

Join. Engage. Advance.

PRODUCTION AND PLANNING

OESA AUTOMOTIVE SUPPLIER BAROMETER Q1 2018

Executive Summary



Supplier Barometer Index (SBI) SBI Score = 57; up from Q4 level of 46

Optimism has soared across all revenue groups due to US tax reform, a more positive tone on NAFTA and continued market strength. The outlook for suppliers of all sizes reflect strong optimism and sharply lower pessimism overall. Uncertainty remains due to ongoing volatility, elevating pessimism for the \$501M-\$1B revenue group.



Trade policy is identified as the greatest industry threat, followed closely by poor vehicle sales.

These two threats have alternated 1st and 2nd position over the last 6 months.

Production Breakeven Level Rises To 15.0m Units:

Suppliers feel better positioned to weather market volatility over the near-term and appear to be sized correctly. However, ongoing OEM capacity expansion is pushing supplier breakeven levels higher in the face of decreasing demand.



The median 'all-in' capacity utilization rate remains at 85% with the range of responses narrowing a bit compared to last year.

Over the past 6 years, there has been an estimated 10% rise in the median utilization rate.



- Flexible Operations: Overtime, Relocation of production
- Expanding or investing in new facilities
- New equipment
- Subcontracting
- More proactive planning



Executive Summary



The primary internal production issue continues to be talent availability in the areas of engineering, skilled labor and hourly labor

Inventory carrying costs and manufacturing capacity constraints are improving compared to last year.



Material cost premiums continue to be the primary sub-tier issue impacting suppliers' abilities to meet production requirements

...with additional significant (>25%) constraints in Transportation/logistics, inbound-expedited freight and raw material shortages.



44% of suppliers are confident that their customer releases are matching sales and inventory requirements.

Most pass-through releases to their suppliers.



R&D Spending is unchanged from last year; remaining at 4% of total sales.

From the R&D budget, approximately one-third goes to research while two-thirds is allocated to development. Advanced material technologies are a top priority for investments.



35% of suppliers have lower inventory levels while 32% have increased inventory levels (still down by 6% over last year).

OESA

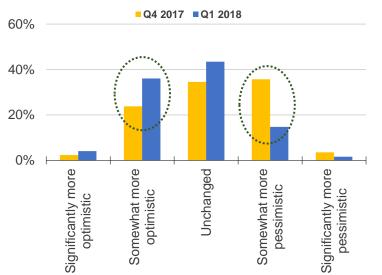


SUPPLIER OUTLOOK

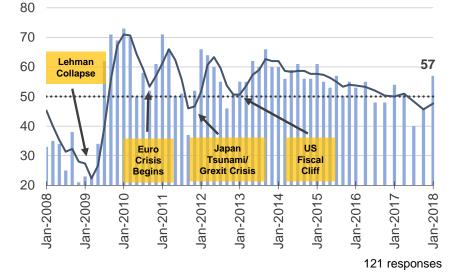


OESA Supplier Barometer: 1Q 2018 Results

Describe the general twelve month outlook for your business. Over the past three months, has your opinion become...?







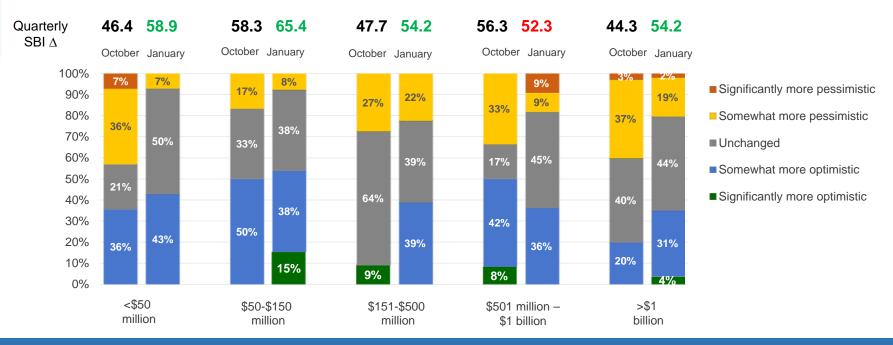
SBI Score = 57; soars 11 points from Q4 level of 46

Tax Reform, a more hopeful view on NAFTA and continued Market Strength all Drive Optimism



OESA Supplier Barometer: 1Q 2018 Results By Revenue Size

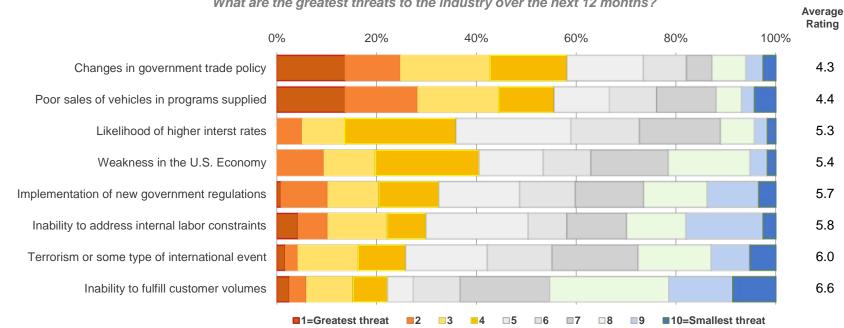
Describe the general twelve month outlook for your business. Over the past three months, has your opinion become...?



There is strong optimism and sharply lower pessimism across all revenue groups. Uncertainty remains due to ongoing volatility, elevating pessimism for the \$501M-\$1B revenue group.



OESA Supplier Barometer: Industry Threats



What are the greatest threats to the industry over the next 12 months?

Trade policy is identified as the greatest industry threat, followed closely by poor vehicle sales. These two threats have alternated 1st and 2nd position over the last 6 months.



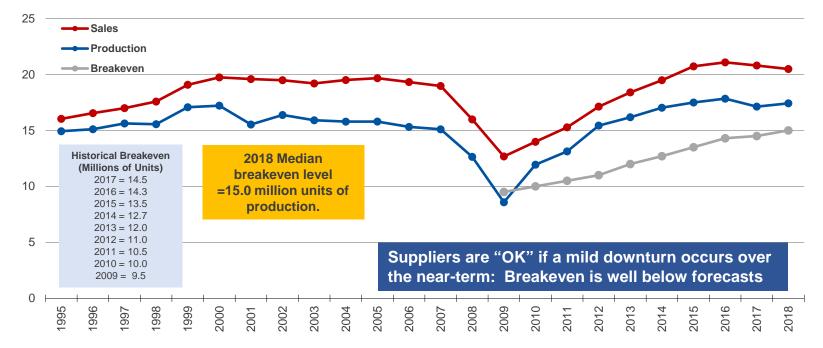


PRODUCTION AND PLANNING



Production Planning: Breakeven and Year-End Estimates

Considering North America light duty vehicle production, estimate the required 2018 industry volume needed to achieve breakeven in your North American operations?



Source For Sales & Production Volumes: IHS Markit forecast (January 2018)



Millions of Light Vehicles

Production Planning: Capacity Utilization

Please estimate your 'all-in' capacity utilization levels (in percent)

'All-in' capacity is the total of your current capacity utilization (current workforce levels and operating plant and equipment assuming 270 working days and 3 shifts) plus warm-idled capacity (idled capacity but being able to ramp up production within 3 months with minor capital needed) plus cold-idled capacity (idled but being able to ramp up production after 3 months with moderate levels of capital required).

January 2018				
Lower Quartile Value	Median Value	Upper Quartile Value		
75%	85%	87%		

The median 'all-in' capacity utilization rate remains at 85% with the range of responses narrowing a bit compared to last year.

January 2017		January 2016			January 2015			
Lower		Upper	Lower		Upper	Lower		Upper
Quartile	Median	Quartile	Quartile	Median	Quartile	Quartile	Median	Quartile
Value	Value	Value	Value	Value	Value	Value	Value	Value
74%	85%	90%	75%	85%	90%	66%	80%	86%

May 2014			May 2013			May 2012		
Lower		Upper	Lower		Upper	Lower		Upper
Quartile	Median	Quartile	Quartile	Median	Quartile	Quartile	Median	Quartile
Value	Value	Value	Value	Value	Value	Value	Value	Value
70%	80%	90%	65%	75%	85%	55%	75%	85%

Supplier efforts if over 90% capacity utilization... (multiple supplier responses for each)

- Flexible Operations: Overtime, Relocation of production
- Expanding or investing in new facilities
- > New equipment
- Subcontracting
- More proactive planning



What Steps are you Taking at your firm to Address the Issues Identified?

(multiple supplier responses for each)

Engineering Talent/Availability

- Increasing recruiting efforts
- Expanding of internships
- Increasing salaries
- Implementing or increasing bonuses
- Balancing work-life
- Training and mentoring

Production Overtime Premiums

- Planning budgets for higher costs
- Adding capacity
- Hiring
- Changing shifts
- Improving efficiencies
- Relocating production

Skilled Labor Shortages

- Reaching out to community colleges
- Initiating apprenticeship programs
- Increasing recruiting efforts
- Developing training programs
- Increasing salaries and benefits

Hourly Labor Shortages

- Recruiting
- Increasing marketing efforts
- Increasing wages and benefits
- Developing automation
- Improving work environments
- Cross-training



What Steps are you Taking at your firm to Address the Issues Identified?

(multiple supplier responses for each)

Inventory Carrying Costs

- Delivering as Just-in-Time
- Improving planning
- Adjusting payment terms
- Reducing carried inventory

Re-allocation of Resources - Quality/Production

- Adding quality and process engineers
- Using outside resources
- Emphasizing supplier quality management

Set-up and Change-Over Costs

- Developing lean manufacturing
- Hedging capacity requirements
- Planning for and limiting change-overs

Internal Manufacturing Capacity Constraints

- Adding or expanding facilities
- Adding equipment
- Increasing out-sourcing
- Moving existing production

Outbound-Expedited Freight

- Improving communication-customers & suppliers
- Substituting components where possible
- Carrying more inventory

Liquidity Shortages Within Your Own Company

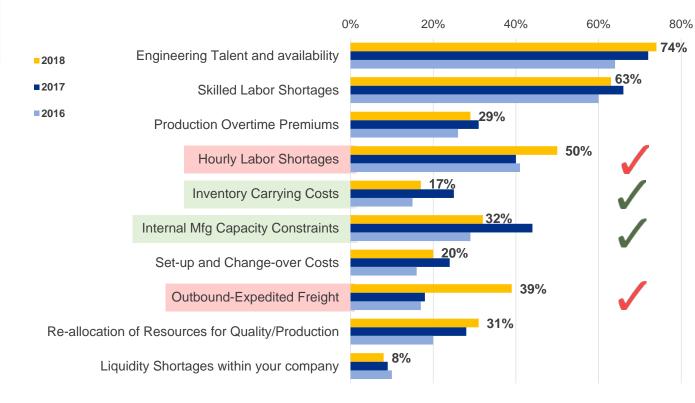
Cutting costs



AGEN

Production Planning: Internal Issues

Over the next 12 months, identify which of the following internal issues you will face as you meet required levels of production?



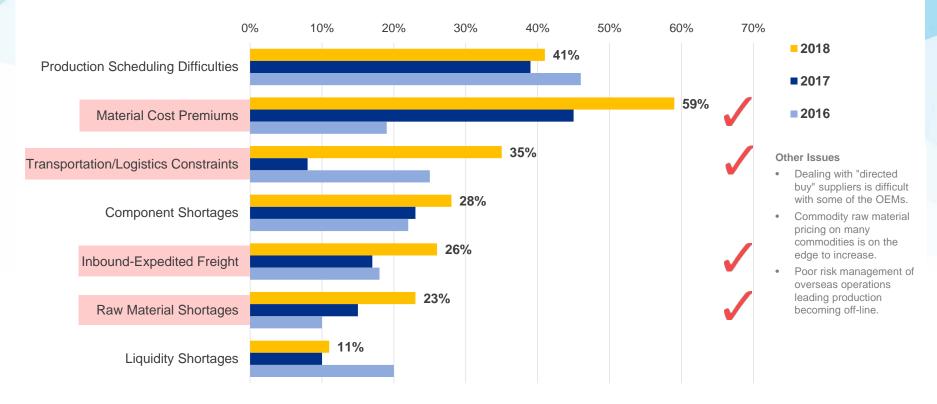
Other Issues

- Launching new products that are unique/patented, often requiring new manufacturing processes.
- Transportation costs rising, new legislation.
- Capacity issues within supply base, especially within electronics.
- Balancing success rate of business acquisition against resources.
- Securing new business and diversification with the auto sector.
- Investment funds to manage new part launches expected to be awarded by customers in the next 6-12 months.
- Component shortages on electronic components (resistors, diodes, connectors)



Production Planning: Sub-Tier Issues

Over the next 12 months, identify which of the following internal issues you will face as you meet required levels of production?





What Steps are you Taking within your sub-tiers to Address the Issues Identified?

(multiple supplier responses for each)

Production Scheduling Difficulties

- Improving forecasting
- Monitoring and supporting supplier facilities
- Increasing lead-times
- Work load leveling at suppliers

Transportation/Logistics Constraints

- Setting up foreign trade zones
- Ensuring accurate schedules

Component and Raw Material Shortages

- Paying premium freight
- Providing longer range forecasts
- Identifying substitute components where possible

Material Cost Premiums

- Re-sourcing when needed and possible
- Developing long-term agreements
- Negotiating indices
- Hedging contracts

Inbound-Expedited Freight

Ensuring accurate schedules

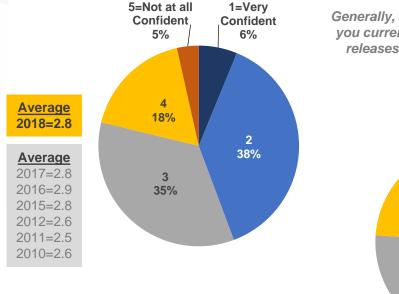
Liquidity Shortages Within Your Supply Base

- Assessing supplier financial health
- Working with suppliers on payment terms

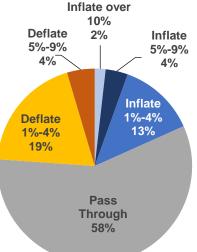


Production Planning: Confidence in Customer Releases

How confident are you that your customers' production releases are matching their current sales and inventory requirements?



Generally, across customers and programs, are you currently tending to inflate or deflate your releases down through your supply chain?



44% of suppliers are confident that their customer releases are matching sales and inventory requirements.

Most pass-through releases to their suppliers.

Mixed Supplier Sentiment on customer accuracy:

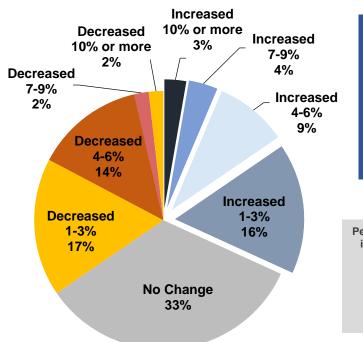
"For the most part, the OEMs are doing a good job keeping supply and demand aligned. They worked on it in 2017 and appear to be in much better shape."

"OEMs do a poor job of forecasting actual releases outside of 2-3 week window."



Production Planning: Finished Goods Inventory

Compared to average 2016 levels, how did your average 2017 finished goods inventory levels change?



Suppliers are working to reduce inventory. 35% of suppliers have lower inventory levels while 32% have increased inventory levels (still down by 6% over last year).

Percent of suppliers with increased inventory... 2017 = 32% 2016 = 38% 2015 = 34% 2013 = 51%

Drivers of Finished Goods Inventory... (multiple supplier responses for each)

- Forecasting and Demand Changes
- Material and Component Availability
- Available Cashflow
- Capacity



Production Planning: Research & Development Spending

For 2017, estimate your R&D spending as a percent of total sales.

	Lower Quartile	Median Value	Upper Quartile				
	R&D Share of Total Sales						
2018	3%	4%	5%				
2017	2%	4%	6%				
2015	2%	3%	5%				
2014	2%	3%	5%				
2012	2%	3%	5%				

R&D Spending is unchanged from last year; remaining at 4% of total sales. From the R&D budget, approximately one-third goes to research while two-thirds are allocated to development.

For 2017 R&D budget, estimate the percent allocated to research and percent allocated to development.

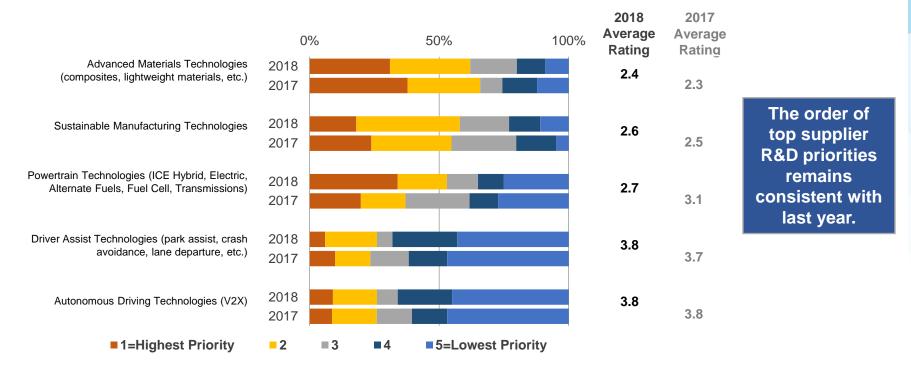
Lower Quartile							
Resea	Research budget (for future technologies)						
2018	20%	32%	44%				
2017	10%	20%	40%				
2015	20%	30%	50%				
2014	16%	30%	50%				
2012	20%	30%	50%				

	Lower Quartile	Median Value	Upper Quartile
Develop	oment budget	(for specific	programs)
2018	50%	67%	80%
2017	58%	75%	85%
2015	35%	67%	80%
2014	50%	70%	84%
2012	50%	70%	80%



Research & Development Technology Investments

If you had additional dollars for R&D investment, rating in terms of importance, how would you allocate it across the following technology areas?







OESA Automotive Supplier Barometer is a survey of the top executives of OESA regular member companies. The OESA Automotive Supplier Barometer takes the pulse of the suppliers' twelve month business sentiment. In addition, it provides a snapshot of the industry commercial issues, business environment and business strategies that influence the supplier industry. www.oesa.org.

Survey Methodology

- Data collected the week of January 22 via invitation to online survey.
- Executives of OESA supplier companies.
- 121 survey responses were received.

The information and opinions contained in this report are for general information purposes. Comments are edited only for spelling and may contain grammatical errors due to their verbatim nature. Responses to this survey are confidential. Therefore, only aggregated results will be reported and individual responses will not be released or shared.

Antitrust Statement:

Respondents/participants should not contact competitors to discuss responses, or to discuss the issues dealt with in the survey. It is an absolute imperative to consult legal counsel about any contacts with competitors. All pricing and other terms of sale decisions and negotiating ᠕ᡰᠬ strategies should be handled on an individual company basis.

Contact

Mike Jackson Executive Director Strategy and Research 248.430.5954 mjackson@oesa.org

Kathy Reiss Director **Research and Industry Analysis** 248-430-5960 kreiss@oesa.org

Original Equipment Suppliers Association 25925 Telegraph Road Suite 350 Southfield, Michigan 48033

