Venture Corporation Limited

FNCE101 Finance

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1. Industry Overview

The global electronics manufacturing service (EMS) market is driven by a contract manufacturer's ability to specialise in economies of scale production, design and manufacturing expertise, raw materials procurement and offering other value-added services. The EMS market is expected to grow at a compound annual growth rate (CAGR) of 6.4% from FY2017 to reach a value of $600 billion in FY2021.

1.1 Downstream Sector Growths to Drive Industry Expansion

This growth stems from expansion of downstream Automotive and Smart Lighting sectors, driven by connectivity and "smart" electronics, which will experience phenomenal growth rates of 23.6% CAGR until 2020. Another driver of growth would be medical devices, triggered by the constant need to improve personalised household healthcare delivery, in equipment such as Fitbits and Amazon's Alex-controlled Echo speakers, rather than in clinical settings. The rising demand for EMS will provide opportunities for consumer electronics companies like Venture Corporation Ltd (VC) to grow. However, EMS market players have to continually expand their capacity to hold larger production whilst being cost-efficient, lean and eco-friendly.

1.2 Competitor Analysis

Singapore is a hub for EMS vendors. Competitors in this saturated space have become increasingly focused on research and development (R&D) and high-value component production. Labour-intensive assembly operations have instead been displaced to emerging markets in APAC. VC has two major competitors: Benchmark Electronics Inc. (BE) and Flextronics International Ltd. (FL). BE offers services to original equipment manufacturers (OEMs) of industrial control equipment, telecommunications equipment and other products in America, Asia and Europe (AA&E). FL is an end-to-end supply chain solutions company which provides electronic designs, manufacturing and aftermarket services to OEMs in AA&E.

2. Venture Corporation Analysis: To Buy or Sell?

VC is a Singapore-based technology service provider offering a wide range of expertise including printing and imaging, advanced storage systems and devices, handheld interactive scanning and computing products, industrial products and installations and more. The group consists of 40 companies with 12,000 employees in South East Asia, North Asia, US and Europe. It manages a portfolio of more than 5,000 products and solutions for over 100 global clients across different industries. The following is a SWOT analysis of the company:

2.1 Reaping Results from Broad Service Offerings and Diverse Operational Verticals

VC's primary competitive advantage is its broad portfolio of services offering, which enhances its ability to provide end-to-end design, manufacturing, testing and supply chain management capabilities to capture a growing base of high value customers. Its operations across diverse verticals is another strength which enhances its wide-ranging market position, thereby minimising vulnerability to specific sector risks and enabling the group to leverage on opportunities offered in the diverse industries. This can be seen through its balanced revenue streams across its sectors. These strengths allow VC to continue its strong growth in the long haul.

2.2 Potential Risks Stem from its Relative Smaller Scale

VC lacks the scale compared to its primary competitors- FL and BE. The resources VC has, in terms of technical, financial and marketing aspects, due to its relative smaller scale, limits its ability to expand its operations and growth at a rate faster than its competitors. However, as VC grows to become a major market player, it would definitely have sufficient resources to compete on a level-playing field in the future.

2.3 Growing Global Electronics Market to Drive Sustained Future Growth

However, VC is poised to flourish from the growing electronic components market and an increase in demand for EMS in the long-term. The global electronic components market, which encompasses applications for aerospace, medical and information technology industries, has rebounded in recent years and is expected to continue to rise to $233 billion by 2020 with a growing penetration of small electronics in the automotive and healthcare industries. VC is poised to benefit, in terms of revenue and market share, from the growth of this sector through its design and manufacturing services capabilities. Also, the global EMS has been expanding, forecasted to reach $600 billion in FY2021. VC's large manufacturing services portfolio and strong presence in the electronic manufacturing services would strategically place it to reap ample growth prospects.

2.4 Rapid Technological Obsolescence Threatens Profit Growth

Due to rapidly changing technologies, VC has to continually invest substantially in the development of its capabilities, such as R&D, technology licensing and facility expansions. The quick obsolescence of technology does not allow it sufficient time to absorb the investments and would lead to lower profitability.

3. Financial Analysis Overview: Fundamentals Remain Strong with Expansion underway

VC's fundamentals remain strong with its diversified revenue streams and customer base. Since the financial year of 2008, Venture has been receiving net profits, which reached 363.5 million in 2017. In 2018, VC's revenue is forecasted to hit 4527.88 million while net income margin is expected to grow by 8.84%. Its operating margin of 10.87% in 2017 also far surpasses its larger competitors, BE (3.2%) and FL (2.1%) despite its relative size. United Overseas Bank (UOB) cites a potential $2.5 billion revenue stream VC could receive from a ramp-up in production of a new device which will be sold to a multinational company. Thus, operating income is forecasted to surpass the consensus estimate of $385 million in 2018 if production capacity hits 100%. Based on its liquidity ratios, VC is more than able to meet its short-term obligations. Its current ratio of 2.34 in 2017 shows the significant lack of debt taken on lowers relative to its total asset. Investors would not have to worry about debt-financing issues which will surface in the short-run.

3.1 Stabilised Return on Assets (ROA) signify Shift in Focus on Improving Operating Efficiency

VC has been able to manage its assets aptly, but there is room for improvement. It hit a ROA of 5.45% in 2013, but suffered a dip of 2% in 2014. Being capital-intensive, VC can improve on its efficiency by setting up a more sensitive supply chain management that reduces any excessive inventory storage during slowdowns. Since 2014, the ROA of VC rebounded significantly and surpassed major competitors in the industry. In 2017, VC's ROA even doubled from 2016 to reach 12.63%. This is mainly attributable to revenue increases and a focus on operational efficiencies across its value chain through R&D. This is substantiated by VC's steadily

improving asset turnover ratio from 0.97 in 2013 to 1.35 in 2017 compared to its other competitors. However, its efficiency has yet to reach the level of FL of 1.91 in 2017. Yet, its potential to realise better operational efficiency in the near future would boost investor confidence and sentiments towards it in the short-run.

3.2 DuPont Analysis of Return on Equity reveals Profit Margin as Main Driver of Increase

VC's adjusted return on equity (ROE) has grown to approximately 18% in 2017. Using the DuPont Identity, VC's equity multiplier is low, reinforcing the point that the company uses less debt to finance its assets. Secondly, the company's asset turnover ratio of 1.36 in 2017 is above the industry average of 0.65, highlighting its efficient use of asset. Lastly, the analysis reveals profit margin to be the main driver of ROE increase. With profit margin growing, investors should remain confident of the value VC is able to generate for them.

3.3 Venture's Earnings per share (EPS) Doubles in 2017

Over the past 2 years, VC has enjoyed the lowest debt to equity ratio over its competitors, by raising capital through the issuance of shares. In 2017, VC's total shares issued is 270 million as opposed to BE's 50 million issued shares. Its EPS is, thus, expected to be lower than its competitors. The difference in EPS between VC and BE from 2013 to 2016 highlights how equity-heavy VC is. Despite having a larger share capital, VC has managed to double its EPS in 2017 to 1.27 from 2016, surpassing both BE and FL. This signifies greater profits to be shared by shareholders and paints an even brighter future for VC as expansion plans carry on.

3.4 Falling Price to Earnings (PE) Ratio is Unreflective of Future Earnings

A comparison of PE ratio between VC and its competitors over time may be worrying to investors. VC's PE ratio has been falling from 16.10 in 2013 to 15.48 in 2017 while FL's PE ratio has been rising from 11.28 in 2013 to 20.18 in 2017. However, this worrying trend is mainly due to VC's EPS rising at a faster rate than the price of its stock throughout the years. Therefore, the falling PE ratio of VC instead represents how exceptionally well the company is currently doing with respect to the past few years.

3.5 Receivables Turnover- Improvement in Credit Policy, the Next Vital Step

In 2017, VC only collects its receivables 5.42 times on average per year, which translates to 67.29 days in a year which an average customer takes to make payments for his orders. This possibly indicates the company's poor collecting processes or bad credit policy as VC's turnover is significantly lower than its peers. Considering the diverse customers VC engages, it is understandable that this would be a difficult process. Despite there being a marked improvement from its previous years where receivables were collected less than 5 times in a year, VC should still continue to reassess its credit policy. It could analyse its customer credit portfolio and past transaction histories to highlight problematic customers and enforce stricter policies on them. This would ensure timely collection of loaned credit that could be well invested elsewhere.

3.6 Rising Market-to-Book value, but Future Earnings are Expected to grow continually

VC's market-to-book value is rising from FY2013-2016, with an average of 1.24. Although this depicts stock overvaluation of 24%, this is a flawed indicator as it fails to factor in future earnings prospects of VC and intangible assets that take up 25.21% of company total assets. Value investors should continue to maintain their buy option on VC's stocks as future earnings are expected.

VC has market capitalisation values between $2 billion and $10 billion, which is typical of mid-cap companies. Often, mid-cap companies carry higher risk than companies with bigger market capitalisations but are still competitive for investing as they have greater possibility of growth. Mid-cap companies are also less volatile and risky for investments than small-cap companies as they are more capable of enduring economic issues.

3.7 Issuance of Dividends and Indication of an Undervalued Stock to Boost Buy Option on Stock

VC dividends per share has been stable at $0.50 and only increasing to $0.60 in the year 2017. An increase in dividends per share symbolises growth and tends to be accompanied by a rise in stock prices. Analysts predict dividend growth of 15-20% in the years 2017 to 2021, with dividend payments of $0.69 in 2018. Using the dividend growth model, VC capital stock is expected to sell for $23 in 2017, suggesting that the stock was undervalued by $2.53. Investors may be able to pull comfortable short-run returns as they can purchase stocks well under market value. However, this method assumes that dividends grow at stable rates. A better solution is to use a non-constant growth model, to account for sporadic growth to attain more accurate pricing.

3.8 VC, a prime investment avenue when employing WACC

VC's weighted average cost of capital (WACC) from 2013 to 2016 has remained relatively stable at around 5.4% to 6%. Along with the VC's capital structure which is largely 90% equity-based with the other 10% made up of debt, investors take on lower risk when they invest in VC. With annualised returns of 28.91% well above 6% of WACC, VC has been continually creating value for shareholders over the years.

4. BUY OPTION

The analysis of the industry, VC's competitors and its financials have concluded in a strong sentiment for all investors to execute a long-term buy option in VC's stocks. Recent share buybacks by VC's CEO on numerous occasions summarily provide a very clear positive signal of his and our confidence over where he believes the company is heading towards.

5. THE FUTURE

The future's technologies are boundless, and VC could remain as the forefront manufacturer of such tech. Virtual reality is at its initial stages limited at the visual-auditory scale of humans. The next stage taps into the "vertebrane[1]" where players will become the "ultimate videogame controller". Next, programmable matter, such as utility fog[2], holds the key to unlocking the next phase for nanotechnology and its uses. Beyond simulation capabilities in nanocomputers, its uses extend to practical applications such as collision compressors. Last, the reality of "mind-uploading", where neuronal structures and the essence of a biological brain could be easily downloadable into a computer system, could be realised as soon as 2040. With the processing powers of VC as a leading circuit board manufacturer, complex fibre optics assembler, and new product introduction service provider, it is well-positioned to provide complementary services to welcome such technologies.

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[1] Vertebrane is a term for a speculative brain-computer interface technology that taps into all sensory and motor nerve bundles flowing to and from the brain. It allows for augmented reality or a complete disconnection of the brain from the biological body and subsequent electronic reconnection to a virtual body typically inhabiting a virtual world.

[2] UFog is a hypothetical collection of micro-sale robots that work in tandem to achieve certain functions.

Databases:

1. Bloomberg
2. BMI Research
3. Marketline Advantage
4. OCBC Investment Research
5. Singapore Exchange (SGX)
6. UOB Investment Research

References:

1. Global EMS market continues to grow in 2017. (2017, April 11). Retrieved from http://evertiq.com/news/41360
2. Hopper, T. (2017, February 14). Top Electronics Manufacturing Trends and Challenges in 2017. Retrieved from https://www.pannam.com/blog/top-trends-and-challenges-in-electronics-manufacturing/
3. Venture Corporation Limited. (n.d.). Retrieved from http://www.venture.com.sg/
4. Weeks, L. (2017, July 20). Retrieved from https://www.mastercontrol.com/gxp-lifeline/5-trends-driving-disruption-in-the-med-device-industry-in-2017-

Appendix: (Includes graphs/charts, and relevant explanations by sub-header)

1. Competitor Analysis

Benchmark Electronics Inc	FY 2014	FY 2015	FY 2016	FY 2017
Revenue	2797.06	2540.87	2310.42	2466.81
Net Income (in millions)	81.24	95.4	64.05	-31.97
Stock Price	25.44	20.67	30.50	29.10
Basic Weighted Average Shares	52.99	50.18	49.33	49.14
EPS	1.53	1.90	1.30	-0.65

Figure 1: Benchmark Electronics

Flextronics International Ltd	FY 2014	FY 2015	FY 2016	FY 2017
Revenue	26108.61	26147.92	24418.88	23862.93
Net Income (in millions)	365.59	600.80	444.08	319.56
Stock Price	9.24	12.68	12.06	16.80
Basic Weighted Average Shares	591.43	563.32	544.82	531.29
EPS	0.62	1.07	0.82	0.60

Figure 2: Flextronics International Limited

2. Financial Analysis Overview: Fundamentals Remain Strong with Expansion underway

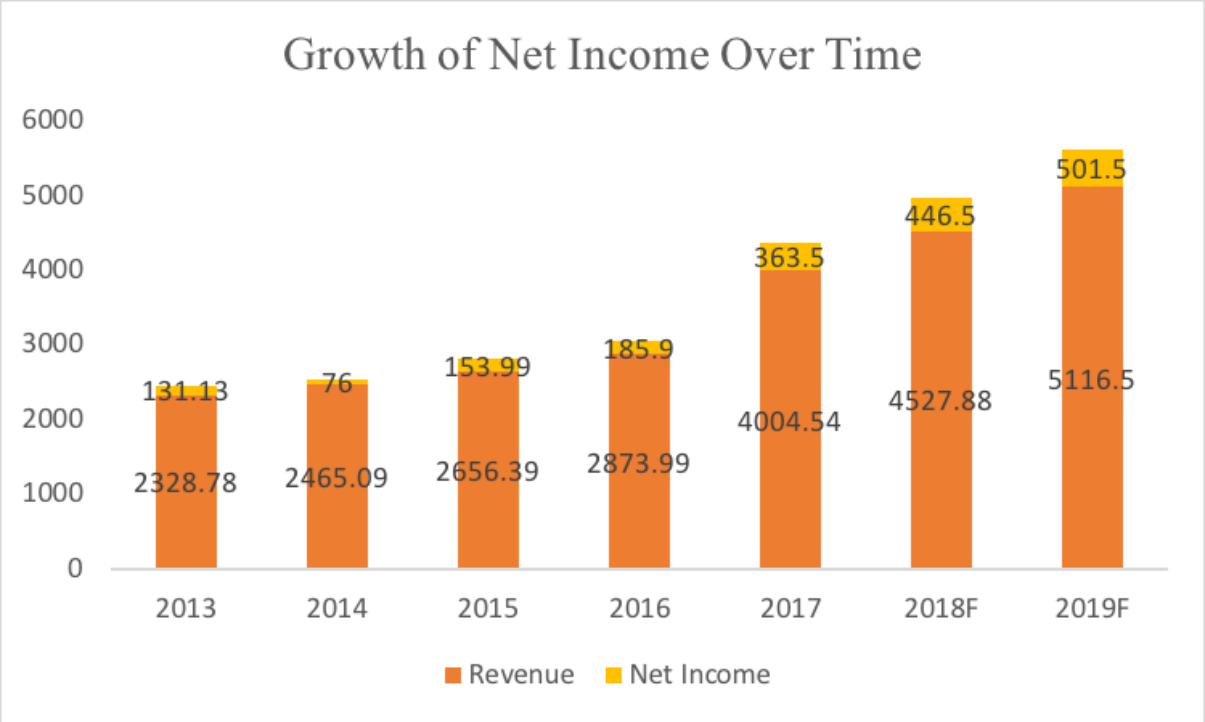

Figure 3: VC's Growth of Net Income Over Time

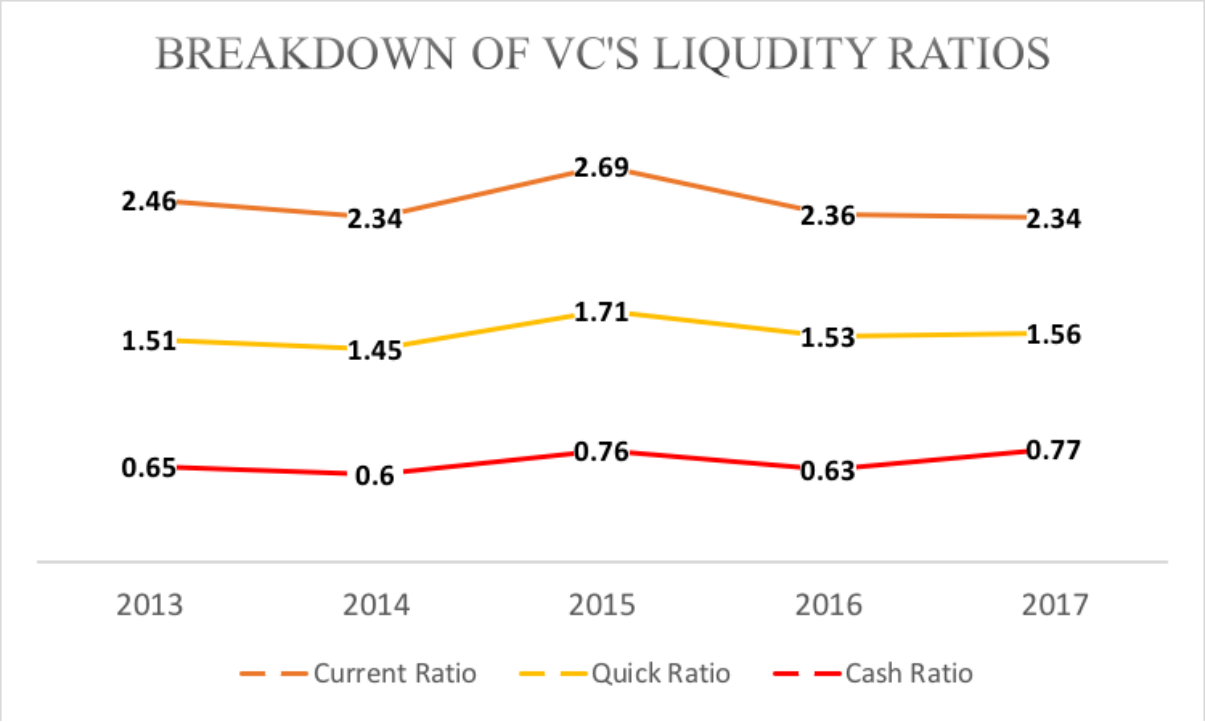

Figure 4: Breakdown of VC's Liquidity Ratios

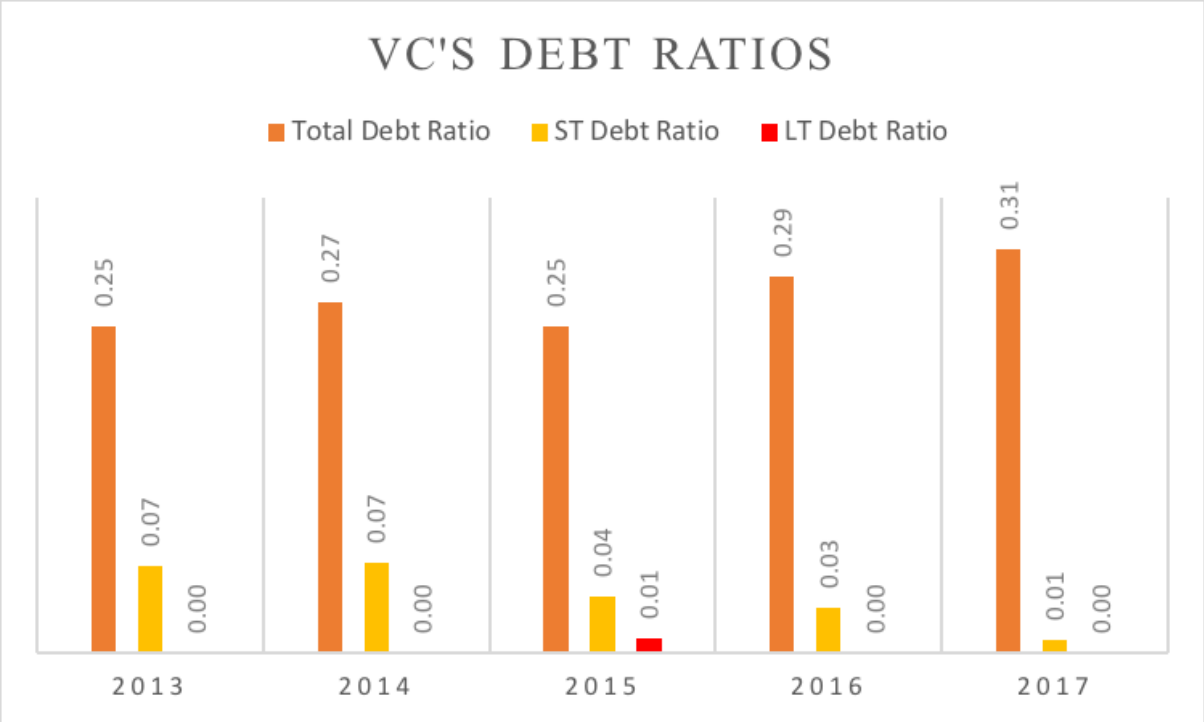

Figure 5: VC's Debt Ratios

3.1 Stabilised Return on Assets signify Shift in Focus on Improving Operating Efficiency

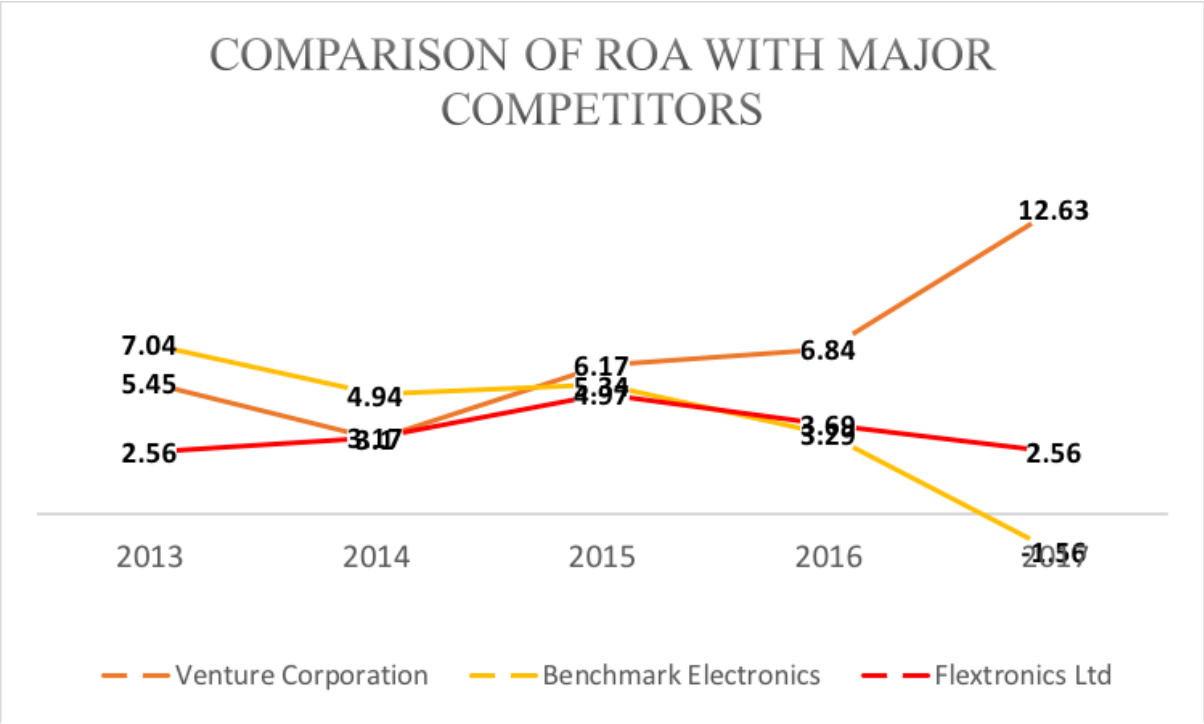

Figure 6: Comparison of Return on Assets with Major Competitors

	2013	2014	2015	2016	2017
Venture Corporation	0.97	1.00	1.06	1.09	1.35
Benchmark Electronics	1.58	1.68	1.42	1.19	1.20
Flextronics Ltd	2.18	2.26	2.16	2.03	1.91

Figure 7: Comparison of Asset Turnover Ratio with Competitors

3.2 DuPont Analysis of Return on Equity reveals Profit Margin as Main Driver of Increase

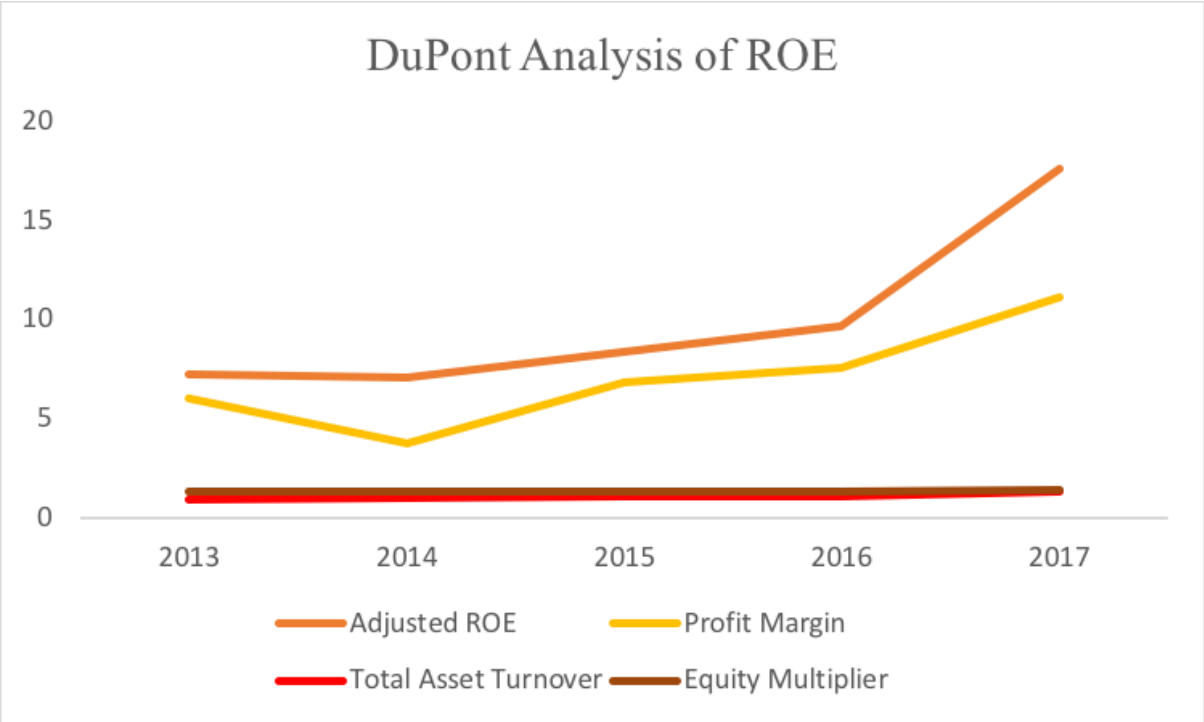

Figure 8: DuPont Analysis of Return on Equity

Venture Corporation	2013	2014	2015	2016	2017
Adjusted ROE	7.26	7.09	8.38	9.65	17.62
Profit Margin	6.06	3.80	6.88	7.54	11.11
Total Asset Turnover	0.97	1.00	1.06	1.09	1.36
Equity Multiplier	1.33	1.35	1.35	1.37	1.43

Figure 9: DuPont Analysis of Return on Equity

3.3 Venture's Earnings per share (EPS) Doubles in 2017

	2013	2014	2015	2016	2017
Venture Corporation	0.48	0.28	0.56	0.67	1.27
Benchmark Electronics	2.03	1.53	1.90	1.30	-0.65
Flextronics Ltd	0.41	0.62	1.07	0.82	0.60

Figure 10: Comparison of Earnings Per Share with Major Competitors

3.4 Falling Price to Earnings (PE) Ratio is Unreflective of Future Earnings

PE Ratio	2013	2014	2015	2016	2017
Venture Corporation	**16.10**	**28.41**	**14.70**	**15.15**	**15.48**
Benchmark Electronics	**14.78**	**16.54**	**12.82**	**23.53**	**20.18**
Flextronics Ltd	**11.28**	**13.31**	**13.04**	**13.88**	**22.75**

Figure 11: Comparison of Price to Earnings Ratio with Competitors

Share Price (Average)	2013	2014	2015	2016	2017
Venture Corporation	**7.68**	**7.87**	**8.20**	**9.88**	**20.47**
Benchmark Electronics	**23.08**	**25.44**	**20.67**	**30.5**	**29.1**
Flextronics Ltd	**6.76**	**9.24**	**12.68**	**12.06**	**16.8**

Figure 12: Comparison of Share Price with Competitors

3.5 Receivables Turnover- Improvement in Credit Policy, the Next Vital Step

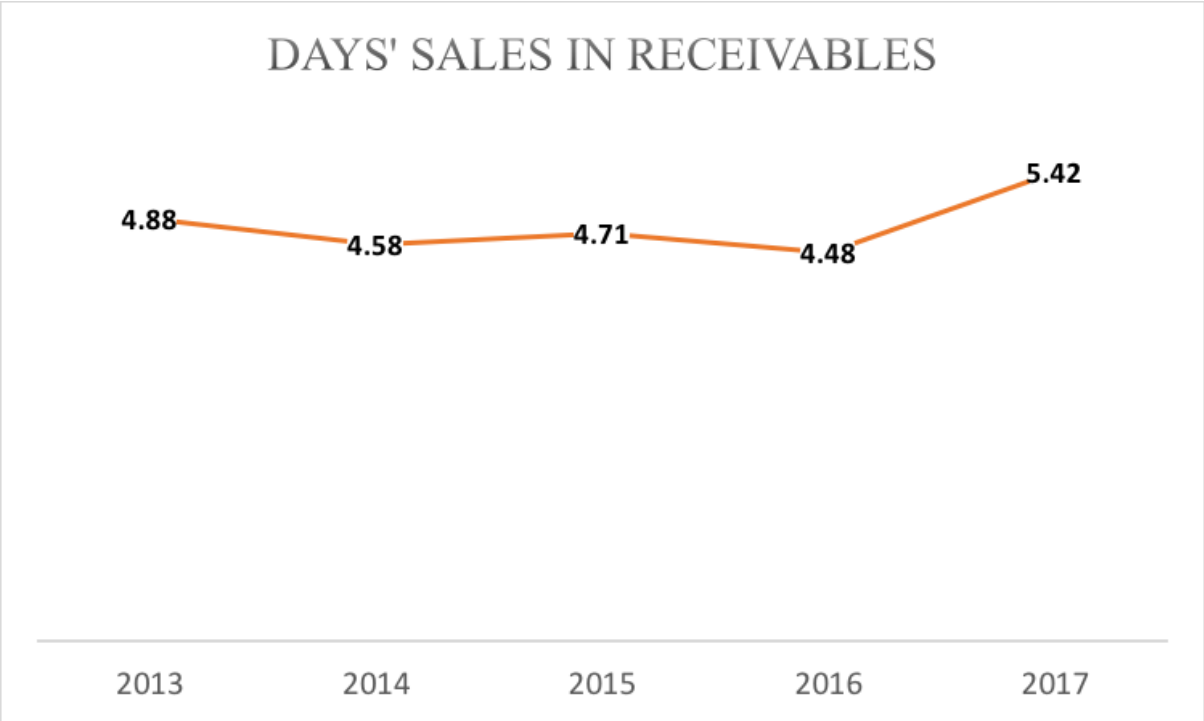

Figure 13: VC's Days Sales in Receivable

	2013	2014	2015	2016	2017
Venture Corporation	4.88	4.58	4.71	4.48	5.42
Benchmark Electronics	4.92	5.18	5.08	5.02	5.62
Flextronics Ltd	10.00	10.85	10.39	11.14	11.26

Figure 14: Comparison of Receivables Turnover

3.6 Rising Market-to-Book value, but Future Earnings are Expected to grow Continually

	2013	2014	2015	2016	2017
Venture Corporation	1.15	1.20	1.20	1.40	2.69
Benchmark Electronics	1.01	1.04	0.78	1.10	1.08
Flextronics Ltd	1.92	2.53	3.02	2.56	3.38

Figure 15: Comparison of Market-to-Book Ratio with Competitors

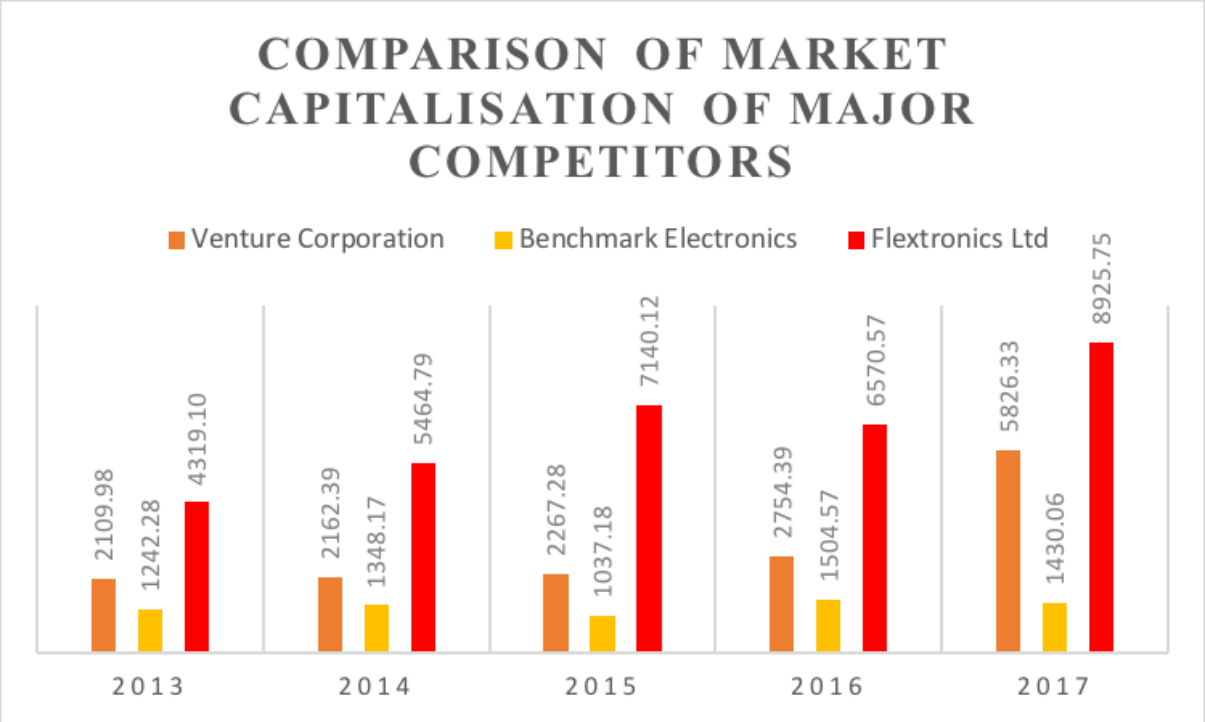

Figure 16: Comparison of Market Capitalisation

3.7 Issuance of Dividends and Indication of an Undervalued Stock to Boost Buy Option on Stock

Venture Corporation	**2013**	**2014**	**2015**	**2016**	**2017**
Price	7.68	7.87	8.20	9.88	20.47
Dividends per Share	0.50	0.50	0.50	0.50	0.60
Cost of Equity	0.07	0.06	0.06	0.26	0.18

Figure 17: Venture Corporation Cost of Equity

Venture Corporation	**2017**	**2018F**	**2019F**	**2020F**
Dividends Growth Rate (assumed)	0.15	0.04	0.03	0.03
Dividends per Share	0.60	0.69	0.72	0.74
Stock Price (expected)	23.0	5.27	4.94	5.09

Figure 18: Venture Corporation Expected Stock Price

Calculation of Expected Stock Price

DGR = (D1/D0) - 1

D1 = D0 (1+ Dividend Growth Rate)

By using the above formula, we are able to arrive at an expected stock price of $23.00 for 2017. In comparison with the data from Figure 16, we can see that the actual stock price of VC in 2017 is undervalued at $20.47.

3.8 VC, a prime investment avenue when employing WACC

Calculation of Cost of Debt

Cost of Debt Calculation	2013	2013 EFF IR	2014	2014 EFF IR
Bank loan 1	68.337	0.67%	78.696	0.67%
Bank Loan 2	6.771	0.73%	5.05	0.72%
Bank Loan 3	38.598	0.77%	24.92	0.77%
Bank Loan 4	22.779	0.77%	34.102	0.70%
Bank Loan 5	25.31	0.77%	26.232	0.77%
Total Loan	161.795		169	

Figure 19: Cost of Debt Calculation

Cost of Debt Calculation	2015	2015 EFF IR	2016	2016 EFF IR
Bank loan 1	**70.705**	**0.62%**	**50.256**	**0.97%**
Bank Loan 2	**3.899**	**0.84%**	**4.015**	**0.31%**
Bank Loan 3	**41.889**	**0.78%**	**11.487**	**1.07%**
Bank Loan 4	**26.475**	**0.67%**	**26.883**	**1.01%**
Bank Loan 5	**16.929**	**1.02%**	**16.969**	**0.78%**
Total Loan	**159.897**		**109.61**	

Figure 20: Cost of Debt Calculation

Calculation of Cost of Debt:

By extracting the information of total loans taken out by VC from its annual reports from 2013 to 2016 (VC's annual report for 2017 has not been published yet), we multiplied the effective interest rates with the amount of bank loan separately and divided it with the total loans taken out for each year. The figure calculated would be the cost of debt for each year (as shown in Figure 20).

Calculation of Cost of Equity

Calculation of Beta	
Beta	0.31973

Assumptions	
Rate of Return on Risk-free securities***	4.00%
Beta	0.31973
Market Overall Expected Rate of Return*	10%
Cost of Equity (CAPM)	5.92%

Figure 21: Cost of Equity Calculation

Calculation of Beta:

For this report, we have extracted the weekly closing stock prices of VC and the weekly STI Index closing price for a duration of 5 years from Bloomberg. We assume that the analysis of this over a 5-year period will be sufficient to calculate a proper beta. We then calculated the percentage changes in stock prices of VC and percentage changes in weekly STI Index. Last, beta of VC is calculated by taking the covariance of its weekly percentage changes in VC closing stock price and STI's closing index and dividing it by the variance of the percentage STI change. After the calculations have been carried out, we arrive at a *beta of 0.31973*.

Assumptions:

1. Our group assumes that the expected return of STI is the same as S&P500 of 10%
2. Rate of return on Risk-free securities is assumed to be 4% based on interest rate of treasury bills

Calculation of Weighted Average Cost of Capital

	2013	2014	2015	2016	2017
Total Equity	1829.25	1801.01	1895.81	1962.5	
Total Debt	161.79	169	135.02	92.64	30.83
Total Debt & Equity	1991.04	1970.01	2030.83	2055.17	2198.89
Cost of Debt	0.73%	0.71%	0.72%	0.94%	Undetermined**
Cost of Equity	5.92%	5.92%	5.92%	5.92%	5.92%
Tax Rate	17%	17%	17%	17%	17%
WACC	5.49%	5.46%	5.56%	5.69%	Undetermined**

Figure 22: Weighted Average Cost of Capital Calculation

$$WACC = r_D (1- T_c)*(D / V)+ r_E *(E / V)$$

where:

r_D = Cost of debt

T_c = Tax Rate of a company

D = Total debt of a company

V = Total debt and total equity of a company

r_E = Cost of equity

E = Total equity of a company

*****Disclaimer: We are unable to determine the cost of debt of VC in 2017 as VC has yet to publish their 2017 annual reports. Thus, we are unable to extract the total loans information and the respective effective interest rate of each loan.**

****Disclaimer: Subsequently, without being able to find the cost of debt, the WACC for 2017 also cannot be determined.**

Calculation of Total Shareholder Returns[3]

Total Shareholder Returns				
Period		Dividends Receivec	Capital Appreciatior	Total Shareholder Returns
Short Term Return	5 Days	-	-0.54	-1.88%
	10 Days	-	0.11	0.39%
	20 Days	-	1.19	4.42%
Medium Term Return	3 Months	-	7.67	37.52%
	6 Months	-	10.71	61.55%
	1 Year	0.50	16.61	148.78%
Long Term Return	2 Years	1.00	19.75	248.21%
	3 Years	1.50	19.64	249.59%
	5 Years	2.50	19.51	255.93%
Annualised Return	Annualised	-	-	28.91%

Figure 23: Total Shareholder Returns Calculation

[3] Reference: http://www.shareinvestor.com/fundamental/factsheet.html?counter=V03.SI