

Media Release

Aerospace Industrial Development Corp. Assigned 'twAA-/twA-1+' Ratings; Outlook Stable

May 29, 2019

Rating Action Overview

- We expect several factors to underpin AIDC's competitive position and satisfactory profitability over the next one to two years. These include the likelihood that AIDC will maintain its role as only company in Taiwan providing self-developed aircraft with sustainable business from their maintenance and repair, the national policy of increasing self-sufficiency in aero defense, and the relatively stable performance of AIDC's commercial engine business.
- However, AIDC's relatively small scale and limited projects on hand, high client concentration with strong customer bargaining power, expansion in some loss-making component businesses for commercial aircraft, and higher debt leverage partly temper these strengths.
- We believe there is a very high likelihood that the Taiwan government would provide sufficient and timely extraordinary support to AIDC in times of financial stress, due to the company's very strong link and very important role as the sole supplier for homemade defense aircraft.
- On May 29, 2019, Taiwan Ratings Corp. assigned its 'twAA-' long-term and 'twA-1+' short-term issuer credit ratings to AIDC.
- The rating outlook is stable to reflect our expectation that AIDC will maintain its current competitive
 position and slightly improve its debt to EBITDA ratio to close to 4x, with no change in its role and link
 to the Taiwan government over the next two years.

Rating Action Rationale

The ratings on Aerospace Industrial Development Corp. (AIDC) reflect the company's monopoly role providing self-developed aircraft to Taiwan's military with sustainable business from the maintenance of such aircraft, the government's policy to increase self-sufficiency in airborne defense, as well as the relatively stable performance of AIDC's commercial engine business. We expect all these factors to underpin the company's competitive position and satisfactory profitability over the next one to two years. Tempering these strengths are the company's relatively small scale and limited projects on hand, high client concentration with strong customer bargaining power, AIDC's expansion in loss-making commercial aviation component parts business, and current high debt leverage.

Founded in 1969 and previously a fully government-owned entity, AIDC is only company in Taiwan with a long history providing self-developed aircraft, including AT-3 and IDF aircraft and their upgrade programs. AIDC is also responsible for the maintenance and repair of such

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+886-2-8722-5827 raymond.hsu @spglobal.com raymond.hsu @taiwanratings.com.tw aircraft. We expect AIDC to continue to benefit from these business opportunities over the next five to ten years, particularly as these aircraft are aging. We also believe that long-term and recurring business from the Taiwan government brings higher stability to AIDC's overall performance.

AIDC's self-developed aircraft projects will maintain very high priority in the government's budget. Taiwan's budget allocation for national defense is increasing under the current relationship between the governments of Taiwan with China. According to the Taiwan government's 2019 budget, spending on national defense has risen to 2.1% of Taiwan's forecasted GDP, which is higher than the average of 1.8% over the past five years. Furthermore, the government has budgeted New Taiwan dollar (NT\$) 68.6 billion for a new advanced jet trainer program, which will support AIDC's business growth and profit for the next several years.

We expect AIDC to maintain its relatively stable performance, particularly in its engine business, supported by the company's satisfactory technology capabilities with various certifications. The company has a proven ability to co-develop next generation products with large major engine companies, such as GE Aviation's LEAP program, by leveraging its good engineering capability in manufacturing thin metal parts with high strength and low weight. However, most intellectual property rights in the commercial aviation industry are retained by the aircraft and engine original equipment manufacturers (OEMs). This means suppliers like AIDC manufacture most of the components/systems based on the original blueprint and technical guidelines, and differentiate themselves mainly by offering better quality in products and services, as well as maintaining good relationships with clients.

AIDC's relatively small scale compared with its larger global peers', limited diversified business portfolio, and high client concentration in its commercial aviation business will continue to limit the company's overall competitive position, in our view. AIDC currently has 140 projects on hand bringing in only about US\$900 million revenue annually. Aside from the 46% sales contracted with the Taiwan government, the largest remaining nine commercial clients accounted for about 50% of AIDC's total revenue in 2018. We expect such business concentration to remain, and bring higher volatility to the company's operating performance over the next few years, because AIDC will continue to expand its business in the commercial aviation sector.

Furthermore, AIDC faces strong bargaining power from its downstream clients due to the oligopoly market structure. In addition to price competition, aircraft and engine OEMs also try to improve their margins by reducing costs, and increase their control over aircraft development and production. This trend could lead to lower margins for aerospace suppliers. As the result, the cost down strategy implemented by Boeing and Airbus will continue to limit any material margin improvement in AIDC's commercial aircraft business over the next few years.

Moreover, OEMs often ask suppliers to extend their payment-terms, further adding pressure to suppliers' cash flow, as evidenced by AIDC's longer account receivable days over the past few quarters, which has raised its debt level. However, we expect moderate improvement in AIDC's cash conversion cycle, given the company has reached agreement with some major commercial clients for better terms and AIDC is likely to receive quite a few payments from the Taiwan government in 2019.

We forecast AIDC's EBITDA margin to be at 12%-13% over the next two years, compared with 13.9% in 2018. The relatively lower margin is due to fewer self-developed defense projects, as well as the impact of AIDC's losses on some of its commercial aircraft component business because these contracts often carry a relatively high initial investment and long payback period. However, the EBITDA margin is likely to recover when the company enters the major delivery period for the new jet trainer after 2020, in our view. Under such a scenario, AIDC is

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likely to improve its debt to EBITDA ratio slightly to close to 4.0x in 2019-2020, from 4.6x as of the end of 2018.

Outlook

The stable outlook reflects our expectation that AIDC will achieve slight improvement in its debt to EBITDA ratio to close to 4.0x over 2019-2020. This is supported by the company's strong position as Taiwan's major supplier of self-developed defense aircraft, the recurring business from the maintenance and repair of these aircraft, and the increasing contribution from its aero engine business with relatively stable and good margin. The assessment of an improved debt to EBITDA ratio also reflects our expectation of some cash inflow due to moderate improvement in AIDC's receivable turnover days.

The stable outlook also reflects our expectation that AIDC's role to and link with the Taiwan government will remain intact over the next one to two years.

Upward scenario

We could raise AIDC's rating if the company could keep its ratio of debt to EBITDA comfortably below 4x. This could happen if the company improves its cash conversion cycle with more effective accounts receivable management. This could also happen over the next two to three years if the company could improve its EBITDA and cash flow materially during the major delivery period of the next generation jet trainer.

Downward scenario

We could lower the rating if the company's debt to EBITDA ratio weakens to above 5x persistently. This could happen if AIDC's cash conversion cycle further deteriorates, resulting in a larger cash outflow than we previously expected due to strong bargaining power from its downstream clients. This could also happen if the company incurs large losses particular in its business development in manufacturing parts and components for commercial aircraft, or faces more intensified competition that results in a material deterioration in AIDC's profit margin and cash flow.

The ratings will also come under pressure if we believe that the company's role to and link with the Taiwan government has weakened substantially, which includes:

- A substantial reduction in government ownership, such as to less than 1/3 of total ownership, or the government gives up control of AIDC's board.
- A change in government policy such that the government chooses to materially lower its self-sufficiency on air defense, and instead purchases aircraft from primarily outside of Taiwan.

Our Base-Case Scenario

Our base case scenario assumes the following:

Macro and industrial assumptions:

- S&P Global's forecast of Taiwan's real GDP to grow 2.3% in 2019 and 2020 and for global GDP to grow 3.4% in 2019 and 3.6% in 2020.
- Commercial aircraft orders will likely remain at or below the 2018 level of production (about 1,600) over the next few years. However, air traffic to continue to increase at a faster pace than the historical average of 5.5% and there is still demand to replace older aircraft with new, more fuelefficient models.
- Airbus and Boeing will likely continue to increase the production rates of their popular aircraft, due
 to the huge backlog of orders for these aircraft. However, the recent temporary production cut for
 Boeing's 737 MAX could negatively affect its suppliers, depending on their exposure to the MAX
 program.

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Company specific assumptions:

- We expect AIDC's revenue to be relatively flat in 2019, but grow by a mid-single-digit in 2020.
 - > Sales from defense aircraft projects will increase only moderately as the company will only start to deliver the next generation jet trainer over the next two years.
 - Sales from military related maintenance and repairs will stay at or be lower than the 2018 level, given the company finished a major military project in 2017.
 - > Sales from commercial aircraft will grow particular in 2020, due to the increasing project contribution from popular single-aisle programs. We do not expect a material impact from production cut on 737 MAX, based on the company's moderate exposure to the whole 737 family.
 - > Sales from engine-related products will also grow as the shipment for next-generation products starts to increase.
- AIDC's profitability will remain relatively low in 2019-2020. However, the company's EBITDA margin
 is likely to recover when AIDC enters the major delivery period for the new jet trainer after 2020, in
 our view.
- The company's capital expenditure is likely to grow to about NT\$1.5 billion in 2019 and NT\$2 billion in 2020 for the investment in a new engine casing factory.
- We expect moderate improvement in AIDC's cash conversion cycle.
- We assume about 60% cash dividend payout ratio over 2019-2020.

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

- Ratio of debt to EBITDA of 4.5x-4.3x in 2019 and 4.4x-4.2x in 2020.
- EBITDA margin at 12%-13% in 2019 to 2020

The long-term issuer credit rating on AIDC is five notches above the company's standalone credit profile (SACP) of 'twbbb'. This reflects our view there is a very high likelihood that the Taiwan government would provide timely and sufficient extraordinary support in the event of financial distress. We base this on our view that:

- AIDC has a very strong link with the Taiwan government, as the government is the single largest shareholder and currently owns 35.18% of AIDC through the Ministry of Economic Affairs (MOEA), which has a written commitment to maintain the government's ownership at least at 34%. Given the importance of developing a self-made, independent national defense industry, we do not expect the government to give up control and strong influence over AIDC's strategic direction in business and financial planning over the next two to three years.
- AIDC also has very important role to the government, because it is the sole supplier/coordinator for domestic national air defense projects and has a long record providing Taiwan's self-developed aircraft over the past few decades. AIDC is very important to the government because other countries do not allow their aircraft to be integrated with Taiwan's self-developed weapons system. The only solution is to develop homemade aircraft through AIDC. Also, the self-developed aircraft enhance the Taiwan government's bargaining power to purchase more advanced jets from the U.S. or other foreign countries. We therefore believe the government has a strong will to maintain the company's operating and financial stability over the long term.

Liquidity

The short–term rating on AIDC is 'twA-1+'. We assess AIDC's liquidity as adequate because we believe the company has sufficient cash flow to meet its needs over the next 12 months factoring in maintenance capital expenditure and ongoing government support in the form of state-owned bank facilities. We expect the ratio of liquidity sources to uses will be slightly above 1.2 times in the 12 months ending December 2019. Furthermore, we believe the company will have sufficient liquidity headroom even if its forecast EBITDA declines by 15%.

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We also believe the company has well-established relationships with banks and could establish new credit facilities when needed, due to its status as a government related entity, as evidenced by AIDC's average interest rate of only 0.8% in 2018. We believe AIDC has generally prudent risk management to ensure at least adequate liquidity, because the company's operational and financial budget needs to be approved by the MOEA and remains under the government's surveillance. The company's loans carry no financial covenant.

Principle Liquidity Sources:

- Cash and short-term investment: NT\$0.96 billion as of the end of 2018.
- Funds from operations: About NT\$2.9 billion in 2019.
- Expected working capital inflow: About NT\$1.4 billion.
- Ongoing government support in form of government related bank facilities: NT\$14 billion to cover refinancing needs in 2019.

Principle Liquidity uses:

- Debt maturities: NT\$15.5 billion in 2019.
- Maintenance capital expenditures: About NT\$0.3 billion in 2019.
- Cash dividend payout: About NT\$1.26 billion in 2019.

Rating Score Snapshot

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

Note: All scores are in comparison with global obligors.

Business risk: Fair

- Country risk: Intermediate
- Industry risk: Intermediate
- Competitive position: Fair

Financial risk: Aggressive

- Cash flow/Leverage: Aggressive

Anchor: twbbb

Modifiers

- Diversification/Portfolio effect: Neutral (No impact)
- Capital structure: Neutral (No impact)
- Financial policy: Neutral (No impact)
- Liquidity: Adequate (No impact)
- Management and governance: Fair (No impact)
- Comparable rating analysis: Neutral (No impact)

Stand-alone credit profile: twbbb

- Sovereign rating: AA-
- Likelihood of government support: Very high (+5 notches from the SACP)

Related Criteria

- Understanding Taiwan Ratings' Rating Definitions, www.taiwanratings.com June 26, 2018
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions March 25,
 2015
- Criteria | Corporates | General: Corporate Methodology November 19, 2013
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments April 01, 2019
- General Criteria: Country Risk Assessment Methodology And Assumptions November 19, 2013
- General Criteria: Methodology: Industry Risk November 19, 2013

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- Criteria | Corporates | Industrials: Key Credit Factors For The Aerospace And Defense Industry -March 25, 2014
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers - December 16, 2014
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers - November 13, 2012
- General Criteria: Group Rating Methodology November 19, 2013
- General Criteria: Use Of CreditWatch And Outlooks September 14, 2009

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Ratings List

New Rating		
	То	From
Aerospace Industrial Development Corp.		
Issuer Credit Ratings	twAA-/Stable/twA-1+	Not rated

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