

Media Release

Outlooks On Formosa Plastics Group Core Units Revised To Negative On Weakening Credit Metrics; 'twAA/twA-1+' Ratings Affirmed

October 22, 2019

Rating Action Overview

- FP group's profitability and cash flow generation have weakened materially and could continue to weaken under macroeconomic headwinds, high market uncertainty, and global capacity additions.
- The group's ratio of debt to EBITDA could rise above 2x over the next one to two years, given its rising capital expenditures and still-high cash dividends, coupled with weakening cash flows.
- On Oct. 22, 2019, we revised our outlook on the core members of the FP group to negative from stable, to reflect the material downside risk that the group's ratio of debt to EBITDA ratio could rise above 2x for a prolonged period.
- At the same time, we are affirming our 'twAA' long-term and 'twA-1+' short-term issuer credit ratings on the four core members of the FP group. We also affirmed the 'twAA' issue ratings on the group's senior unsecured debts issued as well as the 'twAA' issue rating on the senior unsecured notes issued by Formosa Group (Cayman) Ltd. and proportionally guaranteed by the four core companies.

Rating Action Rationale

The outlook revision reflects our view of the downside risk that the four core members of the Formosa Plastics (FP) group (**Formosa Plastics Corp.**, **Formosa Petrochemical Corp.**, **Formosa Chemicals & Fibre Corp.**, and **Nan Ya Plastics Corp.**) will be unable to restore the group's weakened profitability and cash flow generation before the end of 2020. High market uncertainty and macroeconomic headwinds linked to global trade tension could continue to weaken downstream demand and keep inventories low in the oil and chemical industry supply chain over the next few quarters.

Meanwhile, industrywide capacity additions for the group's key products are likely continue over the next few years and further pressure the average selling price and spread for chemical products over the period. Moreover, conditions could worsen for products such as ethylene, propylene, and paraxylene and their downstream derivatives if weak global demand cannot absorb the additional capacity.

We expect the FP group to increase its capital expenditure to support significant capacity expansion, particularly in the U.S., from 2020 onward. FP group plans to build a shale gas-based chemical complex in Louisiana, which we expect will require over US\$10 billion in capex, including potential cost overrun, in two phases from 2020-2028. This project along with the group's constant expansion in Asia could result in constant negative free operating cash flow and increase the group's debt leverage in the coming few years. This is in addition to the group's still-high cash dividend payouts. In our base case, FP group's

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debt-to-EBITDA ratio will be slightly above 2x in 2019-2020, compared with 1.2x in 2017 and 1.6x in 2018.

The rating affirmations reflect the group's strong operating efficiency and product diversity, and strong domestic market position in the petrochemical and oil refining industries. In addition, we believe the group may take measures during the upcoming period of high capital expenditure to keep its debt leverage from deteriorating if the industry downturn prolongs. This could include a reduction in the distribution of cash dividends. Furthermore, China's tightening environmental standards could drive out less efficient firms and the group's efforts to enhance its product mix with more high value-added products could also partly offset the negative effect of persistent regional oversupply for most commodity chemicals in the region.

Outlook

The negative outlook reflects the downside risk that the four core units of the FP group might be unable to restore the group's weakened profitability and cash flow generation before the end of 2020. This could result in the group's ratio of debt to EBITDA rising to and remaining above 2x for a prolonged period.

Downward scenario

We may lower the long-term ratings on the core group members if the FP group could not improve its profitability and lower its ratio of debt to EBITDA consistently below 2x. This may happen due to weakened market conditions or if the group increases its capital expenditure over the next one to two years but fails to take measures to limit its cash outflow and rising debt. An example of such a failure would be to maintain high cash dividend payouts.

Upward scenario

We may revise the outlook back to stable if the group could keep its ratio of debt to EBITDA comfortably below 2x for a prolonged period. This could be achieved if the group can restore its profitability and cash flow generation despite the market downturn, or if the group could lower its debt leverage through a reduction in cash dividends or debt guarantees, or via asset disposal.

Our Base-Case Scenario

- Our base-case assumptions for oil prices (Brent) are US\$60/bbl for the rest of 2019 and in 2020.
- Weakening prices will likely continue to pressure regional chemicals players in the upcoming months. The softening outlook on regional growth and the risks from U.S.-China trade tension could continue to drag on chemical prices and sector margins. Modest demand combined with capacity additions planned for China and other regions in Asia, will likely be a double blow to chemicals players in the coming few months.
- The revenue of the four core companies to decline by 10%-12% in 2019. This is to reflect demand uncertainty, overall low inventory levels in the market, as well as generally lower average selling product prices. We also forecast low-single-digit sales growth in 2020, which is mainly supported by capacity additions, such as Nan Ya Plastic's new ethylene glycol capacity in the U.S., and Formosa Petrochemical's higher run rate for its refinery units.
- Formosa Petrochemical's refining utilization rate at 89% in 2019 and 92% in 2020; olefin utilization rate will decline to 93% in 2019 and 2020, down from 95%-96% over the past two years.
- Profitability to weaken over the next two years, under the negative effect of demand uncertainties and capacity additions. The group's increasing sales from higher-value-added products and more efficient manufacturing processes could only partly offset the industry downturn, in our view.
- Capital expenditures plus investments will increase in 2019, mainly for the group's expansions in the U.S. and China. Capital expenditure will remain high from 2020 onwards, mainly to support the group's new project in Louisiana. Our base case for capital expenditure plus investments is about New Taiwan dollar (NT\$) 100 billion in 2019, and slightly above NT\$100 billion per year over 2020-2021.

- The group's guarantee on its Vietnam-based steel mill project will decrease moderately from about NT\$124 billion at the end of July 2019 to about NT\$118 billion at the end of 2020.
- Cash dividend payouts will maintain at about 70% of previous year's net income over the next two years, while the average tax rate in 2019-2020 will remain similar to that in 2018.
- We assume a similar cash conversion cycle for the FP group in 2019-2020 to that in 2018.
- No material interest rate hike during 2019-2020.
- We apply a 16.5% haircut on the cash and cash equivalent to net the group's outstanding debt.

Based on these assumptions, we arrive at the following credit measures for the FP group:

- EBITDA margin at 13%-16% in 2019-2020.
- The ratio of debt to EBITDA at 2.0x-2.3x in 2019-2020.

Liquidity

The short-term rating is 'twA-1+'. We believe the FP group has adequate liquidity to meet its needs over the next 12 months, reflected by a ratio of liquidity sources to liquidity uses of 1.8x for the next 12 months. We believe the group will have positive liquidity sources less uses, even if forecast EBITDA declined by 15%. We also believe the group has solid banking relationships and a generally high credit standing to support its financial flexibility, as evidenced by the group's very low credit spread and large amount of undrawn credit lines. In addition, we expect the FP group to easily meet the requirements of loose financial covenants on the group's current ratio, ratio of liability to equity, interest coverage, and net worth.

Principal Liquidity Sources:

- Cash and short-term investments of NT\$215 billion at the end of June 2019.
- Funds from operations of NT\$150 billion-NT\$160 billion per year in the 12 months ending June 2020.
- Undrawn long-term credit facilities of NT\$95 billion as the end of June 2019.

Principal Liquidity Uses:

- Debt maturity plus short-term debt repayment of about NT\$126 billion in the 12 months ending June 2020.
- Maintenance capital expenditures of about NT\$30 billion in the 12 months ending June 2020.
- Cash dividend payout of about 70% of previous year's net income.

Rating Score Snapshot

Issuer Credit Rating: twAA/Negative/twA-1+

Note: All scores are in comparison with global obligors.

Business risk: Satisfactory

- Country risk: Intermediate
- Industry risk: Moderately high
- Competitive position: Strong

Financial risk: Intermediate

- Cash flow/Leverage: Intermediate

Anchor: twa+

Modifiers

- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Positive (+1 notch)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Positive (+1 notch)

Stand-alone credit profile: We have not assigned an SACP to the core operating units of the FP group.

- Group credit profile: a-
- Entity status within the group: Core

Related Criteria

- General Criteria: Group Rating Methodology - July 01, 2019
- Criteria | Corporates | General: Corporate Methodology - November 19, 2013
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments - April 01, 2019
- Understanding Taiwan Ratings' Rating Definitions, www.taiwanratings.com - June 26, 2018
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers - December 16, 2014
- Criteria | Corporates | Industrials: Key Credit Factors For The Oil Refining And Marketing Industry - March 27, 2014
- General Criteria: Methodology: Industry Risk - November 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities - November 13, 2012
- General Criteria: Guarantee Criteria - October 21, 2016
- General Criteria: Country Risk Assessment Methodology And Assumptions - November 19, 2013
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings - March 28, 2018
- General Criteria: Methodology: Timeliness Of Payments: Grace Periods, Guarantees, And Use Of 'D' And 'SD' Ratings - October 24, 2013
- General Criteria: Use Of CreditWatch And Outlooks - September 14, 2009

(Unless otherwise stated, these articles are published on www.standardandpoors.com, access to which requires a registered account)

Ratings List

Ratings Affirmed; Outlook Action

	To	From
Formosa Plastics Corp.		
Formosa Chemicals & Fibre Corp.		
Formosa Petrochemical Corp.		
Nan Ya Plastics Corp.		
Issuer Credit Rating	twAA/Negative/twA-1+	twAA/Stable/twA-1+
Senior Unsecured Issue Credit Rating	twAA	
Formosa Group (Cayman) Ltd.		
Senior Unsecured Issue Credit Rating	twAA	

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