Media Release:

Formosa Plastics Companies Downgraded To 'twAA-' On Weakened Leverage And Profitability; Outlook Negative

July 3, 2025

We use our Principles of Credit Ratings criteria to assess and assign a proxy group credit profile (GCP). We continue to base our assessment of the credit quality of **Formosa Plastics Corp.**, **Nan Ya Plastics Corp., Formosa Chemicals & Fibre Corp.** and **Formosa Petrochemical Corp.** on the proxy GCP, based on the pro forma consolidated financials of their audited consolidated statements.

PRIMARY CREDIT ANALYST

Raymond Hsu, CFA
Taipei
+886-2-2175-6827
raymond.hsu
@spglobal.com
raymond.hsu
@taiwanratings.com.tw

SECONDARY CONTACT

Irene Lai
Taipei
+886-2-2715-6825
irene.lai
@spglobal.com
irene.lai
@taiwanratings.com.tw

Rating Action Overview

- Persistent pressure on profitability and a jump in adjusted debt will likely keep the financial leverage ratios of Formosa Plastic group companies elevated without significant prospects of returning to our base case level over the next two years.
- Chronic industry overcapacity amid tepid demand growth will prevent material improvement in the profitability of the group's commodity chemical business. This could constrain discretionary cash flow for significant debt reductions in 2025-2026.
- We have therefore lowered to 'twAA-' from 'twAA' the long-term issue credit ratings on the four companies. We also lowered the issue rating on the companies' various bonds. At the same time, we affirmed the 'twA-1+' short term issuer credit rating on the companies.
- The negative outlook reflects a material likelihood that chronic overcapacity could endure and keep the group's profitability weak over the next 12-24 months. This would in turn prevent material improvement in the ratio of debt to EBITDA to close to 3x over the period.

Rating Action Rationale

The downgrade reflects low prospects of a recovery in the four core Formosa group companies' weakened leverage and profitability over the next one to two years. Chronic overcapacity and gloomy macroeconomic conditions will continue to deeply hit the companies' profitability over the next few quarters. We forecast weak margins over the same period, leading to persistently constrained EBITDA generation.

Aggressive capacity additions by China-based peers of the group's commodity chemical products could cap utilization and keep product spreads very thin in 2025. In particular, ethylene, propylene and their derivatives are exposed to severe overcapacity.

Rising trade tensions and slowing economic growth, especially China, could weigh on demand for commodity chemicals in Asia. This could result in demand growth trailing capacity growth for at least the rest of 2025. In addition, the four companies' dependence on exports raises their exposure to competition from gas-based chemical imports and trade barriers. We forecast the companies' commodity chemical businesses will mostly continue to incur operating losses in 2025 before breaking even in 2026.

The improving performance of the group's oil refining and non-commodity chemical businesses could lift overall profitability, albeit only moderately. We expect Formosa Petrochemical's oil refining business, Nan Ya Plastics' electronics material business, and rising sales of the group's differentiated products to support a stronger recovery in related EBITDA margins over the next two years. However, this will not be sufficient to materially lift the consolidated performance, given continued weak profitability from commodity chemical sales.

We expect Formosa Petrochemical's refining margin to improve gradually over the next few quarters, because lower oil prices will stimulate demand, amid very limited capacity additions in 2025-2026. Growing attention to global warming has discouraged investments in new refining capacity. This will likely lead demand growth to exceed new capacity additions in 2025-2026 and support higher utilization and refining margins.

Meanwhile, Nan Ya Plastics' electronics material business has recovered slower than we previously forecast. This was mostly due to weak demand from industrial, automotive, and consumer electronics segments. However, new applications, particularly AI, electric vehicles, and automation, will drive demand growth for electronics materials. This includes printed circuit board and integrated circuit substrates. The four companies' efforts to increase sales of premium products for advanced applications such as AI could also accelerate growth.

We forecast the four companies could increase their EBITDA moderately to about new Taiwan dollar (NT$) 87 billion in 2025 and NT$95 billion in 2026 from NT$60.8 billion in 2024. This will them to return to positive discretionary cash flow and lower their debt slightly in 2025-2026. In addition, we believe the group's debt leverage will remain elevated over the next year, albeit with slight improvement in the ratio of debt to EBITDA to about 4.3x in 2025 from 6.7x in 2024. This will be partly supported by the removal of the companies' debt guarantee for the group's Vietnam-based steel subsidiary in 2025. The companies' debts remained elevated over the past three years due to weak cash flow generation.

The four companies' profitability could take longer to restore to the mid-cycle level than we previously forecast, slowing deleveraging. We expect low profitability in the chemical sector and tightening energy efficiency requirements to shake out small and inefficient production facilities in Asia. We also expect the sector's capital expenditure (capex) to decrease sharply following the latest round of expansion in China, given the sector's weak cash flow and high leverage in the sector.

Nonetheless, we believe a meaningful structural shift will take time with many facilities in China supported by local governments will maintain employment and local capacity. In addition, cost competition from new mega integrated oil refining and chemical complexes could pressure the four companies' margins, given their competitive cost structure utilizing the latest technology. These factors could weaken the Formosa group's cost competitiveness in the long term and increase business risk. The companies are shifting their businesses toward specialty and eco-friendly chemicals such as fine chemicals for semiconductors and recycled plastics and fibers, though this will require more time.

Accordingly, we forecast the ratio of debt to EBITDA for the four companies will improve slowly to about 3x in 2027. This is despite weak free operating cash flow and significant capex needs to increase the production of differentiated products. The ratings also factor in our view of gradual debt reduction and improving credit metrics for the four companies through improving operating cash flows, given their limited financial risk appetite.

Material downside risk remains for our base case amid the volatile global economy and uncertainty over the benefits of the group's product differentiation strategy. Prolonged overcapacity could continue to squeeze the four companies' profitability. Several factors could constrain growth for commodity chemicals over the next two years including conservative market demand amid trade uncertainties and China's weaker economic outlook. Ongoing geopolitical tension is also likely to dampen consumer spending and deepen the demand slowdown over the next few quarters. Moreover, volatile oil prices could bring significant volatility to the four companies' product spreads while their product differentiation strategy awaits market testing.

Outlook

The negative rating outlook reflects material risk that chronic oversupply in Asia's chemical market could limit an earnings recovery for the four Formosa group companies over the next 12-24 months. This will prevent an improvement in their consolidated ratio of debt to EBITDA to below 3.5x over the period.

Our base case still assumes a gradual decline in the leverage ratio, based on our expectation of improving profitability and stable dividend payments and capex over the same period. However, continued capacity growth, rising competition, and slowing economic growth, particularly in China, remain material downside risks to the ratings.

Downside scenario

We could lower the long-term rating on the four companies if the consolidated ratio of debt to EBITDA fails to decline below 3.5x over the next 12-24 months. Scenarios that could lead to this include:

- Aggressive capacity additions together with slowing demand growth in China result in sustained overcapacity that suppresses product prices and product spreads;
- The four companies cannot maintain their cost advantage or cannot diversify away from highly competitive commodity chemicals;
- Competition from gas-based chemical producers in the U.S. and Middle East rises; or
- The four companies make more aggressive cash dividend payouts, capex, or other investments that are substantially above our base case.

Upside scenario

We may revise the outlook to stable if the four companies can improve and sustain the consolidated ratio of debt to EBITDA materially below 3.5x. Scenarios that could lead to this include:

- The four companies can withstand competition from new capacity by maintaining their advantages in cost and product differentiation, leading to a significant recovery in profitability over the next one to two years, as markets adjust to significant capacity additions. Stronger and sustained growth in chemical demand in Asia, particularly China, or substantially lower input costs could also facilitate such a recovery; or

- Consolidated debt falls faster than we had forecast through higher discretionary cash flow with strong profitability, improved working capital management, or prudent capex and cash dividends.

Company Description

The four Formosa Plastics group companies--Formosa Plastics Corp., Nan Ya Plastics Corp., Formosa Chemicals & Fibre Corp., and Formosa Petrochemical Corp.--constitute one of Taiwan's largest private-sector industrial conglomerates in terms of assets. The four companies generated about NT$1.18 trillion in revenue and NT$61 billion in EBITDA in 2024.

The four companies have significant integration in manufacturing facilities with products ranging from oil refining and naphtha cracking to plastics and polyesters. This is particularly reflected in the companies' highly integrated Mai-Liao complex, which provides a stable supply of base chemical feedstock for their production of downstream chemicals.

Our Base Case Scenario

- Taiwan's economy to expand 3.3% in 2025 and 1.7% in 2026, China's economy to grow 4.3% in 2025 and 4.0% in 2026, and Asia-Pacific GDP to grow 4.1% annually in 2025-2026.
- Brent oil price of US$60 per barrel for the rest of 2025, US$65 for 2026-2027.
- Refining margin likely to rise moderately over the next few quarters because lower oil prices stimulate demand and limited capacity is added.
- Better market discipline by chemical producers could sustain or slightly improve product spreads. A mild rise in oil prices in 2026 should slightly lift commodity chemical prices. This is despite average selling prices for individual products vary considerably on their demand-supply balance, especially under pressure from increasing capacity in China. Base chemicals and general plastics could generate product spreads significantly below mid-cycle levels in 2025-2026 due to still-low utilization.
- The four companies consolidated revenue could decline slightly in 2025, mostly due to lower crude oil prices that will lower prices for commodity chemicals and refining products, despite slightly improving output. Revenue should improve slightly in 2026 on improving utilization for base chemicals, polymers and electronics materials. Nan Ya Plastics' electronics materials business could see faster growth on demand growth driven by new applications including AI and Internet of Things.
- Formosa Petrochemical's refining units will operate at close to 82% utilization in 2025 and 85% in 2026, up from 78% in 2024. Olefin utilization rate will rise to about 56% in 2025 from about 60% in 2026, albeit still lower than regional peers. This reflects the impact of slowing capacity additions.
- The consolidated gross margin for the four companies before depreciation and amortization will rise to about 12.2% in 2025 and 13% in 2026 from 9.5% in 2024, amid stabilizing product prices, rising sales volume, slightly higher capacity utilization, and lower oil prices that lower unit costs.
- The four companies' consolidated ratio of expenses will rise slightly to 5.1% in 2025-2026 under a smaller revenue scale.
- Minimal working capital outflow in 2025-2026.
- Capex plus investments to fall slightly to NT$45 billion-NT$50 billion in 2025-2026 as the four companies shift their investment focus to specialty products, as well as decarbonization.

- Cash dividends received from equity investments will decline materially in 2026. That's because the group's Mai Liao Power plant will shut down its coal-fired generators and start constructing gas-fired generators in 2025.
- The four companies will not provide a new debt guarantee to Formosa Group (Cayman) following maturity of its US$1 billion guaranteed bonds in April 2025.
- Average interest rates to stay flat in 2025-2026.
- Average tax rate to remain at 13%-17% in 2025-2026.
- Cash dividend payout to exceed 100% of the previous year's net income in 2025-2026.

Note: GDP growth forecasts are from the latest Credit Conditions Committee. S&P Global Ratings believes there is a high degree of unpredictability around policy implementation by the U.S. administration and possible responses--specifically with regard to tariffs--and the potential effect on economies, supply chains, and credit conditions around the world. As a result, our baseline forecasts carry a significant amount of uncertainty, magnified by ongoing regional geopolitical conflicts. As situations evolve, we will gauge the macro and credit materiality of potential and actual policy shifts and reassess our guidance accordingly.

Key metrics

Formosa Plastics Companies-- Taiwan Ratings Corp. forecast summary.

Industry sector: chemical companies

(Bil. NT$)	2021a	2022a	2023a	2024a	2025e	2026f	2027f	2028f
Revenue	1,335	1,467	1,201	1,183	1,125	1,170	1,214	1,259
Gross profit	360	189	133	113	136	151	166	173
EBITDA (reported)	291	123	75	54	78	92	105	109
Plus: Operating lease adjustment (OLA) rent	--	--	--	--	--	--	--	--
Plus/(less): Other	5	8	5	7	7	1	1	1
EBITDA	296	131	80	61	85	93	106	110
Less: Cash interest paid	(4)	(5)	(10)	(12)	(12)	(12)	(11)	(11)
Less: Cash taxes paid	(18)	(41)	(18)	(8)	(1)	(4)	(7)	(10)
Plus/(less): Other	--	--	--	--	--	--	--	--
Funds from operations (FFO)	275	84	52	41	72	77	88	90
EBIT	266	113	41	17	34	45	58	62
Interest expense	4	6	11	12	12	12	11	11
Cash flow from operations (CFO)	208	132	100	45	66	79	79	79
Capital expenditure (capex)	74	76	66	50	48	46	41	50
Free operating cash flow (FOCF)	135	56	34	(4)	17	33	38	30
Dividends	53	152	61	25	14	18	23	32
Share repurchases (reported)	--	--	--	--	--	--	--	--
Discretionary cash flow (DCF)	82	(95)	(27)	(29)	4	15	14	(3)
Debt (reported)	363	474	503	521	483	468	454	457
Plus: Lease liabilities debt	7	7	7	7	7	7	7	7

Plus: Pension and other postretirement debt	--	--	--	--	--	--	--	--
Less: Accessible cash and liquid Investments	(237)	(212)	(211)	(152)	(123)	(123)	(123)	(123)
Plus/(less): Other	56	31	31	33	--	--	--	--
Debt	190	300	330	409	367	352	338	340
Equity	1,120	998	1,003	946	951	960	975	985
FOCF (adjusted for lease capex)	126	47	25	(14)	18	33	38	30
Interest expense (reported)	4	6	10	12	11	11	10	10
Capex (reported)	74	77	67	51	49	47	42	51
Cash and short-term investments (reported)	281	247	246	184	150	150	150	150
Adjusted ratios								
Debt/EBITDA (x)	0.6	2.3	4.1	6.7	4.3	3.8	3.2	3.1
FFO/debt (%)	144.9	28.0	15.9	10.1	19.8	22.0	26.1	26.3
FFO cash interest coverage (x)	75.0	17.0	6.4	4.5	6.9	7.7	8.8	9.0
EBITDA interest coverage (x)	72.4	20.3	7.5	4.9	7.0	8.0	9.4	9.9
CFO/debt (%)	110.0	44.1	30.2	11.1	17.9	22.4	23.4	23.3
FOCF/debt (%)	71.1	18.8	10.3	(1.1)	4.8	9.3	11.2	8.7
DCF/debt (%)	43.2	(31.8)	(8.2)	(7.2)	1.1	4.1	4.3	(0.8)
Lease capex-adjusted FOCF/debt (%)	66.3	15.8	7.5	(3.3)	4.8	9.3	11.2	8.7
Annual revenue growth (%)	45.9	9.9	(18.1)	(1.5)	(4.9)	4.0	3.7	3.7
Gross margin (%)	27.0	12.9	11.0	9.5	12.1	12.9	13.7	13.7
EBITDA margin (%)	22.2	8.9	6.7	5.1	7.6	8.0	8.8	8.8
Return on capital (%)	20.8	8.6	3.1	1.2	2.5	3.4	4.4	4.7
Return on total assets (%)	16.3	6.5	2.4	1.0	2.1	2.8	3.6	3.8
EBITDA/cash interest (x)	79.7	24.9	8.3	5.2	7.0	8.0	9.4	9.9
EBIT interest coverage (x)	65.1	17.6	3.9	1.3	2.8	3.9	5.2	5.6
Debt/debt and equity (%)	14.5	23.1	24.7	30.2	27.8	26.8	25.7	25.7
Debt fixed-charge coverage (x)	72.4	20.3	7.5	4.9	0.4	1.0	4.2	3.1
Debt/debt and undepreciated equity (%)	14.5	23.1	24.7	30.2	27.8	26.8	25.7	25.7

All figures are adjusted by Taiwan Ratings Corp., unless stated as reported. Figures for the forecast period are based on Taiwan Ratings Corp.'s base-case scenario. a--Actual. e--Estimate. f--Forecast. NT$--new Taiwan dollar. N.M.--Not meaningful.

Liquidity

The short-term rating is 'twA-1+'. We believe the four companies have adequate liquidity to meet their needs over the next 12 months ending March 2026. We expect the consolidated ratio of liquidity sources to liquidity uses to be about 1.22x over the same period. We also estimate the group will likely have positive liquidity sources minus uses, even if forecast EBITDA declines by 15%.

The four companies have solid banking relationships and a generally high credit standing to support their financial flexibility, as reflected in their low interest rates. This includes a 2.08% rate on Nan Ya Plastics Corp.'s five-year NT$-denominated bonds that the company issued in May 2025. The four companies also have large undrawn credit lines. In addition, we believe the four companies can easily meet the requirements of loose financial covenants on their current ratios, ratios of liability to equity, interest coverage, and net worth for debt at their subsidiaries.

Principal liquidity sources

- Cash and short-term investments of NT$204 billion at the end of March 2025.
- Funds from operations of NT$70 billion-NT$80 billion for the 12 months ending March 31, 2026.
- Undrawn long-term credit facilities maturing beyond March 30, 2026, of NT$65 billion-NT$ 75 billion as of the end of March 2025.

Principal liquidity uses

- Debt maturity plus short-term debt repayment of about NT$250 billion for the 12 months ending March 31, 2025.
- Maintenance capex of about NT$20 billion annually in 2025.
- Working capital outflow of NT$2 billion-NT$3 billion for the 12 months ending March 31, 2026.
- Cash dividend payout of NT$16 billion till March 2026.

Ratings Component Scores

Formosa Plastics Corp., Formosa Chemicals & Fibre Corp. Formosa Petrochemical Corp., Nan Ya Plastics Corp.		
	To	**From**
Issuer Credit Rating	twAA-/Negative/twA-1+	twAA/Negative/twA-1+
Business risk	Satisfactory	Satisfactory
Country risk	Intermediate risk	Intermediate risk
Industry risk	Moderately high risk	Moderately high risk
Competitive risk	Satisfactory	Satisfactory
Financial risk	Significant	Intermediate
Cash flow/Leverage	Significant	Intermediate
Anchor	twa+	twaa-
Modifiers		
Diversification/portfolio effect	Neutral (no impact)	Neutral (no impact)
Capital structure	Positive (+1 notch)	Positive (+1 notch)
Financial policy	Neutral (no impact)	Neutral (no impact)
Liquidity	Adequate (no impact)	Adequate (no impact)
Management and governance	Neutral (no impact)	Neutral (no impact)
Comparable ratings analysis	Positive (+1 notch)	Positive (+1 notch)
Group stand-alone credit profile*	twaa	twaa+
Group credit profile	twaa	twaa+
Entity status within group	Highly Strategic	Highly Strategic
*The four companies have not been assigned an SACP. Note: All scores above are in comparison with global obligors.		

Related Criteria & Research

Related Criteria

- General Criteria: Group Rating Methodology - July 01, 2019
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings - March 28, 2018
- Criteria | Corporates | General: Sector-Specific Corporate Methodology - April 04, 2024
- Criteria | Corporates | General: Corporate Methodology - January 07, 2024
- Criteria | Corporates | General: Methodology: Management And Governance Credit Factors For Corporate Entities - January 07, 2024
- General Criteria: National And Regional Scale Credit Ratings Methodology - June 08, 2023
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings - October 10, 2021
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments - April 01, 2019
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers - December 16, 2014
- General Criteria: Country Risk Assessment Methodology And Assumptions - November 19, 2013
- General Criteria: Methodology: Industry Risk - November 19, 2013
- General Criteria: Principles Of Credit Ratings - February 16, 2011

Related Research

- Taiwan Ratings' Ratings Definitions – November 11, 2021

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

Ratings List

Downgraded

	To	From
Formosa Plastics Corp. **Formosa Chemicals & Fibre Corp.** **Formosa Petrochemical Corp.** **Nan Ya Plastics Corp.**		
Issuer Credit Ratings	twAA-/Negative/twA-1+	twAA/Negative/twA-1+
Issue Credit Ratings	twAA-	twAA

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.taiwanratings.com for further information. Complete ratings information is available to subscribers of Rating Research Service at rrs.taiwanratings.com.tw. All ratings affected by this rating action can be found on Taiwan Ratings' public website at www.taiwanratings.com.

Copyright © 2025 by Taiwan Ratings Corporation (TRC). All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of TRC. The Content shall not be used for any unlawful or unauthorized purposes. TRC and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively TRC Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. TRC Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. TRC DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall TRC be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. TRC's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. TRC assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. TRC does not act as a fiduciary or an investment advisor except where registered as such. While TRC has obtained information from sources it believes to be reliable, TRC does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, TRC reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. TRC disclaims any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

TRC keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of TRC may have information that is not available to other TRC business units. TRC has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

TRC receives compensation for its solicited ratings and certain analyses, normally from issuers, originators, arrangers, or underwriters of securities or from obligors. TRC reserves the right to disseminate its opinions and analyses. TRC's public ratings and analyses are made available on its Web sites, www.taiwanratings.com (free of charge), and rrs.taiwanratings.com.tw (subscription), and may be distributed through other means, including via TRC publications and third-party redistributors. Please click here for any other conflict of interests that may affect the credit rating as requested by the regulator.