

## Research Update

# Taiwan Semiconductor Manufacturing Co. Ltd. 'twAAA/twA-1+' Ratings Affirmed On Strong Performance; Outlook Stable

November 6, 2019

## Rating Action Overview

- TSMC plans to raise its capital expenditure significantly to US\$14 billion-US\$15 billion annually in 2019-2020, which will result in temporary negative discretionary cash flow; however, we expect the company to maintain a net cash position during the period.
- We expect TSMC to further strengthen its market leadership through accelerated investments in advanced process technologies, despite the short-term impact on margins.
- On Nov. 6, 2019, we affirmed our 'twAAA/twA-1+' issuer credit ratings on the Taiwan-based semiconductor foundry company, and revised our liquidity assessment to strong from exceptional. At the same time, we affirmed our 'twAAA' issue rating on the company's unsecured corporate bonds.
- The stable outlook reflects our expectation that strengthened technology leadership will enable TSMC to maintain its strong, albeit slightly weaker, profitability and a net cash position on an adjusted basis over the next 12-24 months.

## Rating Action Rationale

### **Strengthening technology leadership to underpin faster growth and very strong EBITDA margins.**

**Taiwan Semiconductor Manufacturing Co. Ltd.'s** (TSMC's) plan to accelerate investments in advanced 7 nanometer (nm) and 5nm process technology should help it maintain its technology leadership, support faster growth than its foundry peers, and generate very strong, albeit slightly lower, EBITDA margins in 2019-2020. We also expect TSMC to remain debt free on an adjusted basis over the period. That's despite the company's discretionary cash flow could turn negative temporarily during the period due to its plan to raise its capital expenditure significantly to US\$14 billion-US\$15 billion annually in 2019 and 2020, up from TSMC's previous guidance of US\$10 billion-US\$11 billion for 2019.

### **Rising capex along with a lower cash balance and short-term investments weaken liquidity slightly.**

We have revised our assessment of TSMC's liquidity to strong from exceptional to reflect the impact of the significant increase in capital expenditure and the company's lower cash balance and short-term investments at the end of September 2019. We now expect that TSMC's ratio of liquidity sources to liquidity uses to be 1.5x-2.0x for the 24 months ending Sept. 30, 2021. The revision has no impact on the ratings.

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# Outlook

The stable outlook reflects our view that TSMC's dominant market position, strengthened leadership in process technologies, and more diversified end-market applications will help the company sustain strong profitability and cash flow over the next two years. We also expect TSMC to remain debt free on an adjusted basis during the period. This is despite the company's proposed significant increase in capital expenditure could lead to negative discretionary cash flow in 2019-2020.

## Downward scenario

We may lower the long-term rating over the next two years if TSMC fails to maintain its leading technology position and loses market share, resulting in significant deterioration in its profitability and cash flow generation. We may also lower the rating if the company pursues a less-prudent financial policy such as through more aggressive shareholder distributions or mergers and acquisitions, and takes on high leverage. A ratio of debt to EBITDA exceeding 1.0x for an extended period, increased cash flow volatility due to mergers and acquisitions, or a weakening competitive position could indicate such a change.

## Rating Score Snapshot

**Issuer Credit Rating:** twAAA/Stable/twA-1+

Note: The descriptors below are on a global scale.

**Business Risk:** Strong

- **Country risk:** Intermediate
- **Industry risk:** Moderately high
- **Competitive position:** Excellent

**Financial Risk:** Minimal

- **Cash flow/Leverage:** Minimal

**Anchor:** twaaa

**Modifiers**

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Strong (no impact)
- **Management and governance:** Strong (no impact)
- **Comparable rating analysis:** Neutral (no impact)

## Related Criteria

- Understanding Taiwan Ratings' Rating Definitions, [www.taiwanratings.com](http://www.taiwanratings.com) - June 26, 2018
- General Criteria: Methodology For National And Regional Scale Credit Ratings - June 25, 2018
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings - March 28, 2018
- General Criteria: Group Rating Methodology - July 01, 2019
- 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
- Criteria | Corporates | Industrials: Key Credit Factors For The Technology Hardware And Semiconductors Industry - November 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions - November 19, 2013
- General Criteria: Methodology: Industry Risk - November 19, 2013
- Criteria | Corporates | General: Corporate Methodology - November 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities - November 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks - September 14, 2009

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# Ratings List

## Ratings Affirmed

### Taiwan Semiconductor Manufacturing Co. Ltd.

Issuer Credit Ratings	twAAA/Stable/twA-1+
Unsecured Corporate Bond Issue Rating	twAAA

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