

Media Release:

Ratings On Formosa Plastics Group Core Units Lowered To 'twAA-' On Growing Operating Headwinds; Outlook Stable

October 16, 2020

Rating Action Overview

- Major businesses of Taiwan-based Formosa Plastics (FP) group will continue to face weak demand and limited recovery in profitability in 2021 and 2022, given the global economic slowdown and oil price volatility amid the COVID-19 pandemic.
- Weak operating cash flow and high capital expenditure could keep the group's financial strength, measured by the ratio of debt to EBITDA, materially below what we had earlier assumed for a prolonged period, despite a gradual recovery from the COVID-19 shock.
- We are lowering the long-term issuer credit ratings on the four core members of the FP group to 'twAA-' from 'twAA'. At the same time, we are lowering the issue ratings on senior unsecured debts issued by the four core companies to 'twAA-' from 'twAA', and issue ratings on the senior unsecured notes issued by Formosa Group (Cayman) and unconditionally and irrevocably guaranteed by the four core companies to 'twAA-' from 'twAA'.
- The rating outlook is stable, reflecting our view that recovering profitability and delayed capital expenditure will enable the FP group to keep its ratio of debt to EBITDA comfortably below 3x over the next two years.

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Rationale Action Rationale

Our rating action reflects the challenging macroeconomic conditions we believe the FP group will face in 2020 and possibly over the next few quarters, and the resulting weakening of credit metrics relative to our previous assumptions.

The pandemic's prolonged negative effect on the oil and chemical markets will deeply hit FP group's performance over the next few quarters. We expect the group's ratio of debt to EBITDA to only recover to 2x-3x in 2021 and 2022, from the trough of about 4x in 2020, as the coronavirus outbreak moderates gradually. The four core companies are **Formosa Plastics Corp. (FPC)**, **Nan Ya Plastics Corp. (NYPC)**, **Formosa Chemicals & Fibre Corp. (FCFC)**, and **Formosa Petrochemical Corp. (FPCC)**.

The FP group's operating performance should trough in 2020.

Given our assumption of low oil and chemical product prices through the end of 2020, we expect FP group's revenue to decline by 25%-30% in 2020. This is in addition to the uncertain demand recovery due to COVID-19. FP group's EBITDA margin will be materially hurt by demand weakness from poor GDP growth, thin product spreads, or a sustained fall in oil prices. We expect the group's EBITDA margin to decline to 10%-11% in 2020 from 12.5% in 2019. With the double whammy of crashing demand and the oil price plunge, revenues of the four core companies declined by 10%-35% in the first half of 2020, with three of them turning unprofitable.

Global capacity expansion, coupled with continued demand risk, could constrain the pace of recovery in the group's performance.

We forecast the group's sales to recover by 20%-25% in 2021, supported by an expected rebound in oil price, as well as the group's capacity addition in both the U.S. and China. However, we expect still- tepid demand and capacity additions in the region to limit the expansion of product spread. We therefore project the FP group's EBITDA margin to only moderately widen to 12%-14% in 2021. This is despite better capacity utilization and efforts in growing sales of value-added products.

Expansion of chemical capacity in the U.S. (shale gas based) and Asia (mainly oil-based in China) from 2018-2022 could prevent significant improvement in supply-demand conditions, if current expansion projects are not materially delayed by the effects of COVID-19. Average selling prices and spreads for chemicals may be weakened and that is likely to derail the recovery. We believe products such as ethylene, propylene, paraxylene, and their downstream derivatives could be particularly at risk under the weak global demand.

The group's earnings are exposed to FPCC's sensitivity to oil price volatility and the uncertainty on the global refining market stemming from COVID-19.

We believe FPCC's high sensitivity to oil price movements and the volatile refining margins because of the products' commodity nature will continue to weigh on the group's profitability over the next few years. In addition, aggressive capacity expansion particularly in China, combined with COVID-19-induced uncertainty over global demand for refined products such as aviation fuel and gasoline, will affect the company's profitability. In our estimate, FPCC's operating income contribution to the consolidated group ranged from -4% to 59% over the past eight years. Accordingly, we expect the FP group to experience slightly higher business volatility over the next few years.

An upcoming mega project in the U.S. could keep free cash flow negative and prevent an improvement in cash flow and leverage for an extended period after 2022.

We expect FP group's capital expenditure to increase from 2022 onward, which is several quarters delayed from our previous expectation, due to the impact of COVID-19. FP group plans to build a shale gas-based chemical complex in the state of Louisiana, U.S., costing more than US\$12 billion over two phases. This investment is to support the group's significant expansion, which is likely to improve its geographic diversity and cost structure. However, this project and other expansions in Asia could keep FP group's free cash flow negative and therefore elevate its debt leverage for an extended period after 2022, if profitability does not grow materially.

Our Base-Case Scenario

- S&P Global Ratings projects Taiwan's GDP growth of 1.0% in 2020 and 3.0% in 2021. Our forecasts for China's GDP growth are 2.1% in 2020 and 6.9% in 2021. The GDP forecasts for Asia Pacific are a contraction of 2.0% in 2020 and growth of 6.9% in 2021. China continues to be a relative bright spot while many other emerging markets struggle to contain COVID-19. Economic fallout has bottomed but the rebound appears unequal among countries and sectors.
- Our base-case assumptions for Brent crude oil are US\$40/bbl for the remaining of 2020, and US\$50/bbl for 2021.
- Oil markets faced severe supply-demand imbalance in the second quarter of 2020. In line with our economic outlook, we anticipate a recovery in both GDP and oil demand through the second half of 2020 and into 2021 as the shocks from the coronavirus outbreak moderate. However, FPCC could continue to suffer if oil price stays low and demand for refined products remains sluggish.
- We expect chemical demand to recover in the second half of 2020 but the risks to margins are still high, especially for commodity chemicals, due to significant capacity additions. However, downstream manufacturers such as FPC and NYPC could have better spreads for product lines with lower input costs when market demand recovers.
- The revenue of the four core companies could decline by 25%-30% in 2020. This mainly reflects our assumption of low oil and chemical product prices through the end of 2020, in addition to uncertain demand recovery. We forecast the group's sales to recover by 20%-25% in 2021, supported by a rebound in oil prices and the group's capacity addition in Texas and Ningbo, China.
- Given lower demand for refining products and FPCC's shutdown of a refining unit after a fire, we expect the company's refining utilization rate to stay slightly below 70% in 2020 before recovering to 85%-90% in 2021. However, olefin utilization rate will remain high at 90%-95% over 2020 and 2021 to support the group's downstream products, compared with 95%-96% over the past two years.
- We expect the group's EBITDA margin to be 10%-11% in 2020 due to lower utilization and weak product prices, but it could recover to 12%-14% in 2021.
- Capital expenditures plus investments will be high at about New Taiwan dollar (NT\$) 110 billion in 2020, partly due to delayed expenditures from last year. We assume this amount to fall to NT\$80 billion-NT\$90 billion in 2021, before increasing again to above NT\$100 billion in 2022, reflecting the potential delay on the group's Louisiana project.
- The group's guarantee on its Vietnam steel mill project will decrease gradually from about NT\$120 billion at the end of 2019 to about NT\$80 billion in 2021, mainly through refinancing without guarantee.
- Cash dividend payout ratio will remain at about 72% of previous year's net income over the next few years. In 2021, we have assumed a higher payout ratio to reflect the potential weak earnings in 2020.
- The average tax rate in 2020 and 2021 will remain similar to that in 2019.
- Cash conversion cycle could lengthen in 2020 before returning to normal in 2021. We expect some working capital inflow this year due to the expected lower sales.
- Interest rates will remain stable in 2020 and 2021.

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

- Ratio of debt to EBITDA of about 4x in 2020 before improving to 2x-3x in 2021, compared with 2.2x in 2019.

Liquidity

The short-term rating is 'twA-1+'. We assess the FP group to have adequate liquidity. We expect its ratio of liquidity sources to uses at 1.5x for the next 12 months. We believe the group's net liquidity sources will stay positive, even if forecast EBITDA declines by 15%. In our view, the group has solid banking relationships and a generally high credit standing to support its financial flexibility, as evident from the group's very low credit spread and large amount of undrawn credit lines. In addition, we expect the FP group to comply easily with the 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\$224.5 billion as of end June 2020.
- Funds from operations of about NT\$100 billion in the 12 months ending June 2021.
- Undrawn long-term credit facilities of NT\$90 billion as of end June 2020.

Principal Liquidity Uses

- Debt maturity of NT\$170 billion in the 12 months ending June 2021.
- Maintenance capital expenditure of NT\$30 billion in the 12 months ending June 2021.
- Cash dividend payout of about 72% of previous year's net income.

Outlook

The stable outlook reflects our view that the FP group will maintain its ratio of debt to EBITDA at 2x-3x over the next two years with recovering profitability and delayed spending. This is despite the weaker ratio in 2020, due to the pandemic's impact and a sharp decline in oil prices. We also expect the group's generally satisfactory profitability and cash flow to support its shale gas-based chemical complex in the U.S. and other expansions without further deterioration in its debt leverage over the next three to five years.

Downward scenario

We may lower the long-term ratings on the core group members if the FP group's ratio of debt to EBITDA stays constantly above 3x. Scenarios that could lead to this include: (1) prolonged weak market conditions due to either a much weaker regional economy hurting demand, or capacity addition particularly in China that leads to sustained oversupply; or (2) the group taking on more aggressive cash dividend payouts, capital expenditures, or other investments that are substantially above our base case.

Upward scenario

We may raise the ratings on the core group members if the FP group can keep its debt-to-EBITDA ratio below 1.5x constantly. This could be achieved by more conservative dividend and investment policies that substantially and sustainably lower the group's debt. The debt-to-EBITDA ratio could also be kept below 1.5x through material improvement in the group's geographic diversity and product differentiation, which strengthens the group's profitability

and operating stability. The group could most likely achieve this when its U.S. investment results in a major contribution to consolidated revenue and profit.

Rating Scores Snapshot

Issuer Credit Ratings: twAA-/Stable/twA-1+

Note: All scores below are in comparison with global obligors.

Business risk: Satisfactory

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

Financial risk: Intermediate

- Cash flow/Leverage: Intermediate

Anchor: twa+

Modifiers

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

Stand-alone credit profile (SACP): The core operating units of the FP group have not been assigned a SACP

- Group credit profile: twaa-
- Entity status within group: Core

Related Criteria & Research

Related Criteria

- General Criteria: Principles Of Credit Ratings - February 16, 2011
- General Criteria: Group Rating Methodology - July 01, 2019
- 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
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments - April 01, 2019
- Criteria | Corporates | General: Corporate Methodology - 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

Related Research

– Taiwan Ratings' Ratings Definitions – August 10, 2020

(Unless otherwise stated, these articles are published on www.taiwanratings.com)

Ratings List

Downgraded

	To	From
Formosa Plastic Corp.		
Nan Ya Plastics Corp.		
Formosa Chemicals & Fibre Corp.		
Formosa Petrochemical Corp. (FPCC).		
Issuer Credit Rating	twAA-/Stable/twA-1+	twAA/Negative/twA-1+
Senior unsecured issue credit rating	twAA-	twAA
Formosa Group (Cayman) Ltd.		
Senior unsecured issue credit rating	twAA-	twAA

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