time around it has been a case of the capital market scam spilling over to the banking system.
- b. Presently Indian financial markets are regulated by following statutes/agencies:
1. Government of India through fiscal policy.
 2. RBI through monetary policy
 3. The companies Act, 1956
 4. SCRA, 1956
 5. Rules 1957 (Securities contracts regulation).

Apart from above, there are miscellaneous rules and regulations which also influence the financial markets. With so many agencies and Acts controlling the market the confusion regarding responsibility of control in specific circumstances will always be there. In fact, with the distinctions between various financial intermediaries becoming blurred more such problems will be faced in future as to the responsibility of control. Ideally, a super regulator should be there to avoid confusion. However, with only one regulator would be too unwieldy considering many types of specializations and skills required in financial markets. It is more practical to form a joint coordination group to trace and tackle such incidence of scams as well as to take effective deterrent reassures.

7. i. SEBI never does anything when share prices are sky rocketing, it steps in only when the sensex starts falling rapidly.
- ii. SEBI trusted the 'all is fine' reports from stock exchanges even though exchange managements are no paragons of impartial regulations.
- iii. When the upward volatility changed to downward volatility. SEBI didn't do enough. Infact, the cash margin requirements on delivery – based transactions allow all margin in these trades to be paid in the form of bank guarantees. This way the stock market and banking system are linked. SEBI did not raise any suspicion on during the upward volatility and did not keep RBI informed.
- iv. SEBI, did rarely give the small investors prior warning that the could be looking at a market situation that is getting dangerously volatile.

Hence, due to all these aforementioned reasons, we feel that SEBI has not fulfilled the mandated role of protecting the small investors.

Caselet 2

8. For investing in the stock an investor should carry out fundamental analysis as well as technical analysis. Fundamental analysis gives the intrinsic value of the share whereas technical analysis helps in identifying the right timing. Some of the important parameters for investment are as under:
- i. **ROE** : Average return on equity and its trend is an important parameter which can be compared with the industry return for identification of good stocks. This factor takes care of the competitive ability of the firm, its retention of the market share and ability to keep costs under control.
 - ii. **ROCE**: Return on capital employed gives the operation efficiency of the company as has EBIT figure in the numerator of the ratio. It checks the efficiency of the firm without considering the capital structure of the company.
 - iii. **P/E** : Price by earning ratio is used to get is a right reflection of the price that one may pay for the company. The ratio is fairly in line with the industry average plus the premium derived by the brand value and image of the company. However, the P/E ratio of tech companies is not a reliable parameter.

Apart from above financial parameters the promoters' background, technology used and management practices should be kept in mind before taking the investment decision.

9. HLL and ITC have been the case in the contrast. HLL could maintain the performance due to
- Consolidation of operations in last six years e.g. taking over TOMCO, DOLLOPS, KWALITY and merger of group companies e.g. Brooke Bond, Lipton, Ponds.
 - Focusing on rural distribution initiative. This has catapulted HLL into a mass market player in a big way.

ITC on the other side is a cigarette major with diversified interest in hotel, paper and now readymade garments. Its main strength has been to increase net sales realization of tobacco division despite having excise duty component more than 50% of the sales price.

10. Presently market is very much bearish. The fundamental of most of the brick and motor companies are not reflected in the prevailing stock prices. After October 2000 meltdown of NASDAQ the much talked about ICE (IT, communication and tech) stocks have stated falling which has been accelerated after the Ketan Parekh lead banking scam has surfaced. Since, in the present bear phase the prices have fallen to 1992 levels it is expected a recovery is going to happen soon in the next 6 months to a year's time.

The caselet speaks of India has witnessing 5 bull and 5 bear phases in last 10 years. It shows that on an average a phase remain for a year. Therefore, the bull phase is expected in another 6 months' time. Further, the bear phase only retraces 73% of the gains of preceding bull rally. Therefore, in next six years the Indian market is going to be bullish rather than bearish.

Caselet 3

11. The Indian stock exchanges display weaknesses that rightfully being to a bygone era. There are too many exchanges and most are too small. All the exchanges suffer from outdated and inadequate infrastructure and use inefficient and opaque settlement processes. The non-corporational ownership structure remains one, which lends itself to complaints of insider trading and market manipulation leading to inefficient price discovery. The exchange also suffer from excessive volatility due to the limited liquidity of most scripts and the ability of large players to cartelize.
12. It is critical for exchanges to separate, ownership from trading rights. Most exchanges in India (except the NSE) are constituted as cooperatives of some form owned by the member brokers. The process of demutualization can ensure that the exchanges will be managed by professional managers in order to focus on efficiency, transparency and customer. The conflict of interests of the member owners, which are the root cause of many problems faced by the exchanges today can be eliminated.