This methodology document stands superseded. Refer to ICRA's website www.icra.in to view the updated methodology document on this subject.

ICRA Rating Feature

Rating Methodology for Entities in the Solvent Extraction (Edible Oil) Industry

This rating methodology updates and supersedes ICRA's previous methodology note on the sector, published in September 2015. While this revised version incorporates a few modifications, ICRA's overall approach to rating entities in the sector remains materially unchanged.

Overview

Edible oils constitute an important component of food expenditure in Indian households. The demand for edible oils in India has shown a steady growth, driven by improvement in per capita consumption, which in turn is attributable to rising income levels and living standards. However, the Indian edible oils market continues to be underpenetrated as the current per capita consumption level of India (at 19 Kg/year for OY[1] 2015-16) is lower than the global average (30.5 kg/year). Thus, edible oils have a favourable demand growth outlook over the medium-to-long term, which is further supported by positive macro and demographic fundamentals. At present, India plays an important role in the global edible oil market, accounting for ~11% share of consumption, 7% share of oilseed production, 4% share of edible oil production and 19% share of world edible oil imports.

Edible oil processing consists of three operations – crushing and expelling (separating oil from the solids – generally done by Ghanis and small-scale expellers/oilseed crushers), solvent extraction (to crush and process hard oilseeds with low oil content such as soyabean and cottonseed as well as chemically extract residual oil from the oilcake), and oil refining (which includes some or all of the following treatments—filtering, neutralisation, winterising, bleaching, deodorisation and degumming, and filtering to make oil fit for human consumption).

Historically, India has been a major importer of edible oils, with almost 30-40% of its requirements being imported till 1980s. In 1986, the Government of India established the Technology Mission on Oilseeds and Pulses (TMOP) in order to enhance the production of oilseeds in the country. The TMOP launched special initiatives on several critical fronts such as improvement of oilseed production and processing technology; additional support to oilseed farmers and processors besides enhanced customs duty on the import of edible oils. Consequently, there was a significant increase in oilseeds area, production, and yields until the late 1990s. However, in order to fulfil its obligations towards various international trade agreements and also to meet the increasing demand-supply deficits, India began to reduce import restrictions on edible oils in the late 1990s. Eventually, the imports were brought under Open General License. This led to a significant slump in the domestic oil seeds market, as edible oil prices fell sharply, in line with the low international prices prevailing at that time.

In terms of volumes, palm oil, soybean oil and mustard oil are the three largest consumed edible oils in India, with respective shares of ~40%, ~20% and ~10% in total oil consumption in OY2016. Although domestic production is on an increasing trend, imports meet ~70-72% of consumption (with the main imported varieties being crude palm oil and soybean oil). The ability of India’s oilseed sector to compete with imports is weakened by a fragmented processing industry afflicted by low capacity utilisation. Owing to high import dependence, the edible oil prices in India are directly correlated to international oil price movements and currency movements that make profitability vulnerable to unexpected fluctuations.

[1] Oil Year (OY)

In ICRA's opinion, the key determinants of business risk profile of edible oil companies are their ability to overcome the regulatory risk and agro-climatic conditions. Other operational factors include operating efficiency, product diversity, market position, and ability to secure raw material as well as the commodity price and forex-risk management systems. ICRA's assessment also factors in the entity's financial position and returns metrics, its capital structure, ability to generate positive cash flows from operations and the adequacy of the same in relation to its contractual debt service obligations. ICRA also assesses the entity's management for its growth plans, risk appetite and financial policies.

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Industry Risk Assessment

Commodity and currency risks

One of the key risks that edible oil companies face is the risk arising out of volatility in prices of raw materials (oilseeds), crude edible oil and refined edible oil, which may be influenced by trends in international commodity prices, current fluctuations, demand-supply dynamics and macro-economic trends. The domestic edible oil prices are directly linked to the prices of imported palm and soybean oil due to heavy reliance on imports and their substitutability with other oil varieties. While mustard oil is almost entirely produced within the country, soyabean oil is imported in significant quantities (about 55%-70%). Palm oil is almost entirely imported in crude form (for refining in port-based refineries) as well as in refined form. Given the high volatility in international edible oil prices, domestic participants are exposed to the risk of unexpected squeeze on margins because of mismatch between the prices of raw materials and final products (which are both linked to domestic factors as well as global ones). With a significant portion of the consumed oil being imported, the foreign currency movements also have an impact on the profit margins of industry players.

Exposure to commodity price risk may be hedged through back-to-back transactions with customers or through offsetting trade transactions on local/global commodity exchanges. In assessing commodity and currency risks, ICRA evaluates the entity's hedging practices for commodity and forex, the management's track record in the business and commitment to the hedging policy, volatility in earnings in the past and longevity of the entity's operations in each of its market segments/presence across different oils. In addition, the extent of market risk in a business is influenced by the inventory-holding period. Companies with relatively higher inventory-holding periods owing to factors like processing, logistics etc. may face higher risk than the ones with faster turnaround as the inventory value can change rapidly in either direction. Thus, the overall profitability of market participants remains vulnerable to risks associated with

commodity price volatility, forex movements, as well as demand-supply dynamics. ICRA's rating framework focuses on the entity's fundamental credit quality and seeks to evaluate its credit risk profile across commodity and currency cycles.

Agro-climatic risks

As the share of irrigated (by dams/canals/wells) area is low in India, most of the regions are dependent on monsoon rainfall. Even the irrigated areas are indirectly dependent on monsoons. Thus, production of oilseeds is negatively impacted in the years when there is a drought or deficient rainfall. However, the risk can be mitigated to some extent if the companies have a geographically diversified manufacturing presence across several states as the likelihood of monsoons failing simultaneously across states remains low to moderate. Also, the risk is further mitigated for players who have access to imported feedstock (either crude palm oil for refining or soyabean seeds for crushing, extraction and refining).

Regulatory risks

The profitability of edible oil companies is significantly influenced by regulatory changes and remains highly susceptible to the changes in the duty differential between import duties on crude and refined oil by the Government of India (GOI). Also, the profitability of these companies depends on the changes in the export tax levied by exporting countries, mainly Indonesia and Malaysia (that account for most of palm oil imports). Beginning 2007-08, the import duty on crude and refined edible oils has been progressively reduced by the GOI. These policy changes have been made to comply with foreign trade agreements entered by India with other countries such as the Association of South East Asian Nations (ASEAN), apart from meeting shortfalls in domestic supplies so as to curtail inflation[2]. Overall, the profit margins of domestic refiners are influenced by changes in the import duty structure by the GOI or modifications in export duty by exporting countries because of limited value addition as well as limited ability of the players to fully pass on duty changes to end customers on account of the highly-fragmented industry structure. Therefore, ICRA's rating assessment takes into account the overall cost competitiveness of the entity as well as evaluates the consequences of duty changes and viability of the players concerned. ICRA also notes that entities that crush domestic seeds and process into oils will be relatively less affected than refiners of imported edible oil. However, they will be subject to competition from imported oils, which is sensitive to duty changes.

Business Risk Assessment

Economies of scale and cost competitiveness

The edible oil industry in India is characterised by intense competition and fragmentation owing to the presence of a large number of units. This in turn is attributable to low entry barriers such as low capital and low technical requirements of the business. Though a number of inefficient units have been closed down after reduction of high import tariffs on imported edible oils, the average capacity utilisation rates of Indian oilseed processors remain low (at ~30%-40%), with many of the units operating only for a part of the year (during the local harvest season of raw materials). Thus, achieving economies of scale and having a competitive cost structure are of considerable importance. Although the operating profit margins of edible oil manufacturers have inherently been thin due to low value addition in the business, players with cost-competitive structures or bulk purchases of raw materials as well as with established brand presence have achieved relatively better margins because of better pricing power. The ability to maintain high capacity utilisation is influenced by factors such as extent of cost competitiveness and location of the units near a large consumer market, which offers competitive advantage in terms of logistics and price of end products.

Market position

During the past decade, the domestic production of oil seeds and edible oil has remained stagnant but the demand has risen steadily, leading to a significant increase in import dependence. The flexibility to modify product portfolio as per demand is a key strength in a market characterised by commodity price volatility. Accordingly, players with a diversified presence and exposure to the three major categories of oil, namely

[2] *In August 2017, the duty on refined palm oil was increased to 25% from 15.0% while that on crude palm oil was doubled to 15% from 7.5%, Accordingly, the net duty differential increased to 10.0% from 7.5% to protect the domestic industry*

palm oil, soyabean oil and mustard oil, are better positioned for growth than players with single product concentration. Further, large scale integrated players are better placed than small- and mid-sized manufacturers to withstand the challenges in the business environment on the strength of benefits related to economies of scale such as lower cost of production and access to cheaper working capital credit. Also, market participants with a high share of established branded products are better placed than participants operating in the commoditised bulk market. ICRA favourably views edible oil companies with benefits of large scale integrated operations, multi-product offerings and recognisable branded presence in retail markets as these have fared better than small/medium-scale domestic oilseed crushers.

Extent of business integration

Edible oil companies strengthen their business profile through vertically-integrated operations. Some of the larger players in the edible oil business have also integrated their businesses by exploring possibilities of both backward and forward integration. For instance, companies that refine edible oils may strengthen their sourcing by acquiring palm oil plantations in Indonesia or Malaysia on the one hand, and creating brands on the other with the objective to draw greater value addition across the chain. Besides improving profitability, such measures help companies in mitigating the impact of fluctuation in commodity prices to some extent. However, the benefits of backward integration could be neutralised in an adverse demand scenario because of high capital intensity as well as the associated long gestation period, which can result in higher fixed costs.

Management Quality

All debt ratings necessarily incorporate an assessment of the quality of an entity's management as well as the strengths/weaknesses associated with the entity being a part of a "group" or a stronger parent. Also of importance are the entity's likely cash outflows due to the possible need to support other group entities, in case the entity is among the stronger entities within the group. Usually, a detailed discussion is held with the management of the entity to understand its business objectives, plans and strategies, and views on past performance, besides the outlook on the (entity's) industry. Some of the other points assessed are:

» Experience of the parent/management in the line of business concerned
» Commitment of the parent/management to the line of business concerned
» Attitude of the parent/management to risk taking and containment, including any speculative positions raw materials and hedging of commodity risk
» The entity's policies on leveraging, interest risks, commodity risk and currency risks
» The entity's plans on new projects, acquisitions, expansion, etc
» Strength of the other companies belonging to the same group as the entity
» The ability and willingness of the parent/ group to extend extraordinary financial support to the entity, if the latter faces cash flow pressures; or infuse capital to fund the latter's capex commitments

Financial Risk Assessment

The various financial metrics assessed by ICRA can be divided into four categories viz., Profitability, Leverage, Coverage and Liquidity. This document provides a brief summary of why ICRA considers these ratios to be important. For a more detailed description, readers may refer to the note titled, "Approach for Financial Ratio Analysis" published on ICRA's website.

Profitability and returns: The analysis here focuses on determining the trend in the entity's operating profitability and how the same stands in comparison to peers. An entity with higher profitability margins and returns on capital has greater ability to generate internal accruals, attract external capital, and withstand business adversity. The trends in operating margin, working capital position and return on capital employed are analysed to establish the stability of cash flow generation and the sufficiency of the same vis-à-vis the entity's future debt-service obligations. Overall, stiff competition, fragmentation and low value addition in the business often lead to operating margins for edible oil manufacturers to be in the thin-to-moderate range. In addition, risks of commodity price volatility and forex movements (as a significant portion of the consumed oil is being imported) impact operating margins. Thus, the overall profitability of market participants remains vulnerable to risks like weak harvests, commodity price volatility, forex movements

(especially for refiners) and any inventory losses because of high working capital intensity in the business. Thus, the ability of a entity to procure raw material cost competitively, have well-defined policies to hedge commodity and currency risks, and efficiently convert raw material into end products can support profitability because of the relatively high raw material intensity in the business.

Leverage and debt service coverage ratios: Given the low capital intensity of edible oil companies and the high leveraging (working capital borrowings as well as terms loans for greenfield/brownfield expansion), ramping up of operations with high capacity utilisation are essential to generate sufficient cash flows to service debt obligations. Accordingly, the objective here is to ascertain the level of debt in relation to the entity's own funds and is viewed in conjunction with the business risks that the entity is exposed to. ICRA, in its analysis of an edible oil entity's financial position, compares an entity's debt toequity ratio and Total Outside Liabilities to Tangible Net Worth ratio (for players who import against letter of credit facilities) with that of its peers to determine its relative leverage position. Generally, conservative leverage ratios are viewed favourably as these reduce the committed outflows via interest and principal repayment. Long maturity profile (in case of term debt) and lower cost of loans can partially offset the risk associated with high financial leverage. The other debt coverage indicators that are examined include Interest Coverage ratio, ratio of Net Cash Accruals to Total Debt, Total Debt to Operating Profit and Debt Service Coverage Ratio (DSCR).

Working capital intensity: In the edible oil industry, working capital intensity tends to be high because of high inventory holdings, given the seasonality in raw materials (availability of oil seeds). The analysis here evaluates the trends in the entity's key working capital indicators like inventory, receivables and creditors compared to industry peers. ICRA also notes that working capital intensity remains low for players that import crude oil by availing letter of credit facilities (for payment up to 180 days), which can lead to high creditor days. However, in such cases ICRA analyses the maturity profile of outstanding letter of credit and TOL/TNW with respect to industry peers.

Some of the other aspects that are also analysed for edible oil companies include the following:

» **Cash flow analysis*:*** Cash is required to service debt obligations. Cash flows reflect the sources from which cash is generated and its subsequent deployment. Analysed here are the trends in the entity's fund flow from operations (FFO), the retained cash flows, and the free cash flows after meeting debt repayment obligations and capital expenditure needs. The cash flow analysis also helps in understanding the external funding requirement that an entity has to meet its maturing debt obligations.

» **Foreign currency-related risks*:*** Such risks arise if an entity's major costs and revenues are denominated in different currencies. Such instances in the edible oil industry mainly include companies importing crude or refined palm/soyabean oil (which is denominated in terms of US dollars) and selling in the domestic market. The foreign currency risk can also arise from unhedged liabilities, especially for companies that earn most of their revenues in local currency but have unhedged foreign currency borrowings (to part fund capital expenditure and/or working capital requirements like buyer's credit facility). The focus here is on assessing the natural hedge available as well as hedging policy of the entity concerned to mitigate such risk for net foreign currency exposure.

» **Tenure mismatches, and risks related to interest rates and refinancing*:*** Dependence on short-term borrowings to fund long-term investments can expose an entity to significant re-financing risks, especially during periods of tight liquidity. The existence of adequate buffers of liquid assets/bank lines to meet short-term obligations is viewed positively. Similarly, the extent to which an entity would be impacted by movements in interest rates is also evaluated.

» **Accounting quality**: Here, the accounting policies, Notes to Accounts, and Auditor's Comments are reviewed. Any deviation from the Generally Accepted Accounting Practices is noted and the financial statements of the entity are adjusted to reflect the impact of such deviations.

- **Contingent liabilities/off-balance sheet exposures**: In this case, the likelihood of devolvement of contingent liabilities/off-balance sheet exposures and the financial implications of the same are evaluated.

- **Financial flexibility**: The entity's financial flexibility — as reflected by it unutilised bank/credit limits, liquid investments, and the nature of its relationship with banks, financial institutions and other intermediaries — is assessed. The comfort derived from a strong parentage also helps in improving its financial flexibility.

Summing up

As in other manufacturing sector ratings, the rating for edible oil companies involves an assessment of business risk, management risk and financial risk profile. ICRA takes a case-by-case approach to evaluate the credit risk profile of edible oil companies, considering the diversity in their product lines and market dynamics. The cost structure, capacity utilisation, duty structure, diversity of product/consumer mix and hedging strategy ultimately determine the business risk profile, while the financial risk analysis focuses on profitability through price cycles, the extent of leverage, ability to service debt and financial flexibility. The analysis is further complemented with financial projections over the maturity of the debt instrument that seek to evaluate the adequacy of cash flows in comparison to the debt servicing requirements.

ICRA Limited

CORPORATE OFFICE
Building No. 8, 2nd Floor, Tower A; DLF Cyber City, Phase II; Gurgaon 122 002
Tel: +91 124 4545300; Fax: +91 124 4050424
Email: info@icraindia.com, Website: www.icra.in

REGISTERED OFFICE
1105, Kailash Building, 11th Floor; 26 Kasturba Gandhi Marg; New Delhi 110001
Tel: +91 11 23357940-50; Fax: +91 11 23357014

Branches: **Mumbai**: Tel.: + (91 22) 24331046/53/62/74/86/87, Fax: + (91 22) 2433 1390 **Chennai**: Tel + (91 44) 2434 0043/9659/8080, 2433 0724/ 3293/3294, Fax + (91 44) 2434 3663 **Kolkata**: Tel + (91 33) 2287 8839 /2287 6617/ 2283 1411/ 2280 0008, Fax + (91 33) 2287 0728 **Bangalore**: Tel + (91 80) 2559 7401/4049 Fax + (91 80) 559 4065 **Ahmedabad**: Tel + (91 79) 2658 4924/5049/2008, Fax + (91 79) 2658 4924 **Hyderabad**: Tel +(91 40) 2373 5061/7251, Fax + (91 40) 2373 5152 **Pune**: Tel + (91 20) 2556 1194/0195/0196, Fax + (91 20) 2556 1231

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