

# What are financially successful farms doing differently?

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## Overview

- 1. How bad is the financial situation of Iowa farms?**
- 2. What are successful farm doing differently?**

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## Bottom line

- Wide variability in financial performance across farm operations
- On average, farms burned through \$92,000 of working capital in 2015
- Between Jan 1, 2015 and Jan, 1 2016:
  - 65% maintained their liquidity and solvency rating
  - 26% lower liquidity and/or solvency rating
- Successful farms: production mix, marketing/merchandising, costs, yields

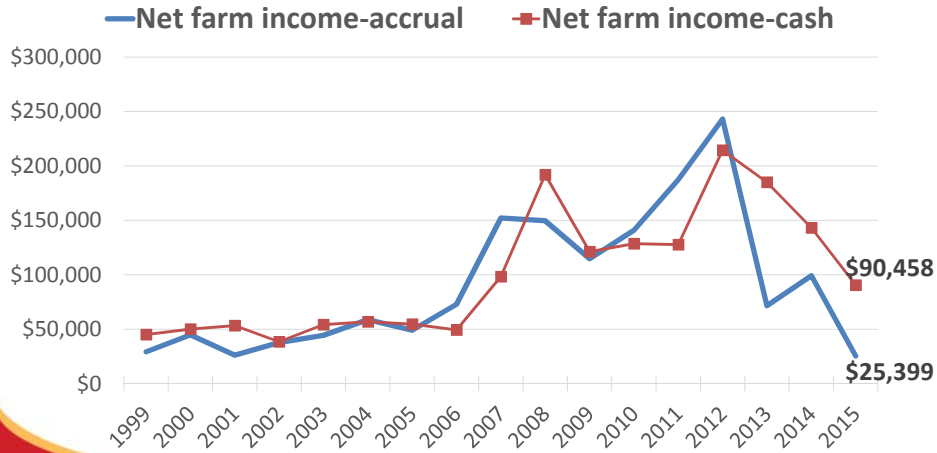
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## Sources of data

- Farm-level anonymous data from the Iowa Farm Business Association (IFBA)
- Commercial mid-sized farms (750-800 acres)
- 2 reports:
  - all farms (N=558)
  - farms with beginning and ending balance sheets (N=316).

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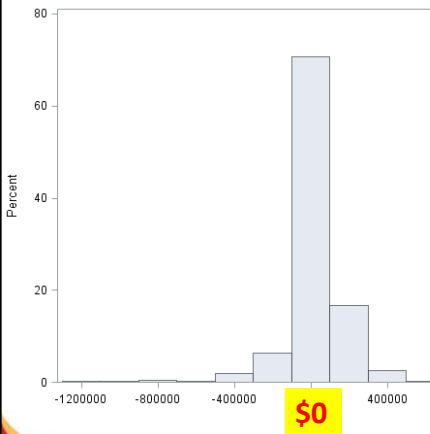
## Historical Comparison: NFI



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Source: Iowa Farm Costs and Returns.  
Ag Decision Maker File C1-10. Various years.

## Distribution of 2015 Accrued Net Farm Income



<b>NFI (Average)</b>	<b>\$25,399</b>
= Cash Income	= \$813,531
+ Change in Crop Inventory	+ \$9,905
+ Change in Livestock Inventory	- \$46,287
+ Feed Credits and change in other inventories	+ \$39,248
- Cash Expenses	- \$723,073
- Economic Depreciation	- \$67,925

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Source: Plastina, A.  
Number of farms=558

		Solvency: Total Debt-to-Asset Ratio		
		Vulnerable: Above 60%	Under Watch: Between 30% and 60%	Strong: Under 30%
Liquidity: Current Ratio	Vulnerable: Below 1.3			
	Under Watch: Between 1.3 and 2.0			
	Strong: Over 2.0			

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Current Ratio = Current Assets/Current Liabilities  
 Debt-to-Asset Ratio = Total Liabilities / Total Assets

		Solvency: Total Debt-to-Asset Ratio		
		Vulnerable: Above 60%	Under Watch: Between 30% and 60%	Strong: Under 30%
Liquidity: Current Ratio	Vulnerable: Below 1.3	13.3%	13.6%	2.2%
	Under Watch: Between 1.3 and 2.0	3.5%	10.4%	6.3%
	Strong: Over 2.0	1.9%	13.6%	35.1%

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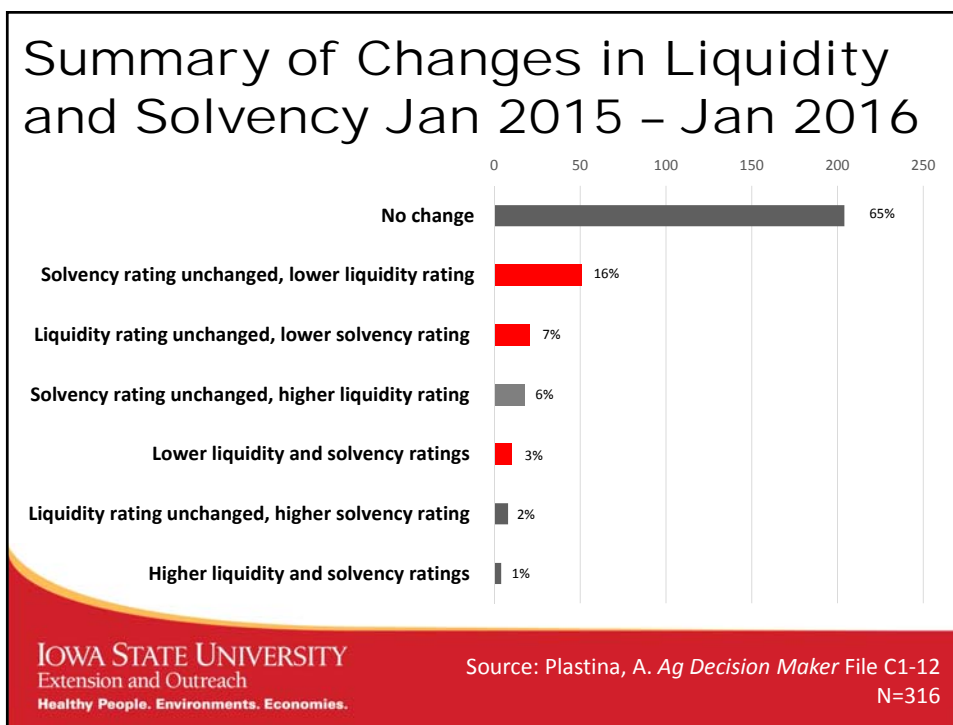
Current Ratio = Current Assets/Current Liabilities  
 Debt-to-Asset Ratio = Total Liabilities / Total Assets  
 Source: Plastina, A. *Ag Decision Maker* File C1-12

## January 1, 2016 (316 farms)

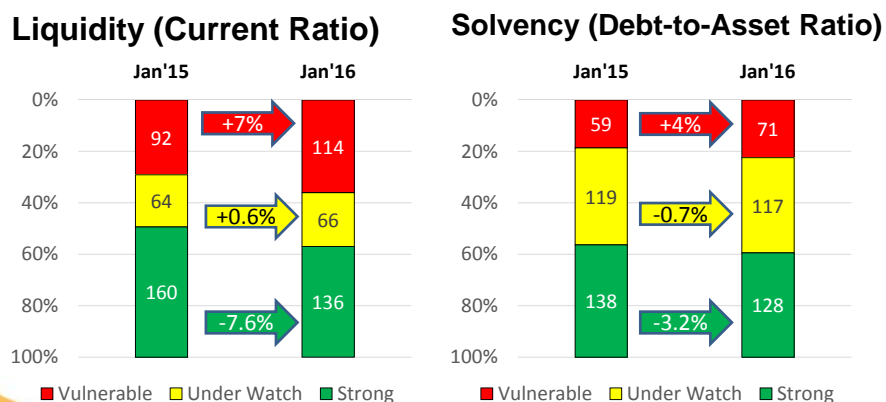
		Solvency: Total Debt-to-Asset Ratio		
		Vulnerable: Above 60%	Under Watch: Between 30% and 60%	Strong: Under 30%
Liquidity: Current Ratio	Vulnerable: Below 1.3	<b>17.7%</b> (+4.3%)	<b>15.5%</b> (+1.9%)	<b>2.9%</b> (+0.7%)
	Under Watch: Between 1.3 and 2.0	<b>3.2%</b> (-0.3%)	<b>10.8%</b> (+0.4%)	<b>7.0%</b> (+0.7%)
	Strong: Over 2.0	<b>1.6%</b> (-0.3%)	<b>10.8%</b> (-2.8%)	<b>30.7%</b> (-4.4%)

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Current Ratio = Current Assets/Current Liabilities  
 Debt-to-Asset Ratio = Total Liabilities / Total Assets  
 Source: Plastina, A. *Ag Decision Maker* File C1-12



## Liquidity and Solvency Ratings (Jan 2015 vs Jan 2016)



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Source: Plastina, A. *Ag Decision Maker* File C1-12  
N=316

## How much working capital did Iowa farms burn through in 2015?

Liquidity Rating Jan'15	Liquidity Rating Jan'16	Change in Working Capital (\$)	% Change vs. Jan'15	Number of Farms
Vulnerable	Vulnerable	-42,752	-45%	77
Vulnerable	Under Watch	68,959	256%	13
Vulnerable	Strong	141,641	141%	2
Under Watch	Vulnerable	-326,265	-66%	28
Under Watch	Under Watch	-75,857	-22%	29
Under Watch	Strong	129,166	42%	7
Strong	Vulnerable	-356,407	-79%	9
Strong	Under Watch	-169,874	-45%	24
Strong	Strong	-71,937	-10%	127
<b>All Farms</b>		<b>-91,658</b>	<b>-24%</b>	<b>316</b>

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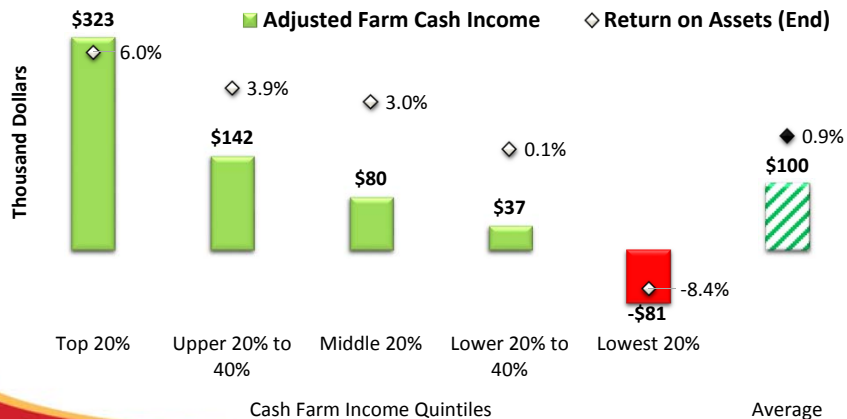
Source: Plastina, A. *Ag Decision Maker* File C1-12  
N=316

## What are successful farm doing differently?

- Free Cash Flow from the farm:  
Adjusted Farm Cash Income=NFI + Depreciation
- IFBA data: 558 farms
- Ordered according to their AFCl
- Divided in 5 groups of equal sizes
- All comparison are for the same groups, using the same farms in each group.

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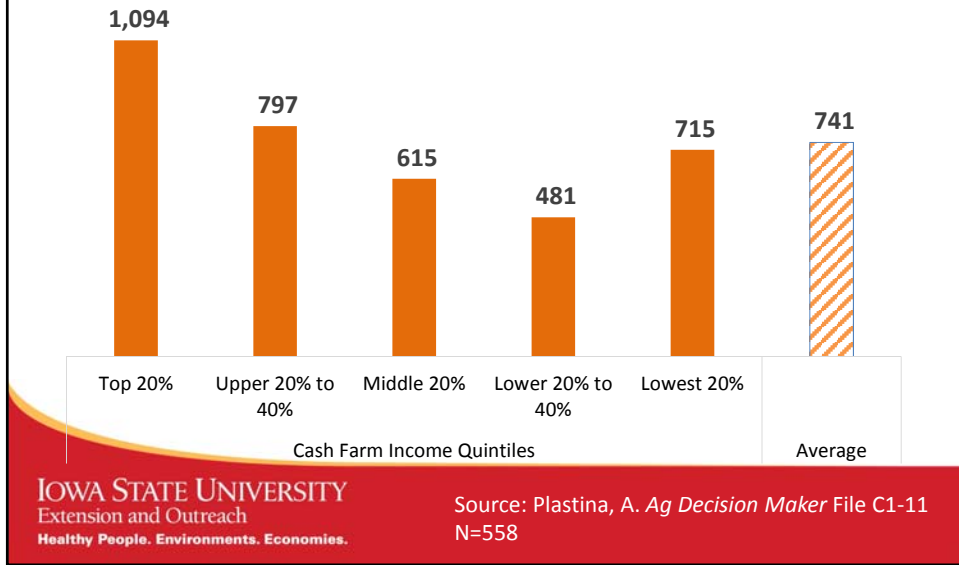
## 2015 Average Adjusted Farm Cash Income and ROA



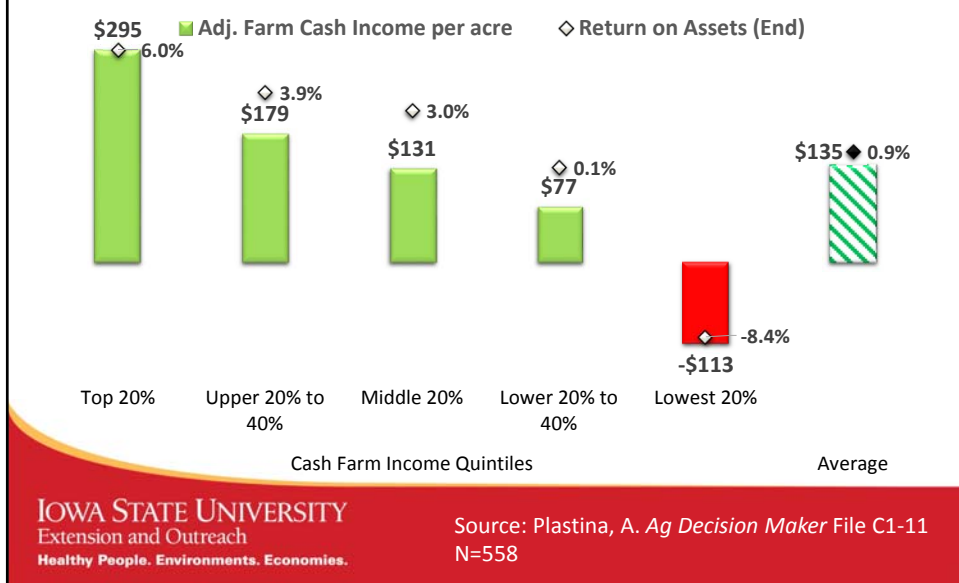
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Source: Plastina, A. *Ag Decision Maker* File C1-11  
N=558

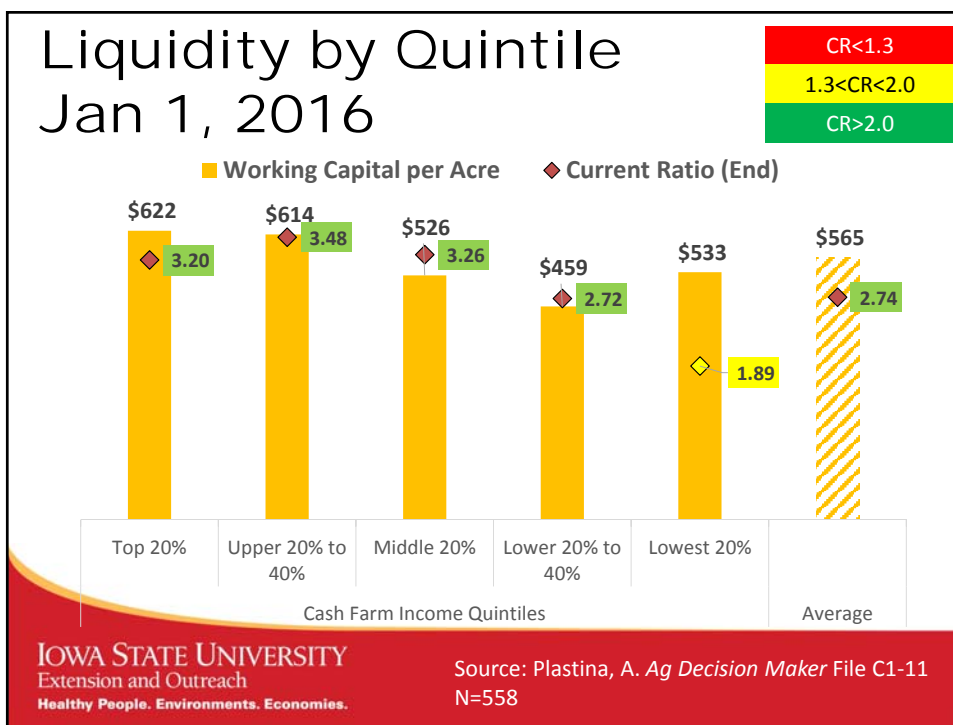
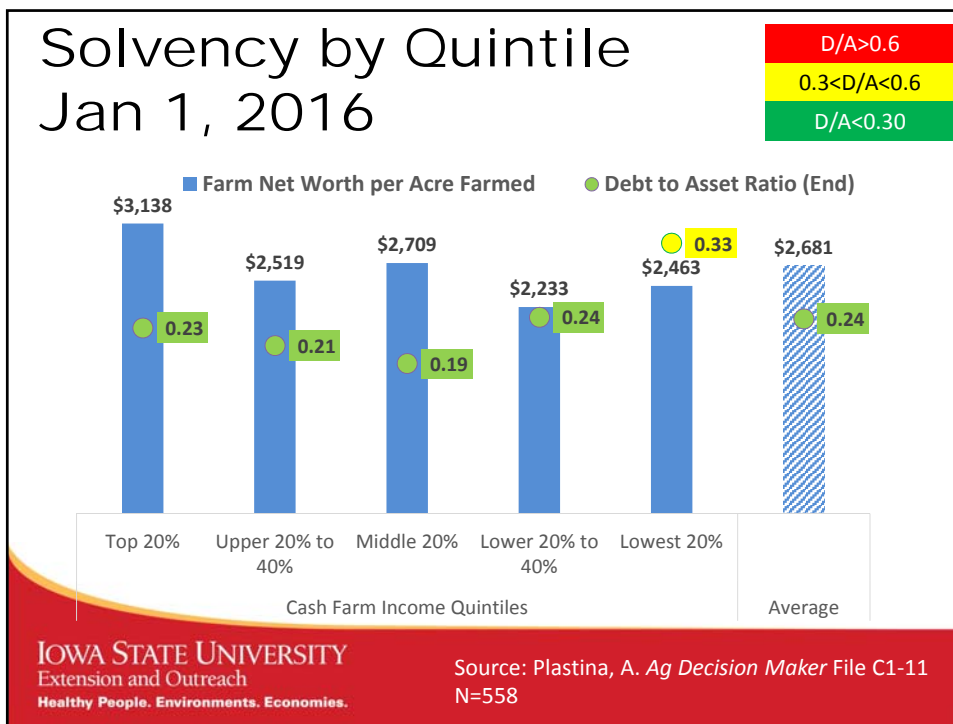
## Farm Size: Operator Crop Acres by Quintile

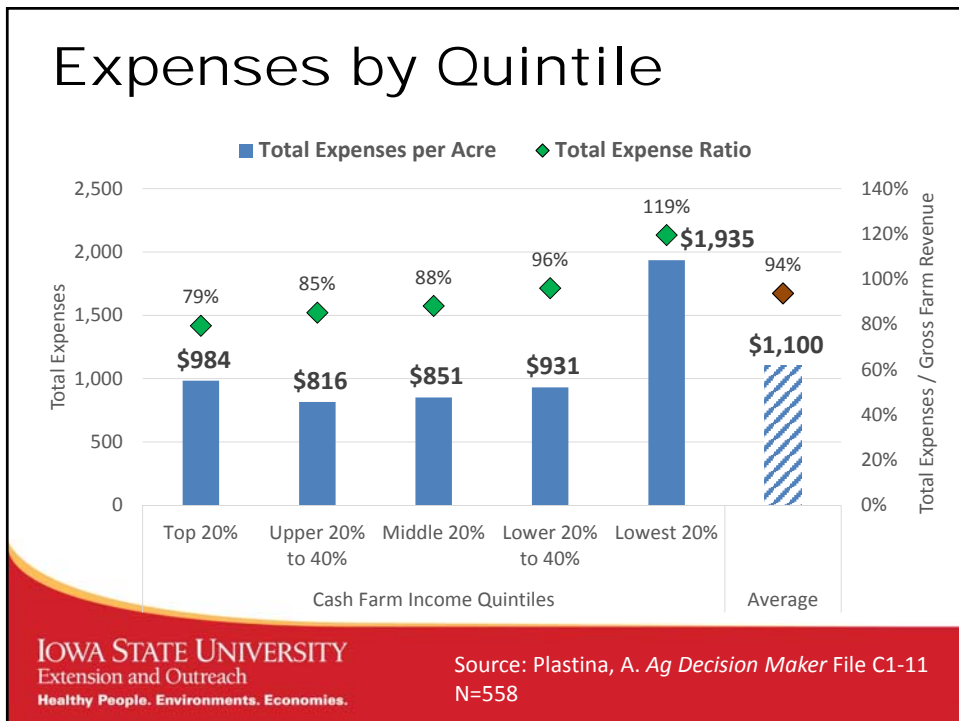
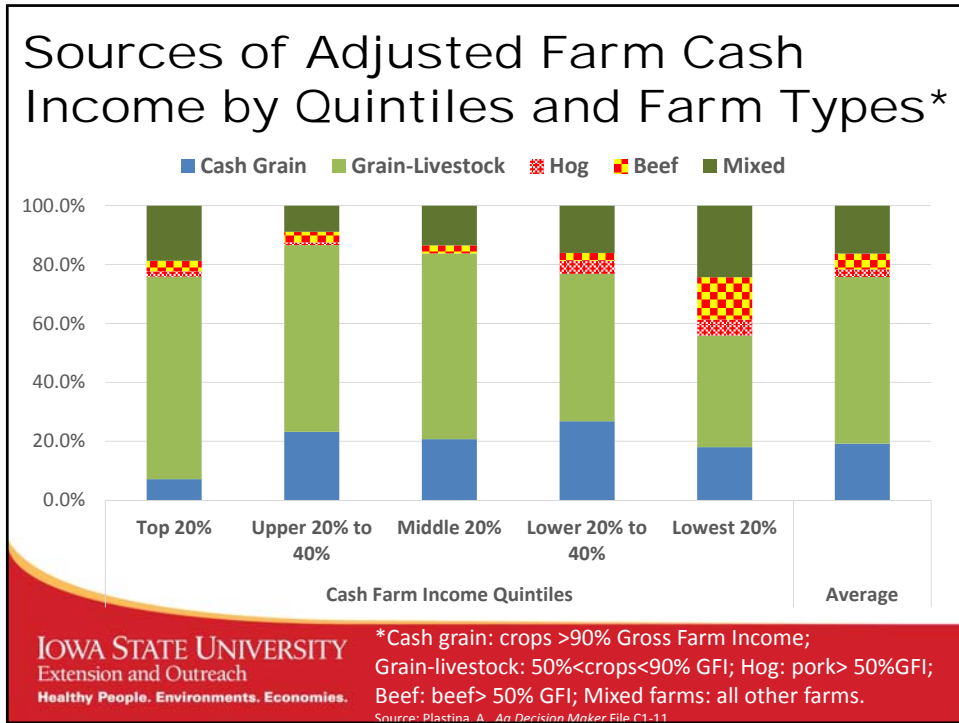


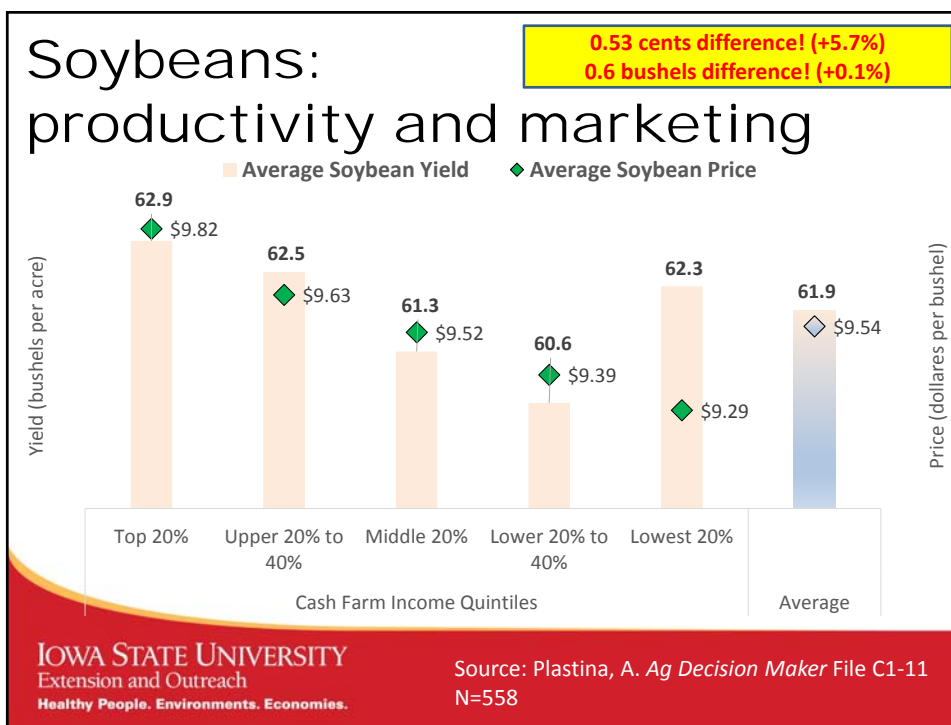
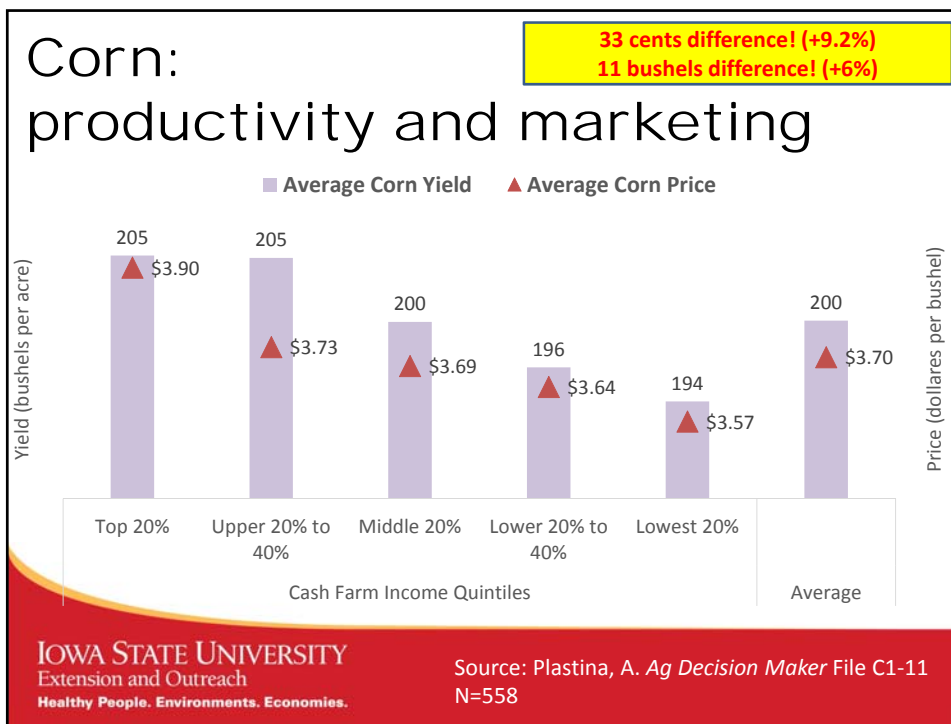
## 2015 Average Adjusted Farm Cash Income per acre & ROA











## Summary

- On average, farms burned through \$92,000 of working capital in 2015
- Liquidity Jan'16: 36.1% vulnerable
- Solvency Jan'16: 22.5% vulnerable
- 26% farms had lower liquidity and/or solvency ratings in Jan'16 than in Jan'15.

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## Summary (cont'd)

- Successful farms:
  - Right production mix,
  - Good marketing/merchandising strategy,
  - Contained costs,
  - High yields

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## Full Reports:

- Plastina, A. 2016a. "Iowa Farm Financial Conditions in 2015." Ag Decision Maker File C1-11.
- Plastina, A. 2016b. "Iowa Farms: From Strong to Vulnerable in a Year?" Ag Decision Maker File C1-12.
- Plastina, A. 2016c. "2015 Iowa Farm Costs and Returns." Ag Decision Maker File C1-10.

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Thank you for your attention!

## Questions?

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