

Media Release

GlobalWafers Co. Ltd. Assigned 'twAA-/twA-1+' Issuer Credit Ratings; Outlook Stable

March 16, 2021

Rating Action Overview

- GlobalWafers is a Taiwan-based semiconductor wafer manufacturer generating EBITDA of NT\$16.1 billion in the first three quarters of 2020.
- We believe GlobalWafers will strengthen its competitive position; however, somewhat inferior technology positioning relative to the industry leader and high product concentration constrain its competitive position.
- We expect GlobalWafers' relatively strong profitability and improved operating cash flow to help lower its debt leverage over the next two years after a debt surge in 2021.
- On March 16, 2021, Taiwan Ratings Corp. assigned its 'twAA-' long-term and 'twA-1+' short-term issuer credit ratings to GlobalWafers.
- The stable outlook reflects our view that GlobalWafers could sustain its enhanced market position and good profitability over the next two years as well as successfully integrate Siltronic, while at the same time lowering the ratio of debt to EBITDA to close to 2.0x.

Rating Action Rationale

Acquisition of Siltronic AG could enhance GlobalWafers' overall market position in the global raw semiconductor wafer market.

When completed, the acquisition of German-based Siltronic will help enhance GlobalWafers' market position in the raw semiconductor wafer segment to second largest globally in terms of revenue. We estimate GlobalWafers' market share in the global silicon wafer segment could also increase to about 27% after fully consolidating Siltronic, up from 15% in 2020, and very close in terms of sales value to that of the Japan-based market leader, Shin-Etsu Chemical Co. Ltd.

More importantly, we expect GlobalWafers to narrow its technology gap with leading players after fully integrating Siltronic. In particular, we expect with the enlarged capacity of the combined entity and more exposure in advanced epitaxy wafers and technological enhancement, GlobalWafers' position in 12-inch wafers could improve with a combined market share similar to that of the other two leading players.

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The acquisition will also expand GlobalWafers intellectual assets pool and allow it to compare technology nodes internally and seek for the optimal and most advantageous technology approach among more options. In addition, Siltronic's better proficiency in advanced epitaxial wafer and SOI (silicon on insulator) technology could well complement GlobalWafers' expertise in argon anneal and FZ (floating zone) wafers. Post-acquisition, GlobalWafers will also be in a better position to invest in the most advanced equipment given its enlarged scale, which is critical for wafer makers to sustain their competitive strengths.

GlobalWafers can sustain above average profitability with improving product capability, despite a likely slight deterioration after consolidating Siltronic.

We believe that GlobalWafers' strong cost management and large-scale volume production could help to sustain its stronger EBITDA margin and return on capital than most of its peers. That's despite the company's slightly weaker technology capabilities and lower average selling price with less exposure to high-end products compared with Shin-Etsu. In addition, GlobalWafers' relatively high and stable revenue generated from long-term agreements compared with industry peers' help to maintain its high utilization, even during weak market conditions.

The higher contribution from long-term contracts compared with that of its peers is also evidence of GlobalWafers' good reputation in delivering timely and quality products. This in turn reflects the company's capability to sustain a stronger profit margin during industry downturns such as 2019-2020, when by contrast other peers experienced a material deterioration in their profit margin. This was due to a demand slowdown and average selling price correction from the industry's super cycle in 2017-2018.

We expect industry supply tightness driven by limited capacity growth and fast-growing demand, and GlobalWafers' solid position as one of the leading semi wafer suppliers, could continue to underpin the company's profitability at a level comparable to or above average among its peers over the next two years.

GlobalWafers' EBITDA margin could decline slightly in 2021 due to Siltronic's weaker cost structure, which mainly reflects its higher production costs in Germany and more sophisticated production process for epitaxy wafers. However, GlobalWafers has a good track record improving the cost structure of companies it acquires, which are mostly cross-border deals. It mainly achieves cost efficiencies through savings in financing costs, enhanced bargaining power in poly silicon procurement, centralized R&D to avoid duplicating tasks, and a constant review to optimize production. Nonetheless, any cost improvement will remain subject to significant execution risk, and GlobalWafers could still require higher costs and more effort in managing its production sites globally.

GlobalWafers has better flexibility and capability in serving local clients with more diversified production sites than most of its peers'.

The company's disperse production sites and sales network worldwide enable GlobalWafers to provide stronger and timely support to its customers, while at the same time increasing its own manufacturing flexibility. We believe GlobalWafers could better withstand political geographic risks and rising trade tensions, given its better capabilities in adjusting its supply chain flexibly. As semiconductor companies are reconfiguring their supply chains to improve resiliency and establish local supply chains, we view GlobalWafers to be better positioned in serving customers in the U.S. and Europe

because of its available local supply chain compared with its leading peers whose production sites are mainly clustered in Asia.

High industry concentration and high entry barriers could limit any meaningful threat from second-tier vendors anytime soon.

In our view, GlobalWafers' established scale economies, solid customer relationships, and enhanced technical strengths underpin its competitive strengths, while smaller competitors are unlikely to narrow the gap meaningfully over the next two years. We also believe China players are less likely to pose a major threat over the next two to three years, particularly for advanced 12-inch wafers for which emerging applications such as 5G and IoT (Internet of Things) could spur robust demand growth. This is because the long learning curve and lack of critical intellectual property could be a major barrier for China-based manufacturers to catch up with leading global players.

In addition, unresolved trade tension between China and the U.S. could prevent China-based players from acquiring the most advanced equipment and strengthen their technology capabilities. High industry concentration with the top five suppliers commanding nearly 95% of the market also serves as an effective barrier for smaller players to gain market share.

Technology capabilities still lag behind the industry leader, particularly in high end products, albeit potentially narrower after full integration of Siltronic.

We view GlobalWafers' competitive position is still somewhat inferior to that of Shin-Etsu, particularly in the most advanced technology, owing to the market leader's established reputation characterized by leading technology and better and consistent quality. This hinders the company from getting involved in top clients' most advanced product developments as the first mover during the early phase. Such early engagement could generally translate into a price premium, enabling the market leader to sustain better profit margins.

The acquisition of Siltronic is likely to improve GlobalWafers' position in high-end products but might not be enough to fully close the technology gap with leading wafer producers or gain significant market share for high-end products from the leading Japanese player. That's because the criticality of raw wafer's quality in the production chain could reduce customers' tendency to switch its major vendor.

High single product risk could lead to performance volatility, partly offset by diversified end applications.

GlobalWafers generates all its revenue from semiconductor wafers, which exposes the company to the high cyclicity of the semiconductor industry. Product concentration risk is partly offset by GlobalWafers' adequate end-segment diversification, though these segments could still be positively correlated to a certain extent. We expect communications, consumers and memory to account for similar weightings of 20%-30% of the company's total revenue over the next two years. GlobalWafers' revenue from high-end products, such as 12-inch epitaxy wafers and SOI, could continue to rise through acquisitions and technology advancement. This should help the company to increase its exposure in rapidly growing applications driven by emerging new technologies such as 5G, IoT, and electric vehicles, as well as certain niche markets.

Stronger cash flow generation could support debt deleveraging over the next two years.

In our base case scenario, GlobalWafers' improving EBITDA is likely to help bring its ratio of debt to EBITDA down close to 2x and below over the next two years from our estimate of 2.6x-3.0x in 2021. We project GlobalWafers' debt leverage will likely rise significantly in 2021 from a net cash position in 2020, following the acquisition of Siltronic that involved a significant cash outflow of new Taiwan dollar (NT\$) 95 billion-NT\$100 billion.

However, we believe GlobalWafers will gradually deleverage over the next three years based on management's track record of maintaining low debt leverage through improved cash flow generation and prudent financial management. The management team is also likely to accelerate its debt deleverage through sizable equity raising amid favorable market conditions over the next one to two years. In addition, given management's relatively low debt appetite, caution in taking on large acquisitions, and the lack of appropriate acquisition targets in the market, we do not assume GlobalWafers will pursue further major acquisitions over the next two years.

We view GlobalWafers as a core subsidiary of SAS group, given the company contributes nearly all of the group's EBITDA.

We believe Sino-American Silicon Products Inc. (SAS) will maintain a controlling ownership in GlobalWafers (51.17% as of February 2021), given that GlobalWafers is the most critical and profitable subsidiary within SAS group. GlobalWafers represented about 90% of SAS's consolidated revenue, and nearly 100% of its operating income and EBITDA in 2020. GlobalWafers operates in lines of business or functions that are integral to the group's overall business strategy and plays a key role as profit growth driver within the group. GlobalWafers' products and services are also very closely aligned with the group's long-term growth strategy. As the major profit driver of the group, GlobalWafers has very strong and long-term commitment from the group's senior group management which shares the same chairman. SAS also controls the board of directors of GlobalWafers. As a result, we view GlobalWafers a core subsidiary of SAS group.

We assess SAS' group credit profile as fully aligned with the stand-alone credit profile of GlobalWafers. SAS' business risk is reflective of that of GlobalWafers, given the group generates nearly all of its cash flow from the profitable subsidiary. The group's financial risk profile is also commensurate with that of GlobalWafers because very limited debts stem from the group's non-semiconductor wafer business. As a result, our assessment on SAS' group credit profile is the same as the stand-alone credit profile of GlobalWafers', and hence has no rating impact on GlobalWafers.

We view GlobalWafers as an insulated subsidiary of SAS Group, and our issuer credit rating on GlobalWafers is capped at one notch above the group credit profile of SAS on S&P Global Ratings' global rating scale. This reflects our belief that as a listed company with three independent directors out of seven, GlobalWafers' business integration with its parent group is limited, and its financial performance and funding are highly independent from those of the group. We also believe the company does not commingle its funds, other assets and cash flow with that of SAS. The company is also subject to additional external oversight on listed companies from regulators and investors.

Outlook

The stable outlook reflects our view that GlobalWafers could enhance its market position and sustain good profitability as well as the successful integration of Siltronic, though the deal remains subject to various governments' regulatory approval. The stable outlook also reflects our view that GlobalWafers will lower its ratio of debt to EBITDA to close to 2.0x over the next two years following a surge in debt in 2021 to fund the acquisition. Our expectation also reflects significant revenue and EBITDA growth driven by the acquisition of Siltronic and a favorable market condition propelled by robust demand growth for semiconductor wafers amid tight supply.

Downward scenario

We may lower the rating on GlobalWafers if the company's debt leverage remains elevated without signs of improvement and the company fails to improve its ratio of debt to EBITDA to close to 2x as in our projection over the next two years. This may occur if:

- GlobalWafers' profitability weakens substantially because the company fails to successfully integrate Siltronic, resulting in lower revenue and EBITDA growth than we currently expect. Such a performance deterioration could also occur if intense competition or a weakened technology positioning induces severe pricing pressure from GlobalWafers' clients or the loss of key customers; or
- The company takes on large-scale acquisitions or becomes more aggressive with its capex or shareholder friendly actions than we assume in our base case.

In a less likely scenario, we may lower the rating on GlobalWafers if the company fails to obtain regulatory approval to acquire Siltronic. This mainly reflects GlobalWafers' weaker operating scale and technological positioning compared with market leaders' without synergies from the acquisition.

Upward scenario

Though the likelihood is low in the next one to two years, we may raise the long-term rating on GlobalWafers if:

- The company substantially lowers its debt and maintains a net cash position on a sustainable basis, likely through equity raising, robust cash flow generation from its expanded operating scale, and improved profit margin as well as a conservative appetite in capex, acquisitions and shareholder friendly actions. At the same time, GlobalWafers would have to enhance its market position through strong growth in high-end products, gain meaningful market share from the top-tier client, and materially narrow its technology and reputation gap with market leaders, as evidenced by improving average selling price and value share growth in premium products.

Our Base-Case Scenario

- S&P Global's forecast for global GDP to expand 5.0% in 2021 and 3.9% in 2022, following a contraction of 3.7% in 2020.
- S&P Global's forecast that global IT spending will increase by about 4% in 2021, which lags behind projected growth in global GDP over the same period due to tapering of benefits from working-from-home. This is because many enterprises brought forward their hardware purchases into 2020.
- Taiwan Ratings' base case scenario for GlobalWafers indicates 45%-55% sales growth in 2021 and 25%-35% growth in 2022, following a moderate decline of 4.7% in 2020, based on our expectation that the deal of Siltronic acquisition will be completed in the second half of 2021. This robust growth forecast also factors in our view of strong semiconductor wafer demand driven by the accelerated rollout of 5G mobile communications, remote working and remote learning, as well as a recovery in the global auto market that aggravates wafer supply tightness.
 - Wafer shipments to grow by 4%-6% for 8-inch and 12-inch wafers in 2021 and 3%-5% in 2022 propelled by robust demand from 5G, automotive, IoT, data center, and cloud computing.
 - Average selling price to rise by a high-single digit in 2021 due to supply tightness, given limited capacity growth over the past few years, and another 3%-5% price increase in 2022.
 - Our forecast of 2021 factors in a half-year contribution from Siltronic before full-year contribution is incorporated in 2022.
- GlobalWafers' cost structure to weaken moderately due to the effect of consolidating Siltronic, which has higher operating costs than GlobalWafers' corporate average.
- We factor in NT\$97 billion-NT\$100 billion cash outflow in 2021 for acquiring the outstanding shares of Siltronic and associated transaction fees, in addition to a cash outflow of about NT\$4.5 billion in 2020.
- We expect capex to increase to NT\$10 billion-NT\$12 billion and NT\$12 billion-NT\$14 billion in 2021 and 2022, respectively, up from about NT\$10 billion in 2020 including capex from Siltronic.
- We assume the cash dividend payout ratio will decline to 55%-60% in 2021 due to the large cash flow to fund the acquisition, but increase to about 80% in 2022--similar to that in previous years.
- We net GlobalWafers' debts with about 85% of its cash and cash equivalents holdings to arrive at our adjusted debt taking into account inaccessible overseas cash subject to repatriation tax.

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

- EBITDA margin of 35%-37% in 2021 and 34%-36% in 2022, versus 38.5%-39.5% in 2020.
- Debt to EBITDA ratio of 2.6x-3.0x in 2021 and 2.0x-2.3x in 2022, versus a net cash position in 2020
- Ratio of discretionary cash flow to debt of 3%-7% in 2021 and 6%-12% in 2022.

Liquidity

The short-term rating on GlobalWafers is 'twA-1+'. We believe that GlobalWafers has adequate liquidity to meet its needs over the next 12 months, based on our view that the company's ratio of liquidity sources to liquidity uses will be 1.2x-1.3x over the next 12 months. We expect GlobalWafers' liquidity sources will continue to exceed uses even if the company's EBITDA were to decline by 15%. GlobalWafers is likely able to absorb high-impact, low-probability events, with limited need for refinancing, given its high cash balance and stable operating cash flow, as well as prudent financial management.

We assess GlobalWafers has sound relationship with lending banks and a generally satisfactory standing in the credit markets in Taiwan. This is evidenced by the company's low financing cost and multiple access to the financial market, if needed. We also believe GlobalWafers has generally prudent risk management, as evidenced by its sustainably low debt leverage over the past several years and good liquidity management supported by steady cash flow generation and ample cash balance on hand in the past several years. There is no financial covenant on GlobalWafers' existing debts. The company's planned syndication loan to fund the acquisition of Siltronic may carry some financial covenants but we view the likelihood that GlobalWafers breaches the thresholds and impairs its liquidity to access the bank line to be very low.

Principal Liquidity Sources

- Cash and short-term investments: NT\$26.9 billion as of the end of September 2020.
- Cash flow from operations: NT\$22 billion-NT\$25 billion over the 12 months ending September 2021.
- Ad hoc NT\$80 billion-NT\$90 billion to fund Siltronic acquisition through syndication loan or bond issuance.

Principal Liquidity Uses

- Debt maturities: NT\$10.1 billion over the 12 months ending September 2021.
- Maintenance capex: NT\$1 billion-NT\$3 billion over the 12 months ending September 2021.
- Acquisition: Additional NT\$97 billion-NT\$100 billion to achieve at a total shareholding of 70.27% Siltronic and associated transaction fees.

Ratings Score Snapshot

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

Note: The descriptors below are on a global scale.

Business risk: Satisfactory

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

Financial risk: Intermediate

- Cash flow/leverage: Intermediate

Anchor: twa+

Modifiers

- Diversification/portfolio effect: Neutral (no impact)

- Capital structure: Neutral (no impact)
- 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: twaa-

Group credit profile: twaa-

- Entity status within group: Core (The ICR reflects the entity's SACP of 'twaa-')

Related Criteria & Research

Related Criteria

- General Criteria: Group Rating Methodology - July 01, 2019
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities - November 13, 2012
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers - December 16, 2014
- General Criteria: Methodology: Industry Risk - November 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions - November 19, 2013
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments - April 01, 2019
- Criteria | Corporates | General: Corporate Methodology - November 19, 2013
- General Criteria: Principles Of Credit Ratings - February 16, 2011

Related Research

- Taiwan Ratings' Ratings Definitions – August 10, 2020

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

Ratings List

New Ratings

GlobalWafers Co. Ltd.

Issuer Credit Rating	twAA-/Stable/twA-1+
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