

IOWA STATE UNIVERSITY

Extension and Outreach / Department of Economics

Consolidation and Competition in Ag: Are These Game Changers?

Annual Meeting of the Iowa Chapter of ASFMRA

Scheman Continuing Education Center, ISU

February 1, 2017

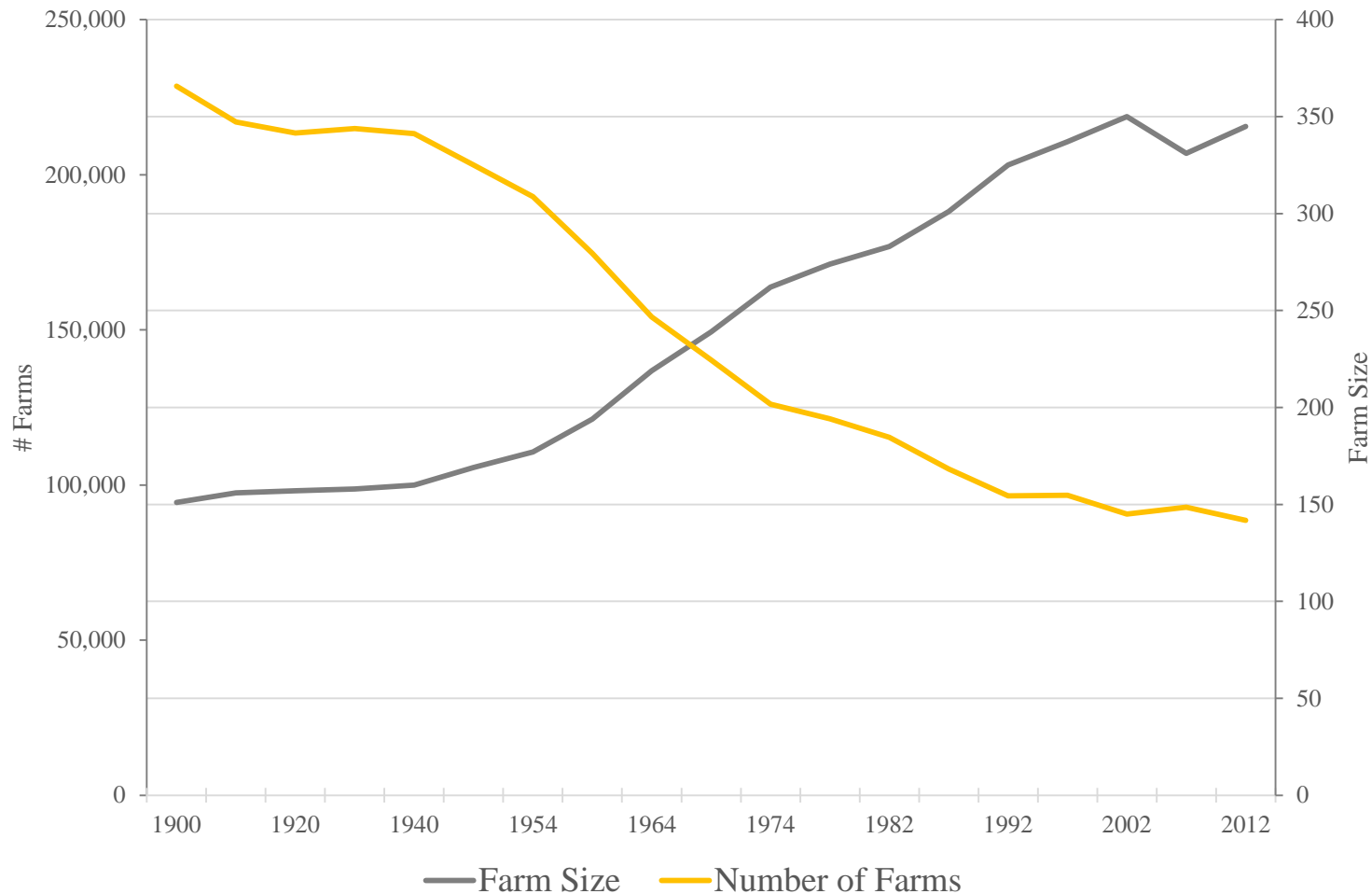
Keri L. Jacobs, Asst. Professor, Extension Economist

Iowa Institute for Cooperatives Endowed Economics Professor

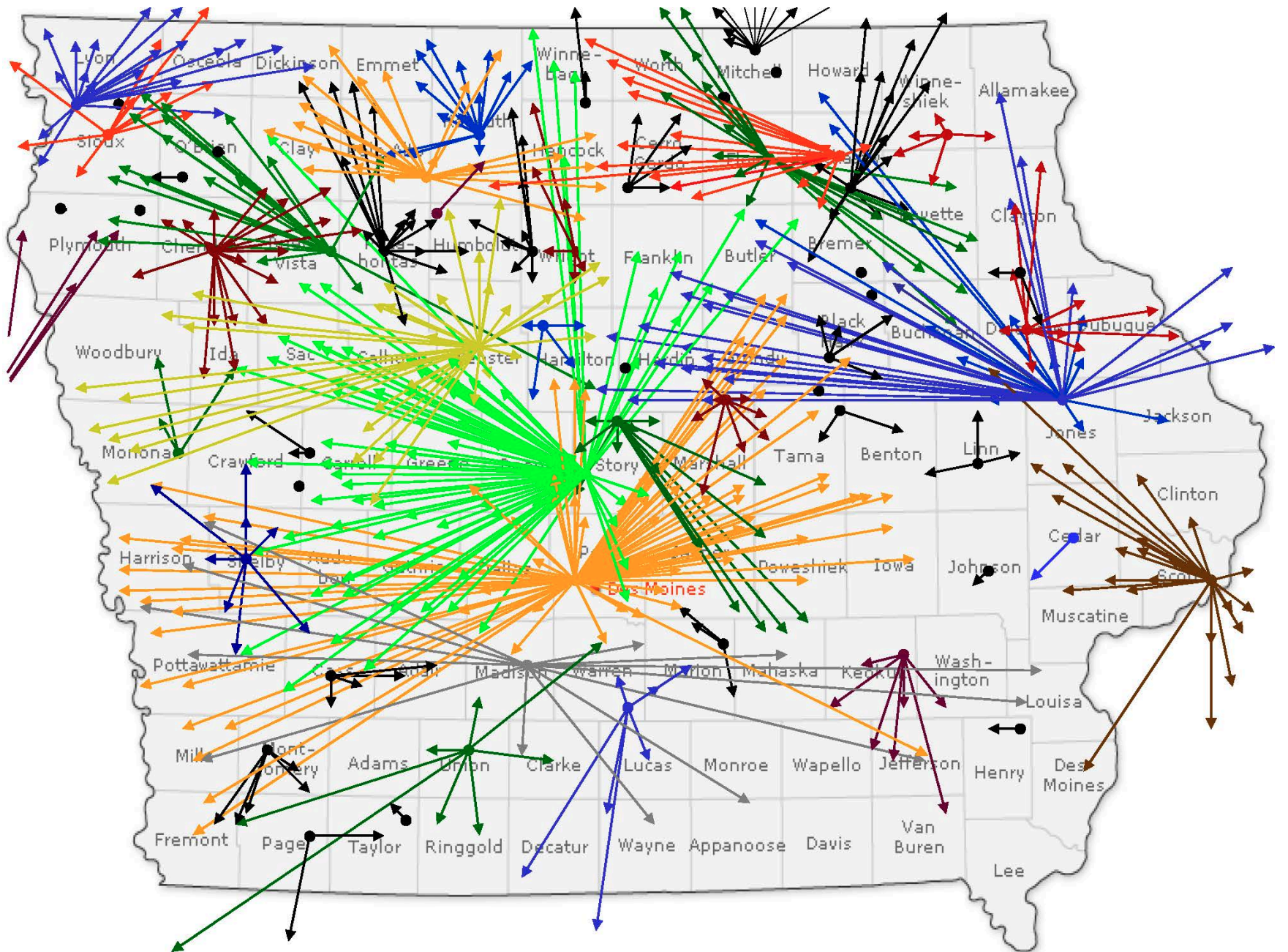
What We See

- High profile mergers and buy-outs along the supply chain
- Consolidation of agricultural retailers (marketing and input supply)
- Increased diversity of producers' needs and operation sizes

Consolidation of Iowa's Farmers



Data Source: National Ag Statistics Service, USDA



Recent Consolidation

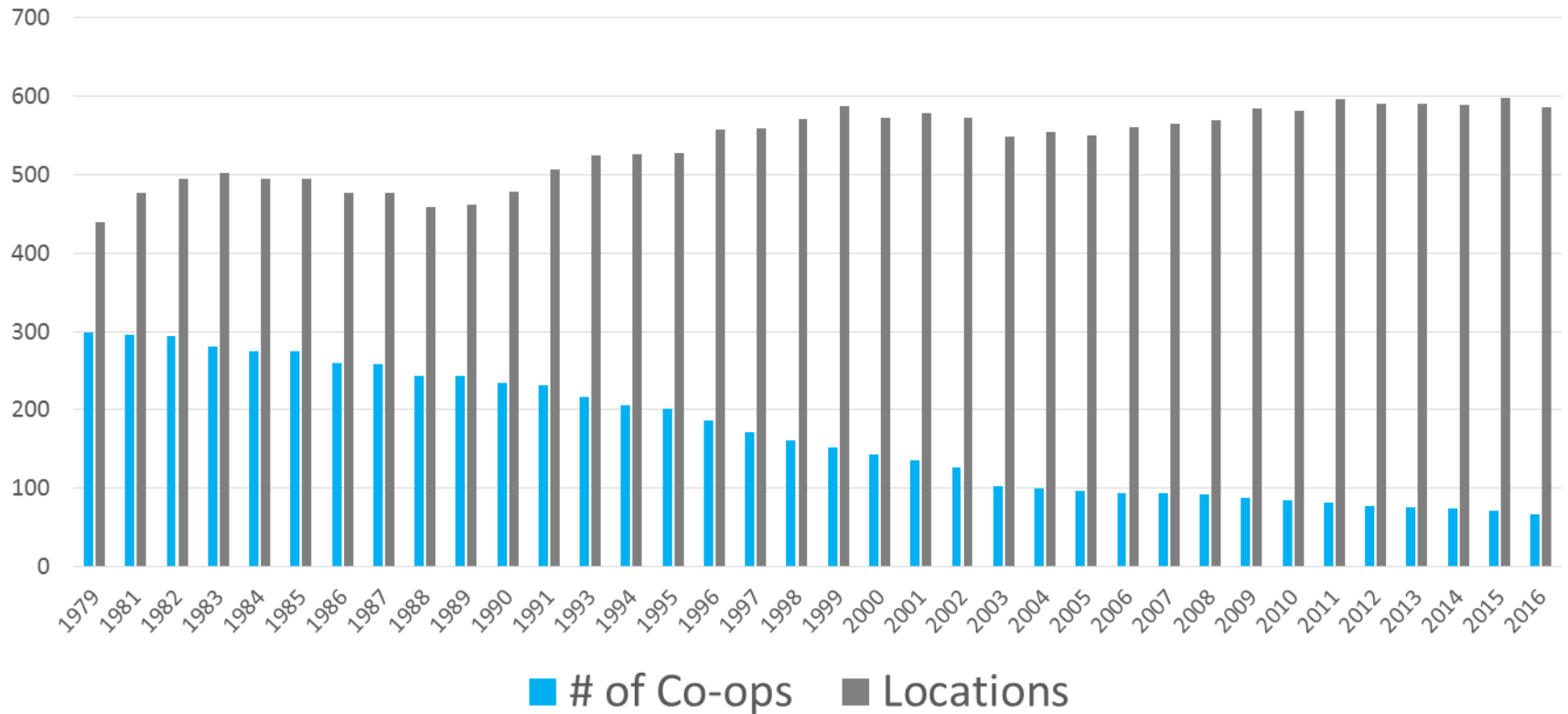
2016

- ✓ West Central + FC = Landus (Ames)
- ✓ Farmers Co-op Elevator Co. (Kingsley) > FCA (Cherokee)
- ✓ Farmers Co-op Co. (Paullina) > FCA (Cherokee)
- ✓ Postville Cooperative (Postville) > Farmers Union Co-op (Ossian)

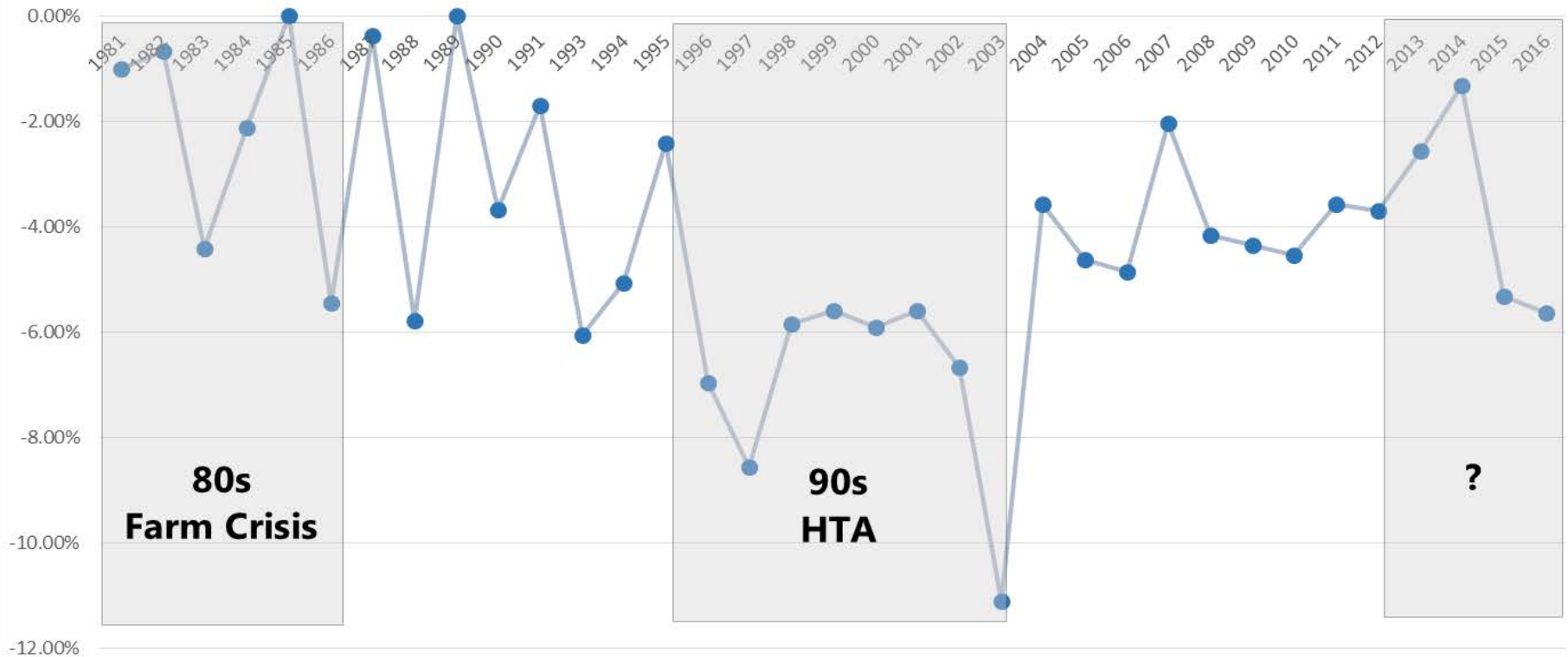
2015

- ✓ Cooperative Elevator Assoc. (Ocheydan) + Farmers Elevator Co-op (George) + United Farmers Co-op = Cooperative Farmers Elevator (Rock Valley)
- ✓ Western Iowa Cooperative (Hornick) > NEW Cooperative (Ft. Dodge)

Consolidation of Cooperatives, Iowa 1979 - 2016



Annual Change in Number of Cooperatives, Iowa

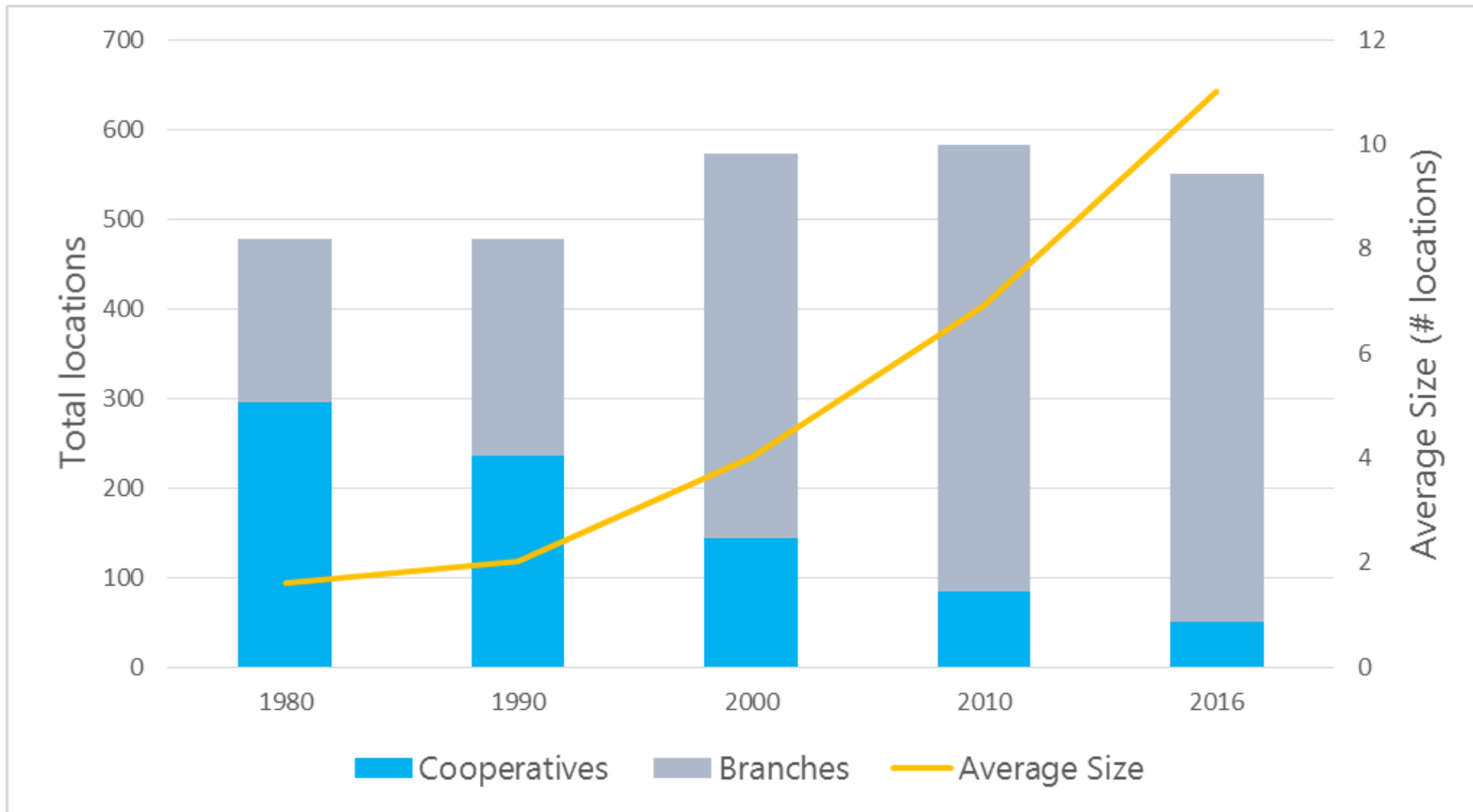


1980s: lost about 50 co-ops, no appreciable change in locations (private acquisitions), mirrored loss of farms during period

1990s: HTA forced restructuring

Current: steady rate through ethanol era, recent uptick driven by human capital needs and "efficiencies."

Iowa Co-ops are Doubling in Size About Every 10 Years



Economies of Consolidation / Integration

Economies of scale

- the change in output associated with proportional increases in all inputs
- technical production factor

“If we double in size, do we produce more than twice as much?”

Economies of size

- the change in per-unit average costs of output when production increases.
- long run economic cost factor

“Does growth allow us to reduce per-unit costs?”

Horizontal versus Vertical?

Horizontal

- Acquiring 'like' processes at the same level of the supply chain
- Ex: West Central + FC
- Why: size, reduce competition, economies of scale, gain access to new markets/customers, negotiation power with business partners

Vertical

- Acquiring processes/production at a different level of the supply chain
- Ex: Agrium + CPS
- Why: capture margins along supply chain (bring value in-house), reduce costs, control supply chain (transaction costs).

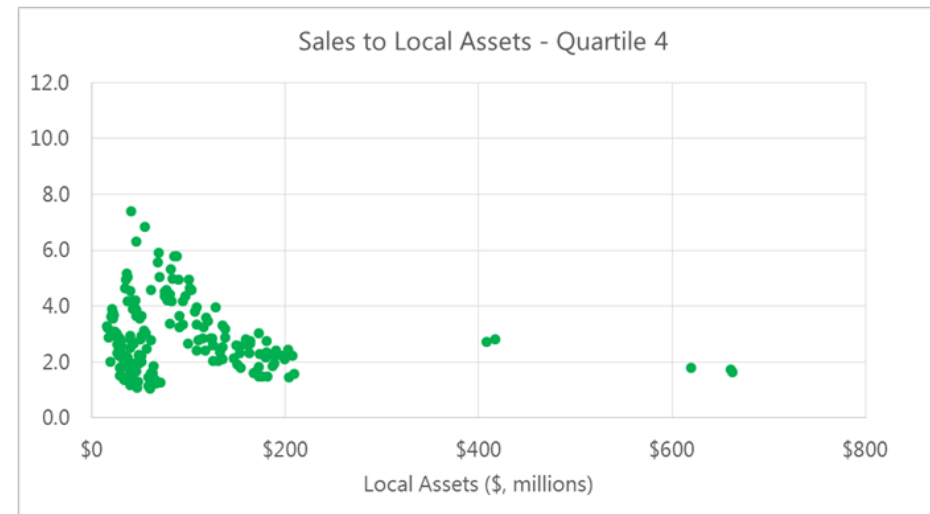
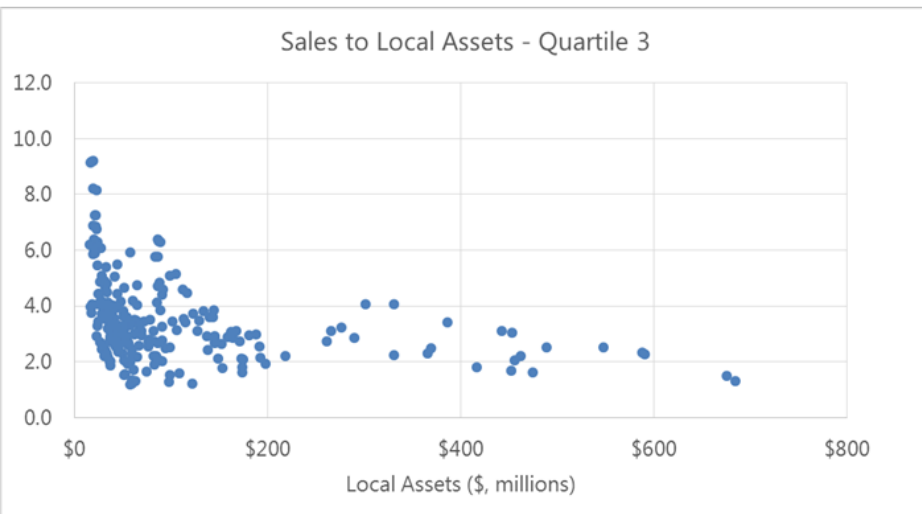
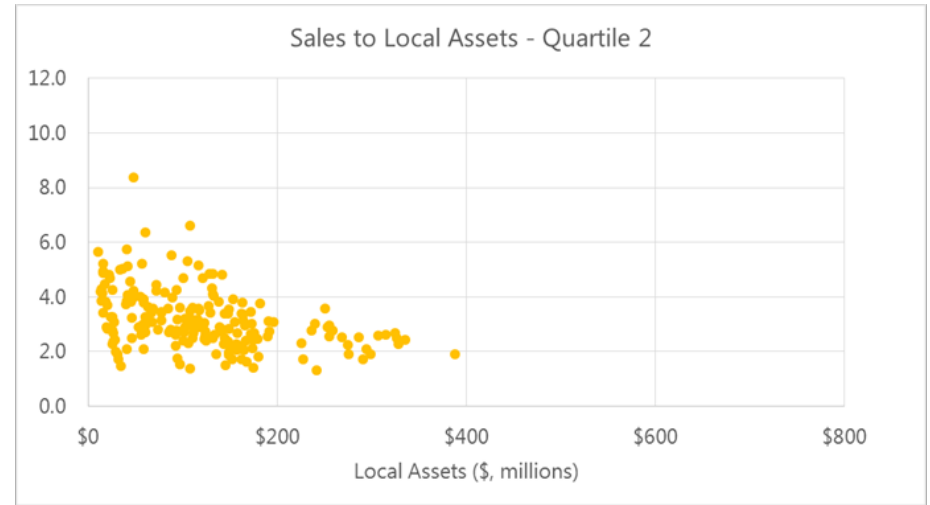
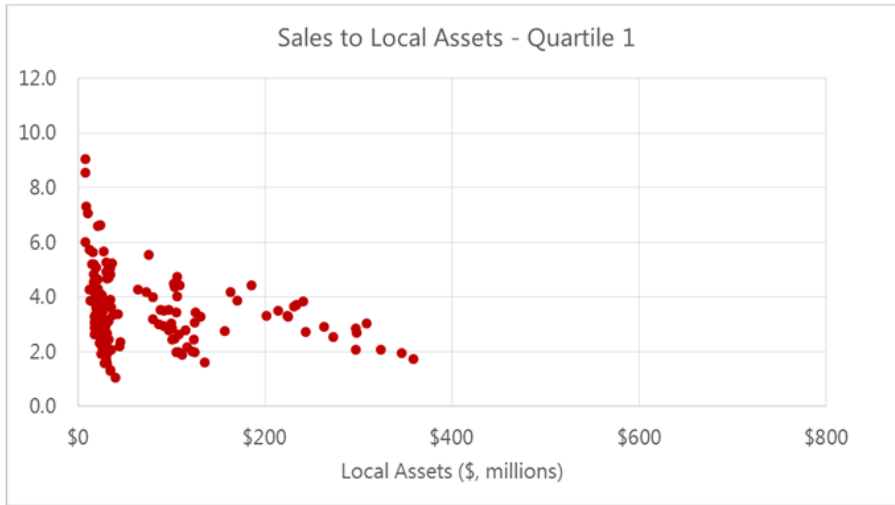
What are the justifications in Iowa?

Most who pursue 'growth' in this way offer justifications:

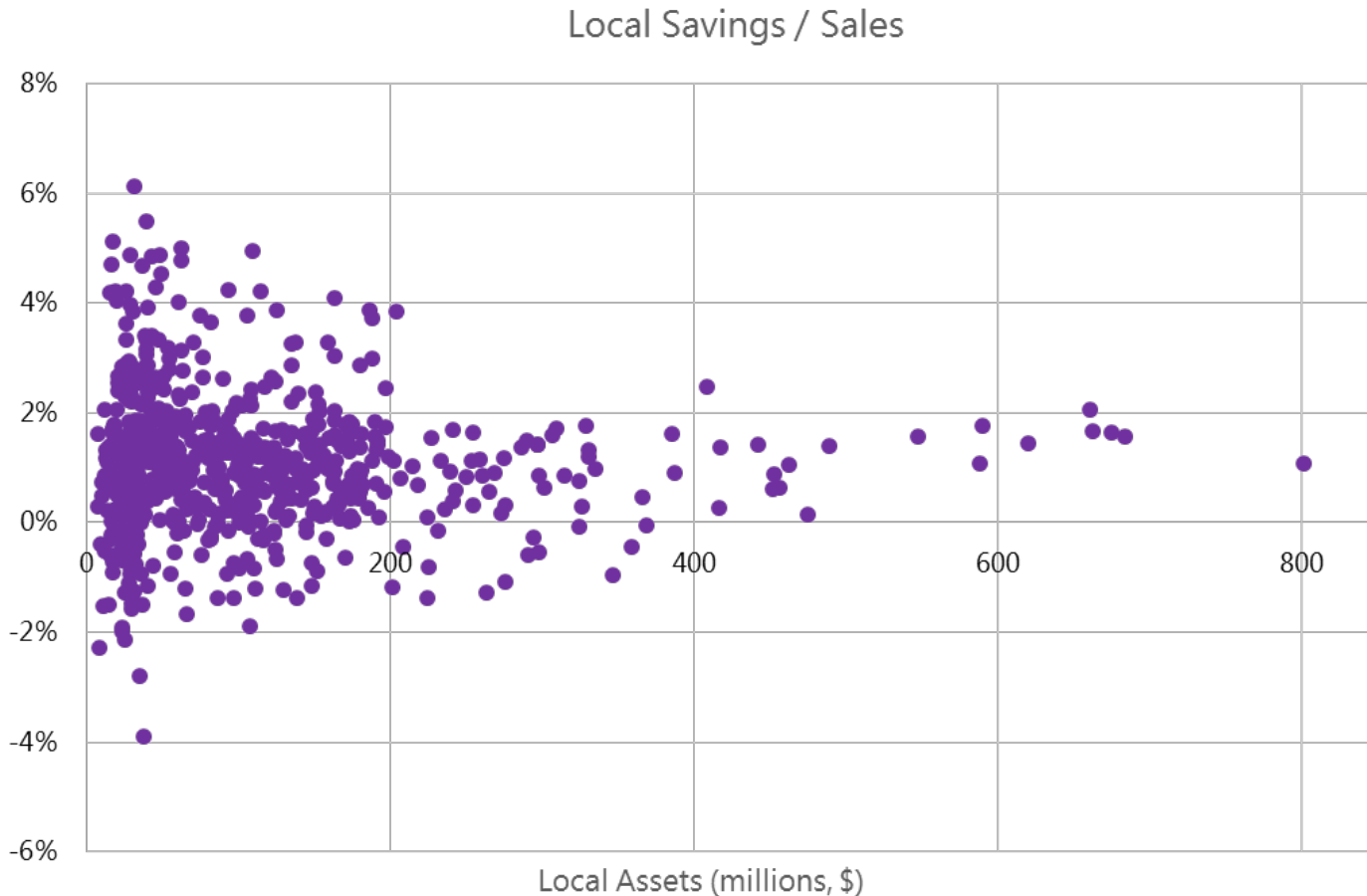
- Enhanced cost efficiency in admin and operations (economies of size)
- More 'output' with few inputs (economies of scale)
- Access to strategic assets (location specificity)
- Value creation for producers

Today's consolidations are largely the result of 'offensive' posturing, not defensive maneuvering.

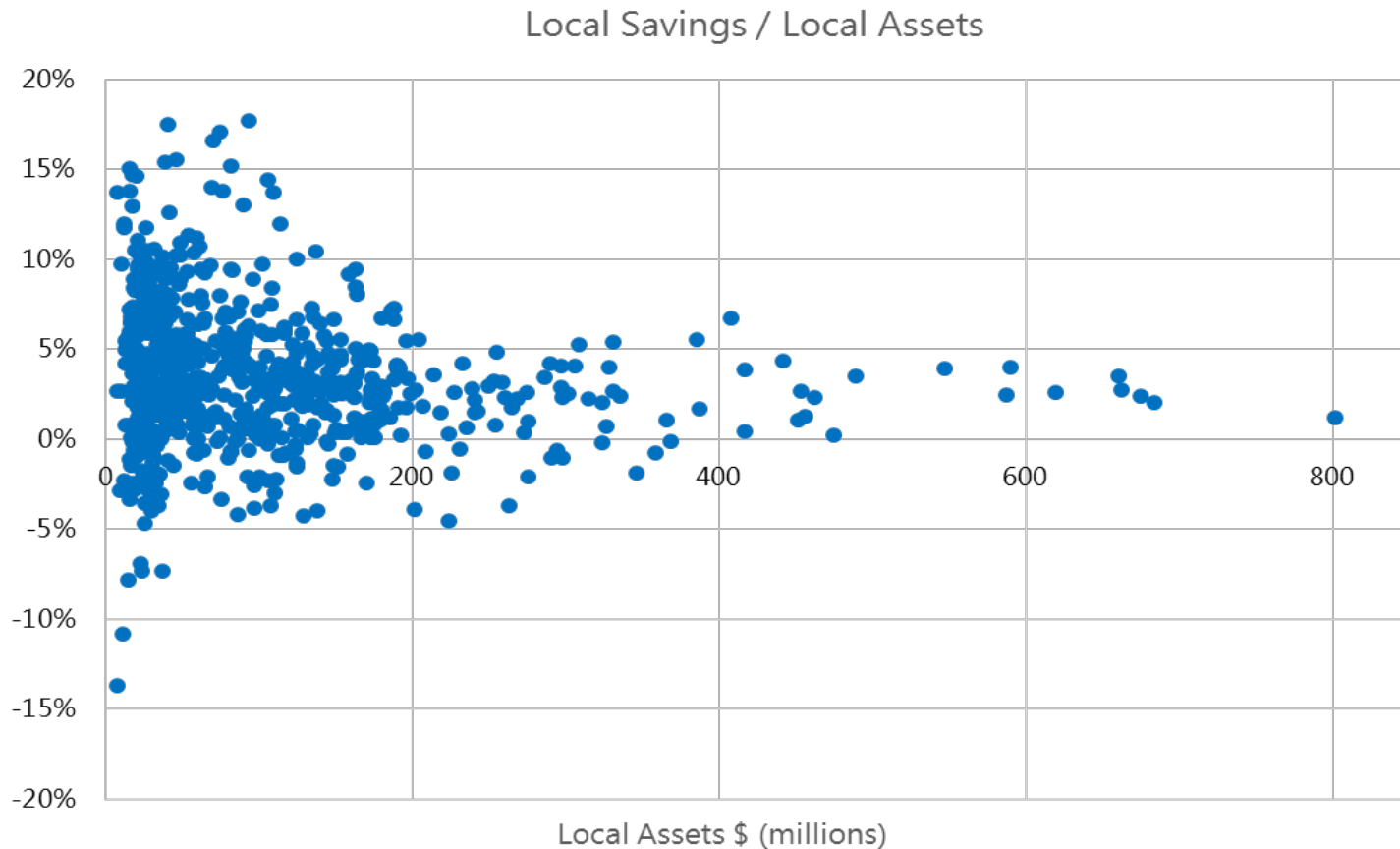
Is bigger better? (sales to assets)



Is bigger better? (profits to sales)



Is bigger better? (profits to assets)



WHAT IN THE WORLD IS GOING ON?

Big Six Status Quo: corporate control of agrochemicals/seeds

BAYER

MONSANTO

DUPONT

DOW

BASF

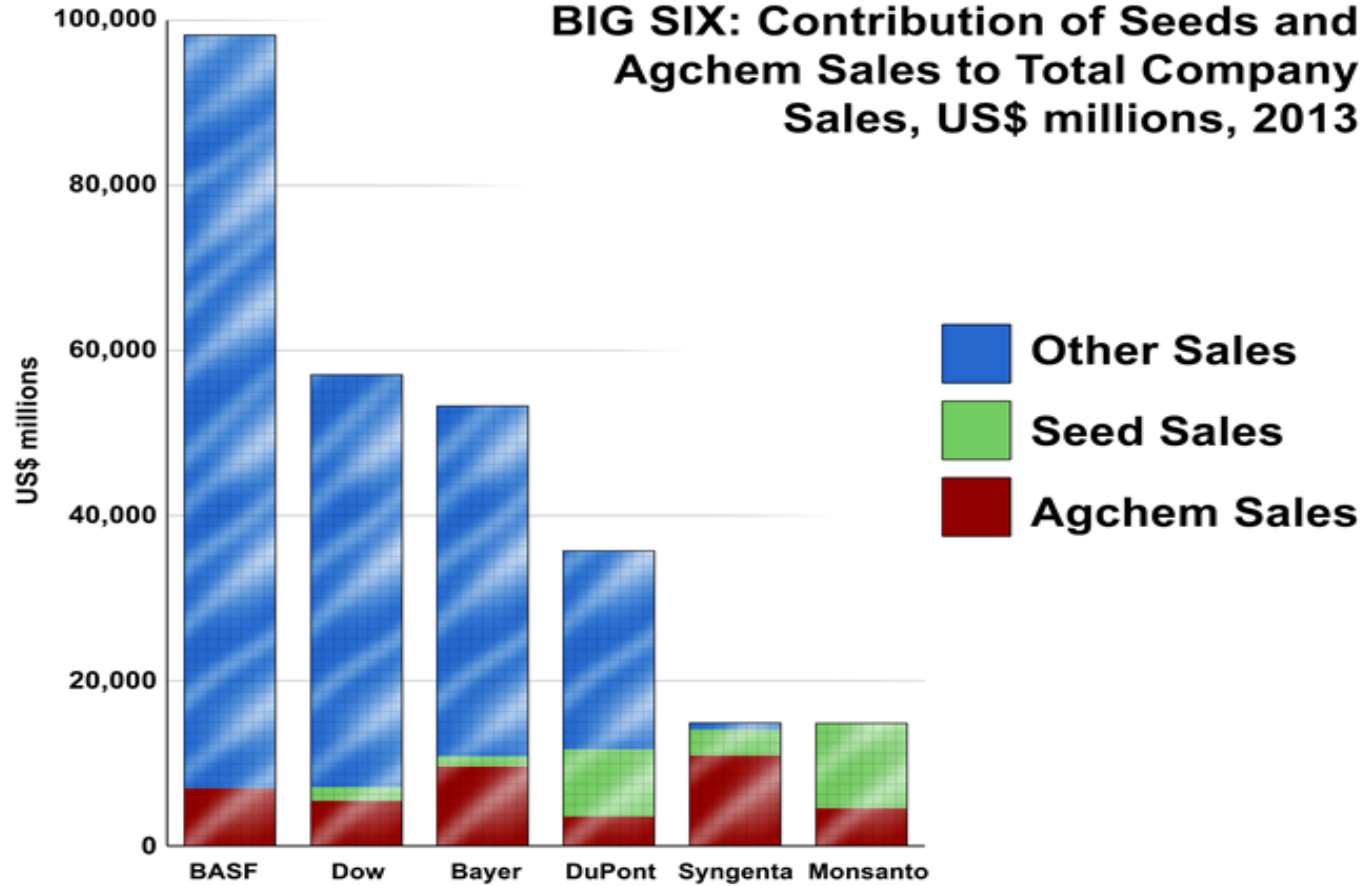
SYNGENTA

- collective sales >\$65 billion per annum in agrochemicals, seeds, biotech traits;
- control 75% of the global agrochemical market;
- control 63% of the commercial seed market;
- account for more than 75% of all private sector ag research in seeds and chemicals.



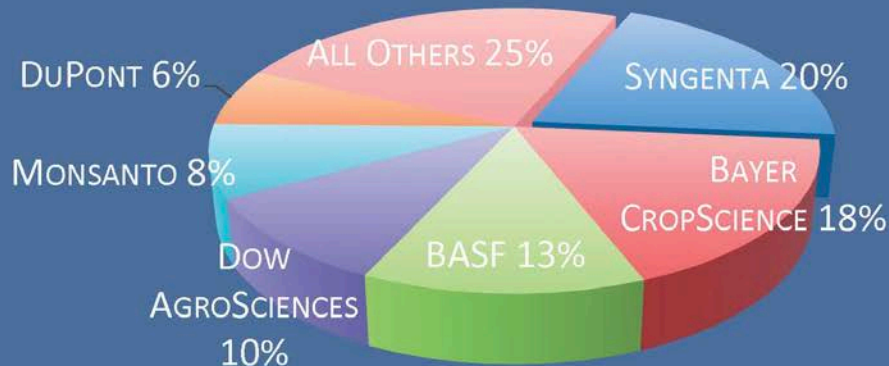
Source: [ETC Group](#), 2015

BIG SIX: Contribution of Seeds and Agchem Sales to Total Company Sales, US\$ millions, 2013



Source: [ETC Group](#), 2015

BIG SIX: Global Agrochemical Market Share



Big Six control 75% of global pesticide market.

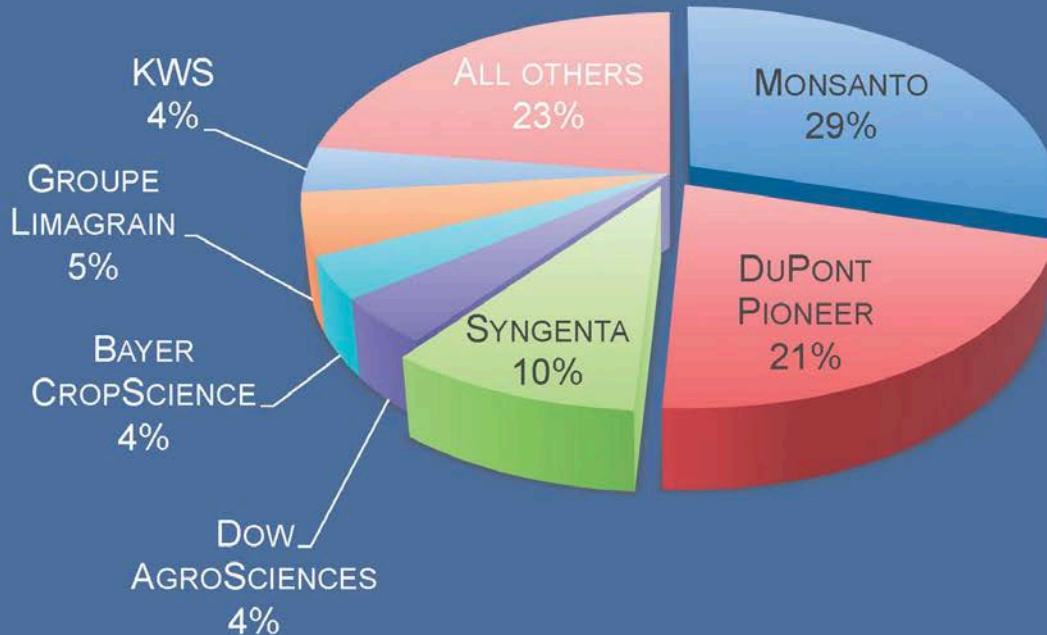
Based on 2013 sales
Sources: ETC Group, company reports, Phillips McDougall



Source: [ETC Group](#), 2015

Field Crop Seed Concentration

3 firms control 60% of market, 2013



Sources: Access to Seeds Methodology Report, 2015 and Phillips McDougall, cited in Vilmorin Investor Presentation, March 9, 2015



Source: [ETC Group](#), 2015

Mega-Mergers

Bayer – Monsanto, \$66 billion

- Companies stand to benefit from 'upgrade' to their lesser ranked businesses (i.e., seeds/genetics, agrochem)
- Monsanto loses bad rap, Europe swallows GMOs?

Dow – DuPont, \$130 billion

- DuPont stronger in gen than Dow, but Dow significant in both (ranked 4th or 5th)
- Dow to eliminate plant breeding division?

Speculation: drop in R&D

Mega-Mergers

ChemChina - Syngenta, \$43 billion

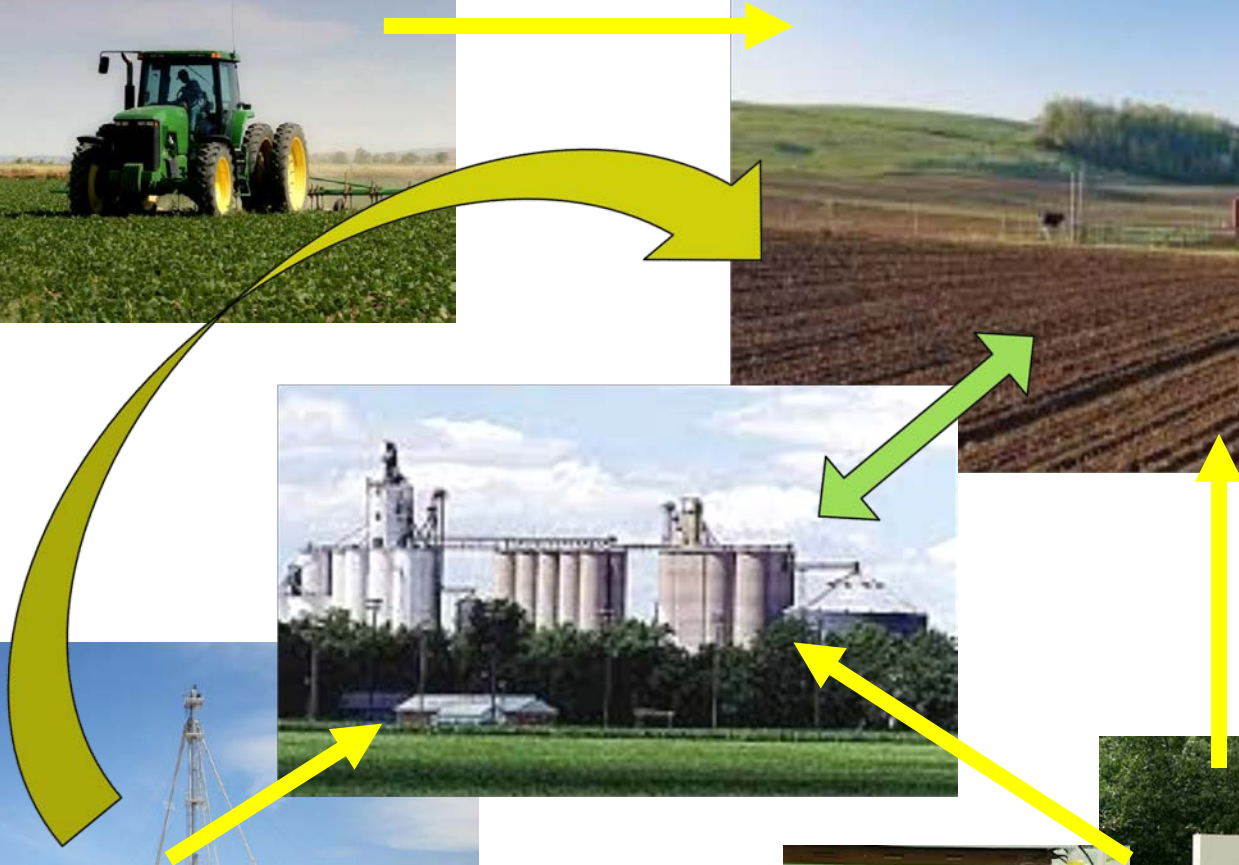
- Syngenta #1 in agrochem, #3 in seed genetics
- ChemChina # 7 in agrochem

John Deere – see ETC Group’s explanation for why Deere might come out on top of all this

- BIG DATA
- “hardware” versus “software”

Agrium – resides in largest input sector, but even with mergers among top 3, can’t touch the post-merger size of Bayer-Monsanto.

THE HOOK?



What kind of world do you want to live in?

Regulators, DOJ, other countries will have a say in what happens with the mega mergers.

As producers, your best bet is to:

- Figure out how to do business with companies that protect your power in the marketplace, or...
- Figure out how to integrate into the value portions of your supply chain.

This is not new, it's just on a different scale, and we've forgotten (see rural co-op history, circa 1922).

SO I ASK AGAIN, "IS BIGGER, BETTER?"



Keri L. Jacobs

e: kljacobs@iastate.edu

www.econ.iastate.edu/people/keri-jacobs