Like me, I saw many people standing around trying to figure out the game and trying to learn how to play or how to get into the game. I saw the pit boss remove people from the table for not knowing or not following the rules. In the end, it seemed like there were a few winners, but many that walked away having lost all the chips they had at the table. On the drive home as my mind wandered back to work, it occurred to me that gambling is very much like compliance with regulations. It is sort of a “crap” shoot.

“...gambling is very much like compliance with regulations. It is sort of a “crap” shoot.”
— Charlie O’Brien

I recently had the great pleasure of attending my daughter’s graduation from college. As part of the celebration of completing the four-year journey, my daughter wanted to go to a casino and do a little gambling. Although I am not much of a gambler, I went along as any dad would do for their daughter who is about to go out on her own. Heck, for me it was a milestone of no more tuition – so I was in a great mood and ready to celebrate.

While at the casino, I curiously watched players gathered around the craps table. A few were playing and there was a great deal of excitement as many congregated to partake in the excitement. As I watched the shooter roll the dice, I kept hearing unusual terms such as boxcars, snake eyes, yo, craps. It seemed very, very complicated. Like me, I saw many people standing around trying to figure out the game and trying to learn how to play or how to get into the game. I saw the pit boss remove people from the table for not knowing or not following the rules. In the end, it seemed like there were a few winners, but many that walked away having lost all the chips they had at the table. On the drive home as my mind wandered back to work, it occurred to me that gambling is very much like compliance with regulations. It is sort of a “crap” shoot.

Take REACH regulations as an example. It is very complicated. As I talk to companies about these regulations, I get a reaction of people knowing that these regulations are important and that they are already at the
REACH regulations: Are you rolling the dice?

table whether they want to be or not, but they really don’t know the rules, what to do about them or how to win the game. As a result, they are basically rolling the dice, hoping that enforcement doesn’t come or that they can do a minimum to be in compliance. Unfortunately, just as in the game of craps, this is a dangerous position and one that can be very expensive.

The reality is, if you export to Europe or are a supplier of ANY components to heavy equipment that is exported to Europe, then you are already in the game. Get ready to roll the dice!

To be clear, if you export or are a supplier to these products exported to Europe, you’re already part of REACH regulations: combines, backhoes, tractors, cranes, excavators, vacuum excavators, feller bunchers, skidders, crawler dozers, lawn mowers, earth movers, rock drills, articulated trucks, asphalt pavers, sprayers, just to name a few.

REACH regulations are one of the most critical issues facing our industry. It’s a game changer. It is the largest regulation that has ever been imposed on our industry. REACH not only applies to the machines being shipped to Europe, it applies to all the parts, components and chemical ingredients as well. It applies to every machine and aftermarket part. You have to know – and be able to illustrate - what is in each part, where it came from, and its chemical make-up.

Companies shipping parts or products into Europe must comply with EU REACH regulations. EU REACH creates increased risk of product recalls or bans that must be proactively addressed in advance to ensure continued market access. Products containing harnesses, hydraulic components, rubber or PVC are at a higher risk of containing restricted chemicals.

So what should you do?

There are many solutions but only one industry solution is designed to minimize the cost of compliance throughout the entire supply chain.

AEM sees this as an industry issue and has worked diligently over the last two years to provide an industry solution. The solution provides on-line education, a standardized industry format for data, and a data platform from which the data can be input and collected.

I encourage you to take the first steps: Learn the rules and increase your odds of winning the game. Don’t stand passively by with your chips on the table. It is a dangerous and risky place to be. Please contact AEM’s Lydia Riesch at lriesch@aem.org for your next steps in complying with these regulations. You can also view our video that provides a good overview of the REACH issue: www.aem.org/safety-and-technical/regulatory/eu-reach.

Paul Malek, AEM membership director
Member employees make a difference

AEM’s 2016 I Make America (IMA) tour is officially underway, following the first event of the year at Hagie Manufacturing in April, held in conjunction with an AEM Regional Member Orientation. IMA is a grassroots campaign in support of manufacturing in the U.S. Tens of thousands of AEM member company employees have joined and have helped to move the needle on issues important to our industry. Member companies hold IMA events, inviting local government officials, gaining visibility from a political perspective and engaging their employees as industry supporters.

The tour will be making its way throughout the Midwest and also recently stopped at HUSCO International, Kuhn North America, and Woods Equipment (a division of Blount International). Kuhn opened its doors to its employees, their friends, family and customers for an open house on Saturday, May 14 to celebrate a new state of the art paint facility on its campus. I Make America was able to sign up a number of Kuhn employees and members of the Brodhead community to get involved with manufacturing issues throughout the election season.

During IMA events, employees have the opportunity to play the new I Make America game and download the app to learn more about manufacturing issues at stake this election season. Ag issues comprise a big part of the game and IMA tour for 2016. The game, for instance, is designed to promote the Renewable Fuel Standard and expanded trade. Moreover, IMA has organized resources for AEM member companies about these issues, and will roll out even more content throughout the election year to equip AEM members with the tools they need to communicate to their employees about Ag issues.

Plans are underway for stops at Mahindra USA, Kondex Corporation, Manitou Americas, Weiler and Vermeer Corporation. If you are interested in hosting an IMA event or promoting the IMA app at your company this election season, contact Abby Lannoye at alannoye@aem.org 414-298-4746 and get your employees prepared on the issues when they go to the polls on Election Day.

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Save the date: Monday, August 29, 2016

AEM’s Infrastructure Vision 2050 Initiative and Agri-Pulse will host a cross-industry summit to explore future infrastructure needs in rural America and across the country on Monday, August 29, 2016 (the day before Farm Progress Show) at the Iowa State Center at Iowa State University in Ames, Iowa. Visit www.aem.org/IV2050 for further details and updates or contact AEM Public Affairs Coordinator Abigail Lannoye at alannoye@aem.org.
AEM Ag Executive Advisor | Industry Insights for the Ag Executive

Advocacy & Legislation

AEM files brief at Supreme Court on New Hampshire dealer laws

AEM joined leading trade associations in filing a friend-of-the-court brief with the U.S. Supreme Court on Thursday, May 19 urging the high court to take up a challenge to a troublesome dealer law in New Hampshire. AEM joined the National Association of Manufacturers (NAM) and other groups in the brief on behalf of Deere & Company, CNH America and AGCO Corporation, which are urging the U.S. Supreme Court to hear arguments to overturn the New Hampshire state supreme court's ruling upholding a restrictive dealer law.

New Hampshire in 2013 expanded dealer laws related to auto manufacturers to also cover the manufacturer-dealer relationship for many types of farm, construction and industrial equipment. The law in essence rewrote the contractual relationships between AEM member companies and their dealers in New Hampshire after the fact.

AEM members had challenged the law in state courts, but the law was ultimately upheld by New Hampshire's supreme court. Deere, CNH and AGCO are now seeking U.S. Supreme Court review of the law, with AEM and NAM's support.

The brief argues that the New Hampshire law unconstitutionally interfered with existing manufacturer-dealer contracts in violation of the Commerce Clause of the U.S. Constitution, among other arguments. The petition for the Supreme Court to review the New Hampshire law is known as a writ of certiorari. For the Supreme Court to grant such a writ, four of its members must vote to hear a case.

For more information, please contact Nick Yaksich, AEM senior vice president, government and industry relations at nyaksich@aem.org | 202-898-9064.

Seed treatment lawsuit moves forward

In their complaint, the plaintiffs stated their case that planting treated seed is a pesticide application because while the seeds absorb some of the neonic coating, the rest “is either scraped off the seeds and blown away as dust during machine planting, or sloughed off into the surrounding soil and groundwater,” and “uncontained dust and contamination from these coatings is killing honey bees by the many millions and imposing a potentially catastrophic hazard to aquatic systems across the nation.”

If ultimately successful, the lawsuit would pave the way for planting equipment to be regulated as pesticide application tools.

A legal challenge brought by beekeepers and environmental groups against the Environmental Protection Agency's (EPA) regulation of neonicotinoid-treated seed is moving forward after a federal judge threw out EPA's motion to dismiss.

The lawsuit contends EPA violated the law when it extended the “treated article” exemption under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to include neonic-coated seeds. Essentially, the beekeepers and environmental groups want the planting of treated seed to be considered a pesticide application and therefore subject to all of the applying regulations.

EPA exempted treated seed from FIFRA in 2003 as a “treated article” by stating pesticide-coated seeds were pesticides under FIFRA, but would be exempt if treated with an already-registered pesticide whose effects didn't extend beyond the seed itself.

For more information, contact AEM senior director, government and industry relations Nick Tindall at ntindall@aem.org.

From our Advocacy Insider:

Congressional and state elections will matter more than ever to equipment manufacturers

As the presidential primaries wind down, and as Donald Trump and Hillary Clinton look safe to lock up their respective parties’ nominations, one thing is clear for AEM members: Elections for House, Senate and Governor will be more important than ever in 2016.

Trump’s nomination in particular has led to turmoil within the Republican Party, and Democrats believe Trump’s polarizing effect will expand the opportunities to pick up House and Senate seats in November.

Bottom line: The turbulent presidential contest this year is prompting a number of figures in Washington to refocus their resources away from the battle for the White House.

AEM has made election year resources available at IMakeAmerica.com, with more information to come this summer – including candidate comparisons and shareable content to help communicate our industry’s issues.
Spray Drift Control Demo Day set for success

AEM is expecting nearly 40 Environmental Protection Agency (EPA) and state pesticide regulatory officials to take part in the June 15th Spray Drift Control Demo Day at the Wye Research Center in Queenstown, MD. This will expand on the collaboration begun with the Office of Pesticide officials during last year’s tour of AEM sprayer member booths at Farm Progress Show (see photo). Both events facilitate open communication between EPA and manufacturers with regard to the EPA Drift Reduction Technology (DRT) Registry. EPA officials gain a better understanding of the many diverse technologies that have been developed by industry to mitigate drift, while manufacturers are able to learn firsthand about the DRT Registry.

AGCO, CNH Industrial, Equipment Technologies, GVM Inc., John Deere, Hardi and TeeJet will have sprayers and demonstration equipment onsite to showcase the wide array of spray drift reduction tools available to today’s producers. Their staff representatives serving on the AEM Liquid Applications Equipment Technical Group and Sprayer Product Leadership Group will demonstrate these products in action. A member of the National Ag Aviation Association will be on hand with a helicopter to display aerial application drift control. Representatives from the Ag Retailers Association will also deliver a presentation on what their members do to control drift.

The day is shaping up to be an excellent opportunity to deepen AEM’s working relations with EPA’s Office of Pesticide Programs and show them that no one is against off-target application more than farmers and that manufacturers work intensively to deliver the tools that farmers need.

Stay tuned in the next Ag Executive Advisor for a full report on this event!

Walker visits AEM headquarters to meet with members

Wisconsin Gov. Scott Walker shared his thoughts on manufacturing issues, the 2016 campaign and more during a visit to AEM headquarters on May 4. The highlights:

• On workforce development: “I found that, to me, that’s the Number 1 issue I focus on these days.”

• On the 2016 elections: “It’s the most bizarre thing I’ve ever seen. In some ways, I’m glad I’m not there.”

• On Hillary Clinton: “If it weren’t for superdelegates … she might be in the fight of her life.”

Walker concluded his visit with a press conference with Wisconsin media in AEM’s lobby.

Proposed 2017 ethanol blend level still falls short

On May 18, the Environmental Protection Agency (EPA) released its proposed blend level under the Renewable Fuels Standard (RFS). In it, the agency calls for 14.8 billion gallons of corn-based ethanol to be mixed into our nation’s liquid transportation fuel supply.

While this raw figure represents an improvement from the step back taken in the combined 2014, 2015 and 2016 final rule, it’s still 200 million gallons short of the level mandated by Congress in the 2007 Energy Bill. This shortfall translates into decreased corn demand by 540 million bushels.

Furthermore, the agency continues to rely on their flawed “distribution waiver” methodology that considers distribution infrastructure as part of the blend level target setting process. This effectively puts the program’s future in the hands of the vertically integrated oil industry.

Since use of this mythology was leaked in 2013, it has stalled investment in the advanced biofuels that have always been intended to carry the RFS beyond 15 billion gallons of corn-based ethanol. Bloomberg has estimated the lost investment capital in excess of $13 billion.

AEM plans to comment on this proposed rule and will continue to work with our partners in the Fuels American Coalition to push for a renewable fuels energy future.
In April 2016, AEM, as secretariat of the Agrievolution Alliance, participated in a worldwide survey directed at senior management of the global agricultural machinery industry. We asked them about the most relevant topics in their industry, such as the general evaluation of business, order intake, turnover, employment, mood, among other topics.

According to the survey responses, the global business climate is back at the low level of October 2014. Although the global downturn might have come to a halt, a global recovery is not in sight for the next six months. On a global scale, the sector seems more likely to stabilize at the current low level.

Compared to October 2014, the current business climate is evaluated to be significantly worse, while future expectations have improved and are now slightly in the positive. However, compared with the last two surveys taken in 2015, the future expectations are far more muted – in particular the expectations from companies located in Western Europe. This is the main cause for the relapse of the global business climate. The further deterioration of the current business of the U.S. industry is an additional factor.

Regarding the global industry’s expectations for the single markets in the next six months, East Asia leads the ranking, followed by Africa. For North and Latin America, a majority of the survey participants expect turnover decreases.

A large majority of Japanese and Russian industry representatives, but also one third of the Turkish participants, report about changes in government programs with positive effects on demand for agricultural machinery in their countries. This could be one explanation, why contrary to other locations, the volume of orders did not decrease in Russia, Japan and Turkey.

Apart from Russia, the general mood of farmers remains largely negative due to the low commodity prices and thus profitability. This might not change in the short-term. The industry’s evaluation of the impact from energy production to its end customer is worst in the U.S. Europe leads the negative ranking concerning the impact from crop and animal production. On the other side, Russian participants report high credit loan restraints.

The alliance is a global coalition of agricultural equipment manufacturing organizations that works to advance agricultural interests worldwide through collaborative action on industry issues, data exchange and public policy outreach. The goal is to promote better understanding of modern agricultural machinery’s important role in sustaining a growing world population. The alliance’s economic committee conducts the biannual survey, released in May and November. Senior-level agricultural equipment manufacturing representatives relay their current business situation and outlook for their respective markets. The survey provides alliance members and their participating companies with timely and accurate global market trends data for business planning. The alliance also releases a public summary report, available on the Agrievolution Alliance website (www.agrievolution.com).
Exports of U.S.-made agricultural equipment for first quarter 2016 dropped 8 percent overall compared to first quarter 2015, for a total $1.7 billion shipped to global markets. Europe and Central America each recorded double-digit gains, with double-digit declines from the other world regions, led by Africa and South America, according to the U.S. Department of Commerce.

**AEM Market Analysis Overview**

While U.S. ag equipment exports to the world continue to decline, this quarter’s year-over-year decline of 8 percent was lower than last quarter’s 16.7 percent decline and 2015 third-quarter decline of 29 percent. Declines continued to be expected as global market drivers responsible for the ag downturn, such as low commodity prices and the larger global malaise, remained in place. Aside from specific industry-related issues, international trade overall is slowing down. On a macro-economic scale, the Baltic Dry Index, which tracks the price of moving major raw materials by sea, fell to an all-time low in March. A strong U.S. dollar also continues to hamper our nation’s global competitiveness.

According to the results of the recent Agrievolution Business Barometer, the global recovery for our industry is not expected to be in sight for at least six months. While the sector seems to have stabilized, it is at a low level. While the survey indicated that East Asia and Africa are leading the future expectations, our recent data shows that for the United States, Central America remains an important market. While in the Barometer survey, there was also a reduction in optimism coming from Europe, U.S. exports did increase. Exports of harvesting equipment, and in particular combines, as well as exports of tractors and parts drove the growth in exports to Germany. Export growth in new tractors was the main driver for trade with France.

### THE BELOW CHARTS ILLUSTRATE A ROLLING 4 QUARTERS VS. PREVIOUS 4 QUARTERS FOR COUNTRIES WITH > $25 MIL./YR IN EXPORTS

**Top 10 Growth Countries - US Ag Equipment Exports**

<table>
<thead>
<tr>
<th>Country</th>
<th>Last 4 Qtrs</th>
<th>Prev 4 Qtrs</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINA</td>
<td>$444,069,370</td>
<td>$346,399,613</td>
<td>28.0%</td>
</tr>
<tr>
<td>ROMANIA</td>
<td>$21,354,797</td>
<td>$26,645,653</td>
<td>17.5%</td>
</tr>
<tr>
<td>MEXICO</td>
<td>$1,631,941,183</td>
<td>$937,567,416</td>
<td>12.2%</td>
</tr>
<tr>
<td>RAJUIN ARARIA</td>
<td>$80,934,204</td>
<td>$54,765,711</td>
<td>11.5%</td>
</tr>
<tr>
<td>FRANCE</td>
<td>$215,972,327</td>
<td>$187,685,822</td>
<td>9.2%</td>
</tr>
<tr>
<td>POLAND</td>
<td>$61,896,900</td>
<td>$57,188,544</td>
<td>6.8%</td>
</tr>
<tr>
<td>OZEECH REPUBLIC</td>
<td>$50,908,062</td>
<td>$50,250,701</td>
<td>1.4%</td>
</tr>
<tr>
<td>UKRAINE</td>
<td>$89,222,625</td>
<td>$89,217,426</td>
<td>0.0%</td>
</tr>
<tr>
<td>THAILAND</td>
<td>$44,558,102</td>
<td>$45,257,249</td>
<td>-1.6%</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>$595,896,711</td>
<td>$617,089,852</td>
<td>-3.5%</td>
</tr>
<tr>
<td><strong>Global Total</strong></td>
<td>$7,216,321,840</td>
<td>$8,147,014,922</td>
<td>-11.4%</td>
</tr>
</tbody>
</table>

**Bottom 10 Growth Countries - US Ag Equipment Exports**

<table>
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<th>Last 4 Qtrs</th>
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<th>% Change</th>
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</thead>
<tbody>
<tr>
<td>SURINAME</td>
<td>$5,696,160</td>
<td>$26,690,800</td>
<td>-77.7%</td>
</tr>
<tr>
<td>URUGUAY</td>
<td>$20,541,750</td>
<td>$62,602,091</td>
<td>67.3%</td>
</tr>
<tr>
<td>HONDURAS</td>
<td>$12,286,062</td>
<td>$28,897,301</td>
<td>-55.1%</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>$181,181,087</td>
<td>$267,631,261</td>
<td>-30.6%</td>
</tr>
<tr>
<td>VENEZUELA</td>
<td>$33,076,424</td>
<td>$56,346,644</td>
<td>-39.9%</td>
</tr>
<tr>
<td>SOUTH AFRICA</td>
<td>$141,201,509</td>
<td>$224,083,205</td>
<td>-38.4%</td>
</tr>
<tr>
<td>PERU</td>
<td>$36,704,920</td>
<td>$40,730,146</td>
<td>-8.2%</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>$110,499,980</td>
<td>$145,799,909</td>
<td>-23.7%</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>$123,414,715</td>
<td>$174,106,298</td>
<td>-25.4%</td>
</tr>
<tr>
<td>GUATEMALA</td>
<td>$30,301,507</td>
<td>$40,073,375</td>
<td>-23.1%</td>
</tr>
<tr>
<td><strong>Global Total</strong></td>
<td>$7,216,321,840</td>
<td>$8,147,014,922</td>
<td>-11.4%</td>
</tr>
</tbody>
</table>

Source: U.S. Census / AEM Market Intelligence
### AEM ag equipment sales report and analysis

**Market Intelligence**

#### U.S. Unit Retail Sales

<table>
<thead>
<tr>
<th></th>
<th>May 2016</th>
<th>May 2015</th>
<th>%Chg</th>
<th>YTD — May 2016</th>
<th>YTD — May 2015</th>
<th>%Chg</th>
<th>Beginning Inventory</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2WD Farm Tractors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;40 HP</td>
<td>15,714</td>
<td>14,369</td>
<td>9.4%</td>
<td>55,596</td>
<td>48,143</td>
<td>15.5%</td>
<td>79,864</td>
<td></td>
</tr>
<tr>
<td>40&lt; 100 HP</td>
<td>5,201</td>
<td>5,127</td>
<td>1.4%</td>
<td>22,067</td>
<td>22,534</td>
<td>-2.1%</td>
<td>39,962</td>
<td></td>
</tr>
<tr>
<td>100+ HP</td>
<td>1,612</td>
<td>1,670</td>
<td>-3.5%</td>
<td>8,166</td>
<td>10,790</td>
<td>-24.3%</td>
<td>10,674</td>
<td></td>
</tr>
<tr>
<td><strong>Total 2WD Farm Tractors</strong></td>
<td>22,527</td>
<td>21,166</td>
<td>6.4%</td>
<td>85,829</td>
<td>81,467</td>
<td>5.4%</td>
<td>130,500</td>
<td></td>
</tr>
<tr>
<td><strong>4WD Farm Tractors</strong></td>
<td>147</td>
<td>199</td>
<td>-26.1%</td>
<td>912</td>
<td>1,314</td>
<td>-30.6%</td>
<td>791</td>
<td></td>
</tr>
<tr>
<td><strong>Total Farm Tractors</strong></td>
<td>22,674</td>
<td>21,365</td>
<td>6.1%</td>
<td>86,741</td>
<td>82,781</td>
<td>4.8%</td>
<td>131,291</td>
<td></td>
</tr>
<tr>
<td><strong>Self-Prop Combines</strong></td>
<td>234</td>
<td>391</td>
<td>-40.2%</td>
<td>1,408</td>
<td>1,978</td>
<td>-28.8%</td>
<td>853</td>
<td></td>
</tr>
</tbody>
</table>

Data courtesy: Association of Equipment Manufacturers Statistics

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**Large Farm Tractor Sales weak**

Some of the rhetoric we have been hearing is that equipment sales should be more stable in 2016 compared to 2015, though retail sales of production ag machinery such as the 100+HP 2WD and 4WD tractors continue to deteriorate. Farm incomes are expected to be more stable this year and we are seeing some growth in crop receipts in certain areas in the USA. We will most likely have to wait until later this year or 2017 to see an impact. 2WD tractors 100+HP retail sales declined 3.5 percent year over year, which was a lower decline than earlier this year as the YTD sales declined 24.3 percent compared to the previous year. 4WD Farm tractors retail sales continued their double digit declines.

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**Ahead: Small and Mid-Size Tractors**

Farm tractors <40hp reported a growth of only 9.4 percent in May 2016 compared to the same period last year. YTD, the category’s growth decreased to 15.5 percent. Farm tractors 40-100HP continued their stable trend having their sales grow 1.4 percent year over year. When combined, the May retail sales number are in fact higher than the 5-year average (11-15), but that was mostly driven by less than 40HP tractors which remains an area of growth for the industry.
Production more stable, inventories decreasing

Q1 Surveys & Economy:

**Demand vs. planning**

Our quarterly surveys ask the membership about demand, planning, new orders, backlog of orders, production, inventories, employment, exports, capital expenditures, prices, etc. These surveys are designed to see what stage of the boom-bust cycle we are in. The results are presented as Net Rising Indexes or NRI’s. We take the positive answers and detract the negative ones, creating an index. Anything below the line means a market contraction, anything above the line means growth. The stronger the contraction or growth, the stronger the market consensus.

In Q1 2016, the Net Rising Index for y/y demand for goods improved, but is still negative. Indicating more respondents felt that the market declined vs. grew. About 38 percent of respondents felt the market had remained unchanged. For parts, the index is close to 0, with about 45 percent of respondents indicating no change. The outlook for the next 12 months also improved, but the NRI remains negative. The NRI’s are in line with the trends in farm income though and while we are seeing a slight decrease, the overall market seems to gear towards stable compared to 2015. Which means a continued downturn given last year’s declines. While most respondents mentioned that the market was tough, one respondent indicated that we are just before the dawn.

Looking at the work backlog, production and new orders, there are no clear new trends in Q1 compared to the last quarter of last year. Production became more stable, while new orders deteriorated for both whole goods and components/attachments. For whole goods the backlog of work also decreased.

**Inventory levels**

Inventories continue to be one of the major constraints in the current ag equipment industry downturn. From 2014 onwards we have received narratives and comments that ag equipment manufacturers and their dealers have put forth efforts to reduce the high inventories that are clogging up the pipeline. Compared to the previous quarter, the NRI for dealer inventories quarter over quarter came in at -16.39, up from -20 in Q4 2015. Still, more respondents indicated the inventories were decreasing vs. increasing. A big difference from last quarter is that inventories are now rated too low, though there is a significant group (50 percent) that says they are closer to being a good level. (blue line)
Market Intelligence

Africa ag market potential on the rise

In the first quarter of 2016, AEM, through Agrievolution, engaged in a project with the World Bank to research the viability of the African ag machinery market. The results of the survey indicated that, according to 171 manufacturers of farm equipment, the African market held great market potential for our industry. Forty-two percent of manufacturers surveyed indicated that Africa is already a very ‘important’ or ‘absolutely essential’ market for them today. Only about 12.5 percent discarded Africa as a potential market.

Looking towards the future, almost half of the manufacturers surveyed felt the African market will reach ‘great’ or ‘very strong’ potential. This number grows to 75 percent if we expand the horizon to 5 to 15 years.

As a follow up to the survey, we wanted to provide some additional insights coming from Business Monitor International (BMI). According to BMI, the main drivers behind agriculture in Africa continue to be population growth and rising income. In a 2020 outlook, BMI states that the rise in income will continue to increase consumption and demand for staples, including corn, wheat and rice (see chart right). Corn will remain the staple grain out to 2020, but the large grain consumption will outpace production over the next 5 years.

Some of the risks that remain were very similar to what the World Bank pointed out. From a logistics point of view Sub-Saharan Africa (SSA)’s poor transportation network will continue to weigh on growth opportunities. The political environment also remains key as the governments can affect agriculture through subsidies, trade barriers, land rights, labor markets and biosafety regulations. SSA’s current macro-economic risks comes from its weak currencies, which promotes exports of crops but reduces access to agricultural inputs such as seed, fertilizer and machinery.

While the Agrievolution/World Bank survey revealed a strong long term outlook for machinery, BMI indicated that sales in the coming quarters will remain subdued. This outlook is based on three major components that need to improve for sales to pick up. These are: higher farm incomes resulting mainly from high commodities prices; positive financial conditions such as low interest rates and improving access to credit; and a favorable exchange rate, as African nations rely on imports of agricultural equipment. According to BMI, South Africa and North African countries will remain the key markets for machinery in Africa. Support from the government and multinationals remains critical.

Over the next five years, BMI believes South Africa and North African countries will remain the key markets for agricultural machinery companies in Africa. This is because they forecast these regions, already the continent’s largest producers, to see the strongest growth in corn and wheat production respectively between 2015/16 and 2019/20. Moreover, their Country Risk team forecasts the currencies of Algeria and Morocco to appreciate against USD between 2016 and 2020, which will help to sustain machinery imports.

To increase the profitability of African agriculture, a driver for equipment sales, partnerships with food companies, the development of cooperatives and increased access to credit are needed. Investment in infrastructure such as roads, ports, power, and finance will also be needed. One major restriction on machinery sales growth in Africa is average farm size. According to FAO estimates, 80 percent of all farms in Africa had an area of less than two hectares in 2012. Though emerging Asian farms are generally as small as their Sub-Saharan African counterparts, the use of biotechnology, resulting in larger crops and increasing farm profitability, has provided the impetus for increased mechanization in Asia.
Statistics program offers global data, Spain joins Alliance

Agrievolution Statistics Program

The Agrievolution Statistics Program is open to AEM and Alliance association member companies, providing global product specific market data to companies who report in to the program. It currently covers five products: Tractors, combines, forage harvesters and two types of hay balers. The program may be expanded in the future to include additional product categories.

AEM and Alliance association member companies who are unable to participate in the programs can benefit by having exclusive access to aggregate data from the program in the form of indexes for each of the product categories going back five years. The indexes provide valuable trend line data, and will be posted soon on AEM’s market intelligence web pages.

The program has been in existence for roughly 40 years. The Agrievolution Alliance was recently voted in as the new Secretariat for the program by the participating companies. The Alliance is the global coalition of 14 agriculture equipment manufacturing organizations representing more than 6,000 ag equipment manufacturers. It will work to grow the program throughout its collective member companies. AEM will act as Statistics Secretariat on behalf of the Alliance.

The data will continue to be processed by Systematics International as it has since the program’s inception. Systematics International is an independent data processing company based out of the UK, dedicated to providing the highest quality statistical reports to manufacturing industries worldwide.

ANSEMAT, Spain joins the Alliance

The Alliance’s global representation and the value of its data continues to strengthen with the addition of the National Association for Agricultural, Forestry and Landscaping Machinery (ANSEMAT), Spain. ANSEMAT represents 63 agriculture equipment manufacturing companies in Spain, and a total of 124 companies. The continued growth increases the Alliance’s ability to advance agricultural interests worldwide and promote better understanding of the key role that agriculture equipment plays in sustaining a growing world population.

Agrievolution Alliance activities include:

- Biannual global tractor sales reports for AEM and all Alliance member companies
- Biannual global industry Outlook reports (based on data gathered from global surveys) for participating AEM and Alliance member companies (public versions also available)
- Biennial Agrievolution Summits, connecting the industry globally through the sharing of market and economic information, creating political awareness and providing a venue for industry leaders to gather

Brazil, Venezuela turmoil leads Latin America to recession

From AEM’s Latin America Advisor

Following a five-year period of growth that averaged 3.6 percent annually, Latin America continues on the path to recession, with the economy contracting 1.3 percent year on year in the last quarter of 2015. Venezuela and Brazil are the main contributors to this downswing, although not all countries in the region are affected. Argentina, Chile, Mexico, and Peru experienced positive growth for the year.

The majority of Latin American countries have experienced anemic growth in 2016 due to a drop in commodity prices, a slowed global economy, and a lack of investor confidence. Overall, the region is predicted to further contract to 0.5 percent by the end of 2016 as the economic situations in Brazil and Venezuela continue to worsen. These countries are projected to decrease 4 and 10 percent respectively. However, in 2017, an increase of 2.1 percent for the region is projected as hopes are high that the two worst performing economies will improve from changes in fiscal and governmental policy.

This is an El Niño year. Argentina, Chile, Paraguay, and Uruguay have all faced substantial rains and flooding, leading to crops being ruined and subsequent price increases due to the lack of supply. Evacuations have also come about. Harvest dates are pushed back meaning internal demand may not be met. Brazil has seen both heavy rains and drought.

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Modernization and automation of dairy farms – “Engineering for a better world”

Matt Daley, president and CEO, GEA Farm Technologies, North America

It’s no surprise that Matt Daley, president and CEO, GEA Farm Technologies, North America, is passionate about developing solutions that will give dairy farmers more free time to enjoy their families, hobbies and personal time. Being tied down to the farm is what compelled him to move on from his own family dairy farm.

The Daley farm is a fourth generation operation in southeastern Minnesota. Growing up with his four brothers and two sisters - all helping out with milking, planting, whatever needed doing - Matt naturally developed a strong mid-western work ethic. After graduating with a business degree from Minnesota State, Matt landed a job straight out of school managing a Tractor Supply store in South Dakota. The family business called him home after 2 years, and he spent the next 8 years farming full time. Although business was good and he enjoyed the work, he and his wife wanted to be able to travel, have free time to enjoy their families, hobbies and personal time. Being tied down to the farm is what compelled him to move on from his own family dairy farm.

After graduating with a business degree from Minnesota State, Matt landed a job straight out of school managing a Tractor Supply store in South Dakota. The family business called him home after 2 years, and he spent the next 8 years farming full time. Although business was good and he enjoyed the work, he and his wife wanted to be able to travel, have free time to enjoy their families, hobbies and personal time. Being tied down to the farm is what compelled him to move on from his own family dairy farm.

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Matt took a job at GEA and spent 5 years in global sales and marketing. He then spent 4 years at JCB and in 2009, was offered a spot back at GEA as head of their business rather than just expecting their dealers to buy from them. Along with his team, he helped bring the focus back to North America, and the company has experienced extraordinary growth every year since then – even in last year’s tough economy.

GEA recently introduced rotary robotic milking systems to the U.S. Can you tell us a bit about that?

“Engineering for a better world” is the GEA motto. Robotics is getting some dominant focus, a leap forward in technology. While the first generation of robotics developed in Europe was geared towards smaller farms, we took our product managers and engineers to the largest farms in the country. They then spent the next two years developing solutions, which we are launching now. We not only wanted to offer farmers an economic benefit, but to enhance their quality of life by giving them flexibility in their schedules, freeing up time for a personal life. We’ve now adapted this technology to better serve smaller farms as well.

What are the biggest challenges facing the dairy industry today?

Labor and environmental issues. Immigration issues are causing worker shortages; huge increases in minimum wage are coming; there is mandatory insurance and, for the first time ever, overtime pay on a farm in many states. Farms large and small are now subject to close regulation dictating how you can expand, where, requiring multiple permits, approved manure management plans. Application of your own nutrients to your own land is regulated. This all adds up to significant time, money and stress for the farmer.

While the recent drop in the ag market initially didn’t hit dairy as hard, it seems to have caught up with a vengeance. What do you foresee over the next couple of years?

Because the local market is affected more and more by worldwide milk prices, it is tough to gauge. I see continued modernization and automation of dairy farms, with manufacturing principles like Lean being applied to the farm just like we do in manufacturing. Also, today 60 percent of our milk is produced by 2 percent of the dairy farms in the US. I see a continuation of that extraordinary consolidation.

GEA has been an AEM member for 60 years and utilizes our stats programs, technical groups and surveys. You serve on the Ag Sector Board and several committees. How does this benefit GEA?

Being a part of AEM allows us to lead versus follow – actually speaking directly with legislators on issues like the farm bill. Working on roadways regulations, using market data from stats programs, learning from peers are all great benefits. The board’s attitude is that it’s our association, and we as manufacturing leaders need to make it what we want, make it better. If you’re an equipment manufacturer and you’re not taking advantage of what AEM can do for you, you’re missing out.

Matt is an avid reader with a keen interest in world history. Besides reading a few novels a month, he spends his free time travelling with his wife, enjoying time with his two daughters and fishing a trout stream on his home property in Minnesota.

“We not only wanted to offer farmers an economic benefit, but to enhance their quality of life by giving them flexibility in their schedules, freeing up time for a personal life.”
Product accident prevention is everyone’s business

“Protecting the health and well-being of our customers is not only morally right, but it is good business.”

“…In fact, in this era of increasing social consciousness, a manufacturer must commit substantial resources to preventing product-related accidents in order to stay in business over the long term. The rapidly escalating public awareness, political attention, media emphasis and liability pressures of the day demand that equipment manufacturers accelerate their efforts to contribute toward preventing injury and illness-producing accidents. Product accident prevention is everyone’s business!”

Program covered 11 topics and was a day and a half event. Today’s seminars cover three and half days and include 39 discrete subject areas.”

Despite challenging market conditions, attendance for the back-to-back Product Safety & Compliance and Product Liability seminars stayed strong with 250 attendees registered for one or both. “No overview like this exists in any other place,” one attendee noted. “I missed last year and didn’t want to miss this year,” another wrote. “Great to learn and network,” a third said.

One area that earned rave review from attendees was the new technical publications track. “Love the tech pubs track,” stated one attendee. “Please continue to offer a publications track – this seminar is one of the only opportunities,” said another.

“It is clear that AEM member companies are willing to invest in making the products they produce safe for the customers they serve by sending new product safety professionals to the training designed for them,” said Vern Hoppes, chair of the Product Safety & Compliance Seminar Planning Committee and product safety engineer at John Deere Power Systems. At the same time, he said, the seminar continues to offer experienced attendees in-depth information on relevant subjects that are challenging the industry.

“As products grow ever more efficient by way of technological advances, they also get far more complex, which in turn seems to be driving an even more complex and challenging regulatory and design standards environment to work in,” Hoppes noted. “Along with this complexity is information which needs to be shared with the operators of equipment for them to realize these gains in productivity.”

“What we need to do now is look forward to these challenges, find solutions, and continue to make the powerful and productive products AEM members provide even safer for the users and bystanders who use them,” he said.

The next Product Safety & Compliance and Product Liability seminars will take place April 24-27, 2017 in Cincinnati, Ohio.

Welcome new AEM Agriculture members!

Arrowcast Inc.
Ace Pump Corporation
ADC Custom Products LLC
B&D Fabricators
Brilliance Business Solutions
Demco
Dieci United States, LLC
DOGA USA Corp.
Donghua USA
FAST Ag Solutions
Fluidall, LLC
FTG Equipment Solutions
Game Equipment LLC
Holland Pump Manufacturing Inc
JADCO, Inc.
Kawasaki Precision Machinery (U.S.A.) Inc.
Lincoln Electric Company (The)
Magni Telescopic Handlers SRL
Newgen North America, Inc.
Nicholson Manufacturing (DBA Madill Equipment)
NSK Corporation
Rhino Tool Co
Rimkus Consulting Group
Ryerson
S3 Enterprises Inc.
TC Industries
Wexco Industries
Yaskawa America, Inc,
Motoman Robotics Division
Standards

N.A. ag braking requirements: review continues

Changes in ag vehicle braking requirements for North America are being considered.

The standard containing braking requirements for towed and towing agricultural field equipment is in need of updating to keep pace with current machine design and practices.

A small task force of braking system experts from several North American-based equipment manufacturers along with developers and suppliers of vehicle braking systems has been comparing the current requirements in ASAE S365.9 to the demands current equipment and practices are placing on braking systems as well as requirements from other regions of the world.

The review of the dated North American braking standard will take the next step towards a thorough revision when manufacturers meet in mid-June. The industry-driven review has progressed to a point where a broader coalition, including manufacturers of brake components, self-propelled, towed and towing equipment, will meet to review ASAE S365.9 as it applies to agricultural equipment currently being marketed.

The group recognizes that increases in equipment speed, weight and size along with greater congestion of U.S. roadways are placing more demands on the performance and design of agricultural equipment braking systems.

While much work has already been completed, there is still a long way to go and many more voices to take into consideration. Invitations have been extended to a broad base of interested parties in both the U.S. and Canada. The upcoming meeting will bring new attendees up-to-date on the current status, needs and timelines to enhance existing standards and, where possible, establish consistency with other regional standards and regulations, thereby improving manufacturing efficiencies.

Topics to discuss include means to resolve the concerns over the current ASAE S365.9 standard which:

- Has no provision to allow towing of a lightweight towed ag vehicle without brakes at speeds exceeding 32kph (20 mph)
- Does not address how the brake system interfaces between towing vehicle and the towed vehicle
- Has no provisions to warn an operator that the brake system has failed
- Does not clearly address requirements for combination braking systems (hydrostatic & friction brakes)
- Increases complexity for manufacturers and users due to the misalignment with other standards around the world.

Once agreement has been achieved, the discussions will move to the formal ASABE standardization process. For more information, contact Michael Pankonin at mpankonin@aem.org | 414-298-4128.

Michael Pankonin
AEM senior director, technical and safety services

Statistics program offers global data, Spain joins Alliance

- Advocating for the industry globally through communications with government and collaboration with organizations like the Agriculture Industry Electronics Foundation, World Bank, FAO, UNIDO

For more information on the Alliance and its activities, check out www.agrievolution.com or contact Anita Sennett at asennett@aem.org.

Anita Sennett,
AEM director agriculture product management and Agrievolution

Alliance Secretariat

Brazil, Venezuela turmoil leads Latin America to recession

The grain harvest for the region is expected to be 202.4 million tons, representing a decrease of 2.5 percent (5.3 million tons) in comparison to the previous harvest.

Mexico, Peru, Colombia, and Venezuela have also been affected by the weather pattern. An uptick in food prices could lead to an increase in inflation. Combined with devalued or depreciating currencies, purchasing power is decreased, making it difficult for those affected by poverty to feed themselves or their families. In February, the Cato Institute’s “Misery Index” listed Venezuela as the most miserable country in the world for the second year in a row, based on inflation, unemployment, and interest rates. With oil making up 95 percent of Venezuela’s exports, the drop in oil prices is crushing their economy.

Overall, Latin America is facing a series of extensive challenges. Domestic currencies are depreciating and as the dollar strengthens, national consumers are affected. The region needs commodity prices to return to previous highs to sustain growth, infrastructure spending, and social programs. Corruption needs to be identified and eradicated. For a closer look, check out the June edition of the AEM Latin America Ag Advisor at aem.org/news or contact Barbara Schumacher at bschumacher@aem.org.
The American Society of Agricultural and Biological Engineers (ASABE) has nationally adopted the following international standards:

- **ASABE/ISO 27850:2013, Tractors for agriculture and forestry — Falling object protective structures — Test procedures and performance requirements**: for the testing and performance of tractor structures designed to provide protection against falling objects.

- **ASABE/ISO 3776-2:2013, Tractors and machinery for agriculture — Seat belts — Part 2: Anchorage strength requirements**: specifies the strength requirements of the anchorages for pelvic restraint (seat) belts intended to be used by the operators of agricultural tractors and self-propelled machinery. 2) **ASABE/ISO 23205:2014, Agricultural tractors — Instructional seat**: specifies the minimum design and performance requirements for an instructional seat and restraint designed for limited use by a trainer or trainee or service person inside an enclosed cab of an agricultural tractor.

- **ISO 12934:2013, Tractors and machinery for agriculture and forestry - Basic types – Definitions**: ASABE standard ANSI/ASAE S390, Definitions and Classifications of Agricultural Field Equipment, was used as the basis document for the development of ISO 12934 and is also referenced in various US and state regulations.

These adoptions of international standards further harmonize national and international standardization, a goal that facilitates manufacturing, safety advancements and product marketing worldwide.

For information on these or any other ASABE standard, contact Scott Cedarquist at 269-932-7031, cedarg@asabe.org. A current listing of all ASABE standards projects can be found on the ASABE web site at www.asabe.org/projects.
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