

# **Bannari Amman Sugars Limited**

## **Valuation of Equity Shares of Madras Sugars Limited and Bannari Amman Sugars Limited**

**April 2016**



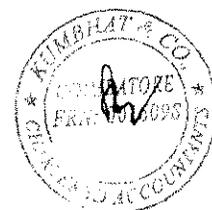
## Table of Contents

|  |     |
|--|-----|
| Abbreviations .....  | 3   |
| 1. Background Information and Scope of Work.....           | 4   |
| 1.1 Background Information .....                           | 4   |
| 1.2 Proposed Transaction.....                              | 4   |
| 1.3 Transaction Rationale .....                            | 4   |
| 1.4 Scope of Work .....                                    | 5   |
| 1.5 Conclusion and Share Swap Ratio .....                  | 5   |
| 2. Indian Sugar Industry Outlook .....                     | 6   |
| 3. Valuation Methodology & Approach .....                  | 7   |
| 3.1 Valuation Methodology & Approach .....                 | 7   |
| 3.1.1 Market Based .....                                   | 7   |
| 3.1.2 Cash Flow Based.....                                 | 8   |
| 3.2 Date of Valuation.....                                 | 9   |
| 4. Valuation of Madras Sugars Limited .....                | 10  |
| 4.1 Business Overview – Madras Sugars Limited .....        | 10  |
| 4.2 Financial Overview.....                                | 10  |
| 4.3 Valuation of MSL.....                                  | 11  |
| 4.3.1 Discounted Cash flow Method.....                     | 11  |
| 4.3.2 Market Multiple Method .....                         | 13  |
| 4.4 Valuation Conclusion – MSL .....                       | 144 |
| 5. Valuation of Bannari Amman Sugars Limited .....         | 15  |
| 5.1 Business Overview – Bannari Amman Sugars Limited ..... | 15  |
| 5.2 Financial Overview.....                                | 15  |
| 5.3 Valuation of BASL .....                                | 15  |
| 5.3.1 Discounted Cash flow Method.....                     | 16  |
| 5.3.2 Market Multiple Method .....                         | 18  |
| 5.3.3 Market Capitalization Method.....                    | 19  |
| 5.4 Valuation Conclusion – BASL .....                      | 19  |
| 6. Caveats .....   | 20  |
| 6.1 General.....   | 20  |
| 6.2 Distribution of Report .....                           | 21  |
| 7. Sources of Information .....                            | 22  |



## Abbreviations

|        |  |
|--------|--|
| ACOE   | - Adjusted Cost of Equity                                    |
| BCOE   | - Base Cost of Equity  |
| CAPM   | - Capital Asset Pricing Model                                |
| CSRP   | - Company Specific Risk Premium                              |
| DCF    | - Discounted Cash Flow                                       |
| EBIT   | - Earnings before Interest and Tax                           |
| EBITDA | - Earnings before Interest, Tax, Depreciation & Amortisation |
| ERP    | - Equity Risk Premium  |
| EV     | - Enterprise Value   |
| FCFF   | - Free Cash Flow to Firm                                     |
| FY     | - Financial Year ending March 31 <sup>st</sup>               |
| $K_d$  | - Cost of Debt   |
| $K_e$  | - Cost of Equity   |
| Ltd.   | - Limited  |
| MW     | - Mega Watt  |
| NAV    | - Net Asset Value  |
| NPV    | - Net Present Value  |
| NSE    | - National Stock Exchange                                    |
| PAT    | - Profit after Tax   |
| PV     | - Present Value  |
| PBT    | - Profit Before Tax  |
| $R_f$  | - Risk Free Return   |
| TCD    | - Total Cane Crushed in Metric Tonnes                        |
| WACC   | - Weighted Average Cost of Capital                           |
| $W_d$  | - Weighted Average of Debt                                   |
| $W_e$  | - Weighted Average of Equity                                 |



## 1. Background Information and Scope of Work

### 1.1 Background Information

**Bannari Amman Sugars Limited (BASL)** is one of the India's leading private sector sugar manufacturers. The Company has four sugar manufacturing units, which are located in Tamil Nadu and Karnataka, and the aggregate cane crushing capacity is 20,100 TCD. It has co-generation plants in all its sugar factories having installed capacity of 104.80 MW. The Company has two distilleries one in Tamil Nadu and another in Karnataka besides having bio-compost units in both the places. The Company also has granite processing unit in Tamil Nadu. The Company owns windmills having capacity of 8.75 MW which are situated at southern part of Tamil Nadu. The Company's shares are listed on the BSE and NSE.

**Madras Sugars Limited (MSL)** was established during 2010-11 as a sugar complex at Vengur village in Villupuram District, Tamil Nadu with an installed crushing capacity of 3,600 TCD and includes a co-generation plant with capacity of 25 MW which is synchronized with the Tamil Nadu Electricity Board Grid. The Company is wholly owned subsidiary of M/s SVB Holdings Private Limited.

Both BASL and MSL are under the same management.

### 1.2 Proposed Transaction

Bannari Amman Sugars Limited plans to acquire Madras Sugars Limited (the "Target Company") in a stock-for-stock transaction ("Proposed Transaction"). The acquisition is proposed through scheme of amalgamation of both the Companies.

### 1.3 Transaction Rationale

Some of the key synergies expected to kick in post the acquisition are highlighted below:

**Synergies through economies of scale:** BASL's production capacity would increase from a pre-acquisition crushing capacity of 20,100 TCD across four sugar mills to 23,700 TCD with 5 sugar mills in Tamil Nadu and Karnataka, further strengthening its position as one of the largest players in southern India's sugar industry. The timing of the acquisition presents an opportunity for BASL to capitalise on the widely expected uptake in sugar prices owing to the projected deficit in production and consumption on the global scale. BASL's co-generation capacity is also expected to increase by 25 MW to 129.8 MW.

**Increased captive Cane acreage:** The sugar cane allotted to MSL by the state government in terms of Sugarcane (Control) Order, 1996 lies in parts of the districts of Villupuram and Tiruvannamalai in Tamil Nadu viz. six firkas – Manalurpettai, Mugaiyur, Arakandanallur and Thirukovilur from Thirukovilur Taluk (part) of Villupuram district and Tiruvannamalai South (part) and Veraiyur from Tiruvannamalai district. BASL has one of its sugar factories in Kolundampattu Village, Tiruvannamalai district. The area allotted by the State Government to MSL and to the unit of BASL is contiguous. BASL's unit at Tiruvannamalai District is having crushing capacity of 5000 TCD and 28.80 MW of cogeneration power plant. The BASL's unit can potentially absorb the excess cane grown in the allocated area of MSL. BASL has drawn 2,75,132 MTs of sugarcane in 2014-15 sugar season and till 11<sup>th</sup> April 2016, 1,39,048 MTs of sugarcane during 2015-16 sugar season from the allotted area of MSL. BASL can get around 300000 tonnes of cane per season



from the area allotted to MSL in the coming years. The merger optimizes the cane availability and crushing of both the sugar factories.

**Downstream synergies:** MSL has sufficient unused portion of land in Venmar and Vengur villages where the sugar factory is situated to carry out further expansion of sugar unit and set-up downstream distillery. The distillery can consume the molasses produced in MSL and BASL's unit in Tiruvannamalai District for production of alcohol.

#### 1.4 Scope of Work

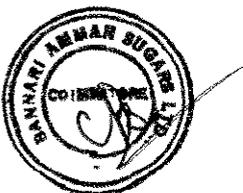
In connection with the aforementioned Proposed Transaction, BASL has approached m/s **KUMBHAT & CO.**, Chartered Accountants, Coimbatore to provide Fair Value of Equity Shares for the MSL and BASL as on December 31, 2015 ("Valuation Date") for the purpose of share swap by BASL to the equity shares holders of MSL.

#### 1.5 Conclusion and Share Swap Ratio

The fair value of equity share for MSL and BASL as on the Valuation Date as estimated in the report are Rs. 128.76 per equity share and Rs. 1,753.91 per equity share respectively.

| Particulars                                     | MSL    | BASL     |
|---|--------|----------|
| Enterprise Value (Rs. Crore)                    | 465.32 | 2,419.71 |
| Fair Value of Equity (Rs. Crore)                | 193.13 | 2,006.42 |
| Fair Value per Equity Share (Rs.)               | 128.76 | 1,753.91 |
| Fair Value per Equity Share (Rs.) (Rounded off) | 128.80 | 1,753.90 |

Therefore, the share swap ratio after round off for MSL and BASL is 150:11, i.e. every 150-equity shares of MSL will get 11 equity shares in BASL.



## 2. Indian Sugar Industry Outlook

In September 2015 the International Sugar Organization (ISO) forecast a 2.5 million tons deficit in the global sugar market in 2015-16. According to ISO figures, the deficit is set to more than double to 6.2 million tons in 2016-17 assuming that demand will also continue to grow by around 2% per year. This deficit is likely to act as a major tailwind for sugar prices in India, the second largest sugar producer in the world.

World sugar prices in recent years have been under pressure and touched 6 year lows in 2015 due to large supplies in the world market. However, prices recovered in the last few months of the year on expectation of production deficit in next 2016 and 2017, the first time since 2009-10.

According to the latest USDA report, global sugar production for 2015-16 is forecast at 172 million tonnes (mt), down by 3 mt compared to last year. Brazil, the top producer, is estimated to produce 35 mt – down 950,000 tonnes as majority of sugarcane is expected to convert into ethanol due to increase of the mandated ethanol blend in gasoline.

The sugar industry tends to be cyclical in nature and many experts believe that the industry has surpassed the tough conditions in 2015. This sanguine stance of the analysts has been vindicated by rising sugar prices on the NCDEX and the outperformance of the sugar stocks in the markets in the last few months.

The government has been taking positive steps such as the announcement of production-linked crop subsidies of Rs. 45 a tonne to the farmer to reduce the payment burden of sugar mills. To reduce the stockpile, the Centre announced compulsory export of at least 4 million tonnes in the current crushing season. Further, to improve the financial positions of sugar mills, the government also removed the excise duty on ethanol and decided to increase ethanol blending with petrol to 10 per cent.

According to Ken Research, the revenues of the sugar industry in India are projected to increase to Rs. 1,03,300 Crore by FY 2019-20. As GDP growth gains steam once again, consumer spending on food and beverages is likely to be positively affected almost immediately. Indian sugar consumption is majorly dominated by the industrial sector followed by the household sector. The industrial sector includes all the major factories and companies that produce products which require sugar in the production process such as confectionery, carbonated beverages, dairy processing, bakery and others. Demand from the industrial sector is expected to grow at a rapid pace going forward as consumers start spending more on F&B purchases.



### 3. Valuation Methodology & Approach

#### 3.1 Valuation Methodology & Approach

The standard of value used in our analysis is fair value which is often defined as the price, in terms of cash or equivalent, that a buyer could reasonably be expected to pay, and a seller could reasonably be expected to accept, if the business were exposed for sale on the open market for a reasonable period of time, with both buyer and seller being in possession of the pertinent facts and neither being under any compulsion to act. Valuation of an enterprise or its equity shares is not an exact science and ultimately depends upon what it is worth to a serious investor or buyer who may be even prepared to pay goodwill. This exercise may be carried out using generally accepted methodologies, the relative emphasis of each often varying with the factors such as:

- Specific nature of the business
- Whether the entity is listed on a stock exchange
- Industry to which the Company belongs
- Past track record of the business and the ease with which the growth rate in cash flows to perpetuity can be estimated
- Extent to which industry and comparable company information is available.

The results of this exercise could vary significantly depending upon the basis used, the specific circumstances and professional judgment of the valuer. In respect of going concerns, certain valuation techniques have evolved over time and are commonly in vogue. The aforesaid valuation techniques can be broadly categorised as follows:

##### 3.1.1 Market Based

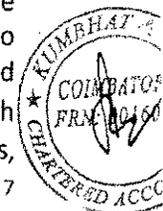
###### *Stock Exchange Quotation or Market Price Method*

This method reflects the price that the market at a point in time is prepared to pay for the shares. It is therefore influenced by the condition of the stock market, the concerns and opportunities that are seen for the business in the sector or market in which it operates. The market price also reflects the investor's view of the ability of management to deliver a return on the capital it is using. In case of companies not frequently traded or thinly traded, this value may be very different from the inherent value of the shares, but nevertheless forms a benchmark value.

###### *Market Multiple Method*

Under this methodology, market multiples of comparable listed companies are computed and applied to the business being valued in order to arrive at a multiple based valuation. This is based on the premise that the market multiples of comparable listed companies are a good benchmark to derive valuation. In this method, market multiples based on a revenue/profitability metric of comparable listed companies are applied to the business being valued to derive the multiple based valuation. The difficulty here is in the selection of a comparable company since it is rare to find two or more companies with the same product/service portfolio, size, business strategy and accounting practices. We have considered this method for the valuation of Target Company with closely comparable listed companies in terms of geography, size, and stage of business,

BHAT & CO., Chartered Accountants, Coimbatore



profitability, and product offerings.

### ***Precedent Transaction Multiple Method***

This method is similar to the Market Multiple Method, with the exception that the companies used as guidelines are those that have been recently acquired. Under the Transaction Multiple Method, acquisitions or divestitures involving similar companies are identified, and the multiples implied by their purchase prices are used to assess the subject company's value. There is no rule of thumb for the appropriate age of a reasonable transaction; however it is important to be aware of the competitive market at the time of the transaction, synergies included in the transaction value negotiated and hence factor any changes in the marketplace environment or underlying synergies into the analysis. All other things being equal, the more recent the transaction, the more reliable the value arrived at using this technique. We have not used this method for the valuation of the Company due to lack of availability of recent transactions involving closely comparable companies.

### **3.1.2 Cash Flow Based**

#### ***Discounted Cash flow Method (DCF)***

The DCF method uses the future free cash flows of the firm/ equity holders discounted by the cost of capital/equity to arrive at the present value. In general, the DCF Method is a strong and widely accepted valuation tool, as it concentrates on cash generation potential of a business. Considering that this method is based on future potential and is widely accepted, we have used this approach for the valuation of the Company.

#### **Discount Rate**

One of the important steps involved while estimating the fair value using the DCF method is estimation of the discount rate. The discount rate considered for arriving at the present value of Free Cash to Firm ("FCFF") is the Weighted Average Cost of Capital ("WACC").

Calculation of WACC is shown below.

$WACC = (ACOE \times W_e) + (K_d (1 - t) \times W_d)$ , where

- ACOE is the cost of equity
- $K_d$  is the cost of debt
- $W_e$  and  $W_d$  represent the equity and debt weights, respectively, in the capital structure
- $t$  is the effective tax rate

The ACOE is computed as per Capital Asset Pricing Model ("CAPM") using the formula

$ACOE = R_f + ERP$ , where

- $R_f$  is the Risk Free Return



- ERP is the Equity Risk Premium

Following are the common inputs used for the calculation of **Base Cost of Equity ("BCOE")**. For the detailed calculation of discount rate, please refer to the respective sections wherever applicable.

Risk Free Return ( $R_f$ ) –  $R_f$  is considered at 7.46% based on the 10 Year Wholesale Debt Market Zero Coupon Bond Yield as on the Valuation Date. (Source: Bloomberg)

Equity Risk Premium (ERP) – We have assumed the Equity Risk Premium at 7.00% for BASL and MSL, based on long term Equity Risk Premium for developing markets.

Based on the above parameters, we have estimated at the Base Cost of Equity (BCOE).

Cost of Debt ( $K_d$ ) – Pre-tax cost of debt has been considered at 12.0% for MSL and 10.50% for BASL based on the current borrowing rate and discussion with the Management.

Capital Structure – Debt to total capital of 2:1 for MSL and 1:1 for BASL has been considered based on the long term debt to total capital ratio objective of the management.

Effective tax rate - The long term effective tax rate is considered to be 34.61%, based on the statutory tax rate prevailing in India for corporate as per the recent Finance Budget.

Based on the above, we have arrived at the Weighted Average Cost of Capital (WACC) for the purpose of using at as the discount rate. The WACC of the Target Companies is discussed in detail in respective valuation sections.

### 3.2 Date of Valuation

Date of valuation is 31 December 2015 ("Valuation Date").



#### 4. Valuation of Madras Sugars Limited

##### 4.1 Business Overview – Madras Sugars Limited

**Madras Sugars Limited (MSL)** was established during 2010-11 as a sugar complex at Vengur village in Villupuram District, Tamil Nadu with an installed crushing capacity of 3,600 TCD and includes a co-generation plant with capacity of 25 MW which is synchronized with the Tamil Nadu Electricity Board Grid. The unit has crushed 5.93 lakh tonnes of cane during the FY 2014-15. The co-generation plant has produced 775.92 lakh units of power and exported 574.20 lakhs units to the state grid. MSL is headquartered in Coimbatore. Considering the past records and the cane potential, this factory can crush **4,200 TCD** without any CAPEX or filing of IEM as required under industrial policy of the government of India.

##### 4.2 Financial Overview

Key historical financial information of MSL for FY 2013, 2014, 2015 and provisional financial statement for the nine months ended 31 December 2015 given in Table 4.1. Financial Projection of MSL from FY 2017 till FY 2023 is given in Table 4.2.

**Table 4.1 - Key Historical Financial Information of MSL**

(Rs. In Crore)

| Particulars                   | 2014    | 2015   | Upto Dec 31, 2015* |
|-------------------------------|---------|--------|--------------------|
| Net Revenue                   | 173.84  | 137.05 | 229.00             |
| Operating Expenses            | 133.03  | 81.56  | 265.97             |
| EBITDA                        | 40.80   | 55.49  | (36.97)            |
| Interest Expenses             | 38.41   | 43.44  | 23.69              |
| Depreciation and Amortisation | 24.90   | 13.99  | 11.85              |
| PBT                           | (22.51) | (1.94) | (72.52)            |
| PAT                           | (15.54) | 0.55   | (53.66)            |

\* 9 months ended December 31, 2015

**Table 4.2 - Financial Projections of MSL**

(Rs. In Crore)

| Particulars                   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|-------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Net Revenue                   | 424.85 | 399.47 | 393.12 | 391.53 | 391.14 | 391.04 | 391.01 |
| Operating Expenses            | 336.74 | 322.26 | 317.24 | 316.57 | 317.01 | 317.73 | 318.58 |
| EBITDA                        | 88.11  | 77.21  | 75.88  | 74.96  | 74.13  | 73.31  | 72.43  |
| Interest Expenses             | 24.92  | 18.58  | 15.93  | 14.37  | 14.05  | 14.04  | 14.04  |
| Depreciation and Amortisation | 14.62  | 14.62  | 14.51  | 14.37  | 14.23  | 14.20  | 14.20  |
| PBT                           | 48.57  | 44.01  | 45.44  | 46.22  | 45.85  | 45.07  | 44.19  |
| PAT                           | 38.95  | 35.30  | 36.44  | 37.07  | 36.77  | 36.14  | 35.44  |

Revenue of MSL is expected to grow from Rs. 229.00 Crore during nine months ended 31 December 2015 to Rs. 391.14 Crore in FY2021. EBITDA margins are expected to improve from negative 17% during nine months ended 31 December 2015 to 19% in FY2021. Based on discussion with the Management, we understand that the increase in the revenue would be on account of increase in the capacity utilization, higher Realisations and availability of adequate cane in the area allotted.



The debt of MSL includes the interest free loan of Rs.177.53 crores from the holding company. Based on the discussion with the management, we understand that it continues to be an interest free loan in the merged entity.

### 4.3 Valuation of MSL

For the purpose of calculating fair value of equity of MSL as on the Valuation Date, all the relevant factors and circumstances as applicable have been considered in the valuation analysis. Accordingly, DCF and Market Multiple methods have been considered to arrive at the fair value of equity as on the Valuation Date. While different values have been arrived at under these methodologies, for the purpose of estimating fair value of equity shares, it is necessary to arrive at a single equity value of MSL.

The weights assigned to DCF and Market Multiple methods are 75% and 25% respectively; as per generally applied approach used in several other cases

#### 4.3.1 Discounted Cash flow Method

Discounted Cash flow methodology works on the premise that the value of a business (as a going concern) is measurable in terms of future cash flow streams discounted to the present time at an appropriate discount factor. The valuation under the DCF method depends on the projected future cash flows and also takes into account the capital spending and other cash flows required to generate the projected cash flow and therefore take a holistic view of the future business plan.

#### Discount Rate

The assumptions for the computation of WACC as mentioned below:

**Table 4.3 - Computation of WACC: MSL**

|                                       |        |
|---------------------------------------|--------|
| Cost of Equity ( $K_e$ )              | 14.5%  |
| Risk Free rate                        | 7.5%   |
| Market Risk Premium                   | 7.0%   |
| Cost of Debt ( $K_d$ )                | 7.8%   |
| Corporate Bond Premium                | 4.5%   |
| Marginal Cost of Debt                 | 12.0%  |
| Nominal Tax Rate                      | 34.6%  |
| WACC                                  | 10.0%  |
| Weight for Debt (Current & Long Term) | 66.66% |
| Weight for Shareholder's Equity       | 33.33% |

#### Terminal Value

The terminal value refers to the present value of the business as a going concern beyond the explicit period of forecasts up to perpetuity. This value is estimated taking into consideration the past growth rates of the product / service, economic life cycle of the product / service, expected growth rates in future, capital investments made in the business as well the estimated growth rate of the industry and economy. Considering the projected growth of the Indian economy, as well as factors specific to MSL and the industry in which it operates, we have assumed terminal period's EBITDA multiple as 6x beyond the projection period.



Table 4.4 - Estimating Free Cash Flows of MSL

(Rs. In Crore)

| Particulars                    | FY 2016        | FY 2017      | FY 2018      | FY 2019      | FY 2020      | FY 2021      | EY 2022      | FY 2023      |
|--------------------------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Months                         | 3              | 12           | 12           | 12           | 12           | 12           | 12           | 12           |
| Sales                          | 94.20          | 424.85       | 399.47       | 393.12       | 391.53       | 391.14       | 391.04       | 391.01       |
| EBIDTA                         | (1.25)         | 88.11        | 77.21        | 75.88        | 74.96        | 74.13        | 73.31        | 72.43        |
| EBIT                           | (4.91)         | 56.43        | 47.64        | 47.11        | 46.51        | 45.85        | 45.07        | 44.19        |
| Less: Working Capital Interest | (18.88)        | (17.06)      | (14.95)      | (14.26)      | (14.09)      | (14.05)      | (14.04)      | (14.04)      |
| Less: Current Tax Expenses     | -              | (9.62)       | (8.71)       | (9.00)       | (9.15)       | (9.08)       | (8.92)       | (8.75)       |
| Add: Depreciation              | 3.66           | 14.62        | 14.62        | 14.51        | 14.37        | 14.23        | 14.20        | 14.20        |
| GCF                            | (20.13)        | 44.37        | 38.59        | 38.36        | 37.63        | 36.95        | 36.31        | 35.60        |
| Change in Working Capital      | (20.64)        | (14.39)      | 1.92         | 0.48         | 0.12         | 0.03         | (0.00)       | (0.01)       |
| Capex                          | -              | 2.50         | 2.50         | 2.50         | 2.50         | 2.50         | 2.50         | 2.50         |
| <b>NFCFF</b>                   | <b>(40.77)</b> | <b>32.48</b> | <b>43.01</b> | <b>41.34</b> | <b>40.25</b> | <b>39.48</b> | <b>38.81</b> | <b>38.09</b> |
| WACC                           | 10.04%         | 10.04%       | 10.04%       | 10.04%       | 10.04%       | 10.04%       | 10.04%       | 10.04%       |
| Projection Year                | -              | 1.00         | 2.00         | 3.00         | 4.00         | 5.00         | 6.00         | 7.00         |
| Discount Factor                | 1.00           | 0.91         | 0.83         | 0.75         | 0.68         | 0.62         | 0.56         | 0.51         |
| <b>PV of Free Cash Flow</b>    | <b>(40.77)</b> | <b>29.52</b> | <b>35.52</b> | <b>31.03</b> | <b>27.45</b> | <b>24.47</b> | <b>21.86</b> | <b>19.50</b> |

Table 4.5 – Intrinsic Value

| Intrinsic Value                                |              |
|--|--------------|
| Sum of PV of FCFE (Explicit Forecast) (INR Cr) | 148.58       |
| Cost of Capital (WACC)                         | 10.04%       |
| Terminal Multiple (EBIDTA Multiple)            | 6.0x         |
| Terminal Value (INR Cr)                        | 434.58       |
| PV of Terminal Value (INR Cr)                  | 183.75       |
| Total PV (INR Cr)                              | 332.33       |
| Add: Cash & Investment (INR Cr)                | 0.29         |
| Total Value of Enterprise (INR Cr)             | 332.62       |
| Long Term Debt Outstanding (INR Cr)            | 272.19       |
| Total Value of Equity (INR Cr)                 | 60.43        |
| No. of Shares O/s (No. Crore)                  | 1.50         |
| <b>Fair Value per Share (Rs.)</b>              | <b>40.29</b> |

Therefore under the DCF method:

- the sum of the net present value of the free cash flows from the business in the projected period is arrived at Rs.148.58 Crore as at the Valuation Date; and
- The net present value of the terminal value of the business arrived at is Rs. 183.75 Crore as at the Valuation Date.
- The total enterprise value of MSL as on valuation date is Rs. 332.62 Crore and after reducing the long term debt (Term Loan and Loans from Promoters) the fair value of equity is Rs. 60.43 Crore (i.e. Rs. 40.29 per share).



#### 4.3.2 Market Multiple Method

Under this methodology, market multiples of comparable listed companies are computed and applied to the business being valued in order to arrive at a multiple based valuation. For the valuation of MSL, we have considered Bannari Amman Sugars Limited, EID Parry, Rajshree Sugars, KCP Sugars, Sakthi Sugars Limited and Balrampur Chini for the comparison. The EV/ Sales and EV/ EBITDA multiples are used for determining the value of MSL. Sales for the sugar industry are dependent on the capacity of the plant and also a function of the amount of sugarcane available to the company. Therefore, EV/EBITDA is considered to be a better indicator for the value of MSL with weightage of 70% while EV/sales is allotted a weightage of 30%. The multiples are further discounted to account for the availability of the financials for the previous financial year as well as MSL being a privately held company compared to others being public companies.

Table 4.6 – Comparable Companies

(Rs. In Crore)

| Particulars (FY March 31, 2015) | MSL    | Bannari Amman | EID Parry | Rajashree Sugars | KCP Sugars | SSL     | Balrampur Chini |
|---------------------------------|--------|---------------|-----------|------------------|------------|---------|-----------------|
| Revenue                         | 137.05 | 947.85        | 2,265.04  | 527.96           | 363.36     | 831.75  | 2,579.65        |
| EBIDTA                          | 55.49  | 128.15        | 389.18    | 18.07            | (13.02)    | 143.77  | 141.54          |
| EBIDTA Margin                   | 40.49% | 13.5%         | 17.2%     | 3.4%             | -3.6%      | 17.3%   | 5.5%            |
| PAT                             | 0.55   | 1.03          | 148.25    | (52.76)          | 27.66      | (34.77) | (57.73)         |
| M Cap                           | -      | 1,490.31      | 3,647.55  | 100.14           | 311.81     | 344.92  | 2,560.00        |
| LT Secured Debt                 | 307.21 | 312.37        | 673.09    | 469.86           | 53.75      | 592.82  | 432.00          |
| PE                              |        | 1,446.90      | 24.60     | -                | 11.27      | -       | -               |
| EV / EBIDTA                     |        | 14.07         | 11.10     | 31.54            | -          | 6.52    | 21.14           |
| EV / Sales                      |        | 1.90          | 1.91      | 1.08             | 1.01       | 1.13    | 1.16            |
| Weightage Assumed               |        | 13%           | 30%       | 7%               | 5%         | 11%     | 34%             |

Table 4.7 - Market Multiples of related companies

| Weighted Average Multiples | Multiples for FY 2015 | Discounted Multiples for FY 2017 |
|----------------------------|-----------------------|----------------------------------|
| EV / EBIDTA                | 15.31                 | 11.69                            |
| M. Cap / Sales             | 1.46                  | 1.12                             |

Table 4.8 - Market Multiples Valuation of MSL

| Average Valuation per Share |              |          |        |
|-----------------------------|--------------|----------|--------|
| Particulars                 | Equity Value | % Weight | WAV    |
| EV/EBITDA                   | 757.96       | 70%      | 530.57 |
| EV/Sales                    | 202.21       | 30%      | 60.66  |
| Equity Valuation            |              |          | 591.24 |
| No. of Shares O/s           |              |          | 1.50   |
| Value per Share (Rs.)       |              |          | 394.16 |



#### 4.4 Valuation Conclusion – MSL

Using the combination of DCF method and Market multiples method, we have estimated the fair value of equity of MSL. The DCF valuation is a better indicator of the company's value due to the intrinsic factors involved in the calculation. Therefore, it has been assigned the maximum weightage while Market multiple have been allotted 25% weightage. The following table summarizes the adjusted equity valuation of MSL.

**Table 4.9 - Valuation Summary of MSL**

| Valuation Approach  | Fair Value of Equity (Rs. Cr) | Fair Value of Equity per Share (Rs.) | Weight | Value per Share (Rs.) |
|---|-------------------------------|--------------------------------------|--------|-----------------------|
| Discounted Cash Flow Method   | 60.43                         | 40.29                                | 0.75   | 30.22                 |
| Comparable Companies Valuation Method                               | 591.24                        | 394.16                               | 0.25   | 98.54                 |
| <b>Weighted Average Per Share Fair Market Value of Equity (Rs.)</b> |                               |                                      |        | <b>128.76</b>         |
| <b>Fair Market Value of Equity (Rs. Crore)</b>                      |                               |                                      |        | <b>193.13</b>         |

We therefore estimate the Fair Equity Value for Madras Sugars Limited to be Rs. 193.13 Crore (i.e. Rs. 128.76 per equity share) as on 31<sup>st</sup> December, 2015, based on the methodologies described in this report and subject to the limitations stated in this report and our engagement letter.



## 5. Valuation of Bannari Amman Sugars Limited

### 5.1 Business Overview – Bannari Amman Sugars Limited

**Bannari Amman Sugars Limited (BASL)** is one of the India's leading private sector sugar manufacturers. The Company has four sugar manufacturing units, which are located in Tamil Nadu and Karnataka, and the aggregate cane crushing capacity is 20,100 TCD. It has co-generation plants in all its sugar factories having installed capacity of 104.80 MW. The Company has two distilleries one in Tamil Nadu and another in Karnataka besides having bio-compost units in both the places. The Company also has granite processing unit in Tamil Nadu. The Company owns windmills having capacity of 8.75 MW, which are situated at southern part of Tamil Nadu. The Company's shares are listed on the BSE and NSE.

### 5.2 Financial Overview

Key historical financial information of BASL for FY 2013, 2014, 2015 and provisional financial statement for the nine months ended 31 December 2015 given in Table 5.1. Financial Projection of BASL from FY 2017 till FY 2023 is given in Table 5.2.

**Table 5.1 - Key Historical Financial Information of BASL**

(Rs. In Crore)

| Particulars                   | 2014   | 2015   | Upto Dec 31, 2015* |
|-------------------------------|--------|--------|--------------------|
| Net Revenue                   | 653.64 | 946.16 | 1,027.68           |
| Operating Expenses            | 507.63 | 819.69 | 939.21             |
| EBITDA                        | 146.02 | 128.15 | 88.47              |
| Interest Expenses             | 61.91  | 92.84  | 82.31              |
| Depreciation and Amortisation | 51.95  | 51.26  | 43.59              |
| PBT                           | 32.14  | 0.34   | (37.43)            |
| PAT                           | 28.68  | 1.03   | (22.85)            |

\* 9 months ended December 31, 2015

**Table 5.2 - Financial Projections of BASL**

(Rs. In Crore)

| Particulars                   | 2017     | 2018     | 2019     | 2020     | 2021     | 2022     | 2023     |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|
| Net Revenue                   | 1,608.56 | 1,670.92 | 1,654.55 | 1,650.58 | 1,669.88 | 1,662.05 | 1,654.72 |
| Operating Expenses            | 1,244.78 | 1,308.04 | 1,308.90 | 1,310.00 | 1,311.61 | 1,312.63 | 1,313.61 |
| EBITDA                        | 363.78   | 362.89   | 345.65   | 340.58   | 358.27   | 349.42   | 341.10   |
| Interest Expenses             | 95.78    | 93.05    | 83.33    | 77.84    | 66.90    | 55.59    | 55.59    |
| Depreciation and Amortisation | 56.02    | 53.63    | 52.08    | 50.81    | 49.75    | 48.85    | 48.08    |
| PBT                           | 214.41   | 218.63   | 212.66   | 214.36   | 244.05   | 244.46   | 239.85   |
| PAT                           | 165.99   | 158.58   | 161.73   | 168.05   | 187.66   | 188.29   | 185.41   |

### 5.3 Valuation of BASL

For the purpose of calculating fair value of equity of BASL as on the Valuation Date, all the relevant factors and circumstances as applicable have been considered in the valuation analysis. Accordingly, DCF, Market Price and Market Multiple methods have been considered to arrive at the fair value of equity as on the Valuation Date. While different values have been arrived at under these methodologies, for the purpose of estimating fair value of equity shares, it is necessary to arrive at a single equity value of BASL.



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The weights assigned to DCF, Market Price and Market Multiple methods are 75%, 12.50% and 12.50% respectively; as per generally applied approach used in several other cases

### 5.3.1 Discounted Cash flow Method

Discounted Cash flow methodology works on the premise that the value of a business (as a going concern) is measurable in terms of future cash flow streams discounted to the present time at an appropriate discount factor. The valuation under the DCF method depends on the projected future cash flows and also takes into account the capital spending and other cash flows required to generate the projected cash flow and therefore take a holistic view of the future business plan.

#### Discount Rate

The assumptions for the computation of WACC as mentioned below:

**Table 5.3 - Computation of WACC: BASL**

|                                       |        |
|---------------------------------------|--------|
| Cost of Equity ( $K_e$ )              | 14.5%  |
| Risk Free rate                        | 7.5%   |
| Market Risk Premium                   | 7.0%   |
| Cost of Debt ( $K_d$ )                | 6.9%   |
| Corporate Bond Premium                | 3.0%   |
| Marginal Cost of Debt                 | 10.5%  |
| Nominal Tax Rate                      | 34.6%  |
| WACC                                  | 10.32% |
| Weight for Debt (Current & Long Term) | 54.5%  |
| Weight for Shareholder's Equity       | 46.5%  |

#### Terminal Value

The terminal value refers to the present value of the business as a going concern beyond the explicit period of forecasts up to perpetuity. This value is estimated taking into consideration the past growth rates of the product / service, economic life cycle of the product / service, expected growth rates in future, capital investments made in the business as well the estimated growth rate of the industry and economy. Considering the projected growth of the Indian economy, as well as factors specific to BASL and the industry in which it operates, we have assumed terminal period's EBITDA multiple as 6x beyond the projection period.

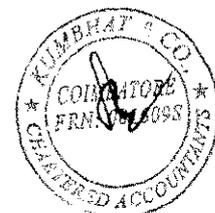


Table 5.4 - Estimating Free Cash Flows of BASL

| (Rs. In Crore)                 |              |               |               |               |               |               |               |               |
|--------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Particulars                    | FY 2016      | FY 2017       | FY 2018       | FY 2019       | FY 2020       | FY 2021       | FY 2022       | FY 2023       |
| Months                         | 3            | 12            | 12            | 12            | 12            | 12            | 12            | 12            |
| Sales                          | 263.57       | 1,608.56      | 1,670.92      | 1,654.55      | 1,650.58      | 1,669.88      | 1,662.05      | 1,654.72      |
| EBIDTA                         | 98.56        | 363.78        | 362.89        | 345.65        | 340.58        | 358.27        | 349.42        | 341.10        |
| EBIT                           | 83.14        | 307.76        | 309.25        | 293.56        | 289.77        | 308.52        | 300.57        | 293.02        |
| Less: Working Capital Interest | (7.44)       | (46.54)       | (48.62)       | (48.62)       | (55.59)       | (55.59)       | (55.59)       | (55.59)       |
| Less: Current Tax Expenses     | (6.64)       | (48.42)       | (60.05)       | (50.93)       | (46.30)       | (56.39)       | (56.17)       | (54.44)       |
| Add: Depreciation              | 15.42        | 56.02         | 53.63         | 52.08         | 50.81         | 49.75         | 48.85         | 48.08         |
| GCF                            | 84.48        | 268.82        | 254.22        | 246.10        | 238.69        | 246.28        | 237.66        | 231.07        |
| Change in Working Capital      | (6.63)       | 122.65        | 73.00         | 78.93         | 39.31         | 46.38         | 31.43         | 5.17          |
| Net Capex                      | (8.65)       | (30.00)       | (30.00)       | (30.00)       | (30.00)       | (30.00)       | (30.00)       | (30.00)       |
| <b>NFCFF</b>                   | <b>69.20</b> | <b>361.47</b> | <b>297.22</b> | <b>295.03</b> | <b>247.99</b> | <b>262.66</b> | <b>239.09</b> | <b>206.24</b> |
| WACC                           | 10.32%       | 10.32%        | 10.32%        | 10.32%        | 10.32%        | 10.32%        | 10.32%        | 10.32%        |
| Projection Year                | -            | 1.00          | 2.00          | 3.00          | 4.00          | 5.00          | 6.00          | 7.00          |
| Discount Factor                | 1.00         | 0.91          | 0.82          | 0.74          | 0.68          | 0.61          | 0.55          | 0.50          |
| <b>PV of Free Cash Flow</b>    | <b>69.20</b> | <b>327.65</b> | <b>244.21</b> | <b>219.73</b> | <b>167.42</b> | <b>160.73</b> | <b>132.62</b> | <b>103.69</b> |

Table 5.5 – Intrinsic Value

| Intrinsic Value                                |                 |
|--|-----------------|
| Sum of PV of FCFE (Explicit Forecast) (INR Cr) | 1,356.05        |
| Cost of Capital (WACC)                         | 10.32%          |
| Terminal Multiple (EBIDTA Multiple)            | 6.0x            |
| Terminal Value (INR Cr)                        | 2,046.61        |
| PV of Terminal Value (INR Cr)                  | 932.75          |
| Total PV (INR Cr)                              | 2,288.80        |
| Add: Cash & Investment (INR Cr)                | 10.80           |
| Total Value of Enterprise (INR Cr)             | 2,299.60        |
| Long Term Debt Outstanding (INR Cr)            | 413.29          |
| Total Value of Equity (INR Cr)                 | 1,886.30        |
| No. of Shares O/s (No. Crore)                  | 1.14            |
| <b>Fair Value per Share (Rs.)</b>              | <b>1,648.91</b> |

Therefore under the DCF method:

- The sum of the net present value of the free cash flows from the business in the projected period is arrived at Rs.1,356.05 Crore as at the Valuation Date; and
- The net present value of the terminal value of the business arrived at is Rs. 932.75 Crore as at the Valuation Date.
- The total enterprise value of BASL as on valuation date is Rs. 2,299.60 Crore and after reducing the long term debt the fair value of equity is Rs. 1,886.30 Crore (i.e. Rs. 1,648.91 per share).



### 5.3.2 Market Multiple Method

Under this methodology, market multiples of comparable listed companies are computed and applied to the business being valued in order to arrive at a multiple based valuation. For the valuation of BASL, we have considered EID Parry, Rajshree Sugars, KCP Sugars, Sakthi Sugars Limited and Balrampur Chini for the comparison. The EV/ Sales and EV/ EBITDA multiples are used for determining the value of BASL. Sales for the sugar industry are dependent on the capacity of the plant and also a function of the amount of sugarcane available to the company. Therefore, EV/EBITDA is considered to be a better indicator for the value of BASL with weightage of 70% while EV/ sales is allotted a weightage of 30%. The multiples are further discounted to account for the availability of the financials for the previous financial year and as well as BASL being a private company compared to others being public companies.

**Table 5.7 – Comparable Companies**

| Particulars (FY March 31, 2015) | (Rs. In Crore) |           |                 |            |         |                 |
|---------------------------------|----------------|-----------|-----------------|------------|---------|-----------------|
|                                 | Bannari Amman  | EID Parry | Rajshree Sugars | KCP Sugars | SSL     | Balrampur Chini |
| Revenue                         | 947.85         | 2,265.04  | 527.96          | 363.36     | 831.75  | 2,579.65        |
| EBIDTA                          | 128.15         | 389.18    | 18.07           | (13.02)    | 143.77  | 141.54          |
| EBIDTA Margin                   | 13.52%         | 17.2%     | 3.4%            | -3.6%      | 17.3%   | 5.5%            |
| PAT                             | 1.03           | 148.25    | (52.76)         | 27.66      | (34.77) | (57.73)         |
| M Cap                           | 1,490.31       | 3,647.55  | 100.14          | 311.81     | 344.92  | 2,560.00        |
| LT Secured Debt                 | 312.37         | 673.09    | 469.86          | 53.75      | 592.82  | 432.00          |
| PE                              | 1,449.72       | 24.60     | -               | 11.27      | -       | -               |
| EV / EBIDTA                     | 14.07          | 11.10     | 31.54           | -          | 6.52    | 21.14           |
| EV / Sales                      | 1.90           | 1.91      | 1.08            | 1.01       | 1.13    | 1.16            |
| Weightage Assumed               | 0%             | 34%       | 8%              | 6%         | 13%     | 39%             |

**Table 5.7 - Market Multiples of related companies**

| Weighted Average Multiples | Multiples for FY 2015 | Discounted Multiples for FY 2016 |
|----------------------------|-----------------------|----------------------------------|
| EV / EBIDTA                | 15.49                 | 11.83                            |
| M. Cap / Sales             | 1.40                  | 1.07                             |

**Table 5.8 - Market Multiples Valuation of BASL**

| Particulars           | Average Valuation per Share |          | WAV      |
|-----------------------|-----------------------------|----------|----------|
|                       | Equity Value                | % Weight |          |
| EV/EBITDA             | 3,899.26                    | 70%      | 2,729.48 |
| EV/Sales              | 1,314.65                    | 30%      | 394.39   |
| Equity Valuation      |                             |          | 3,123.88 |
| No. of Shares O/s     |                             |          | 1.14     |
| Value per Share (Rs.) |                             |          | 2,730.73 |



### 5.3.3 Market Capitalization Method

Under the market capitalisation method, share price of Rs. 1,407.09 per share of BASL on NSE prior to date of announcement of the proposal to the stock exchange was taken based on the SEBI formula for the same.

**Table 5.9 - Market Capitalization Method**

| Particulars                       | Amount   |
|-----------------------------------|----------|
| Current Market Price (Rs.)        | 1,407.09 |
| No. of Shares O/s (No. Crore)     | 1.14     |
| Market Capitalization (Rs. Crore) | 1,609.67 |

### 5.4 Valuation Conclusion – BASL

Using the combination of DCF method, Market Capitalisation and Market Multiples method, we have estimated the fair value of equity of BASL. The DCF valuation is a better indicator of the company's value due to the intrinsic factors involved in the calculation. Therefore, it has been assigned the maximum weightage while Market multiple and Market Capitalization have been allotted equal weightage. The following table summarizes the adjusted equity valuation of BASL.

**Table 5.10 - Valuation Summary**

| Valuation Approach  | Fair Value of Equity (Rs. Cr) | Fair Value of Equity per Share (Rs.) | Weight | Value per Share (Rs.) |
|---|-------------------------------|--------------------------------------|--------|-----------------------|
| Discounted Cash Flow Method   | 1,886.30                      | 1,648.91                             | 0.75   | 1,236.68              |
| Comparable Companies Valuation Method                               | 3,123.88                      | 2,730.73                             | 0.13   | 341.34                |
| Market Capitalization (CMP)   | 1,609.67                      | 1,407.09                             | 0.13   | 175.89                |
| <b>Weighted Average Fair Market Value of Equity per Share (Rs.)</b> |                               |                                      |        | <b>1,753.91</b>       |
| <b>Weighted Average Fair Market Value of Equity (Rs. Crore)</b>     |                               |                                      |        | <b>2,006.42</b>       |

We therefore estimate the Fair Equity Value for BASL to be Rs. 2,006.42 Crore (i.e. Rs. 1,753.91 per equity share) as on the Valuation Date, based on the methodologies described in this report and subject to the limitations stated in this report and our engagement letter.



## 6. Caveats

### 6.1 General

Provision of valuation recommendations and considerations of the issues described herein are areas of our regular corporate advisory practice. The services do not represent accounting, audit, and financial due diligence review, transfer pricing or domestic tax-related services that may otherwise be provided by **KUMBHAT & CO.**, Chartered Accountants, Coimbatore

Our analysis and review of the Company does not constitute an audit in accordance with Auditing Standards. We have relied on explanations and information provided by the Management of BASL and accepted the information provided to us as accurate. Although we have reviewed such data for consistency and reasonableness, we have not independently investigated or otherwise verified the data provided. Nothing has come to our attention to indicate that the information provided had material mis-statements or would not afford reasonable grounds upon which to base the report.

Our valuation is primarily from a business perspective and has not taken into account various legal and other corporate structures beyond the limited information made available to us.

The responsibility for forecasts and the assumptions on which they are based is solely that of the Management of BASL. It must be emphasized that profit forecasts necessarily depend upon subjective judgment. They are to a greater or lesser extent, according to the nature of the business and the period covered by the forecasts, subject to substantial inherent uncertainties. In consequence, they are not capable of being audited or substantiated in the same way as financial statements, which present the results of completed periods. Similarly, we have relied on data from external sources. These sources are considered to be reliable and therefore, we assume no liability for the accuracy of the data. We have assumed that the business continues normally without any disruptions due to statutory or other external/internal occurrences. The valuation exercise has been performed on a going concern basis considering the current structure of the companies.

The scope of our work has been limited both in terms of the areas of the business and operations which we have reviewed and the extent to which we have reviewed them. Based on discussion with the Management, the scope is limited to estimating the Enterprise value of the Target Company. The valuation assumes successful completion of the proposed transaction, infusion of required equity/debt funds, availability of working capital finance at the expected rate, capacity utilization as projected and execution of its outstanding order book as per schedule beside maintaining a robust order book and achieving the projected margins. There may be matters, other than those noted in this report, which might be relevant in the context of the transaction and which a wider scope might uncover. It may be noted that Valuation is not an exact science and ultimately depends upon what the business is worth to a serious investor or buyer who may be prepared to pay a substantial goodwill.

The valuation analysis recommendation contained herein is not intended to represent the value at any time other than the date that is specifically stated in this report. This report is issued on the understanding that the Management of BASL has drawn our attention to all matters of which they are aware concerning the financial position of the businesses, which may have an impact on our



report up to the date of issue. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

We have no present or planned future interest in Target Company or BASL or any of its group companies and the fee for this report is not contingent upon the values reported herein. Our valuation analysis should not be construed as investment advice; specifically, we do not express any opinion on the suitability or otherwise of entering into any transaction with Target Company or BASL or any of its group companies.

## 6.2 Distribution of Report

The report has been prepared exclusively for the management of BASL for its proposed acquisition and hence should not be used for any other purpose, whether in whole or in part without our prior written consent, which consent will only be given after full consideration of the circumstances at the time. We understand that the report may be shared with the advisors to the companies supporting the proposed transaction. Please note that our firm owes no duty of care and cannot accept any responsibility or liability to the addressee's advisors, shareholders or any other third party for reliance by them in acting or refraining from acting on the contents of the report.



## 7. Sources of Information

The Valuation is based on a review of historical and projected financial information relating to the respective companies, provided by the Management of MSL and BASL and information relating to its business and industry. The sources of information we have relied on include:

- Information on business and profile of the Company;
- Annual Reports
- Provisional financials upto December 31, 2015
- Management certified financial projections of the Company for the period FY 2017 to FY 2023;
- Details of installed capacity, other operating parameters;
- Discussions with the Management;
- Other relevant information available in the public domain and internet sources;
- International Databases.

In addition to the above, we have also obtained such other information and explanations which were considered relevant for the purpose of our analysis. We have not independently verified or audited the information and have relied on the information presented to us.

Coimbatore  
Dated: 12<sup>th</sup> April 2016

for **KUMBHAT & CO.,**  
Chartered Accountants  
FRN001609S



**CERTIFIED TRUE COPY**  
For **BANNARI AMMAN SUGARS LTD**  
*C. Palaniswamy*  
**(C. PALANISWAMY)**  
COMPANY SECRETARY  
ACS No : 12580

*Sheelendra Bhansali*

**Sheelendra Bhansali**  
Partner  
M.No.026234

