



Waldorf=Astoria
Orlando, Florida, USA
January 11, 2010



Agriculture and the Agriculture Equipment Manufacturing Industry in the United States of America - 2010

Presented by Doug DeVries
representing the Association of
Equipment Manufacturers





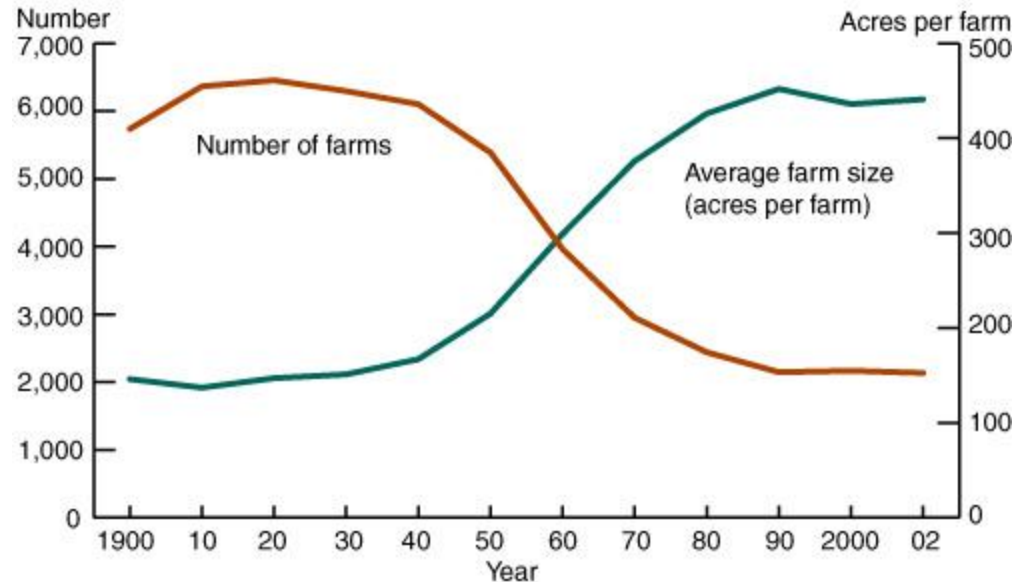
STATE OF AGRICULTURE IN THE USA





- Less than 2% of the U.S. population today works in agriculture.
- At the turn of the 20th century, one farmer in the U.S. could feed 25 people; today, that ratio is 1:130 (in a modern grain farm, a single farmer can produce cereal to feed over a thousand people).
- With continuing advances in agricultural machinery, the role of the farmer will become increasingly specialized and rare.
- Automation continues to be critical.

Figure 3
As the number of farms declined, their average size increased



Source: Compiled by Economic Research Service, USDA, using data from *Census of Agriculture, Census of Population, and Census of the United States*.

Figure 3: Farms in thousands / 500 acres = 202 hectares

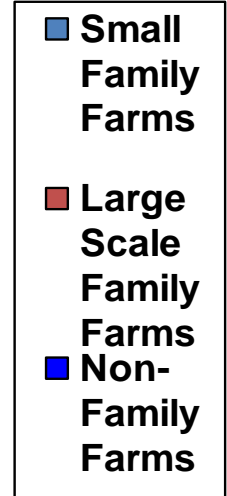
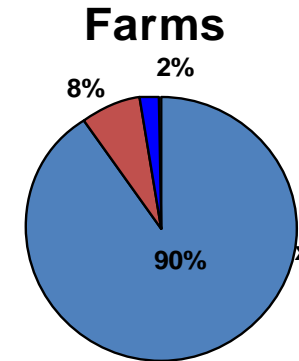




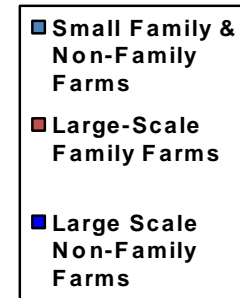
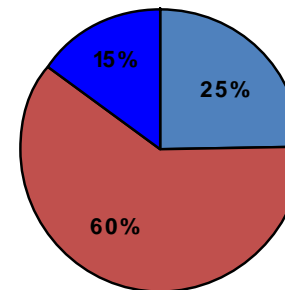
State of Agriculture in the USA

U.S. FARMS

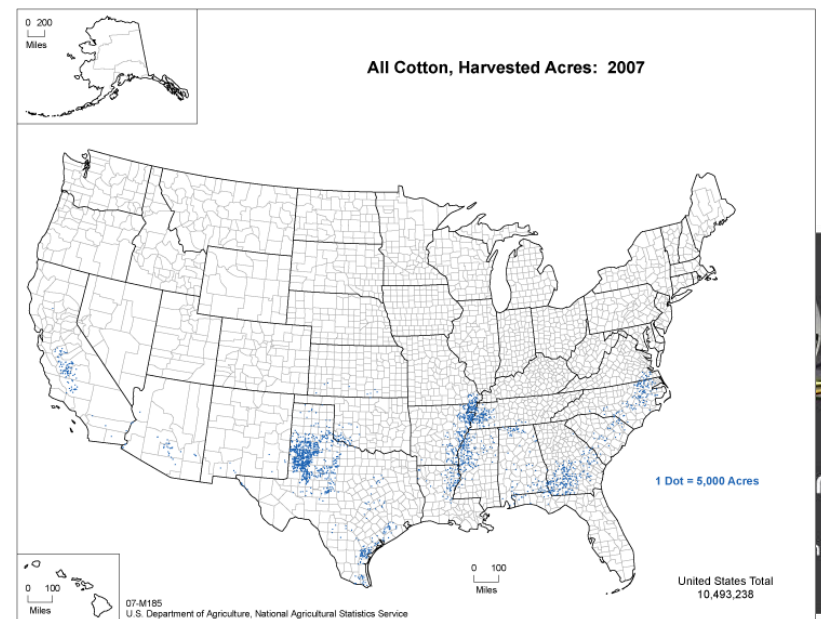
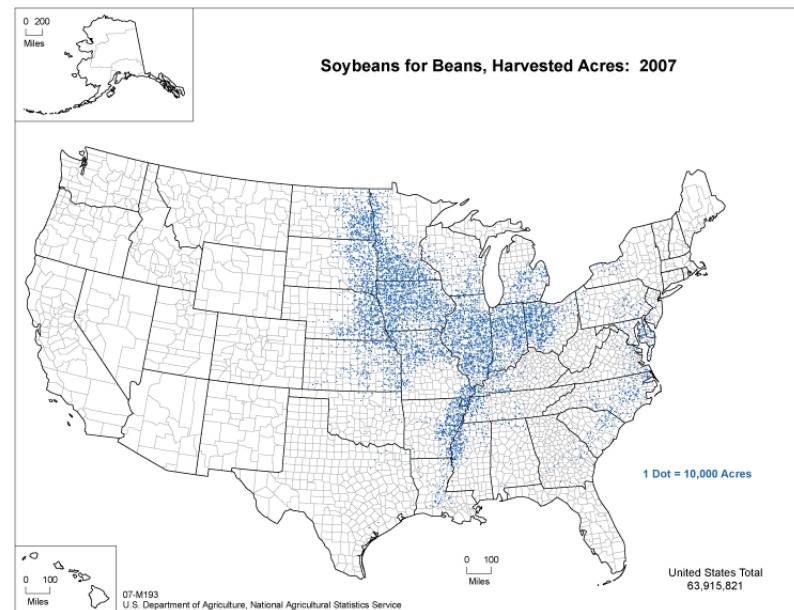
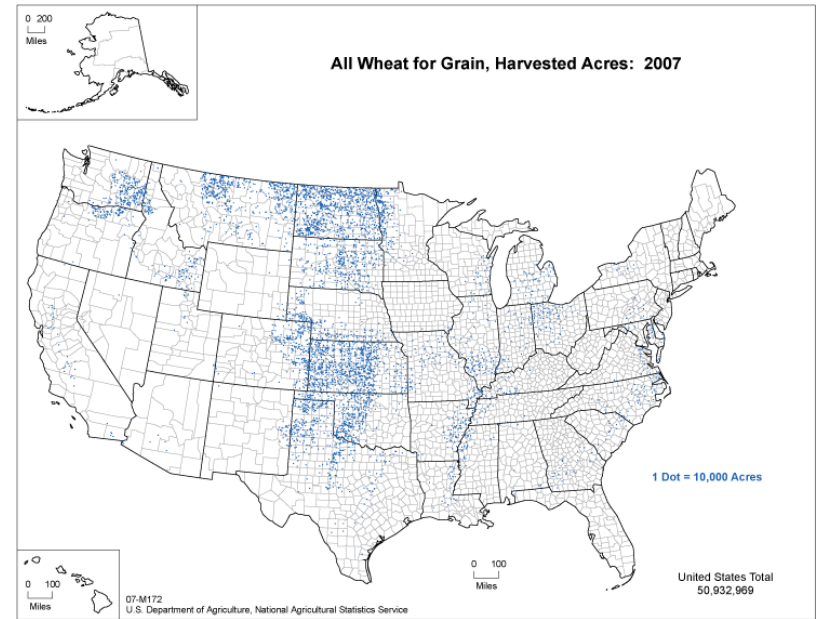
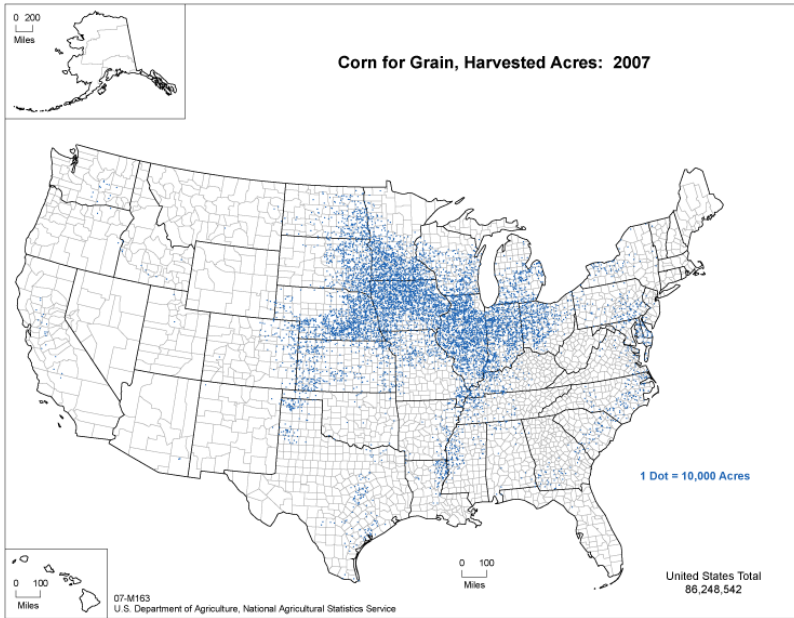
- ❑ Operating farms in the U.S.: 2,204,792
- ❑ Net U.S. Farm Income: \$54 billion in 2009
- ❑ Total operated hectares: 373,158,947
- ❑ Family Farms: 98%
- ❑ Small family farms (<\$500,000 annual sales): 95%
- ❑ Large scale farms account for only 10% of farms, but 75% of production value
- ❑ Small farms hold 68% of all farm assets
- ❑ Average production area: 170 hectares
- ❑ Ownership:
 - Full owner – 61.8%
 - Part owner – 32.1%
 - Tenant – 6.1%



Value of Production



Grain/Cotton Production





State of Agriculture in the USA

Major Field Crops



Corn

- 32.09 million hectares planted in 2009/10
- Up 1% from 2008/9, down 8% from 2007/8
- Yield 10.23 MT/hectare, up 6% from '08/9
- Prices received by farmers currently ~\$3.64 /bushel

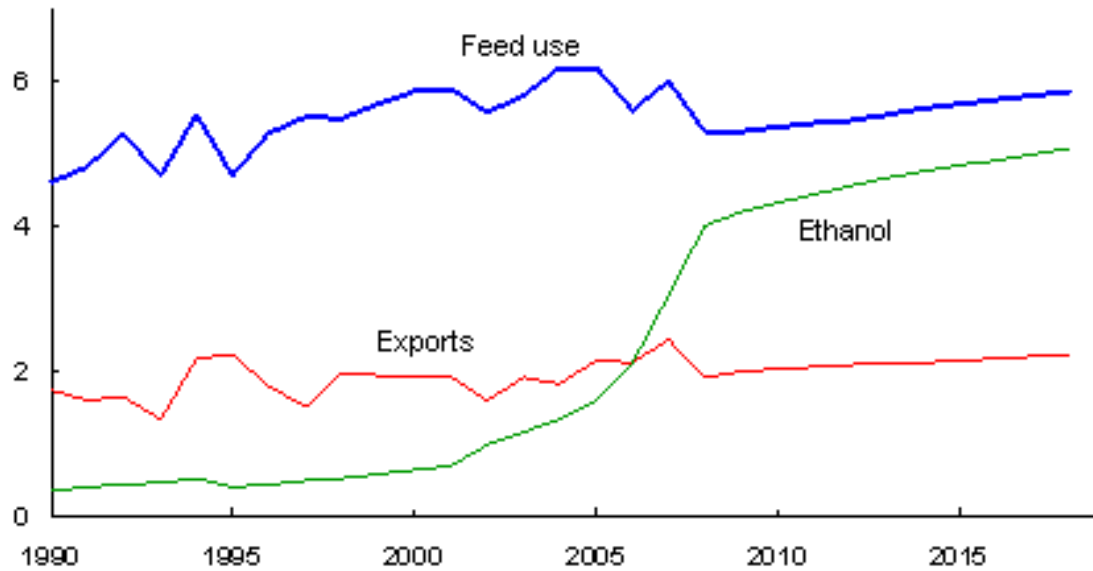
Soybeans

- 31.01 million hectares planted in 2009/10
- 2.6% more than in 2008/9
- Yield 2.91 MT/hectare, up 9% from '08/9
- ~ \$10/bushel



U.S. corn: Feed use, ethanol, and exports

Billion bushels

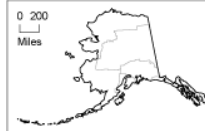
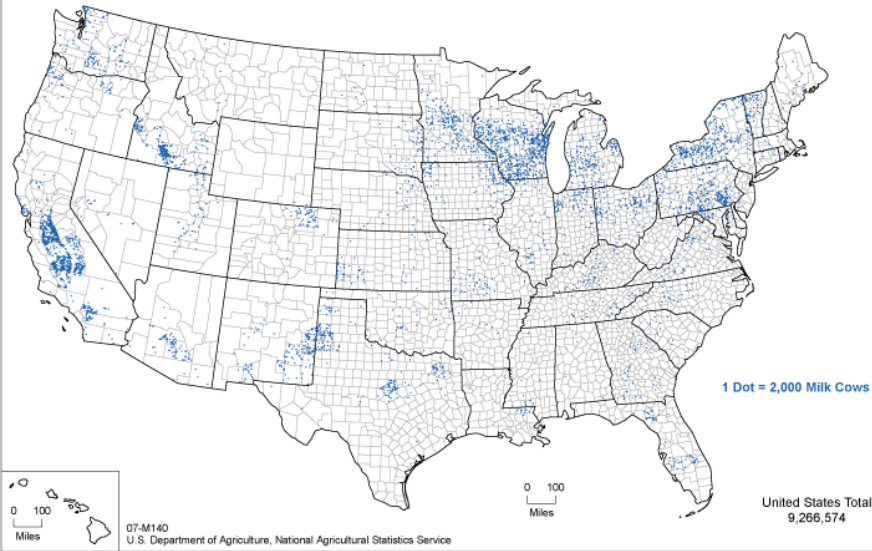


Source: *USDA Agricultural Projections to 2018*, February 2009.
USDA, Economic Research Service.

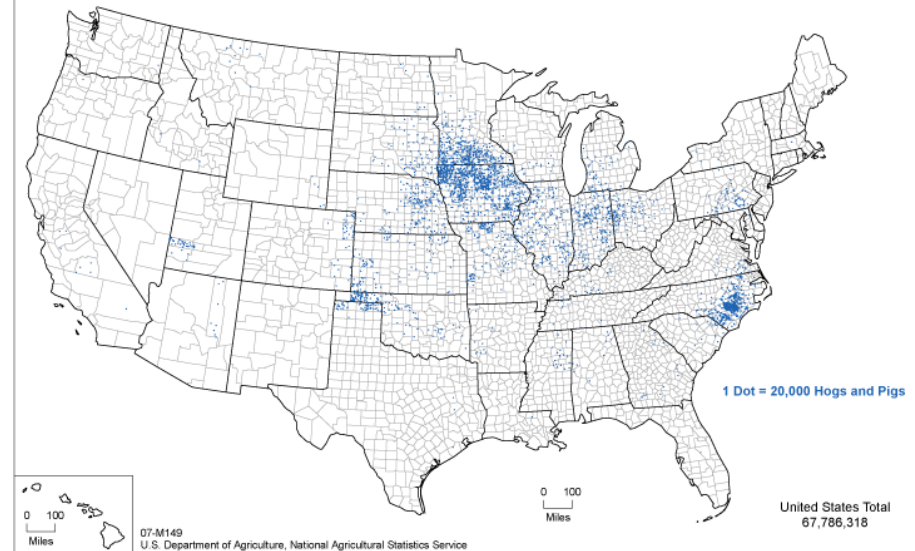




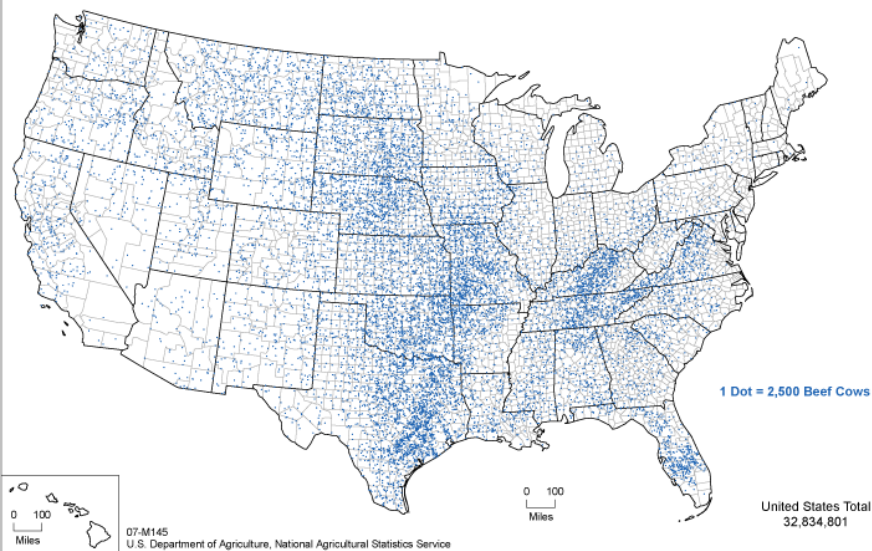
Milk Cows - Inventory: 2007



Hogs and Pigs - Inventory: 2007



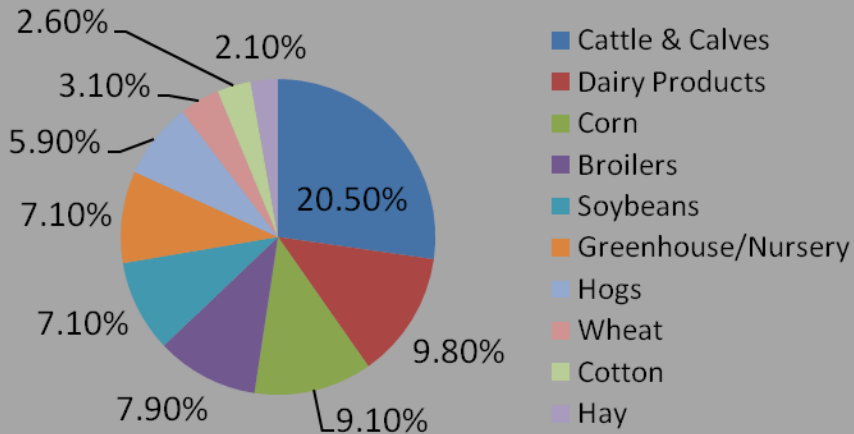
Beef Cows - Inventory: 2007



Dairy Beef Hogs

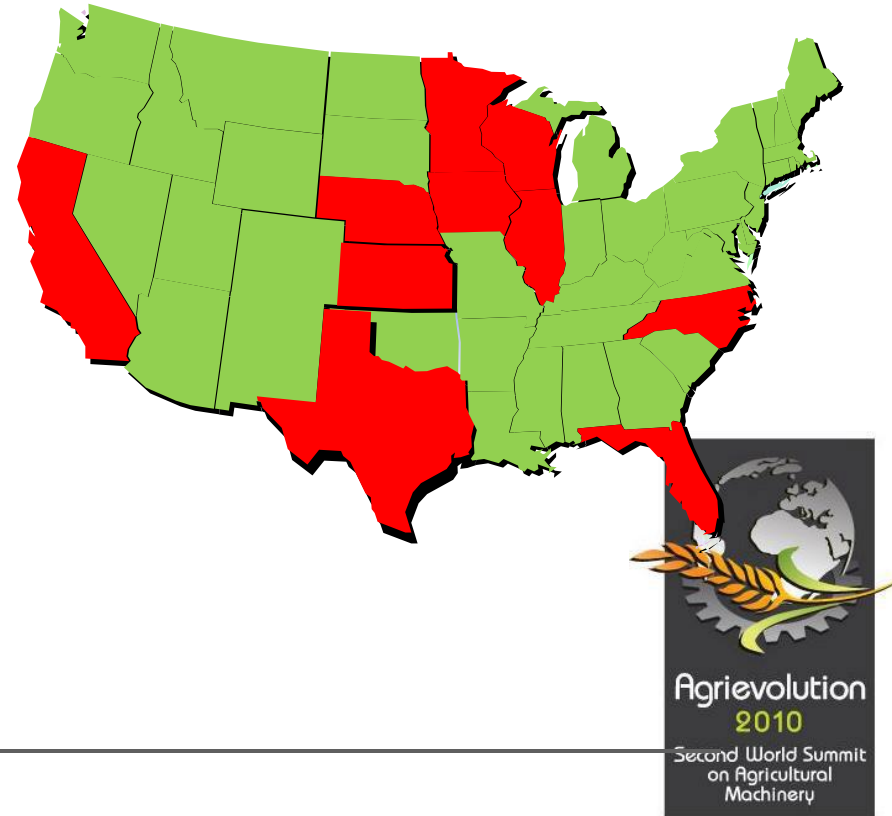
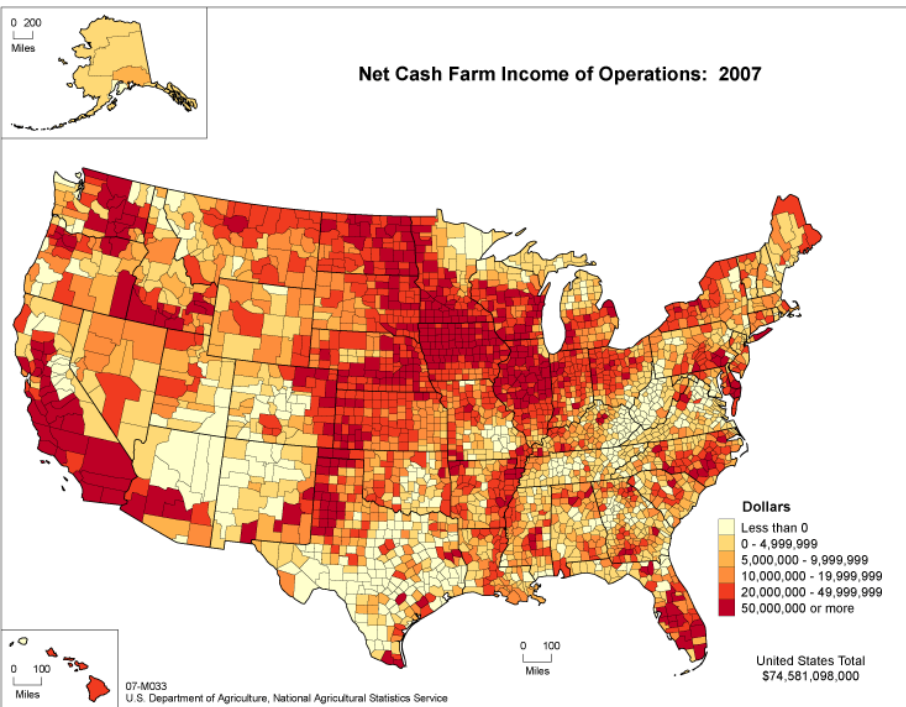


Value of Receipts of U.S. Products Farmed

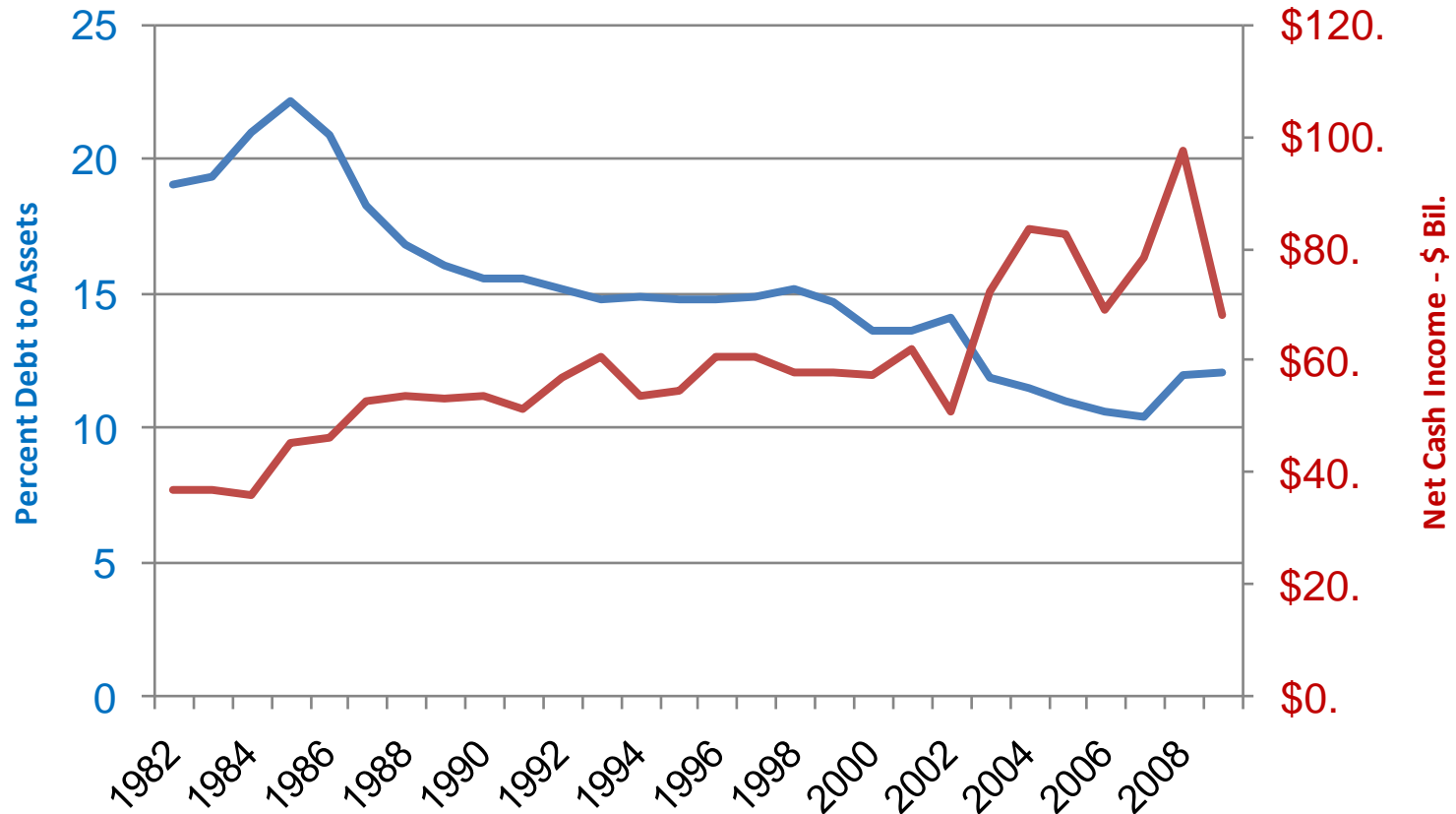


Top 10 Farming States (by Cash Receipts)

California	(Dairy & Nursery)
Texas	(Cattle & cotton)
Iowa	(Corn & hogs)
Nebraska	(Cattle & corn)
Minnesota	(Corn & hogs)
Illinois	(Corn & soybeans)
Kansas	(Cattle & wheat)
North Carolina	(Hogs & broilers)
Wisconsin	(Dairy & cattle)
Florida	(Nursery & oranges)



Farm Financial Conditions



Good financial position however, Farm income falls to lowest level since 2002

Source: USDA



MECHANIZATION EVOLUTION AND ECONOMIC WEIGHT OF INDUSTRY



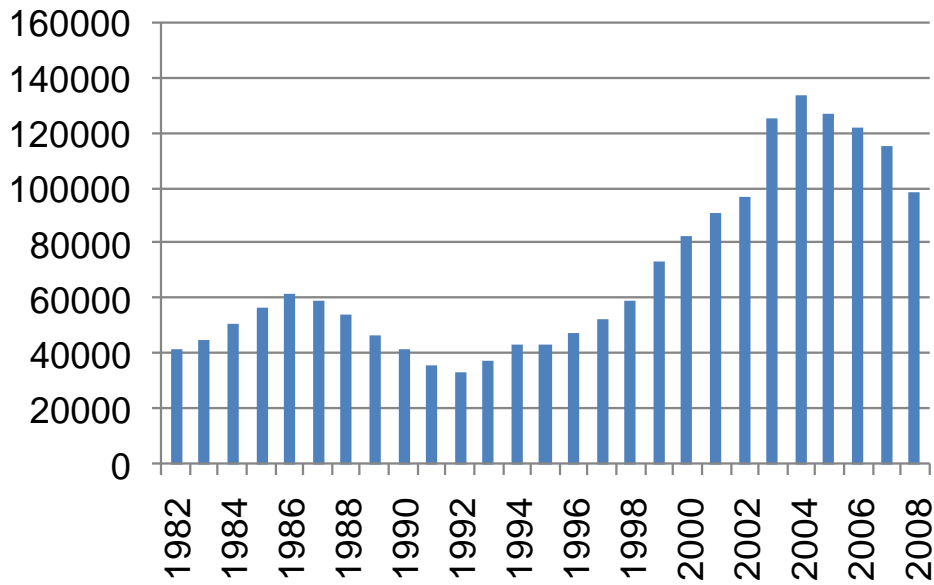


U.S. Agriculture Equipment Manufacturing Industry Facts

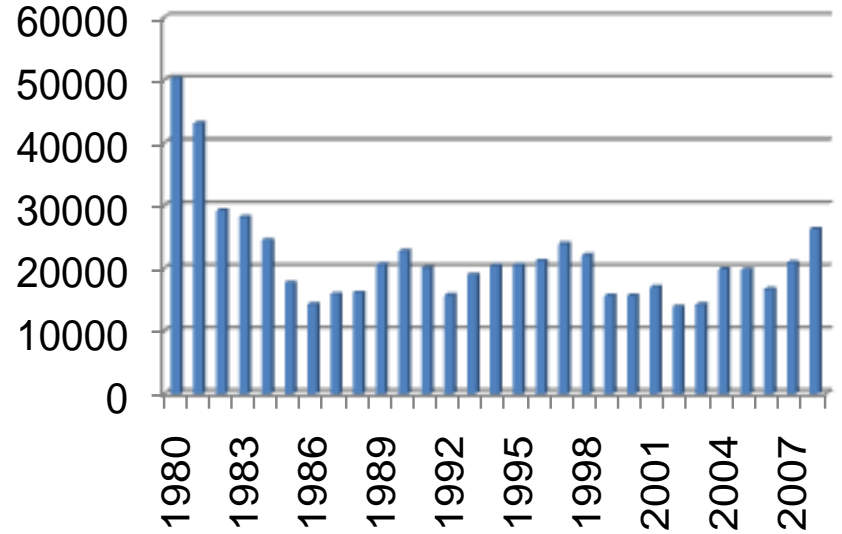
- \$82.0 billion in revenue
- \$6.2 billion in exports
- 250,000 employed in industry
- \$8.5 billion payroll
- Regional Economic influence:
 - Minnesota, Illinois, Wisconsin, Iowa, Nebraska
 - California
 - Texas
 - North Carolina, Florida



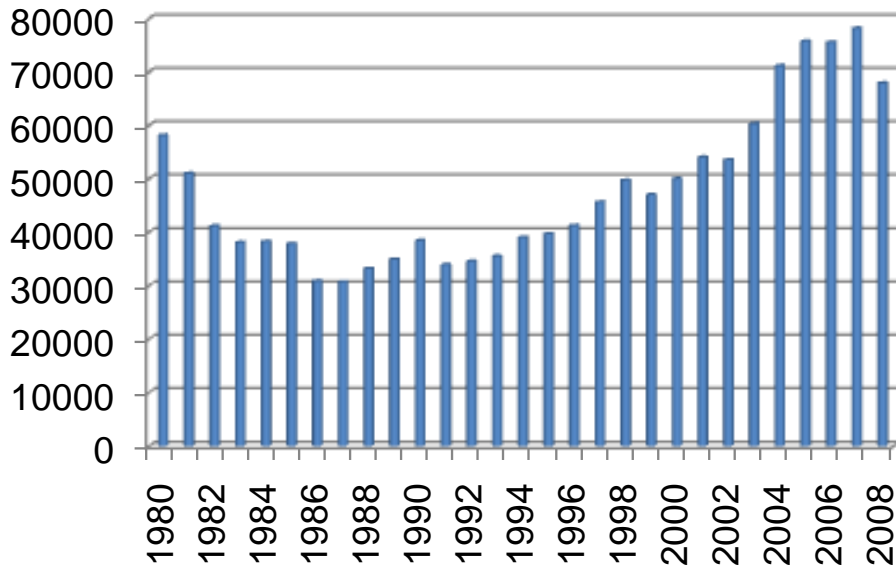
Tractors - 2WD < 40HP



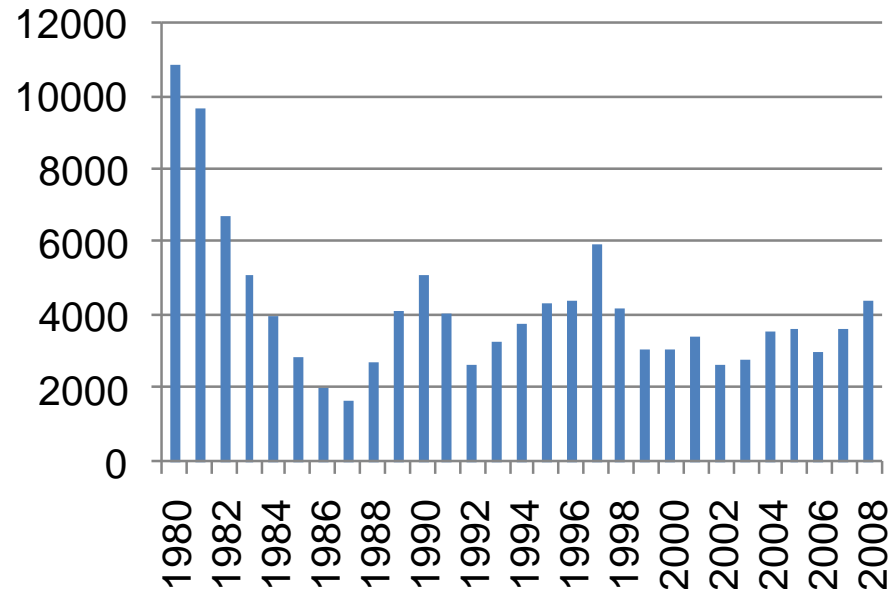
Tractors - 2WD > 100 HP



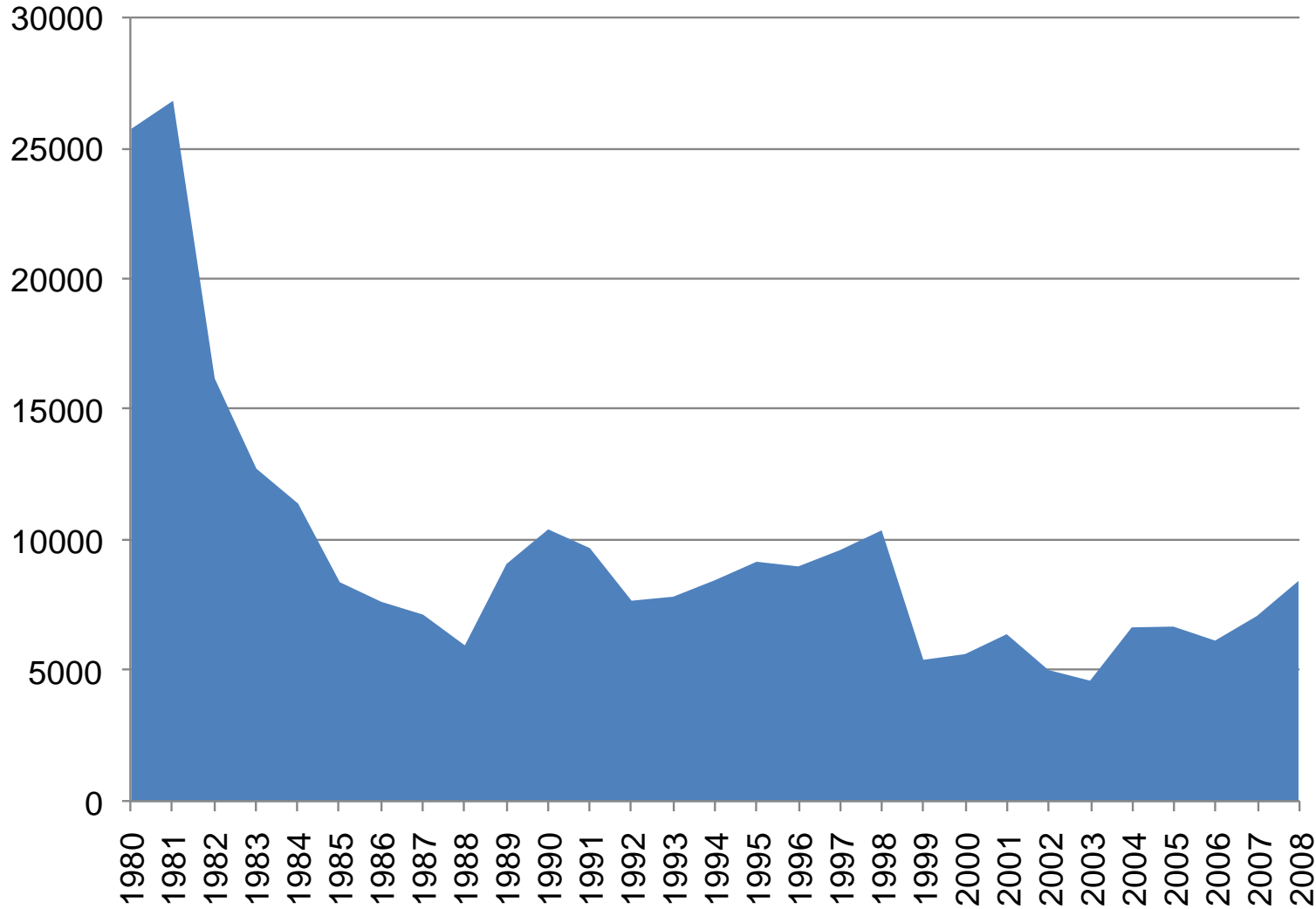
Tractors - 2WD 40-100 HP



Tractors, 4 Wheel Drive



Self-Propelled Combines



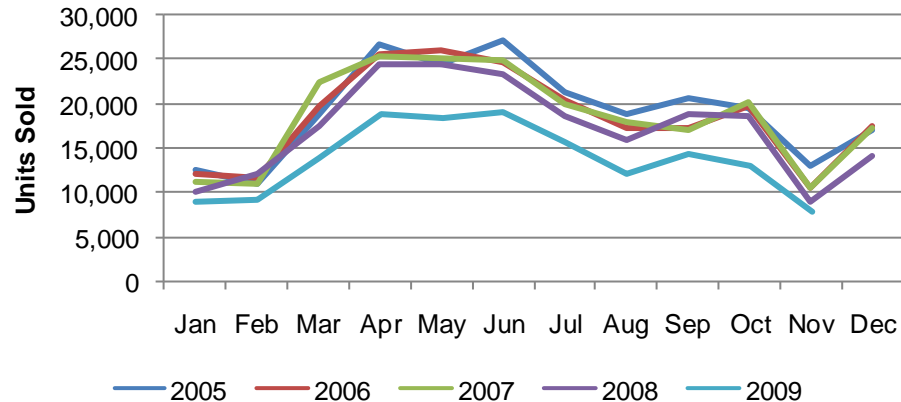


U.S. Unit Retail Sales

- Recession Has Hit Agricultural Equipment
- 2WD Tractors Hardest Hit
- 4WD Neutral
- Combines Still Growing

	November			YTD - November			Beginning Inventory November 2009
	2009	2008	%Chg	2009	2008	%Chg	
2WD Farm Tractors							
< 40 HP	3,669	3,877	-5.4	74,809	94,149	-20.5	40,146
40 < 100 HP	2,398	3,081	-22.2	44,409	62,809	-29.3	25,204
100+ HP	1,139	1,215	-6.3	20,292	23,624	-14.1	8,345
Total 2WD Farm Tractors	7,206	8,173	-11.8	139,510	180,582	-22.7	73,695
4WD Farm Tractors	243	250	-2.8	4,066	4,043	0.6	809
Total Farm Tractors	7,449	8,423	-11.6	143,576	184,625	-22.2	74,504
Self-Prop Combines	386	410	-5.9	8,739	7,514	16.3	911

US Retail Sales, 2-4WD Tractors & Combines





RESEARCH AND TECHNOLOGICAL INNOVATION

AEM Research & Technological Innovation

- Biofuels
 - Cellulosic
 - Biomass harvesters
- Autonomous Tractors
- ISOBUS
- Further Commercialization of Precision Farming
- Mechatronics
 - Qin Zhang -University of Illinois
 - Automated navigation
 - Active Rollover Protection System
 - Smart machine health monitor
 - Vision based side dressing





Rome 30-31 May 2008

