



INDORAMA VENTURES PLC

No. 132/2017 18 October 2017

Company Rating: A+

Issue Ratings:

Senior unsecured A+ Hybrid A-

Outlook: Positive

Company Rating History:

DateRatingOutlook/Alert09/09/11A+Stable

Contacts:

Sermwit Sriyotha sermwit@trisrating.com

Pravit Chaichamnapai, CFA pravit@trisrating.com

Wiyada Pratoomsuwan, CFA wiyada@trisrating.com

WWW.TRISRATING.COM

Rating Rationale

TRIS rating affirms the company rating of Indorama Ventures PLC (IVL) and the ratings of IVL's senior unsecured debentures at "A+". TRIS Rating also affirms the rating of "A-" to IVL's subordinated capital debentures. At the same time, TRIS rating revises the rating outlook of IVL to "positive" from "stable". The "positive" outlook reflects the company's success strategy to shift its portfolio mix toward high value added (HVA) products.

The ratings continued to reflect the company's leading position in the polyester value chain, competitiveness stemming from vertical integration, and geographic diversification in terms of production and customer bases. The ratings also take into consideration the management team's capability and experience, as well as IVL's access to key technologies. However, the ratings are constrained by the volatile nature of the petrochemical industry.

IVL was established by the Lohia family on 21 February 2003 as a holding company to invest mainly in businesses along the polyester value chain. IVL was listed on the Stock Exchange of Thailand (SET) on 5 February 2010. As of June 2017, the Lohia family held a 66.4% stake in IVL. The company's core businesses comprise the production of polyethylene terephthalate (PET), fiber, and feedstock. At the end of June 2017, IVL's total installed capacity was 10.5 million tonnes per annum (MTA), of which the PET segment comprised 42%, the fiber segment 15%, and the feedstock segment 43%.

IVL's production bases are well diversified geographically. Currently, IVL had 72 plants located in 24 countries across four continents: Asia, Europe, North America, and Africa. IVL's business model is aimed at vertical integration, a diversified geographical presence around the globe and shift portfolio mix toward HVA products. This model should enhance the company's profitability and competitive advantage, as well as mitigate the risks associated with the volatility of the petrochemical industry and trade barriers.

During 2016 to the first six months of 2017, the company spent about Bt30,500 million to conclude four acquisition transactions. The acquisitions increased IVL's total capacity from 8.8 MTA in 2015 to 10.5 MTA in June 2017. The acquisitions included PTA plant in Spain, an integrated paraxylene (PX) and PTA plant in the United States (US), high value added (HVA) yarn production facilities in Europe and China, and PET plants in India.

These acquisitions help enhance IVL's profitability as the spread between PTA price and its raw materials is normally wider in North America and Europe than in Asia, in which IVL was concentrated before the acquisition. In addition, the PTA plants in Spain and in the US also produce the HVA products i.e., isophthalic acid (IPA) and naphthalene dicarboxylate (NDC), respectively. The acquisitions over the past five years have balanced IVL's portfolio in terms of geographic diversification. About 38% of IVL's total capacity now is located in North America, 32% in Asia, and about 30% in Europe, the Middle East, and Africa. IVL is also refurbishing the ethane cracker it acquired in 2014 in the US. The project is expected to commence operations in late 2017. This project will help enhance IVL's profitability, as it could capture the low gas price environment in the US. It is also another step of backward integration, as ethylene is a raw material of mono ethylene glycol (MEG).

For the first six months of 2017, IVL's revenue was Bt143,311 million, an increase of 15% year-on-year (y-o-y). The increase was mainly due to the higher





sales volume from the acquisitions. Since 2012, the oversupply of PTA in Asia put pressure on IVL's profitability, as it caused a squeezing in the spread of PTA price and its raw material in Asia. The spread was below US\$100 per tonne. However, the acquisition during 2015-2017 is helping increase IVL's profitability and balance its feedstock portfolio. The operating margin (operating income before depreciation and amortization, as percentage of sales) has improved, rising about 5% during 2012-2014 to 11.1% in the first six months of 2017. The rise resulted from the acquisition of the PTA plants in Canada, Spain, and the US.

IVL's strategic of being more toward the HVA products helps improve operating margin. In 2012, HVA products accounted for about 16% of total production and 25% of total earnings before interest, tax, depreciation, and amortization (EBITDA). However, for the first six months of 2017, HVA accounted for 20% of IVL's productions and contributed about 57% of IVL's EBITDA. IVL's EBITDA per tonne improved from about US\$80-US\$90 per tonne in 2015-2016 to US\$107 per tonne for the first six months of 2017. The increase in EBITDA per tonne of production resulted from the higher contribution of the HVA products in total portfolio. In addition, the acquisition of PTA plants in Europe and the US enhance IVL's profitability, as the PTA spread in these regions is wider than in Asia. The sustainability of this margin improvement is being monitored.

IVL's capital structure is moderate. At the end of June 2017, the company's total adjusted debt for hybrid debentures (total adjusted debt) was Bt106,689 million, with a total adjusted debt to capitalization ratio of 56.6%. The company's funds from operations (FFO) improved from Bt9,639 million for the first six months of 2015 to Bt14,535 million in the first six months of 2017. The FFO to total adjusted debt ratio improved from 12%-16% during 2012-2015 to 22.6% for the first six months of 2017.

Looking forward, the company's financial position is expected to improve from the current level, as the company will realize the full benefit from the acquisitions it made during 2015-2017. TRIS Rating's base case scenario has incorporated the company's acquisition budget and its capital expenditure plans for maintenance, debottlenecking, and expansion of its current facilities. This expenditure is projected at about Bt136,000 million spanning 2017-2020.

With its investment and capital expenditure plan, the company's total installed capacity will increase from 10.5 MTA in 2017 to about 15.5 MTA by 2020. Based on the expected mix of HVA products and the gradual recovery of the industry margin, TRIS Rating expects the company EBITDA per tonne will be in the range of US\$105-US\$115 over the next three years. The company's total EBITDA is expected to be Bt30,000-Bt50,000 million per year during 2018-2020. Approximately Bt12,600 million in debt will come due in 2018, Bt22,200 million in 2019, and about Bt15,900 million will be due in 2020. The base case projection also incorporates increasing equity base of Bt15,500 million from warrants exercised in July and August 2017. The total adjusted debt to capitalization ratio is expected to be in the range of 50% to 55% over the forecast period.

Rating Outlook

The "positive" outlook reflects the company's improved business profile caused by successful strategies to expand in the HVA products. It also takes into account the benefits it receives from vertical integration and geographical diversification strategies implemented during 2015-2017.

The ratings should be upgraded if IVL can improve its FFO to total adjusted debt to about 20%-25% on a sustainable basis. The negative factor for the ratings could be a significant deterioration in financial performance. Sizable debt-funded acquisitions, which lead to a weakening of balance sheet, are also negative for the ratings.





Indorama Ventures PLC (IVL)

Company Rating:	A+
Issue Ratings:	
IVL186A: Bt550 million senior unsecured debentures due 2018	A+
IVL18OA: Bt98 million senior unsecured debentures due 2018	A+
IVL18OB: Bt1,302 million senior unsecured debentures due 2018	A+
IVL18DA: Bt780 million senior unsecured debentures due 2018	A+
IVL193A: Bt800 million senior unsecured debentures due 2019	A+
IVL194A: Bt1,500 million senior unsecured debentures due 2019	A+
IVL205A: Bt2,000 million senior unsecured debentures due 2020	A+
IVL206A: Bt520 million senior unsecured debentures due 2020	A+
IVL20DA: Bt880 million senior unsecured debentures due 2020	A+
IVL21OA: Bt37 million senior unsecured debentures due 2021	A+
IVL210B: Bt3,163 million senior unsecured debentures due 2021	A+
IVL21OC: Bt300 million senior unsecured debentures due 2021	A+
IVL224A: Bt1,250.5 million senior unsecured debentures due 2022	A+
IVL224B: Bt2,649.5 million senior unsecured debentures due 2022	A+
IVL225A: Bt500 million senior unsecured debentures due 2022	A+
IVL22DA: Bt1,645 million senior unsecured debentures due 2022	A+
IVL236A: Bt1,100 million senior unsecured debentures due 2023	A+
IVL243A: Bt1,400 million senior unsecured debentures due 2024	A+
IVL245A: Bt1,000 million senior unsecured debentures due 2024	A+
IVL24DA: Bt1,475 million senior unsecured debentures due 2024	A+
IVL25DA: Bt1,150 million senior unsecured debentures due 2025	A+
IVL26OA: Bt200 million senior unsecured debentures due 2026	A+
IVL275A: Bt2,000 million senior unsecured debentures due 2027	A+
IVL28OA: Bt2,200 million senior unsecured debentures due 2028	A+
IVL295A: Bt2,000 million senior unsecured debentures due 2029	A+
IVL31OA: Bt2,300 million senior unsecured debentures due 2031	A+
IVL14PA: Bt15,000 million subordinated capital debentures	A-
Rating Outlook:	Positive





Financial Statistics and Key Financial Ratios*

Unit: Bt million

			Year Ended 31 December				
	Jan-Jun 2017	2016	2015	2014	2013	2012	
Revenue	143,311	254,620	234,698	243,907	229,120	210,729	
Gross interest expense	1,996	4,601	3,787	3,622	3,986	3,611	
Net income from operations	7,405	9,563	2,935	234	24	(444)	
Funds from operations (FFO)	14,535	21,469	15,347	12,274	10,389	11,571	
Earnings before interest, tax, depreciation, and amortization (EBITDA)	16,405	27,075	18,073	13,598	12,371	11,958	
Capital expenditures and investments	16,727	38,537	26,385	13,716	7,192	42,176	
Total assets	270,777	258,380	221,641	194,534	189,042	172,474	
Total debts	106,689	102,106	83,606	73,294	85,266	80,630	
Total adjusted debt	114,126	109,543	91,043	80,731	85,266	80,630	
Shareholders' equity	94,796	91,815	82,953	74,610	61,568	56,565	
Operating income before depreciation and amortization as % of sales	11.1	10.1	7.1	5.5	5.0	5.7	
Pretax return on permanent capital (%)	9.7 **	8.9	5.6	3.9	3.7	4.1	
EBITDA interest coverage (times)	7.3	5.3	4.2	3.8	3.1	3.3	
FFO/total debt (%)	22.6**	19.1	16.3	15.2	12.2	14.4	
Total debt/capitalization (%)	56.6	56.5	54.7	54.6	58.1	58.8	

^{*} Consolidated financial statements

Note: All ratios are adjusted with the subordinated capital debentures (50% of the outstanding is treated as debts and the rest is treated as equity)

TRIS Rating Co., Ltd.

 $Tel: 0-2231-3011\ ext\ 500\ /\ Silom\ Complex\ Building,\ 24th\ Floor,\ 191\ Silom\ Road,\ Bangkok\ 10500,\ Thailand\ www.trisrating.com$

© Copyright 2017, TRIS Rating Co., Ltd. All rights reserved. Any unauthorized use, disclosure, copying, republication, further transmission, dissemination, redistribution, or storing for subsequent use for any purpose, in whole or in part, in any form or manner or by any means whatsoever, by any person, of the credit rating reports or information is prohibited, without the prior written permission of TRIS Rating Co., Ltd. The credit rating is not a statement of fact or a recommendation to buy, sell or hold any debt instruments. It is an expression of opinion regarding credit risks for that instrument or particular company. The opinion expressed in the credit rating does not represent investment or other advice and should therefore not be construed as such. Any rating and information contained in any report written or published by TRIS Rating has been prepared without taking into account any recipient's particular financial needs, circumstances, knowledge and objectives. Therefore, a recipient should assess the appropriateness of such information before making an investment decision based on this information. Information used for the rating has been obtained by TRIS Rating from the company and other sources believed to be reliable. Therefore, TRIS Rating does not guarantee the accuracy, adequacy, or completeness of any such information and will accept no liability for any loss or damage arising from any inaccuracy, inadequacy or incompleteness. Also, TRIS Rating is not responsible for any errors or omissions, the result obtained from, or any actions taken in reliance upon such information. All methodologies used can be found at https://www.trisrating.com/en/rating-information/rating-criteria.html.

^{**} Annualized with trailing 12 months