Advanced Manufacturing Quarterly

Analyst themes from 3Q18 earnings calls

Leaders at AM companies continued to hold a positive outlook on growth on earnings calls in 3Q18. While geopolitical issues are adding uncertainty, AM peers are preserving revenues and margins through pricing strategies and flexible uses of global manufacturing footprints. Market share is depending more than ever on innovative products and services and deep customer relationships.

Agility sets competitors apart in responding to market forces

Welcome to the quarterly review of the top themes discussed by leaders of 20 advanced manufacturing (AM) sector companies (including those from the aerospace and defense, industrial manufacturing, and chemicals sectors) during public earnings calls held from 17 October to 9 November 2018. This update tracks the movement of these themes from quarter to quarter to provide perspective on shifts in the AM landscape.

We view the themes in this update as providing a timely snapshot rather than a universal assessment of importance, revealing insights into the minds of both AM leaders and industry analysts during the quarter. Themes that stood out in 3Q18 include:

- **Geopolitical environment,** which appeared among the top issues for the third quarter in a row, moving from No. 4 to No. 2 this quarter. As trade policy conflicts and new tariffs create ongoing uncertainty for industrial markets, AM leaders are expressing concern about potential reductions in demand in key end markets. Companies are making strategic decisions about manufacturing locations to lower their exposure to tariffs and raising prices to preserve margins.
- **Competitive environment,** debuting on the list at No. 3. Price increases by AM companies are being driven not only by tariffs, but by rising raw materials costs. Premium products based on innovative technologies are best positioned to maintain market share in spite of higher prices. A growing number of manufacturers are realigning their business models to focus more on services, which allow for deeper customer relationships and ensure future revenue streams.
- **Financial initiatives,** also new to the list at No. 8. Several companies across the AM spectrum announced new share buyback programs or expansions of previous programs. Dividends are also being increased by a number of companies. In an environment where AM companies are facing increasing competition for acquisition targets, many are choosing to return capital to shareholders rather than participate in deals that may be overvalued. Leaders continue to maintain an optimistic tone when communicating with investors about growth opportunities.

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Jerry Gootee
EY Americas Advanced Manufacturing Advisory Leader

Top 10 themes from quarterly earnings calls

3Q18			2Q18	
↑	1.	Working capital and cash flow management	1.	Change in financial outlook
↑	2.	Geopolitical environment	2.	Geographic developments
New	3.	Competitive environment	3.	Developments in end markets
↓	4.	Geographic developments	4.	Geopolitical environment
↓	5.	Developments in end markets	5.	Working capital and cash flow management
↓	6.	Change in financial outlook	6.	Innovation and new product/service launches
New	7.	Currency impact/foreign exchange volatility	7.	Cost reduction
New	8.	Financial initiatives	8.	Transaction strategy (future plans)
New	9.	Supply chain management	9.	Changes in production rates
↔	10.	Business reorganization/restructuring	10.	Business reorganization/restructuring

Key themes

1 Working capital and cash flow management

Significant change observed from prior quarter

- Cash flow continues to improve for several peers because of strong prioritization of working capital discipline, often supported by productivity and cost-control programs.
- Increased pension plan contributions create a drag on cash flows for some peers.
- A few peers are raising inventory levels to meet customer demand — for example, a planned maintenance shutdown at a chemicals company. In other cases in chemicals and industrial manufacturing, high inventory levels are unplanned and have been identified by leaders as a challenge to working capital management.

"Trade has historically been somewhat stable or predictable, allowing for less-complicated short- and long-term planning. Trade practitioners used to have 'givens' in trade, enabling confidence in the trade impact of long-term decisions. Short-term disruption would generally occur on a micro level, with changes, for example, impacting particular products. Companies would make significant capital expenditures and sourcing decisions based on 'givens,' like NAFTA. The uncertainty of trade seems to be a new given, thus calling upon the global trade function to weigh in much more and to consider whether the company adjusts its strategy."

Mike Heldebrand, Partner, EY Global Trade, Indirect Tax Services, Ernst & Young LLP

2 Geopolitical environment

Effects of government policies and trade flow on industrial revenues and margins

- Trade policy conflicts and the evolution of new tariffs are creating ongoing uncertainty for industrial markets.
- Some leaders are concerned about secondary effects such as reduced demand in end markets, particularly automotive, if interest rates rise.
- At the same time, rising tensions between the US and Saudi Arabia may lead to restrictions on a key end market for some US aerospace and defense (A&D) peers.
- Responses by manufacturers include leveraging global manufacturing footprints to lower exposure to tariffs, applying for exemptions from tariffs on key raw materials and increasing prices.
- Some A&D peers are optimistic about new US defense appropriations for FY19 likely to support increased military spending.

Key themes

New

3 Competitive environment

Pricing, market share and changes in business models

- Peers across all subsectors are increasing prices in response to higher raw materials costs and tariff impacts.
- Premium products based on innovative technologies are best positioned to maintain market share in spite of increased prices.
- Rising manufacturing costs are leading some peers to renew efforts to improve productivity.
- Expansion of service portfolios, ranging from post-purchase maintenance contracts to business consulting, is providing manufacturers with ways to deepen customer relationships and ensure future revenue streams.
- Increased caution by customers in committing to large projects, due in part to economic uncertainty, was reported by one industrial manufacturing peer.

> "Start thinking beyond simply being a manufacturer. Consider what you could accomplish with a new set of associates and a new perspective on developing customer solutions. For instance, if you make aircraft engines, your customers are the plane manufacturers. But if you acquire an engine maintenance services vendor, you create a new revenue stream – and join a new ecosystem. And as an after-sale service provider to the airlines, you have access to new data – data that might lead to launching additional new services. You benefit from a bigger ripple effect at the center of an ecosystem."
>
> **Jade Rodysill, EY Americas Advisory Chemicals Leader, Ernst & Young LLP**

4 Geographic developments

Market conditions by region

- Company leaders across all subsectors continue to cite the Asia-Pacific region as growing most rapidly.
- China continues to lead demand growth for many products. However, slowing growth was noted by a few peers, particularly in China's automotive sector and in solar power.
- Revenues in Europe and Latin America rose for some peers, continuing a trend from 2Q18.
- R&D investments are being made in specific geographic markets, particularly China, the Middle East and Europe, to better support local customer needs.

5 Developments in end markets

Trends in key customer segments impacting demands for products and services

- Optimism is supported by growth across a range of industrial markets.
- Strong growth in air traffic and high load factors are continuing to drive demand for commercial aircraft.
- Demand is increasing for advanced materials and specialty chemicals from customers in consumer electronics, agriculture and food manufacturing.
- While demand from automotive customers is slowing in some markets, more than one peer saw growth in electric vehicles.
- Construction materials were described as "soft" by more than one peer.
- In the energy sector, order activity has been growing more quickly from renewables customers than from those in traditional power generation.
- Demand for military equipment is continuing to rise as defense budgets in many countries expand. Two peers noted year-on-year increases in activity from oil and gas sector customers, especially in downstream operations.

6 Change in financial outlook

Changing forecasts for revenues or earnings per share

- After outlooks on 2H18 revenues and earnings per share (EPS) were raised by half of peers in 2Q18, most chemicals and industrial manufacturing peers maintained their outlooks in 3Q18 or made minor adjustments based on situations such as M&A.
- Several A&D leaders continued to express confidence for improving revenues in the last part of 2018 and into 2019.
- Margins are expected to continue to improve based on the success of ongoing productivity programs for several peers, boosting EPS.
- A few peers revised outlooks downward on factors such as higher raw materials pricing, weak results in non-core operation or restructuring.

New

7 Currency impact/ foreign exchange volatility

Net benefits or headwinds to financial results due to currency changes

- For US-based peers, a strong US dollar created headwinds in reporting revenues from international markets.
- Foreign exchange volatility was noted most often in connection with revenues earned in Brazil, Argentina and Turkey. A chemicals peer also mentioned the euro and the Chinese yuan as creating potential headwinds going into 2019.
- An industrial manufacturing peer noted the additional challenge of an internal dual IT system environment, which created obstacles in intercompany fund transfers.
- Almost half of peers commented specifically on currency effects.

Key themes

New

8

Financial initiatives

Capital management and deployment

- New share buyback programs or expansions of previous programs were announced by several peers.
- Peers also provided updates on recent buyback activity, which in some cases has been US$1 billion or more in 2018.
- Commitments to dividends, including plans for increasing payouts, were shared by peers in all subsectors.
- An industrial manufacturing peer described plans to complete acquisitions before the end of the year but acknowledged that price was a factor in finding the right targets.

New

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Supply chain management

Optimization programs and challenges; increase in inventory

- High raw materials prices, including the impact of tariffs, are creating headwinds.
- A&D peers continue to experience challenges in guaranteeing the availability of key parts, including engines and airframes, which puts aircraft deliveries at risk of falling behind schedule.
- Some chemicals peers are building internal sources or establishing joint ventures for access to key feedstocks in order to protect against market price fluctuations.
- Industrial manufacturing peers are identifying opportunities to reduce costs in supply chain and procurement systems.

"Divestiture activity is helping to drive dealmaking as the sector continues to respond to the push by investors for companies to focus on their core capabilities. Two-thirds (66%) of manufacturing executives said their companies now review their portfolio more than once a year to seek divestment opportunities and almost three-quarters (72%) said that they identified an asset to divest as a result of their latest review. The risk of disruption from forces such as technology, convergence or geopolitical uncertainty was cited by 40% as the reason for the divestiture, while 32% cited underperformance of the asset."

David Gale, EY Global Advanced Manufacturing Leader, Transaction Advisory Services

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Business reorganization/ restructuring

Operational streamlining, business function reorganization and divestments

- Manufacturers continue to reorganize portfolios through spin-offs, acquisitions and divestments to achieve a more focused business structure.
- Productivity programs, underway at several peers, are yielding results by streamlining organizational structures and reducing complexity.
- For chemicals, large transactions in the last few years are now winding down as peers focus more on core capabilities. Deals are more likely to support chemicals companies deepening their specializations.

Companies included in our analysis

- ABB Ltd.
- Airbus SE
- Akzo Nobel NV
- BASF SE
- Boeing Company
- Bombardier, Inc.
- Danaher Corporation
- DowDuPont, Inc.
- Eaton Corporation plc
- Flowserve Corporation
- FMC Corporation
- General Dynamics Corporation
- General Electric Company
- Honeywell International, Inc.
- Johnson Controls International plc
- Lockheed Martin Corporation
- Raytheon Company
- Siemens AG
- Solvay SA
- United Technologies Corporation

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1811-2951536

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