Market Trends and Megatrends in the Aftermarket

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ADVANCING THE INDUSTRY’S INTERESTS SINCE 1904

Motor & Equipment Manufacturers Association

Automotive Aftermarket Suppliers Association

Heavy Duty Manufacturers Association

Original Equipment Suppliers Association

Motor & Equipment Remanufacturers Association
The **largest** sector of manufacturing jobs in the U.S.

871,000 direct jobs

Total employment impact of **4.26** million jobs

Contributes **2.4%** on U.S.GDP

And...

77% of the value of a car
Weak sales at O’Reilly Automotive send shares tumbling 20%

- Auto parts retailer stocks are weighed down after O’Reilly reported weaker than expected same-store sales numbers.
- The company’s stock has been struggling over the past 12 months, losing more than a third of its value since August.

David Gernon | @d_gernon
Wednesday, 5 Jul 2017 | 3:38 PM ET
AGENDA—LIGHT VEHICLES

Market Trends

1. Strong Market Fundamentals
2. Decelerating Growth?
3. Future Looks Bright (Very)

Mega Trends

4. E-tailing
5. Changing Values
   - Connected, Automated, Shared, Electrified
6. Telematics & Freedom of Choice

Aftermarket Megatrends & Realities
AGENDA—LIGHT VEHICLES

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## VERY STRONG MARKET FUNDAMENTALS

<table>
<thead>
<tr>
<th>Fundamentals</th>
<th>Status</th>
<th>U.S. Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIO</td>
<td>Big and Growing</td>
<td>279 million(^1)</td>
</tr>
<tr>
<td>Avg. Vehicle Age</td>
<td>High; Increasing</td>
<td>11.7 years(^2)</td>
</tr>
<tr>
<td>Miles Driven</td>
<td>Record Levels</td>
<td>3.22 Trillion(^3)</td>
</tr>
<tr>
<td>Fuel Prices</td>
<td>Low</td>
<td>$2.38/gallon(^4)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>16-year Low</td>
<td>4.3%(^6)</td>
</tr>
<tr>
<td>Economy</td>
<td>Growing</td>
<td>2.2%(^5)</td>
</tr>
</tbody>
</table>

WHICH HAS LED TO A STRONG, STABLE, AND ATTRACTIVE $277 BILLION AFTERMARKET

U.S. aftermarket has doubled in size in the last 20 years

Source: AASA / ACA Joint Channel Forecast by IHS Markit; 1997 – 2012 are historical actuals; 2013 – 2016 are IHS modeling based on economic actuals; 2017 – 2020 are forecasts.
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AASA MEMBERS REPORT SALES ARE STILL STRONG, ALTHOUGH SLOWING

How strong are your company's aftermarket sales?

Source: 2Q 2017 AASA Barometer Report
RECENT CONCERNS / HEADLINES
...ABOUT SLOWING GROWTH

Big 4 Sales Trend

Source: Jeffries, and company quarterly reports; SSS = same store sales
PICTURE MORE POSITIVE, THOUGH GROWTH MIGHT BE RETURNING TO TREND

• Market has been outperforming trend in recent years, as we have enjoyed large, unusually positive ‘deltas’ in key market drivers

• This may have led to ‘unrealistic expectations’

• Recent market numbers likely depressed by unusually mild weather, delayed tax refunds
  • Big 4 numbers may exaggerate recent market trend?

• Some struggling to see the growth to meet plan or expectations

Market Fundamentals at a high, strong level – but may not be accelerating at the same pace that drove above-trend growth in recent years. Sales aren’t declining; growth may be
WE HAVE RECENTLY ENJOYED ABOVE TREND GROWTH

Aftermarket Growth Rate Over Time

2008-9: Great Recession
2010-12: Recovery
2014-16: Gas prices ↓, miles driven ↑, employment ↑

© Automotive Aftermarket Suppliers Association 2017  Source: IHS Markit; AASA Analysis; Trendline based on 2003-2016
VIO WILL CONTINUE TO GROW, BUT GROWTH RATE DECELERATING FROM HIGH LEVEL

Motor Vehicle Stock, % Change YOY

© Automotive Aftermarket Suppliers Association 2017  
Source: IHS Markit; AASA Analysis
CARS AT RECORD AGE, BUT SLOWING RATE OF INCREASE

Age of Vehicles In Use
Average Age • Change in Age YOY

© Automotive Aftermarket Suppliers Association 2017 Source: IHS Markit; AASA Analysis
LOW UNEMPLOYMENT, BUT LIKELY NO BIG ‘DELTA’ LIKE 2010-16 TO DRIVE DEMAND

U.S. Unemployment Rate

© Automotive Aftermarket Suppliers Association 2017

Source: IHS Markit
GAS PRICES LOW. BUT UNLIKELY TO SEE ANOTHER BIG DIP THAT WOULD SUPERCHARGE GROWTH

© Automotive Aftermarket Suppliers Association 2017

Source: Energy Information Agency: Short-Term Energy Outlook, 8 8 2017
MILES DRIVEN WILL BE POSITIVE, BUT NOT AS STRONG A CONTRIBUTOR TO VOLUME INCREASE

**Forecast 2017-2020**
- **IHS**: ~+2.0%
- **EIA**: ~+0.95%

*Annualized YTD as of May 2017

Source: IHS Markit
© Automotive Aftermarket Suppliers Association 2017

Source: Department of Transportation; IHS Markit; Energy Information Agency, AASA Analysis
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   - C: Connected, A: Automated, S: Shared, E: Electrified
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Market large, stable, attractive – a market that rest of the auto or retail industries would love to have

- Despite return to trend, this is one of most attractive auto or retail sectors
- U.S. OE volume softening, increasing incentives; aftermarket still growing
- Consumer price inelasticity – when needs repaired, it needs repaired

Turned corner on “sweet spot”

Parts complexity increasing cost per part; mega-trends of fuel economy regulations and sensorization accelerating opportunity

Global trends are positive, as OE unit sales increase dramatically
Post-recession new vehicle sales increases are starting to move into the aftermarket sweet spot, joining the increasing number of cars older than 12 years.

Source: IHS Markit, AASA Analysis
PARTS ARE GETTING MORE COMPLEX – AND COSTLY

Examples

Wiper Blade
$5
$19

Fuel Pump
$45
$225

Wheel End
$15
$185

Increasing technology – lightweighting, friction reduction, ADAS, electrification, sensorization, etc. – will increase parts value

Source: AASA Analysis
AFTERMARKET FORECASTED TO GROW TO A HEALTHY $316 BILLION BY 2020

The market in 2020 will be more than twice the size it was in 2000.

Part of growth is shift from DIY to DIFM, including growing labor component and pricing.

Source: AASA / ACA Joint Channel Forecast by IHS Markit; 1997 – 2012 are historical actuals; 2013 – 2016 are IHS modeling based on economic actuals; 2017 – 2020 are forecasts.
ALBEIT GROWTH INCREASINGLY DRIVEN BY PRICE

Growth Rate Contributions
Price versus Volume


Price Volume

Source: AASA / ACA Joint Channel Forecast by IHS Markit; AASA Analysis
WHAT COULD BE NEW DRIVERS OF POSITIVE “DELTAS” FOR U.S. AFTERMARKET?

Inflation
  • General economy
  • Industry-specific

Increased consumer spending power

Increased economic growth rate

Increased failure rate of new technology—large technology deltas historically lead to temporary increases—among, for example:
  • More fuel-efficient, light-weighted, lower-friction technologies
  • Infotainment and electronics / software / sensor content
MEGA TRENDS
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Pure Play E-tail Contribution to Total Aftermarket Sales

Sales do not include e-tailing sales of traditional brick and mortar retailers such as Walmart or AutoZone.

Pure-play e-tailers are adding ~$1B a year in sales
WHY U.S. CONSUMERS CHOOSE THE E-TAILING CHANNEL

Reasons for Buying Online - Consumers Who Have Bought Online

- **Price**
  - Reason 1: 12%
  - Reason 2: 23%
  - Reason 3: 25%

- **Ease of Purchase/Convenience**
  - Reason 1: 50%
  - Reason 2: 29%
  - Reason 3: 26%

- **Home Delivery**
  - Reason 1: 49%
  - Reason 2: 19%
  - Reason 3: 29%

- **Unavailability in Local Store**
  - Reason 1: 42%
  - Reason 2: 16%
  - Reason 3: 13%

- **Other**
  - Reason 1: 43%
  - Reason 2: 17%
  - Reason 3: 22%

SOURCE: AASA and Booz & Company; E-tailing Success Strategies for the Fastest Growing Segment of the Aftermarket. March 2013
E-TAILERS HAVE TAKEN ADVANTAGE OF THIS DISRUPTION

**AMAZON WORLDWIDE**
$4 Billion aftermarket sales

**ESTIMATE**
“They’ll grow 50% this year”

**EXPANDING SERVICES**
Offering cars online in Italy

**LOWER PRICES**
- **AutoZone** $249
- **Amazon** $213

**EASY SHOPPING**
Customized, individual shopping

**FAST DELIVERY**
Same-day delivery of parts in 40 U.S. cities
COST SAVINGS COULD HELP E-TAILING EXPAND INTO DIFM

Shops are interested in cost saving, *if significant*....

Price savings required to convince shops to relax delivery expectation (% Acceptors)

- 5%: 3%
- 10%: 14%
- 20%: 21%
- 30%: 17%
- More than 30%: 10%
- Would never wait for next day: 34%

DIFM consumers are interested in cost savings, *even with delayed delivery*.

When offered a 25% saving:

- Off $500 Repair: 94% (I'll take the savings), 6% (No thanks)
- Off $300 Repair: 90% (I'll take the savings), 10% (No thanks)
- Off $150 Repair: 58% (I'll take the savings), 42% (No thanks)

SOURCE: AASA/Strategy & DIFM Outlook 2025

SOURCE: Directional findings from AASA proprietary study; 2017
TO DATE, ROADBLOCKS HAVE OFFERED PROTECTION FROM E-TAILING

“Relationships ... have also been a sticking point for B2B distribution moving online. Industrial buyers often value reliability, quality guarantees and immediate availability of products highly relative to costs...”

Goldman Sachs,
Fortnightly Thoughts
Issue 119 April 12, 2017
SOME AFTERMARKET PRODUCTS WILL LOSE THAT PROTECTION SOONER THAN OTHERS

Drivers of Online Penetration

<table>
<thead>
<tr>
<th>Easier to Sell Online</th>
<th>Harder to Sell Online</th>
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<tbody>
<tr>
<td><strong>PRODUCT CHARACTERISTICS</strong></td>
<td></td>
</tr>
<tr>
<td>Easily digitized</td>
<td>Physical products</td>
</tr>
<tr>
<td>Highly standardized</td>
<td>Relatively standardized</td>
</tr>
<tr>
<td>Low weight/volume</td>
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| **MARKET CHARACTERISTICS** | | |
|----------------------------|---------------------|
| Low touch | Physical handling and sale |
| Discretionary purchase | Assisted sale |
| | Same-day delivery |
| | Assisted sale |
| | Immediate fulfillment |
| | Relationship-based sale |

Source: Booz & Company e-tailing report for AASA, 2013
E-TAILING WILL IMPACT ALL PARTS OF THE VALUE CHAIN

Service Professionals

- More educated consumers
- Impact of price transparency—need to make profit on labor since parts moving to market prices

Channel Partners

- Learn customers’ “path to purchase” on and off-line
- Competitive threat: possible market share shifts
- Potential threat: too much brick and mortar

Suppliers/Manufacturers

- Understand consumers, build brands, grow with e-tailing
- Suppliers behind the curve in creating value for channel partners through insight

Source: Booz & Co.: “E-tailing: Supplier Success Strategies” 2013
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CHANGES IN WHAT IS VALUED IN A VEHICLE

What a vehicle is has changed over time

Past

Mechanical device

Current

Mechanical device with electronic enablers

Future

Software device with electronic & mechanical enablers
VALUE PROPOSITION MIGHT FUNDAMENTALLY CHANGE

Changing Product Attributes

What consumers want / pay for
What is ‘performance’ / appeal
Who are the buyers / owners
Who and how vehicles are maintained

Changes for Suppliers

Sources of competitive advantage
Investment needs
Pace of change / level of certainty
People and culture needs

Aftermarket Megatrends & Realities
INDUSTRY TRANSFORMATION—A CASE IN POINT

Connected
- Becoming a technology industry: mechanical → software/electronics
- Internet of Things (IoT), cybersecurity, V2X, **infotainment**, big data/data analytics

Automated
- Driving automation / ADAS / increased safety
- Cybersecurity / V2X

Shared
- “Car-as-a-Product” → “Car-as-a-Service”
- Changing business models and value propositions
- Changing customers, competitors, partners

Electrified
- Fuel economy, CO₂, emissions reduction / harmonization
- Electrification / decarbonization
- Sustainability
“November or December of this year, we should be able to go from a parking lot in California to a parking lot in New York, no controls touched at any point during the entire journey.”

Elon Musk
CEO Tesla, Inc.
4/29/2017
CONNECTED & AUTONOMOUS... WILL INCREASE MILES DRIVEN

KPMG:
“Miles driven will soar by one trillion more miles per year by 2050 ...”

- Older can still be driven
- Freedom of mobility for youth
- Fewer occupants per vehicle
- The top of their 3 scenarios has miles driven increasing 3-4 trillion miles/yr!
Mobility & automation will lead to significant increase in miles-driven:

- Basic economic equation: good becomes more appealing (automation frees up time for work, entertainment, consumption) + cheaper per unit of use (increased safety, shared mobility models) = increased demand
- May happen a bit later than forecasts, which are over-optimistic on automated vehicle timing. But this is our future

U.S. forecast to grow from 3 to 5 trillion miles driven

Source: Morgan Stanley, 6/16
MOBILITY TREND MAY LEAD, OVER TIME, TO ‘GOLDEN AGE’ FOR AFTERMARKET

... and with it the size of the aftermarket:

McKinsey & Company
Size of global aftermarket, high-disruption scenario, $ billion

Source: McKinsey, 1/16; note that AAPEX analysis indicates the global aftermarket was $740 billion in 2016
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TELEMATICS COULD LEAD TO AN INCREASE IN KEY BUSINESS DRIVERS FOR THE AFTERMARKET

Products or services used to a) **collect and communicate data** from vehicles in operation, and/or b) the **process of communicating** that data.

Increased awareness of:
- failure, replacement rates, & location information for better demand forecasting
- prognostics that alert motorists, service providers, distributors, & suppliers of pending failure.
- more end-consumer awareness benefits suppliers from increased maintenance
“We need to get the laws to be pro-choice and pro-consumer. **We could all be denied this** and the aftermarket goes away.”

“Like Tesla, they could have a chip that says the part has to be OE”

“We’re playing high-stakes poker with this topic…”

*Senior executives in the aftermarket, 2016*
4 STEPS TO ACHIEVE DESIRED OUTCOME (1/2)

AASA initiatives

1. Be clear about what we want –

- Access to the vehicle that offers motorists freedom-of-choice for vehicle repair and service parts
- Access and use of parts and equipment-enabling software necessary to allow motorists freedom-of-choice
2. Advance aftermarket industry’s technical solution:
   • Secure Vehicle Interface
     o Required for v2V, V2I, V2X as well as aftermarket
   • Software-enabled copyrights
   • Aftermarket data privacy principles

3. Training & Certification
   • Telematics/Connected-vehicle Certification
     • Consumer trust that aftermarket can repair
     • Protect data privacy

4. Awareness of Solutions
To grow, the aftermarket needs to:

- Take advantage of the opportunities that increasing vehicle technology and parts complexity bring
- Ensure aftermarket can repair automated, connected, software-intense vehicles / remain the provider of choice
- Now, more than ever, suppliers and channel-partners must collaborate for mutual growth and long-term success.
Thank you