# SPJCM SINGAPORE – GMBA 2008-09

## End-Term Examination, Time: 120 Minutes, Total Marks: 40

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**INSTRUCTIONS**

**This is an open book examination. Laptops and Calculators are allowed.** But, you are not allowed to borrow calculators, books, etc. No access to internet is required.

Anyone who resorts to unfair practices, as judged by the examiner, the minimum penalty will be zero in this segment of evaluation, while the maximum penalty could be expulsion from the institute. There will be no further warnings.

**Case: Virat Industries Limited (40 marks)**

Virat Industries Limited is a very small textile player (segment – knitting yarn, socks, export oriented) with manufacturing facilities in Gujarat, India. It is owned by a small family based business group (community – parsi) and is listed on the Bombay Stock Exchange. You are being provided with the soft copies of the annual reports of Virat Industries Limited for the financial years (2005 and 2007). Other limited details available on the company are mentioned below. You are required to find the intrinsic value of each equity share of this company. Please mention clearly the valuation model adopted and your assumptions for arriving at the intrinsic value (i.e., assumptions behind your computations). Please be specific in your answer (writing irrelevant things would result in less marks).

**Your answer sheet will be a word file with your roll number as the name of the file. All excel computations are also to be pasted on the same.**

**Details of its Equity:**

Par Value of Each Equity Share: Rs. 10; Current Beta: 1.7; Average Volume of Shares Traded per day: 37K (Source: Reuters). The market return risk premium for the Indian equity markets could be taken as 7% and the risk free rate of return could be taken as 8%.

Your answers will be evaluated using the following framework:

| Grade | Focus | Development | Response to Case | Style | Errors |
|---|---|---|---|---|---|
| A | All elements respond to the focus | A clear and consistent pattern of development | Enhances the case | A flair for style and a concern for revision | 0-3 errors |
| B | One or two digressive elements | Breaks down once or twice | Responds clearly to the case | Words and sentences reflect care | 4-6 errors |
| C | Traces of a single focus | Inconsistent pattern of development | Some misdirection | Word choice fails, choppy | 6-12 errors |
| D | The paper loses its path | Ideas are simply listed | Thwarts the instructional purposes of case | Sentences require several readings | 12-20 errors |
| F | No focus | No development | Off case | Incomprehensible | 20+ errors |

Source: Ram Kumar Kakani and Pingali Venugopal; *'Management education: A framework for grading'* Management and Labour Studies, Vol. 27[3], Jul. 2002, pp. 57-72, Available at SSRN: http://ssrn.com/abstract=905166

**2005 – highlights**

During the year under review, your company has made significant strides in its operational as well as financial performance
and achieved an inspiring turnaround in financial results by registering a net profit of Rs.35.94 Lac against net losses in the
last four consecutive years.

Company is now equipped with suitable facilities to also manufacture Football socks which are being supplied to many prestigious football clubs in the U.K. the quality is in accordance with the European standards.

Company has been focusing on the export market because export clients offer large size orders, which result in an economy of scale, better plant efficiency and improvement in quality. There was a notable increase of 66.20% in export sales in this year, compared to the previous year.

Total income and export sales have been reported to be growing to the tune of 66.20%

Interest payments have been reduced by 29.75% indicating the sustainability of the growth on equity and reserves available.

Production of socks have increased more than 34% as compared to 2004.

The quality has been well appreciated, though prices are under pressure, due to tough competition from other players in the international markets.

The credit rating of the company has been good in terms of repayments as they have been regular in their meeting their dues.

It also enjoys the trust from the banks such that facilities like packing credit and foreign bill purchases are rendered to them.

Because of the state of the art machines, the company has not been investing in R & D. Hence no capitalization of R & D is required. Efforts in brief, made towards technology absorption, adaptation and innovation. It has imported major plant and machinery.

**2007 - highlights**

Commendable performance across several operating and financial performance by registering 16% growth in sales and 25% increase in net profits over last year.

Biggest achievement is ever increasing affirmation of your Company's products and services by satisfied overseas customers who placed orders regularly and repeatedly to maintain the encouraging order book position throughout the year.

Judicious investments in purchasing knitting machines, thereby making optimum-use of the prevalent balancing equipment and infrastructural facilities

The company had planned expansion in the last three years that augmented their growth to double.

Capex to the range of purchase of : 35 knitting machines were added in the last three years; 13 machines in 2006-07, 9 machines in 2005-06 and 13 machines in 2004-05.

With the expansion done in the company relating to its manufacturing capability, it has started manufacturing children, technical, football and sport socks, besides the already existing dress socks thereby indicating the strong market share and further growth avenues.

The export sale has grown 15% and the pairs of socks that has been dispatched have been enhanced by 15% increasing their earnings per share by 25%.

All other conditions about credit rating, repayments of loans, packing credit facilities extended by the bank remains the same as given in highlights for 2005.

Still the company survives on the state of the art machinery and does not plan to invest in R & D.

**Model Selector:**

Based on the performance indicators that have been listed above along with the following forms the basis that FCFF model – 3 stage is best suited for the valuation of this firm's equity.

- The firm's growth rate in earnings has been improving with growing years owing to good export orders that the company is able to procure. But it is also facing competition from international players.
- More over the company's secondary segment markets like Switzerland, India, and Rest of the worls as one category has been earning good revenues YOY as given under schedule – 15; point number 10.
- Hence in the coming years high growth for the company is expected to grow. We are assuming that the company will grow in the range of 30% for the next 3 years and henceforth due to international competition, the stable growth rate of the company would be 15%.
- The company has been investing heavily in capex. The working capital needs are also being financed by the facilities rendered by the bank.
- Tax rate has been calculated and assumed to be approximately 18%.
- Loans and advances from the company have been included in the current assets bracket and is further used to calculate the non cash working capital and changes in working capital.
- the cost of debt for cost of capital calculation has been calculated as 6.32%
- The beta value of 1.7 is assumed to be constant during the phase of high growth and when the risk is also high. However, with due course of time the beta would smooth out in the stable growth phase and is assumed to be .90
- I am also assuming that with growing reputation and processes of the company being streamlined, the cost of debt would also go down. I am assuming that it would go down to 5.5%
- In the model I have also assumed that the capital spending, depreciation and revenues would grow in the same rate as the earnings. Moreover, for ease in calculations, I have kept the current fraction of working capital to revenues also as same.
- For the capital spending and depreciation in the stable growth, I am assuming that capital expenditure as % of depreciation would be 200 % approximately.
- The cost of equity comes out to be arounfd 19.90%. The economy is expected to grow at 7 %.
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**FCFF Model**

| | | | Current | High growth | | | Terminal |
|---|---|---|---|---|---|---|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| **Operating Income** | 56161097 | 82127028 | 97155598 | 126302277.4 | 164192960.6 | 213450848.8 | 245468476.1 |
| **Operating Income (1-t)** | | 67344162.96 | 79667590.36 | 103567867.5 | 134638227.7 | 175029696 | 201284150.4 |
| **Capex** | | -9578620 | -14367930 | -21551895 | -32327842.5 | -48491763.75 | -72737645.63 |
| **Depreciation** | | 3949995 | 5924992.5 | 8887488.75 | 13331233.13 | 19996849.69 | 29995274.53 |
| **Current asset** | | 29882847 | 44824270.5 | 67236405.75 | 100854608.6 | 151281912.9 | 226922869.4 |
| **Current liab** | | 18911959 | 23639948.75 | 29549935.94 | 36937419.92 | 46171774.9 | 57714718.63 |
| **WC** | | | -10213433.75 | -16502148.06 | -26230718.89 | -41192949.33 | -64098012.74 |
| **FCFF** | | | 61,011,219.11 | 74,401,313.16 | 89,410,899.44 | 105,341,832.63 | 94,443,766.59 |
| **Ke** | | | | 19.90% | 19.90% | 19.90% | 19.90% |
| **Discounting factor** | | | | 0.83 | 0.58 | 0.34 | 0.16 |
| **PV of high growth** | | | | 164761361.70 | | | |
| **PV of term growth** | | | | 246,415,765.55 | | | |
| **Intrinsic value** | | | | 411177127.25 | | | |
| **Value per share** | | | | 8.3516 | | | |

Looking at the above results the company's stock intrinsic value is priced at around Rs 9.

## The reason in support of the above is

For the third consecutive year, the Indian economy has experienced a robust growth, recording 8% to 9% growth. The
industrial production continued its upward march during the year under review. With the company's product and services well established and accepted in the export market, the overall growth in the economy should augur well for the company's profitable growth.

Your Company enjoys the distinct position of being one of the suppliers of premium quality dress and sports socks to some reputed retail chains in the UK, Switzerland and Gulf countries. The socks produced by your.Company are foot friendly meeting the international quality norms in terms.of stretch, sizing,.foot comfort, skin care and other parameters essential for inner wear apparel. They also meet the fashion demands in terms of designs, different knits and multiple shades. The socks produced by your Company are sold in upper end markets.