

# American Vanguard

Providing the Means to Safe, Efficient & Abundant Agriculture Worldwide

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*November 2018*

# Safe Harbor Statement

This presentation contains, in addition to historical information, forward-looking statements. Such statements are based on management's current expectations and are subject to a number of uncertainties and risks that could cause actual results to differ materially from those described in the forward-looking statements. Factors that may cause such a difference include, but are not limited to, those described in the Company's Annual Report, on Form 10-K, and in other SEC filings.

# American Vanguard Overview

- ▶ Traded on NYSE:AVD - - - Founded in 1969...currently 550 employees
- ▶ Fully integrated operation - - - excluding basic R&D
- ▶ Business Model: Acquire, develop, manufacture and market a diverse group of specialty agricultural products

Mission: **Enhance agricultural productivity and safeguard public health worldwide**

- ▶ Growth Focus:
  - Acquire/license proven, branded, niche application products
  - Reinvent core products by identifying new opportunities
  - License new, active ingredients and product technologies
  - Fully exploit significant domestic manufacturing capabilities

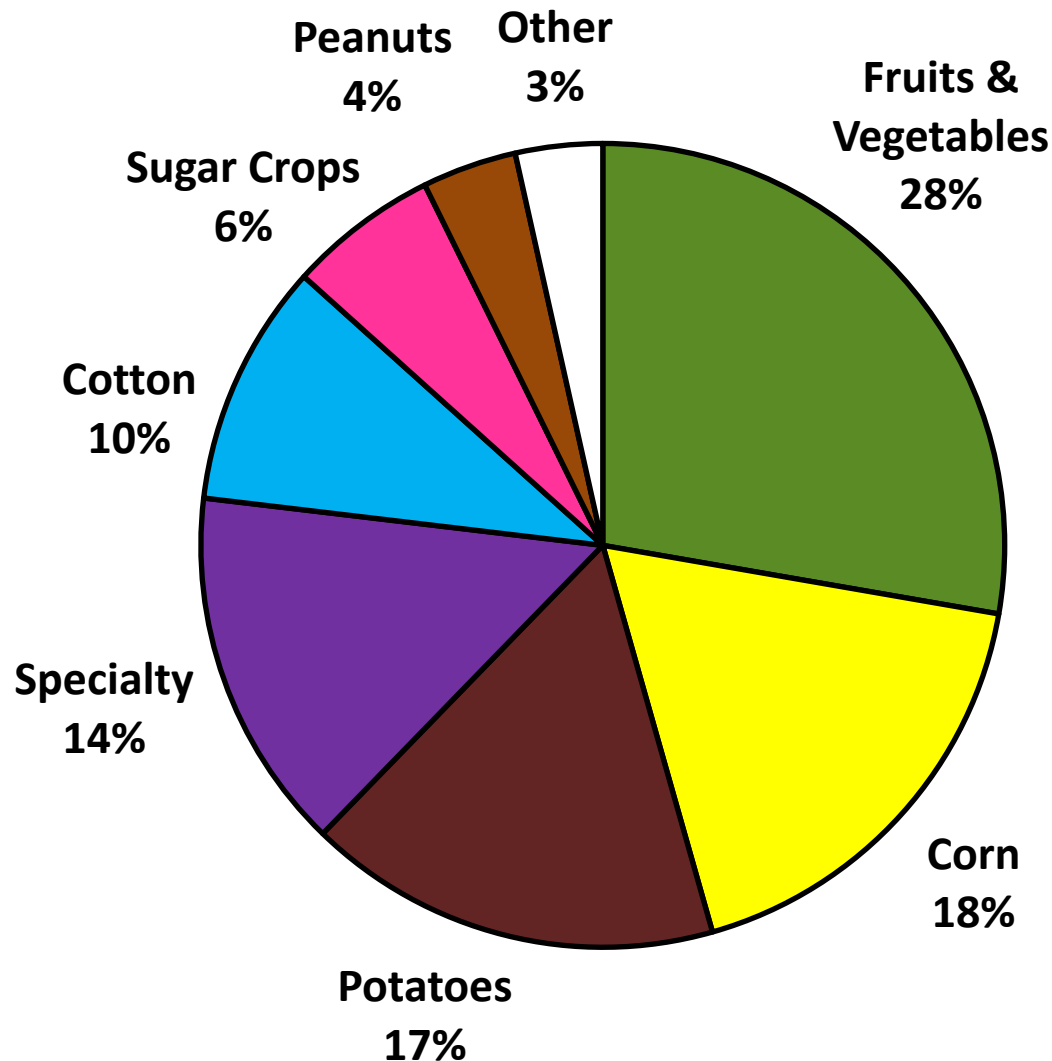
# Proven Acquisition & Licensing Experience

Phosdrin Mevinphos (DuPont) 1989	SmartBox System (Dupont) 2000	Ambush 25WP Permethrin (Syngenta) 2002	Thimet Phorate (BASF) 2005	E-Z Load System (UAP) 2007	Mocap Nemacur Aztec (bag) (Bayer) 2010	Hyvar (DuPont) 2015
Fruitone NAA (Rhône Poulenc) 1991	Fortress Chorethoxyfos (DuPont) 2000	Deadline Metaldehyde (Pace) 2003	Impact Topramezone (BASF) 2005	Terraclor PCNB (Chemtura) 2007	Tribufos International (Bayer) 2011	Scepter (BASF) 2015
Dibrom (ex-US) (Chevron) 1991	Dacthal DCPA (Zeneca) 2000	Evital Norflurazon (Syngenta) 2003	Counter Terbufos (BASF) 2006	Hannibal Plant (BASF) 2007	Bti Briquets (Summit) 2012	Acropolis (Oxon Italia S.p.A.) 2017
Bidrin Dicrotophos (DuPont) 1993	Aztec (ATB) (Bayer) 2000	Nuvan DDVP (Novartis AH) 2003	Lorsban (Dow) 2006	Marsing Plant (Bayer) 2008	TyraTech Venture (Envance Technologies) 2013	Paraquat Abamectin Chlorthalonil (Adama) 2017
Vapam Metam Sodium (Zeneca) 1996	Axis Plant (DuPont) 2001	Hivol 2,4-D (Pace) 2003	Ambush, Prelude Permethrin (Syngenta) 2006	Orthene Acephate (Valent) 2008	Nemacur (Adama) 2015	GESAPAX BRAVO (Syngenta) 2017
Dibrom Naled (US) (Valent) 1998	Folex Tribufos (Aventis) 2002	Force Tefluthrin (Syngenta) 2004	Lock 'N Load System (BASF) 2006	Def (Bayer) 2010	Krovar (DuPont) 2015	AgriCenter 2017
		Avenge Difenzoquat (BASF) 2005				OHP 2017
						Bromacil (Bayer) 2018

1989

2018

# AMVAC Diversified Participation



**2017 Revenue  
\$355 Million**

*Estimated*  
**2018 Revenue  
\$450-460 Million**



# AMVAC United States Manufacturing Sites



**Los Angeles, CA**



**Axis, AL**



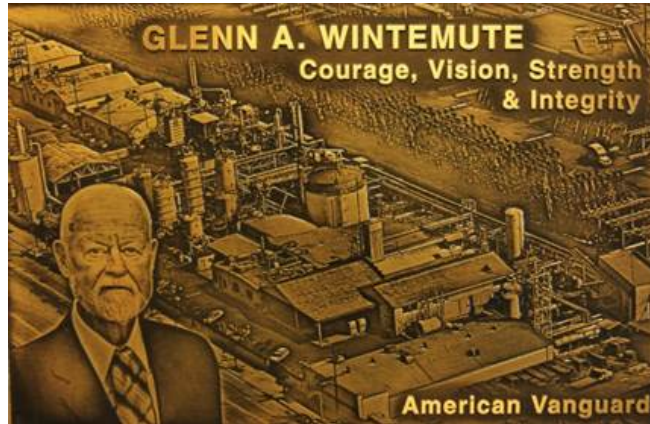
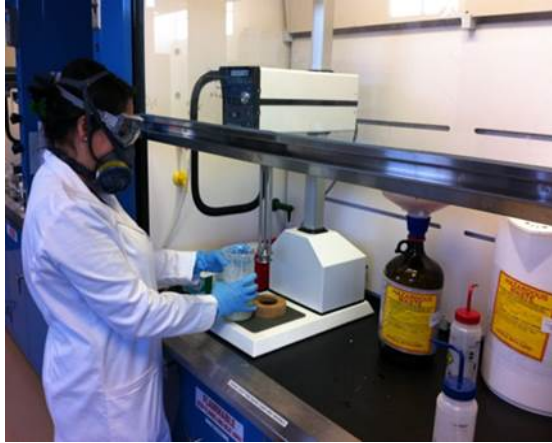
**Hannibal, MO**



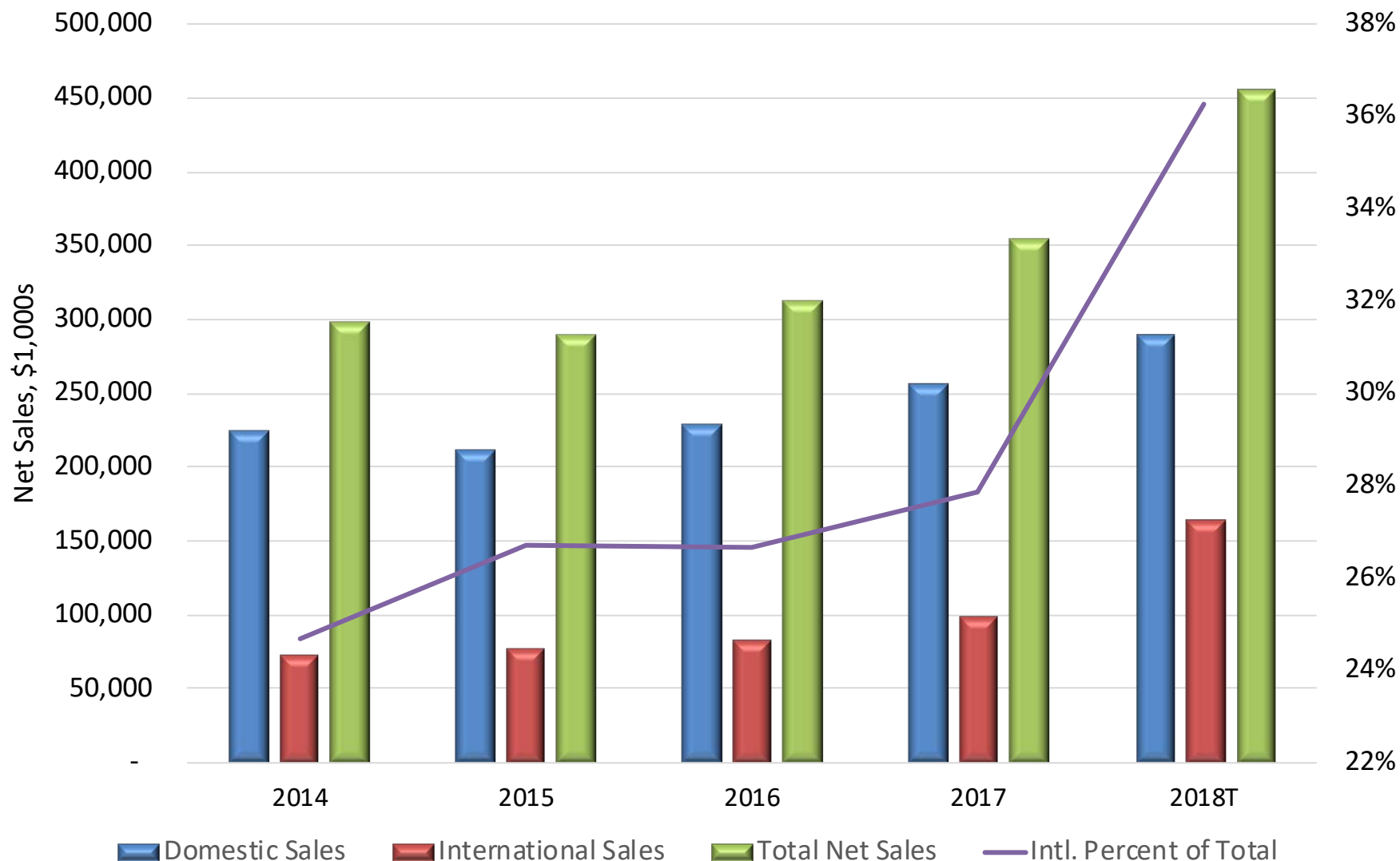
**Marsing, ID**



# Technology Innovation

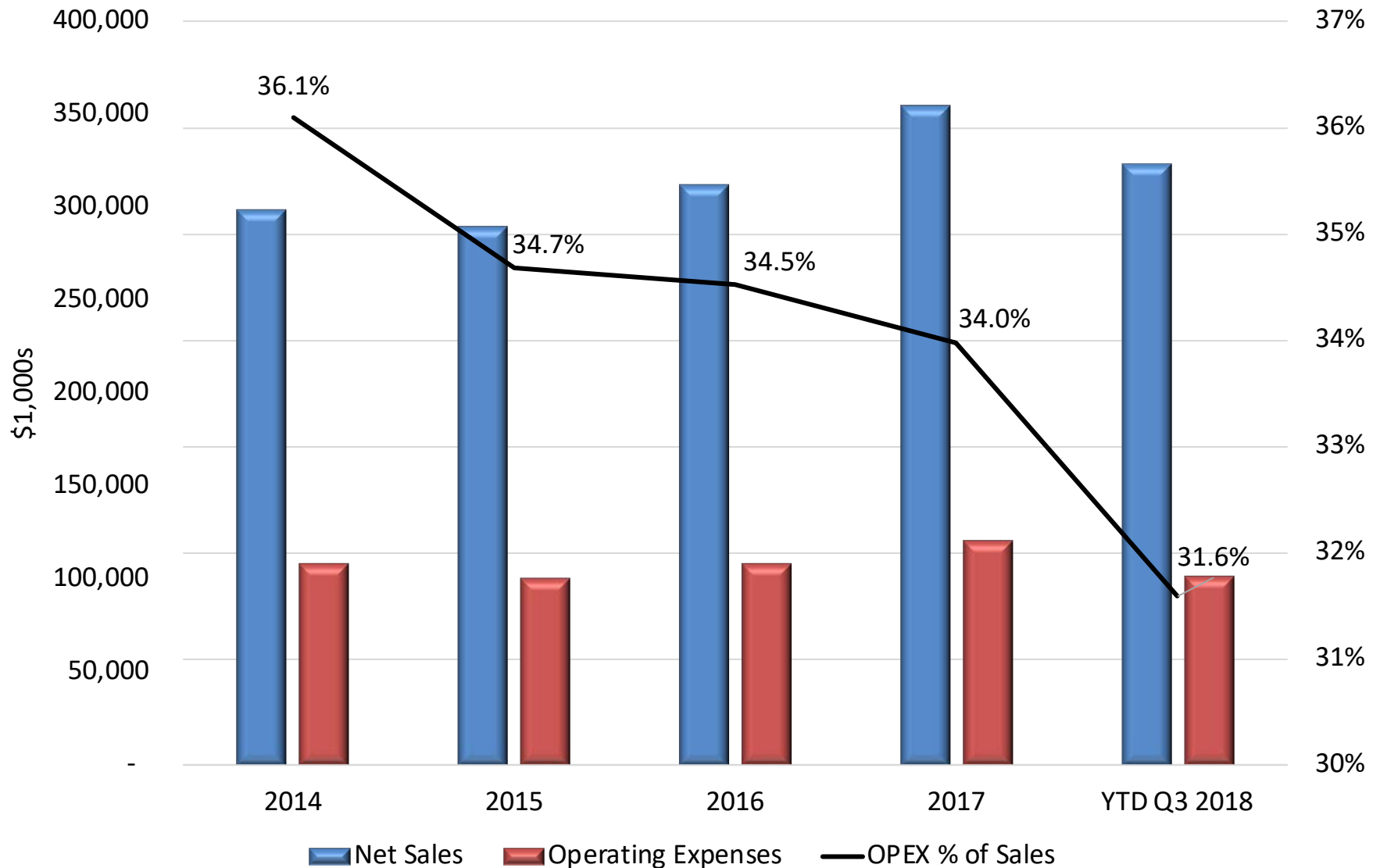


# Net Sales – Dom. vs Intl.

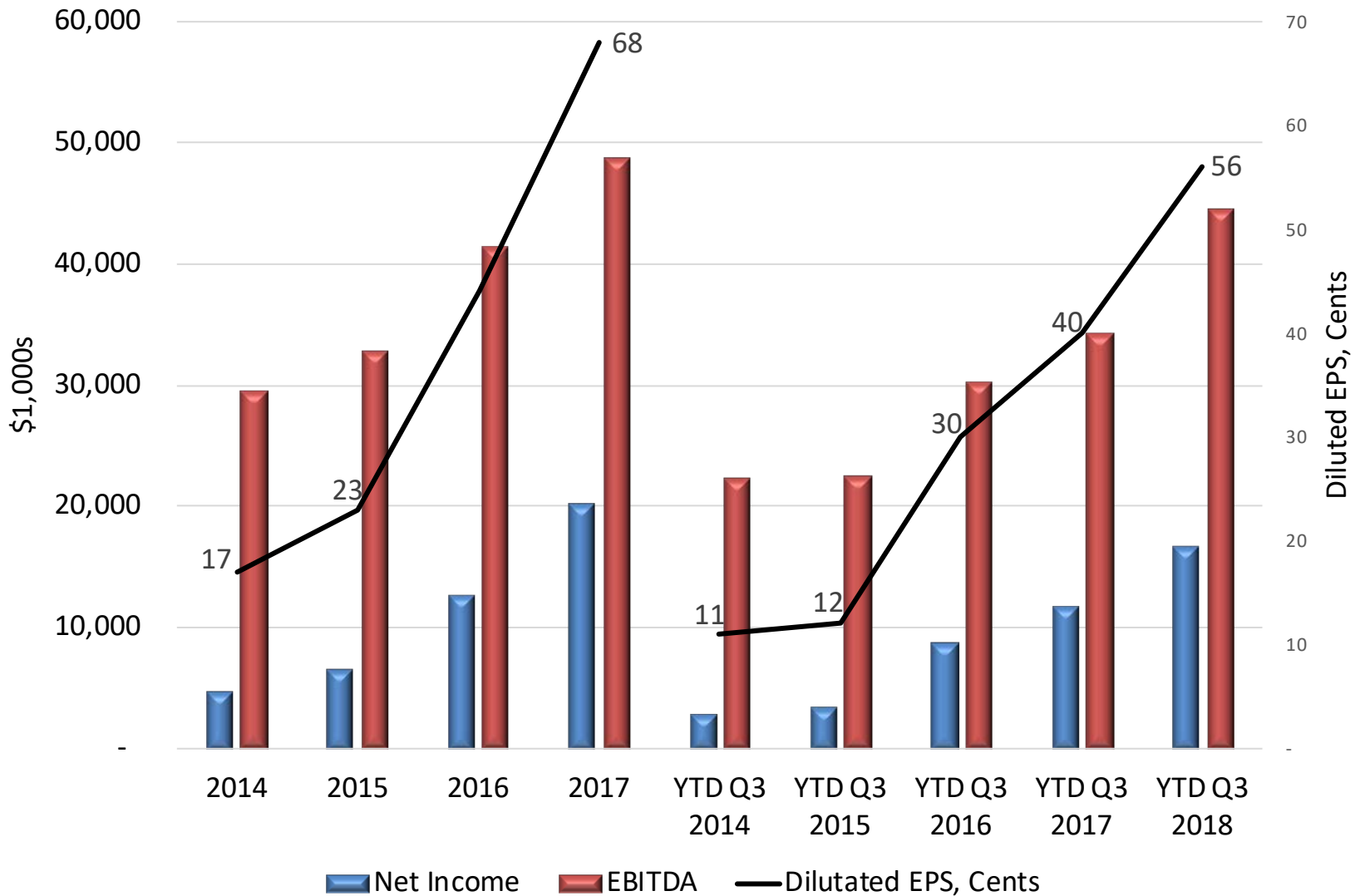




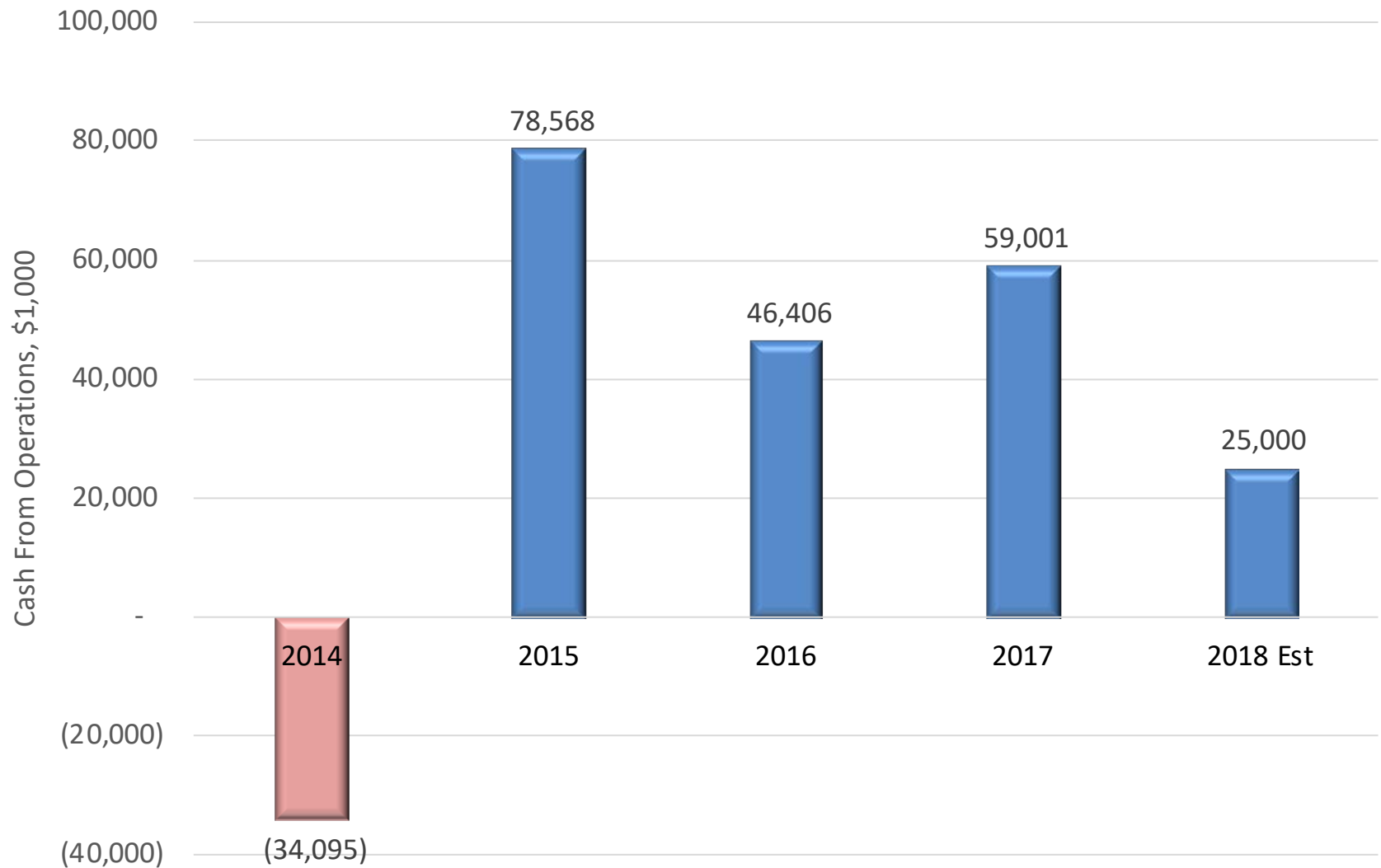
# Operating Expense Performance



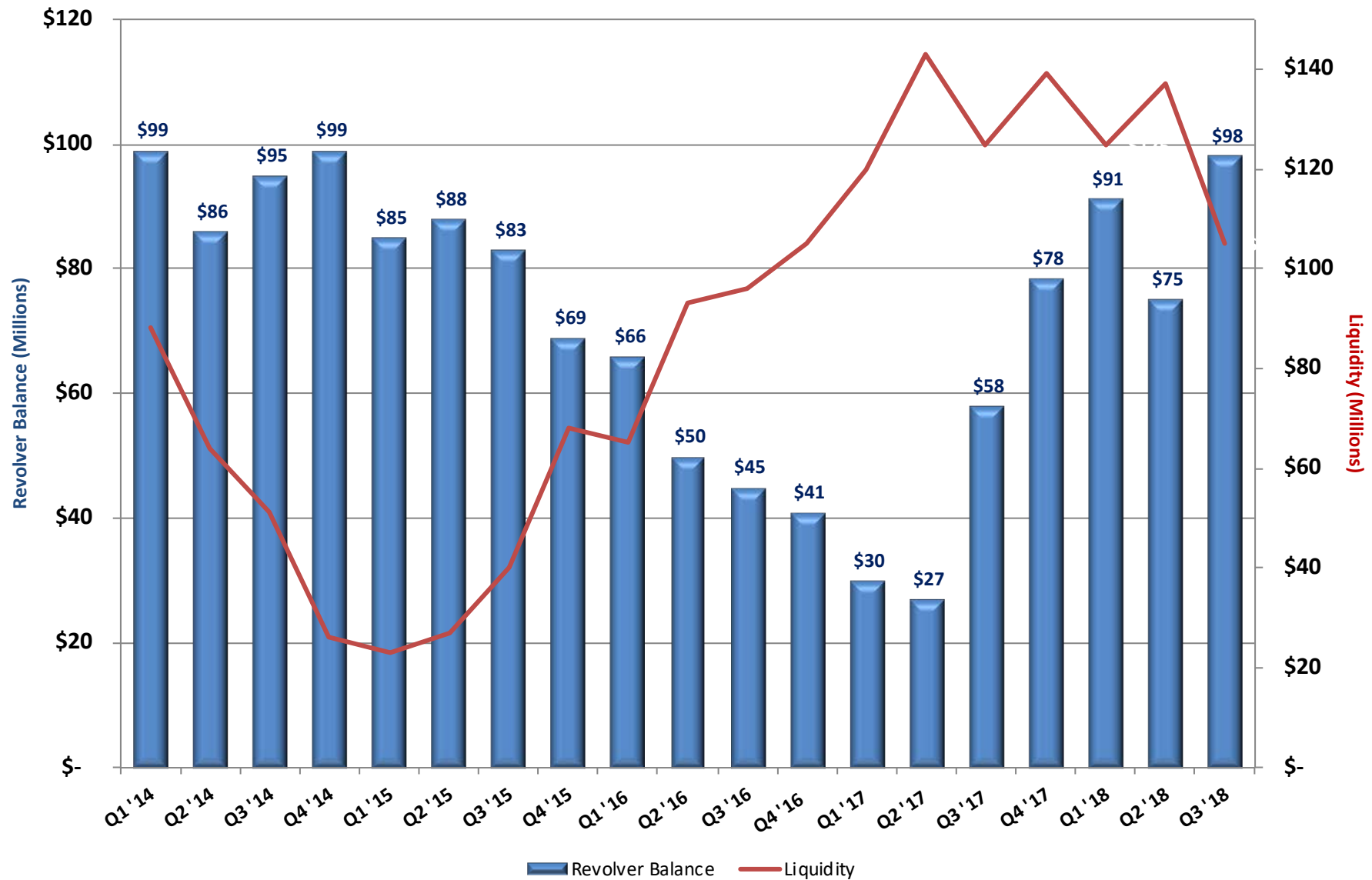
# Income Performance



# Cash Performance



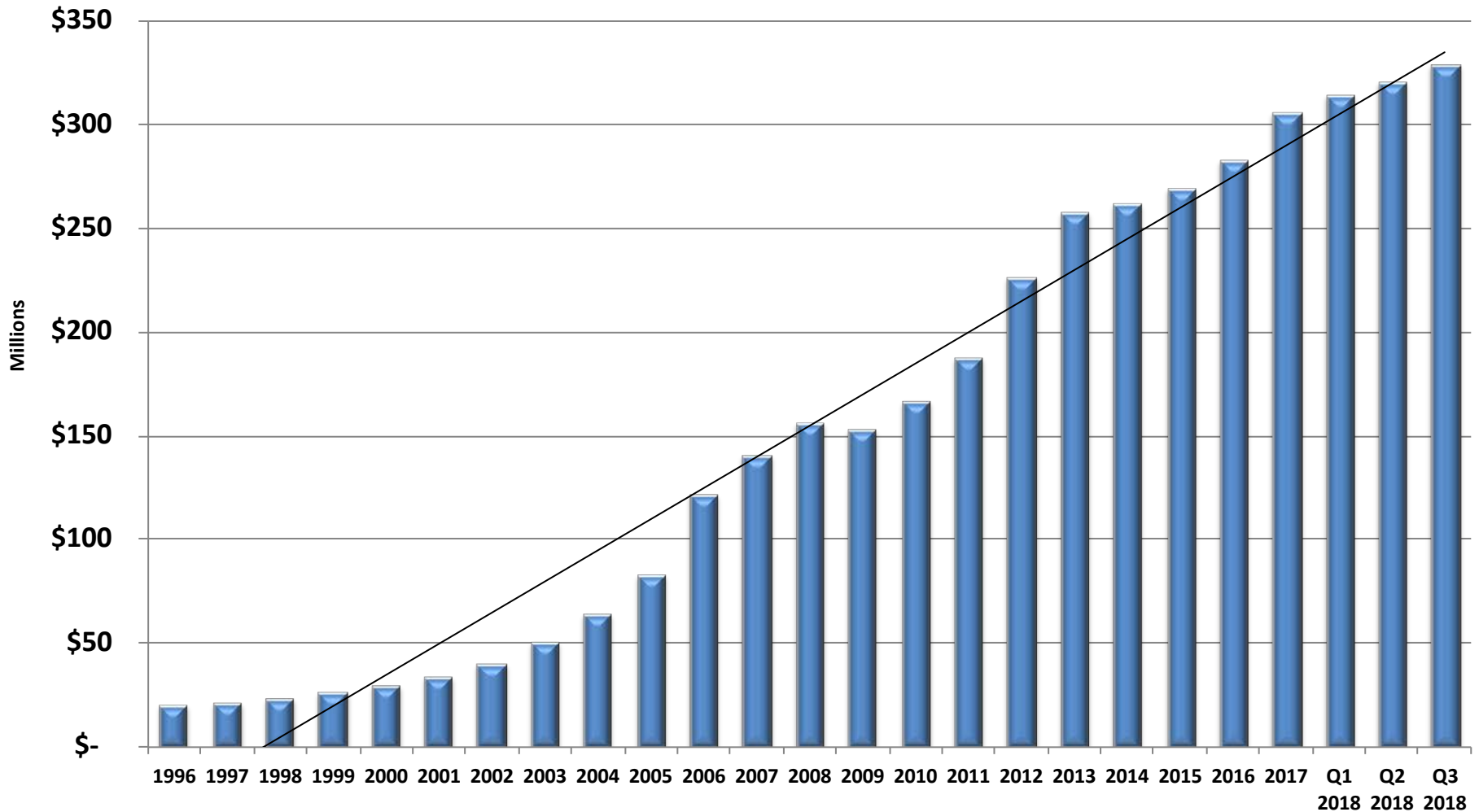
# Debt Level & Liquidity



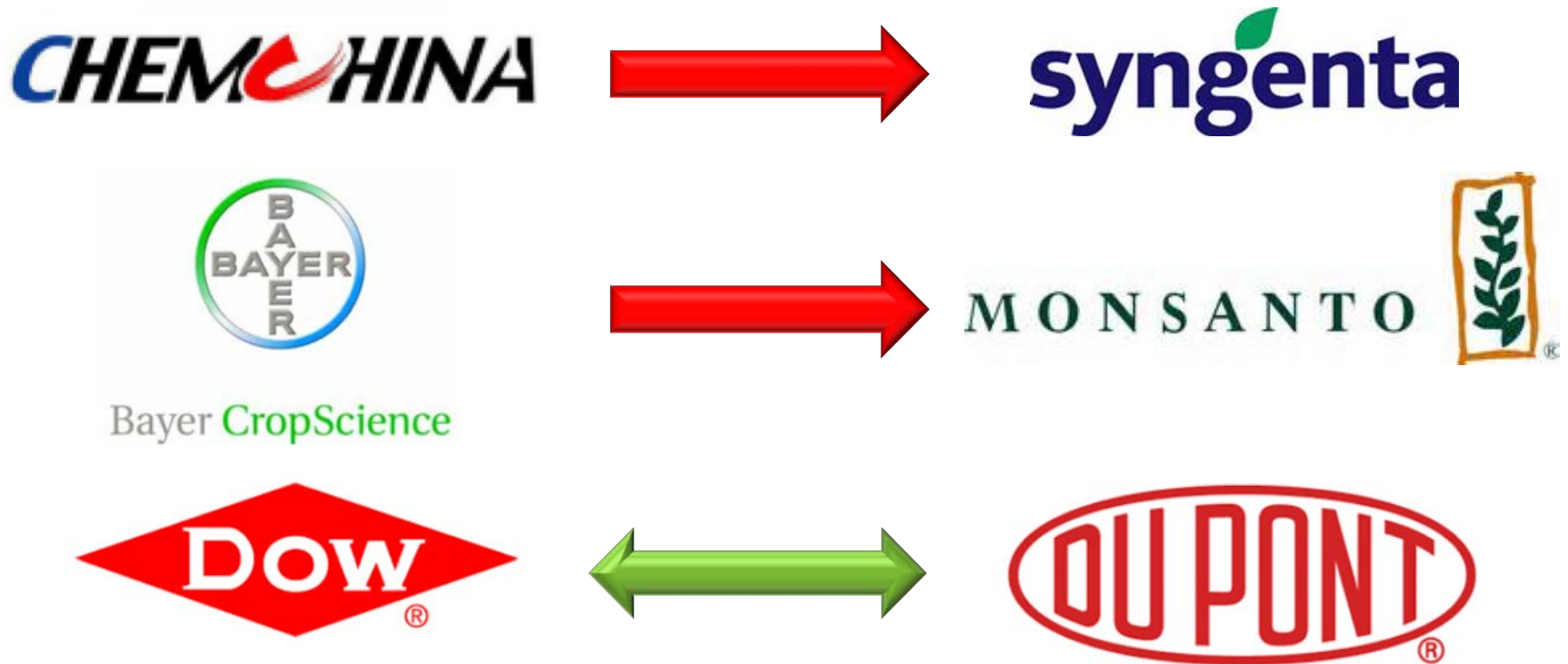


# Shareholder Equity Growth

*Since 2009 has more than doubled*



# Industry Consolidation = Opportunity



# 2017 AMVAC Key Acquisitions

		HISTORIC REVENUE
US Ag	Herbicide, Insecticide, Fungicide (ADAMA) <ul style="list-style-type: none"><li>• <i>Parazone 35 (Paraquat)</i></li><li>• <i>Abba Ultra (Abamectin)</i></li><li>• <i>Equus 720 SST (Chlorothalonil)</i></li></ul>	\$30MM
Mexico	Portfolio of Niche Products (Syngenta)	\$10MM
LATAM	Acquire Regional Distributor (AgriCenter)	\$60MM
US	Acquire Non-Crop Company (OHP)	\$20MM
Sub-Total		\$120MM

# Grupo AGRICenter



## Market Access Platform

- ▶ **Currently Operates in 7 Countries**
- ▶ **Annual Sales \$50-\$60 Million**
- ▶ **Gross Profit Margin 25+%**
- ▶ **Product Mix**
  - ▶ Insecticides  $\approx$  25%
  - ▶ Fungicides  $\approx$  30%
  - ▶ Herbicides  $\approx$  20%
  - ▶ Nutrients & Other  $\approx$  25%
- ▶ **Proven Customer Focused Consulting Services - Identify Problems and Provide Customized Solutions**
- ▶ **Greenplants – Unique Plant Nutrient & Micronutrient Formulations**
- ▶ **Distributor for Leading High-performance Biologicals Supplier**
- ▶ **115 Highly-Qualified Personnel**

Acquisition triples our current Latin American presence and give AMVAC a significant share of the LATAM regional market



# OHP

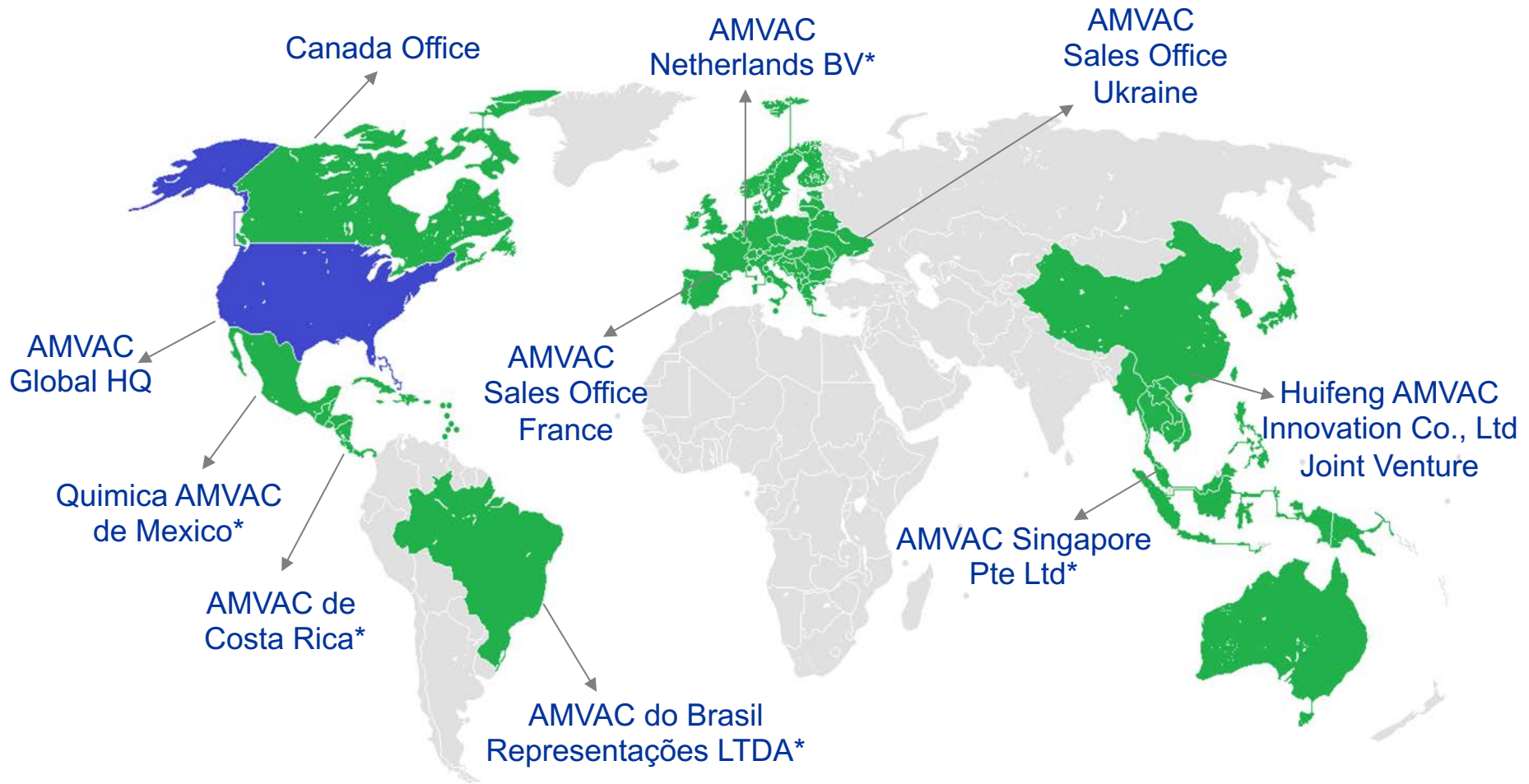
## Horticulture Focus

- ▶ **Greenhouse & Nursery Applications**
- ▶ **Annual Sales \$20-\$25 Million**
- ▶ **Gross Profit Margins  $\approx$  40%**
- ▶ **Business Model:**  
**License, Develop, Register, Market, Sell and Service Products for Horticulture Applications in the United States**
- ▶ **17 Very Experienced Personnel**



Acquisition increases AMVAC's non-crop business by  $\approx$  40% adding horticulture segment to existing leading positions in mosquito control, commercial and consumer pest control, and turf & golf course maintenance

# AMVAC Global Operations



*\*Subsidiaries*

# SmartBox®



The most advanced *granule* application system available

- ▶ Patented, closed-container transfer and application system for pesticides
- ▶ The sealed transfer-container is returnable and refillable.
- ▶ The on-planter base-container contains a locking valve system which enables contact-free product transfer
- ▶ The electronic meter replaces the conventional mechanical meter for accurate product dispensing
- ▶ All three components work together with a cab mounted computer to create the **SmartBox System**





# MUCH Better Accuracy than Mechanical In-cab Monitor & Controls



Records FIELD application rates, but is not integrated with current GPS systems nor does it create as-applied maps

Not "Smart Enough"  
for Future Precision Ag.





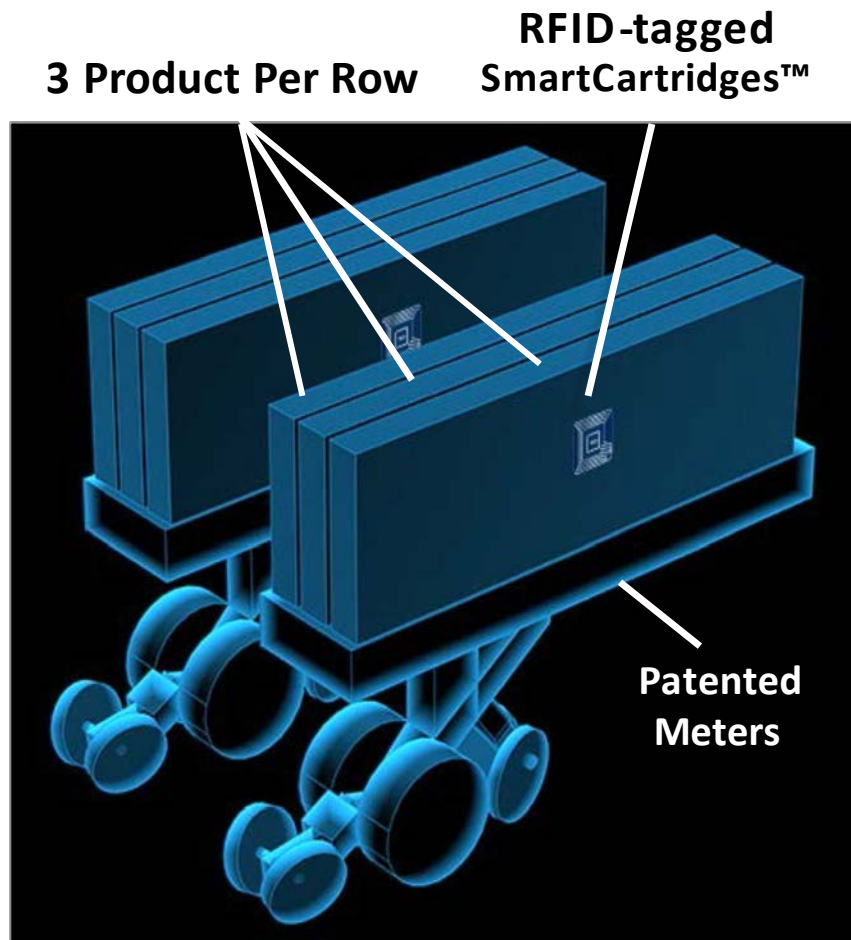
# SIMPAS

## Smart Integrated Multi-Product Prescription Application System

- ▶ One system for Insecticides, fungicides, nutritionals & biologicals
- ▶ Dry and/or liquid products applied simultaneously
- ▶ RFID SmartCartidge packaging  
Application Accuracy (+/- 1%) at  
Very Low rates

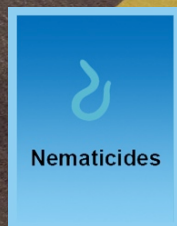
## Value Proposition

- ▶ License equipment manufacturer
- ▶ Support retail distribution
- ▶ Supply Crop Protection Produce Cartridges



# **SIMPAS** makes it **EASY** to **Practice 4R's Stewardship** of **Crop Protection Chemicals** while Planting

**RIGHT PLACES @ RIGHT RATES**



Nematicides



Insecticides



Fungicides



Micronutrients  
& Other\*  
Specialty  
Products

**RIGHT PRODUCTS**



**RIGHT  
TIME**



**SIMPAS™**

*\*Other: Plant Growth Regulators, Biostimulants,  
Inoculants, Specialty Nutritional, etc.*

# SIMPAS Technology



[System Overview](#)

[High Resolution Seed Placement](#)

[Detailed Description Farm Progress Interview](#)



# Market Opportunities



## Crops

All row crops

- Corn
- Soybeans
- Cotton
- Potatoes
- Sugar beets
- Peanuts
- Sugarcane
- etc.

## Geographies

- US
  - Brazil/Argentina
  - China
  - Eastern Europe
- Large farms,  
technology adopters
- UK, EU
  - Canada
  - Australia
- Heavily regulated



# SIMPAS Global Market Access

## North America

- Yield Benefit
- Input Cost Reduction
- SMARTBox Base Business



## Europe

- Regulatory Mandates



## Asia/Pacific

- Seeking Yield Improvement
- Environmental Mandates
- Technology Adopters



## South America

- Large Acreage Growers
- Technology Adopters

# SIMPAS: Collaboration Partners



**SIMPAS™**

## **SIMPLLOT Grower Solutions**

- ▶ Leading full-service agronomic input supplier
- ▶ SmartFarm® data analysis system
- ▶ Focus on “soil health” and soil selective treatments to maximize grower ROI and environmental stewardship

## **TRIMBLE Ag Solution Services**

- ▶ Superior geo-positioning capabilities / guidance systems
- ▶ Controller is compatible with all equipment brands
- ▶ Farm management services – data collection and analysis
- ▶ Vantage Distribution / Retail Network – experts in Precision AG Equipment Systems commercialization plan, system installation and servicing (global)

# Guidance . . . . 2018 Full-Year

- ▶ **Revenue:** **\$450 - \$460 Million**
- ▶ **Gross Margin:** **38% - 40%** *(Subject to quarterly mix)*
- ▶ **Operating Expenses:** **\$150** *(approximately)*
- ▶ **Tax Rate:** **25% - 27%** *(estimated for all jurisdictions)*

# AMVAC Take Away Message

## ► Solid Base Business

*Niche market positions; solid Balance Sheet*

## ► Product Portfolio Expansion

*Acquisition; licensing; internal development; partnership/collaborations*

## ► Increasing Market Access

*Domestic programs; international alliances*

## ► Technology Innovation

*Chemical products; biological products; precision-ag equipment systems*

## ► Organizational Excellence

*Manufacturing; financial discipline; managerial expertise*

# American Vanguard Corporation: Market Valuation

Market Data	5/5/2006	10/2/2012	11/8/18
Stock Price	\$37.00/share	\$36.74/share	≈\$17.24/share
Shares Outstanding	27.0MM	28.9MM	30.1MM
Market Valuation	\$1.00B	\$1.06B	≈\$519MM
AVD Earnings Report	3/31/2006	9/30/2012	11/8/2018
Assets	\$213MM	\$398MM	\$590MM
Debt	\$54MM	\$54MM	\$97MM
Liabilities	\$107MM	\$182MM	\$261MM
Shareholders Equity	\$107MM	\$215MM	\$329MM





**THANK YOU**