

Question Paper

Security Analysis - II (MSF2D2) : January 2008

Section D : Case Study (50 Marks)

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

Case Study*

Read the case carefully and answer the following questions:

1. Perform SWOT Analysis of the Indian Textile Industry. [<Answer>](#)
(10 marks)

2. Based on the financial statements provided, perform ratio analysis for BDML and comment on the same. [<Answer>](#)
(8 marks)

3. From the data provided in Annexure III, you are **required** to: [<Answer>](#)
 - a. Determine the probability that the return from the stock of BDML would be between zero percent and 5 percent. (6 marks)

 - b. Determine the characteristic line for the stock of BDML. (8 marks)

4. [<Answer>](#)
 - a. The EPS of BDML is expected to grow at 7.5% p.a. for the next 3 years, and then grow at 11% for the subsequent two years, before reaching a constant growth rate of 4.5% p.a. The payout ratio will be 25% during the next 3 years and it will rise to 40% for 4th and 5th year before achieving a constant payout of 30%. Determine the required rate of return of shareholders of BDML using the Dividend Discount Model based on the price of Rs. 659.90 per share as on March 31st 2007. (4 marks)

 - b. BDML intends to re-purchase 12% of its shares, and this is not expected to affect its net income and P/E ratio. If the current stock price is Rs.720.50, determine the price after repurchase. (4 marks)

5. Discuss the key characteristics that are to be evaluated for an industry analysis. [<Answer>](#)
(10 marks)

Bombay Dyeing & Manufacturing Co. Ltd

Indian Textile Industry

The Indian textile industry is one of the largest in the world with a massive raw material and textiles manufacturing base. Today the industry contributes around 14% to industrial production in the country.

In part, the very diversity, scale and spread of the industry which has been its strength, has also been its weakness. In past, even government regulations and financial policies have never been able to adequately fulfill the widely varied needs of the different segments of the industry. However, during the last 10 years, the industry's actions, government policies as well as market events have begun to converge, providing several growth opportunities for the sector domestically as well as in the global market. As the MFA quota-regime draws to a close, India presents many opportunities for buyers, suppliers and investors to partner with its textile industry, and to profit from the partnership.

The Government of India as well as the important state governments having a significant presence in the textile industry reviewed the whole spectrum of textile industry. Based on the above review and discussions, appropriate roadmaps have been drawn up for the development and promotion of all the sectors of the textile industry from cotton to finished products. The National Textile Policy 2000 has envisaged a foreign exchange earning to the tune of US \$ 50 billion by the year 2010. Besides, many important measures have been spelt out in the policy document. Before formulating the textile policy, the Government of India had set up a Committee under the chairmanship of Mr. Sathyam to examine and draw up action points on various sectors of the textile industry. Accordingly, the committee in its report had outlined critical issues for development and growth.

Recent trends

Ministry of finance has added 165 new textile products under duty drawback schedule. The new products included wool tops, cotton yarn, acrylic yarn, viscose yarn, various blended yarn/fabrics, fishing nets etc. Further, the existing entries in the drawback schedule relating to garments have been expanded to create separate entries of garments made up of cotton and man made fibre blend. Separate rates have been prescribed for these categories of garments on the basis of composition of textiles. After the phasing out of quota regime under the multi-fibre pact, India can envisage its textile sector becoming US \$100 billion industry by 2010. This will include exports of US \$50 billion. The proposed targets would be achieved provided reforms are initiated in textile sector and local manufacturers adopt measures to improve their competitiveness. A strong strategy aiming to attract FDI by making reforms in local market, replacement of existing indirect taxes with a single nationwide VAT, liberalization of contract norms for textile and garment units, elimination of restrictions that cause poor operational and organizational performance of manufacturers, was suggested.

The Union Ministry said that the Board for Industrial and Financial Reconstruction (BIFR) had approved rehabilitation schemes for sick NTC mills at a cost of Rs 3,900 crore. The government has already constituted assets sale committees comprising representatives of Central and state governments, operative agency, BIFR, NTC and the concerned NTC subsidiary to effect sale of assets through open tender system. Proposals for modernization of NTC mills have been made to the consultative committee members, including formation of a committee of experts to improve management of these mills. Even the present status of jute industry was under the scanner of the consultative committee.

NCDEX launched its silk contract (raw silk and cocoon) on Thursday, January 20, 2005. The launch of the silk contract offers the entire suite of fibres to the entire value chain ranging from farmers to textile mills. Government of India jointly with NCDEX has adopted a policy of encouraging future contracts of silk. The Ministry of Textiles and the Central Silk Board (CSB) had decided to introduce futures trading in mulberry cocoons and raw silk on NCDEX. The basic purpose is to mitigate the risk associated with the changing prices through an efficient price discovery mechanism. Futures trading on the NCDEX will provide an alternative trading avenue for farmers, weavers and traders and help them make a better price discovery for their product. The basic purpose is to mitigate the risk associated with the changing prices through an efficient price discovery mechanism.

India vis-à-vis Global Textiles

The global textile and clothing industry is estimated to be worth about US\$ 4,395 billion and currently global trade in textiles and clothing stands at around US\$ 360 billion. The US market is the largest, estimated to be growing at 5% per year, and in combination with the EU nations, accounts for 64% of clothing consumption.

The Indian textile industry is valued at US\$ 36 billion with exports totalling US\$ 17 billion in 2005-2006. At the global level, India's textile exports account for just 4.72% of global textile and clothing exports. The export basket includes a wide range of items including cotton yarn and fabrics, man-made yarn and fabrics, wool and silk fabrics, made-ups and a variety of garments. Quota constraints and shortcomings in producing value-added fabrics and garments and the absence of contemporary design facilities are some of the challenges that have impacted textile exports from India. The global features of Indian textile industry are as follows:

- India's presence in the international market is significant in the areas of fabrics and yarn.
- India is the largest exporter of yarn in the international market and has a share of 25% in world cotton yarn exports.
- India accounts for 12% of the world's production of textile fibres and yarn.
- In terms of spindleage, the Indian textile industry is ranked second, after China, and accounts for 23% of the world's spindle capacity.
- Around 6% of global rotor capacity is in India.
- The country has the highest loom capacity, including handlooms, with a share of 61% in world loomage.

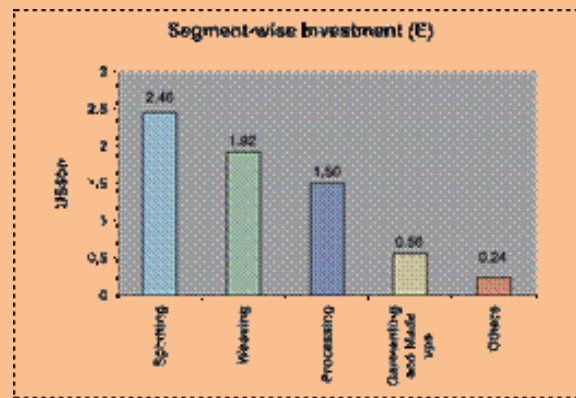
Investments

Investments in the textiles sector can be assessed on the basis of three factors:

Plan schemes such as the Technology Upgradation Funds Scheme (TUFS), Technology Mission on Cotton, Apparel Parks, etc. -- Under the TUFS scheme, a total of Rs.916 billion has been disbursed for technology upgradation. There are around 26 Apparel Parks in eight states in India, with a total estimated investment of Rs.134 billion

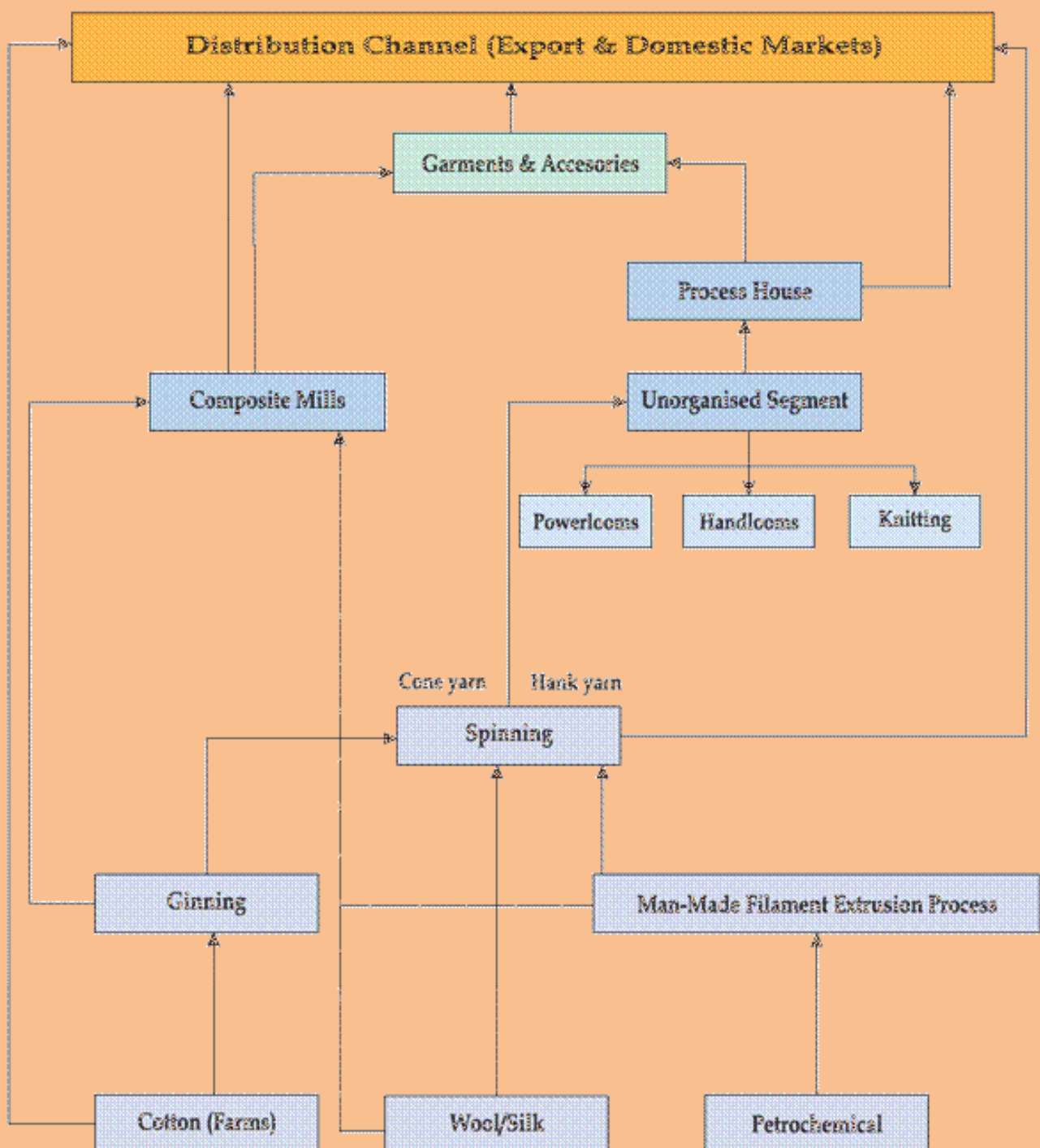
Industrial Entrepreneurship Memorandums implemented from 1992 to Aug 06, amounting to Rs.263 billion. Foreign Direct Investments inflows worth US\$ 910 mn have been received by the textile industry between Aug 91 and May 06, which account for 1.29% of total FDI inflows in the country.

Though significant investments are being made in the textiles segment, the bulk of them are in the spinning and weaving segments. A cumulative total of US\$ 6.67 billion in investment is expected by 2008. Of this, more than two-thirds is expected in the spinning and weaving segments, while only 25% is expected in processing and garment units.



Source: Ministry of Textiles

The Textile and Apparel Supply Chain



Source: D&B Research

The fibre and yarn-specific configuration of the textile industry includes almost all types of textile fibres, encompassing natural fibres such as cotton, jute, silk and wool; synthetic / man-made fibres such as polyester, viscose, nylon, acrylic and polypropylene (PP) as well as multiple blends of such fibres and filament yarns such as partially oriented yarn (POY). The type of yarn used is dictated by the end product being manufactured.

The Man-made textile industry comprises of fibre and filament yarn manufacturing units of cellulosic and non-cellulosic origin. The cellulosic fibre/yarn industry is under the administrative control of the Ministry of Textiles, while the non-cellulosic industry is under the administrative control of the Ministry of Chemicals and Fertilisers.

Bombay Dyeing & Manufacturing Co. Ltd. (BDML)

The company was incorporated on 23rd August 1879, at Mumbai. It manufactures cotton textile goods, non-woven fabrics and DMT. A modest beginning for a company that was grown up into one of India's largest producer of textiles. Along the path of growth and diversification, Bombay Dyeing has spawned dozens of other companies. In technical and financial collaboration with world leaders, such companies have pioneered the manufacture of various chemicals and have grown to be leaders in their new fields. It was more than just a company a legacy that would give rise to one of India's most respected business houses. In 2005 Nickleodeon, ties up with Bombay Dyeing for a merchandising arrangement.

Sales

A unique strength of Bombay Dyeing in India is a Distribution Chain consisting of 600 plus exclusive shops spread all over the country. Bombay Dyeing's unique India wide distribution set-up is an enviable asset in the company's domestic marketing efforts. The textile products are sold under the trade name "TEXSPRING", "SPRINGTEX", etc. Unrivalled in its reputation for quality, the Bombay Dyeing range of fabrics and ready-mades has been growing and evolving with changing trends. Presently the consumer range includes bed linen, towels, furnishings, fabrics for suits, shirts, dresses and saris in cotton and polyester blends. A sizable market has been established in ready-mades, which include a range of formal and casual wear. A household brand Bombay Dyeing network of over 600 franchise retail outlets takes the entire range to over 300 towns and cities in India. Bombay Dyeing also has a wide range of industrial fabrics that include microdot interlining; fabrics for shoe uppers, adhesives, abrasives, leather cloth and filters.

Production facilities

Bombay Dyeing has two main streams of business. Textile is a dominant activity for which the company has advanced facilities. Each of Bombay Dyeing's five manufacturing facilities is of International standards. Weaving facilities include technology from world leaders such as Sulzer. The company has 519 Sulzer Projectile Machines in widths of 130", 142", 153" and 169" In addition the company has 123 Sulzer Airjet Machines in widths of 110"(with tucked in selvedge) and 75" (with fringe selvedge). The Spinning and Winding facilities are equipped with Schlafhorst Autocore Rotors, Auto Corner Winding Spindles and Schweiter CA - 11 Spindles with an installed capacity of 135,336 Ring Spindles. Today the daily production at Bombay Dyeing exceeds 300,000 meters of fabrics. Facilities are available to produce bleached fabric upto 120", dyed and printed fabric upto 98" and grey fabric upto 124".

Exports

Bombay Dyeing was one of the first to put India on the world textile map. Today more than 50% of the production finds its way to sophisticated and advanced countries such as USA, Canada, UK, Germany, Netherlands, Italy, France, Poland, Czechoslovakia, New Zealand, Switzerland, Sweden, Denmark, Australia, Sri Lanka, Mauritius, Singapore, Hong Kong, China, Malaysia, Indonesia, United Arab Emirates, South Africa, East Africa and Argentina making Bombay Dyeing one of the country's largest textile exporters.

No effort is spared at Bombay Dyeing to ensure that the Company's products are amongst the best anywhere in the world.

Cotton Sheetings

In counts of 14s, 16s, 20s, 30s, 40s, 50s, and 60s, In finished widths upto 94" (240 CMS) and grey widths upto 124" (315 cms) Widely used in homes, hotels and hospitals, fully meeting international specifications.

Polyester Cotton Sheetings

Made from superior quality combed and spliced yarn. In counts ranging from 20s, 24s, to 30s, and 40s. In widths upto 124" (315 CMS.)

Poly Cotton Drills

In counts of 14s and 20s, combed and spliced yarn. Manufactured for fashion garments and work wear.

Shoe Lining and Duck Fabrics

The largest manufactured in India of Shoe Lining and Duck Fabrics, catering to the needs of some of the leading shoe manufacturers the world over. In open end yarn counts of 6s, 8s, 10s, 14s, and 16s.

Satin Furnishings

For curtains or upholstery, cushions or garden sets, a range of furnishings in attractive prints or even greys. Manufactured on Sulzer

machines, with yarn counts of 10s, 14s and 30s.

Bombay Dyeing today ranks as the largest exporter of value added sophisticated made-up items and is also one of the leading exporters of cotton and poly cotton sheeting's, twills, drills, etc.

Market strategy

The company plans to use two separate strategies to market its products to low and high-end consumers. The company is making an effort to not be known as a 'discount' brand anymore with this new strategy. Its competitors S Kumar's' Carmichael House and Welspun have both been increasing their top end brands and so Bombay Dyeing does not want to be left out.

According to Arun Bhawasingka, Head of Domestic Business for Bombay Dyeing, the company is not just focusing on the price to differentiate their products, saying that, "Apart from the price points, the look and feel of these new stores will be different to signify the high-end range of our products." Another differentiator would be location of the premier stores.

Annexure I Income Statement as on 31st March

(Rs. in crores)

INCOME	2007	2006	2005
Sales Turnover	492.35	1,106.71	1130.91
Other Income	47.11	64.27	58.70
Stock Adjustments	-12.56	-25.19	12.80
Total Income	526.90	1,145.79	1,202.41
EXPENDITURE			
Raw Materials	257.89	633.76	691.83
Excise Duty	7.21	102.73	117.93
Power & Fuel Cost	52.09	86.58	91.23
Other Manufacturing Expenses	110.15	104.14	98.92
Employee Cost	34.59	50.06	70.53
Selling and Administration Expenses	34.55	37.27	36.69
Miscellaneous Expenses	41.58	37.53	27.78
Less: Preoperative Expenditure Capitalised	100.86	0.00	0.00
Profit before Interest, Depreciation & Tax	89.70	93.72	67.50
Interest & Financial Charges	31.83	17.61	14.44
Profit before Depreciation & Tax	57.87	76.11	53.06
Depreciation	17.46	16.89	19.38
Profit Before Tax	40.41	59.22	33.68
Tax	4.48	-2.12	7.12
Profit After Tax	35.93	61.34	26.56

Annexure II Balance Sheet as on 31st March

(Rs. in crores)

SOURCE OF FUNDS	2007	2006	2005
Share Capital	38.61	38.60	38.58
Reserves & Surplus	364.07	426.23	303.38
Total Shareholders Funds	402.68	464.83	341.96
Secured Loans	798.49	428.51	214.52
Unsecured Loans	253.91	129.86	139.94
Total Debt	1,052.40	558.37	354.46
Total Liabilities	1,455.08	1,023.20	696.42
APPLICATION OF FUNDS			
Gross Block	654.58	720.42	754.47
Less: Accum. Depreciation	512.86	596.19	622.38
Net Block	141.72	124.23	132.09
Capital Work in Progress	735.53	275.08	59.39
Investments	153.70	168.02	241.19
Current Assets, Loans & Advances			
Inventories	171.54	211.95	199.73
Sundry Debtors	251.43	158.53	72.76
Cash and Bank Balance	36.04	33.34	5.51
Loans and Advances	220.92	170.95	125.84

Less: Current Liab. & Prov.			
Current Liabilities	284.78	86.90	99.36
Provisions	38.14	37.57	40.73
Net Current Assets	357.01	450.30	263.75
Miscellaneous Expenses not w/o	67.12	5.57	0.00
Total Assets	1,455.08	1,023.20	696.42

Note: Face value of each share of the company is Rs.10.

Annexure III

Share prices of Bombay Dyeing and Nifty

End of Month	Share price of Bombay Dyeing (Rs.)	Nifty
October 2006	664.70	3742.10
November 2006	778.10	3921.50
December 2006	767.00	3972.40
January 2007	702.25	4083.70
February 2007	550.35	3722.10
March 2007	659.90	3820.55
April 2007	403.00	4087.90
May 2007	547.15	4295.80
June 2007	573.95	4141.05
July 2007	599.15	4443.15
August 2007	658.00	4076.21
September 2007	789.52	5891.35
October 2007	664.70	4311.19

END OF SECTION D

Section E : Caselets (50 Marks)

This section consists of questions with serial number 6 - 11.

Answer all questions.

Marks are indicated against each question.

Do not spend more than 80 - 90 minutes on Section E.

Caselet 1

Read the caselet carefully and answer the following questions:

6. There are many industry-related factors that possibly affect the stock market substantially. Discuss with suitable examples.

[<Answer>](#)

(8 marks)

7. Study of macroeconomic factors help to obtain the causes and give suggestions to the investors of what is happening on the Indian stock market. Explain how it affects the performance of the stock market.

[<Answer>](#)

(9 marks)

While talking about developing economies, no analyst can ignore China and India—the fastest growing economies of the 21st Century with strong economic fundamentals and reform process. In many ways, the economies of China and India are similar. Economic reforms, rapid economic growth, huge and fast urbanization, a new consumerist era with high spending and high saving, increased organized malls and booming housing sector are some of the similarities that persist in both the countries. Despite these affinities, there exist several dissimilarities. Both the countries started economic reforms at different stages of their growth. China started its reform process in 1978 whereas India embraced it in 1990. Though India is following the Chinese model of economic reform it should not be compared with China's economy at all as India's economic reforms began at a much later stage. It is only recently that the Indian market has started showing maturity and beginning to be recognized as a force to reckon with. The Special Economic Zones (SEZs) policies and the IPO markets of both the countries are different. While India's IPO market and the SEZ policies have just begun to takeoff, China has already proved successful with huge IPO's and SEZs.

Despite strong economic fundamentals, the capital markets of India have been relatively volatile. Though the stock indices touched the highest levels in their respective histories, volatility makes these markets vulnerable. Volatility is an inherent part of any stock market. Short run volatile situations are more in number than long run volatile situations. Hence, over the long run, stock markets reflect the true fundamentals of the economy and also of the corporates. China and India have been the top investment destinations for investors from all over the world. However, both the markets have integrated with the global economic trends. Any thing that happens in any part of the world is reflected in the domestic markets. It is no more insulated from global economic imbalance; hence the volatility in the market is more prominent now.

For instance, if an investor owns the stocks of a company which is into the cement, automobile or steel industry, keep monitoring the steel prices. Likewise, one should not forget that it is pertinent to keep a watch on the corporate results and the expectations related to the same. Global markets seem unfriendly; it is better that investors should avoid making heavy investments as the impact of global movements is most profound on emerging markets like ours. The total market capitalization of the Indian stock market is yet to reach the \$1 trillion mark, whereas, the Chinese capital market has already crossed that milestone. However, it is worth comparing the capital markets of China and India are regarded as the fastest growing markets in this century. The future of world economy, mostly, will be influenced by these countries.

Finally, one should not go by the herd but should use their rationale rather than emotions while trading in the stock market.

Caselet 2

Read the caselet carefully and answer the following questions:

8. Real estate sector is booming and it is a fact that the securities market, along with Sebi and Government of India has decided to tap its latent potential. Discuss the major drivers of real estate boom in India.

[<Answer>](#)

(10 marks)

9. The beginning of REMFs will not only lead to enhance investment options, but will also boost the starving housing sector. Discuss how REMFs can be beneficial to the capital market.

[<Answer>](#)

(7 marks)

Real estate can be defined as land including the air above it and the ground below it and any building or structure made on it. It includes residential houses, commercial offices, and trading spaces like shopping malls, hotels, etc. It involves purchase, sale and development of land, buildings and structures. The players in this market are landlords, developers, builders, tenants, and buyers to mention a few. At present, India is one of the fastest growing economies. The major factor behind this is the boom in the real estate sector caused by IT and related businesses and also the significant changes related to real estate businesses. This sector is now considered as the next economic growth engine. According to the tenth Five-Year Plan, by 2007 there would be a shortage of housing units running to the extent of 22.7 million, which would force the government to increase spending in this sector. Also, liberalizing the Foreign Direct Investment (FDI) is expected to increase the flow of money inflow into this sector. In the year 2005, the real estate segment was on a turnaround. A number of changes like urban land ceiling law reforms, stamp duty cuts and access to finance pushed real estate market to a record high level. This had improved the scale of investment in real estate segment. As per the report of The Federation of Indian Chambers of Commerce and Industry (FICCI) this is the second largest employer segment in India after the agriculture sector.

Real Estate Mutual Funds (REMFs) are all ready to roll into the Indian capital market. As the name itself is quite self-explanatory, REMFs are mutual funds that invest investors' money in the real estate. Market regulator Sebi has defined REMF as a scheme of mutual funds, which has investment objective to invest directly or indirectly in the real estate property.

The REMFs can invest in real estate properties within India, mortgage backed by securities, equity shares/bonds/debentures of listed/unlisted companies, which deal in real estate and also undertake property development in other securities. As per Sebi, the REMFs should invest at least 35% of it in property and 40% of it can be invested in shares and securities of realty companies. These funds own properties, commercial spaces and earn income in the way of rent and also in the form of capital appreciation. They acquire, develop and sell the property and the benefits are shared with the investors, just like in any other mutual fund scheme. Real estate sector is booming and it is a fact that the securities market, along with Sebi and Government of India has decided to tap its latent potential. There is also a huge demand witnessed on the residential side especially from the high end and middle class segments. The residential market in major cities continues to witness strong demand from investors and end users especially in the southern part of the nation. Mumbai alone would need anywhere between 180,000 and 200,000 additional residential units in the next ten years. India is expected to see an annual shortfall of 20 million housing units till 2011. Lower interest rates, easy availability of housing finance, escalating salaries and job prospects have been lending buoyancy to the residential sector. With more malls coming up in India, plenty of home financing options and the changing profile of home buyers have made the real estate as a good option for investment.

The beginning of REMFs will not only lead to enhance investment options, but will also boost the starving housing sector. There are a number of mutual fund schemes that offer a chance to invest in a particular sector, but the emergence of REMFs will give the small investors a chance to invest in real estate and earn the potential returns from the real estate market. The setting up of REMFs can also provide some support to the cash-starved housing sector

However, analysts caution about the risks in the investment. They warn that real estate markets may not be as transparent; and that Indian real estate capital market is not as mature and sophisticated when compared to global markets like the US. Tax policy is one of the concerns for the investors in Indian real estate markets. The stamp duty varies from state to state and also the registration charges are subjected to changes in government policies. However considering the viable opportunities, real estate is an opportunity for an investment. Though the real estate funds are now catering to high net worth investors, the retail investors can go for the fund options as and when the opportunity arises.

Caselet 3

Read the caselet carefully and answer the following questions:

10. Impact of FIIs induction shows high degree of volatility on the Indian stock market. Discuss the various factors, which have caused increase in volatility in Indian stock market.

[<Answer>](#)

(7 marks)

11. What attraction does India have, to make it one of the favorite investment destinations for FIIs and indulging them in pouring their money into Indian economy?

[<Answer>](#)

(9 marks)

In response to the recommendations of the Narasimham Committee report on the Financial System, during September 1992, the Government of India decided to open up the country's stock markets to direct participation by the Foreign Institutional Investors (FIIs). In simple terms, FII means an entity established or incorporated outside India and is proposing to invest in India. They were allowed to participate as Pension Funds, Mutual Funds, Insurance Companies, Banks, University Funds, Endowments, Foundations, Charitable

Societies, Asset Management Companies, Investment Trusts, Incorporated/ Institutional Portfolio Managers or their power of attorney holders. Besides investing on their own behalf, they can also invest on behalf of foreign corporates, foreign individuals and institutions, funds or portfolios established or incorporated outside India, in such cases they are called sub-accounts. The Securities and Exchange Board of India (Sebi), as the regulatory authority, will register and permit FIIs based on their track record, professional competence, financial soundness and experience, general reputation of fairness and integrity, and duly verifying whether the applicant is registered with and regulated by an appropriate Foreign Regulatory Authority in the same capacity in which the application is filed with Sebi. Many raised their eyebrows at FIIs' entry to our economy. India realized that foreign capital inflow was one of the important sources of funds for the growth of our economy; only then it would grow at a greater pace than what the domestic savings could support. Based on the need of the hour, the economy welcomed their participation. Since then, the number of FIIs registered with Sebi has grown, more so, in the recent years.

The FIIs obviously found greener pastures in the Indian Economy. Since 1991, the Indian Economy particularly Indian capital market has undergone several reforms. New kinds of investors like FIIs have been allowed to invest in the Indian market. FIIs are now major institutional investors in Indian capital markets with a cumulative net investment of \$36.76 bn. The net inflows to the country amounted to \$101.20 mn and \$1.91 bn in January and February 2006 respectively. This proportion of total turnover on the exchanges might not appear to be substantial, but since the FII trades are delivery based, the actual impact on the market is much higher. A mere outflow of \$1 bn triggered by FIIs sends shivers in the capital market and it can result in depreciation of shareholder value. There has been a substantial increase in the share of foreign stockholding in leading Indian companies.

Given the presence of FIIs on such a large scale, their role in determining share price movements and, hence, the movement of the various indices is considerable. The most important factor to be considered for attracting and facilitating foreign investment is in infrastructure and technology. Nevertheless, India has been focusing on infrastructure development since the inception of FII investment; still it should be further enhanced to facilitate all the transactions from registration with Sebi to trading and clearing of transactions. It is also perceived with a contrarian view that FDI raises the growth rate of a country. Thus, when the FIIs frequently buy and sell stocks in the indices, it leads to a volatile market. Since then, FIIs started playing a significant role in the Indian capital market. Notwithstanding its political uncertainty, infrastructure bottlenecks and bureaucratic hassles, India has become an attractive destination for FIIs, as it has immense potentiality for overseas investment.

END OF SECTION E

END OF QUESTION
PAPER

Suggested Answers

Security Analysis - II (MSF2D2) : January 2008

Section D : Case Study

1.Strength

- The country is one of the largest producers of natural and man-made fibers.
- It produces almost 12% of the world production of raw cotton.
- Skilled labor is available in plenty.
- Manufacturing capacity present across the entire range and across entire value chain yarn, fabric, process house and garments.

Weakness

- Knitted garments manufacturing has remained as an extremely fragmented industry. Global players would prefer to source their entire requirement from two or three vendors and the Indian garment units find it difficult to meet the capacity requirements.
- Industry still plagued with some historical regulations such as knitted garments still remaining as a SSI domain.
- Labour force giving low productivity as compared to other competing countries.
- Technology obsolescence despite measures such as TUFS.
- Low bargaining power in a customer-ruled market.

Opportunity

- Growth rate of Domestic Textile Industry is 6-8% per annum.
- Large, Potential Domestic and International Market.
- Product development and Diversification to cater global needs.
- Elimination of Quota Restriction leads to greater Market Development.
- Market is gradually shifting towards Branded Readymade Garment.
- Increased Disposable Income and Purchasing Power of Indian Customer opens New Market Development.
- Emerging Retail Industry and Malls provide huge opportunities for the Apparel, Handicraft and other segments of the industry.
- Greater Investment and FDI opportunities are available.

Threat

- Competition from other developing countries, especially China.
- Continuous Quality Improvement is need of the hour as there are different demand patterns all over the world.
- Elimination of Quota system will lead to fluctuations in Export Demand.
- Threat for Traditional Market for Powerloom and Handloom Products and forcing them for product diversification.
- Geographical Disadvantages.
- International labor and Environmental Laws.

2.Ratio Analysis

Profitability ratios	2007	2006	2005
Operating profit margin (%)	18.22	8.47	5.97
Net Profit margin (%)	7.30	5.54	2.35
Turnover ratios			
Fixed assets Turnover	0.62	2.21	-
Total asset Turnover	0.34	1.12	-
Liquidity ratios			
Current ratio	2.10	4.62	2.88
Leverage ratios			
Debt-equity	2.61	1.20	1.04
Interest coverage	2.27	4.36	3.33

Interpretation of ratios

The company has a consistently increasing operating profit margin. However, net profit margin is small and fluctuating. The net profit has increased tremendously in the last year. This is a very healthy sign.

Fixed assets turnover ratio has decreased during the years this implies that fixed assets are not being efficiently utilized. Decreasing total asset turnover ratio with increasing sales implies that the company is maintaining high level of total assets.

Company's liquidity position is comfortable as shown by an increase in current ratio. The current ratio is above one. This shows that company is well protected with its liquidity position to meet its current liabilities.

Company is having a high debt-equity ratio. This signifies that a huge amount of both secured and unsecured loans have been reduced by the company. Presently, interest cover is low compared to last year.

3.a.

Month	Return from Bombay Dyeing (%)
November 2006	17.060
December 2006	-1.427
January 2007	-8.442
February 2007	-21.630
March 2007	19.906
April 2007	-38.930
May 2007	35.769
June 2007	4.898
July 2007	4.391
August 2007	9.822
September 2007	19.988
October 2007	-15.810

Mean of return = 2.13%

The standard deviation of the return of Bombay Dyeing's stock = 20.79%

Probability that the return will be between zero and 5% can be calculated as follows:

$$\begin{aligned}
 P(0 < R < 5) &= P\left(\frac{0 - 2.13}{20.79} < Z < \frac{5 - 2.13}{20.79}\right) \\
 &= P(-0.10 < Z < 0.14)
 \end{aligned}$$

From the normal distribution table, the area for

$$P(Z < -0.10) = 0.4602$$

$$P(Z < 0.14) = 0.5557$$

$$P(-0.10 < Z < 0.14) = 0.5557 - 0.4602 = 0.0956 = 9.56\%$$

b.

Returns from Bombay Dyeing (Y)	Returns from Market Index (X)	$(Y - \bar{Y})$	$(X - \bar{X})$	$(Y - \bar{Y})^2$	$(X - \bar{X})^2$	$(Y - \bar{Y})(X - \bar{X})$
17.060	4.794	14.927	2.468	222.823	6.091	36.84435
-1.427	1.298	-3.559	-1.028	12.669	1.057	3.658757
-8.442	2.802	-10.574	0.476	111.829	0.226	-5.03333
-21.630	-8.855	-23.763	-11.181	564.699	125.015	265.6886
19.906	2.645	17.773	0.319	315.865	0.102	5.6721
-38.930	6.998	-41.063	4.672	1686.176	21.830	-191.839
35.769	5.086	33.636	2.760	1131.401	7.617	92.83207
4.898	-3.602	2.765	-5.928	7.646	35.141	-16.3926
4.391	7.295	2.258	4.969	5.097	24.700	11.21938
9.822	-8.259	7.689	-10.585	59.125	112.04	-81.387
19.988	44.530	17.855	42.204	318.798	1781.178	753.5528
-15.810	-26.822	-17.943	-29.148	321.935	849.610	522.9811
25.60	27.91	12.707	11.117	161.469	123.587	127.07
				4758.068	2964.571	1397.797

$$\begin{aligned}
 \bar{Y} &= \frac{\sum Y}{n} = \frac{25.60}{12} = 2.13\% \\
 \bar{X} &= \frac{\sum X}{n} = \frac{27.91}{12} = 2.33\%
 \end{aligned}$$

$$S_y^2 = \frac{\sum (Y - \bar{Y})^2}{n-1} = \frac{4758.068}{11} = 432.55 (\%)^2$$

$$S_x^2 = \frac{\sum (X - \bar{X})^2}{n-1} = \frac{2964.571}{11} = 269.50 (\%)^2$$

$$\text{Cov}_{xy} = \frac{\sum (Y - \bar{Y})(X - \bar{X})}{n-1} = \frac{1397.797}{11} = 127.07 (\%)^2$$

$$\text{Beta} = \frac{\text{Cov}_{xy}}{S_x^2} = \frac{127.07}{269.50} = 0.47$$

Mean return from Bombay Dyeing = 2.13%

Mean return from the market index = 2.33%

If the characteristic line is $\alpha + \beta R_m$

$$\begin{aligned}\alpha &= 2.13 + 0.47(2.33) \\ &= 3.23\%\end{aligned}$$

Hence, the characteristic line of Bombay Dyeings is

$$R_p = 3.23 + 0.47R_m$$

4.a. Stock price as on March 31, 2007 = Rs 659.90

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Current EPS = Rs. 35.93/3.86 = Rs. 9.31

$$DPS_1 = 9.31 \times 0.25 \times (1.075) = 2.50$$

$$DPS_2 = 9.31 \times 0.25 \times (1.075)^2 = 2.69$$

$$DPS_3 = 9.31 \times 0.25 \times (1.075)^3 = 2.89$$

$$DPS_4 = 9.31 \times 0.40 \times (1.075)^3 \times 1.11 = 5.14$$

$$DPS_5 = 9.31 \times 0.40 \times (1.075)^3 \times (1.11)^2 = 5.70$$

$$\text{Constant DPS} = 9.31 \times 0.30 \times (1.075)^3 \times (1.11)^2 \times 1.045 = 4.47$$

According to Dividend Discount Model

$$659.90 = \frac{2.50}{(1+k)} + \frac{2.69}{(1+k)^2} + \frac{2.89}{(1+k)^3} + \frac{5.14}{(1+k)^4} + \frac{5.70}{(1+k)^5} + \frac{4.47}{(1+k)^5} (k = 0.045)$$

$$k = 5.07\%$$

b. Number of shares re-purchased = $0.12 \times 3,86,00,000 = 46,32,000$

$$EPS = NI/\text{No. of shares} = \text{Rs.} 35,93,00,000 / 3,86,00,000 = \text{Rs.} 9.31$$

$$\text{Current P/E} = P/EPS = \text{Rs.} 720.50 / \text{Rs.} 9.31 = 77.39$$

$$EPS_1 = \text{Rs.} 35,93,00,000 / (3,86,00,000 - 46,32,000) = \text{Rs.} 10.58$$

$$\text{The price after re-purchase} = P_1 = EPS_1 \times P/E = \text{Rs.} 10.58 \times 77.39 = \text{Rs.} 818.79.$$

5. The key characteristics that are to be evaluated for an industry analysis are:

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- Past sales and earnings performance
- Permanence of the industry
- The attitude of the government towards the industry
- Labor conditions within the industry
- The competitive conditions as reflected in the existence of the entry barriers
- Stock prices of the firms in the industry relative to their earnings

Past sales and earnings performance– For an analyst, the sales and earnings performance of the firm form a crucial input in forecasting future trends. This is not to say that the firm is going to repeat the same performance again rather, the analyst is more interested in examining the contribution of the various factors in the past so that the relevance of these factors individually and relatively can be properly evaluated under present conditions. In any firm, sales and the earnings play an important role. These variables will exhibit a degree of consistency only when the firm has weathered a variety of economic conditions. The analyst from the observation of these variables will be able to judge the stability of the performance in terms of sales and earnings as well as the growth rates. Another crucial factor is that of the relationship between the sales and the fixed costs. The more the fixed costs, the higher will be the break even point and higher will be the sales volume to be achieved.

Permanence – By permanence, we understand the products and the technology of a particular industry not becoming obsolete in a short span of time. If the industry is not permanent, then investing in that industry altogether becomes a losing proposition. In some of the cases a product with additional features by employing superior technology makes the existing product totally irrelevant or at least results in the manufacturing process becoming a commercially unviable proposition.

In this age of rapid technological development, this factor plays a crucial role in industry analysis. The government's role is also an important factor affecting the permanence of the industry.

The attitude of the government towards the industry – It is imperative for an Analyst that he should be well aware of the various Government policies and regulations with reference to an industry in which he is going to invest. The government policies like deregulating an industry by allowing foreign investment, imposing high tariffs on imports

and restrictive legislation have a bearing on their performance. Some of the legal restrictions result in the profits being very low for a particular industry. Thus an analyst, for that matter, an investor should be thorough with various government regulations and their implications and should be able to predict, at least broadly, the changes likely to take place in the regulations in the near future.

Labor conditions – This is an important factor to be considered in industries which are labor intensive. An analyst should examine the various provisions of the labor laws and also go into the possible reasons that may halt the production process and its fallout on the profits of the industry. In case of a prolonged strike, a labor intensive firm will not only lose its customers and goodwill but also may not be able to cover its fixed costs in certain cases.

Competitive conditions – While analyzing this situation, the three general types of barriers that an analyst should concentrate on, are

1. Existence of product differentiation
2. Absolute cost advantages and
3. Advantages rising from economies of scale.

The existence of the first barrier assures that a new entrant will not be able to charge as much as the existing firms. Also he has to spend large amounts of money on advertising to capture an acceptable share of the market as this situation is usually found in cases where the customers exhibit a high degree of brand loyalty. By absolute cost advantages, we understand that the existing firms are capable of producing and distributing the products at lower costs than the new entrants irrespective of the volume produced. As a result, they enjoy wider profit margins. This may be due to the fact that the existing firms may have exclusive patents, own the resources or superior management skills that are not available to the new entrants.

Economies of scale are usually realized when the production levels are quite high. A new entrant in this case also has to garner a significant market share so that he can avail the benefits from economies of scale. If he fails to do so, he will be able to compete with the prices offered by the existing players.

An analyst or a prospective investor should consider investment in an industry which is well protected.

Industry Share Prices Relative to its Earnings – In addition to the various factors we have been looking at, the analyst also has to look at the present share prices. In this case an underpriced share would be the best bet. Also he should examine the fact that the share prices are not high due to the overzealous nature of the investors to acquire the shares of the firms in a new industry. Usually the shares of these companies experience high fluctuations depending on the crowd behavior.

Section E: Caselets

Caselet 1

6. There are many industry-related factors that possibly affect the stock market substantially. One such example is that of RIL's demerger that caused ripples in the stock market in 2005 owing to its 12% share in the BSE. Similarly, there are many other companies that have great impact on the market. Corporate announcements have been found affecting the stock prices in a big way. For instance, financial results of a company are one of the important factors that influence an investor's confidence. For example, Tata, after the fourth quarter results showed a 13.237 percentage fall in its net profits. This accelerated the process of fall. This was also due to the fact that the metal industry in India in which hedge funds saw a meltdown was declining. Another evidence that supports the impact of corporate announcements is the increase in Maruti's share prices by about 12% on June 2 following the announcement of the rise in domestic sales by 27% in the month of May. Hindalco stocks underwent a drop of 8-10% in the middle of May, when a hike of Rs. 10,000 was announced in aluminium prices due to the increase in the world metal prices. This increase had direct impact on the cement industry and automobile industry. In addition to the above, fears that cement manufacturers may be forced to put on hold their Greenfield projects following the Government's move to bring down cement prices, resulted in nervous selling of cement stocks on the bourses. The fall in stocks was fuelled by the announcement made by the Commerce Ministry to slash the prices of government supplies by 5%.

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The impact of international crude oil price rise was seen on the domestic fuel prices with the increase of Rs. 2 by Central Government. This increased the investors' confidence which can be measured from the fact that the stock price of RIL increased by 11% the very next day.

7. The major role played by a macroeconomic factor in influencing sensex was that of the inflation. Here, it is the global inflation that made an impact. It is evident from the fact that, with the announcement of rise in US Federal rates to curb inflation, FIIs began selling their shares in the Indian market.

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Other issues include the announcements made by the finance ministry. Other factors include the definition of trader and investor in a recent circular of the Central Board of Direct Taxes; the want of pre-emptive action by the Sebi; the cooling of the market itself after a period of overheating; and the manipulation by speculators who took the market to unsustainable heights and after squeezing it dry, let it crash, besides the RBI's decision to hike CRR rates by 25 basis points, a lower than expected industrial output and a statement from the government that it may not divest its stake from profit-making PSUs in the near future, further weighed down the sentiment.

Caselet 2

8. The major drivers of real estate boom in India may be attributed to a number of factors like:

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- Strong economic growth backed by IT, IT-enabled services and Knowledge Process Outsourcing (KPO), creating increased demand for more space.
- Shortage of quality real estate.
- Expansion of retail sector due to consumerism, changing lifestyles, and better income level.
- High rate of return in real estate.
- With increase in IT and IT-enabled services and low operating cost being the driver, they are moving towards Tier-II and Tier-III cities as the space is available at cheaper rates as compared to Tier-I cities and also the growth in Tier-I cities has already reached a saturation point.
- Good amount of disposable income with the investors.
- Favorable government policy as far as real estate sector is concerned like liberalizing the FDI norms in this sector.
- Gradual improvement in infrastructure.

9. The REMFs are introduced foreseeing the number of advantages such as, the REMF would result in an increased flow of funds towards housing sector and provide more liquidity in the mutual funds industry. They would bring professionalism in the mutual fund industry thereby hiring legal professionals who will evaluate and give judgments on legal matters pertaining to property, thereby reducing risk chances as far as defective titles are concerned. Facilities management will come into picture as professionals are employed to provide services to keep the property in good shape. Added to this, the retail investors will be benefited in the terms that they can invest small amount in real estate, which is not possible otherwise. Further, REMF would preserve the value of portfolio from the effects of inflation, and finally, these funds would generate competitive rate of returns as compared to investment in other securities and stability to some extent as compared to investment in other securities.

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Caselet 3

10. High degree of volatility in the Indian market can be attributed as follows:

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1. The increase in investment by FIIs, which triggers a sharp price increase and encourages further investments and creates a tendency for any correction of price increases unwarranted by price earnings ratios to be delayed. And when the correction begins, it is led by an FII pull-out and can take the form of a sharp decline in prices.
2. The increase in foreign capital due to expectations of a price increase can result in an appreciation of the rupee vis-à-vis the dollar. This increases the return earned in foreign exchange, which in turn makes the investment even more attractive, triggering an investment spiral that would imply a sharper fall when any correction begins.
3. FIIs use their volume game as a strategy, aimed at pushing the market up and choosing an appropriate moment to exit which, if resorted to often enough, would imply a substantial increase in volatility.
4. Domestic speculators who also attempt to manipulate markets in periods of unusually high prices making the market volatile.

11. The FIIs obviously found greener pastures in the Indian Economy. One of the primary reasons was the inherent strength of the Indian economy. They were convinced that the Indian stock market was significant in terms of the degree of development; volume of trading was reasonably high; they also found tremendous growth potential with a possibility of earning more profits in our stock markets than other counterparts in the rest of the world. The factors like introduction of dematerialization of shares, rolling settlements, online trading and trading of derivatives have also encouraged the FIIs to invest in India. The attractive undervalued equity was yet another important reason for them to look towards our stock markets. Since 1991, the Indian Economy particularly Indian capital market has undergone several reforms.

FIIs are now major institutional investors in Indian capital markets with a cumulative net investment of \$36.76 bn. The net inflows to the country amounted to \$101.20 mn and \$1.91 bn in January and February 2005 respectively. This proportion of total turnover on the exchanges might not appear to be substantial, but since the FII trades are delivery based, the actual impact on the market is much higher. A mere outflow of \$1 bn triggered by FIIs sends shivers in the capital market and it can result in depreciation of shareholder value. There has been a substantial increase in the share of foreign stockholding in leading Indian companies.

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* – The above case is prepared only for the purpose of examination and not to illustrate either effective or ineffective performance of the fund. The case contains real information adapted and combined with other information to generate discussion or analysis on the desired topics.