

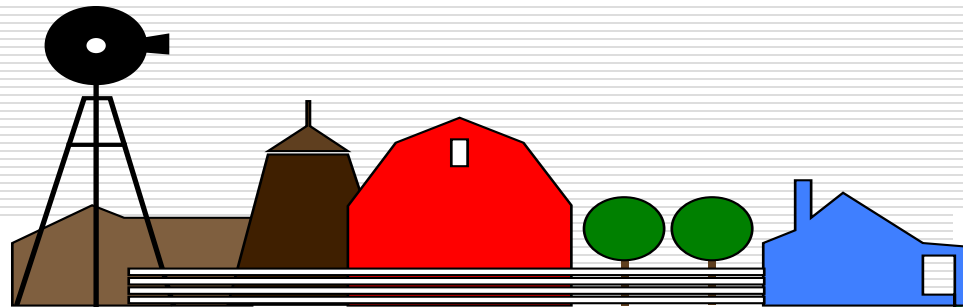
2016 Financial Year in Review

Analysis Financial Trend Data

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Farm Management Education in Southern Minnesota

- ❑ Data from 1380 farms were included in the South East, South Central, South West & West Central regional report.
- ❑ 12 Minnesota West Instructors
- ❑ 7 Ridgewater Instructors
- ❑ 10 Riverland Instructors
- ❑ 13 South Central Instructors



Farm Management Education Is Concerned With:

1. Creating an awareness of the need for accurate financial & enterprise records.
2. Stimulating individuals and families to establish goals and set priorities.
3. Developing the farm operator's understanding of the function of management.



Farm Management Education Is Concerned With:

4. Developing fundamentals of resource management (financial & human).
5. Developing student skills in analyzing and interpreting farm business records.
6. Developing skills in analyzing data to improve the organization and efficiency of the farm business.



2016 in Review

- ❑ Gross farm income was, \$791,868 in 2016, down from \$840,341 in 2015. Down **5.8%**.
- ❑ Cash operating expenses was, \$683,984 in 2016, Down from \$ 724,501 in 2015. Down **5.6%**.
- ❑ Net cash income was \$107,885 in 2016, Down from \$ 115,840 in 2015. Down **6.9%**.
- ❑ Net farm income was \$46,742 in 2016, Up from \$ 35,915 in 2015, Up **30.1%**.

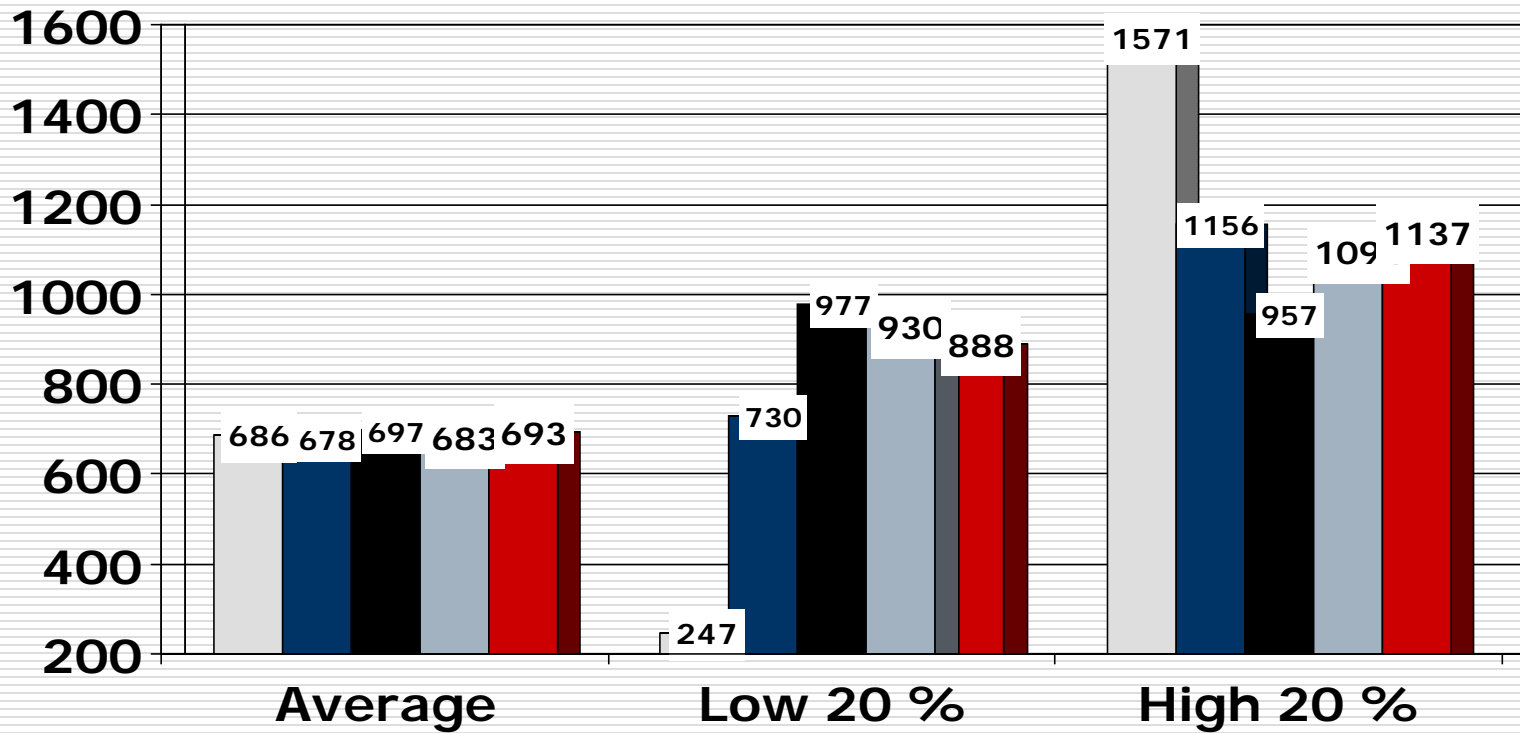


2015 in Review

- ❑ Corn production was down **0.53%** to a yield of 204.8 bu. in 2016 from a yield of 205.9 in 2015.
- ❑ The highest yield ever was in 2015 at 205.9 bu. The lowest was 54 bu. in 1965.
- ❑ Soybean production was up **2%** to a yield of 61.3 bu. in 2016 from a yield of 60.1 bu. in 2015.
- ❑ The lowest yield was 18 bu. in 1996. The highest yield was 61.3 bu. in 2016.



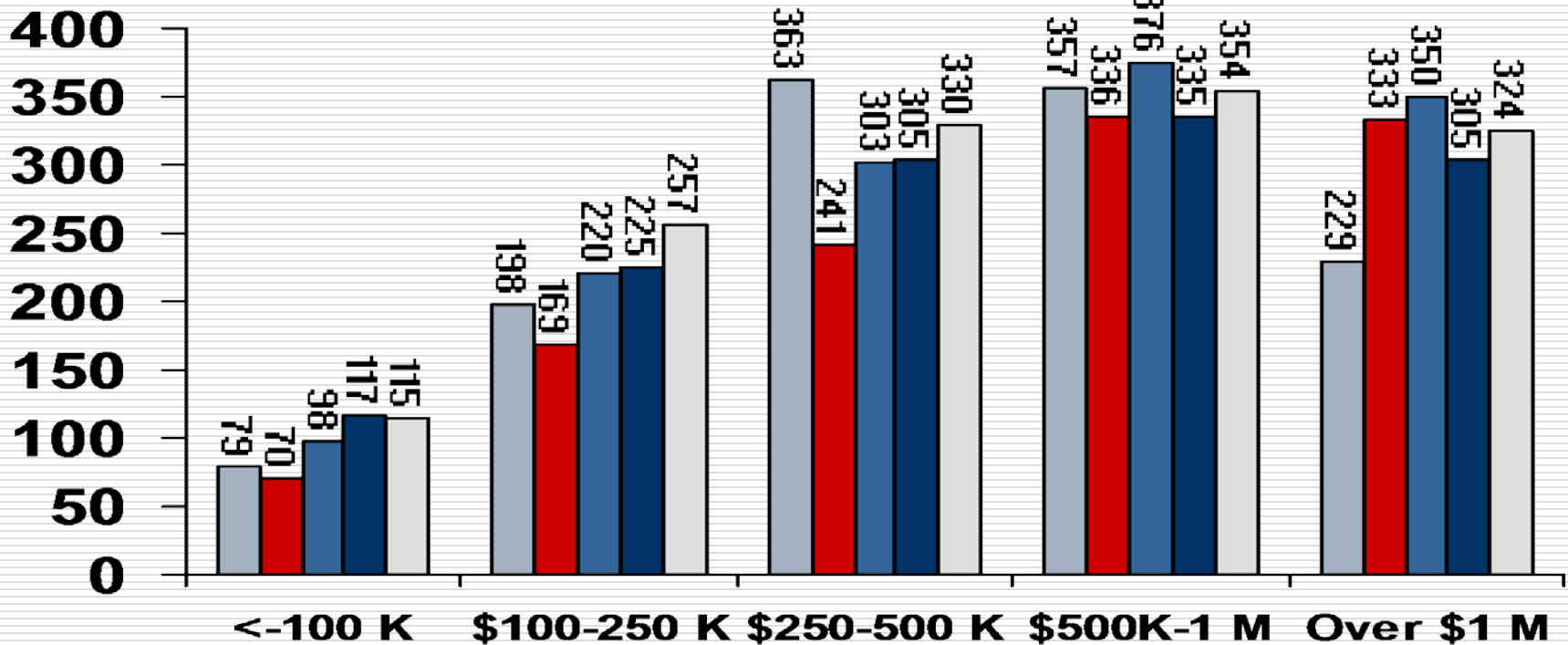
Crop acres



2012 2013 2014 2015 2016

Farm Size

Actual Number of Farms by Size

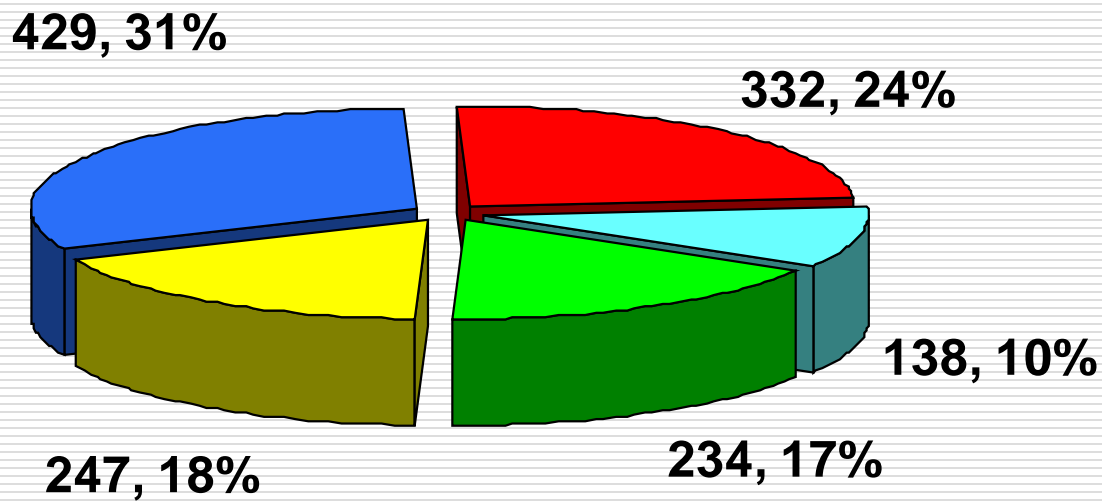


2010 - 1226	2013 - 1151	2014 - 1347
2015 - 1287	2016 - 1380	

Age of Operator

Actual Number of Farms by Operator Age Category

Total of 1380 Farms

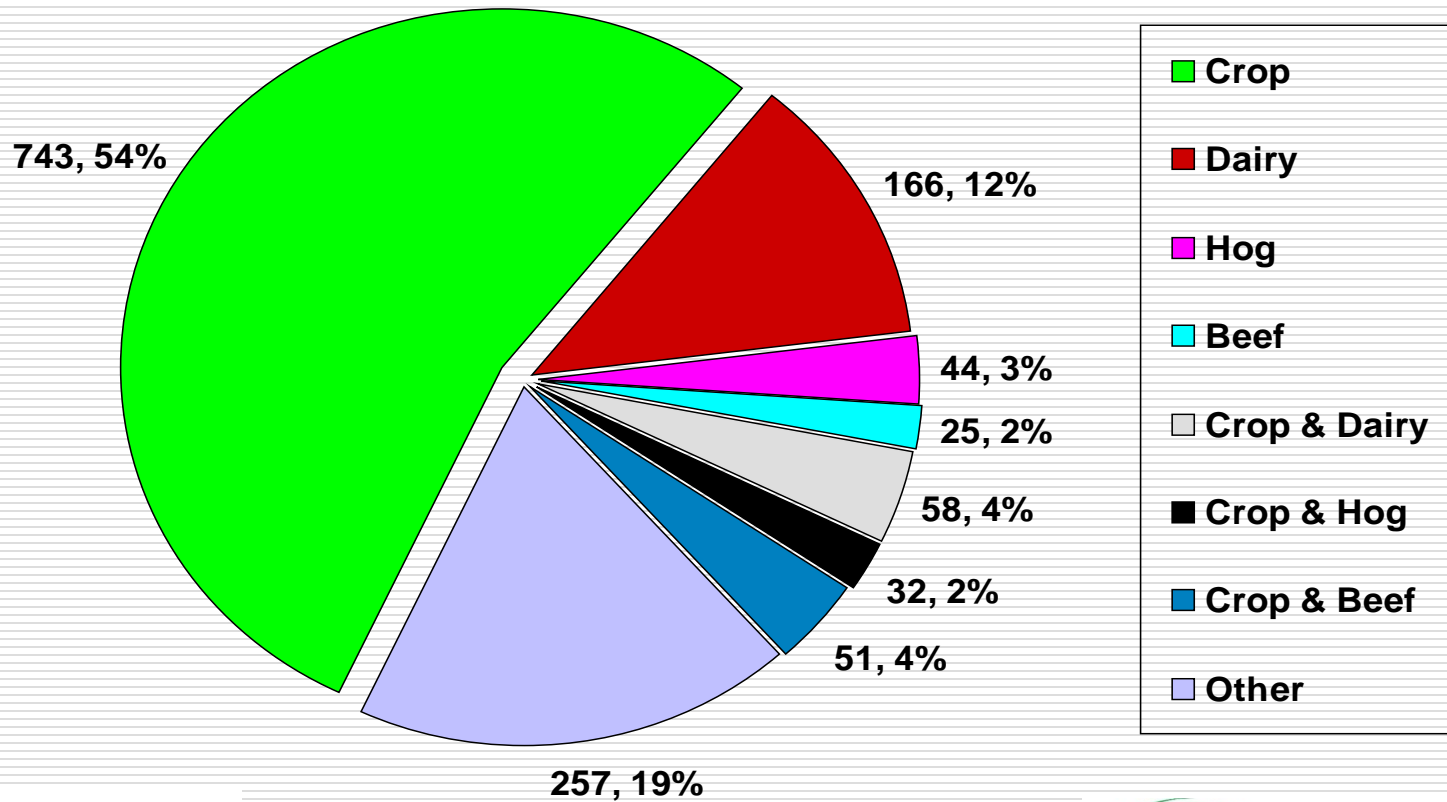


Under 31 31-40 41-50 51-60 Over 60

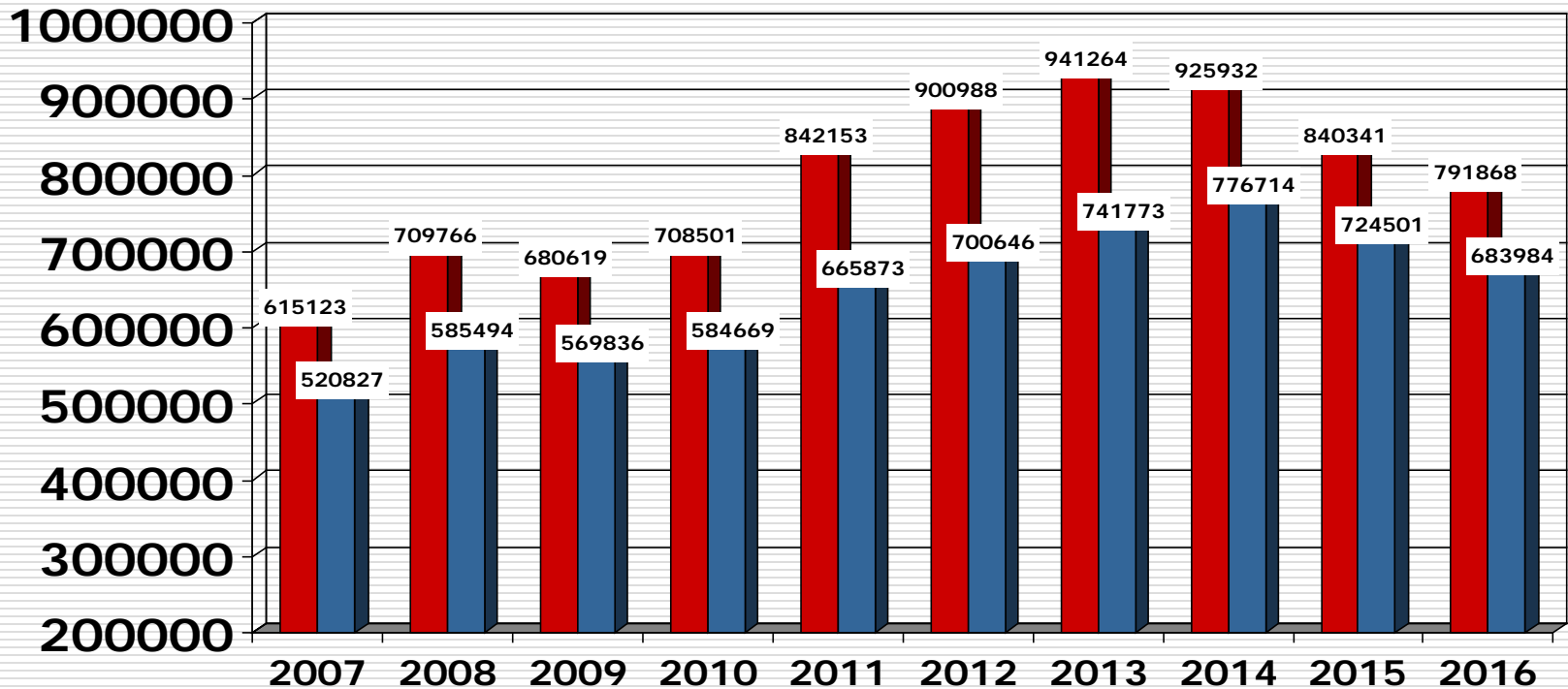
Type of Farm

Actual Number of Farms by Farm Type

Total of 1347 Farms

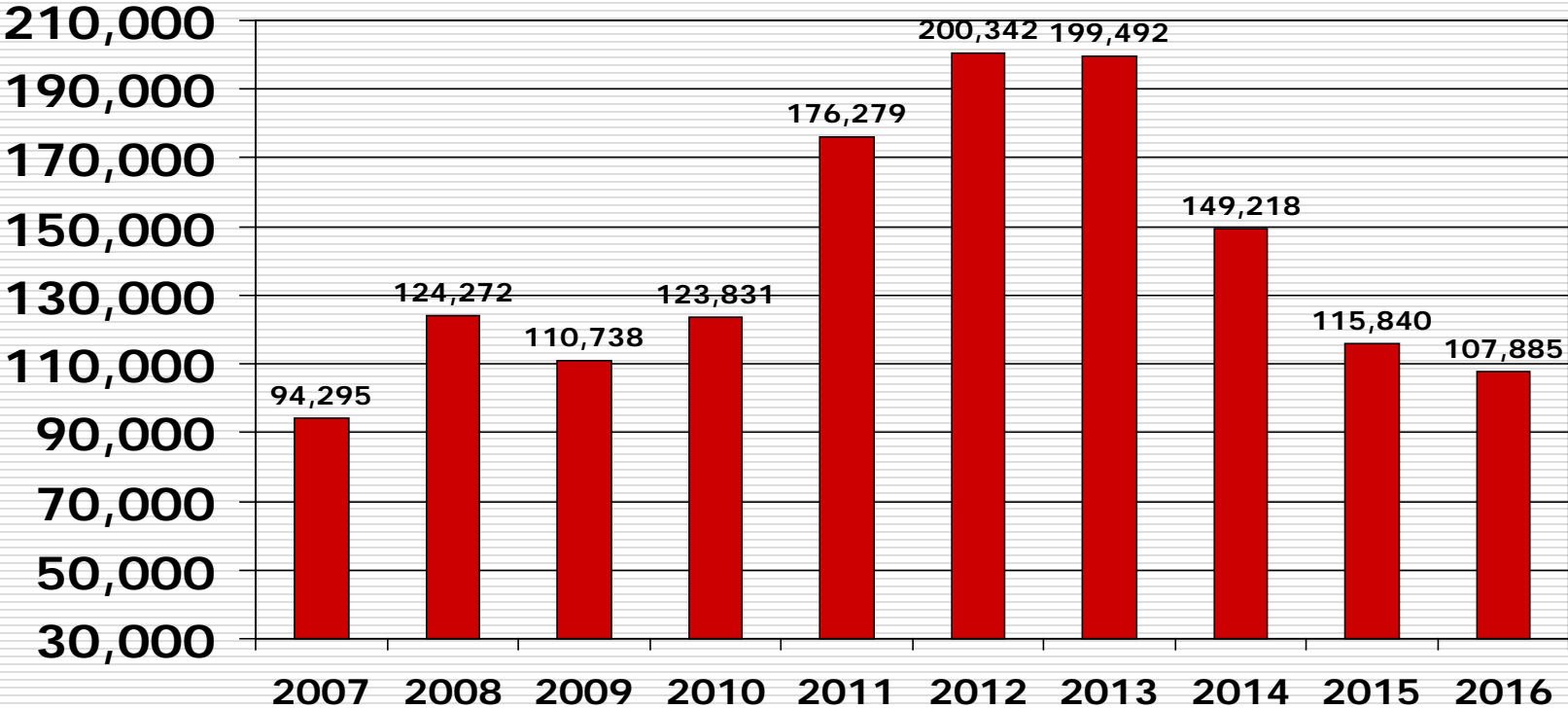


Gross Cash Farm Income & Total Cash Expenses



■ Gross Cash Farm Income ■ Total Cash Expenses

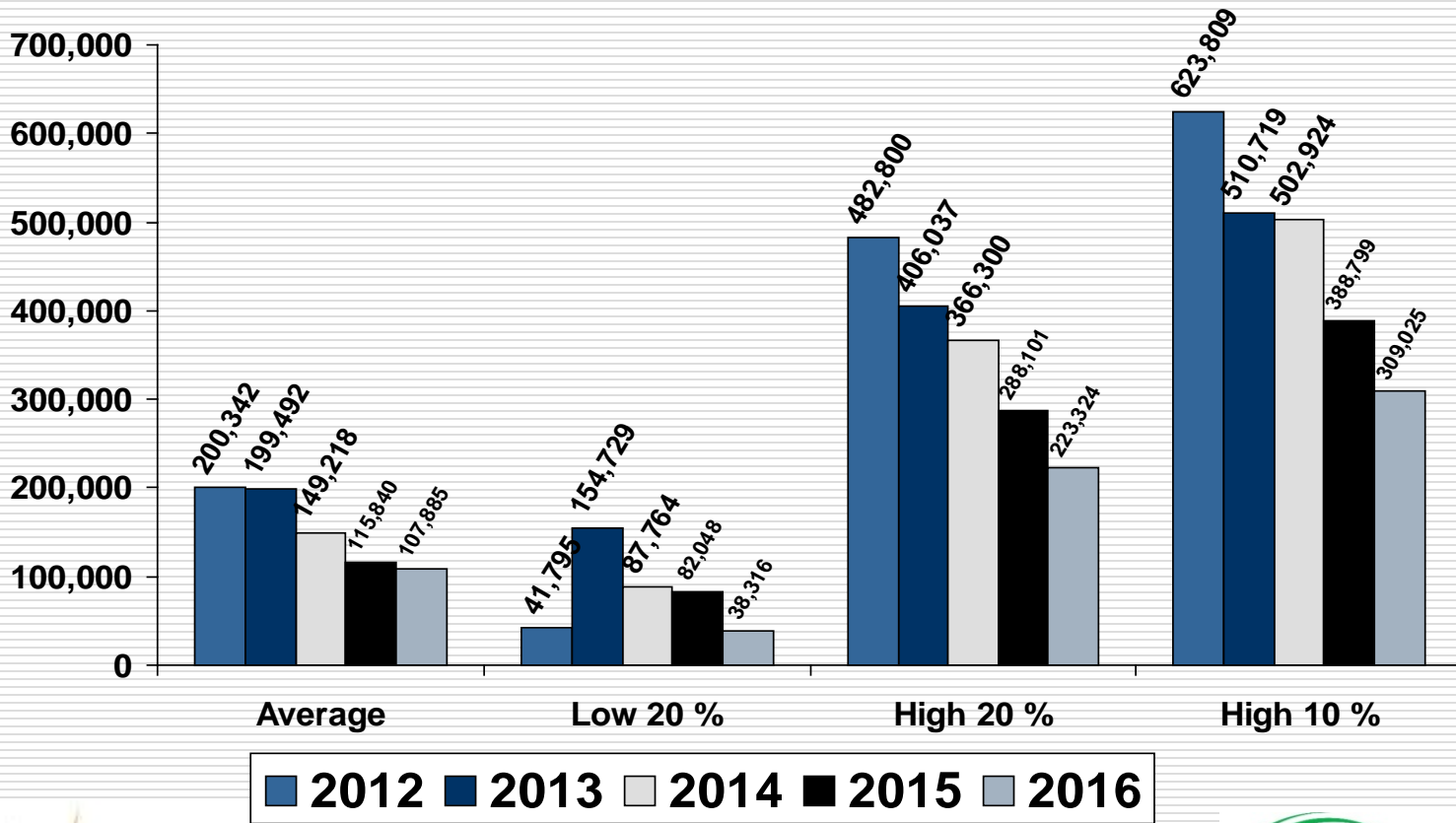
Net Cash Income



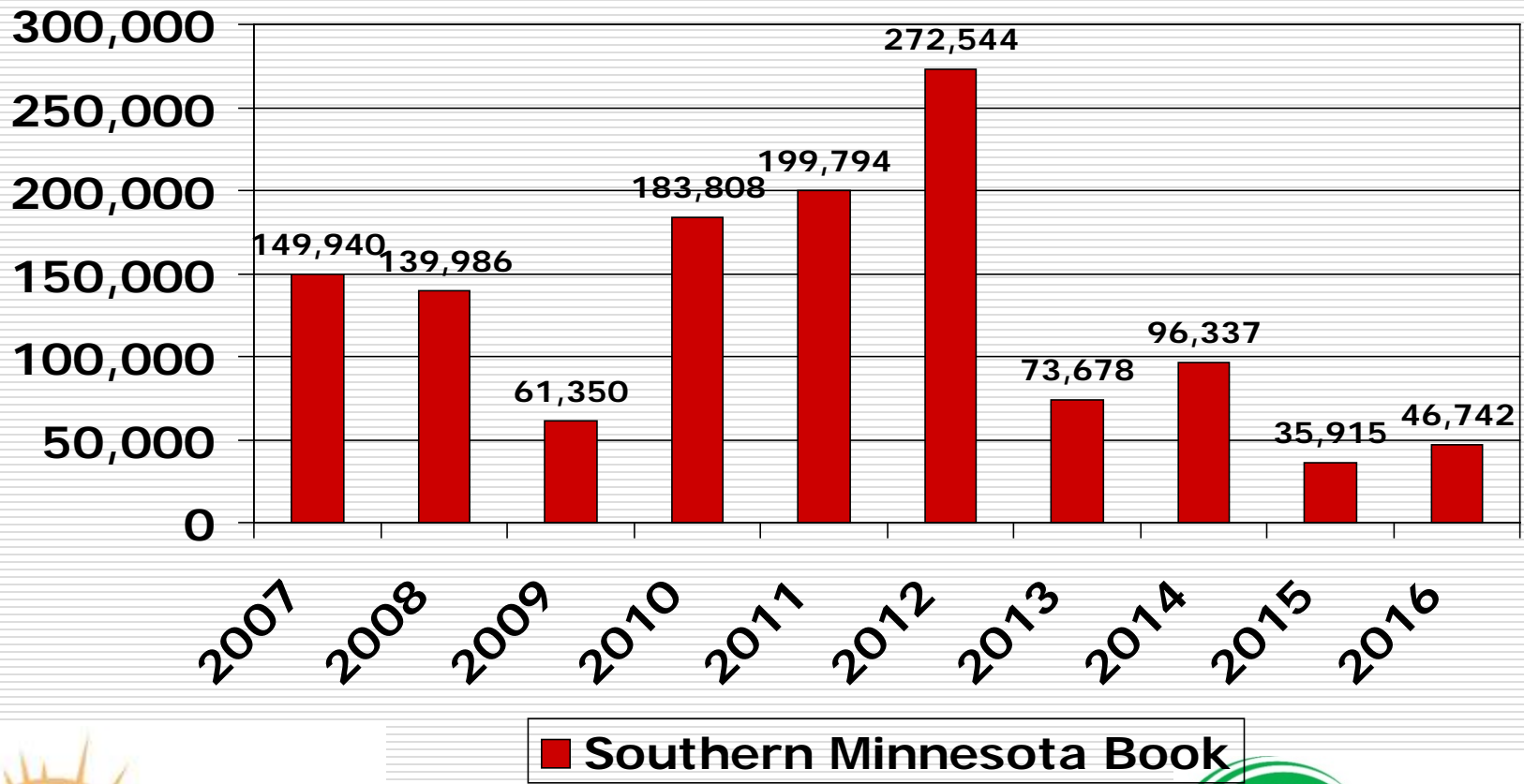
■ Southern Minnesota



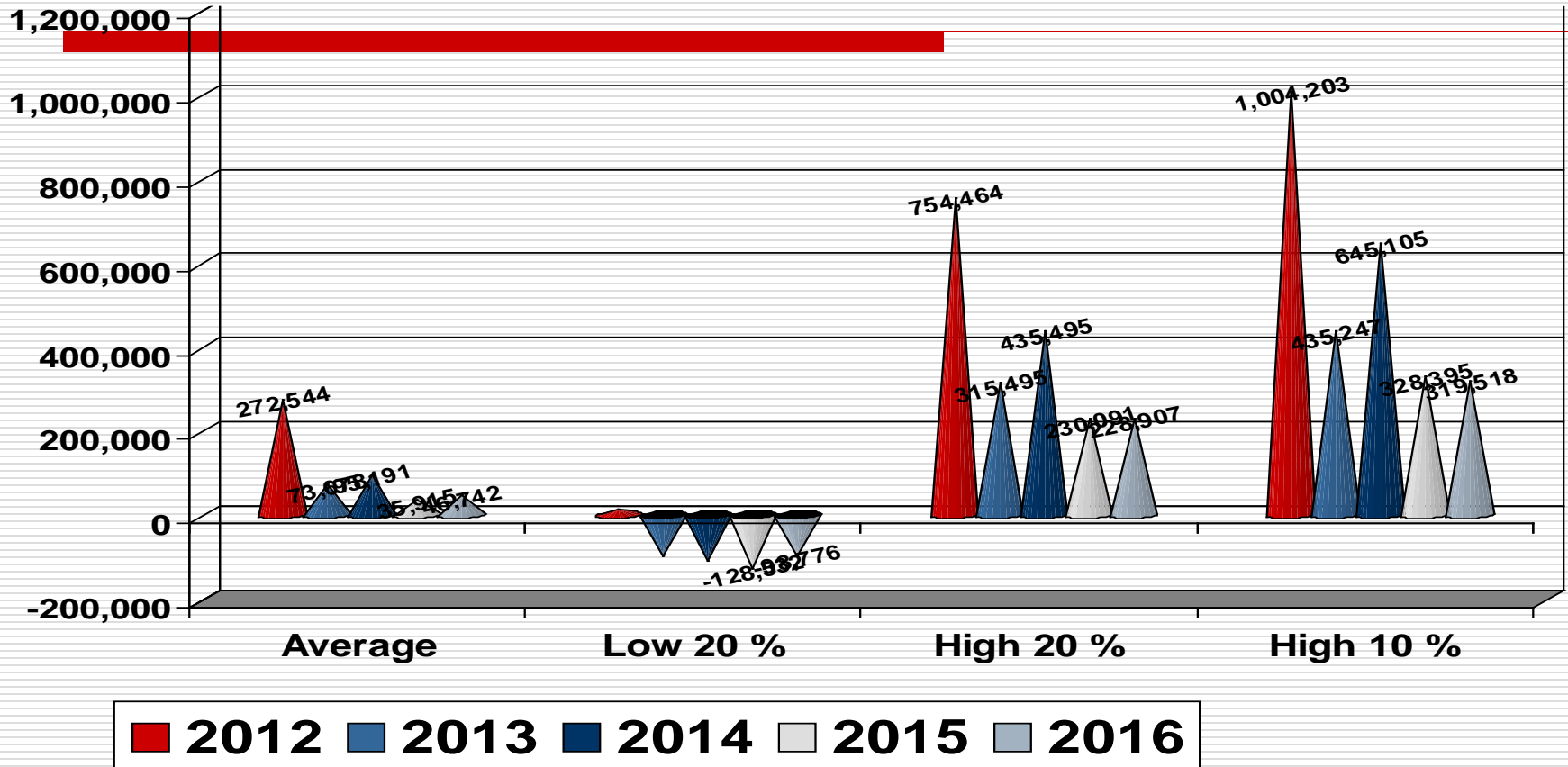
Net Cash Farm Income



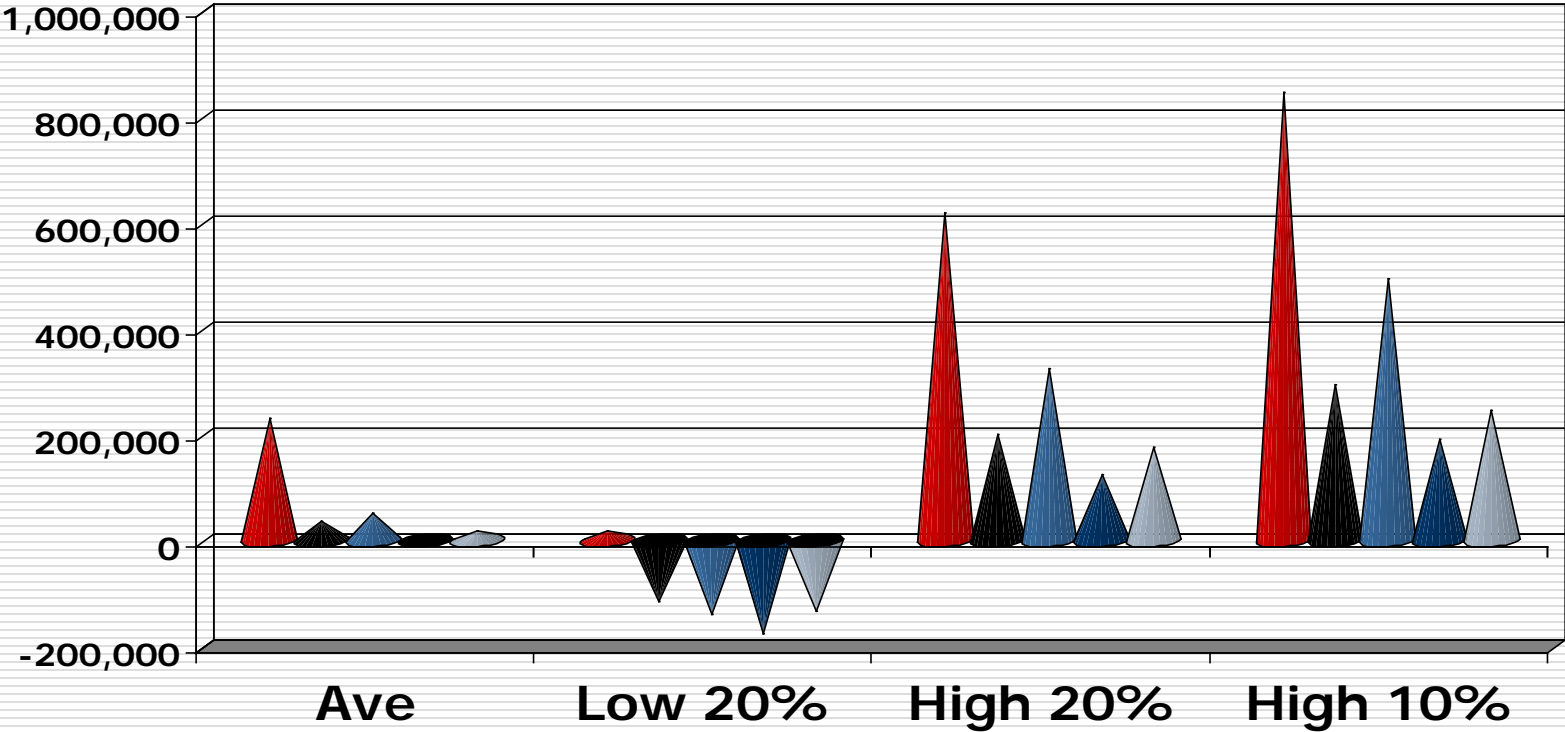
Net Farm Income (Ave)



Net Farm Income

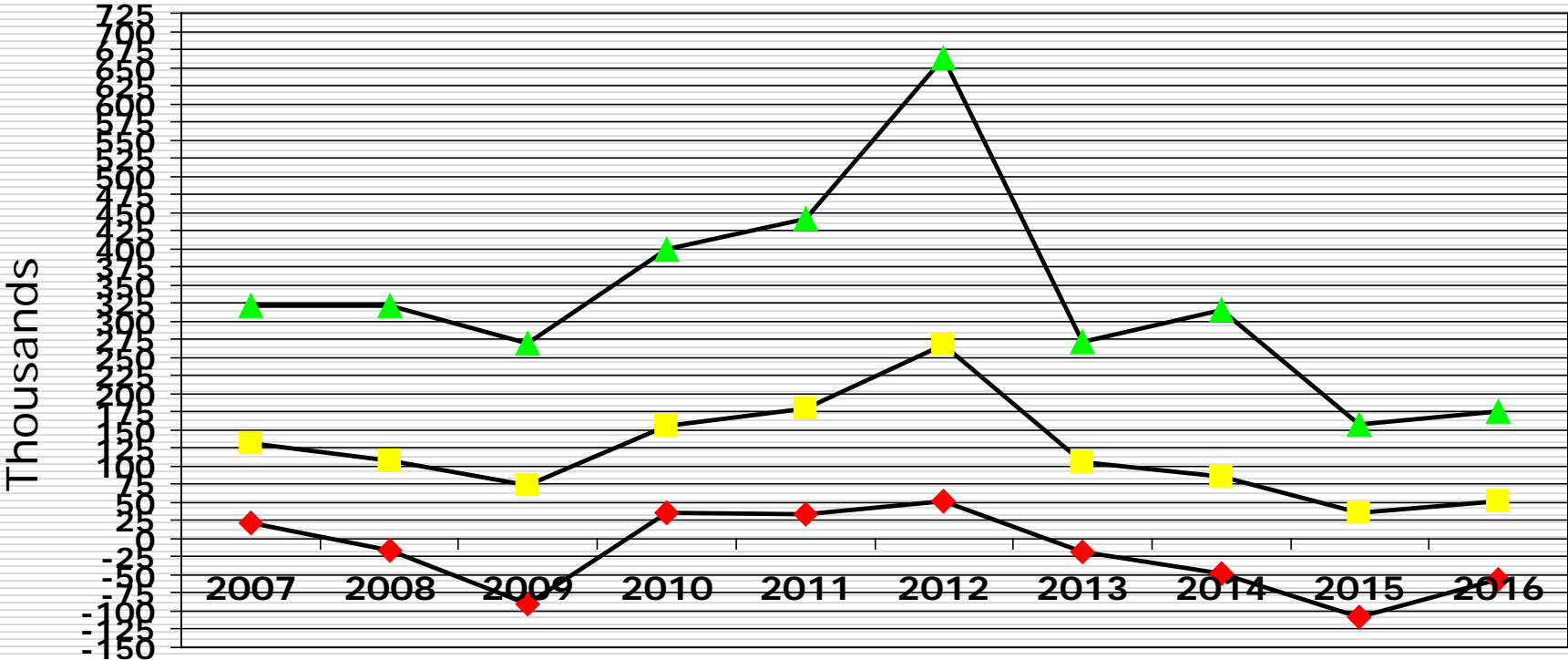


Net Worth Change (Cost)



■ 2012 ■ 2013 ■ 2014 ■ 2015 ■ 2016

Net Worth Change(Market)



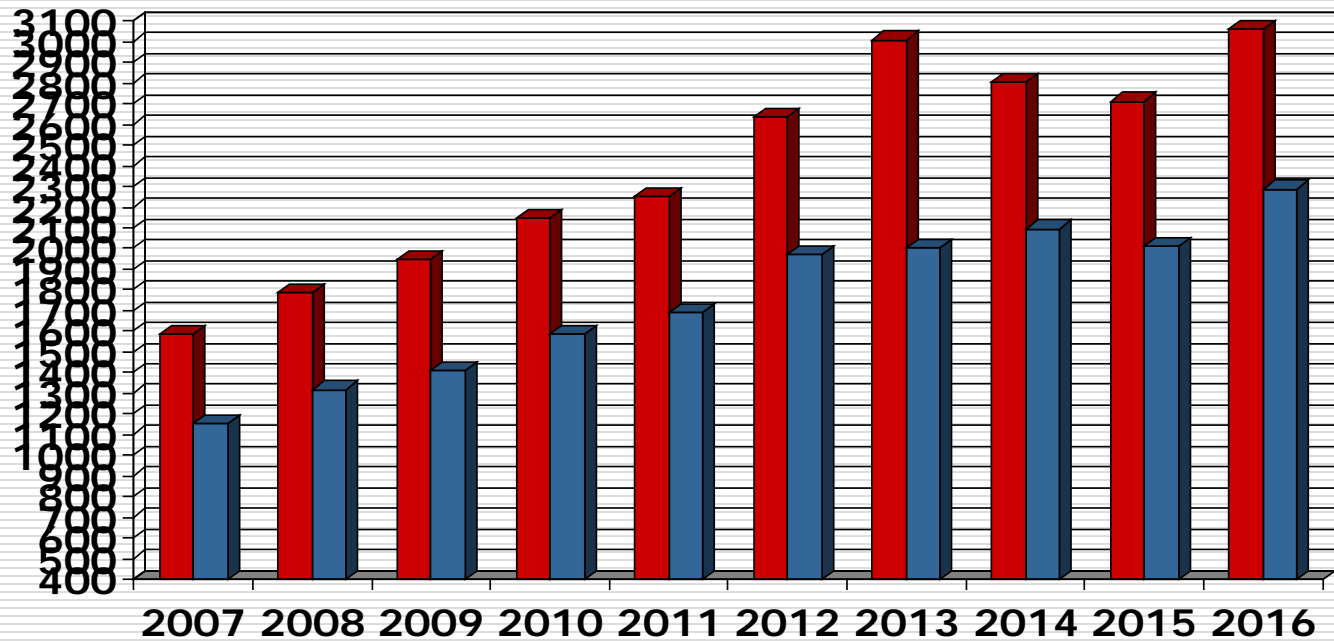
◆ Low 20% ■ Average ▲ High 20%





Year End Farm Assets

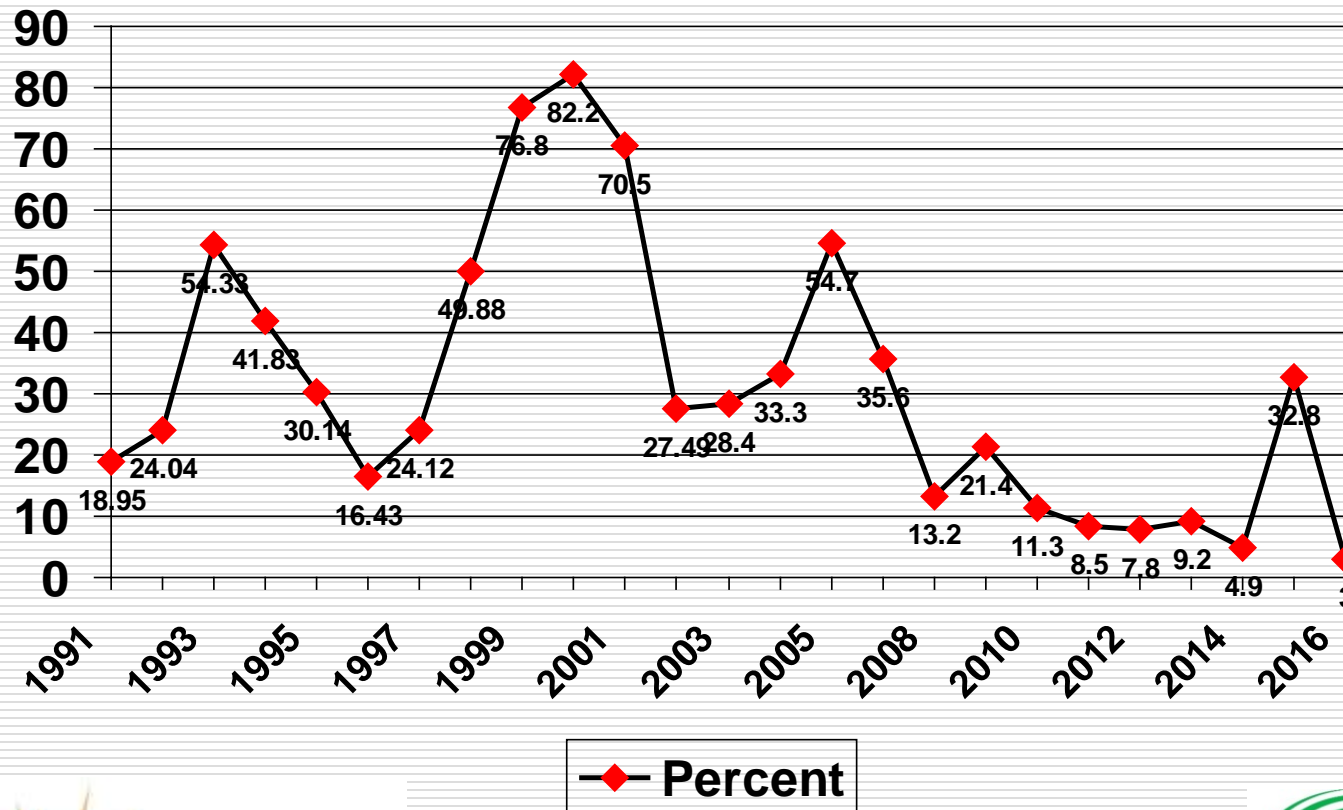
Thousands



■ Farm Assets (Market) ■ Farm Assets (Cost)



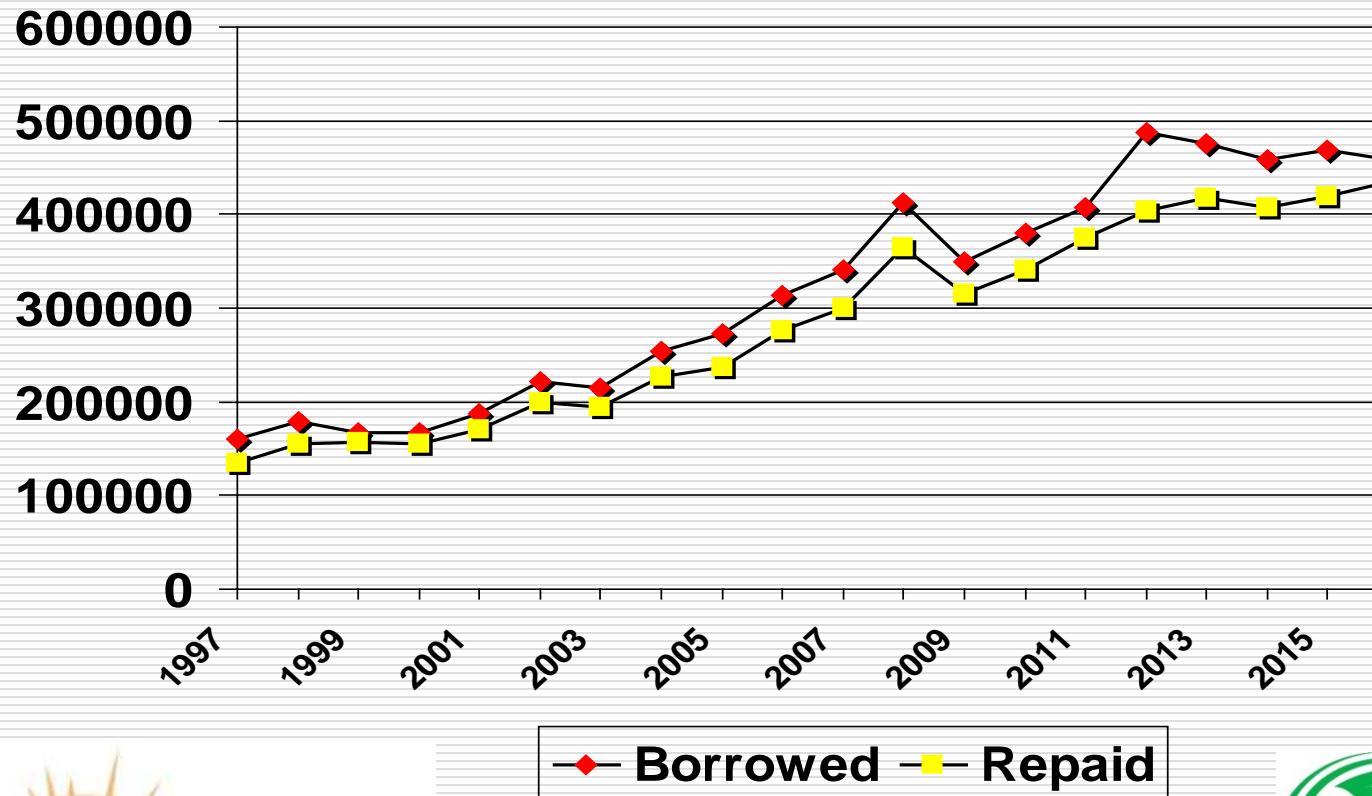
Total Government Payments As a Percent of Net Cash Farm Income



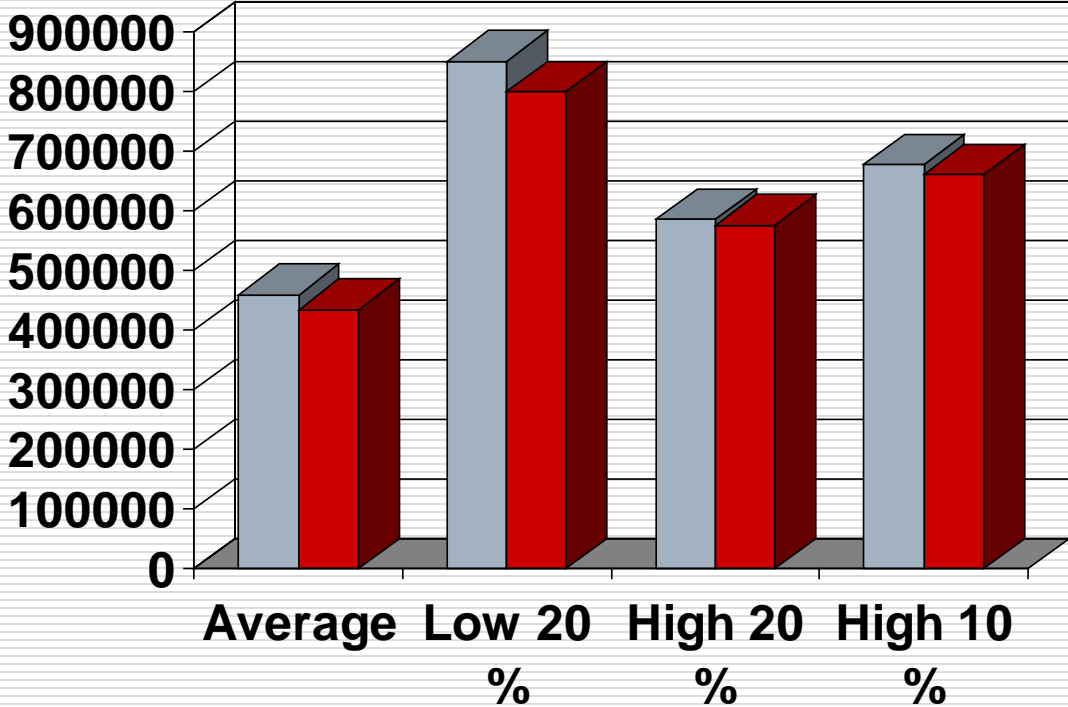
Cash Flow Analysis

Money Borrowed -vs- Debt Repaid

(Page 17)



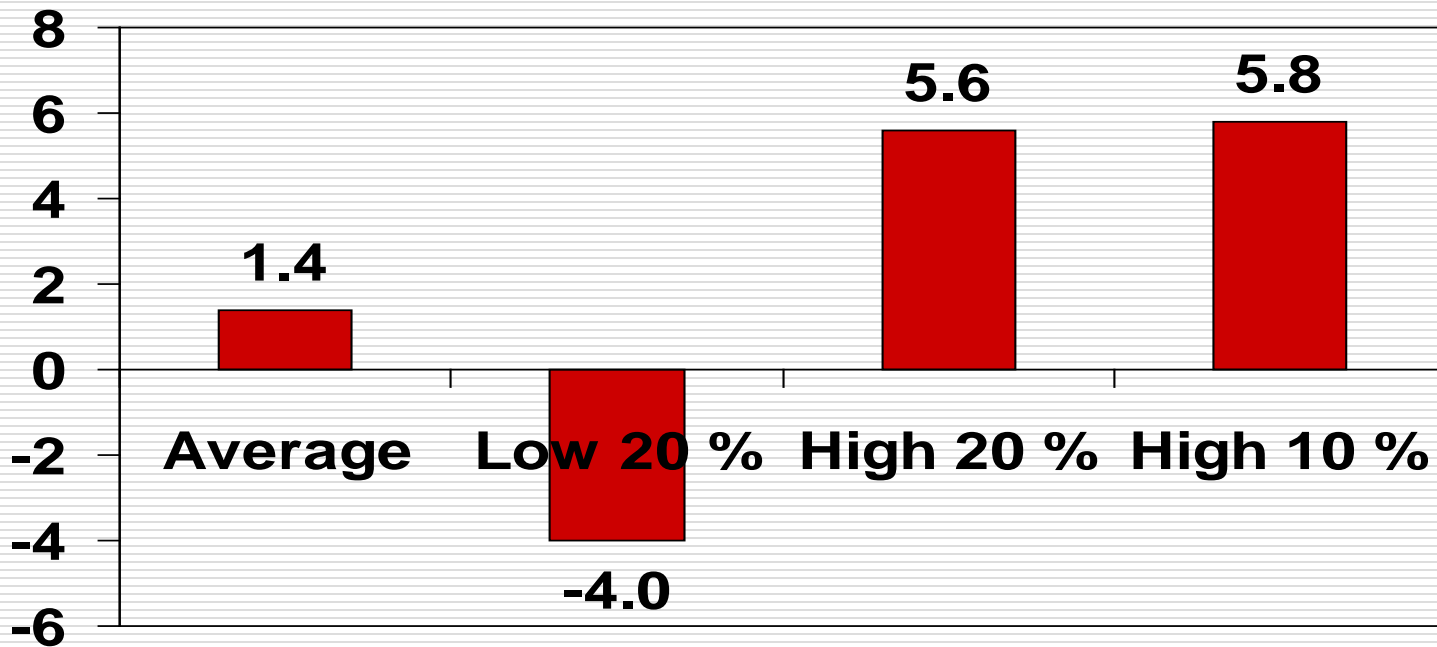
Money Borrowed vs Principal Paid



■ Money Borrowed ■ Money Paid Back



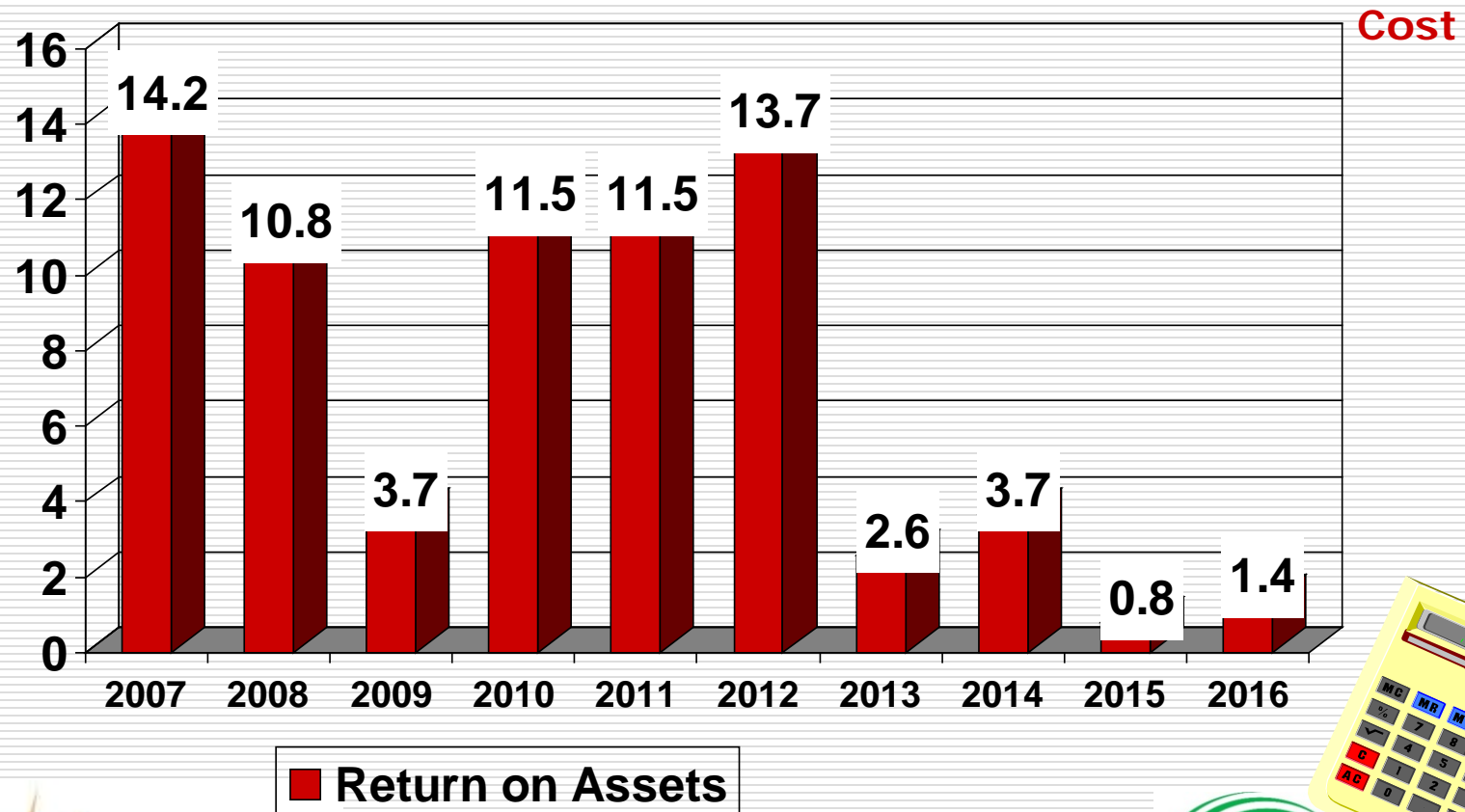
Rate of Return on Farm Assets 2016 (ROA) Cost



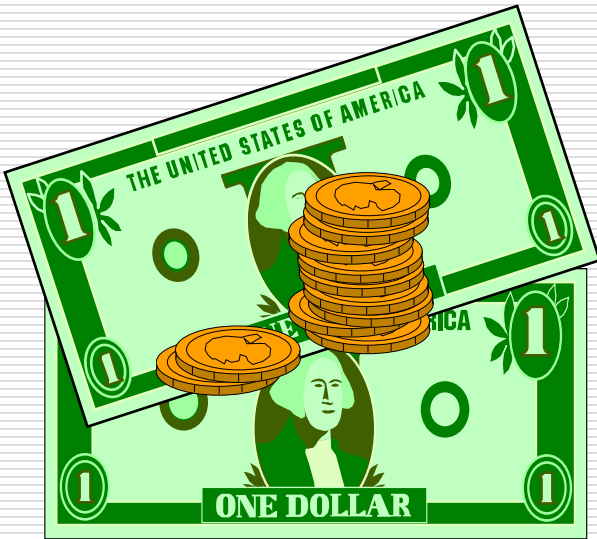
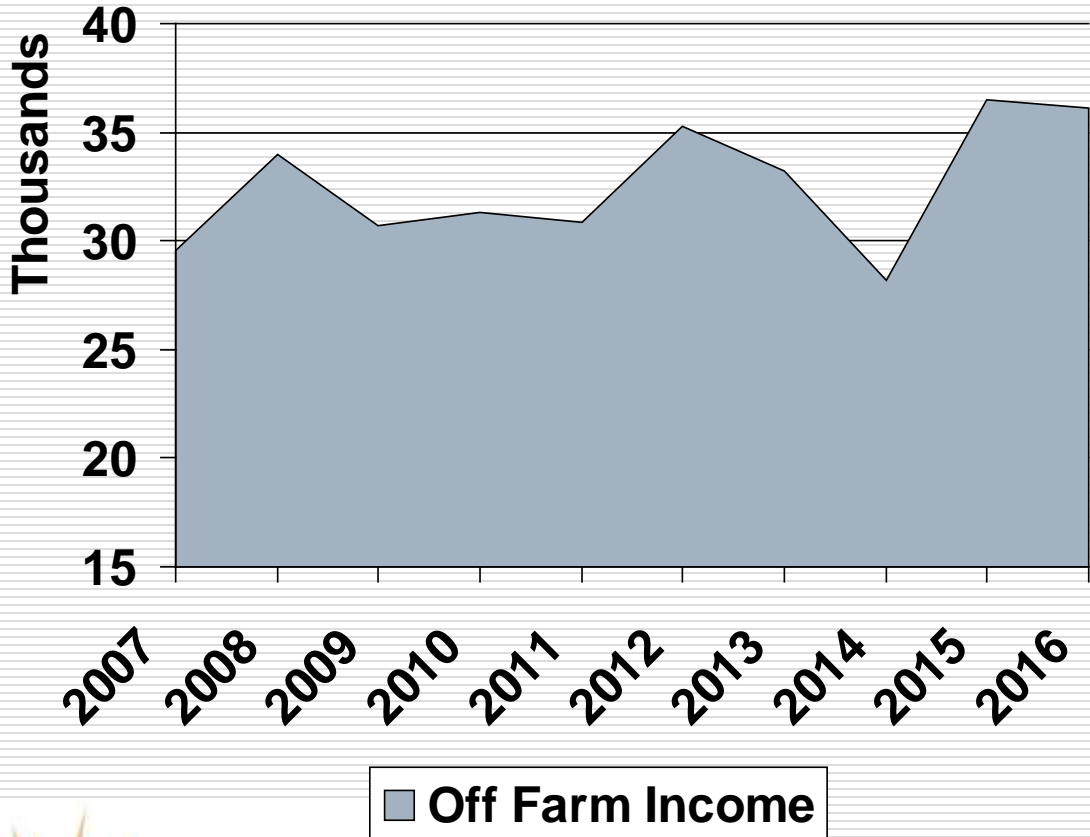
■ Rate of return cost

Profitability Analysis

Rate of Return on Assets

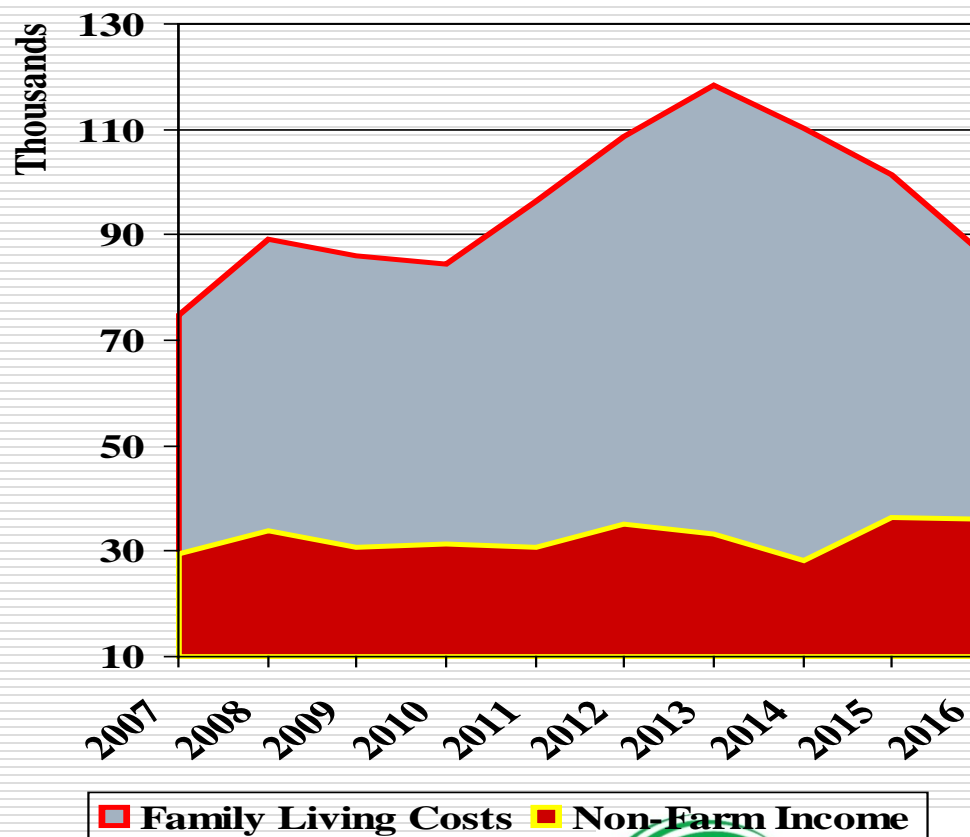


Non-farm Income

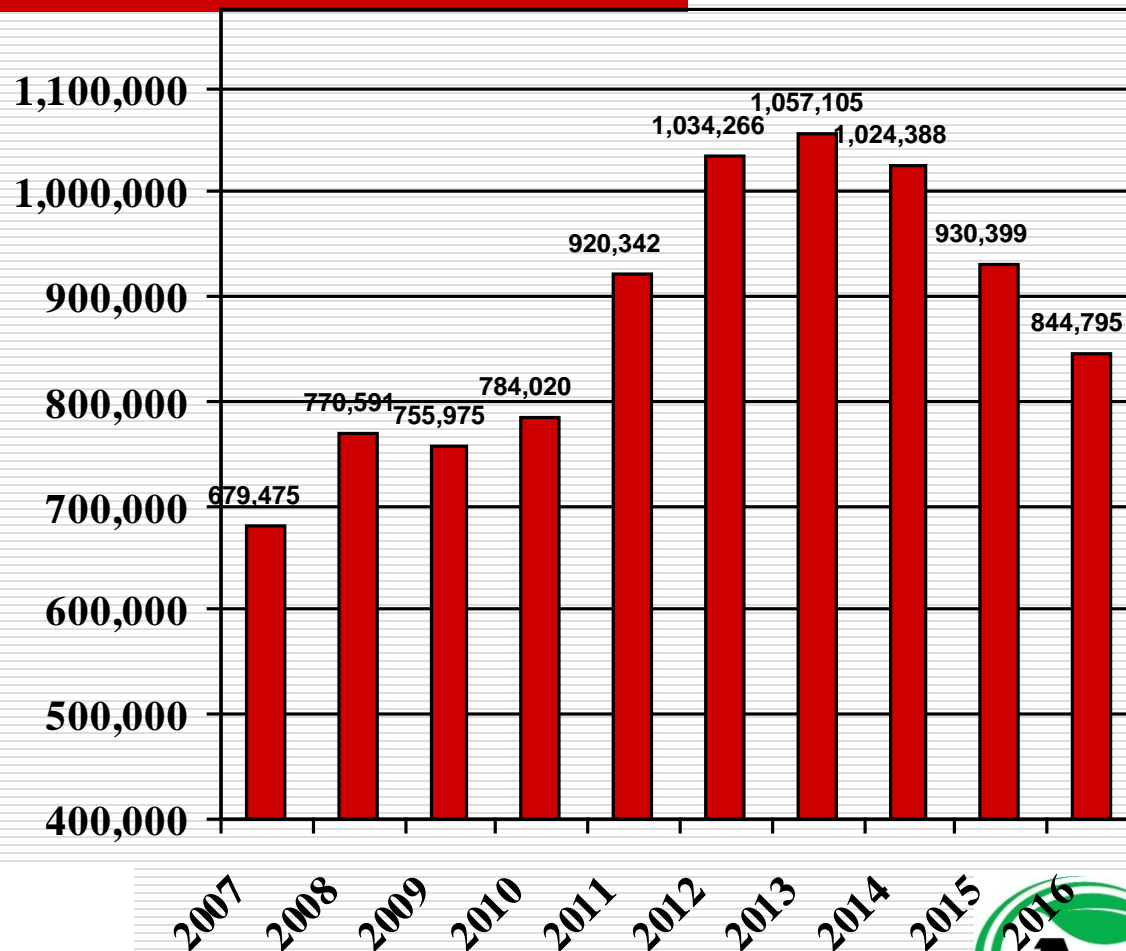


Non-Farm Income & Family Living

- Family living has trended down over the past few years
- In many cases, the employee benefits of off-farm employment adds significant value
- Non-farm income pays for more than half of household and personal spending



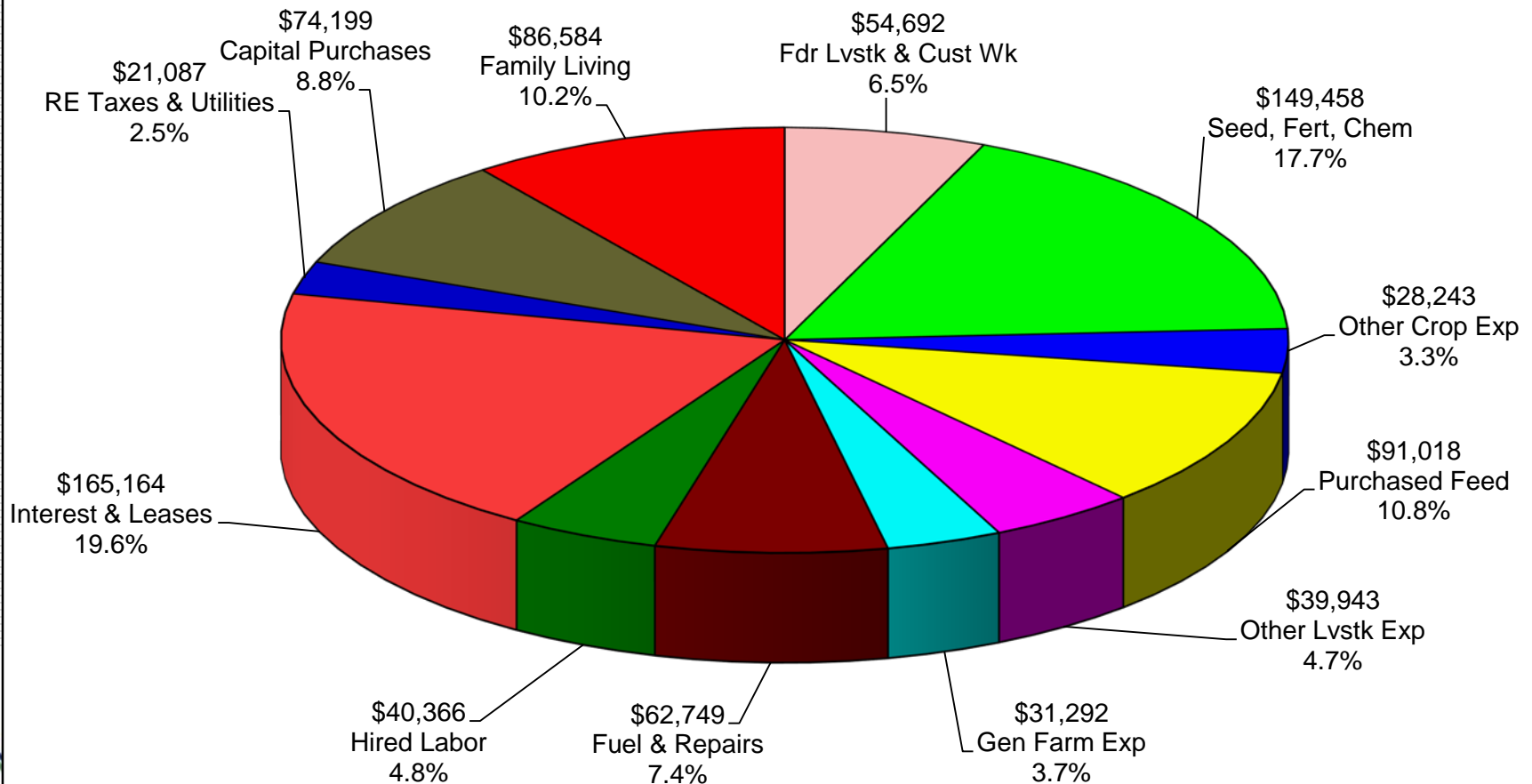
Money Spent by the Average Farmer South of I 94 in Minnesota



Farm & Family Spending

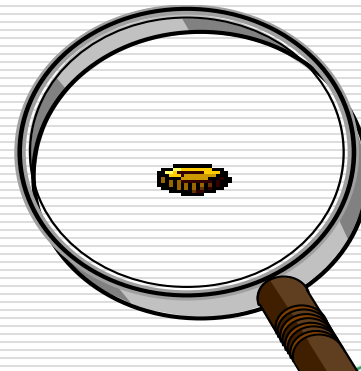
Where did the \$844,795 go in 2016?

Each farmer, on average, spent \$844,795 in the Greater Community in 2016



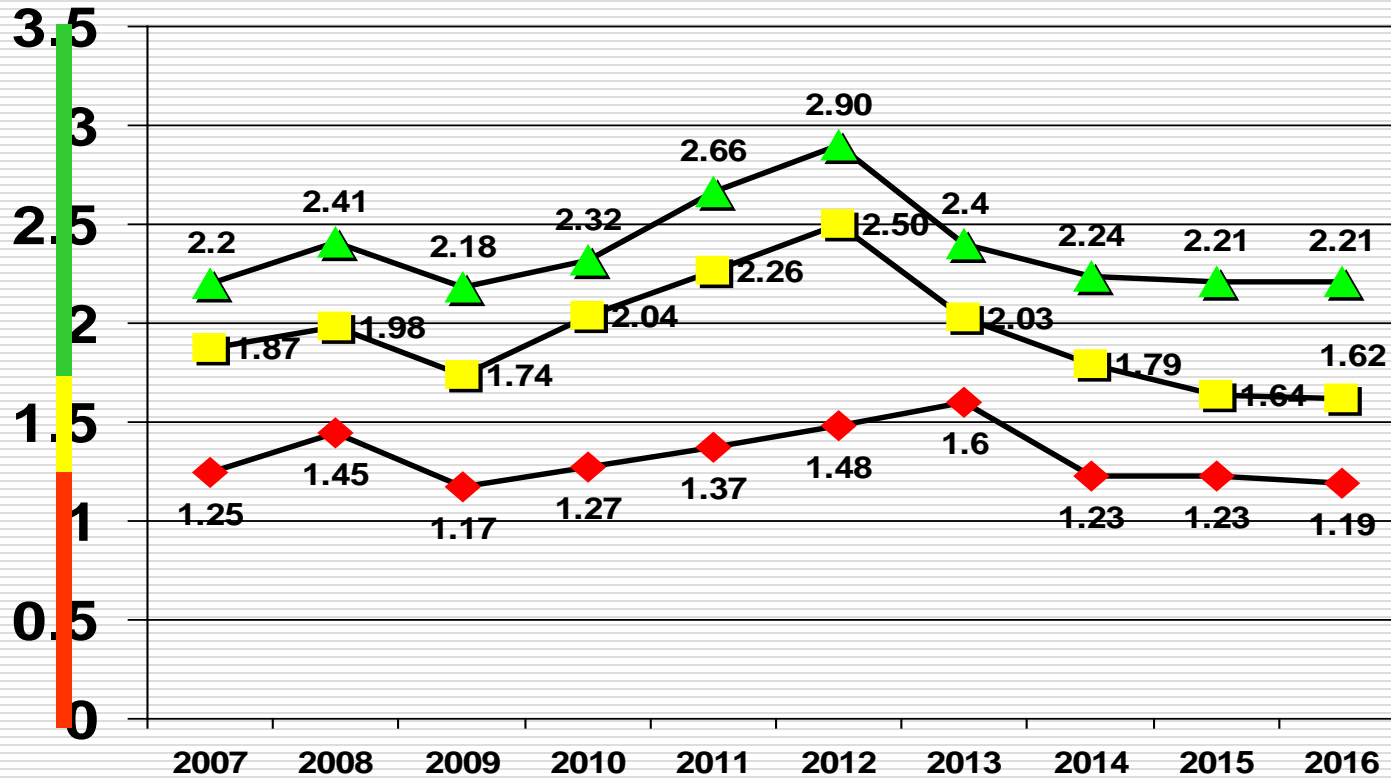
Farm Financial Standards

- The American Bankers Association has endorsed the use of sixteen “standards” to rate business performance (see page 20).
- These standards are measures of:
 - Liquidity
 - Solvency
 - Profitability
 - Repayment Capacity
 - Financial Efficiency



Current Ratio (Liquidity)

Current farm assets / current farm liabilities

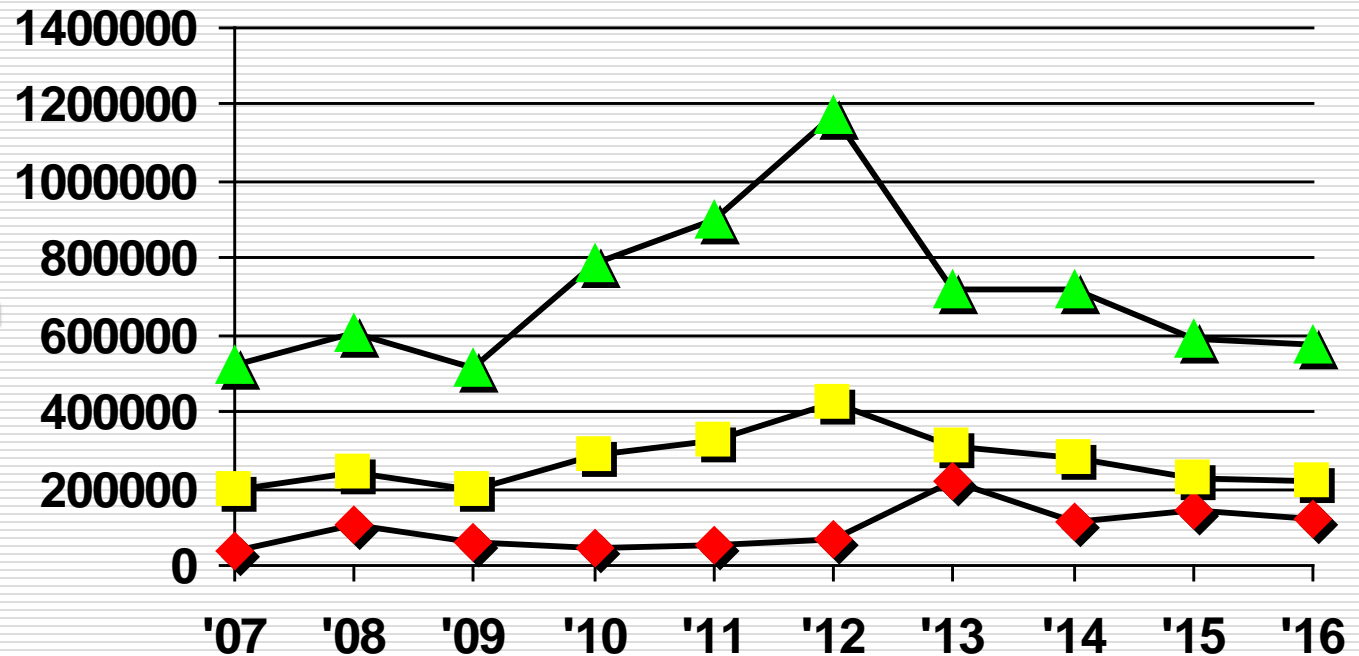


—◆— Low 20% —■— Average —▲— High 20%

Working Capital (Liquidity)

Current farm assets minus current farm liabilities

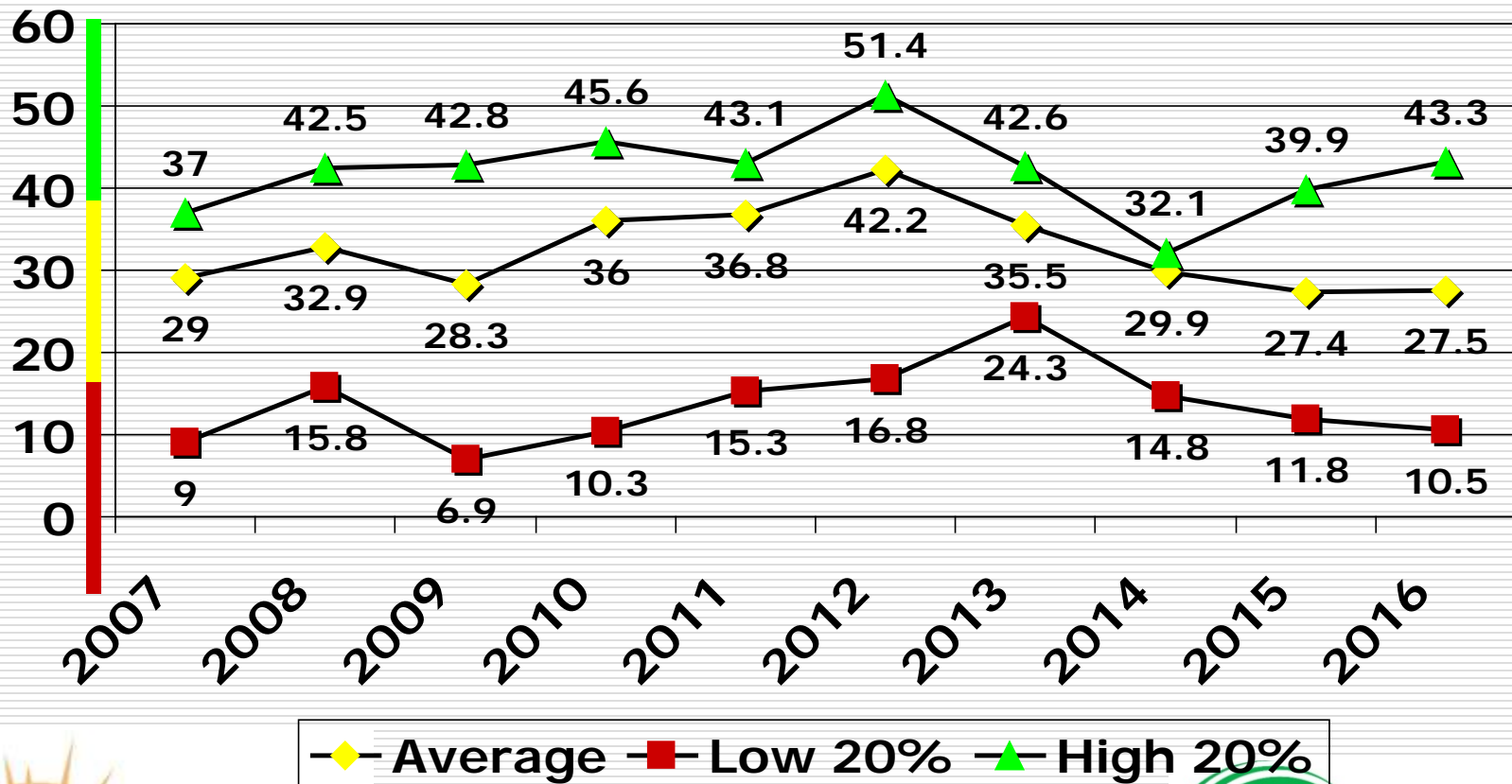
- Green
50% of Cash Operating exp.
- Yellow
20 to 50 % of Cash Operating exp.
- Red
< 20 % of Cash Operating exp.



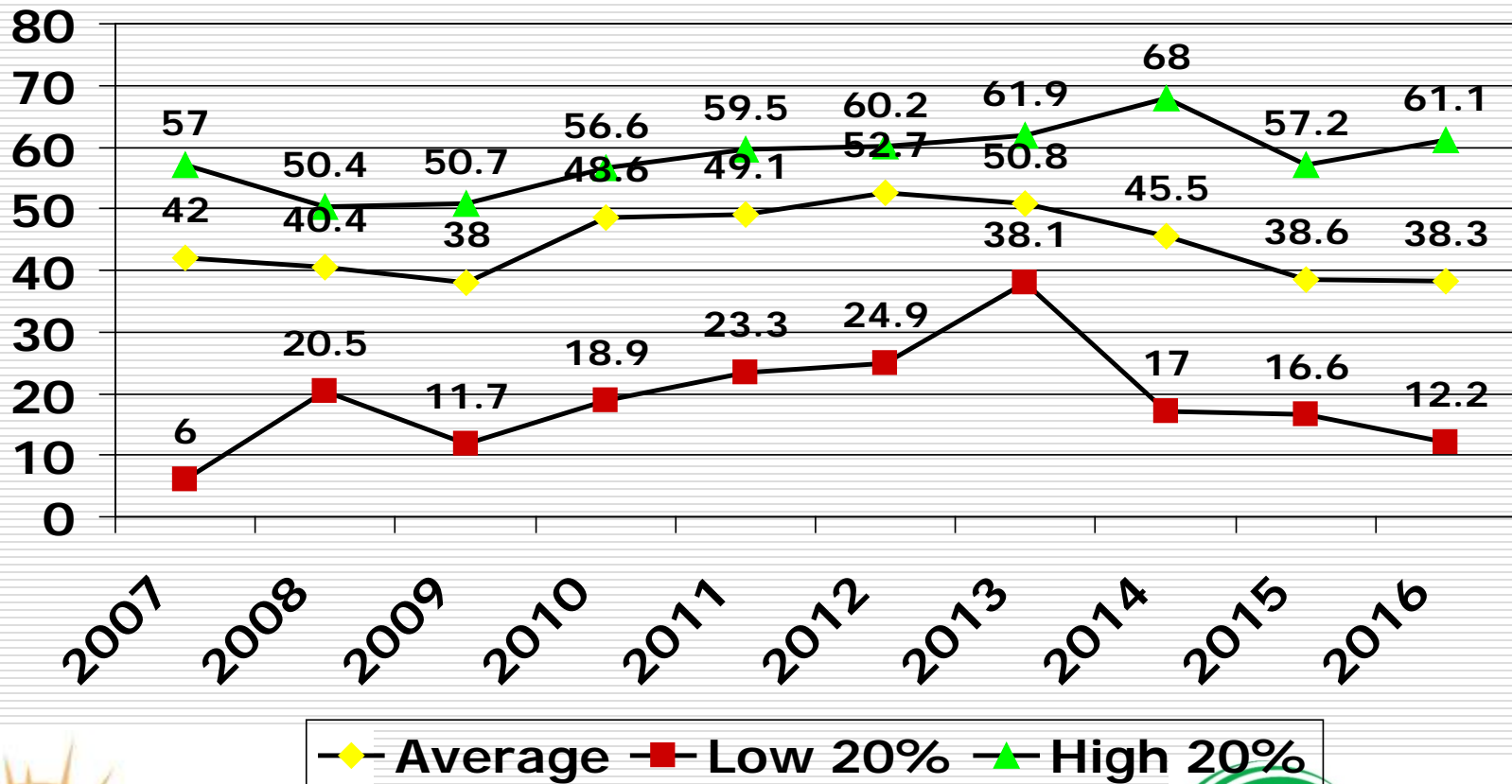
—◆— Low 20 % —■— Average —▲— High 20 %



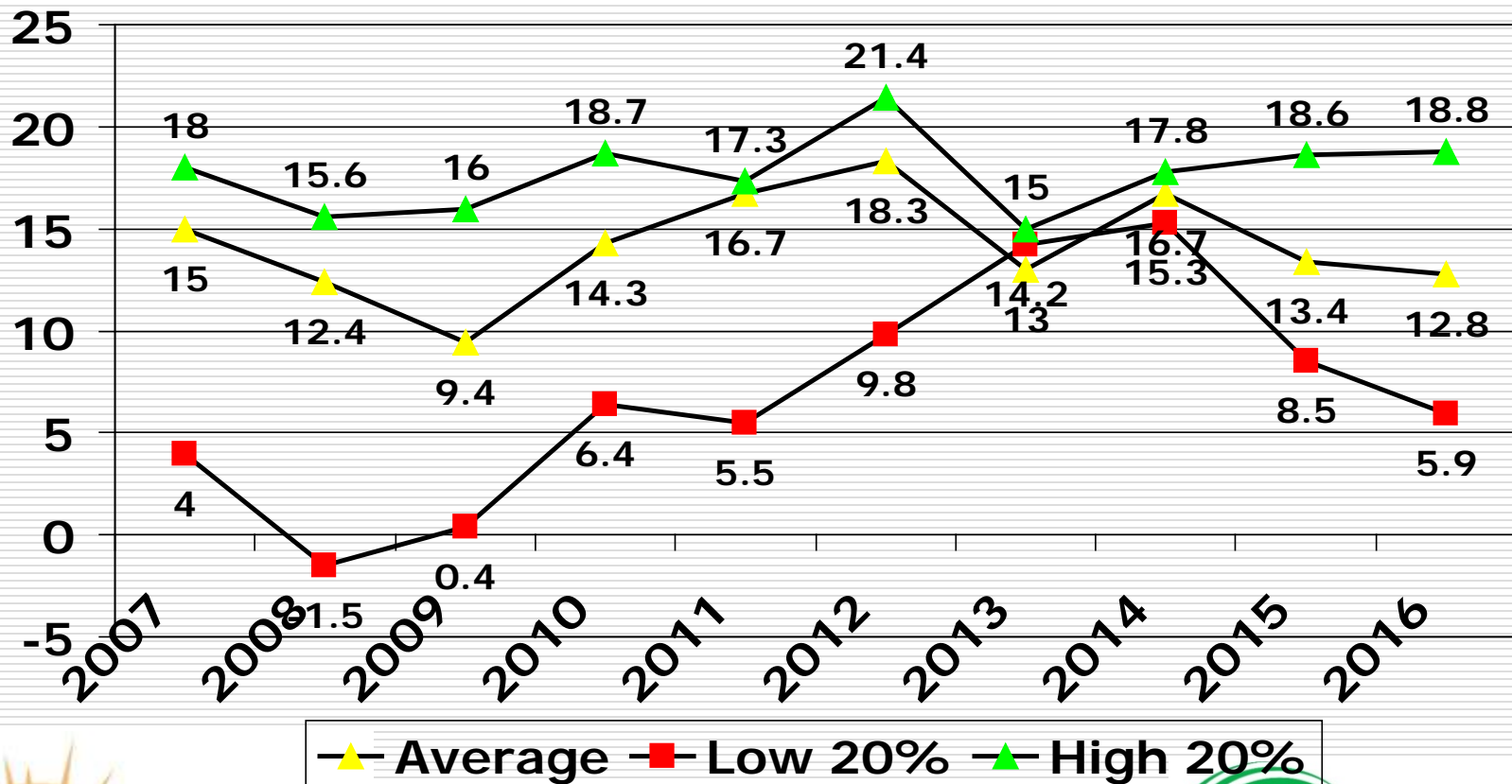
Working Capital to Gross Income All Farms



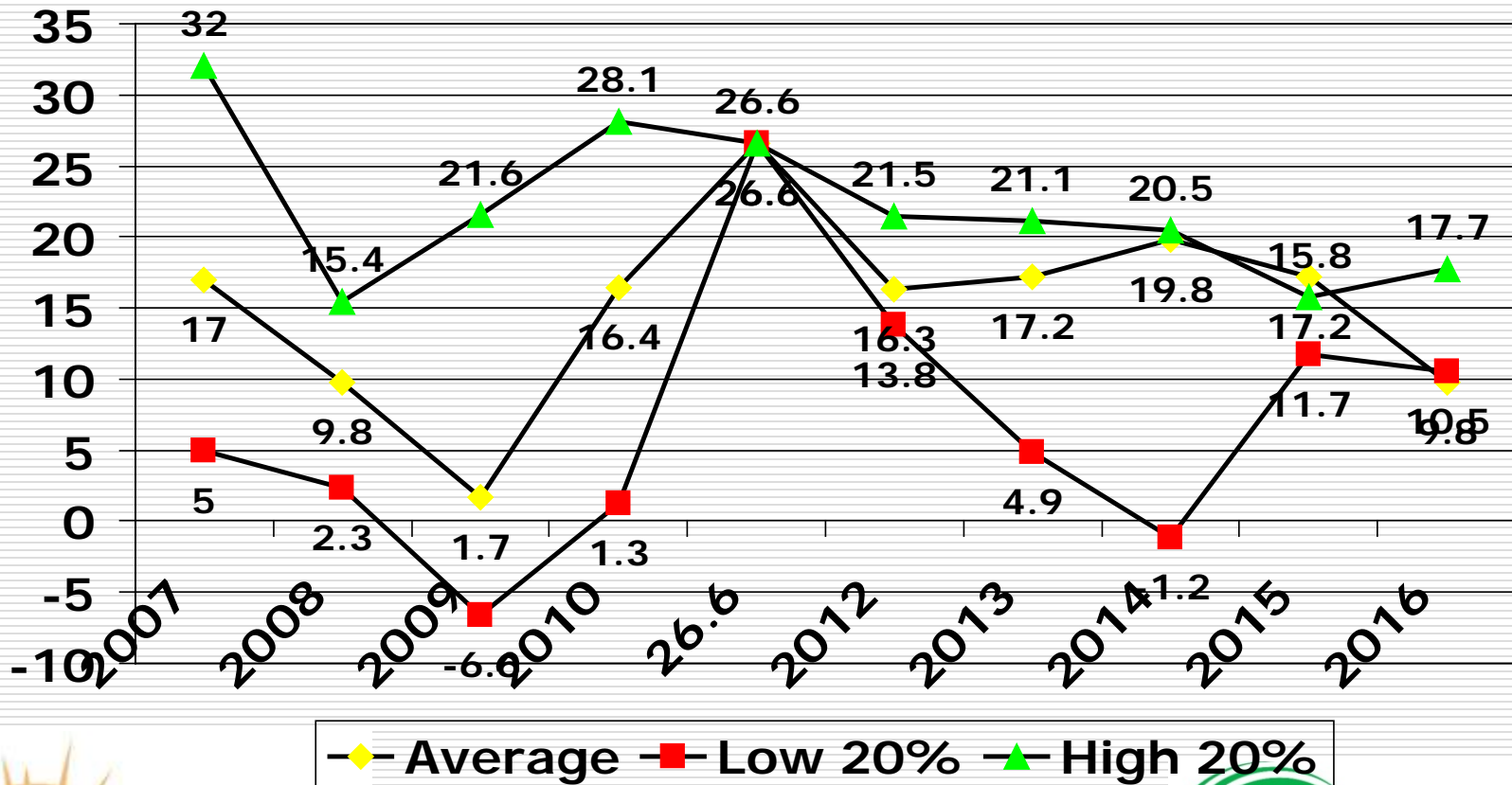
Working Capital to Gross Income Crop Farms



Working Capital to Gross Income Dairy

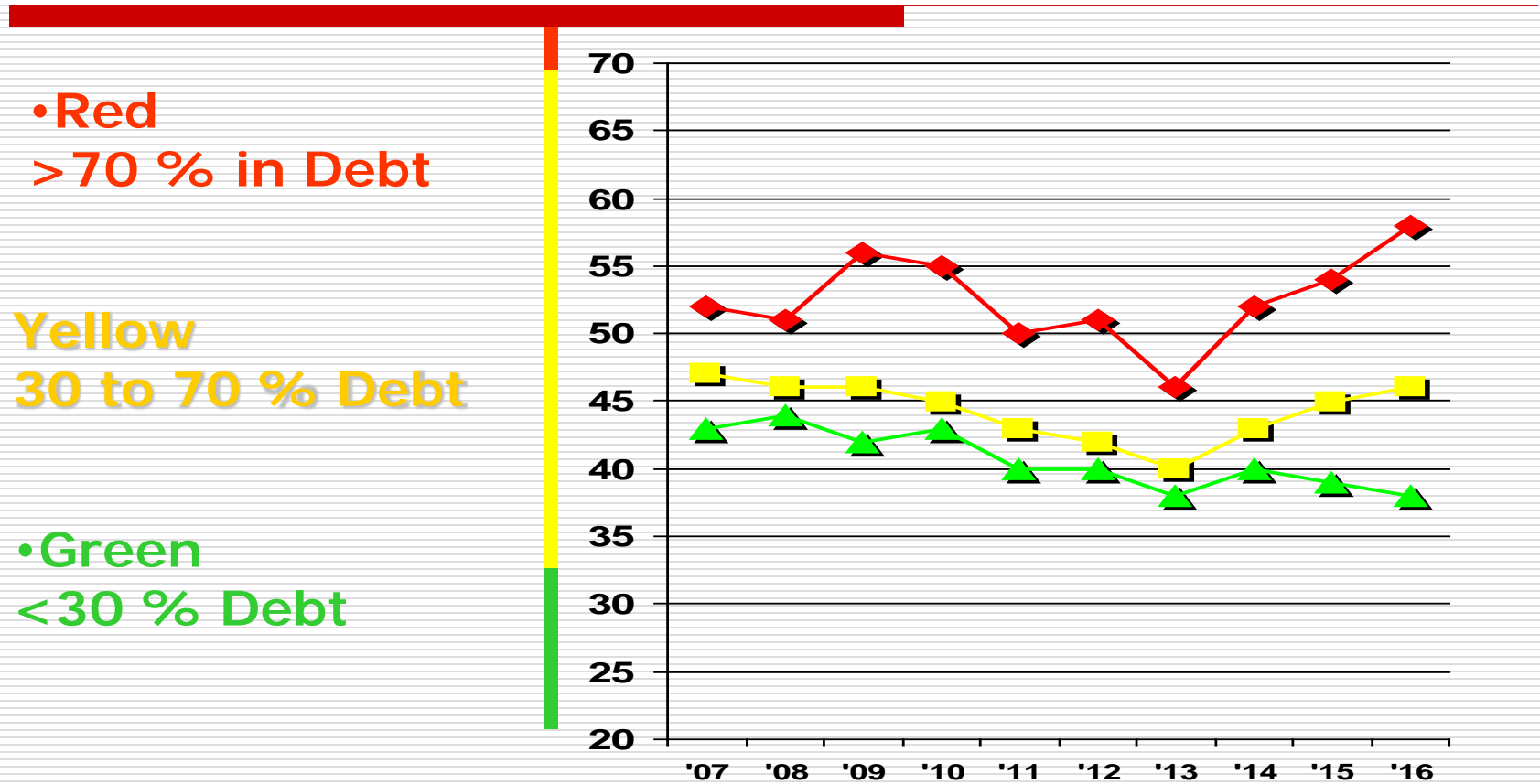


Working Capital to Gross Income Hog Farms



Debt to Asset Ratio (Solvency)

Total farm liabilities / total farm assets



Debt to Equity Ratio (Solvency)

Total farm liabilities / total farm equity

Red

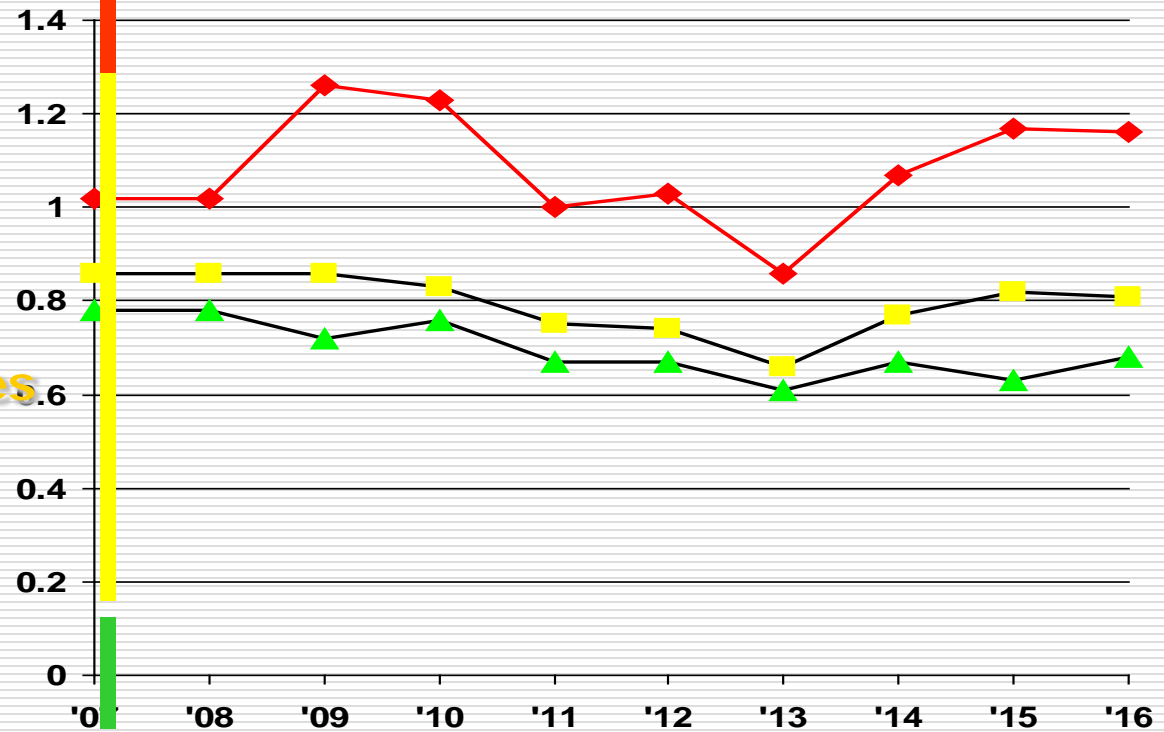
> 230 % Liabilities

Yellow

< 42–230 % Liabilities

Green

< 42 % Liabilities



◆ Low 20 % ■ Average ▲ High 20 %



Rate of Return on Farm Assets (Profitability)

[Net farm income from operations + farm interest expense minus value of unpaid labor & mgmt] / avg. farm assets

Mostly owned

> 5 % Green

1 % to 5 % Yellow

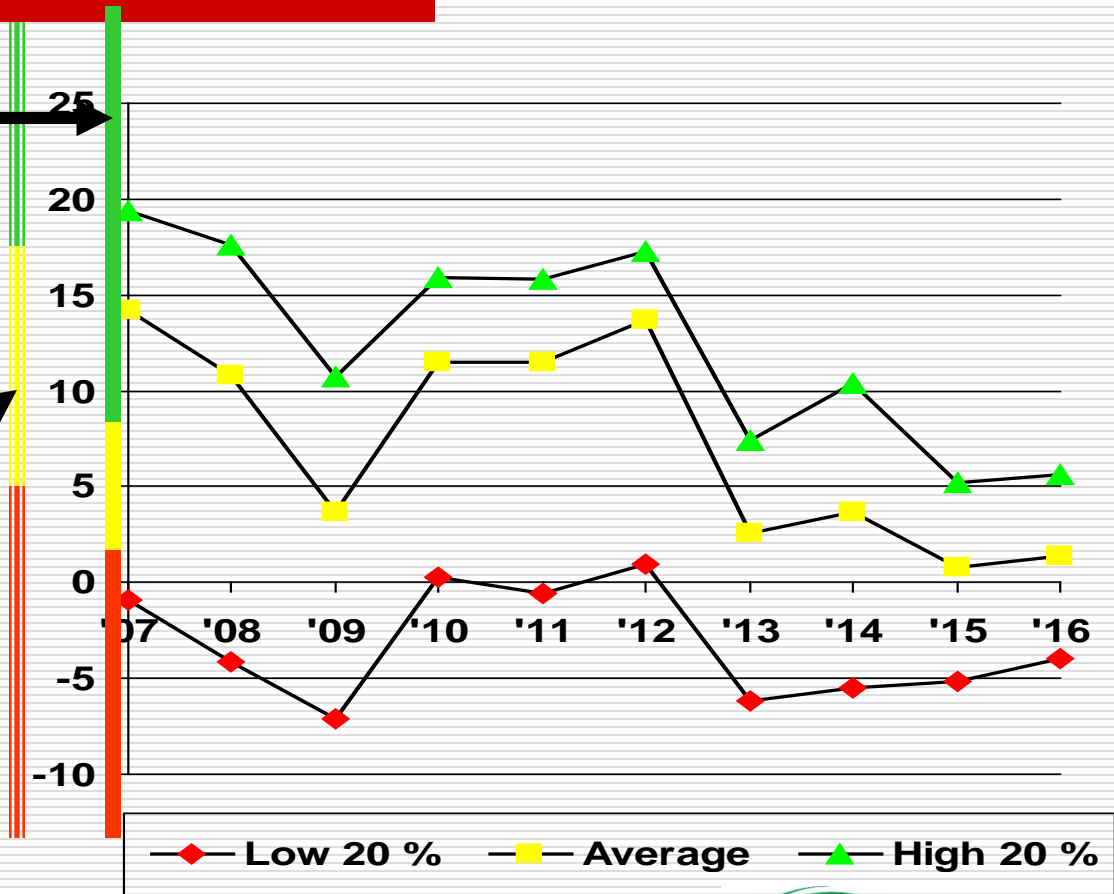
< 1 % Red

Mostly Rented/Leased

> 12 % Green

3 % to 12 % Yellow

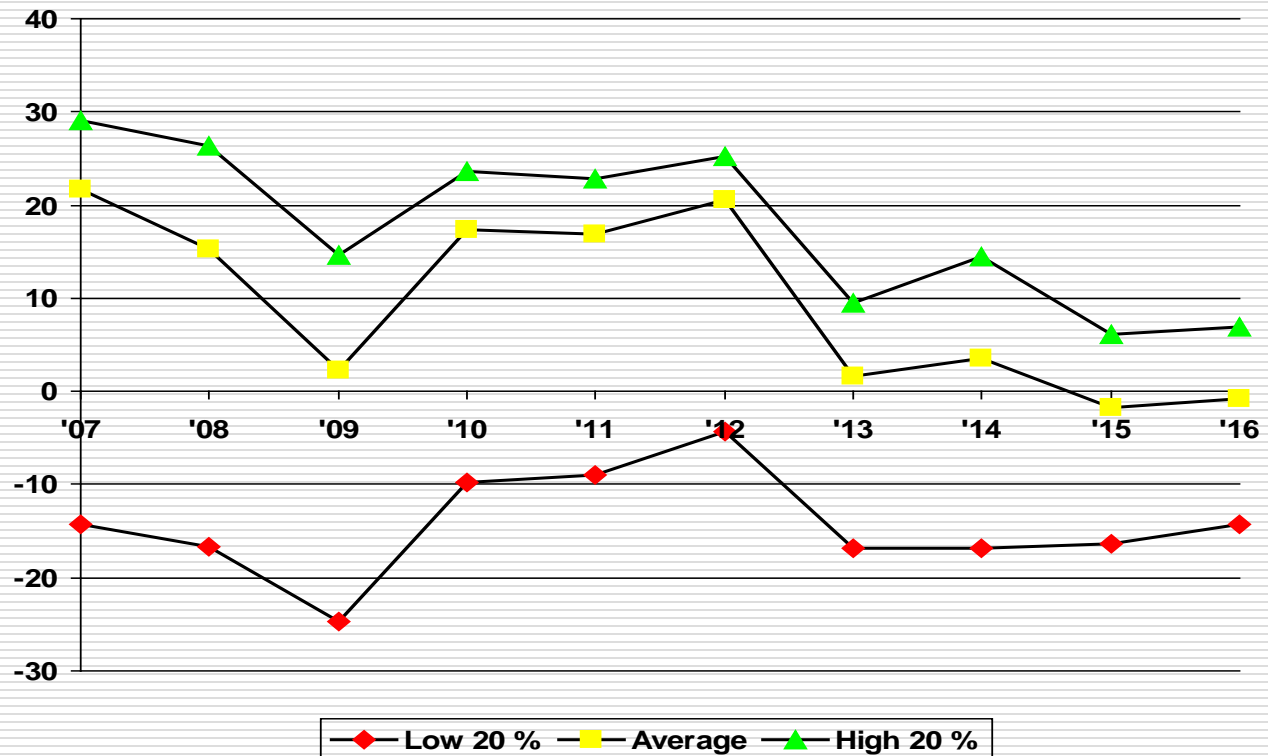
< 3 % Red



Rate of Return on Farm Equity (Profitability)

[Net farm income from operations minus value of unpaid labor & mgmt] / average farm equity

Watch your trend information to be sure you are heading in the desired direction.



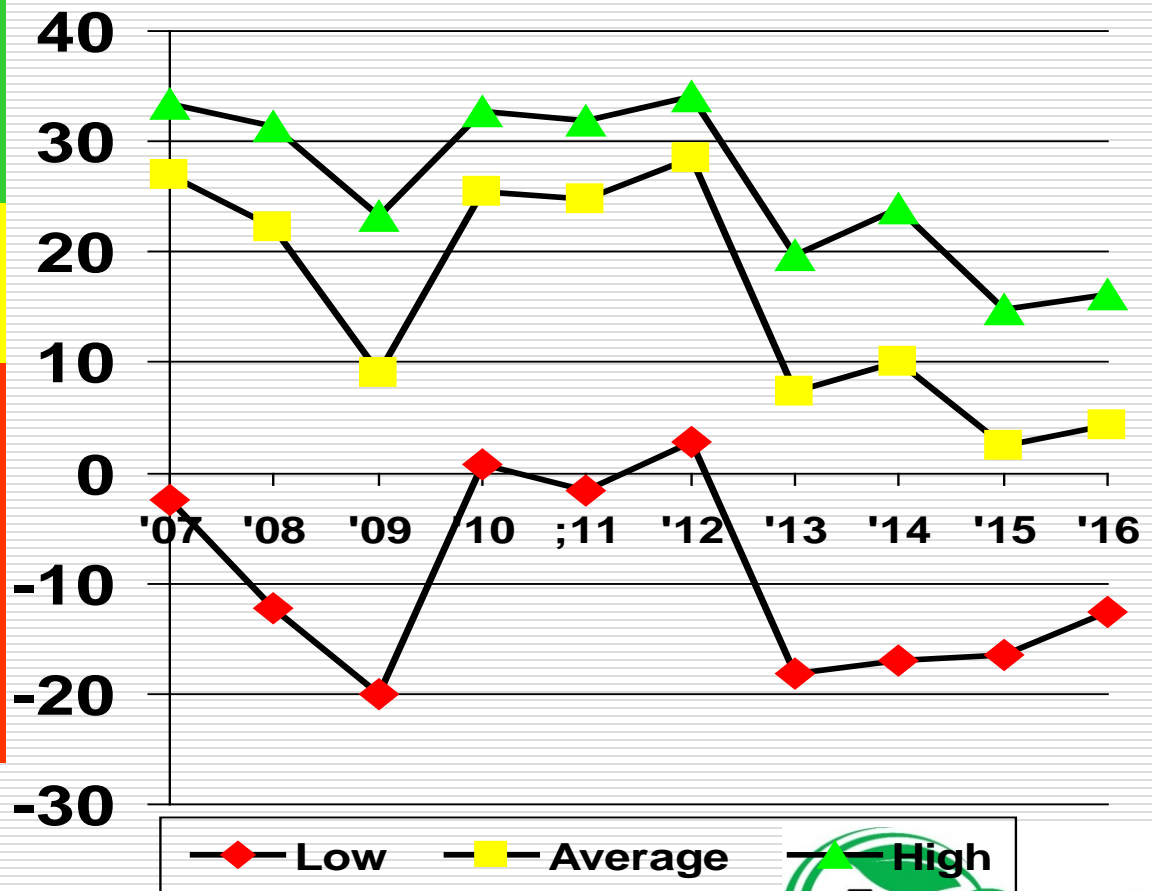
Operating Profit Margin Ratio (Profitability)

[Net farm income from operations + farm interest expense minus value of unpaid labor & mgmt] / gross revenue

>25 % Green

10 % to 25 %
Yellow

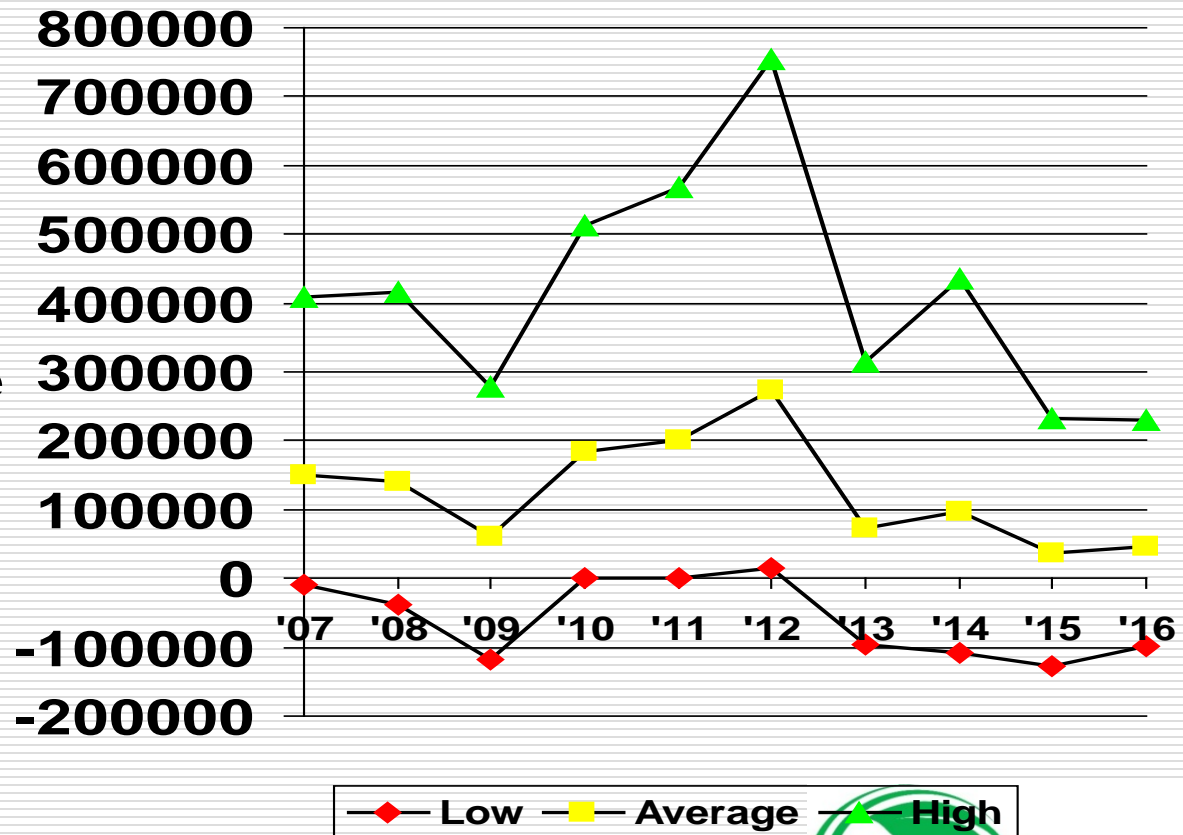
<10 % Red



Net Farm Income (Profitability)

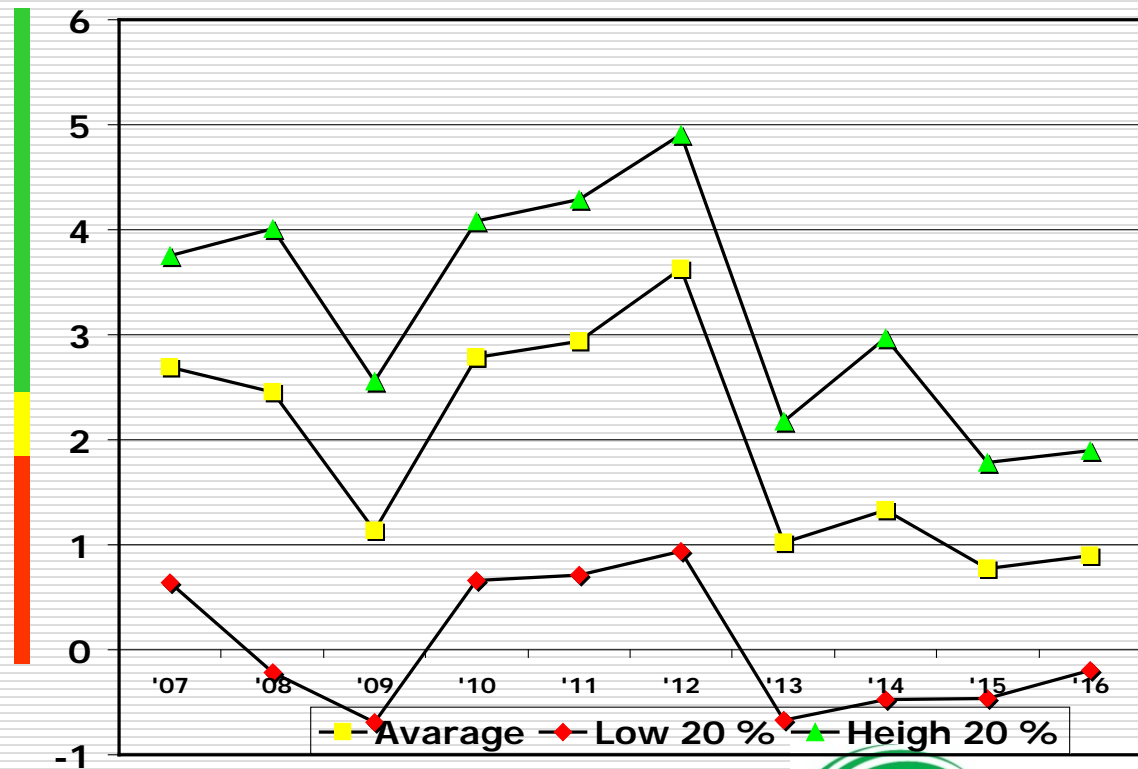
[Farm revenues minus farm expenses] + gain or loss on the sale of farm capital assets

Watch your trends closely. Trends will be variable because of the cyclical nature of agriculture



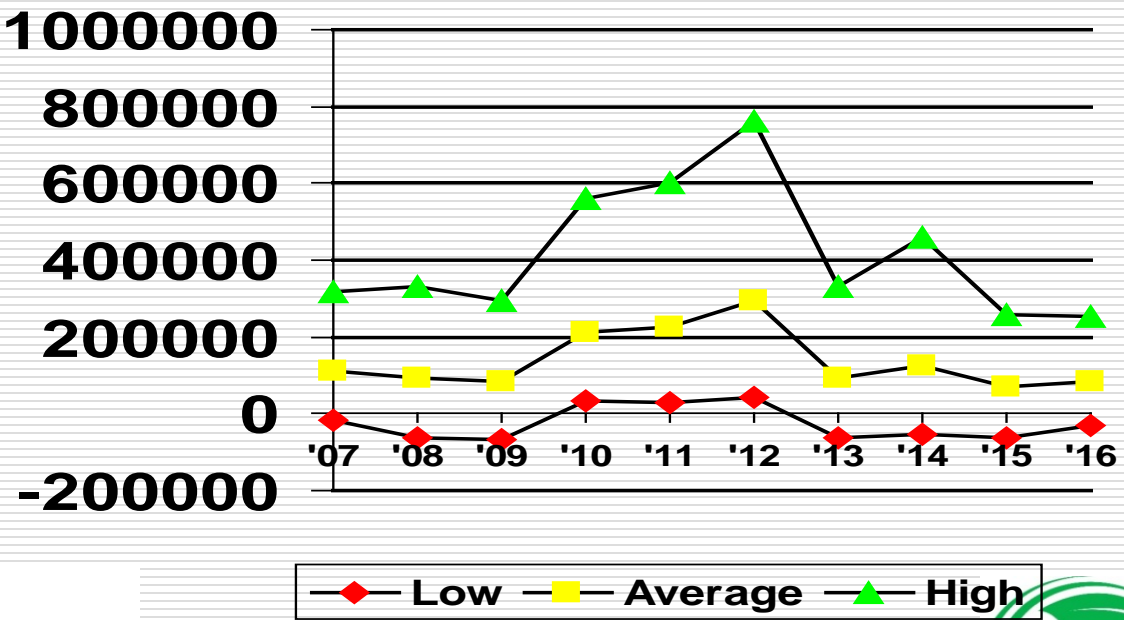
Term Debt Coverage Ratio

>150 % Green
110 to 150 yellow
<110 % Red

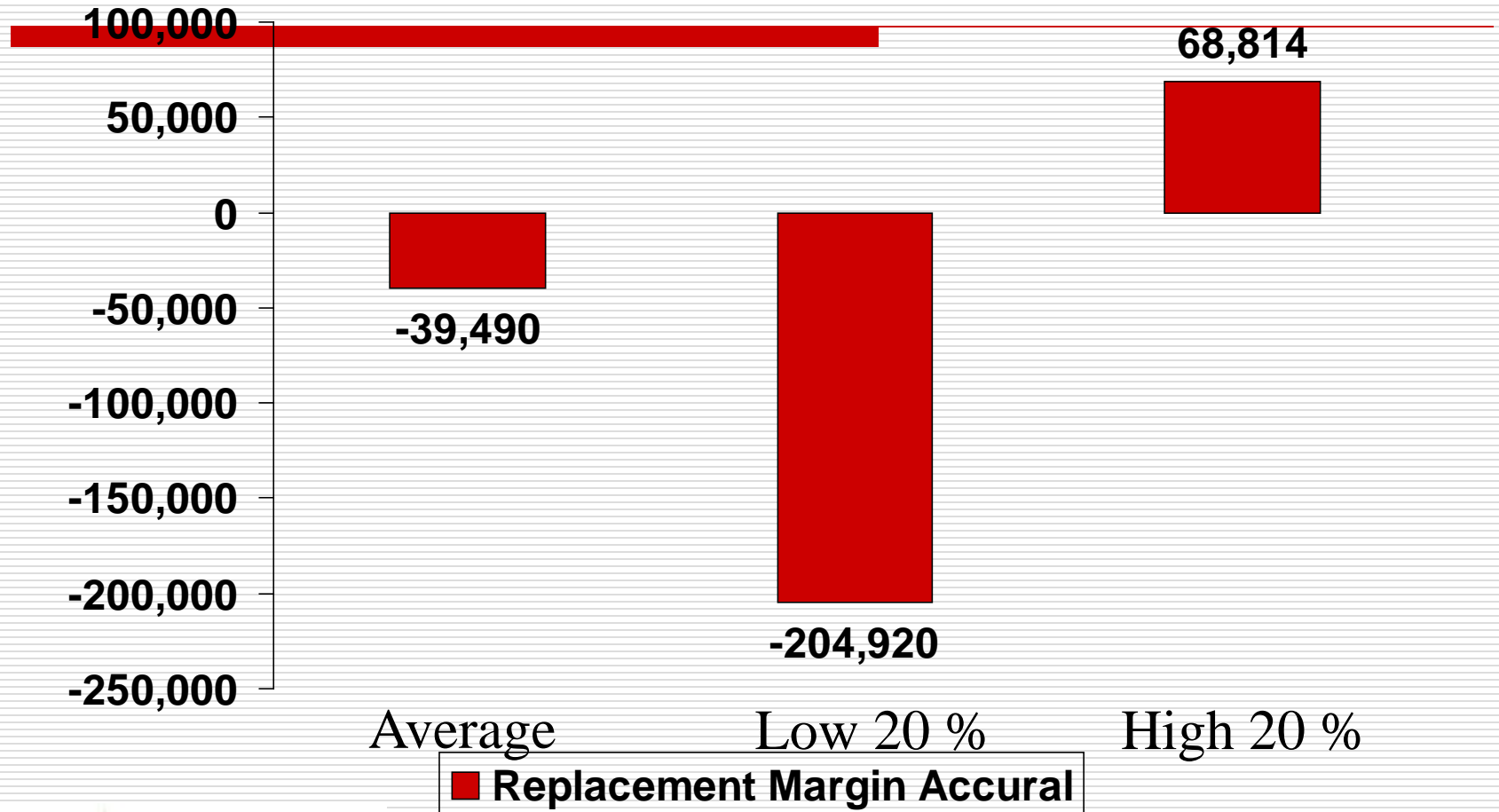


Capital Replacement & Term Debt Repayment Margin (Repayment Capacity)

Net farm income from operations + non-farm income + depreciation minus income tax minus family living minus old operating debt payments minus principal payments on current term debt minus principal payments on capital leases minus payments on personal liabilities

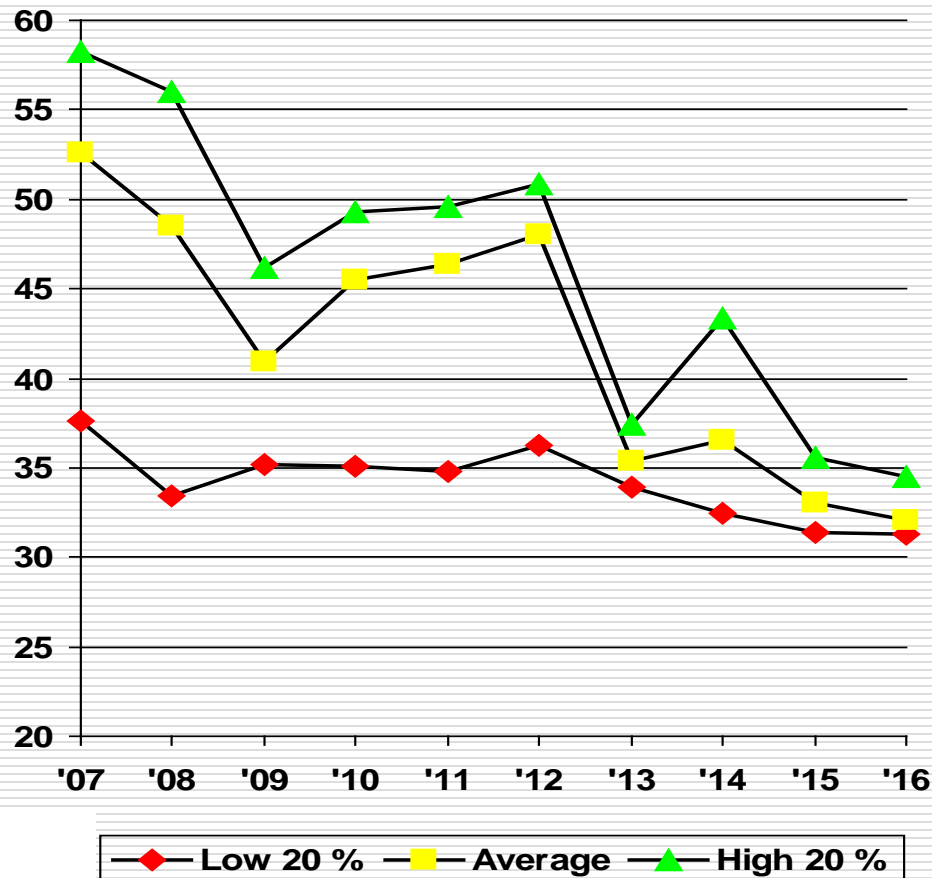


Capital Replacement Margin 2016

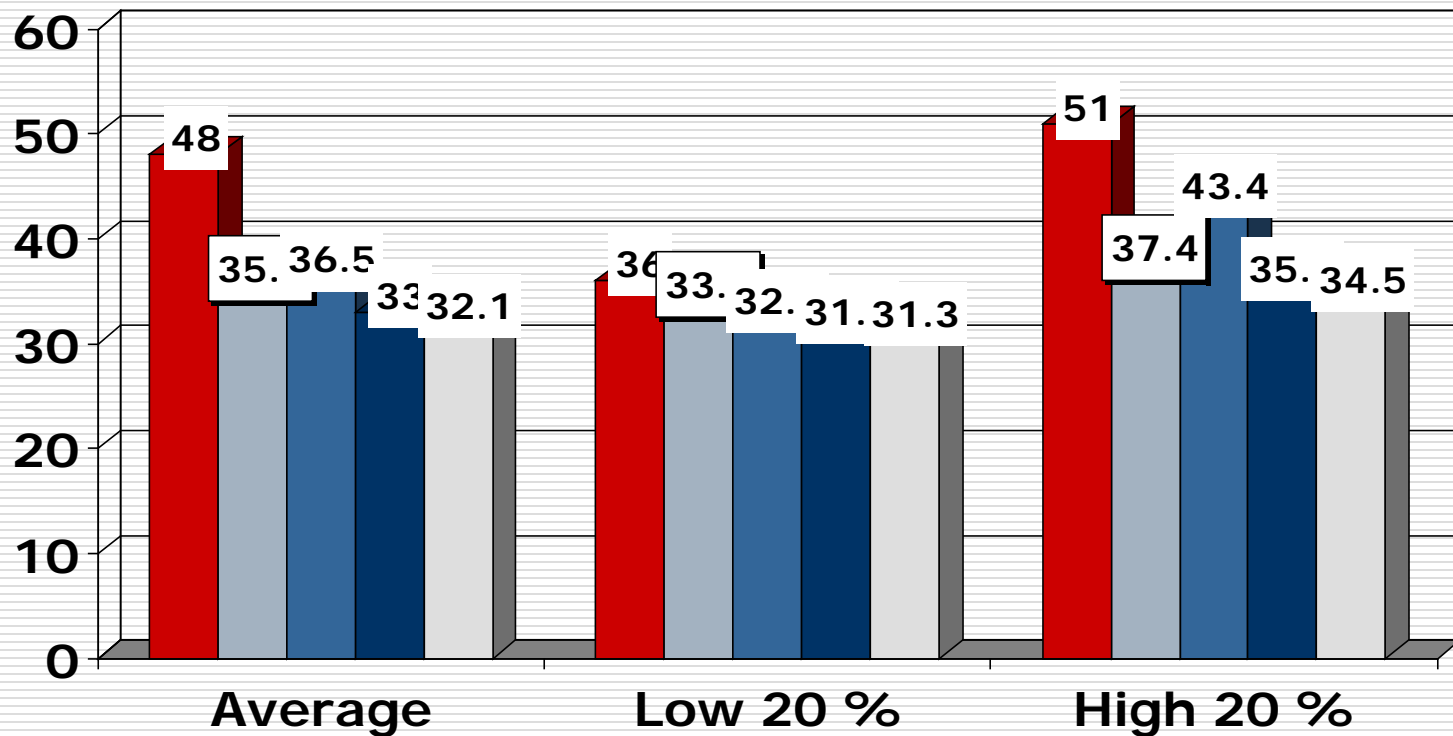


Asset Turnover Rate (Financial Efficiency)

Gross revenues / average total farm assets



Asset Turnover Rate (Cost)



■ 2012 ■ 2013 ■ 2014 ■ 2015 ■ 2016

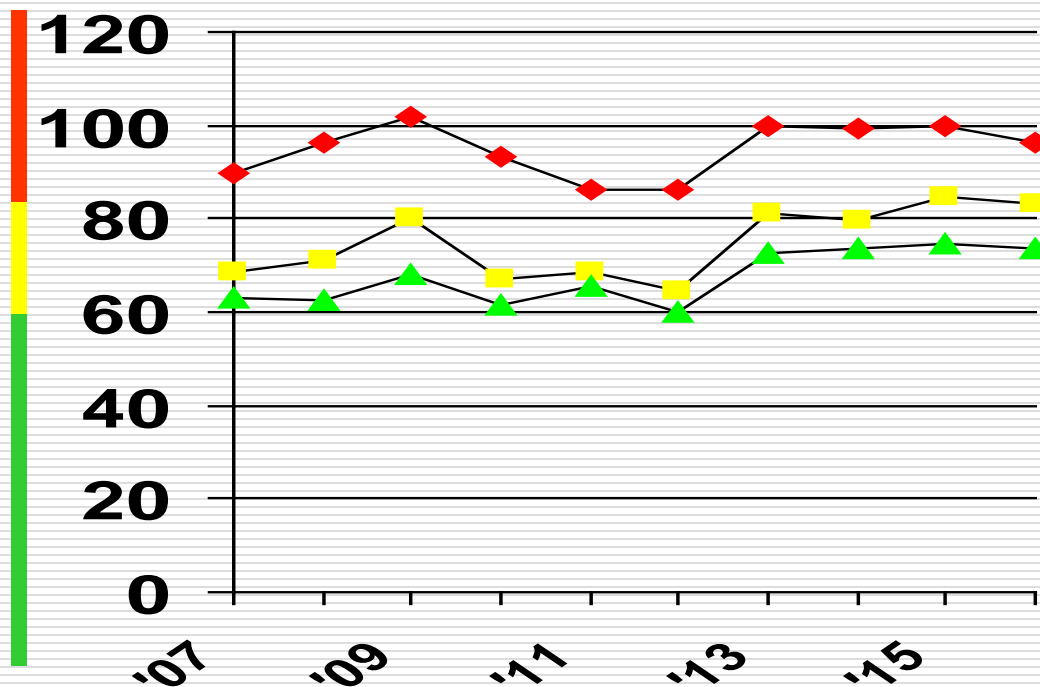
Operating Expense Ratio (Financial Efficiency)

[Total operating expenses minus depreciation] / gross revenue

>85 % is Red

75 % to 85 % Yellow

<65 % is Green

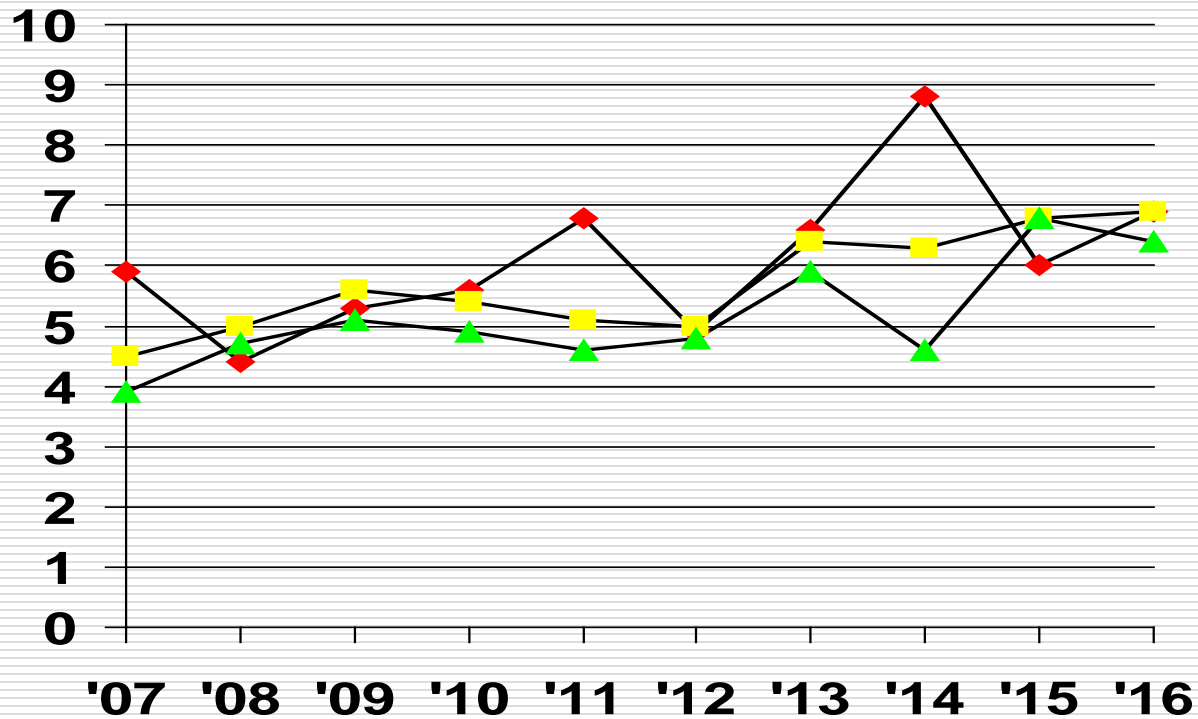


—◆— Low —■— Average —▲— High



Depreciation Expense Ratio (Financial Efficiency)

Depreciation expense / gross revenue



—◆— Low —■— Average —▲— High

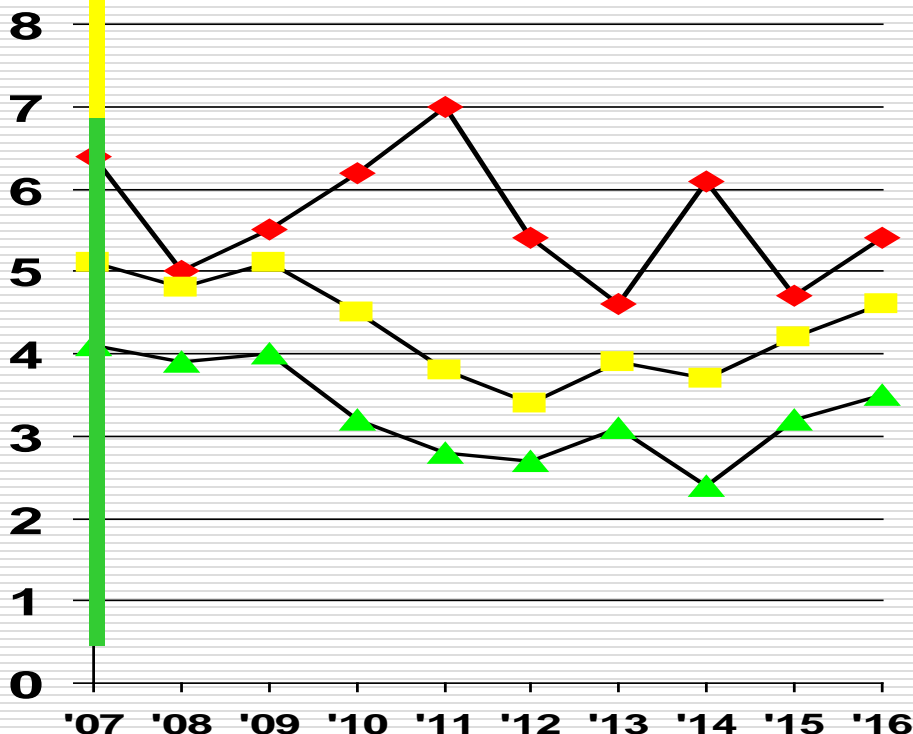
Interest Expense Ratio (Financial Efficiency)

Total farm interest expense / gross revenue

>20 % Red

12 % to 20 % Yellow

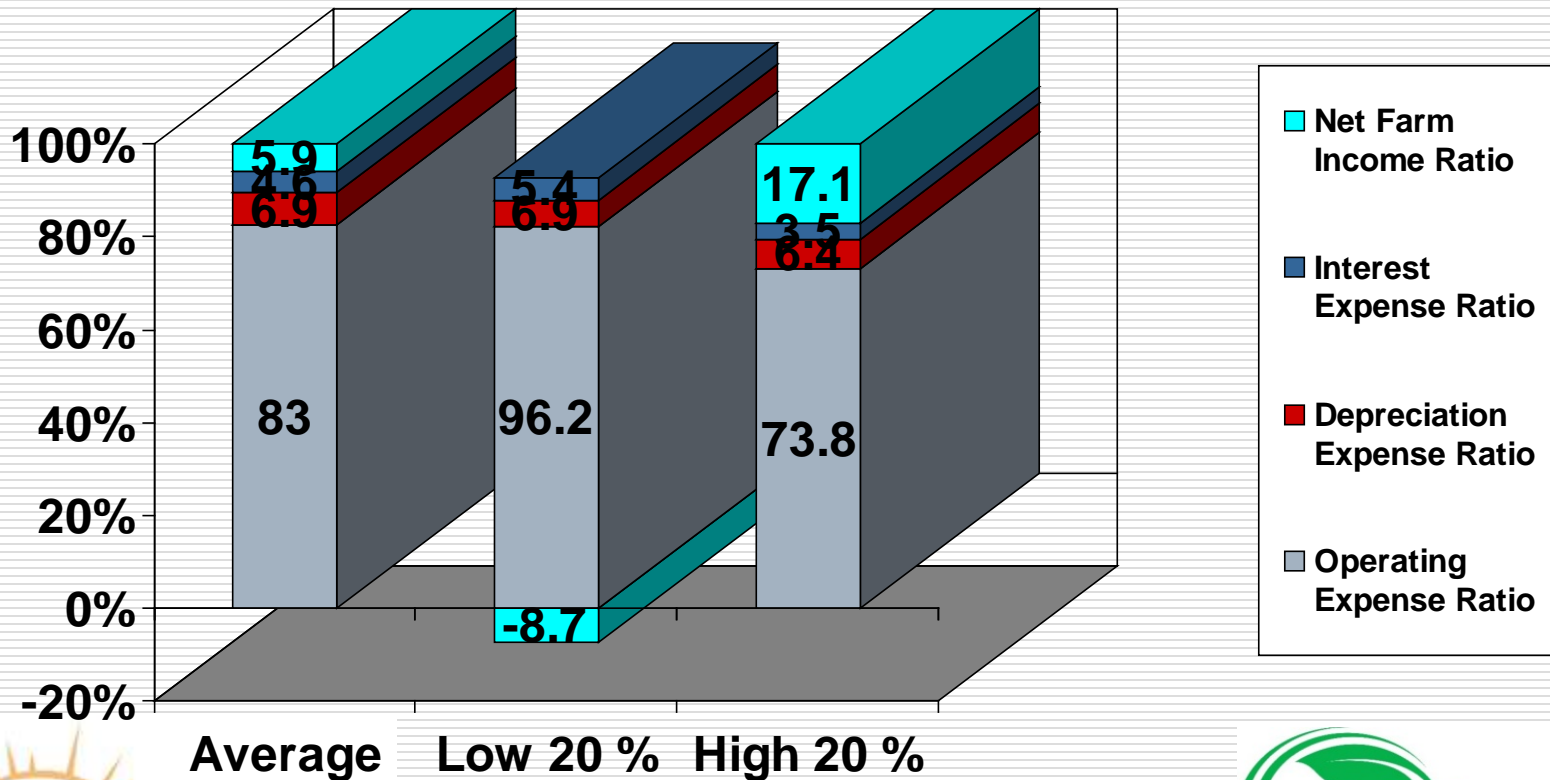
<12 % Green



—◆— Low —■— Average —▲— High

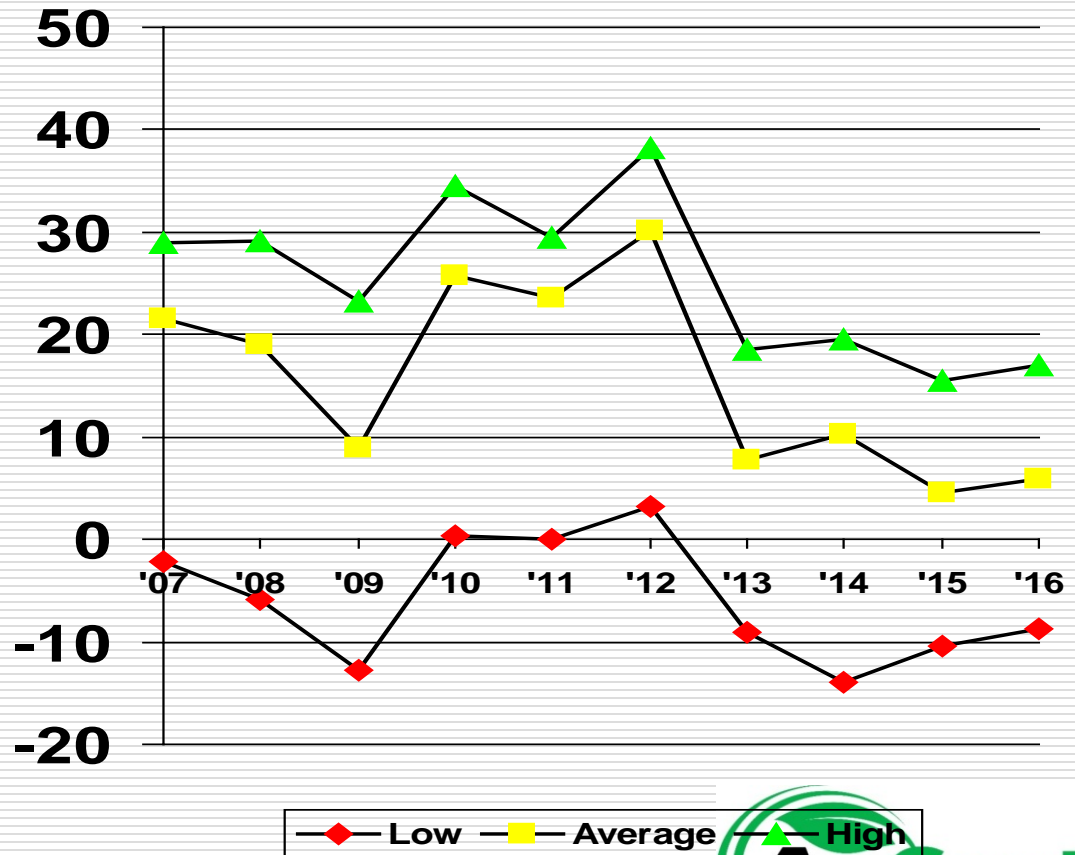


Operating Expense Ratio 2016



Net Farm Income from Operations (Financial Efficiency)

Net farm income from operations / gross revenue



Watch your trends
Closely. Trends will
be variable because
of the cyclical
nature of agriculture.



New Economic Realities-

Financial Metrics

Source Dr. Kohl

<u>Measure</u>	<u>Code</u> <u>Red</u>	<u>Code</u> <u>Yellow</u>	<u>Code</u> <u>Green</u>
Working Capital/Rev.	< 15%	15-33%	> 33%
Debt/Asset Ratio	> 60%	40-60%	< 40%
Credit Score	< 650	650-700	700+
Op. Exp. Revenue (Excluding Depr. & Int.)	> 80%	70-80%	< 70%
Coverage Ratio	< 125%	125- 200%	> 200%

Conclusions about ratios

- Your business trend lines are priceless
- Compare information for the last 5 years
- Compare your data to your peer group
- How does your business stack up?
- What are your new strategies?

Managing in volatile times?

- How do you improve your bottom line?
 - Conduct Variance Analysis (planned vs. actual)
 - Position your balance sheet
 - Manage 100 things 1% better each year
 - Manage the operation to be on the right side of the financial divide

How do you survive the volatile ride ahead?

- Conduct sensitivity analysis cashflows
- Aspire to be a top half marketer by having a written marketing plan
- Form peer advisory groups
- Form strategic alliances
- Capture economies of scale, reducing costs, improving asset utilization



Have a Great Year in 2017!

Make sure you are on your A game in managing your operation this year!

