MOODY'S INVESTORS SERVICE

OUTLOOK

17 September 2019



Manufacturing – Global Outlook revised to negative on lower earnings forecasts; likely to weaken further

Our outlook for the global manufacturing industry is negative. This reflects our expectations for fundamental industry business conditions over the next 12 to 18 months.

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- Prospects for broad earnings growth are in doubt; the likelihood that we revise our forecasts downward is increasing. Our revised aggregate EBITDA forecast calls for no growth this year and flat to about 1% growth in 2020. These forecasts are a fraction of the rates that we anticipated earlier in the year. Moreover, we believe there is a growing likelihood of further downward EBITDA adjustments over the next year as many segments in this industry are challenged by emerging headwinds. There are two key issues: slowing economic growth worldwide and heightened trade tension, which will weigh heavily on an industry critically dependent on trade flow and will contribute to growing uncertainty.
- » Trade friction and the widening scope of tariffs will likely have significant detrimental effects on earnings. Manufacturing companies have done well to manage the initial round of tariffs; companies largely passed input cost increases through with margins relatively unaffected in a continued strong US economic environment. However, with tariffs broadening and with no evidence that trade disputes will be resolved soon, we believe that manufacturers will increasingly face risks because of supply chain disruption and increases in input material costs. This will pressure margins at a time when demand growth weakens as customer spending on investment wanes.

» Most segments within the industry are softening; only aerospace and defense expected to have solid growth in 2020 (see Exhibit 1). We expect modest earnings growth in several industrial sectors, although these forecasts are vulnerable to downward revisions. The transport sector is likely to be weak, largely because of slower automotive sales globally through next year, as is the utility sector because of ongoing demand conditions in the power generation segment. Only the aerospace and defense sector, led by strong defense spending and commercial aircraft orders, is expected to generate strong growth, including a boost after the grounding of <u>Boeing's (A2 negative) 737 Max has been lifted</u>.

Exhibit 1

Earnings growth prospects weakening in most manufacturing segments

Segment	Q3 17	Q4 17	Q1 18	Q2 18	Q3 18	Nov' 18	Q4 18	Q1 19	Q2 19	Q3 19	Legend
Aerospace / Defense									\mathbf{V}	\mathbf{V}	Strong
Agriculture	^										Moderate
Construction						\mathbf{V}	\checkmark				Weak
Energy / Chemicals						\mathbf{V}	$\mathbf{+}$			\checkmark	
Mining	1									\checkmark	
Process Control / Components										\checkmark	
Transportation											
Utilities											

There is no numerical range for strong, moderate and weak. The decision as to which category each end market is placed is based on assessments by a group of Moody's Investors Service analysts.

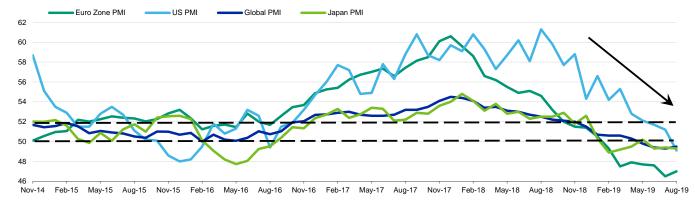
Up/down arrow indicates strengthening/weakening of growth prospects per Moody's Investors Service analysts. Source: Moody's Investors Service estimates

» Deteriorating industry indicators support slower growth forecasts. Coinciding with our increasingly pessimistic view on the sector's earnings, we are seeing dramatic declines in certain forward-looking industrial indicators. For example, the Global Purchasing Managers' Index (PMI), which gauges current sentiment among manufacturing sector participants and serves as a leading indicator to changes in industry conditions, has been falling steadily from peak readings in August 2018. Global PMI is now below 50, indicating contraction in the sector and foretelling weakening order and production levels going into 2020. PMI readings in all regions are now below 50, indicating universally negative sentiment in the sector (see Exhibit 2).

Exhibit 2

Major PMI indicators are in contraction territory

Eurozone, US, Japan and global PMI readings since November 2014; Dashed lines represent upper and lower bounds of PMI supporting a stable outlook



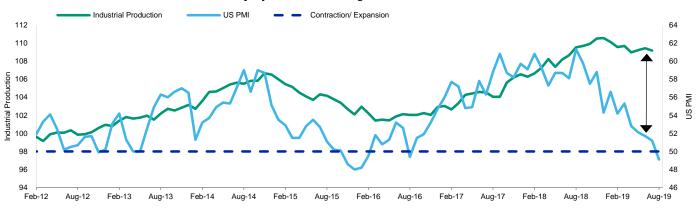
All PMIs in the above chart are manufacturing PMIs

Sources: Institute for Supply Management, Trading Economics, IHS Markit, J.P. Morgan, International Federation of Purchasing and Supply Management and Markit Economics

Notably, while European and Asian manufacturing trends have been weak for some time, US PMI had been relatively strong over the past year, providing a bulwark against a global industrial downturn in 2019. However, US PMI, at 49.1, as of August 2019, is now below 50 for the first time in three years — or since the last industrial recession. This sentiment starkly contrasts with current measures of US manufacturing health, such as Industrial Production which, as Exhibit 3 shows, is just off peak levels of 2018. We believe that current output levels may be one reason why many US companies continue to guide for relatively strong earnings in 2019. We believe that a continuance of such growth through 2020 will prove elusive, and we suspect that earnings guidance could be lowered quickly and dramatically once it appears that production levels will fall further.

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Exhibit 3



In the US, production levels are holding up, but sentiment foreshadows a decline Industrial Production Index- Index 2012=100, seasonally adjusted; US PMI readings

The contraction/ expansion line is in reference to a PMI reading of 50 Sources: Federal Reserve Bank of St. Louis and Institute for Supply Management

- Slobal macroeconomic picture is weakening. More broadly, there is growing uncertainty in the global macro environment, with weaknesses factoring into our earnings forecasts in most regions. While we are currently projecting global (G-20) GDP to grow at 2.7% in both 2019 and 2020, we are expecting US GDP growth to slow to 1.7% next year from 2.3% this year. Four key manufacturing countries in Europe will face an increasing risk of a more pronounced slowdown Germany (Aaa stable), the UK (Aa2 stable), France (Aa2 positive) and Italy (Baa3 stable). Germany already posted one quarter of contraction, while a no-deal Brexit would likely push the UK into a recession. Finally, slower growth is expected in emerging markets, led by deceleration in China, where GDP growth is expected to slow to 6.2% in 2019 and 5.8% in 2020.
- » What could change our outlook. We would consider changing our outlook to stable if we were to expect EBITDA growth solidly within the 1%-3% range across most sectors within the industry, with significantly lower risk to earnings growth because of uncertainty in externalities such as trade issues. Expectations of G-20 GDP growth returning to 3% along with a restoration of Global PMI sustained above 50 would also support a stable industry outlook.

Industry outlooks reflect our view of fundamental business conditions for an industry over the next 12-18 months. Since outlooks represent our forward-looking view on business conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the industry outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of the rating outlooks of issuers in the industry, but rather our assessment of the main direction of business fundamentals within the overall industry.

Moody's related publications

Outlook

- » <u>Global Macro Outlook 2019-20 (August 2019 Update)</u>: <u>Global growth slows even as central banks cut rates to offset impact of</u> <u>trade disputes</u>, August 2019
- » <u>Aerospace and defense Global: Outlook still positive on aircraft delivery ramp-up, although risks are increasing</u>, August 2019
- » <u>Automotive manufacturing Global: Unit sales to swing to a contraction in 2019 and 2020 amid heightened downside risk</u>, August 2019
- » Automotive parts suppliers Europe: Outlook remains negative on further erosion of production volume and margins, August 2019
- » Non-Financial Corporations Global: Industry Sector Outlooks Business conditions continue moderating as global growth slows and risks increase, July 2019
- » Railroads North America: Outlook update: Change to stable as freight volume slows, led by coal and intermodal, April 2019

Sector In-Depths

- » Trade Asia: US-China tensions and China's continued slowdown increase spillover risks to Asia, September 2019
- » Manufacturing Europe: Weakening macroeconomic background weighs on earnings prospects, August 2019
- » <u>Corporates Global: 3D printing has potential to transform production in certain industries, but wide-scale use likely years away</u>, August 2019
- » Global Trade Monitor July 2019 (Slides)
- » Manufacturing Global: Execution, expertise, M&A: key risks in the race for the Industrial Internet of Things, July 2019
- » Manufacturing Emerging Markets: Trade relations, currency strength pose risks for manufacturers in 2019-20, May 2019

Sector Comments

» Trade – US and China: Two-stage US tariff plan will reduce but not eliminate some of the negative effect, August 2019

Issuer In-Depths

- » Crane Co.: Scenario analysis: M&A less risky with strong free cash flow generation, improving credit metrics, August 2019
- » Panasonic Corporation: FAQ on new business plan, auto battery operations, July 2019
- » Smiths Group plc: Demerger of Medical division weakens business profile, a credit negative, but leverage commitment provides support, April 2019
- » General Electric Company: GE could tap \$22 billion in additional asset sales, cash flow to further de-lever and de-risk, February 2019

Newsletter

» EMEA Manufacturing: Newsletter, June 2019

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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REPORT NUMBER 1194420

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