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**A STUDY ON THE SOLVENCY POSITION AND ECONOMIC VALUE ADDED  
WITH REFERENCE TO SAKTHI SUGARS LIMITED, COIMBATORE**

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A PROJECT REPORT

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For the award of the degree

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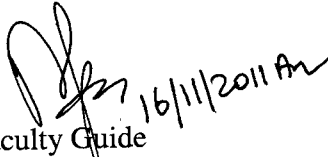
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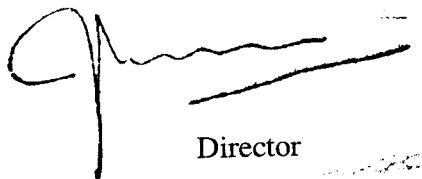
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## BONAFIDE CERTIFICATE


Certified that this project report titled "A study on the Solvency Position and Economic Value Added with reference to Sakthi Sugars Limited, Coimbatore" is the bonafide work of **Ms.A.Priyatharsini, 10MBA43** who carried out the project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

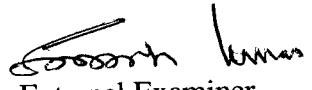
  
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## CERTIFICATE

This is to certify that **A.Priyatharsini**, First year MBA student of KCT Business School, Coimbatore has done a project on the topic "**A STUDY ON SOLVENCY POSITION AND ECONOMIC VALUE ADDITION WITH REFERENCE TO SAKTHI SUGARS LIMITED**" in our organization during the period from 27.06.2011 to 12.08.2011.

During the above period, her performance, conduct and character were found to be **GOOD**.

We wish all success in her career.

FOR SAKTHI SUGARS LIMITED

**P.MUTHUVELAPPAN**  
**SR.VICE PRESIDENT-HRD**

## ACKNOWLEDGEMENT

It is inevitable that thoughts and of other people tend to drift into the subconscious when one feels to acknowledge helping derived from others. I acknowledge to all those who helped me in the preparation of this project work.

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## **ABSTRACT**

An Analytical research was undertaken to study the Economic Value Added by Sakthi Sugars Ltd, Coimbatore to its shareholders and its present solvency position. The study is conducted with five years financial data. The study shows that company is incurring losses, but it can earn profit if funds are effectively managed and cost of production is controlled by reducing the avoidable expenses. The Economic Value Added by Sakthi Sugars Limited posts negative value, since the economic value has been eroded due to consistent losses. The solvency position of the company also warrants serious attention, since the solvency score measure through the Z-Score model is consistently below the required benchmark. The study is concluded that Sakthi Sugars Limited, Coimbatore has the potential to perform economically well, should the vast asset base is put to optimal use.



**CHAPTER 1**  
**INTRODUCTION**

## 1.INTRODUCTION

### 1.1 INTRODUCTION TO THE STUDY

#### **Concept of EVA:**

Maximizing shareholders value has become the new corporate paradigm in recent years. The Corporates, which gave the lowest preference to shareholders curiosity, are now bestowing the utmost preference to it. Shareholder's wealth is measured in terms of returns they receive on their investment. It can either be in forms of dividends or in the form of capital appreciation or both. Capital appreciation depends on the changes in the market value of the stocks. The market value of stocks depends upon number of factors ranging from company specific to market specific. Financial information is used by various stakeholders to assess firm's current performance and to forecast the future as well.

Traditional performance measures such as NOPAT, EPS, ROI, ROE etc. have been criticized due to their inability to incorporate full cost of capital thereby accounting income is not a consistent predictor of firm value and cannot be used for measuring corporate performance. Value based management system has gained popularity in academic literature in last two decades. One such innovation in the field of internal and external performance measurement is EVA.

Pioneered and advocated by US based business consultant Stern Stewart and company argue that EVA can be used instead of earnings or cash from operations as measures of both internal and external performance. According to Stern Stewart "EVA stands well out from the crowd as the single best measures of value creation on continuous basis".

The EVA of the company is just a measure of the incremental return that the investment earns over the market rate of return. In simple terms, it can be stated that EVA measures the profitability net of cost of capital. EVA can be taken as the net operating profit minus an appropriate charge for the opportunity cost of all the capital invested in an enterprise. As such, EVA is an estimate of true economic profit or the amount by which earnings exceed or fall short of the required minimum rate of return that shareholder and lenders could get by investing in other securities of comparable risk. Traditional measure of corporate performance does not consider cost of capital in calculation of NOPAT whereas EVA includes the same.

### Calculation of EVA:

EVA is the surplus left after making an appropriate charge for the capital employed in the business. It can be calculated in the following way.

$$EVA = NOPAT - (TCE * WACC)$$

Where

NOPAT - Net Operating Profit After Tax

TCE – Total Capital Employed

WACC – Working Average Cost of Capital

While calculation of NOPAT, the non-operating items like dividend/interest on securities invested outside the business, non-operating expenses etc. will not be considered. The total capital employed is the sum of shareholders funds as well as loan funds. But this does not include investments outside the business. In determining the WACC, cost of debt is taken as after tax cost and cost of equity is measured on the basis of capital asset pricing method. The cost of capital is thus the most important aspect of EVA. Under the traditional methods most companies appear to be profitable whereas in reality, they are not. As Peter Drucker (1995, p.59) has observed, “Until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that it pays taxes, as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources... until then it does not create wealth; it destroys it.” EVA takes this fact into consideration and states that managers must pay for the capital they are utilizing, just as if it were a wage.

EVA is now recognized as an important tool of performance measurement and management all over the world, particularly in advance economies by adopting it as corporate strategy. Still there are mixed evidences about the superiority of EVA over traditional performance measurement tools. Country specific evidences are also not clear when compared with other residual income metrics. In this review paper, an attempt has been made to review the literature on EVA. It is encouraging to note that last 10 years, in particular 2000 to 2008, have seen a remarkable increase in research on EVA. Empirical research methodology alone accounted for 71 percent among all four methodologies (empirical, conceptual, descriptive and exploratory cross-sectional) From the analysis of studies, it is felt that further research is needed on implementation issues, role of accounting adjustments, empirical evidences in developed economies, EVA as a strategy, EVA and discounting techniques like NPV, IRR

and managerial performance measurement aspects of EVA. Empirical studies conducted till date on EVA had used data for smaller period whereas there is scope for future research on the concept by considering the data pertaining to longer durations in order to test the validity of the concept. Therefore efforts should be made in this direction to further broaden the horizon of applicability of this useful concept.

### **Concept of Z-score:**

Z-Score model was developed and published by Altman in 1968. It utilizes a combination of traditional financial ratio analysis and a sophisticated statistical technique known as discriminant analysis to construct and test a financial model for assessing the likelihood that a firm would go bankrupt. It would be more useful to combine the different ratios into a single measure of the probability of sickness or failure. The technique of Multiple Discriminant Analysis (MDA) helps to do so. MDA can be used to classify the companies on the basis of their characteristics as measured by financial ratios, into two groups namely those which are likely to fail (bankrupt) and those not likely to fail. The use of MDA to consolidate the effects of all ratios.

Various failure prediction models have been used to identify successfully the bankruptcy risks of both financial and nonfinancial corporations. Since the zeta model captures most of the important dimensions of traditional ratio analysis (liquidity, profitability, leverage, etc.), it is conjectured to be an appropriate mechanism for modeling the bankruptcy risk of any corporation. Using various discriminant analysis procedures, Altman, Haldeman, and develop a failure prediction model for manufacturers and retailers. Listed according to their relative order of importance, their model consists of the following seven variables:

1. Cumulative profitability (CP),
2. Stability of earnings (SOE),
3. Capitalization (CAP or equity multiplier EM),
4. Size (SIZE),
5. Liquidity (LQID),

Since the important dimensions of ratio analysis are used and hence it has proven classification accuracy for manufacturers and retailers, the model may be appropriate for identifying bankruptcy risk in any industry.

The derived discriminant function is:

$$Z=0.012X_1+0.014X_2+0.033X_3+0.006X_4+0.010X_5$$

Z= discriminant function score of a firm

$X_1$ =Networking Capital/Total Assets(%)

$X_2$ =Retained Earnings/Total Assets((%)

$X_3$ =EBIT/Total Assets(%)

$X_4$ =Market Value of Total Equity/ Book Value of Debt(%)

$X_5$ =Sales/Total Asset(times)

The Z-score which can be used to classify firms as either financially sound a score above 2.675.headed towards bankruptcy

## 1.2 INDUSTRY PROFILE

Sugar is one of the oldest commodities in the world and traces its origin in 4th century AD in India and China. In those days sugar was manufactured only from sugarcane. But both countries lost their initiatives to the European, American and Oceanic countries, as the eighteenth century witnessed the development of new technology to manufacture sugar from sugar beet. However, India is presently a dominant player in the global sugar industry along with Brazil in terms of production. Given the growing sugar production and the structural changes witnessed in Indian sugar industry, India is all set continue its domination at the global level. The report provides a comprehensive picture of the Indian sugar market. The status of Indian sugar industry has been compared with the rest of the world in terms of raw material availability, crushing period, size of the sugar mill, production cost and prices in the report. The advantages that Indian sugar mills have over others in cost terms have been emphasized too. Indian sugar industry is highly fragmented with organized and unorganized players. The unorganized players mainly produce Gur and Khandari, the less refined forms of sugar. The government had a controlling grip over the industry, which has slowly yet steadily given way to liberalization. The report provides comprehensive analysis about the structure of Indian sugar industry by explaining the above facets. Besides the classification of sugar products and by-products like molasses, their uses too have been extensively covered.

The production sugarcane is cyclical in nature. Hence the sugar production is also cyclical as it depends on the sugarcane production in the country. The report provides extensive information on the production of sugarcane, sugar and other sweeteners in the country in the recent years along with trends and analysis. This also includes a discussion about existing capacities in the country, trends in capacity additions, imports and production of by-products of sugar (molasses and cogeneration of power). The report features a detailed demand analysis discussing the actual demand for sugar and other sweeteners, gur and khandari and their per capita consumption in India. This includes a trend analysis in demand in various regions of the country. The role of exports in the sugar industry has also been discussed. The report gives an exhaustive cost analysis along with the pricing practices. Dual Pricing System is adopted in the Indian sugar industry, which includes sugar price in Public distribution system and the free sale sugar price. An analysis has been provided on the relationship between Indian and international sugar prices. As the industry is a fragmented one, even leading players do not control more than 4 percent market in India. However, the situation is changing and players offlate are striving to increase their market share either by acquiring smaller mills or by going for green field capacity additions. Another notable trend is the shift from Gur and Khandsari to sugar in the rural areas. This should further increase the per capita consumption of sugar in India (currently around 15.6 kg). Besides the Indian urban market is slowly moving towards branded sugar. The potential in this segment seems to be very high. These trends along with the other trends like increase in the production of by-products have been captured in detail.

The second revision of the world sugar balance in the 2010/11 (October/September) crop cycle by ISO puts world production at a record 168.045 mln tonnes, raw value, up 4.66% from the last season. Although ISO still expect a record high world sugar production, it has been revised downwards by 0.910 mln tonnes from their previous assessment in November, 2010. In contrast to output, world consumption has been revised marginally upwards and now is put at 167.849 mln tonnes. Consumption is expected to grow at 2.01%, slower than the 10-year average of 2.6%, due to historically high prices in both the world and domestic markets. After two seasons of large deficits, the stocks/consumption ratio had reduced to the lowest level for more than 20 years - since 1989/90. The ratio is expected to decrease further to 35.04% in 2010/11 from 35.73% in the previous season of a large deficit. Despite the downward revision of world production, export availability still covers projected import

demand. The absence of a physical trade deficit may act to cap prices for the rest of 2010/11 season. The world export availability is put at 50.496 mln tonnes exceeding import demand estimated at 50.309 mln tonnes.

After facing a free fall in the sugar production in the SS2008-09 due to a steep decline in the sugarcane cultivation, the sugar production grew by 31 per cent in the SS2009-10. The recovery in sugar can be attributed to the increased yield and recovery rate. However, the sugar consumption continued to grow at a steady pace. It grew at a CAGR of 2.6% during SS05-10. India is the second-largest sugar producer globally, the largest being Brazil. Excess of production over consumption will augur the exports, which is currently fixed at 2.7 million tonne (1.5 million tonne under the OGL scheme and 1.2 million tonne under the ALS) for SS2010-11.

Indian Sugar Industry' contains comprehensive data and analysis of the sector apart from giving CARE's outlook on the sector. By developing the sophisticated model with its established network of the primary and secondary sources CARE Research has also tried to analyze the different business models which the industry players can adopt and the incremental profits which can be generated from these models.

The report is indispensable for any company in the sugar industry, banks/ FIs, policy makers, research and academic organizations, other international and national agencies etc. Additionally, the four quarterly updates (for the period August 2011 to July 2012) accompanying the subscription of the said report would form a potent tool for the subscribers to keep abreast of the happenings in the industry.

### 1.3 ORGANIZATION PROFILE

In 1921, Pollachi was a tiny village, way too modest compared to the bustling town it is today. But it was here, P.Nachimuthu Gounder laid the foundation for Sakthi Group. It was in this year P.Nachimuthu Gounder broke away from his traditional business of hiring bullock carts and pioneered into passenger transport service. From then on, there was no looking back. After three decades Sakthi Sugars Limited was established in the year 1961, with commercial production of Sugar commencing in the year 1964 at its Sakthinagar

Sugarplant. Sakthi Sugars Limited is one of the important members of the Sakthi Group contributing a large share of revenue to the group's turnover. In its pursuit for business excellence, the Sakthi Group, ever since its inception has been staunchly inclined towards fulfilling its social commitments. As a dutiful corporate, Sakthi Group has set up many educational and charitable institutions, hospitals and religious centers. It has also made significant contribution to rural development through a number of social welfare activities and initiatives. It has created ample employment opportunities for rural youth through its multi-fold agro-based institutions and other industries. It's a strong belief among us that growth and development must reach all sections of the society and businesses have a responsible role in making this a reality.

Today it has in its fold four Sugar plants with three of them in Tamil Nadu located at Sakthinagar, Sivaganga and Modakurichi and one plant in Orissa at Dhenkanal. With the aggregate capacity of 19,000 Tonnes of cane Crush per Day (TCD), Sakthi Sugars Limited is one of the largest producers of Sugar in the country.

In coherence with Sakthi Sugars' continued effort to enhance the efficiency of production many initiatives have been put to practice time and again to enrich the quality of production process to unmatched standards. Some such initiatives are listed below,

Scientific farming, Continuous R&D in sugar rich, pest resistant and high yielding sugarcane varieties, Mechanization of cane harvesting, Efficient Sugar manufacturing process to reduce sugar loss, Ensuring cleanliness and hygiene at their best in factory sites.

Auto Setting Mill facilities, Energy' Saving Schemes like planetary gear boxes, Automated cooling and condensing system, vertical continuous pan, etc.,

The Unit is strategically placed in terms of its location. It is situated in the most favorable climatic zone of the country that hosts more than 35,000 acres of sugarcane cultivation, well irrigated by Rivers and Canals. Nonetheless benchmarking its own records and operating all 365 days in an year . the Sakthi Nagar unit has recorded the highest cane crush of 22.35 Lakh M.T during 2006 -07 seasons. The plant achieved more than 1000 days of continuous cane crushing during 2004-07. With its excellence to repeat its success stories, the Unit has won the National Award for Exemplary Export Performance and has also won National Efficiency Award for many years. The Unit also has the distinct capacity of Raw Sugar Processing to produce high quality sugar using conventional equipments.



The Sivaganga unit was established in the year 1988 – 89 at Padamathur in Sivaganga District, Tamilnadu. It has an advanced infrastructure equipped with Auto Setting Mills and the technical know-how to process Raw Sugar. The plant which was begun with a capacity of 2500 TCD has expanded to 4000 TCD. The plant recorded the highest cane crush of 10 Lakh MT in the 2007-08 Season.

#### **The plant features**

- State-of-the-art automatic syrup clarification and melt clarification systems to produce low ICUMSA colour sugar.
- Modern Fluidised Bed Drier for sugar drying and most modern sugar grader.

In the year 1994 at Dhenkanal, Orissa the Unit was established with an initial capacity of 2500 TCD. Its strategic proximity to the Paradeep Port gave the Unit the much sought after logistical advantage to the Unit helping it realize cost advantage in transportation of shipments during the Import & Export of raw sugar and white sugar. The plant has the infrastructure and technology to produce high quality sugar by processing Raw Sugar using conventional equipments. It is one of the very few Sugar Plants in Orissa state operating for more than 120 days in a season. In the year 1994 it pioneered the processing of raw sugar to produce high quality white sugar using conventional equipments in India.

The plant with the capacity of 3500TCD was instituted in the year 2007 at Poondurai Semur in Erode District, Tamilnadu. In the Trial Season during 2007 the Unit crushed 711609 MT of Cane with an average recovery of 9.11 % which is a rare feat and a remarkable achievement in the national level. Subsequently it produced a laudable quantum of 1.21 Lakh qtls of 45 ICUMSA sugar which was exported. The Unit also introduced Decanters for removing impurities from the juice as against Vacuum filters and also installed energy saving equipments to minimize steam consumption and loss.

**The following are the awards received by the company**

1983-1984	S. V. Parthasarathy Memorial Award for Outstanding Performance in Sugar Industry	SISSTA
1987-88	Commendation Certificate -- All India Level - For achieving Higher Standards of Technical Efficiency	
1987-88	National Efficiency Award -For High Technical Efficiency in the field of Lower Total Losses	Director of Sugar, Ministry of Food, New Delhi
1987-88	SISMA Award for Achieving Higher Percentage of Reduced Mill Extraction.	SISMA
1988-89	SISMA Award for Achieving Higher Percentage of Reduced Mill Extraction.	SISMA
1988-89	National Efficiency Award - For achieving Higher Standards of Technical Efficiency, Highest Mill Efficiency and Lowest Sugar Losses	National
1989-90	National Efficiency Award - For Achieving Lowest Total Sugar Losses and Highest Technical Efficiency	National
1992-93	Special Award - For manufacture of Superior Quality Export Sugar	Special Award
2000-2001	Sugar Export Award - For exporting highest quantity of sugar among all the factories in India	National Federation of Co-op. Sugar Factories Ltd., New Delhi
2000-2001	S. V. Parthasarathy Memorial Award - For Best Cane Development	SISSTA
2007-2008	Best Sugar Factory Award for Highest Cane Crushing	SISSTA
2009-2010	First prize for Best Co-generation Award for Tamilnadu Region	SISSTA

## CAPITAL STRUCTURE:

- Authorized Capital Rs.50Crores
- Issued Capital 34.95 Crores
- Number of Shares 34833635
- Face value Rs.10
- Capital Rs.34.83 Crores

## MANAGEMENT

### CHAIRMAN

- Dr.N.Mahalingam

### VICE CHAIRMAN AND MANAGING DIRECTOR

- Dr.N.Manickam

### REGISTERED OFFICE

- Erode,Tamil Nadu,India

### CORPORATE OFFICE

- Coimbatore,Tamil Nadu, India.

### PRODUCTS:

- Sugar
- Power
- Industrial alcohol
- Soya products
- Sugar by products
- Bio earth

#### COMPETITIVE STRENGTH OF THE COMPANY

- The company retains the sales turnover every year.
- In terms of safety and security it occupies the second first place.

#### 1.4 STATEMENT OF PROBLEM

- Value Creation is a primary function of a corporate organization. An investor evaluates the organization's performance based on the economic value created by the corporate for him. Also, the solvency of an organization is essential to the level that it has sufficient assets to meet out its liabilities.
- The researcher has taken up the above two issues, viz., Assessing the Value Creation and Solvency position of Sakthi Sugars Limited as the problem for study.

#### 1.5 OBJECTIVES OF THE STUDY:

##### PRIMARY

- To study the extent of economic value created by Sakthi Sugars Limited

##### SECONDARY

- To analyse the growth and consistency of the firm in the share holders value creation process.
- To study the solvency position of the firm.

#### 1.6 SCOPE OF STUDY:

The scope of the study is confined to the five financial years of Sakthi Sugars Limited, Coimbatore. The study would focus on providing financial insights to the investors in terms of Economic Value Added to the equity share holders and the long-term Solvency position of the company.

**CHAPTER 2**  
**LITERATURE REVIEW**

## 2.LITERATURE REVIEW

*Easton,P.Harris,T.and Ohlson,J(1992)*<sup>1</sup> observed that Economic Value Added(EVA) is an increasingly popular corporate performance measure one that is often used by companies not only for evaluating performance,but also as a basis for determining incentive pay.Like other performance measures,EVA attempts to cope with the basic tension that exists between the need to come up with a performance measure that is highly co-related with shareholders wealth,but at the same time somewhat less subject to random fluctuations in stock prices.This difficult tension to resolve and it explains the relatively low correlation of all accounting based performance measures with stock returns atleast on a year to year basis

*Stewart(III), and Bennett,G.(1994)*<sup>2</sup> “EVA is a powerful new management tool that has gained growing international acceptance as the standard of Corporate governance.It serves as the centerpiece of a completely integrated frame-work of financial management and incentive compensation.”The experience of a long list of adopting companies throughout the world strongly supports the notion that EVA system by providing integrated decision making framework,can refocus energies and redirected resources to create sustainable value for companies customers,employees,Shareholders and for management

*Ray,Russ(2001)*<sup>3</sup> Observed that the missing link between EVA and improved financials is actually productivity.EVA can be a powerful tool.When properly applied,it allows a firm to

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<sup>1</sup>*Easton,P.Harris,T.and Ohlson,J(1992)*, “Aggregate Earnings can explain most security returns”,*Journal of Accounting and Economic*,June-September.

<sup>2</sup>*Stewart(III), and Bennett,G.(1994)*<sup>2</sup> “EVA:Fact and Fantasy”, *journal of Applied Corporate Finance*, Summer, Vol.7,No.2,1994,pp.71-84.

<sup>3</sup>*Ray,Russ(2001)* “Economic Value Added:Theory Evidence,A Missing Link”,*Review of Business*,Vol.22,No 2,Summer 2001

ascertain where its creating value and where its not.The marginal increase in value added can be attained by either decreasing the firms cost of capital or by increasing its productivity.

*Debdas Rakshit(2002)*<sup>4</sup> Faculty Member,department of Commerce, The EVA based performance measurement system is the basis on which the company should take appropriate decisions related to the choice of strategy,capital allocation,merger&acquisitions,divesting business and global setting.They are in a position to guide a company in its restructuring mission for value creation.So a management Accountant is expected to successfully transform traditional management system into value based management system

*Novak, Frank S.(03/24/97)*<sup>5</sup> According to him “EVA views a company or one of its operations through the eyes of an owner.it measures the amount of capital entrusted to management to invest and then adjusts accounting statements for true economic results.Conventional accounting statements reflect nonrecurring gains,which give the appearance of increasing profit and capital.Netprofits under generally accepted accounting principles may not truly reflect the economic results of ongoing poerations.For instance a company investing heavily in its future may be expensing items truly are economic investments.”

*Pettit,Justin.*<sup>6</sup> Focuses on Corporate governance systems in relation to Economic Value Added(EVA)Shortcomings which could infiltrate the system.Definition of EVA implications of EVA Information on the use of EVA in business organizations,How economic value Added facilities integrated Corporate Governance systems.

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<sup>4</sup> *Debdas Rakshit(2002)* “EVA based performance measurement: a case study of Dabur India Limited” *Vidyasagar University Journal of Commerce, Vol 11, March 2006.*

<sup>5</sup> *Novak, Frank S.(03/24/97)* “EVA helps business owners to keep score”, *Crain’sCleveland Business, Vol.18 issue 12,p36,2/5p,1bw*

<sup>6</sup> *Pettit,Justin.*<sup>6</sup> “Governing for Value”, *Ivey Business Journal;Autumn98, Vol.63Issue1,pg49,5p*

*Fiordelsi, Franco*<sup>7</sup> This paper advances the studies of C.G Pango M.S, 2003. Do bankers sacrifice value to build empires? Managerial incentives, industry consolidation and financial performance. *Journal of Banking and Finance* 27, 417-447 by developing a new measure of bank performance which we refer to as share holder value efficiency. Shareholder value efficiency is found to be the most important factor explaining value creation in European banking, whereas cost and profit efficiency only have a marginal influence.

*Kyriazis, Dimitris Anastassis, Christos*,<sup>8</sup> This study investigates the relative explanatory power of EVA model with respect to stock returns and firms market value, compared to established accounting variables. EVA does not appear to have a stronger correlation with firms Market Value Added than the other variables suggesting that EVA though useful as a performance evaluation tool, need not necessarily be more correlated with shareholders value than established accounting variables.

Griffith, John M.<sup>9</sup> The article discusses the study that determines whether market Value Added Economic Value Added or future growth reliance should be the basis to make investment decisions. This is a database for analysis from Stern Stewart and Co. used by portfolio managers, investors and corporate managers to forecast stock performance. Investors using these determinants in forecasting would experience significant losses which means that these are poor indicators but maximize Shareholders wealth.

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<sup>7</sup> *Fiordelsi, Franco* "Shareholder value efficiency in European banking" *Journal of Banking & Finance*; Jul 2007, Vol 31 Issue 7, p2151-2171, 21p.

<sup>8</sup> *Kyriazis, Dimitris Anastassis* "The Validity of Economic Value Added Approach an Empirical Application." *European Financial Management*; Jan 2007, Vol. 13 Issue 1, p71-100, 30p.

<sup>9</sup> *Griffith, John M.* "EVA and Stock Performance." *Journal of Investin*; Summer 2006, Vol. 15 Issue 2, p75-78, 4p.



*Sinkey, Terza, Dince*<sup>10</sup> This paper applies a successful bankruptcy prediction model for nonfinancial corporations to the problem of predicting bank failures. The purpose is to test the cross-industry validity of the so-called zeta model. Since this model captures the key dimensions of ratio analysis, it should be an appropriate mechanism for modeling the failure of any corporation. The test sample consists of commercial banks that failed in the United States during the early 1980s. Although this version of the zeta model is successful in identifying bank failure in about 3 out of 4 cases, it is not as accurate as the original zeta model. Thus, the findings provide only limited support for the cross-industry validity of the model as applied to commercial banks. The inability of bank accounting data to reflect market values, the presence of criminal misconduct as a major contributing factor in bank failures, and the process by which banks are declared insolvent may explain why bank failure prediction models have not been as accurate as the nonbank ones.

*T.J. Stan Brignall*<sup>11</sup> Some twenty years after the publication of Johnson and Kaplan's *Relevance Lost*, with its influential criticisms of management accounting research and practice, this paper explores the place of financial performance measurement within current best practice in organisational performance management.

*Mohamad Iwan*<sup>12</sup> This research examines financial ratios that distinguish between bankrupt and non-bankrupt companies and make use of those distinguishing ratios to build a one-year prior to bankruptcy prediction model. This research also calculates how many times the type I error is more costly compared to the type II error. The costs of type I and type II errors (cost of misclassification errors) in conjunction to the calculation of prior probabilities of bankruptcy and non-bankruptcy are used in the calculation of the ZETAc optimal cut-off score. The bankruptcy prediction result using ZETAc optimal cut-off score is compared to the bankruptcy prediction result using a cut-off score which does not consider neither cost of classification errors nor prior probabilities

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<sup>10</sup> *Sinkey, Terza, Dince* "A zeta analysis of failed commercial banks". University of Nebraska-Lincoln

<sup>11</sup> *T.J. Stan Brignall* "A financial perspective on performance management" *The Irish Accounting Review* (2007), Vol. 14, No. 1, 1529

<sup>12</sup> *Mohamad Iwan* "bankruptcy prediction model with zeta optimal cut-off score to correct type I errors", *Gadjah Mada International Journal of Business* January-April 2005, Vol. 7, No. 1, pp. 41—68

*Sharma, Anil K*<sup>13</sup> This paper aims to present a narrative literature review of 112 papers published on the EVA from 1994 to 2008. It provides a classification scheme, identifies the gaps in existing literature and suggests the direction for future research. Studies are classified and presented on the basis of the time period, issues covered, distribution of literature in various sources, methodology used, country-wise publications and contributions made by the researchers on the concept. The studies conducted in the developed countries have largely been found to be supporting EVA though there are certain studies in these countries too that consider conventional measures as better tools of corporate performance reporting. However, in developing economies less numbers of studies are available supporting the empirical validity of the concept as a corporate performance measurement tool. The concept of EVA has gained significant attention in the advanced economies, but implementation issues and its validity is under debate all over the world. The paper presents a comprehensive literature review and a critical analysis to move towards the advances in EVA.

<sup>14</sup> *Sergei Vasilievich Cheremushkin*, The paper reveals some substantial defects crept in the conventional method of calculating EVA's essential component – Capital Charge. Presently the Capital Charge is derived as combination of market capital structure based WACC and accounting based Invested Capital, which is likewise joining apples with oranges. This cross-breeding deflects EVA from the Residual Income and the concept of Economic Profit, formulated by Alfred Marshall. The paper proves that the correct way to calculate Capital Charge is to use accounting WACC embracing relevant adjustments made to the Invested Capital. Properly calculated EVA adequately reflects firm's performance compared with initial opportunity costs existed when the capital was contributed. However shareholders' dollar amount opportunity costs at the moment of performance evaluation depend on the market value of capital and market WACC. The paper also establishes the Residual Market Profit that is based on Market Profit and Market Capital Charge.

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<sup>13</sup> *Sharma, Anil K*, Economic Value Added (EVA) - Literature Review and Relevant Issues  
International Journal of Economics and Finance

<sup>14</sup> *Sergei Vasilievich Cheremushkin*, What's Wrong with the Economic Value Added?,  
<http://ssrn.com/abstract=1120917>

**CHAPTER 3**  
**RESEARCH METHODOLOGY**

### 3. RESEARCH METHODOLOGY

#### 3.1 TYPE OF THE STUDY:

- Analytical Research

Under this research, the researcher goes with the specific topic about which he/she have have not made any kind of conclusions termed as question. The researcher surveys the information and views already out there both before and during research. At the end of the research the researcher will be able to contribute his own thoughts to the discussion by drawing some conclusions about the topic chosen, hence this study comes under analytical research.

#### 3.2 METHOD OF DATA COLLECTION:

- Secondary data

#### 3.3 PERIOD OF STUDY:

- Five financial years between 2006 -2011

#### 3.4 TOOLS FOR ANALYSIS:

- EVA.
- Solvency model - Zeta Score model.

### 3.5 VARIABLES FOR STUDY:

- Net Operating Profit After Tax(NOPAT)
- Capital
- Cost of equity
- Cost of debt
- Current ratio
- Interest coverage
- Average market value of stock
- Retained earnings
- Total assets

### 3.6 LIMITATIONS:

In order to do the research articulately utmost care has been taken but still it can have certain limitations

- The analysis is made using secondary data only.
- The period of study only for five years(2006-2011)
- This study is applicable only to Sakthi Sugars Ltd, Coimbatore.

**CHAPTER 4**  
**ANALYSIS AND INTERPRETATION**

#### 4. DATA ANALYSIS AND INTERPRETATION

##### 4.1 CALCULATION OF COST OF DEBT:

###### FORMULA

$$K_d = I(1 - T)$$

Here,  $K_d$  represents Cost of debt,

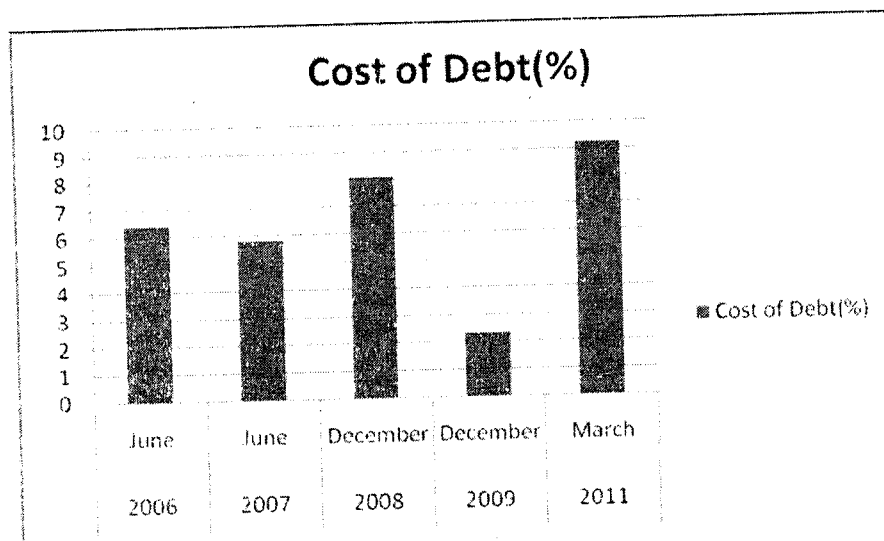
$I$  = interest

$T$  = effective tax rate

TABLE 4.1 COST OF DEBT

Year	Month	Cost of debt(%)
2006	June	6.4
2007	June	5.82
2008	December	8.09
2009	December	2.32
2011	March	9.25

CHART 4.1 COST OF DEBT



## INTERPRETATION:

From the above table and chart it is observed that the firm is not stable and has considerable changes for the five year period. The cost of debt has been sharply increased from 2.32% of december 2009 to 9.25% of march 2011.

- The financial accounts were closed as on 30<sup>th</sup> june 2006 and 30<sup>th</sup> june 2007. The cost of debt has decreased to 5.82% from 6.4% as on 30<sup>th</sup> june 2006.
- As per the decision taken by the Board, the financial accounts were closed on 31<sup>st</sup> december 2008 for a period of 18 months. The cost of debt has increased to 8.09%.
- During 2009 the cost of debt has sharply declined to 2.32%.
- Again as per the decision of the board the financial accounting year has been changed and the books were closed on 31<sup>st</sup> march 2011 for a period of 15 months.



#### INFERENCE:

The above table 4.1 infers about the cost of debt position of the company. The cost of debt is relatively high during the study period. However, the company has reduced its debt commitments in the year 2009, leading a debt rate of 2.32%. The debt rate has again peaked in the year 2011 with 9.25% with further debt financing. The cost of debt is on the higher side.

#### 4.2 CALCULATION OF COST OF EQUITY

##### FORMULA:

$$K_e = (D_1/P_0) * g$$

$K_e$  = Cost of equity

$D_1$  = Expected Dividend paid per share in the next year,

$$D_1 = D_0(1+g),$$

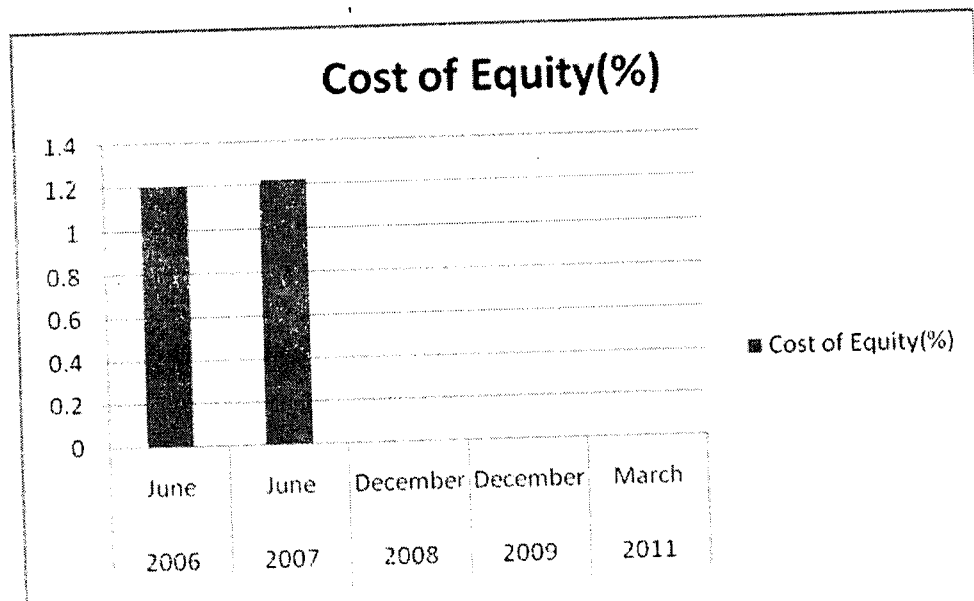
$P_0$  = (Equity share capital + Reserves and Surplus) / number of paid up shares,

$g$  = Dividend growth rate

TABLE 4.2 COST OF EQUITY

Year	Month	Cost of equity(%)
2006	June	1.20
2007	June	1.22
2008	December	0
2009	December	0
2011	March	0

CHART 4.2 COST OF EQUITY



#### INTERPRETATION:

The above table shows 4.2 shows that, in the year 2006 the cost of equity is 1.20% and there is an increase in 0.02% in the year 2007. The subsequent years shows the cost of equity to be nil.

- The company has paid Dividend during the year 2006 and 2007 amounting to Rs.4.71 crores per year. The Reserves were Rs.346.06crores and Rs.356.36 crores respectively.
- During the year 2008 the Revaluation Reserve was Rs.521.68crores and the general Reserves were Rs.87.81crores. The company incurred loss and did not pay any dividend.
- The company earned a net profit of Rs.103.49crores as on 31<sup>st</sup> December 2009 but has not paid any dividend. The Revaluation Reserve was Rs.498.42crores and the General Reserves was Rs.256.99crores.
- The company did not pay any dividend for the accounting period ending 31<sup>st</sup> March 2011 as it incurred a loss of Rs.99.86crores. The Reserves as on that date was Rs.663.81crores.

#### INFERENCE:

The above table 4.2 infers that the cost of equity has reduced to dismal levels. Due to losses posted during the period 2008-11, the dividends were not declared and endured a negative cost of equity.

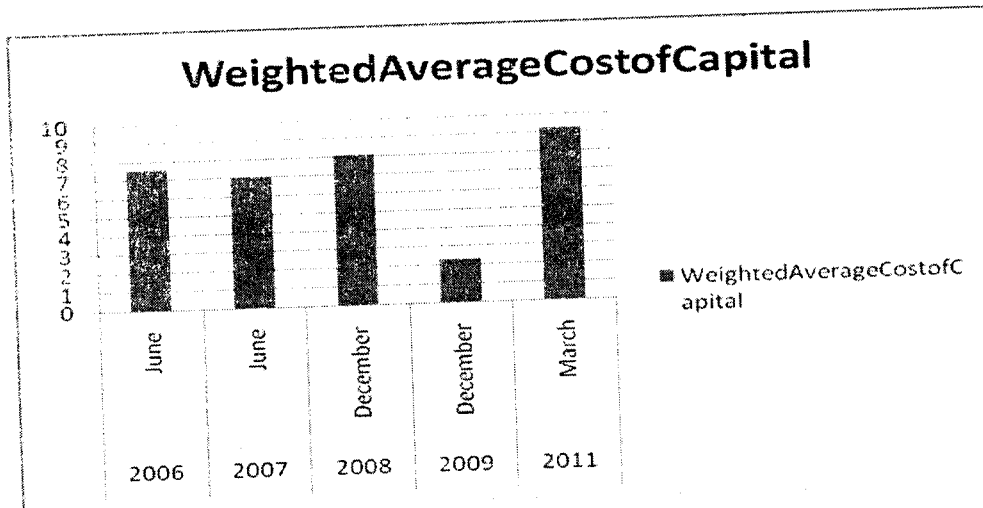
#### 4.3 CALCULATION OF WEIGHTED AVERAGE COST OF CAPITAL(WACC):

According to The Chartered Institute of Management Accounts, London (CIMA) terminology the WACC "as the average cost of company's finance, equity, debentures, bank loans weighted according to the proportion each element bears to the total pool of capital, weighting is usually based on market valuations, current yields and cost after tax. But for EVA calculation purpose the WACC is computed by applying book value weights to cost of debt, cost of equity and cost of preference shares (if any)

TABLE 4.3 WEIGHTED AVERAGE COST OF CAPITAL

Year	Month	Weighted Average Cost of Capital (%)
2006	June	7.6
2007	June	7.04
2008	December	8.09
2009	December	2.32
2011	March	9.25

CHART 4.3 WEIGHTED AVERAGE COST OF CAPITAL



## INTERPRETATION

- For the year ending June 2006 the WACC was 7.6% .Dividend amounting to Rs.4.71 Crores was paid for the year.Interst of Rs.85.68 Crores paid for a total debt of Rs.883.40Crores as on 30<sup>th</sup> June 2006.
- For the year 2007 also the same amount of dividend (i.e Rs.4.71Crores) was paid and the WACC was 7.04% with negligible difference.Interest paid has increased to Rs101.99 Crores for a total debt of Rs.1156.22Crores as on 30<sup>th</sup> June 2007.
- For the period ending December 2008 the WACC was 8.09%. The company has not declared any dividend as it incurred a loss of Rs.79.55 Crores.The interest paid rose to Rs.162.62 Crores for a total debt of Rs.1326.22 Crores as on that date.
- The WACC declined sharply to 2.32% though the equity share capital increased to Rs.34.83 Crores for the year ending December 2009. The Interest paid was also very much low that is Rs.47.50 Crores for the year,whereas the total debt was Rs.1353.65 Crores. This decline is due to the Interest paid was very less. Though the company earned profit dividend was not declared. Hence the WACC is very low.

- For the period ending March 2011 the WACC was 9.25%. The equity share capital has increased to Rs.36.81 Crores. The Interest paid for the year suddenly rose to Rs.181.65 Crores for a total debt of Rs. 1295.50 Crores as on 31<sup>st</sup> March 2011.

#### INFERENCE

Despite there is a consistent decrease in WACC, for the period ending March 2011 the WACC was high due to increase in interest paid and the period taken into account is 15 months. Since the company incurred loss dividend was not paid.

The WACC has increased due to increase in Total Debt and Interest payment thereon. Since Dividend is not paid since 2008 the cost of equity is almost Nil. The company may consider for a Debt which costs less.

#### 4.4 CALCULATION OF ECONOMIC VALUE ADDED

##### FORMULA:

$$EVA = NOPAT - (\text{Capital} * \text{Weighted Average Cost of Capital}),$$

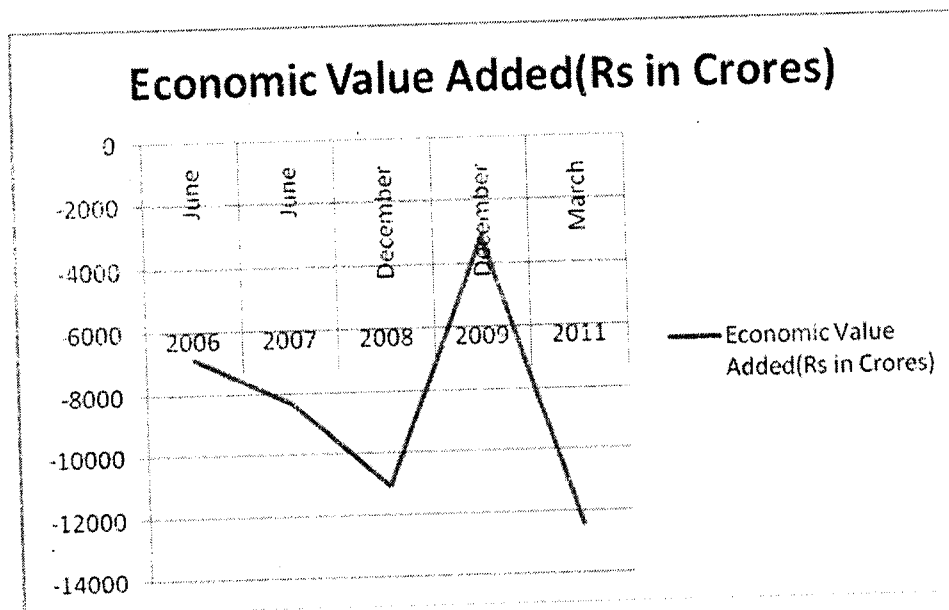
EVA is Economic Value Added,

NOPAT is Net Operating Profit After Tax

TABLE 4.4 ECONOMIC VALUE ADDED

Year	Month	Economic Value Added (Rs in Crores)
2006	June	-6857.2
2007	June	-8326.3
2008	December	-11057.7
2009	December	-3117.78
2011	March	-12423.7

CHART 4.4 ECONOMIC VALUE ADDED(Rs.in Crores)



### INTERPRETATION:

The above table 4.4 and the chart 4.3 depicts that EVA shows a negative trend.

- EVA for the year 2006 is negative. The company earned profit but after providing for the cost of capital the EVA became negative and is Rs.6857.2 Crores. The company has earned less profit which is not sufficient to provide for the cost of Capital employed.
- During the year 2007 also though the company earned profit it was less than of previous year's and unable to meet out the cost of capital employed. The total debt has increased considerably to Rs.1156.22 crores to that of Rs.883.40 Crores for the previous year.
- For the year ending December 2008 the negative EVA has gone upto Rs.11057.78Crores since the company incurred loss.
- During the year ending December 2009 the EVA came down since the company could earn profit. However, the EVA is negative. The company has increased its equity share capital to Rs.34.83 Crores.
- The EVA has risen negatively during the period ending March 2011. This may be due to the rise in Equity share capital to Rs.36.81Crores.

### INFERENCE:

The above table 4.4 chart 4.3 infer that the Economic Value Added by the company. The EVA has consistently declined to the negative zone. There were signs of recovery in the year 2009, however, due to high cost of debt, the EVA has eroded in value.



## 4.5 SOLVENCY POSITION

## Z-SCORE MODEL

## FORMULA

$$Z=0.012X1+0.014X2+0.033X3+0.006X4+0.010X5$$

Z= discriminant function score of a firm

X1=Networking Capital/Total Assets(%)

X2=Retained Earnings/Total Assets((%)

X3=EBIT/Total Assets(%)

X4=Market Value of Total Equity/ Book Value of Debt(%)

X5=Sales/Total Asset(times)

TABLE 4.5 Z-SCORE CONSOLIDATED

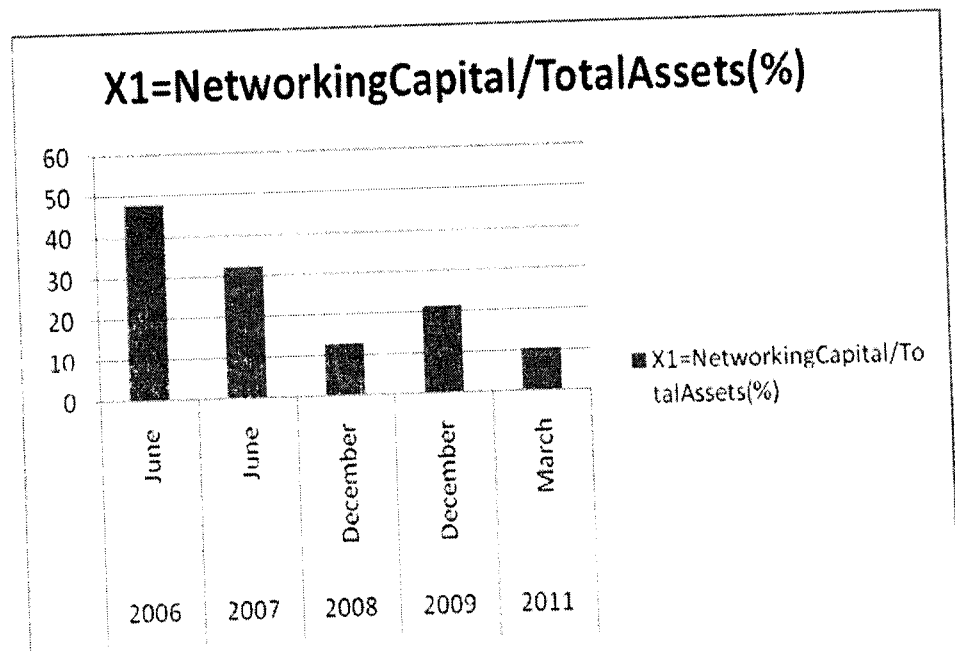
Year	Month	X1	X2	X3	X4	X5
2006	June	47.7	2.62	14.78	67.12	0.7
2007	June	32.26	2.85	9.04	25.51	0.5
2008	December	12.83	0	4.97	11.83	0.6
2009	December	21.49	2.65	9.24	24.96	0.65
2011	March	10.6	0	2.69	10.05	1.08

**X1=Networking Capital/Total Assets(%)**

TABLE 4.6 NETWORKING CAPITAL/TOTAL ASSETS

Year	Month	X1=Networking Capital/Total Assets(%)
2006	June	47.7
2007	June	32.26
2008	December	12.83
2009	December	21.49
2011	March	10.6

CHART 4.5 NETWORKING CAPITAL/TOTAL ASSETS



## INTERPRETATION

### NETWORKING CAPITAL/TOTAL ASSETS

- The ratio for the year ending June 2006 is 47.7% Nearly half the value of Total Assets is utilised as Working capital.
- During the year 2007 the ratio has come down to 32.26%
- The ratio has considerably reduced to 12.83% during the year 2008.
- Again the ration has gone upto 21.49% to meet out the operating expenses during 2009.
- The ratio has very much fallen down to 10.6%

## INFERENCE

### NETWORKING CAPITAL/TOTAL ASSETS

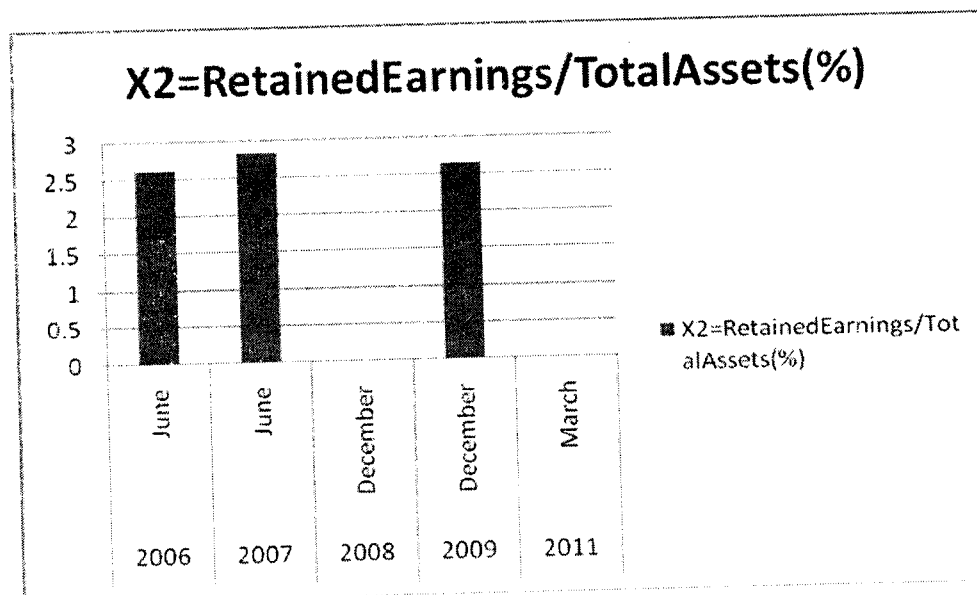
The ratio almost doubly increased for the year ending December 2009. The Company had increased its production level and to meet out the expenses the company had to increase its working capital. The ratio was very much low for the year ending March 2011 which shows that the company managed the funds effectively and functioned well. The NetWorking Capital to Total Assets Ratio has reduced and the working capital insufficiency shows that the company is in need of short-term funds.

**X2=RetainedEarnings/TotalAssets(%)**

TABLE 4.7 RETAINED EARNINGS/TOTAL ASSETS

Year	Month	X2=RetainedEarnings/TotalAssets(%)
2006	June	2.62
2007	June	2.85
2008	December	0
2009	December	2.65
2011	March	0

CHART 4.6 RETAINED EARNINGS/TOTAL ASSETS



## INTERPRETATION

### RETAINED EARNINGS/TOTAL ASSETS((%) :

- The company earned a profit of Rs.95.28Crores for year 2006 and paid Dividend amounting to Rs.4.71 crores and was able to have the ratio of Retained Earnings to Total Assets at 2.62%.
- During the year 2007 the company was able to earn lesser profit amounting to Rs.30.18 crores but paid the same dividend this year also. And the Retained Earnings to Total Assets ratio stood at 2.85%
- Since the company incurred loss for the period ending December 2008 there was no Retained Earnings.
- The company managed to attain a profit of Rs.103.49Crores for the year ending December 2009. But no Dividend was declared and hence the Retained Earnings to Total Assets was 2.65% The Total Assets increased to Rs.2159.63 Crores as on 31<sup>st</sup> December 2009.
- The Company could not earn profit for the period ending March 2011 and there was no Retained Earnings.

### INFERENCE

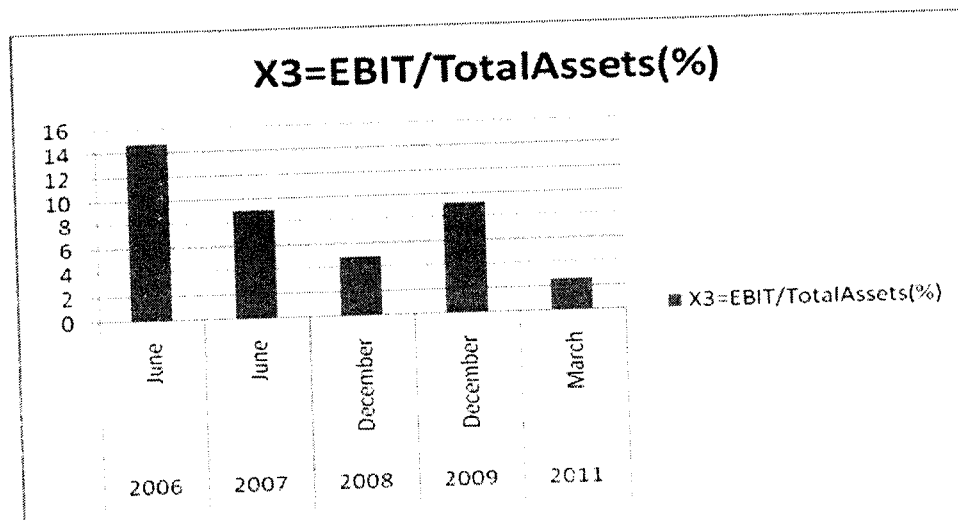
Retained Earnings to Total assets ratio was almost same when the company earned profit. But due to heavy expenditure during the years, the Retained Earnings were nil.

$X3 = \text{EBIT} / \text{TotalAssets}(\%)$

TABLE 4.8 EBIT/TOTALASSETS

Year	Month	$X3 = \text{EBIT} / \text{TotalAssets}(\%)$
2006	June	14.78
2007	June	9.04
2008	December	4.97
2009	December	9.24
2011	March	2.69

CHART 4.7 EBIT/TOTALASSETS



## INTERPRETATION

### EBIT/TOTAL ASSETS(%):

EBIT to Total Assets ratio was 14.78% for the year 2006. This shows that the company was able to make profit and functioned well.

- For the year 2007 the ratio came down to 9.04% with a reduced profit. But the Total Assets of the company has increased to Rs.1559.61Crores. to that Rs.1288.48 Crores for the year ending June 2006
- The Ratio came down again to 4.97% for the period ending December 2008 though the sales increased to Rs.1196.88Crores to that of Rs.771.37Crores during the previous year. The total expenses had increased to Rs.938.55 crores to that of Rs.654.68 during 2007.
- The Ratio increased to 9.24% with increase in profit. This shows that the company does well if effectively managed.
- For the period ending March 2011 the ratio came down to 2.69%. This is because the total expenses for the period has gone up.

## INFERENCE

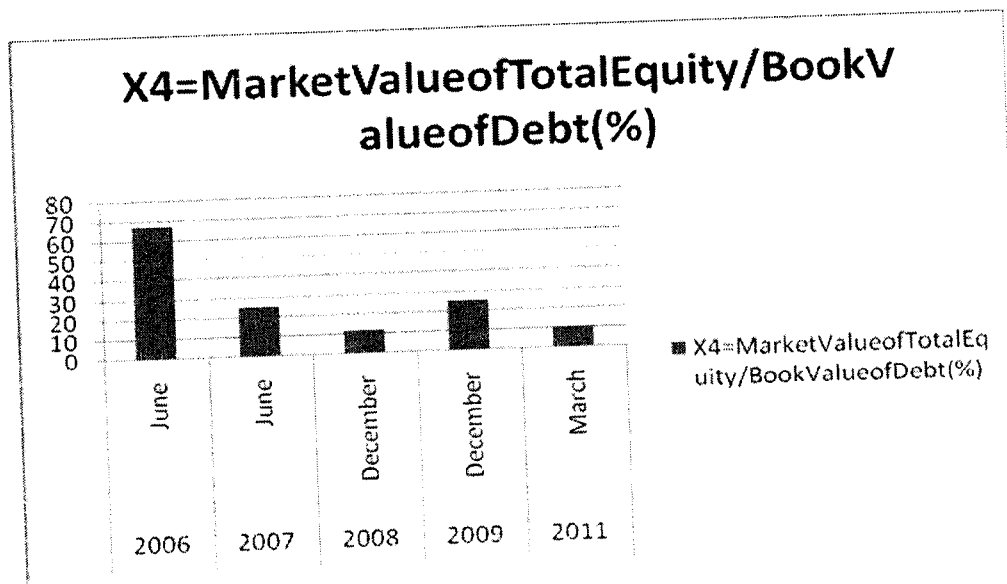
Earnings before Interest and Tax to Total Assets Ratio has reduced but the company has earned operating profit which is not sufficient to meet out the payment of Interest etc.

$X4 = \text{Market Value of Total Equity} / \text{Book Value of Debt} (\%)$

TABLE 4.9 MARKET VALUE OF TOTAL EQUITY / BOOK VALUE OF DEBT

Year	Month	$X4 = \text{Market Value of Total Equity} / \text{Book Value of Debt} (\%)$
2006	June	67.12
2007	June	25.51
2008	December	11.83
2009	December	24.96
2011	March	10.05

CHART 4.8 MARKET VALUE OF TOTAL EQUITY / BOOK VALUE OF DEBT





## INTERPRETATION

### MARKET VALUE OF TOTAL EQUITY/ BOOK VALUE OF DEBT(%):

- The Ratio for the year ending June 2006 was as high as 67.12% since the market capitalization of the equity was Rs.180.35 crores as on that Date. The Book value of Debt was Rs. 883.40 Crore.
- The ratio came down to 25.51% for June 2007 since the market capitalization of the share fallen down to Rs.81/- crores and also the Debt increased to Rs.1156.22 Crore.
- For the period ending December 2008 the ratio still fell down to 11.83% and the market capitalization of the share was Rs.46.50 and the debt rose to Rs.1326.22 Crore.
- The ratio was 24.96% as on 31<sup>st</sup> December 2009 with an increase in market value of the share to Rs.89.25 crore capitalization. And there was increase in Equity capital to the tune of Rs. 3.46Crore.
- For the period ending March 2011 the ratio again came down to 10.05% and the market value of the share came down to Rs.39.40 crore capitalization. The Book value of Debt was Rs.1295.50 Crore.

## INFERENCE

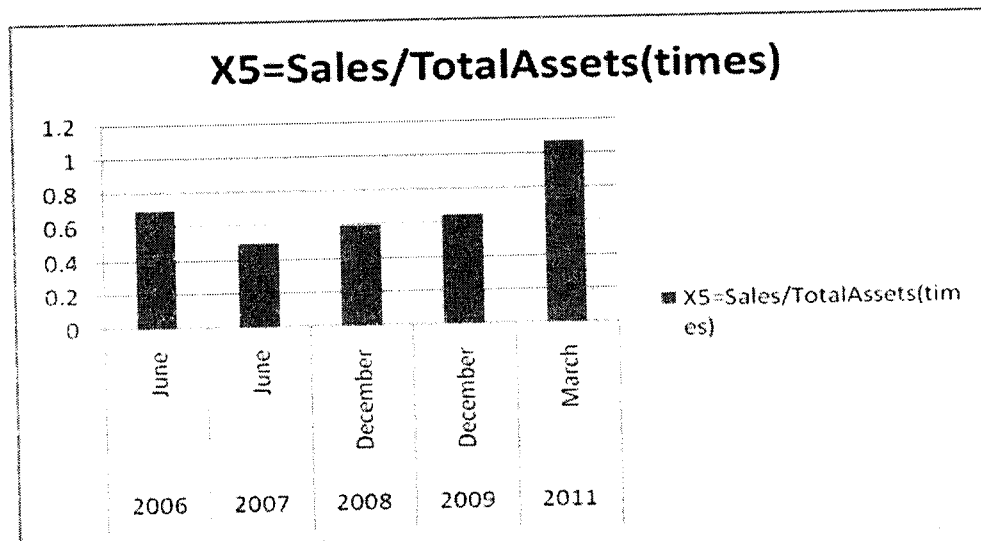
Market value of Total Equity was high in 2006 compared to Total Debt of the Company. As the Market price of the share has come down, the value of Total Equity has also reduced. The Total Debt has increased and this made the ratio to come down. The company may redeem a part of their debt component.

$X5 = \text{Sales} / \text{Total Assets}$

TABLE 4.10 SALES/TOTALASSETS

Year	Month	$X5 = \text{Sales} / \text{Total Assets} (\text{times})$
2006	June	0.7
2007	June	0.5
2008	December	0.6
2009	December	0.65
2011	March	1.08

CHART 4.9 SALES/TOTALASSETS



## INTERPRETATION

### SALES/TOTAL ASSET(TIMES):

- The Sales to Total Assets ratio was 0.7 for the year ending June 2006. The ratio reduced to 0.5 during the year 2007 since sales reduced than that of previous years'.
- The sales level increased for the period ending December 2008 and the ratio came to 0.6. The Total Assets also increased to Rs.1982.73Crores to that of Rs.1559.61 crores for the last year.
- The ratio slightly rose and was 0.65 for December 2009. There was increase in Sales and also in Total Assets and hence the difference in ratio was negligible.
- The ratio was high for the period ending March 2011 due to increase in Sales and slight decrease in Total Assets. The ratio was 1.08 which is high compared to the previous years.

### INFERENCE

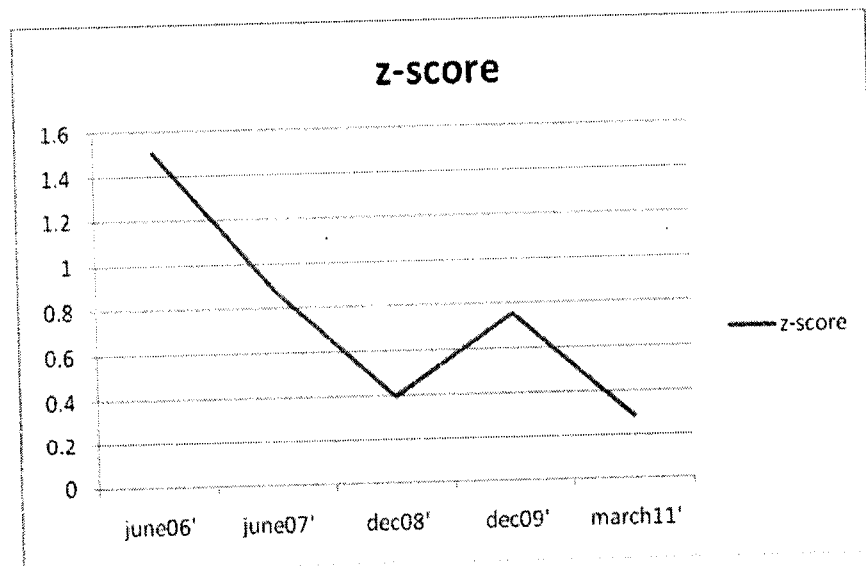
Sales is on the increase over the study period but simultaneously the Total Assets also have gone up. Hence there is not much variation in the ratio. But for the period ending March 2011 the sales has gone up and could reach a ratio of 1.08.

## Z-SCORE

TABLE 4.11 Z-SCORE

Year	Month	Z-Score
2006	June	1.507
2007	June	0.883
2008	December	0.395
2009	December	0.756
2011	March	0.287

CHART 4.10 Z-SCORE



#### INTERPRETATION:

The above table 4.6 and chart 4.3 shows that for all the period of five years the Z-Score is less than 2.675. Though the company could consistently achieve increase in sales from Rs.901.77 Crores during June 2006 to Rs.2163.95 Crores for the period ending March 2011 it could not earn profit as the total expenses have gone up from Rs.653.76 Crores to Rs.2015.42 Crores. The sales has increased 2.4 times whereas the expenses has increased 3.08 times. This is due to increase in the price of Raw Materials, power and fuel cost and also the manufacturing expenses.

The total assets of the company has increased from Rs.1288.48 Crores to Rs.1996.12 Crores during the study period of five years. The total debt of the company has also increased from Rs.883.40 Crores to Rs.1295.50 Crores.

The company's Operating Profit Margin has reduced sharply during the study period. Expenses as composition of total sales has also increased. The working capital of the company has come down and not sufficient for the operational activities.

#### INFERENCE:

The Zeta score or Z-score model indicates the corporate solvency of a firm. A score of 2.675 indicates the benchmark. A firm scoring above the benchmark is considered financially solvent and sound. The Z-score less than the benchmark indicates that the firm is financially unstable, not solvent and may lead to bankruptcy.

The company has posted Z-scores of below the 2.675 benchmark during the study period. The scores are way below the benchmark and the trend leads to Zero mark, which causes a serious concern on the corporate solvency.

**CHAPTER 5**  
**FINDINGS,SUGGESTIONS AND CONCLUSION**

## 5. FINDINGS, SUGGESTIONS AND CONCLUSION

### 5.1 FINDINGS:

- The cost of debt is relatively high during the study period. However, the company has reduced its debt commitments in the year 2009, leading a debt rate of 2.32%. The debt rate has again peaked in the year 2011 with 9.25% with further debt financing. The cost of debt is on the higher side.
- Due to losses posted during the period 2008-11, the dividends were not declared and endured a negative cost of equity.
- Despite there is a consistent decrease in WACC, for the period ending March 2011 the WACC was high due to increase in interest paid and the period taken into account is 15 months. Since the company incurred loss dividend was not paid.
- The WACC has increased due to increase in Total Debt and Interest payment thereon. Since Dividend is not paid since 2008 the cost of equity is almost Nil. The company may consider for a Debt which costs less.
- The EVA has consistently declined to the negative zone. There were signs of recovery in the year 2009, however, due to high cost of debt, the EVA has eroded in value.
- The ratio of Networking Capital to Total assets almost doubly increased for the year ending December 2009. The Company had increased its production level and to meet out the expenses the company had to increase its working capital. The ratio was very much low for the year ending March 2011 which shows that the company managed the funds effectively and functioned well. The NetWorking Capital to Total Assets Ratio has reduced and the working capital insufficiency shows that the company is in need of Funds.
- Retained Earnings to Total assets ratio was almost same when the company earned profit. But due to heavy expenditure when it incurred loss the Retained Earnings was Nil.

- Earnings before Interest and Tax to Total Assets Ratio has reduced but the company has earned operating profit which is not sufficient to meet out the payment of Interest etc.
- Market value of Total Equity was high in 2006 compared to Total Debt of the Company. As the Market price of the share has come down, the value of Total Equity has also reduced. The Total Debt has increased and this made the ratio to come down. The company may redeem a part of their debt component.
- Sales is on the increase over the study period but simultaneously the Total Assets also have gone up. Hence there is not much variation in the ratio. But for the period ending March 2011 the sales has gone up and could reach a ratio of 1.08.
- The Zeta score or Z-score model indicates the corporate solvency of a firm. A score of 2.675 indicates the benchmark. A firm scoring above the benchmark is considered financially solvent and sound. The Z-score less than the benchmark indicates that the firm is financially unstable, not solvent and may lead to bankruptcy.
- The company has posted Z-scores of below the 2.675 benchmark during the study period. The scores are way below the benchmark and the trend leads to Zero mark, which causes a serious concern on the corporate solvency.



## 5.2 SUGGESTIONS:

- The company has to reduce its overheads since the Total expenses have increased very much. The manufacturing expenses have also gone up.
- Though there is increase in sales, the company could not achieve profit since interest paid and also other expenses are more compared to that of previous years. Hence the company has to concentrate on these expenditures and try to reduce. Debt Restructuring may be considered as an option.
- The financial statements shall be prepared in a 12-month accounting year basis. Presently, the period is erratic. This makes comparative studies of financial accounts and decision making difficult.
- Since the increasing debt causes hike in interest, the operating profit can be increased by improving the operational efficiency.
- The company can redeem its long term loans to reduce the burden of Interest. Funds are to be managed effectively.
- The Funds are diverted/invested in Subsidiary companies and this affects the performance of the company. Hence Investments should be taken care of.

### 5.3 CONCLUSION

The study deals with the valuation of Economic Value Added with reference to Sakthi Sugars Ltd. The analytical study is conducted with five years financial data. The study shows that company is incurring losses, but it can earn profit if funds are effectively managed and cost of production is controlled by reducing the avoidable expenses. The Economic Value Added by Sakthi Sugars Limited posts negative value, since the economic value has been eroded due to consistent losses. The solvency position of the company also warrants serious attention, since the solvency score measure through the Z-Score model is consistently below the required benchmark. The study is concluded that Sakthi Sugars Limited, Coimbatore has the potential to perform economically well, should the vast asset base is put to optimal use.

### 5.4 FURTHER SCOPE OF THE STUDY

The study covers only the quantitative aspects of the company, wherein the study can be extended to cover the qualitative aspects also.

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