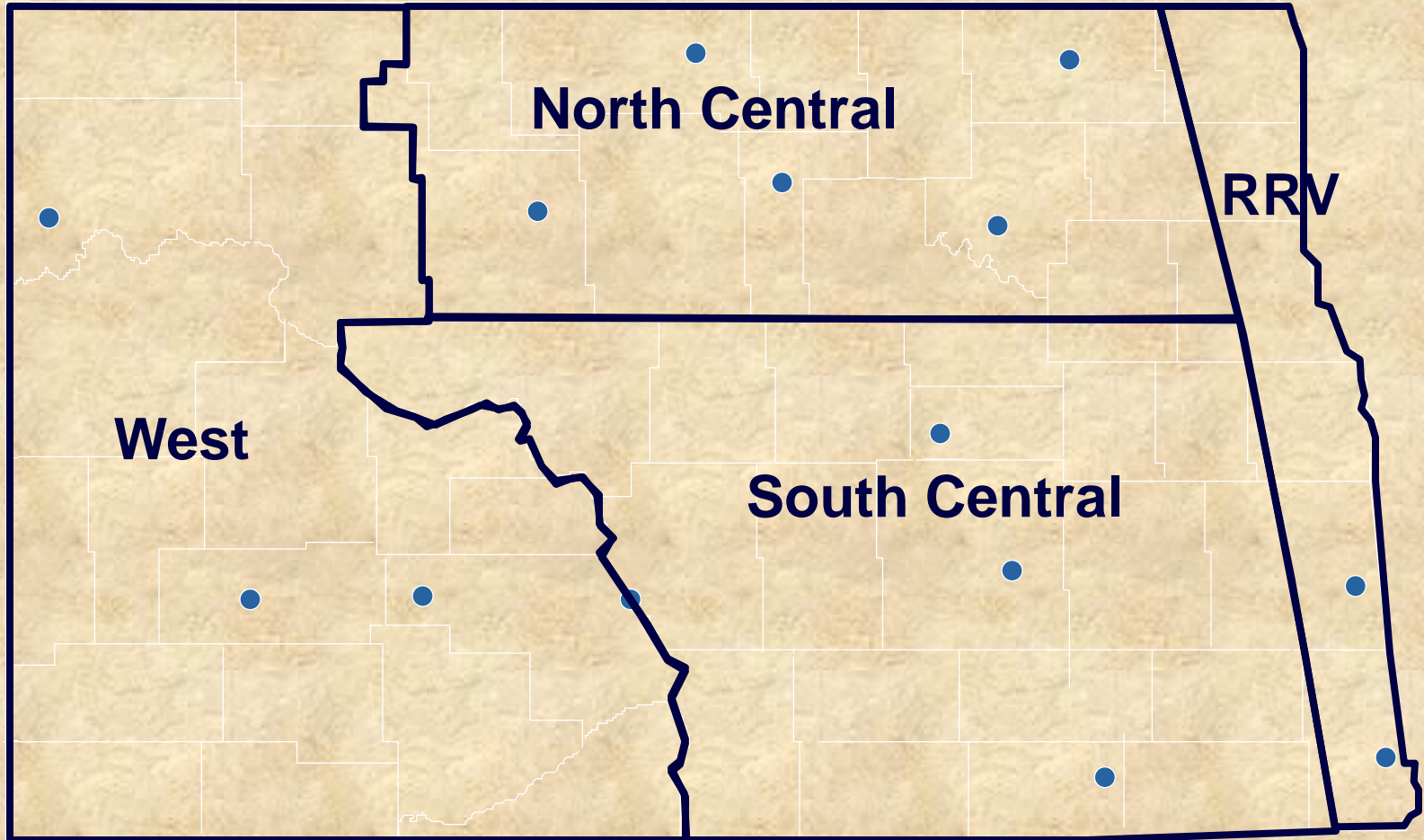




ND Farm & Ranch Business Management 2014 Region 3 Annual Report

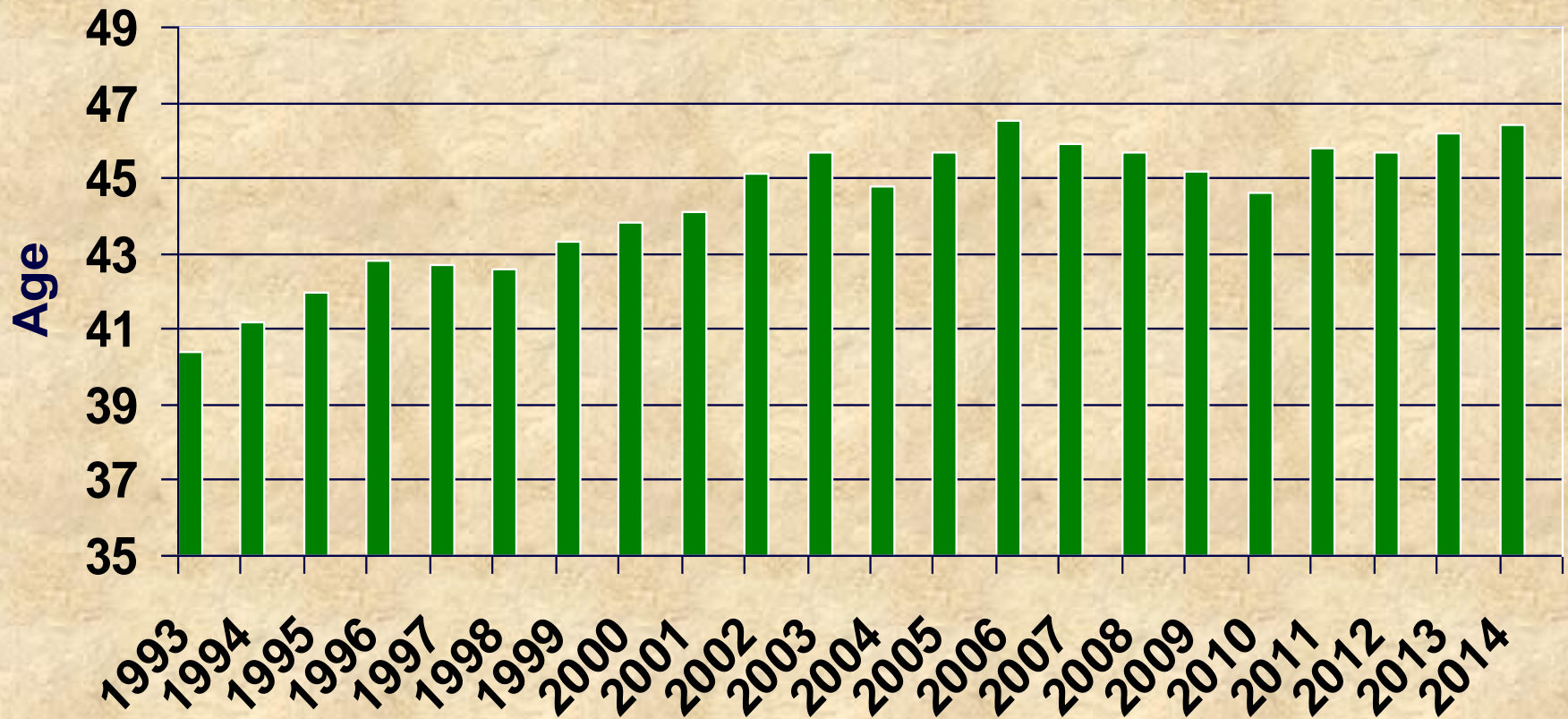
**Steve Metzger
Carrington Research Extension Center and
Carrington Public Schools
Carrington, ND**

**Region 3 includes data from FBM Programs located in
Bismarck(BSC), Carrington, Fargo(NDSCS),
Jamestown(JVCTC), Oakes(JVCTC) and Wahpeton(NDSCS).**

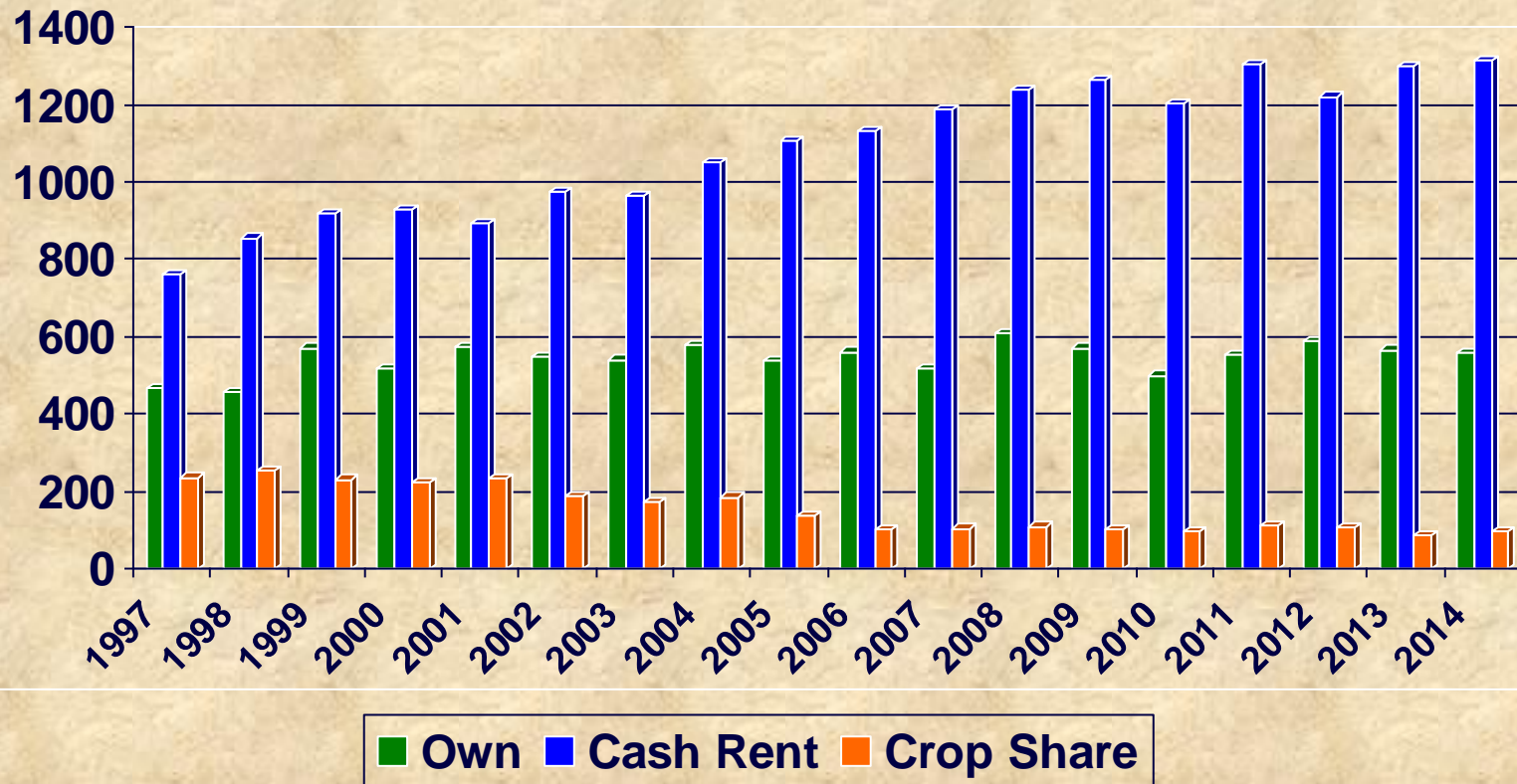


**WHAT TYPE OF FARMS
MAKE UP THE
BASE OF INFORMATION?**

Average Farmer Age in Region III



Crop acres totaled 1,964 in 2014, Increasing 8% since 2004



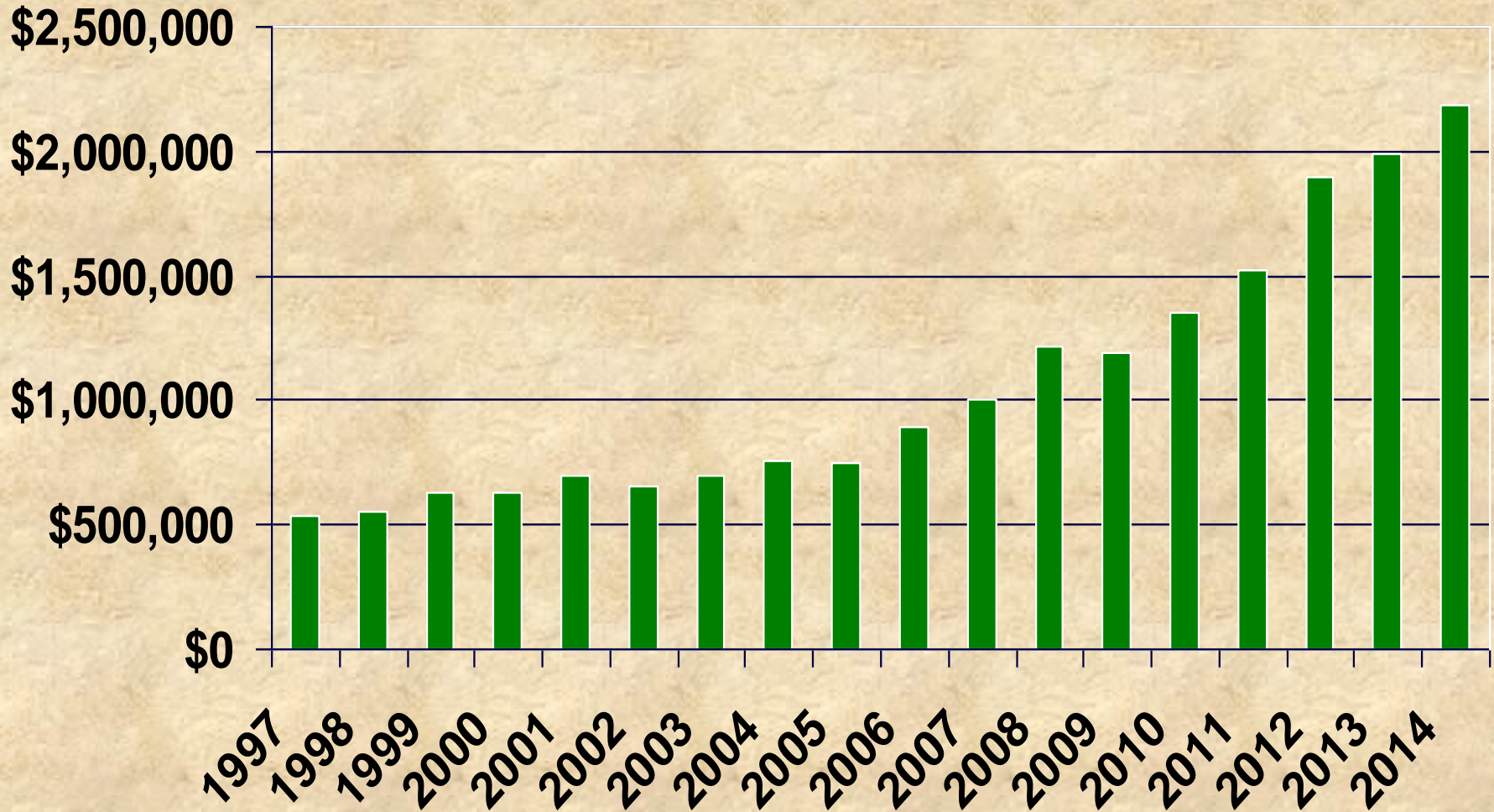
Total Farm Assets, Cost Basis

Total farm assets for enrolled farms increased 10% or \$195,895 from last year. An increase of 188% in the last 10 years. Crop acres increased 8% during that time.

●	2004	\$758,314
●	2005	\$747,601
●	2006	\$892,986
●	2007	\$1,007,440
●	2008	\$1,218,736
●	2009	\$1,188,358
●	2010	\$1,355,383
●	2011	\$1,521,843
●	2012	\$1,897,306
●	2013	\$1,987,640
●	2014	\$2,183,535



Growth of Farm Assets in Region 3, Farm crop acres grew 8% since 2004



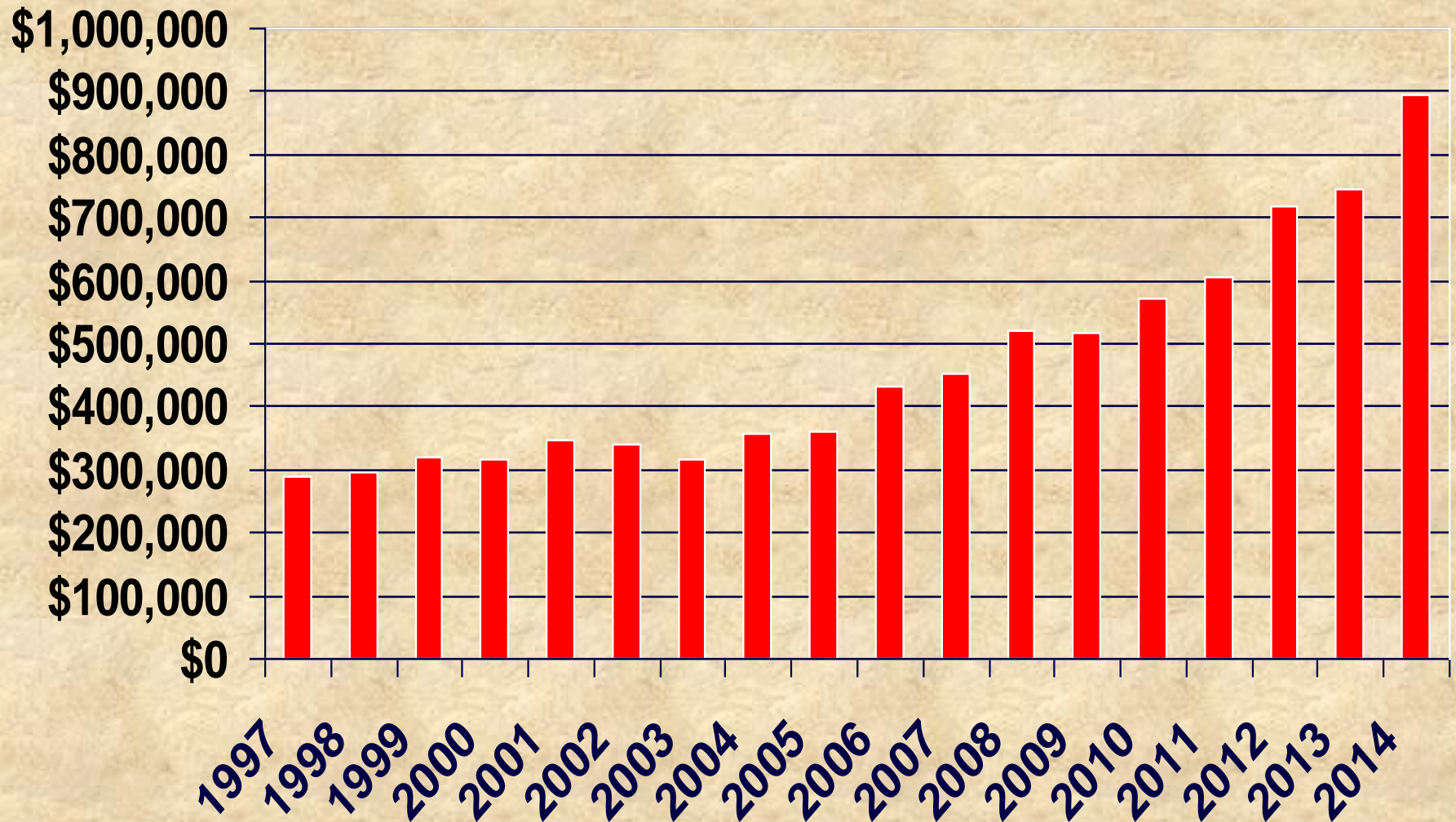
Total Farm Liabilities

Total average farm liabilities increased \$149,572 or 20% from last year. This is an increase of 151% since 2004. Last decreased in 2009.

● 2004	\$ 356,357
● 2005	\$ 361,193
● 2006	\$ 432,110
● 2007	\$ 453,700
● 2008	\$ 521,883
● 2009	\$ 517,110
● 2010	\$ 573,080
● 2011	\$ 605,746
● 2012	\$ 718,437
● 2013	\$ 744,591
● 2014	\$ 894,163



Growth of Average Farm Liabilities Region 3, An increase of 151% since 2004.



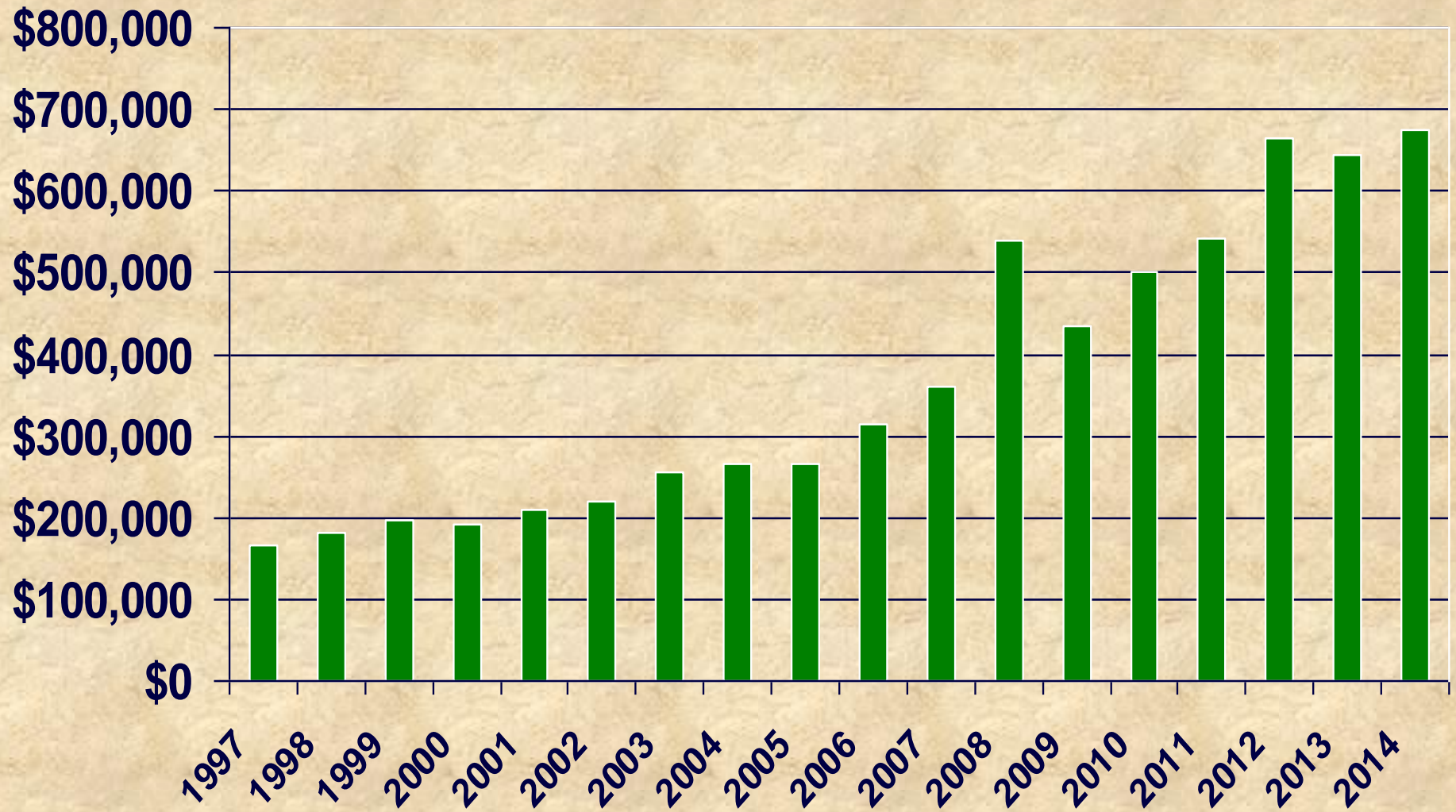
Comparing 2004 to 2014 per Acre Cost Basis Values

- Crop land acres, including haylands, have increased 149 acres per farm, up 8%
- Asset value per acre has increased from \$394 to \$1,112 per acre of cropland, up 182% in the last 10 years.
- Liabilities have increased from \$185 to \$455 per acre of crop land, up 146% in the last 10 years.

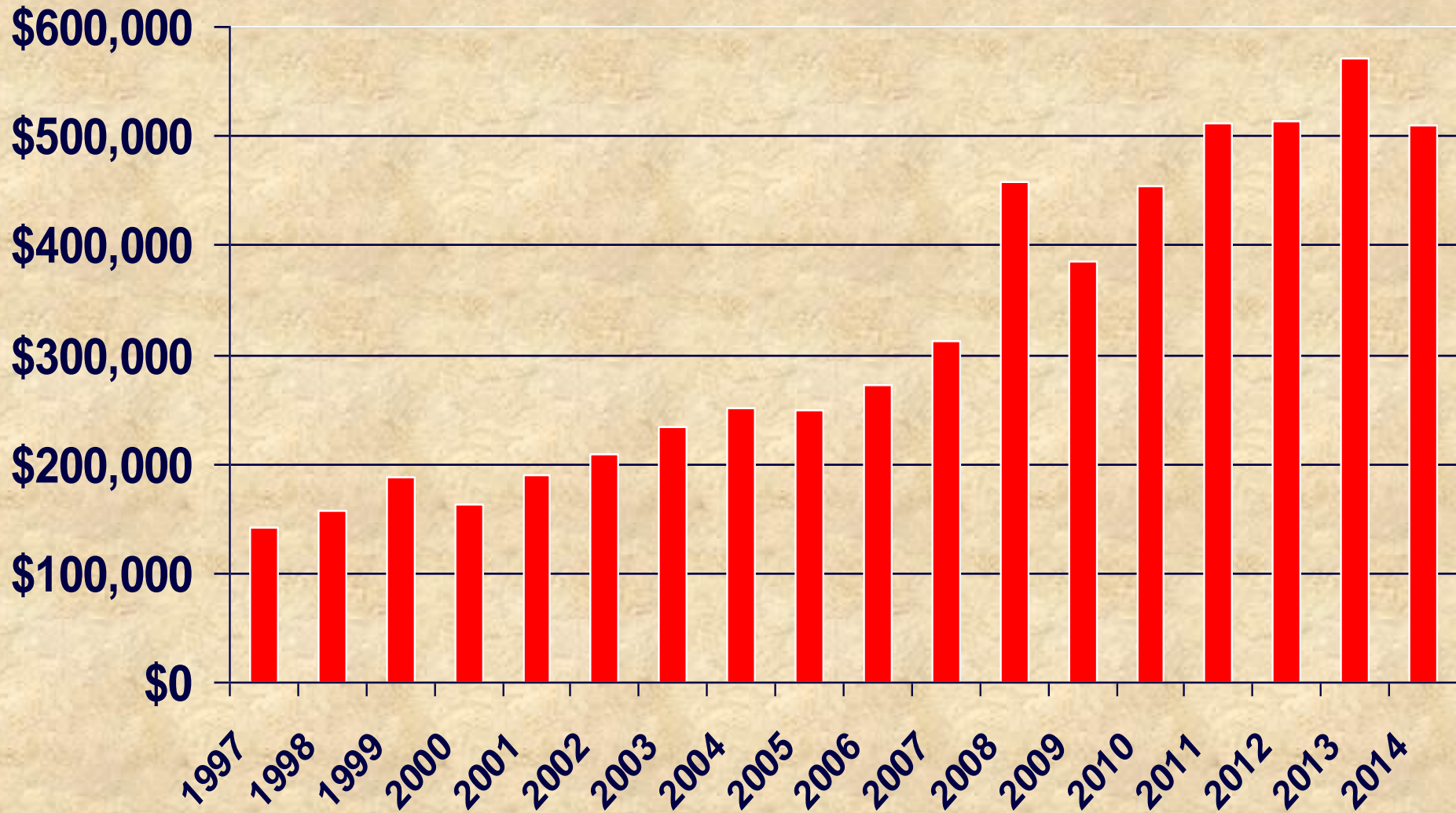
Comparing 2004 to 2014 per Acre, including pasture acres. All Cost Basis.

- **Crop acres increased 79 acres & pasture acres decreased 139 acres. Total acres of 2,444 in 2004 and 2,454 acres in 2014.**
- **Asset value per acre has increased from \$310 to \$890 per acre, up \$580 or 187% in 10 years.**
- **Liabilities have increased from \$146 per acre to \$364 per acre, up \$218 or 149% in the last 10 years.**

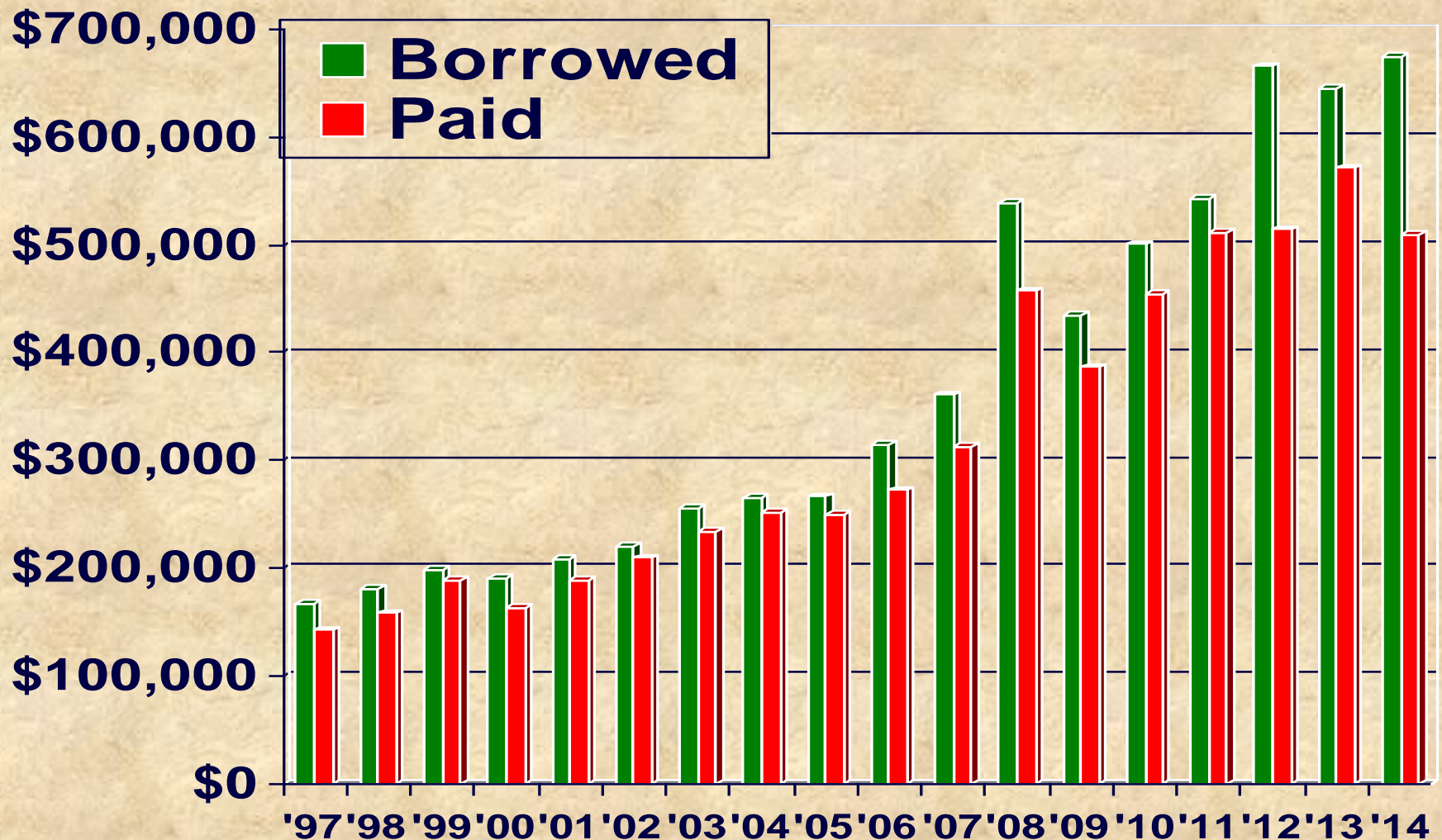
Money Borrowed per Farm Region 3



Principal Paid Per Farm Region 3



Money Borrowed & Repaid, Region 3

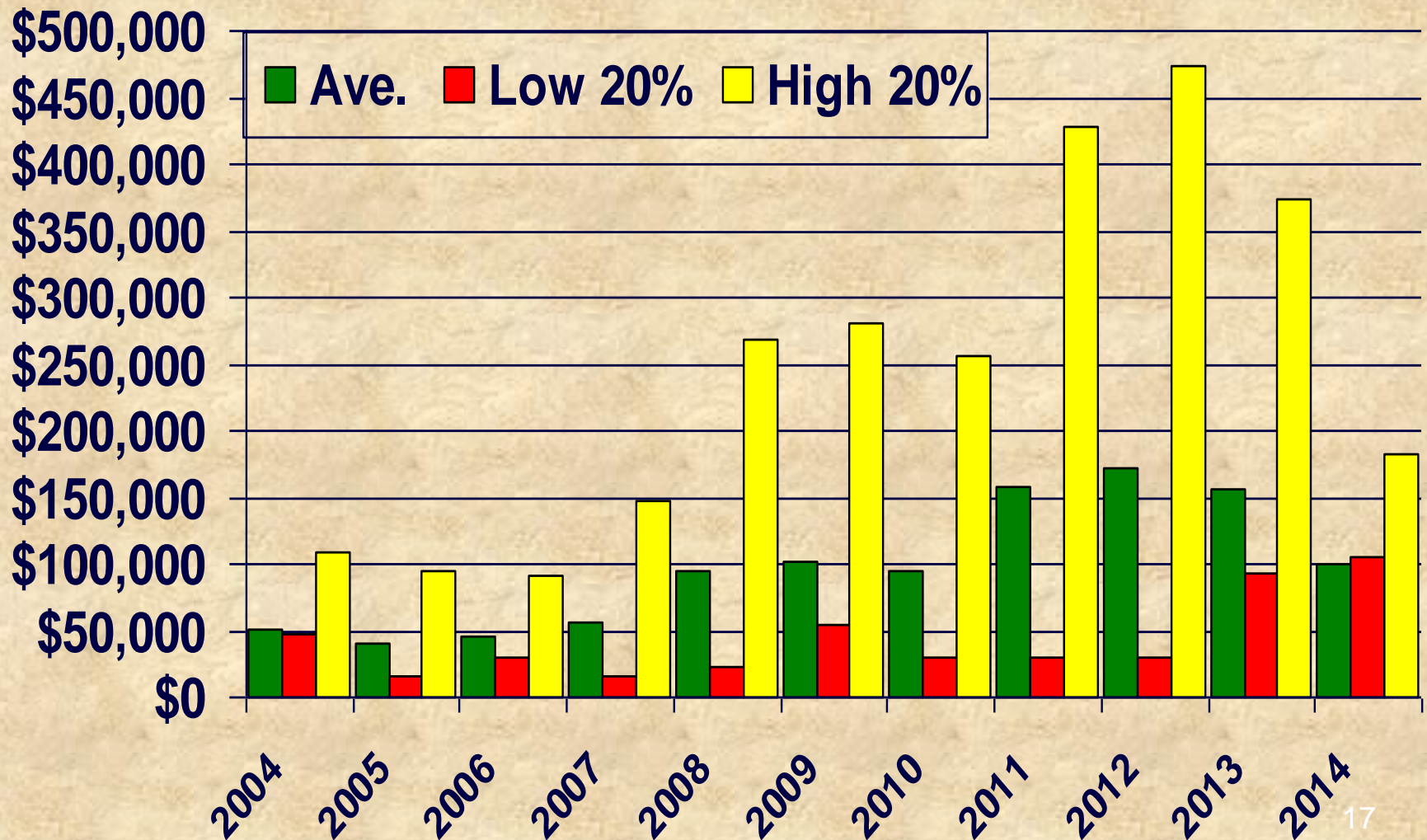


CAPITAL ASSETS, REPLACEMENT and DEPRECIATION

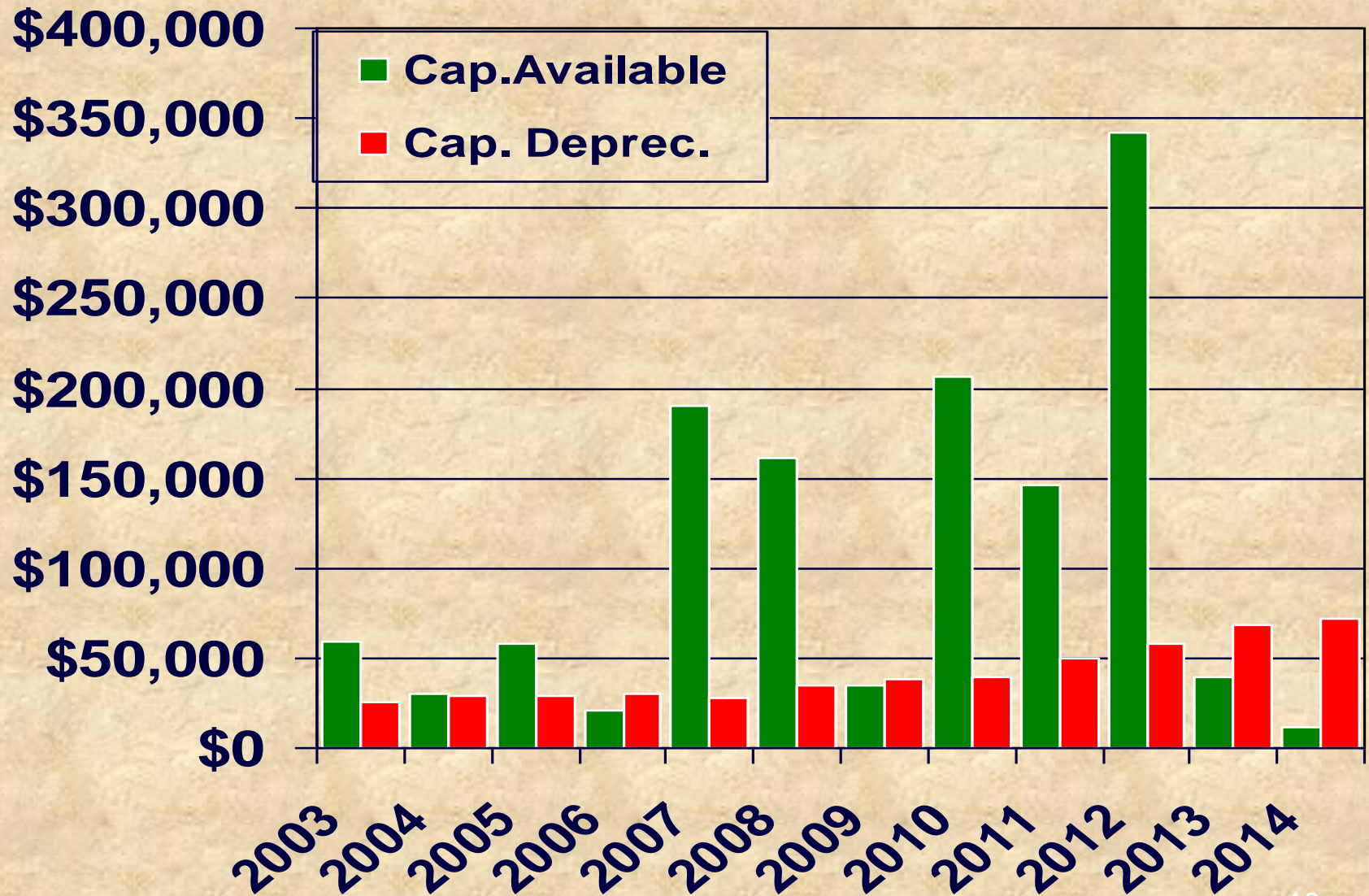
This is not what they mean by “rolling your equipment inventory”!



Capital Purchases of Machinery, Equipment & Farm Vehicles



Capital Replacement Margin compared to Depreciation/Capital Adjustment



Net Worth Change

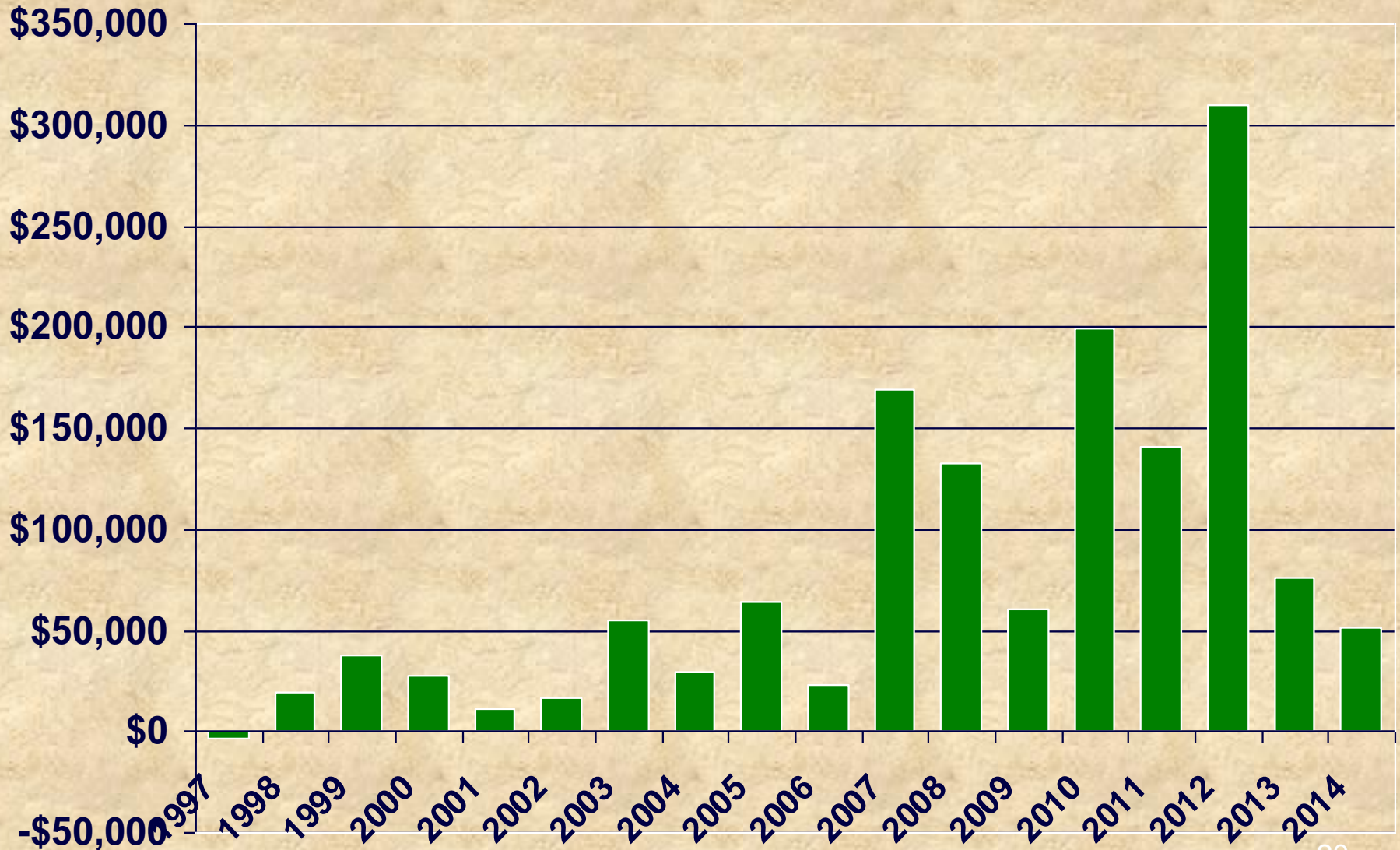
(Change in Retained Earnings)

- This year we saw a positive change in retained earnings of \$51,620 as measured on a cost basis balance sheet.

● 2004	\$ 29,228
● 2005	\$ 64,109
● 2006	\$ 23,452
● 2007	\$ 169,317
● 2008	\$ 132,714
● 2009	\$ 60,577
● 2010	\$ 199,176
● 2011	\$ 141,287
● 2012	\$ 310,126
● 2013	\$ 76,053
● 2014	\$ 51,620



Net Worth Change on a Cost Basis, (Retained Earnings Change) Region III



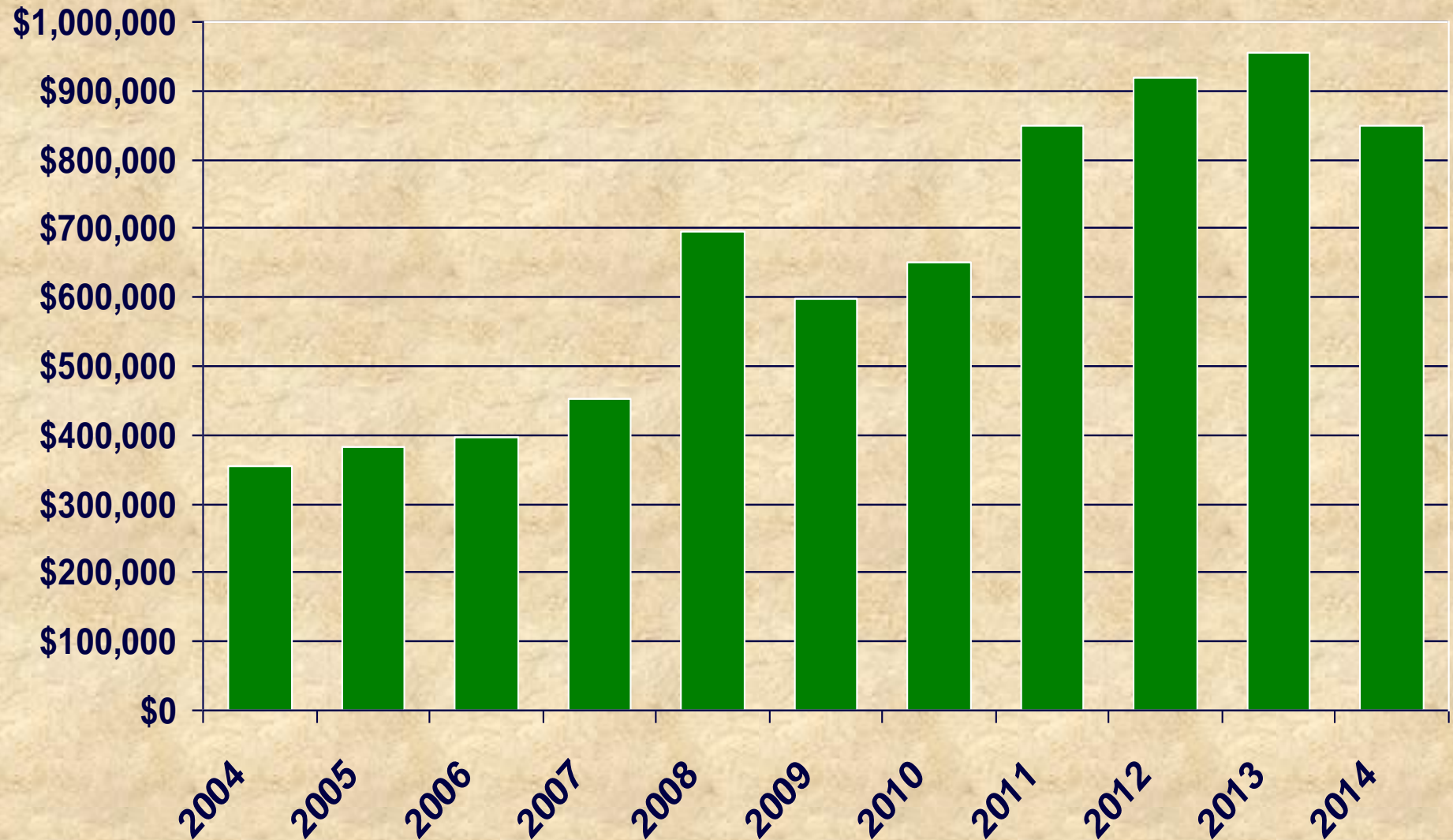
Cash Farm Receipts

**Average Cash Farm Receipts decreased
\$105,347 from 2013 to 2014.**

● 2004	\$ 355,869	+	13.7%
● 2005	\$ 382,304	+	7.4%
● 2006	\$ 395,617	+	3.5%
● 2007	\$ 452,249	+	14.3%
● 2008	\$ 694,575	+	53.6%
● 2009	\$ 597,240	-	14.0%
● 2010	\$ 650,382	+	8.9%
● 2011	\$ 848,141	+	30.4%
● 2012	\$ 918,165	+	8.3%
● 2013	\$ 955,323	+	4.0%
● 2014	\$ 849,976	-	11.0%

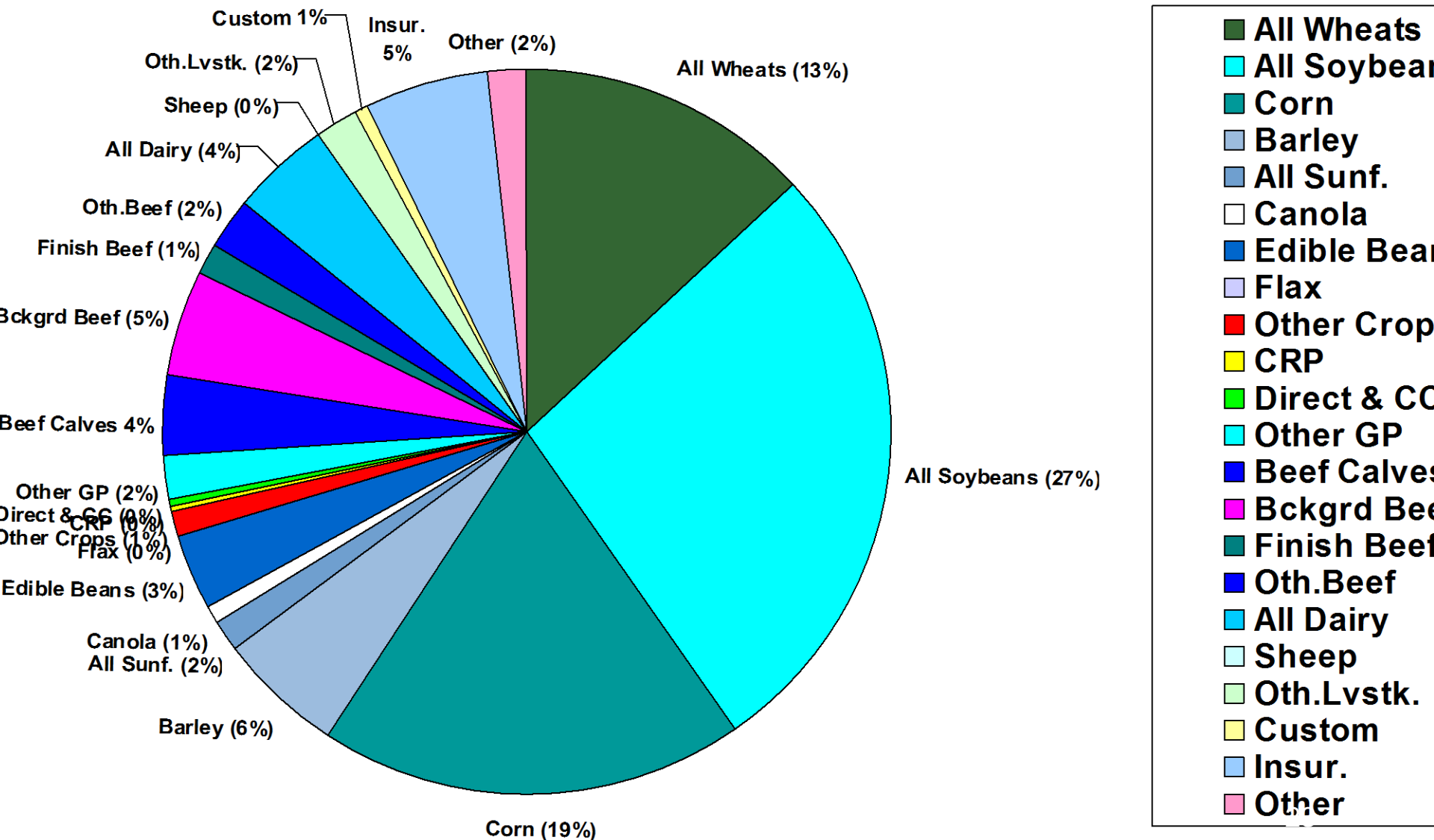
Total Change '04 to '14 = + 139%

Cash Farm Receipts, Region 3



Where did the money come from?

\$849,976 Cash Income for 2014



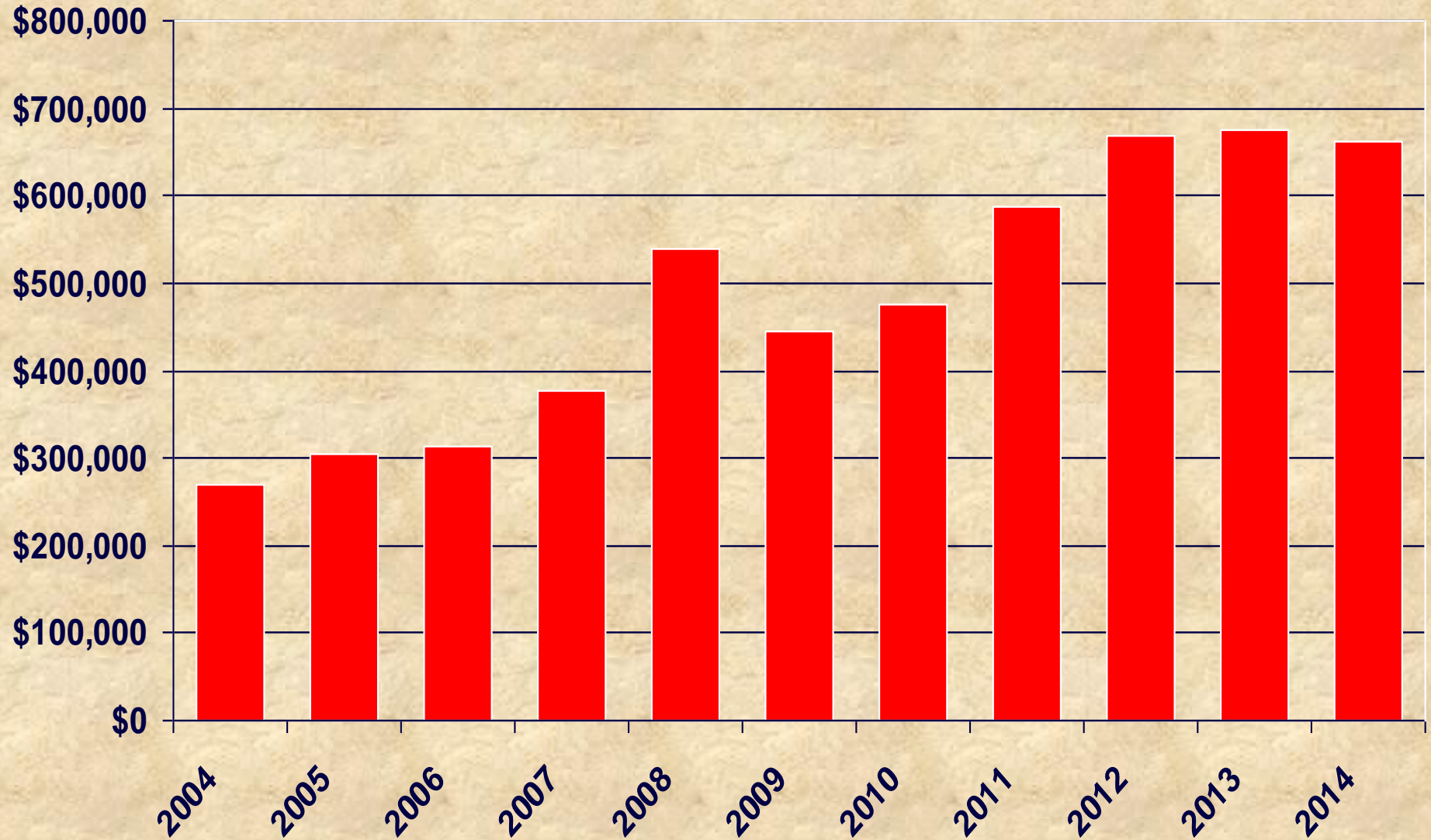
Cash Farm Expenses

**Average cash farm expenses increased
\$11,962 from 2013 to 2014.**

● 2004	\$ 270,147	+ 11.9%
● 2005	\$ 305,543	+ 13.1%
● 2006	\$ 314,372	+ 2.9%
● 2007	\$ 376,242	+ 19.7%
● 2008	\$ 540,226	+ 43.6%
● 2009	\$ 444,962	- 17.6%
● 2010	\$ 475,020	+ 9.8%
● 2011	\$ 586,337	+ 23.4%
● 2012	\$ 668,792	+ 14.1%
● 2013	\$ 674,927	+ 0.9%
● 2014	\$ 662,965	- 1.8%

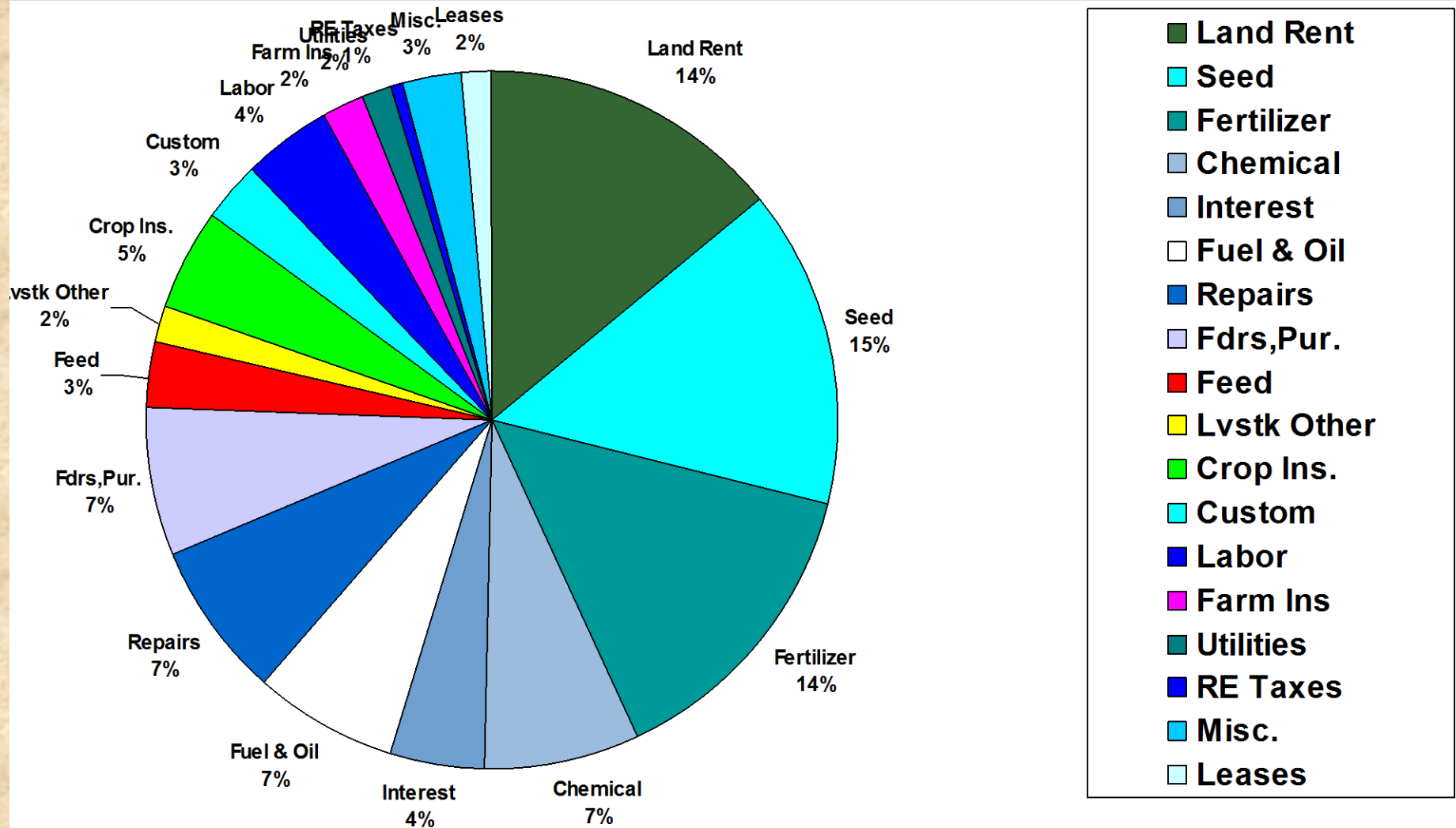
Total increase '04 to '14 = + 145%

Cash Farm Expenses Region 3

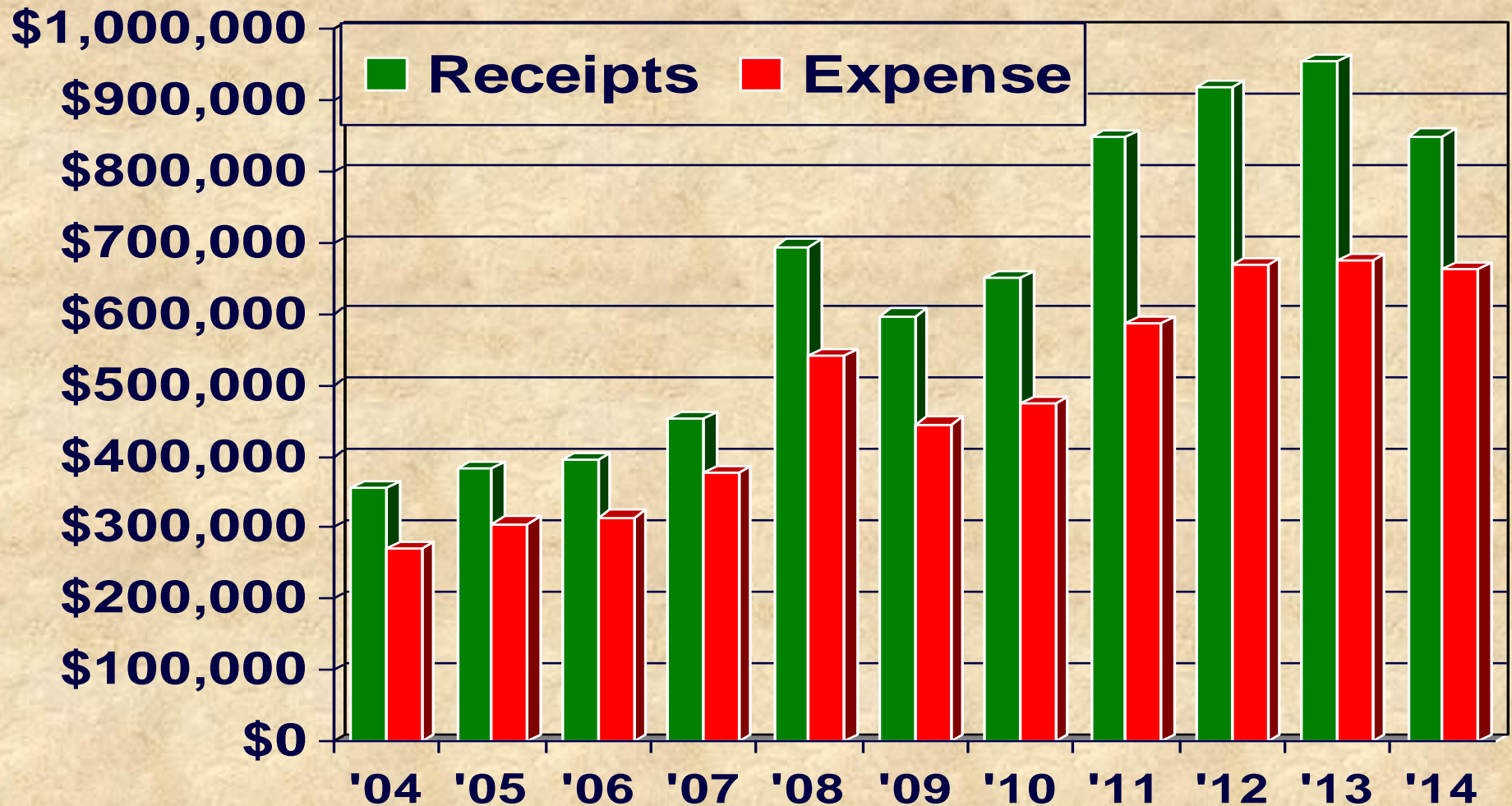


Where was the money spent ?

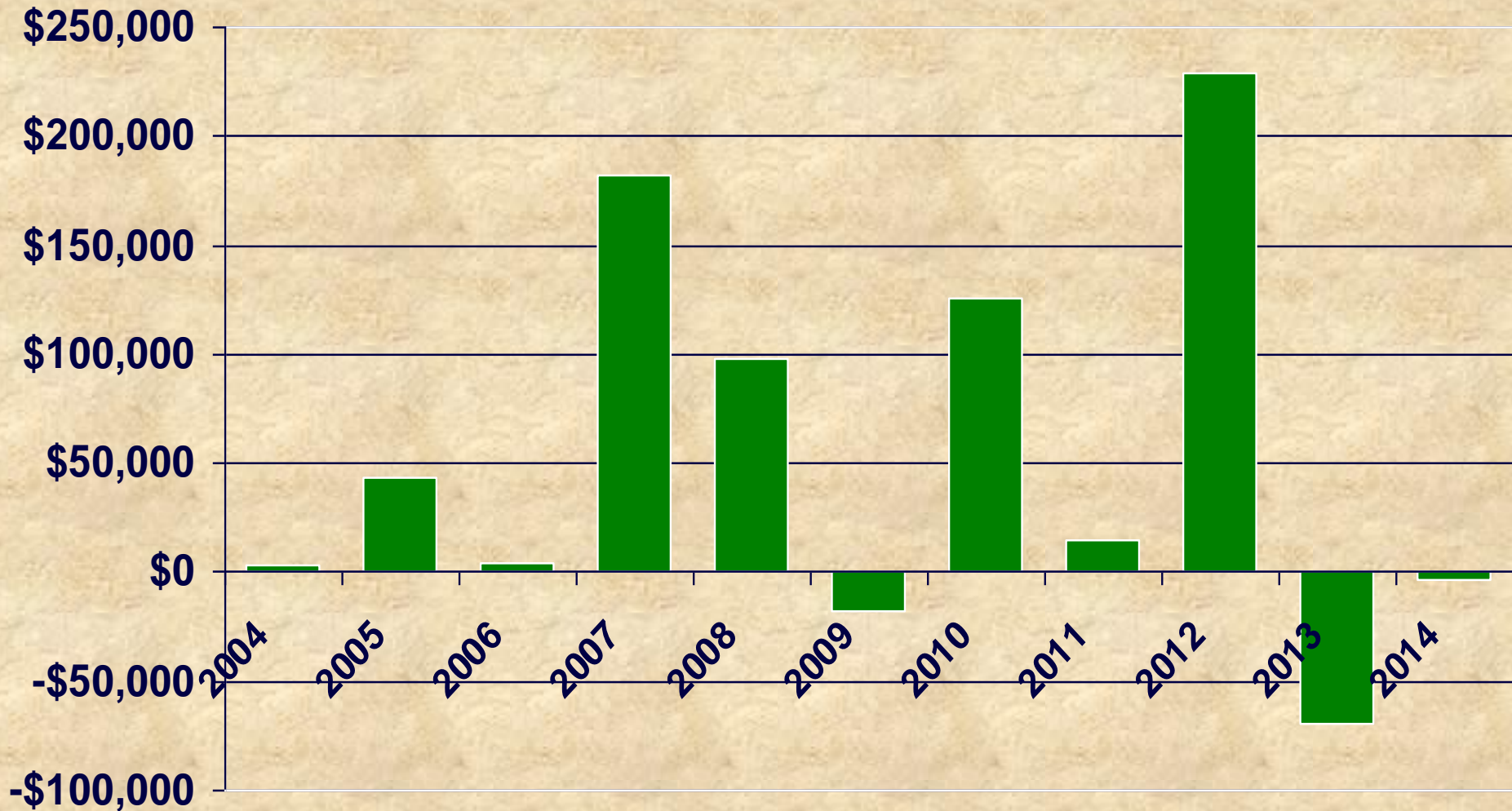
Cash Expenses of \$662,965 in 2014



Gross Cash Income and Cash Expenses



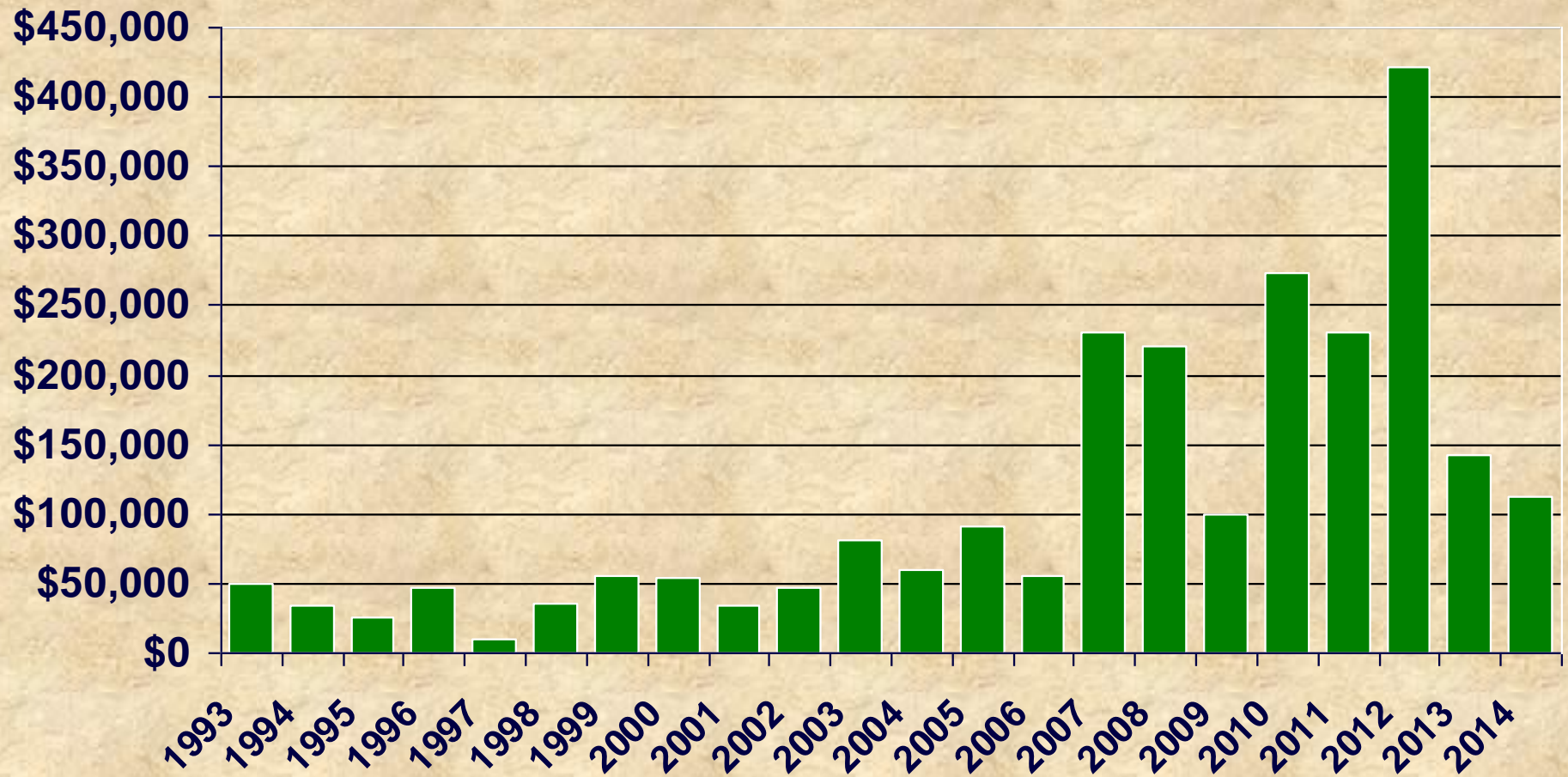
Total Inventory Change per farm, Region 3



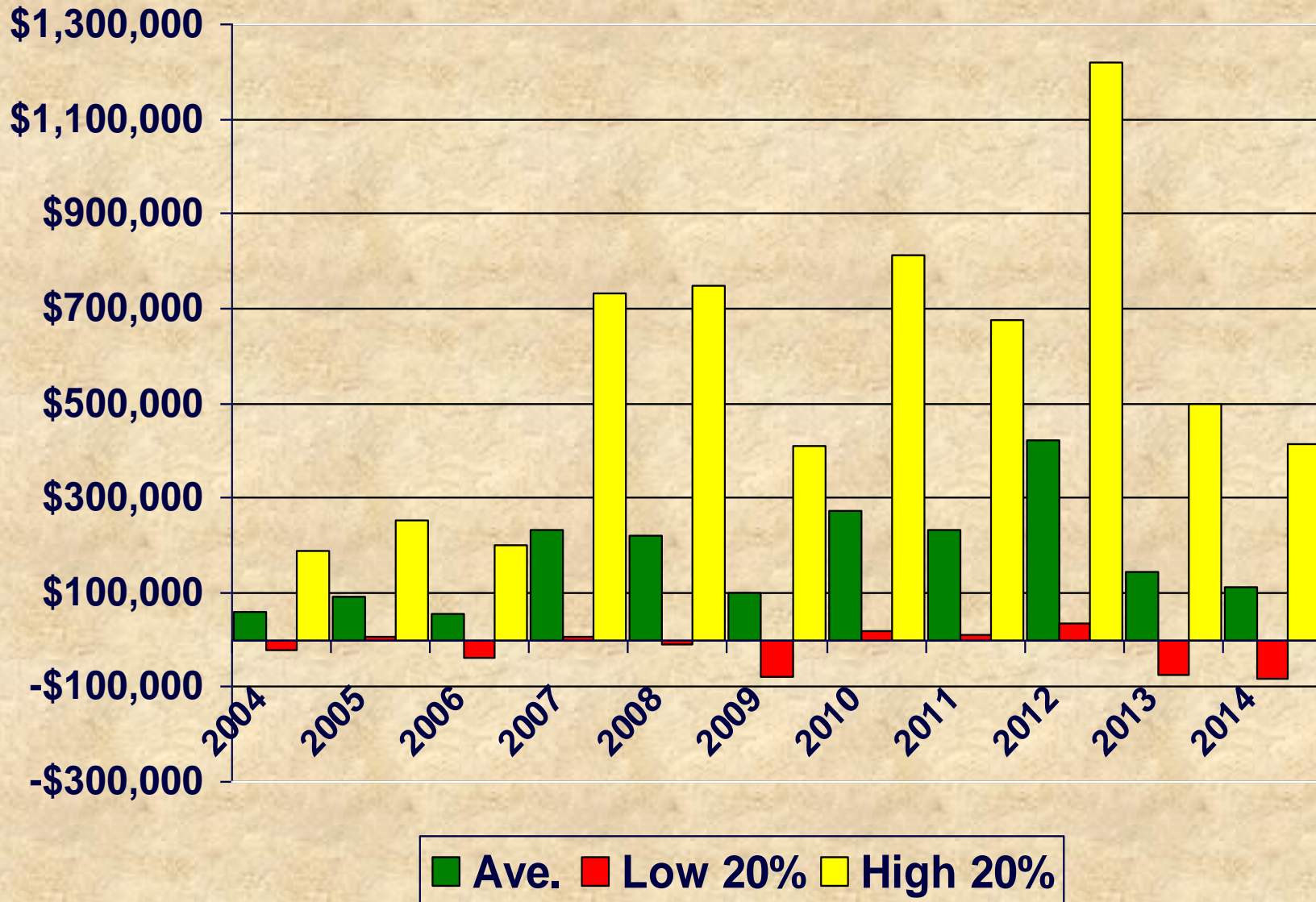
Net Farm Income

- This is the net cash farm income after being adjusted first for inventory change and then for depreciation.
- This is the calculated profit for the year
- If more money than indicated on net farm income is spent on family living, personal taxes, and new investments, it must be taken from inventory sales, the capital replacement dollars, new borrowings, or from off farm income. It is also calculated under the cost balance sheet to avoid the effects of inflation or deflation of asset values.

Average Net Farm Income



Net Farm Income by Profitability Groups



Net Farm Income For Region III

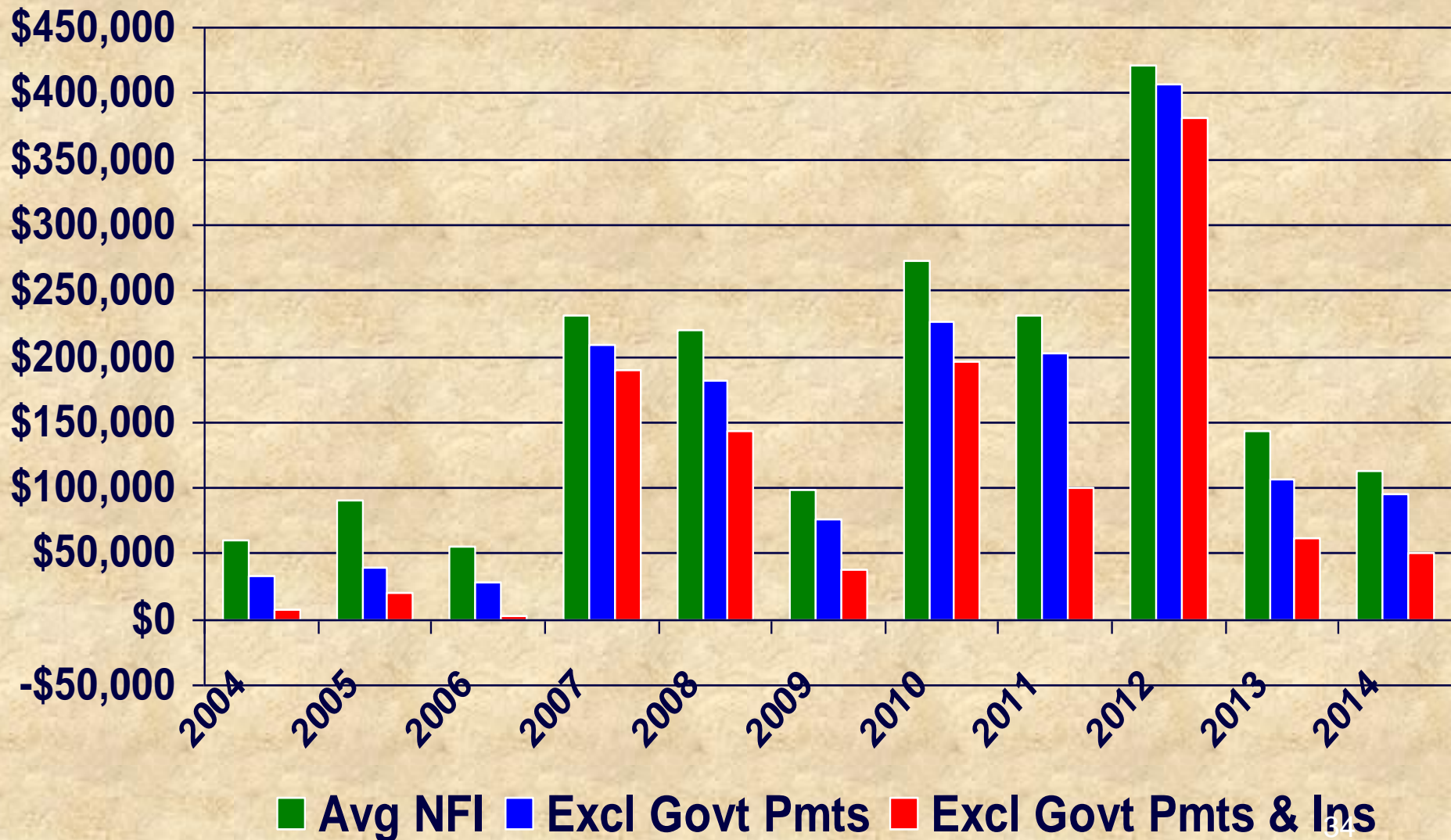
- **Net farm income for farms in Region III averaged \$112,920. (Decreased 21% from 2013).**
- **Net farm income for the low profit 20% of the farms averaged (\$82,920) (Down \$8,296 and 11% from 2013).**
- **Net farm income for the high profit 20% of the farms averaged \$413,037 (Decreased by \$86,823 or 17% compared to 2013).**

Profitability Based on Crop Acres Only, including cash crop lands & haylands.


- **Average Profit, based on 1,964 crop acres was \$61.06 per acre.**
- **Low Profit, based on 2,034 acres was (\$40.77) per acre.**
- **Mid Profit, (40%-60%) \$62,542 from 1,099 acres was a profit of \$56.91 per acre.**
- **High Profit, based on 3,424 acres was \$120.63 per acre.**

Average Net Farm Income

ND Farm Business Management, Region 3

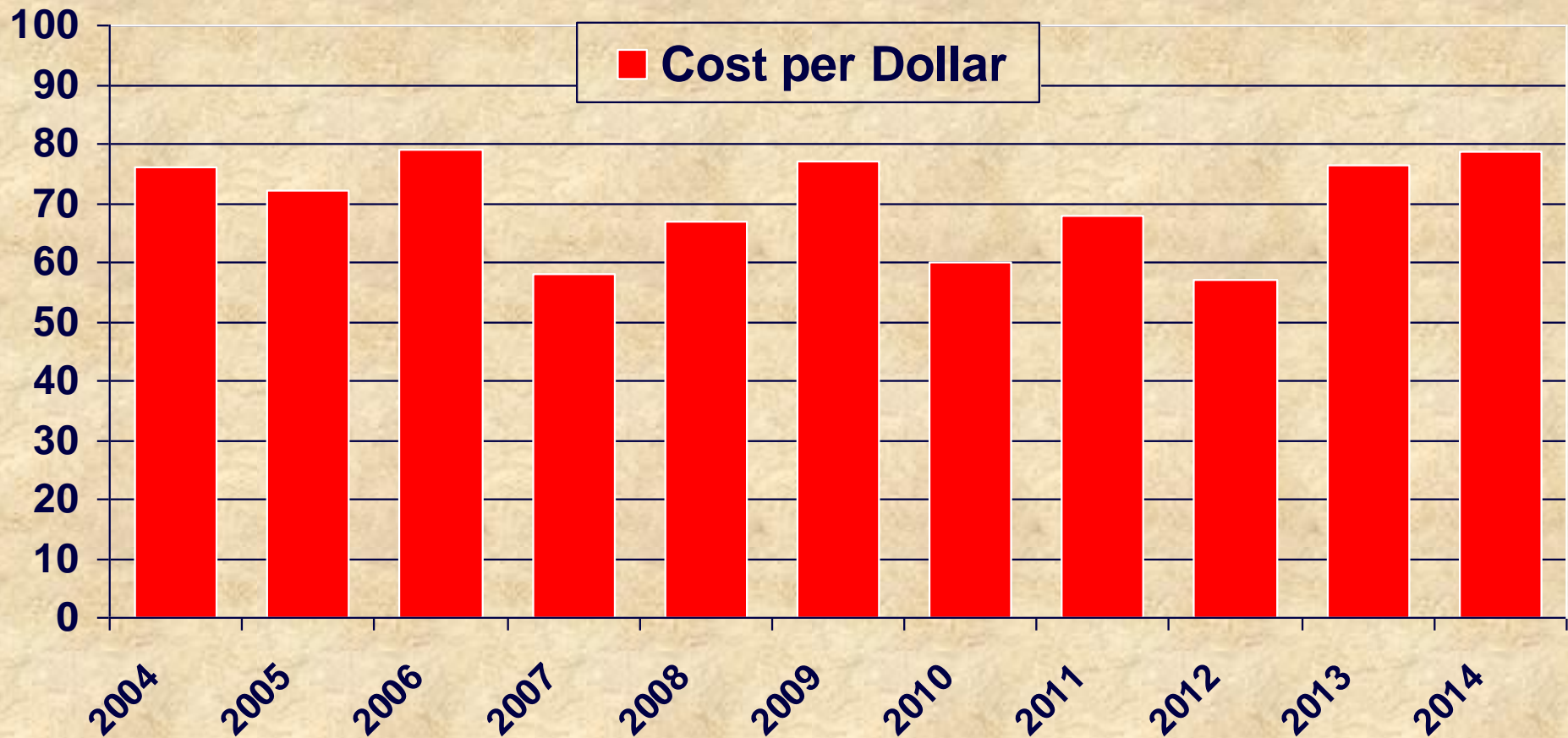


Cost to produce \$1.00 of Accrued Income

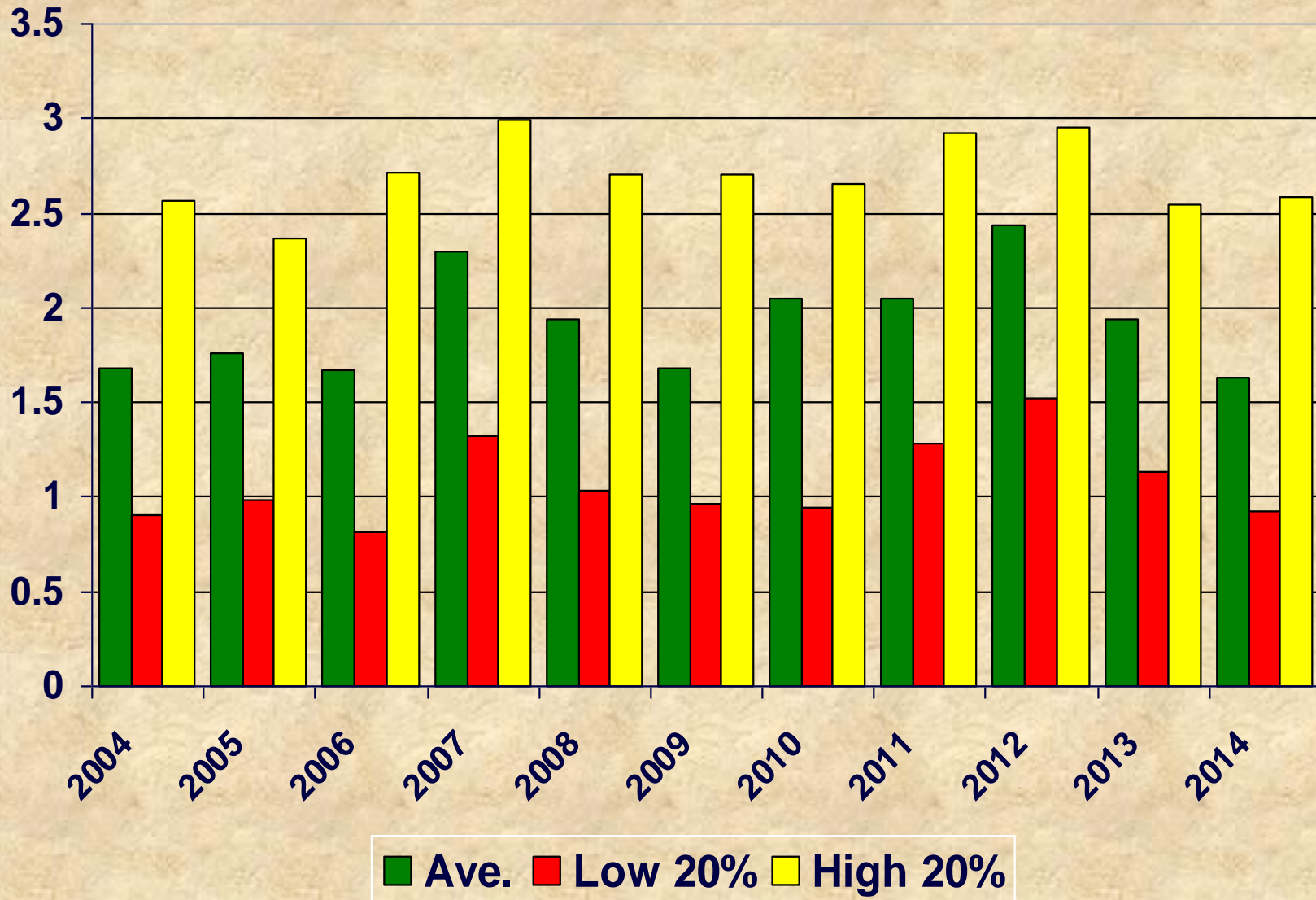
- This year it cost an average Region 3 farmer \$.79 (accrual) to produce a dollar's worth of income, compared to \$.76 last year. (2014 Oper. Expense \$.749 + Interest of \$.037)
- High profit farms created a dollar of income for \$.68 up from \$.66 cents in 2013.

- Low profit farms created a dollar of income for \$1.01 of expenses, including interest, down from \$1.06 in 2013.
Retained Earnings of (\$113,946)

These figures do not include depreciation \$.07-\$.10

Average Cost per Dollar of Income

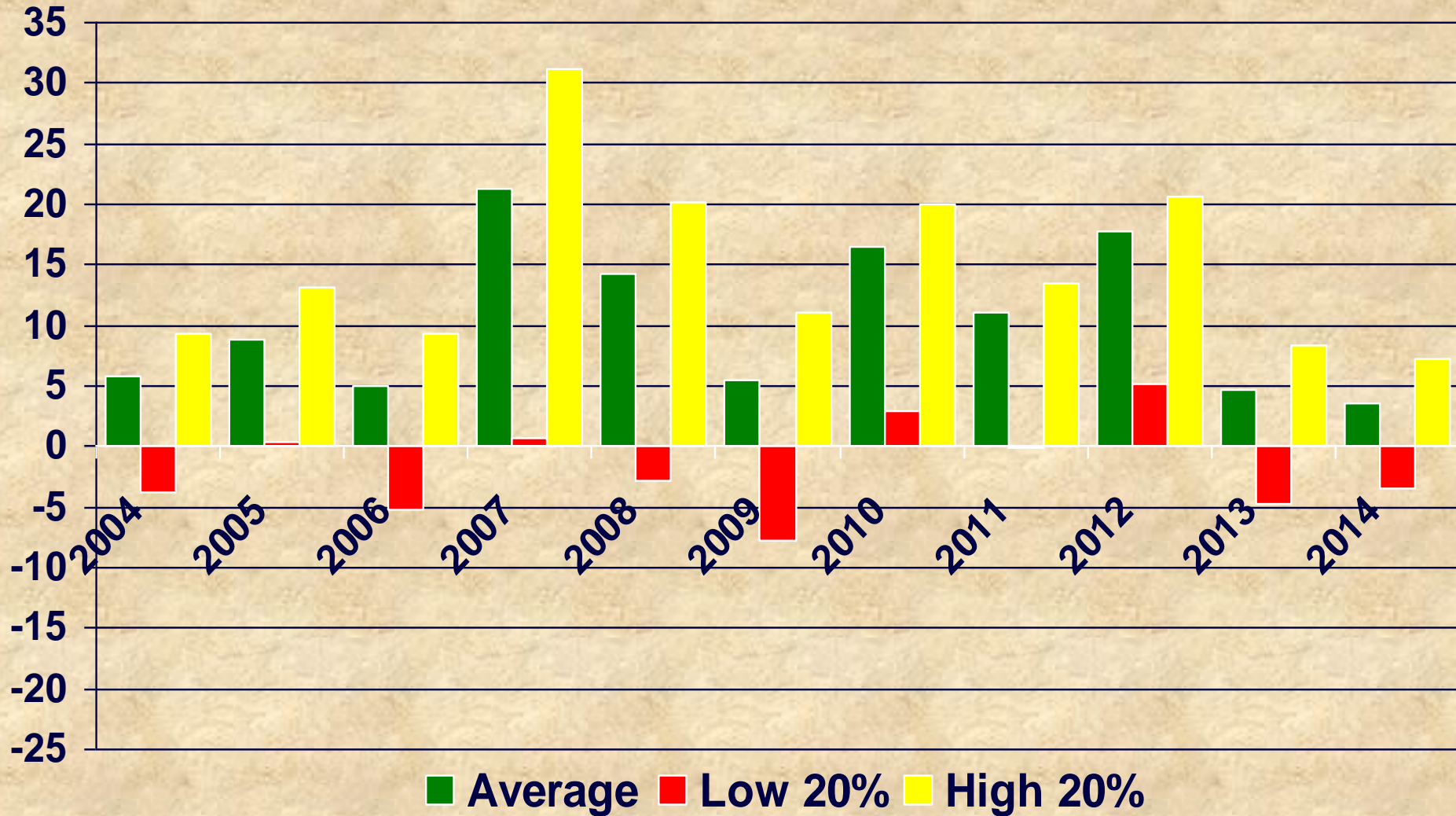


Current Ratio by Profitability Group, Current assets divided by Current Liabilities

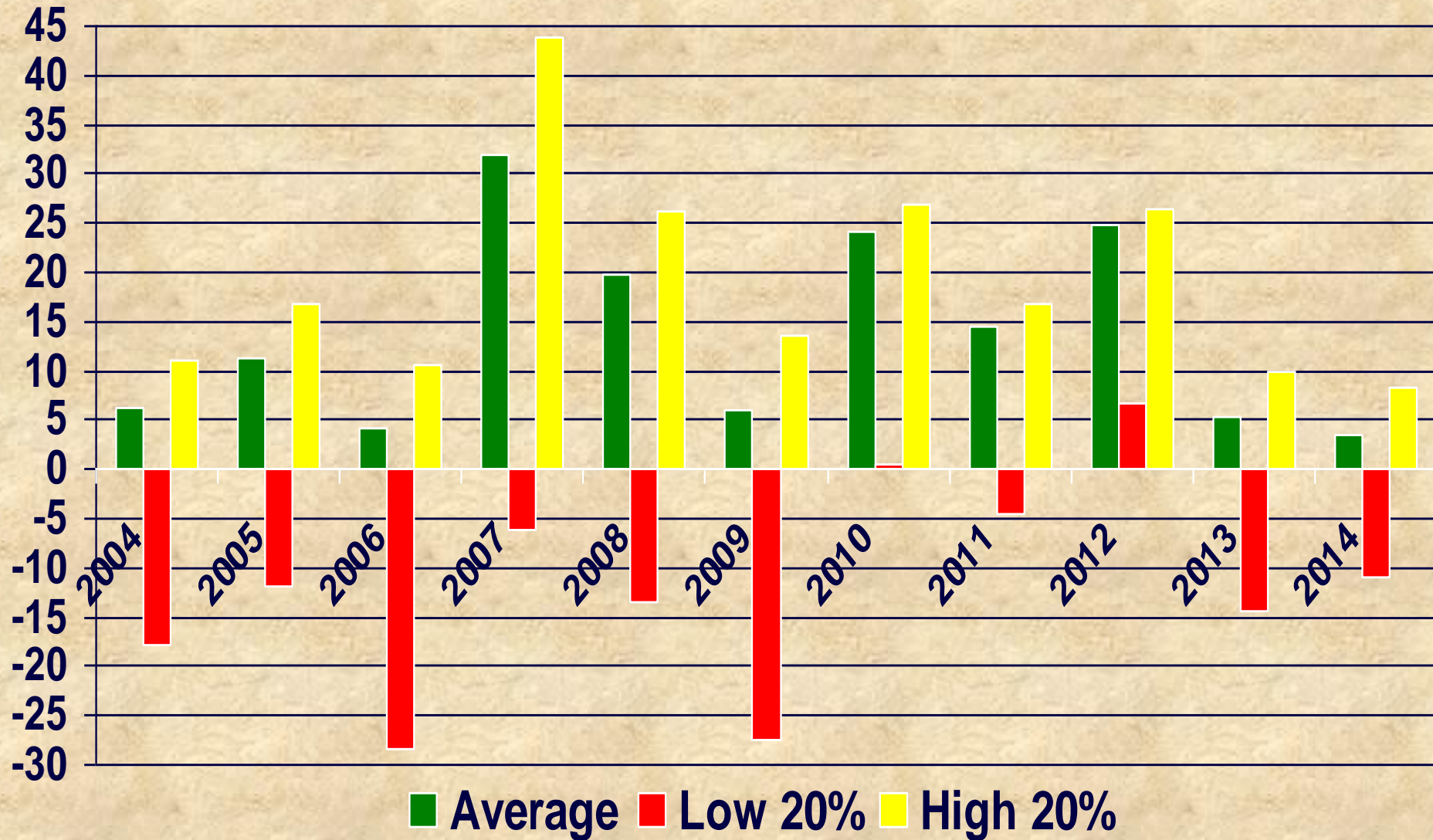


% Return on Assets, Cost Basis

ND Farm Business Management, Region 3



% Return on Equity, Cost Basis



Crop Yields, Costs and Returns for 2014

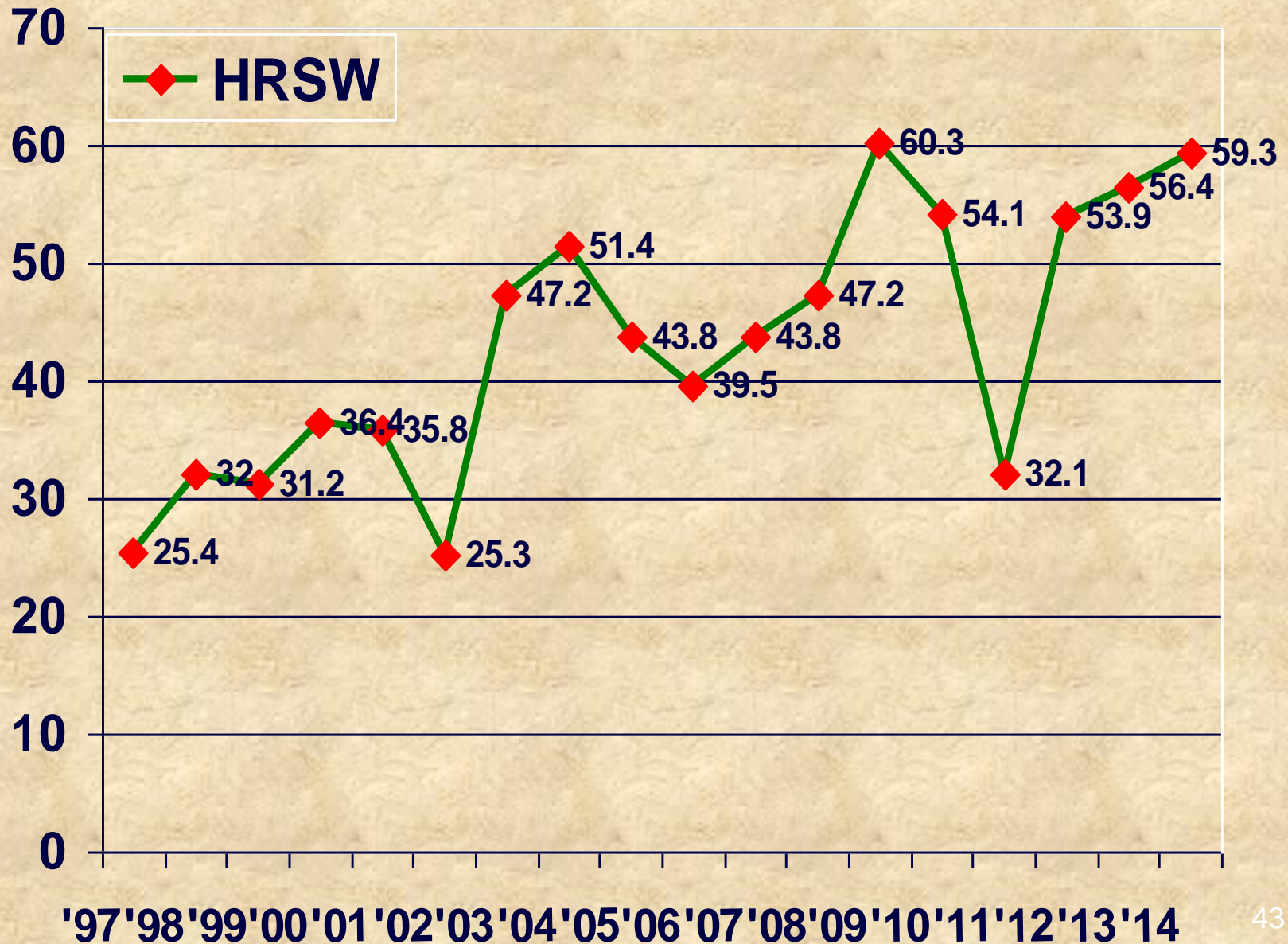
Net Return for Crops

- Does not include Direct or Counter-Cyclical Government Payments.
- Does include LDP and Insurance which shows up in the price of the commodity and the other crop income

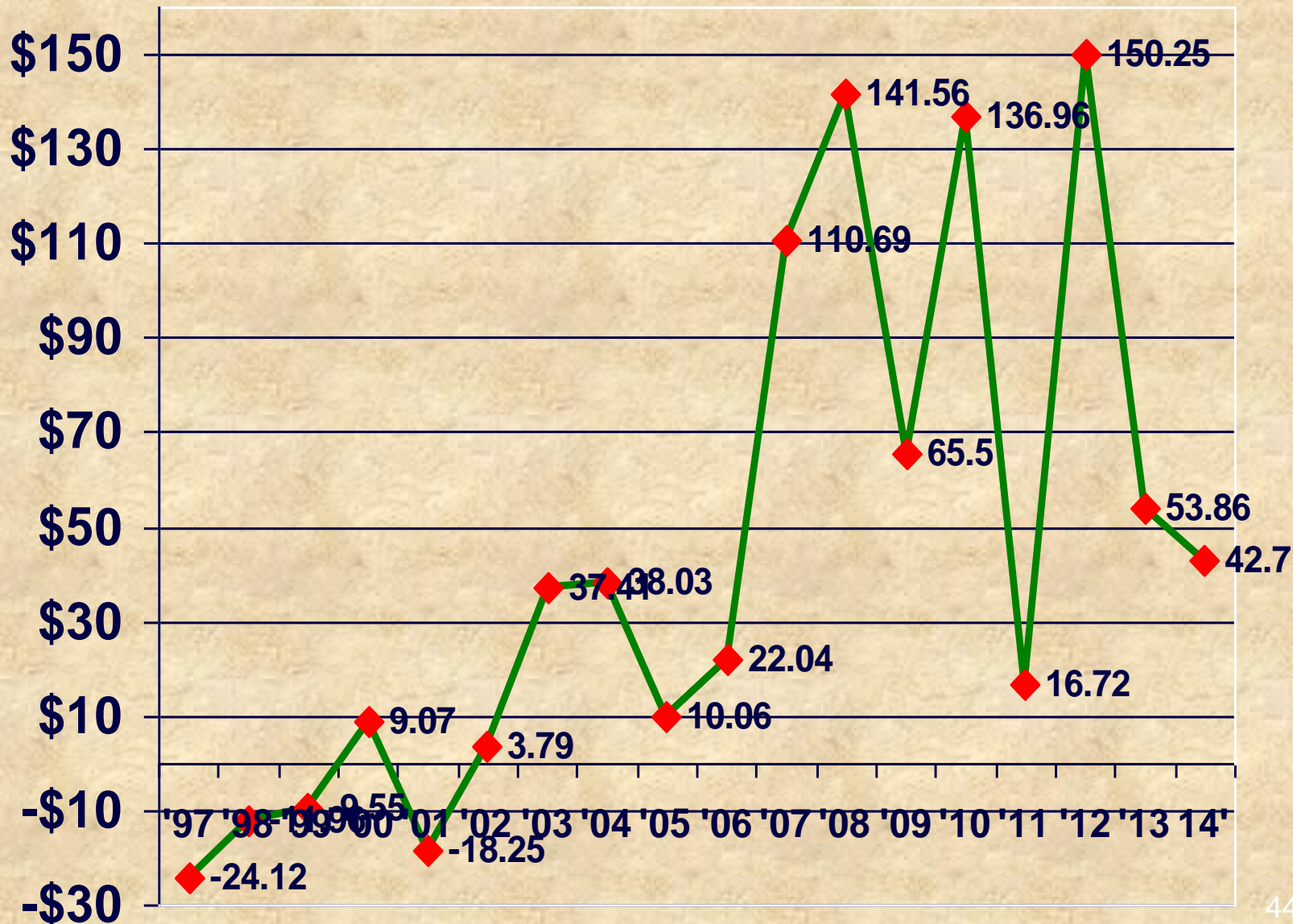
Hard Red Spring Wheat



HRSW Average Yields, Region 3



HRSW Net Return per Acre on Cash Rented Land, Avg. Rent \$60.77

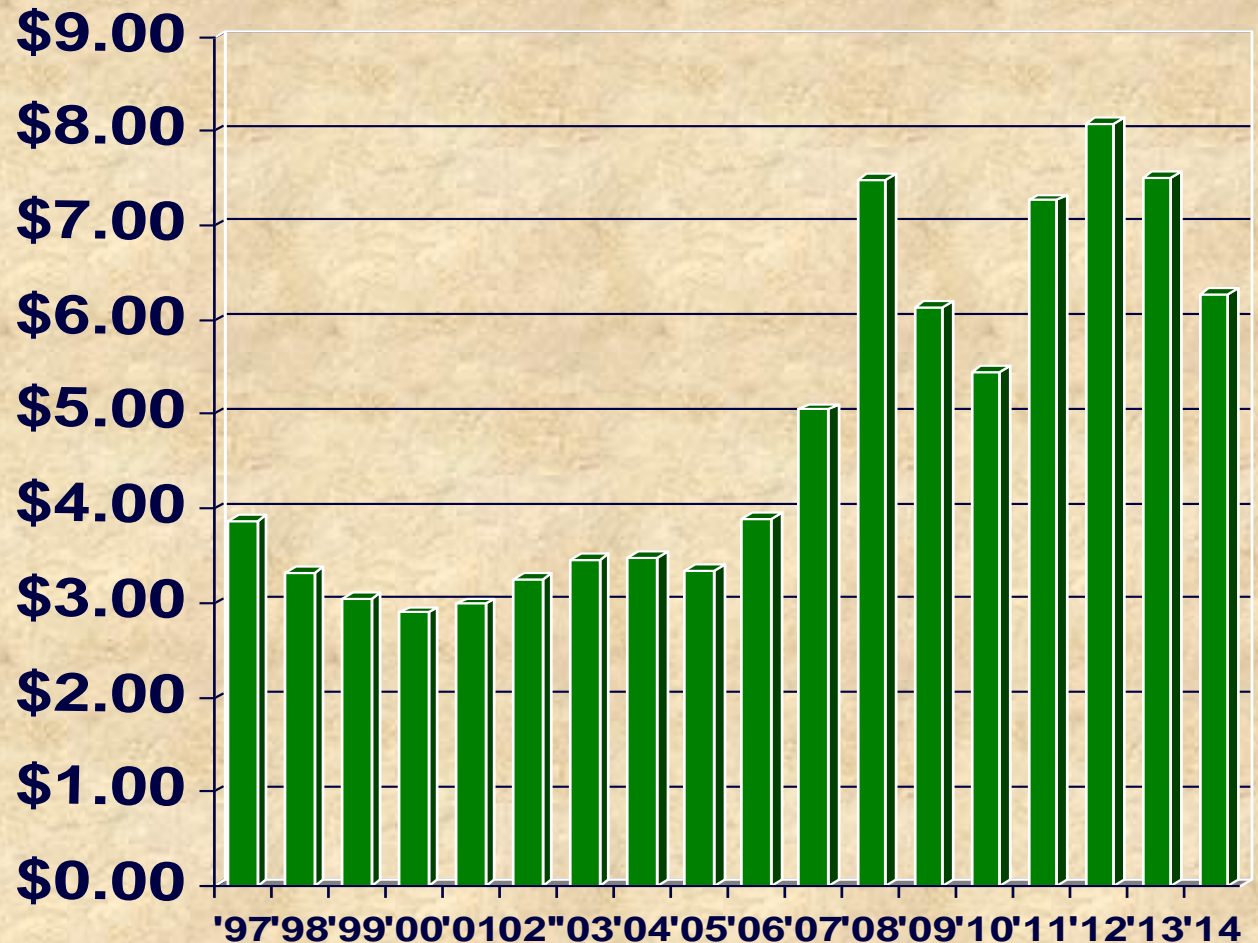


Spring Wheat Net Return/Acre on Cash Rented Land, 2014

● Average	\$ 42.70 at 60.0 Bu.
High 20%	\$ 105.90 at 63.7 Bu.
Low 20%	- \$ 91.02 at 57.4 Bu.

Average Price Received, Cash Sales

• 1997	3.87
• 1998	3.33
• 1999	3.05
• 2000	2.90
• 2001	2.99
• 2002	3.26
• 2003	3.46
• 2004	3.48
• 2005	3.34
• 2006	3.89
• 2007	5.05
• 2008	7.48
• 2009	6.14
• 2010	5.45
• 2011	7.27
• 2012	8.08
• 2013	7.51
• 2014	6.28



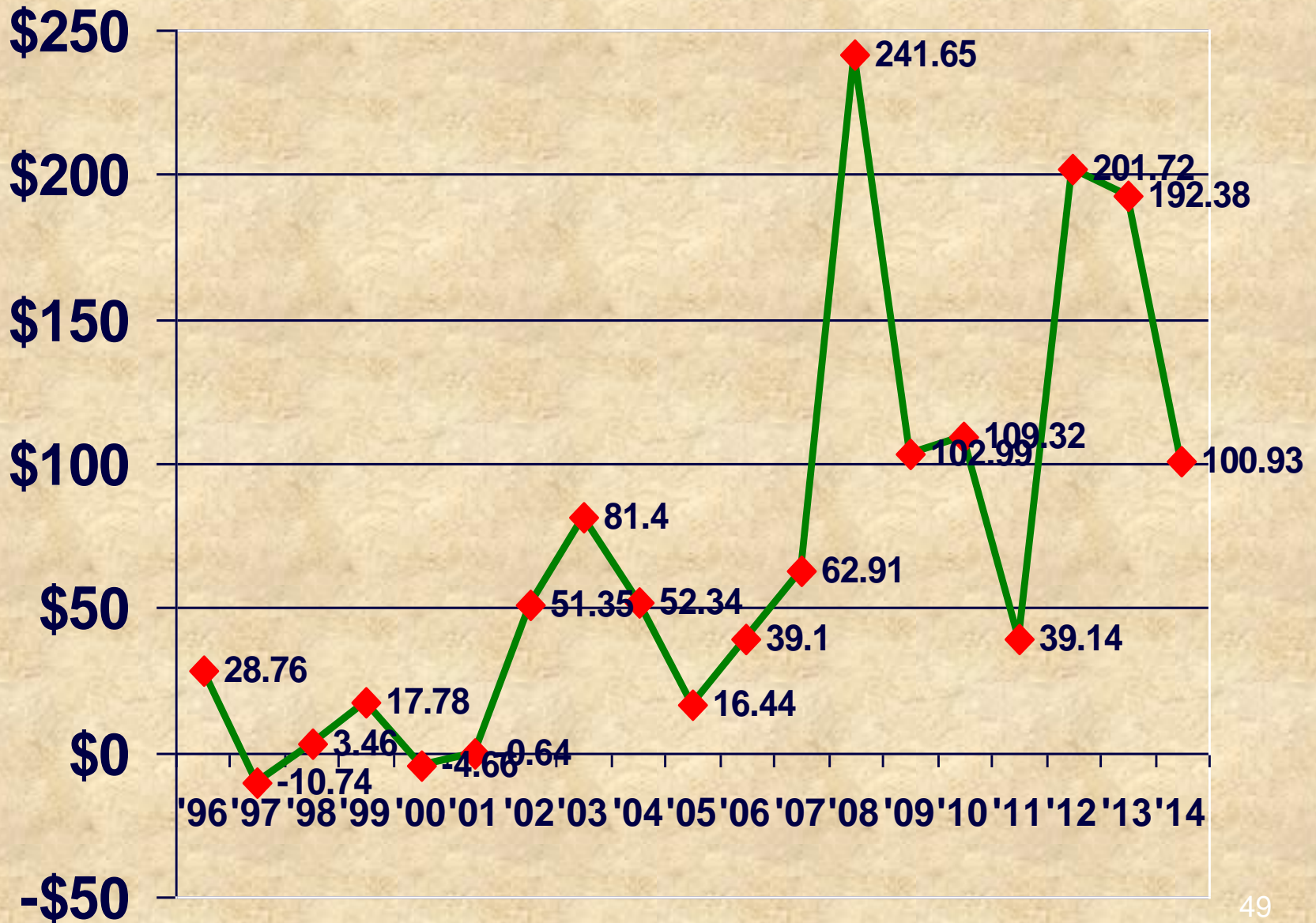
Barley



Barley Average Yields, Region 3

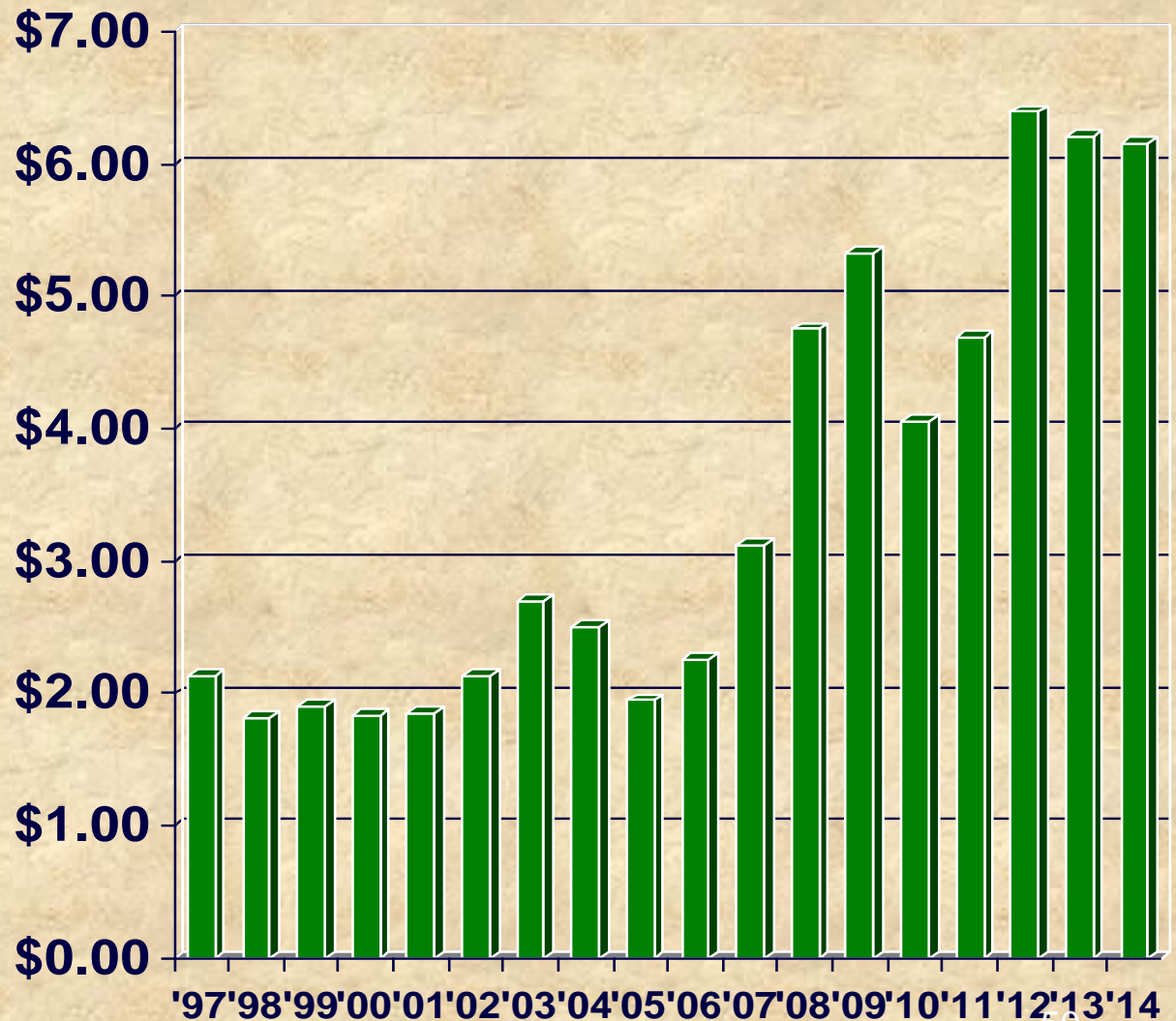


Barley Net Return per Acre on Cash Rented Land, Avg. Rent \$61.24



Average Received for Barley Cash Sales

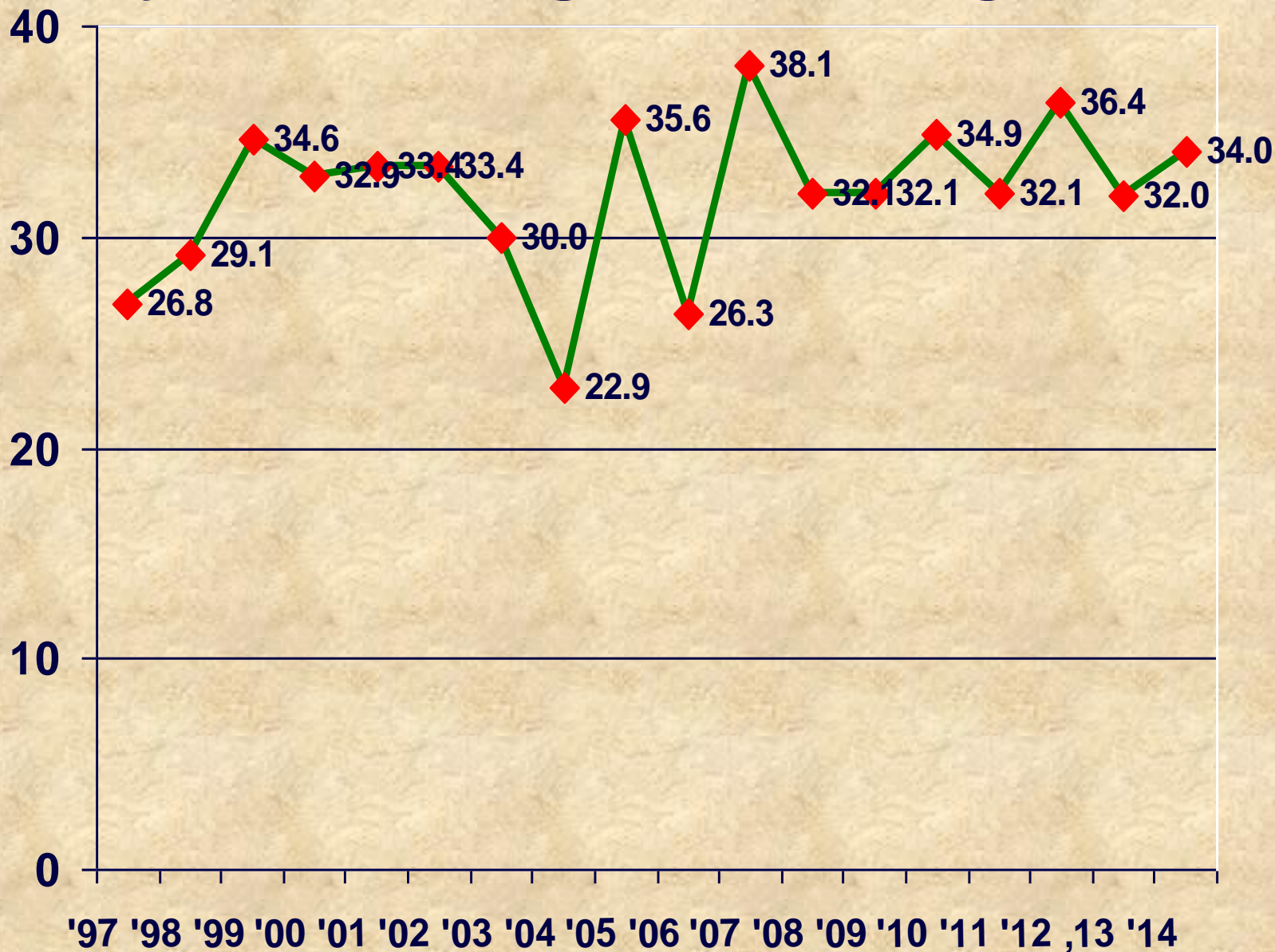
● 1997	2.13
● 1998	1.82
● 1999	1.91
● 2000	1.83
● 2001	1.85
● 2002	2.14
● 2003	2.70
● 2004	2.50
● 2005	1.95
● 2006	2.26
● 2007	3.12
● 2008	4.75
● 2009	5.32
● 2010	4.05
● 2011	4.69
● 2012	6.39
● 2013	6.20
● 2014	6.16



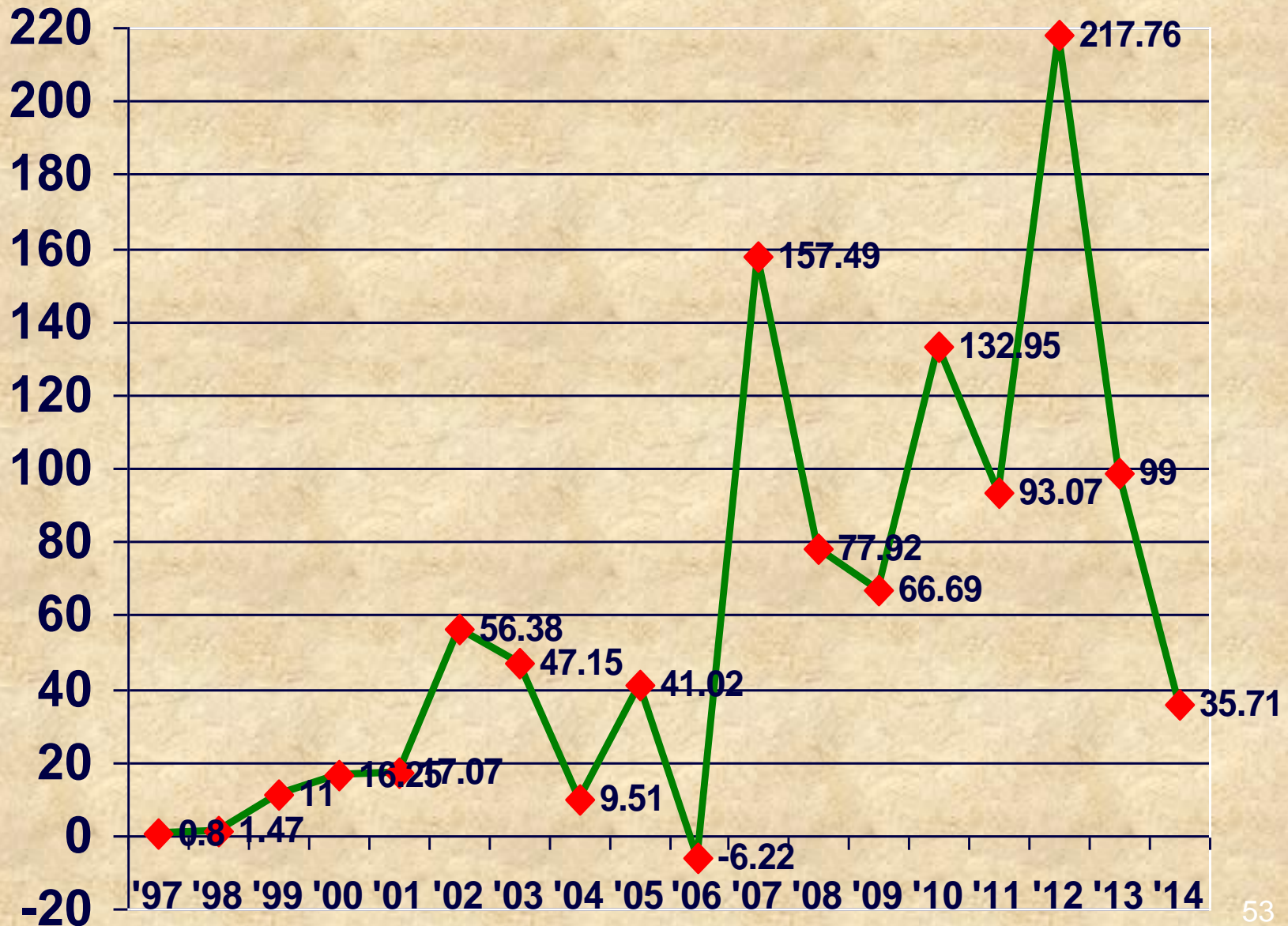
Soybeans



Soybean Average Yields, Region 3



Soybean Net Return per Acre on Cash Rented Land, Avg. Rent \$73.52

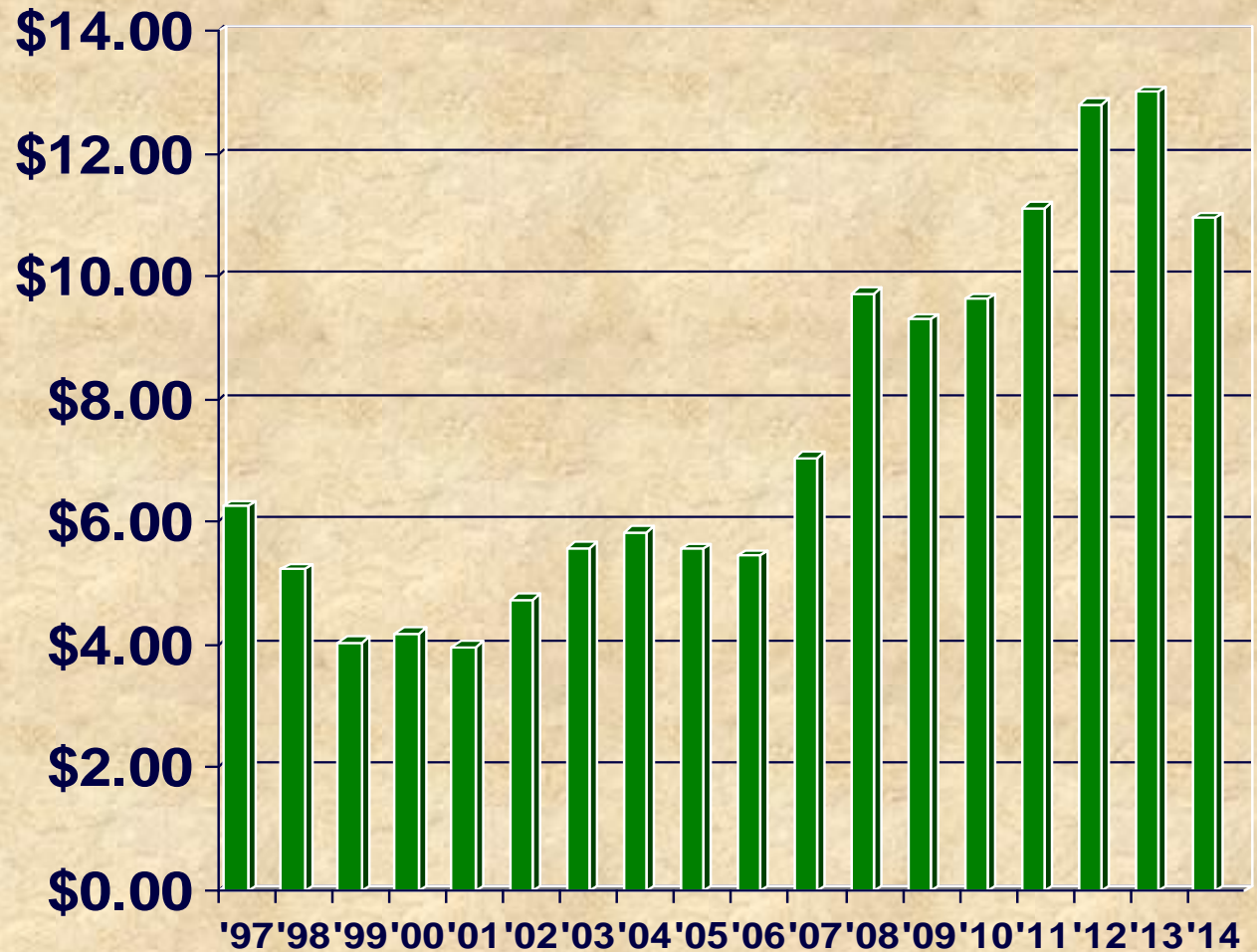


Soybeans Net Return per Acre on Cash Rented Land, 2014

Average	\$ 35.71 at 34.2 Bu.
High 20%	\$ 116.13 at 40.2 Bu.
Low 20%	\$ -64.31 at 29.2 Bu.

Average Price Received for Cash Sales

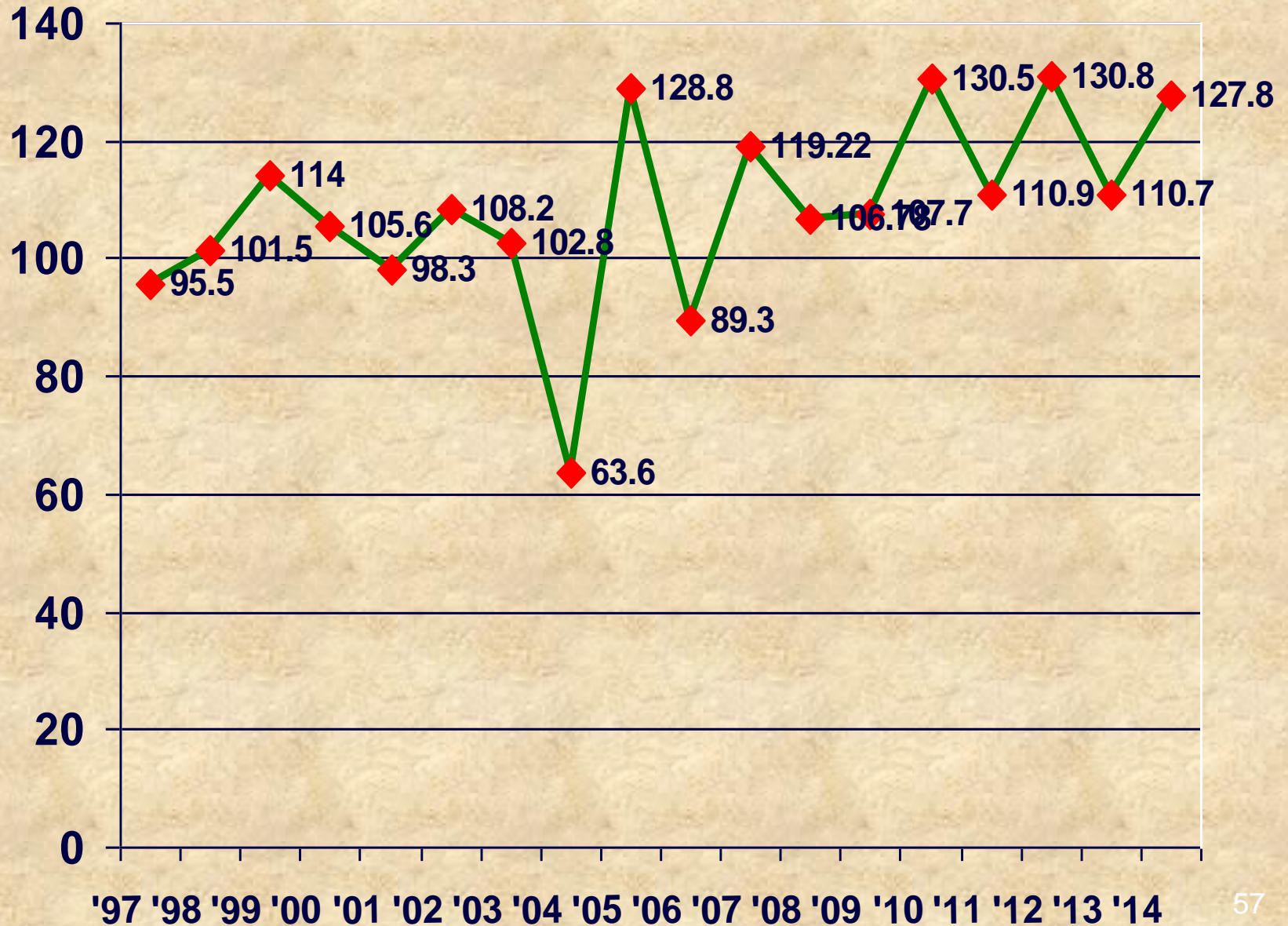
• 1997	6.26
• 1998	5.24
• 1999	4.05
• 2000	4.19
• 2001	3.97
• 2002	4.75
• 2003	5.59
• 2004	5.84
• 2005	5.56
• 2006	5.45
• 2007	7.06
• 2008	9.73
• 2009	9.30
• 2010	9.64
• 2011	11.13
• 2012	12.81
• 2013	13.02
• 2014	10.97



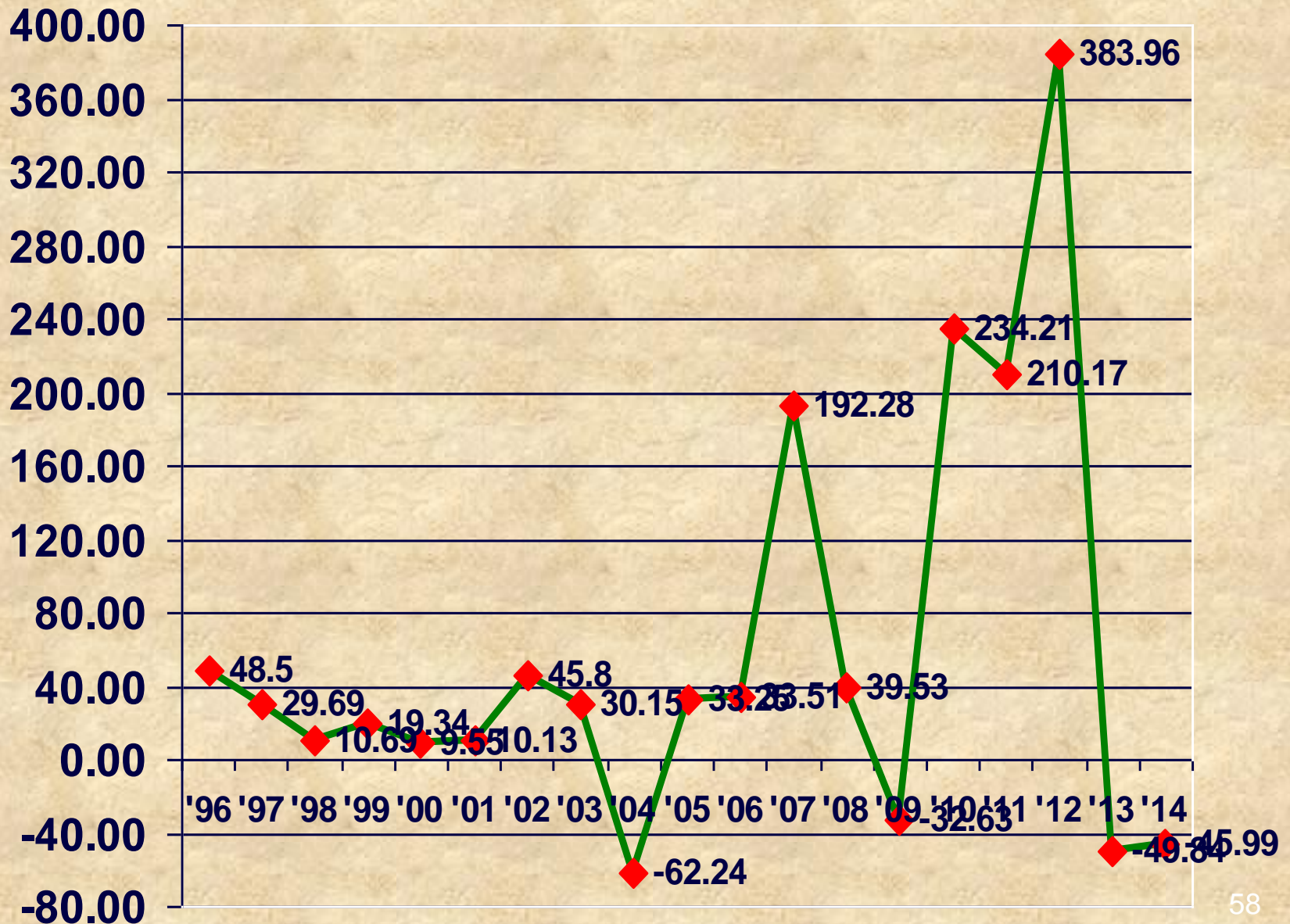
Corn



Corn Average Yields, Region 3



Corn Net Return per Acre on Cash Rented Land, Avg. Rent \$70.62



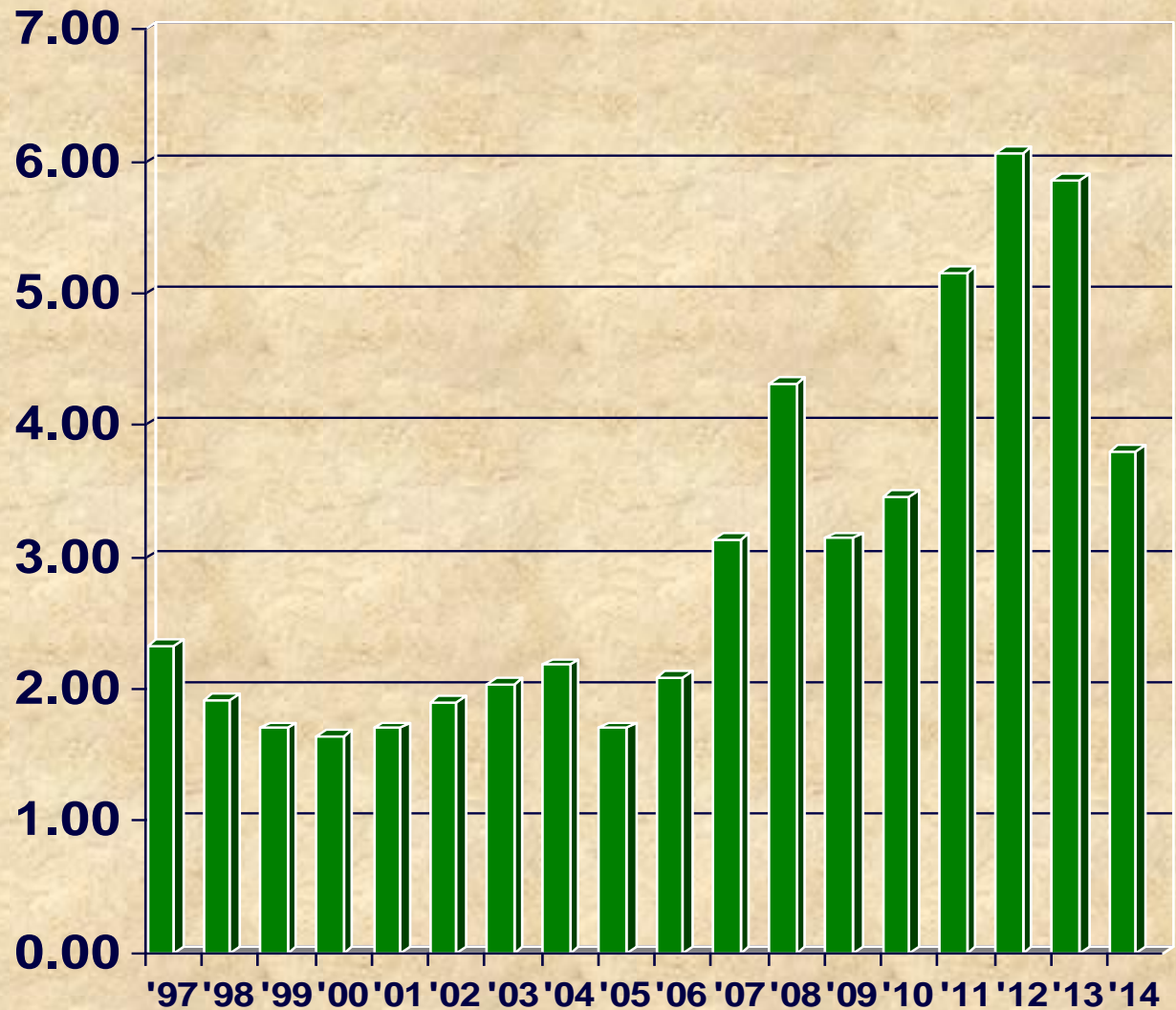
Corn Net Return/Acre on Cash Rented Land, 2014

Average	\$ - 45.99 at 129.0 Bu.
Low 20%	\$ - 138.35 at 120.8 Bu.
High 20%	\$ 30.32 at 133.5 Bu.



Average Price Received Cash Sales

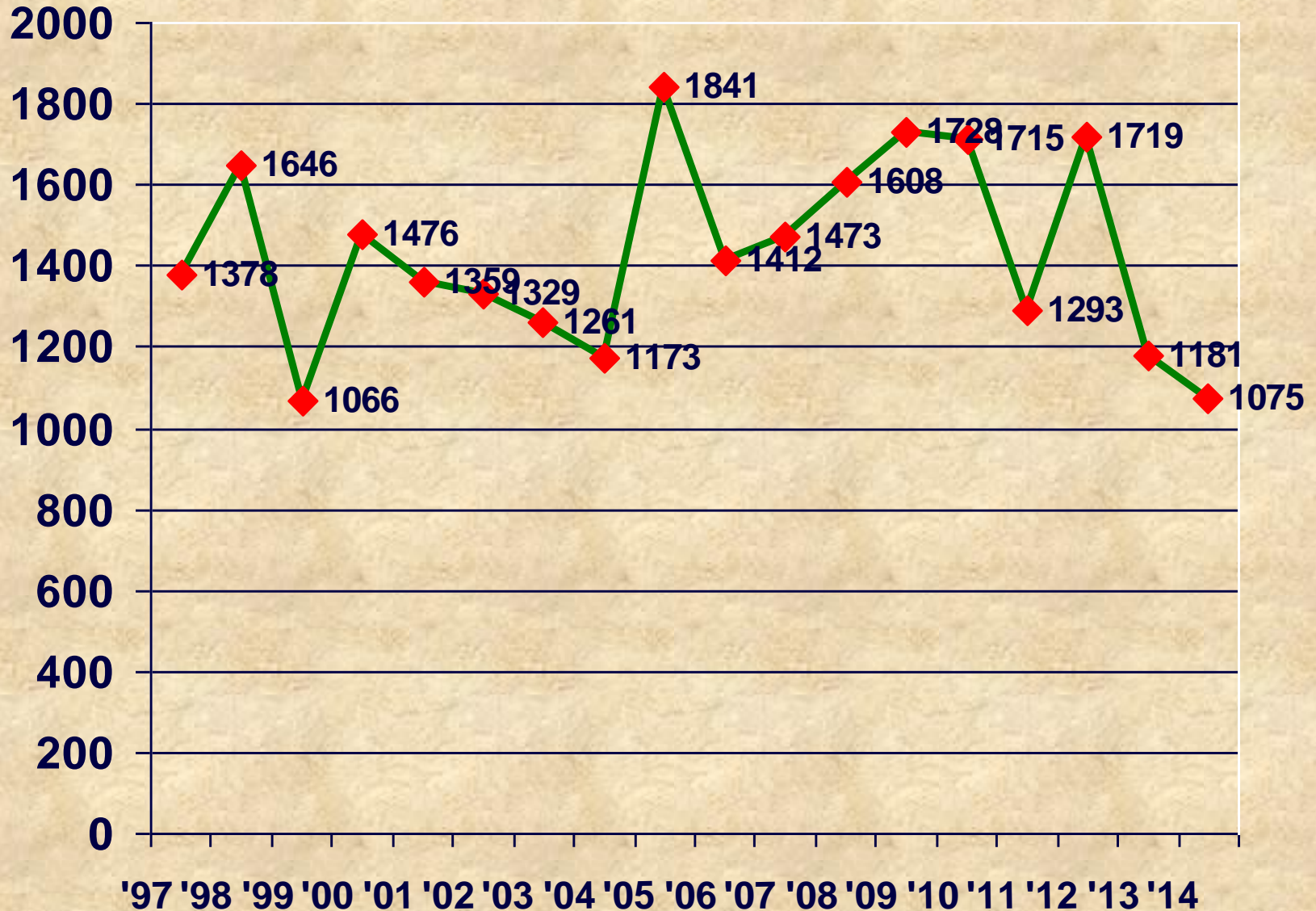
Corn		
● 1997	2.33	
● 1998	1.91	
● 1999	1.70	
● 2000	1.64	
● 2001	1.70	
● 2002	1.90	
● 2003	2.03	
● 2004	2.18	
● 2005	1.70	
● 2006	2.09	
● 2007	3.13	
● 2008	4.31	
● 2009	3.14	
● 2010	3.46	
● 2011	5.15	
● 2012	6.06	
● 2013	5.86	
● 2014	3.80	



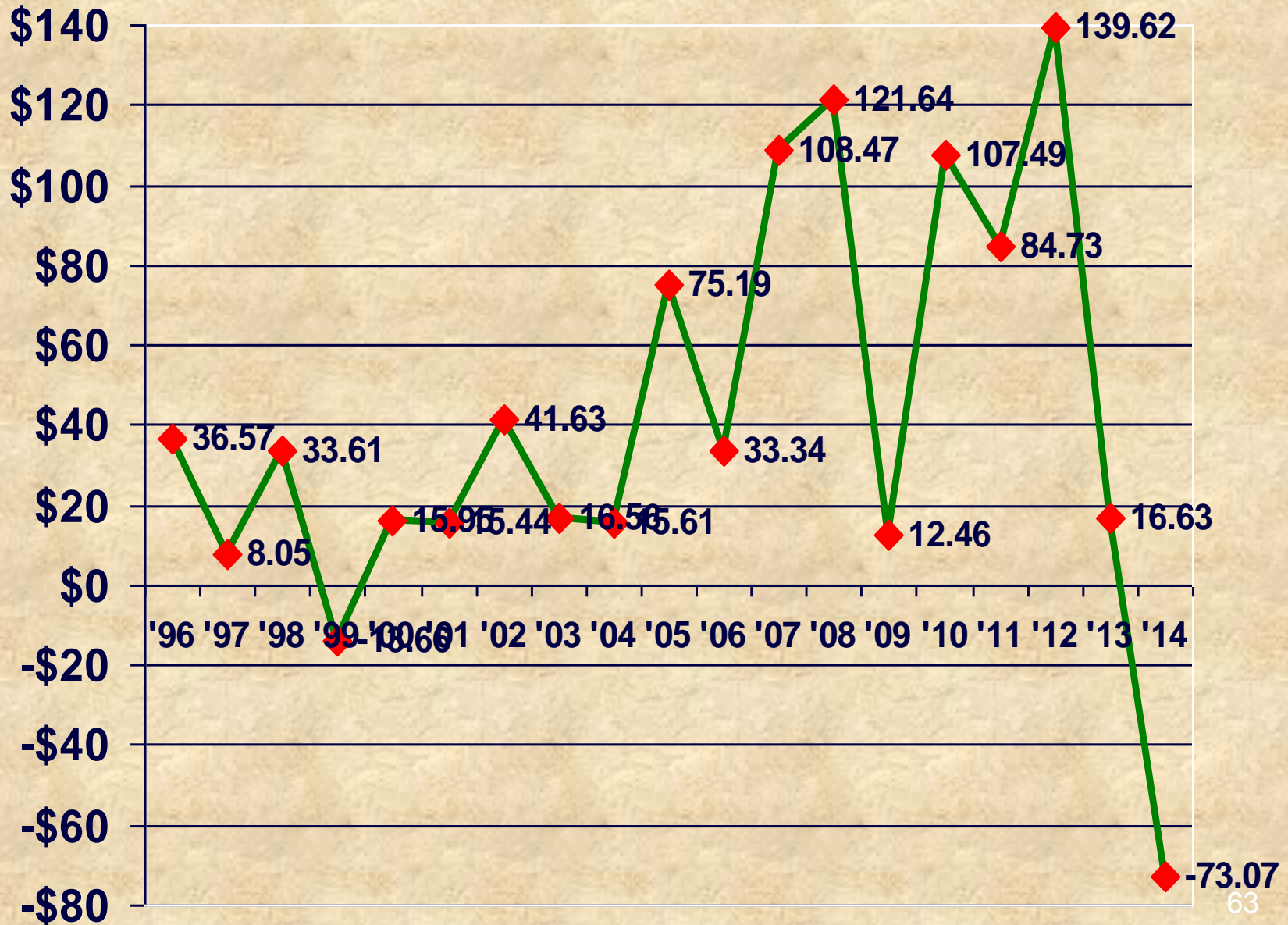
Sunflowers



Sunflower Average Yields, Region 3



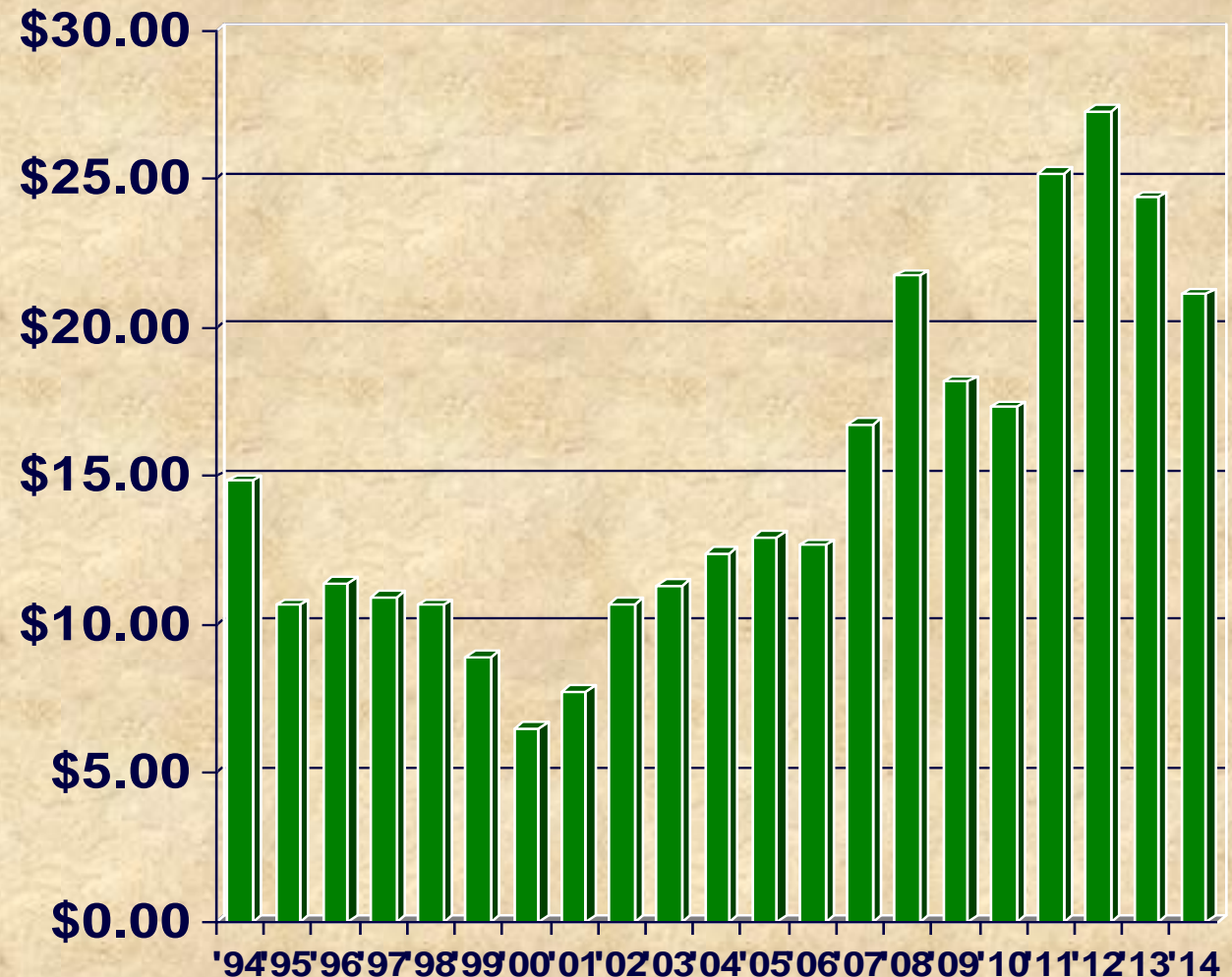
Sunflower Net Return per Acre on Cash Rented Land, Avg. Rent \$58.91



Average Price Received Cash Sales

Oil Sunflowers

● 1997	10.94
● 1998	10.66
● 1999	8.90
● 2000	6.50
● 2001	7.73
● 2002	10.71
● 2003	11.32
● 2004	12.41
● 2005	12.94
● 2006	12.68
● 2007	16.74
● 2008	21.74
● 2009	18.18
● 2010	17.32
● 2011	25.19
● 2012	27.30
● 2013	24.40
● 2014	21.12



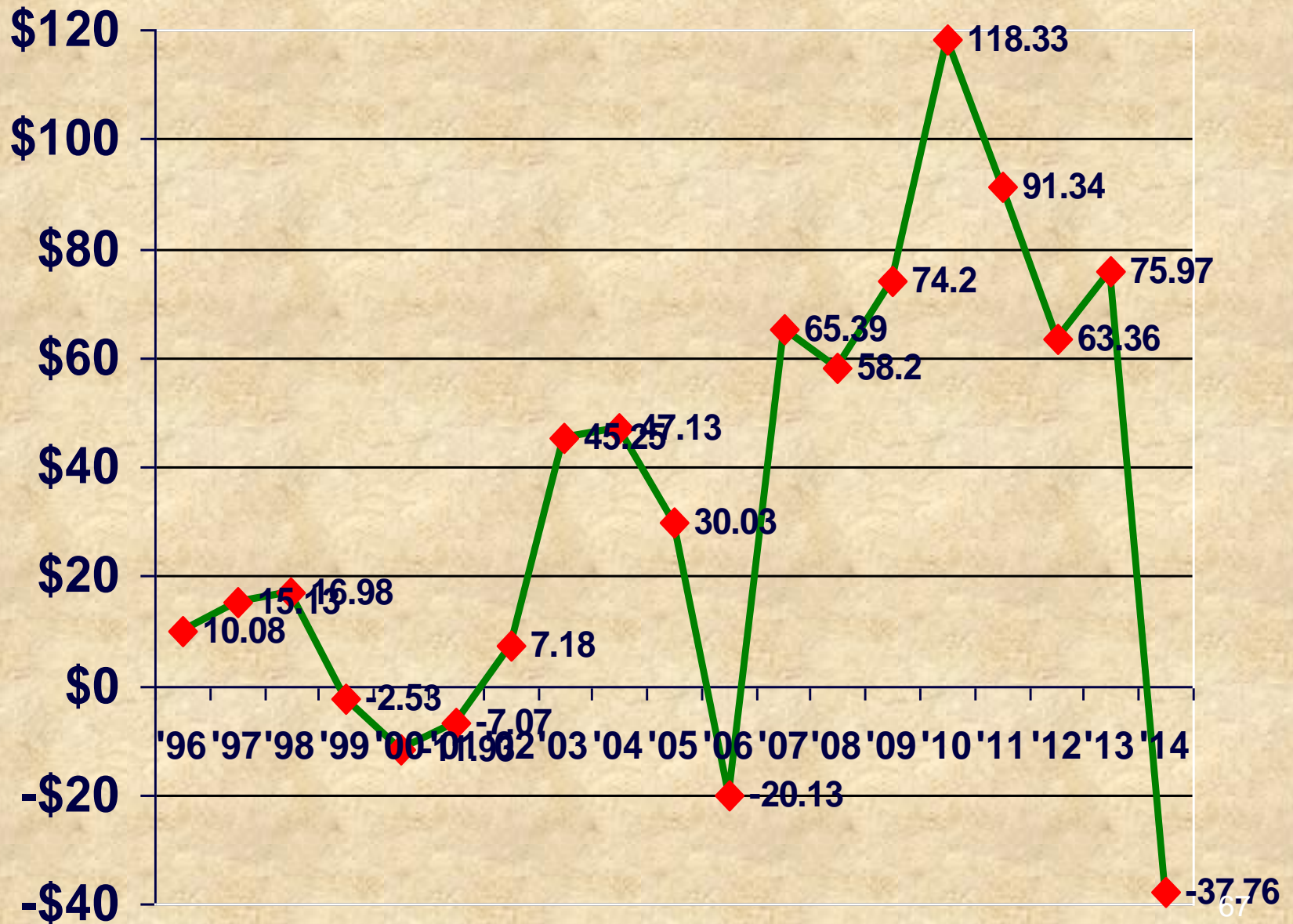
Canola



Canola Average Yields, Region 3



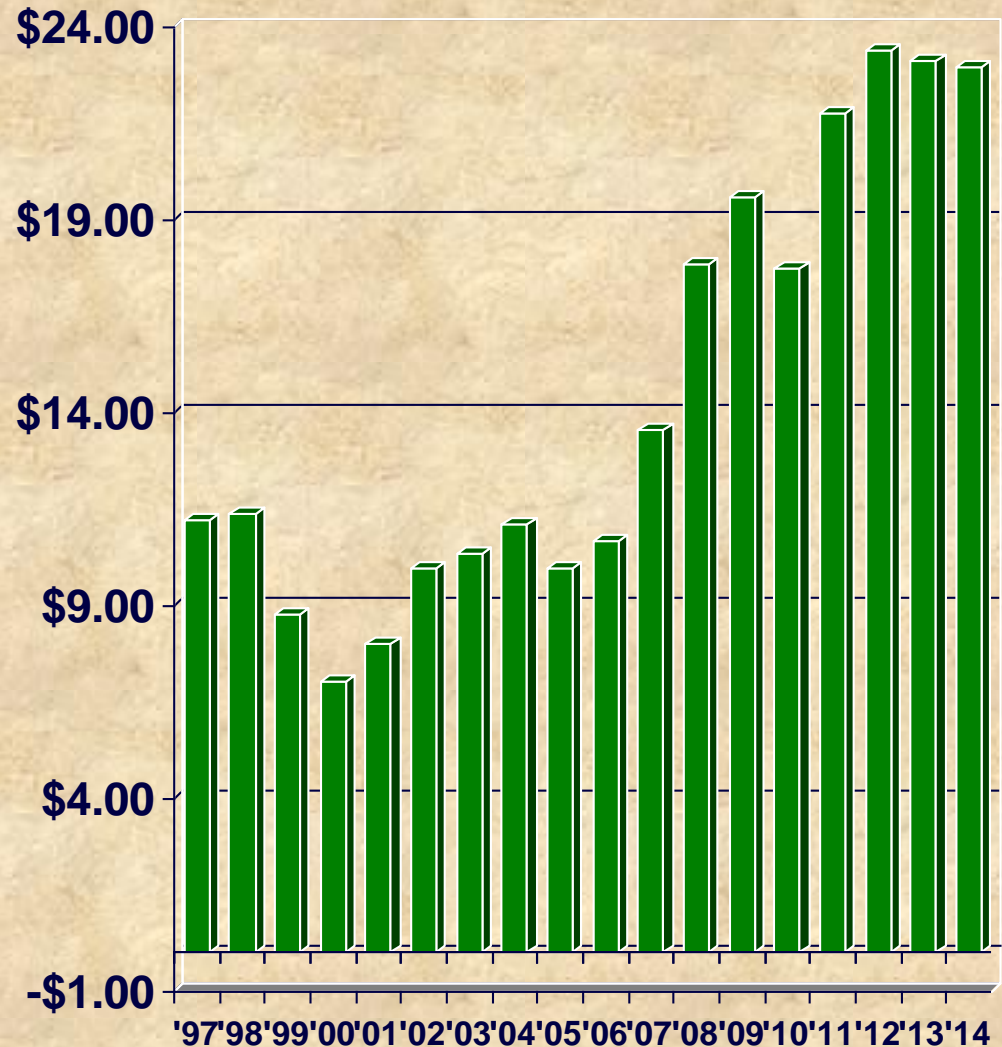
Canola Net Return per Acre on Cash Rented Land, Avg. Rent \$48.46



Average Price Received Cash Sales

Canola

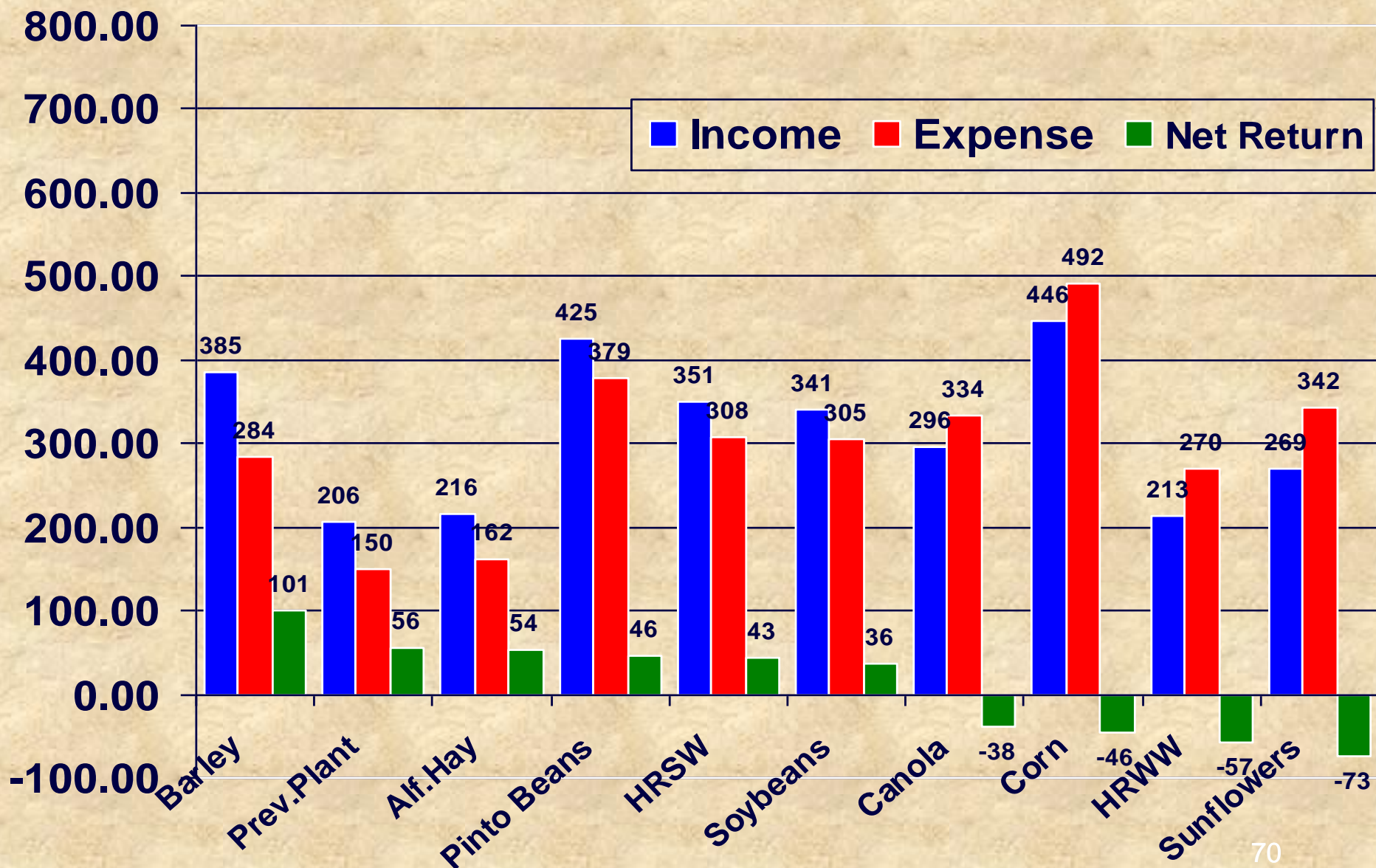
• 1997	11.20
• 1998	11.38
• 1999	8.78
• 2000	7.03
• 2001	7.98
• 2002	9.97
• 2003	10.34
• 2004	11.10
• 2005	9.95
• 2006	10.68
• 2007	13.52
• 2008	17.85
• 2009	19.57
• 2010	17.71
• 2011	21.76
• 2012	23.39
• 2013	23.10
• 2014	22.95



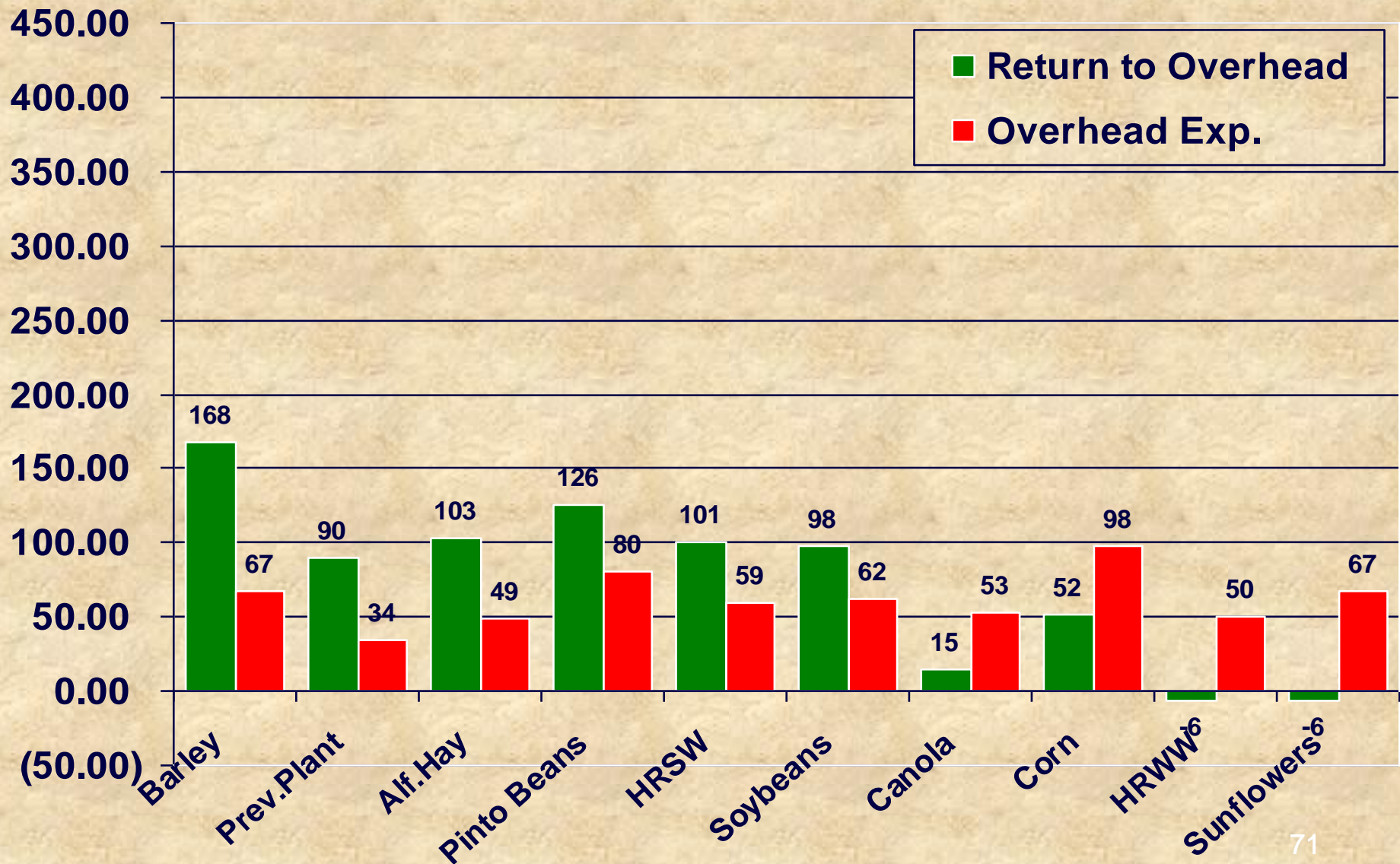
Comparing Crop Profitability



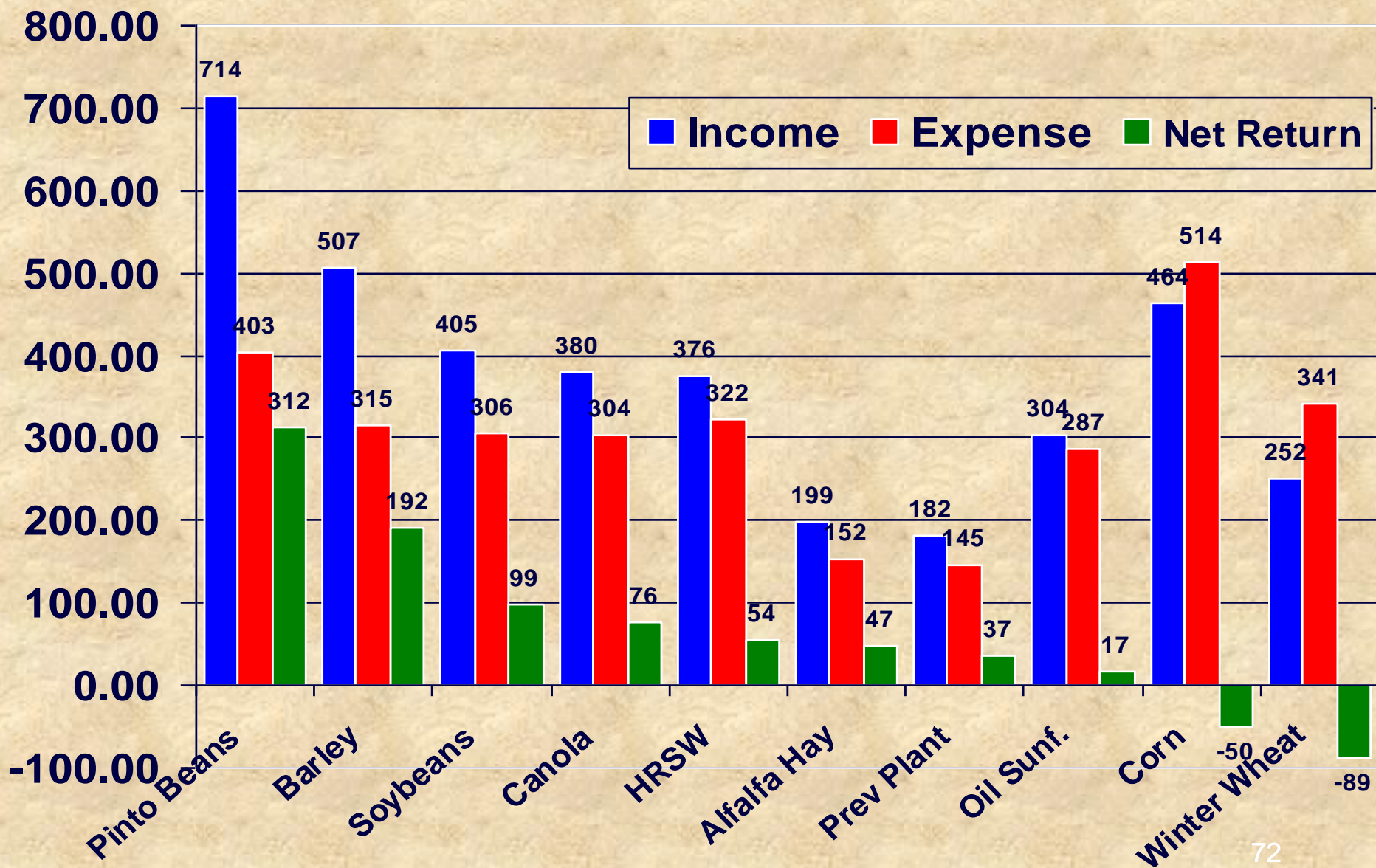
2014 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



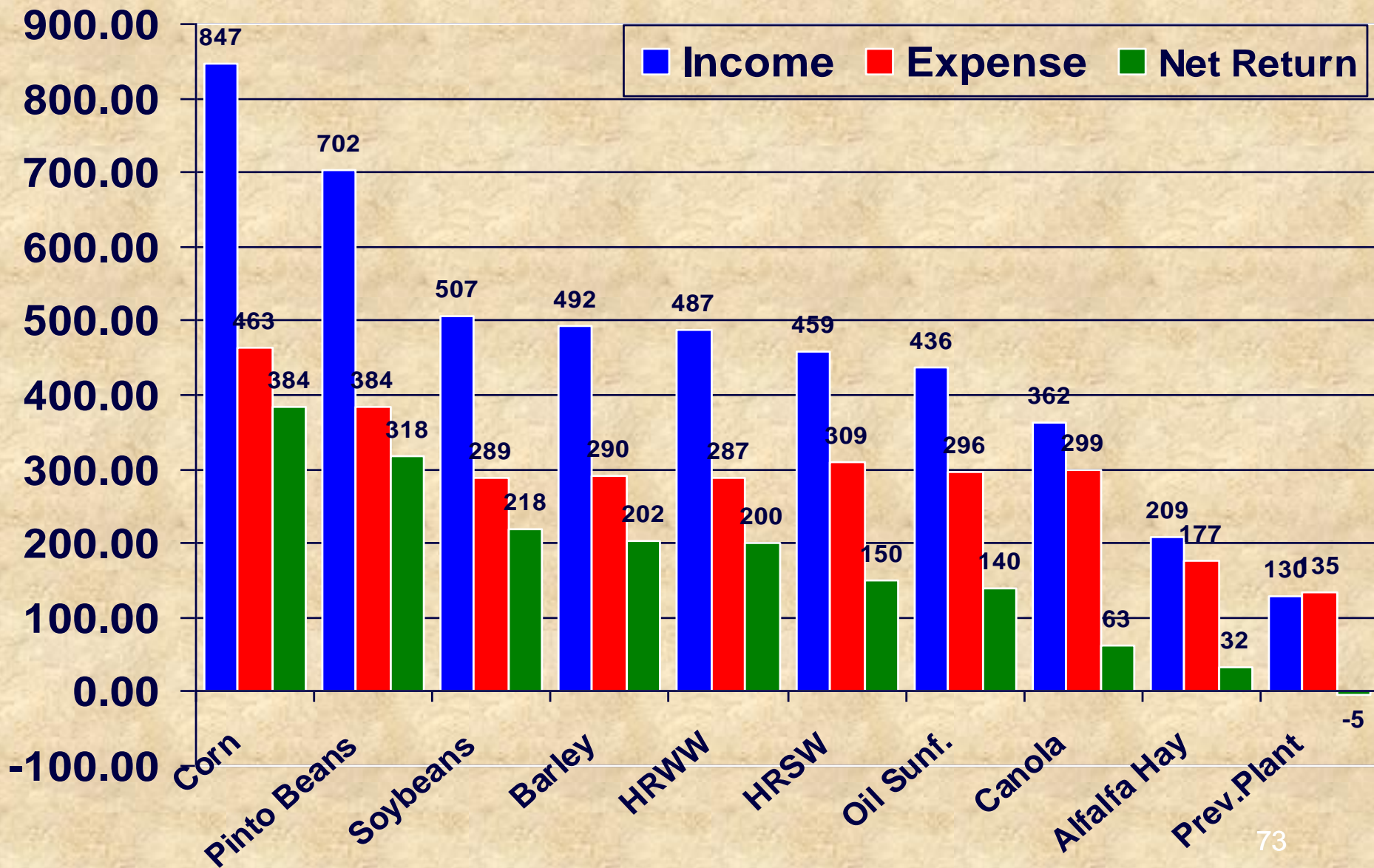
Return to Overhead per Cash Rented Acre without Direct or Counter-Cyclical Payments, Region 3, 2014



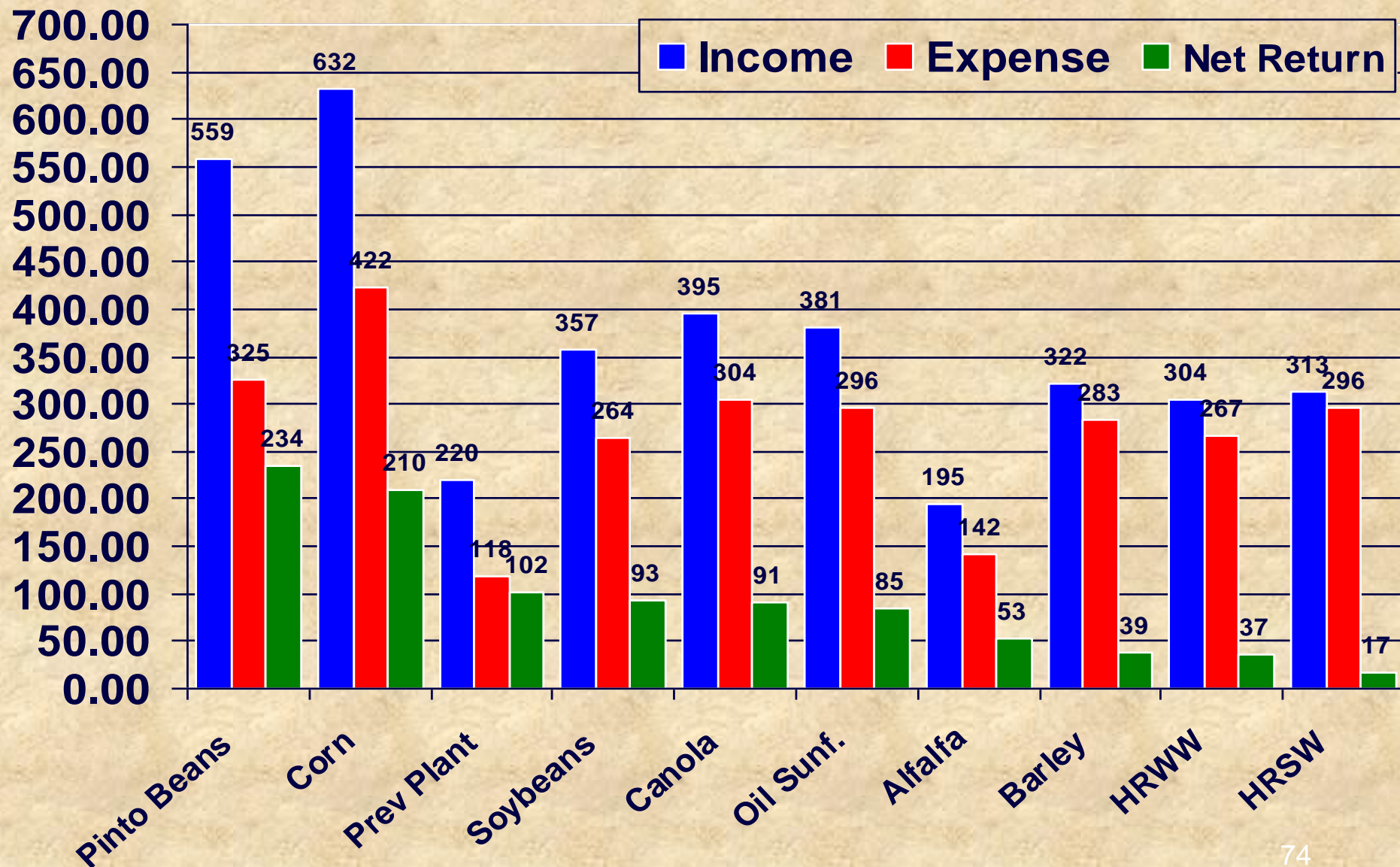
2013 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



2012 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



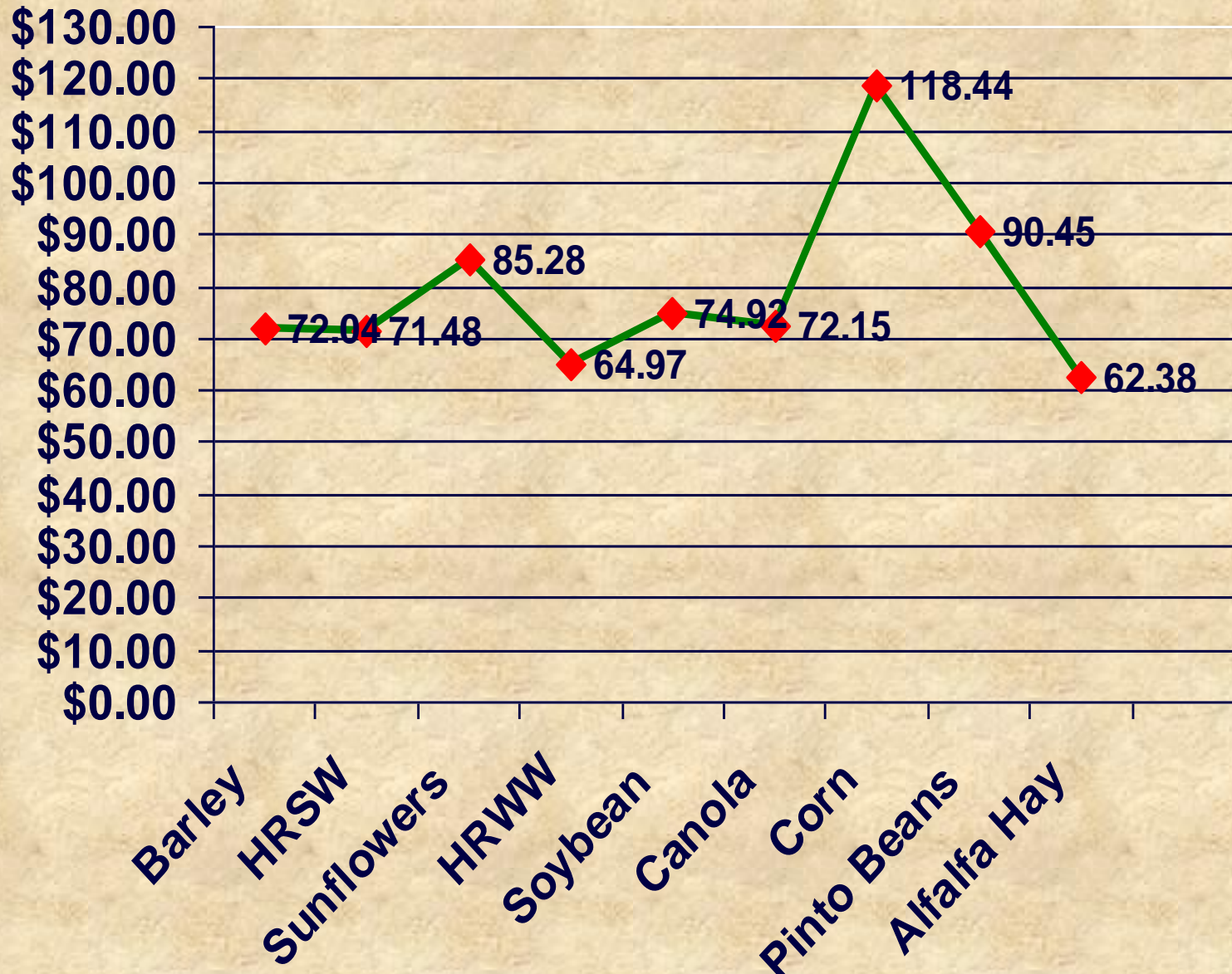
2011 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



Machinery Costs per Acre

- Fuel
- Repairs
- Custom Hire
- Equipment Leases
- Interest on Intermediate Debt (Machinery portion)
- Machinery Depreciation (Crop portion only)
- Small Grains at \$65-\$80, Row Crops \$90-\$120

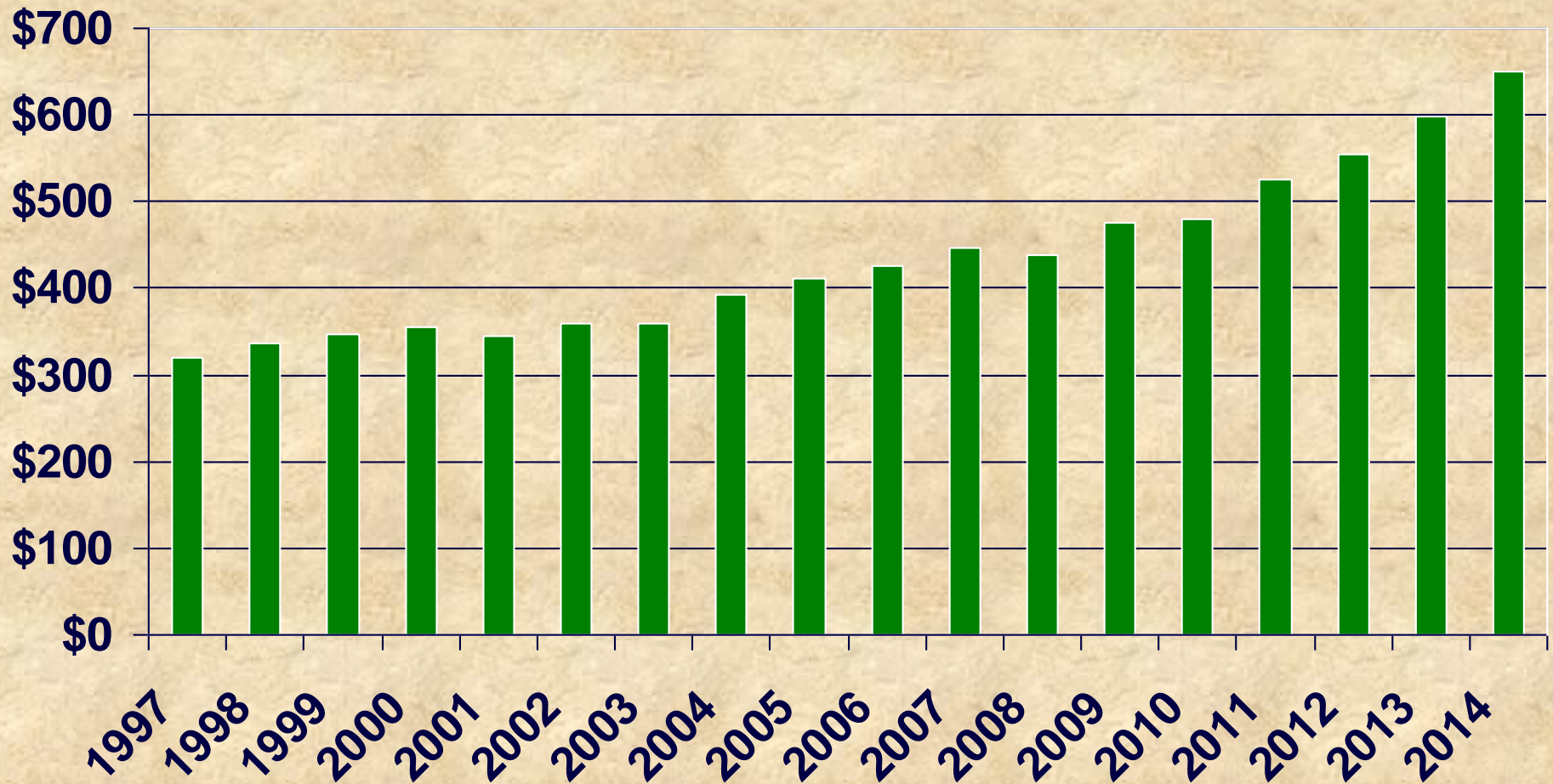
2014 Machinery Costs per acre, Cash Rented Cropping Systems



Beef Production in 2014

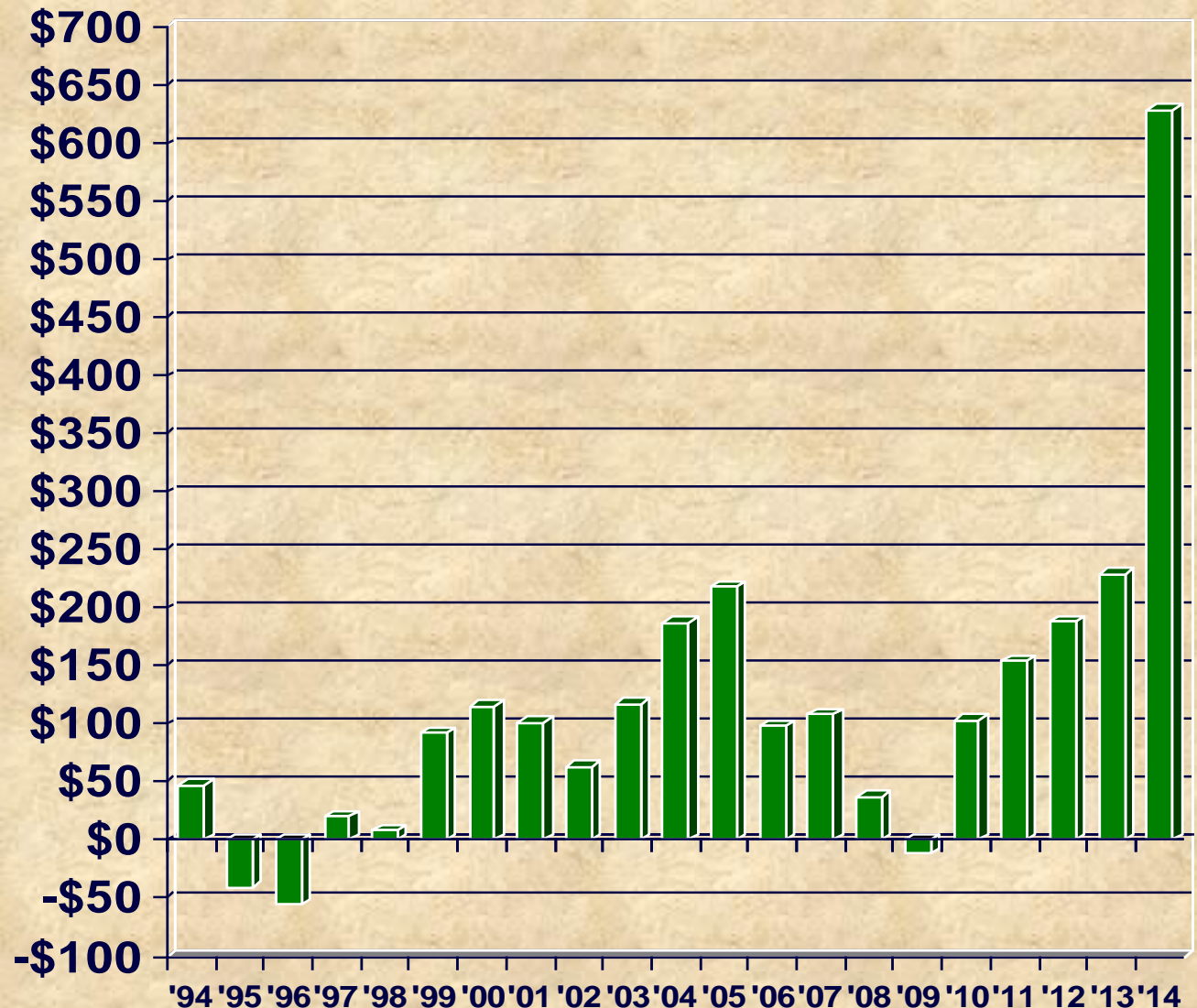


Direct & Overhead Expenses per Cow, does not include net inventory change of \$38.76



Net Return per Cow, Beef Cow Calf

● 1997	20.21
● 1998	8.52
● 1999	92.51
● 2000	114.80
● 2001	101.03
● 2002	62.82
● 2003	117.38
● 2004	187.63
● 2005	217.72
● 2006	98.40
● 2007	108.46
● 2008	37.75
● 2009	-11.35
● 2010	102.87
● 2011	154.62
● 2012	188.15
● 2013	229.46
● 2014	628.84



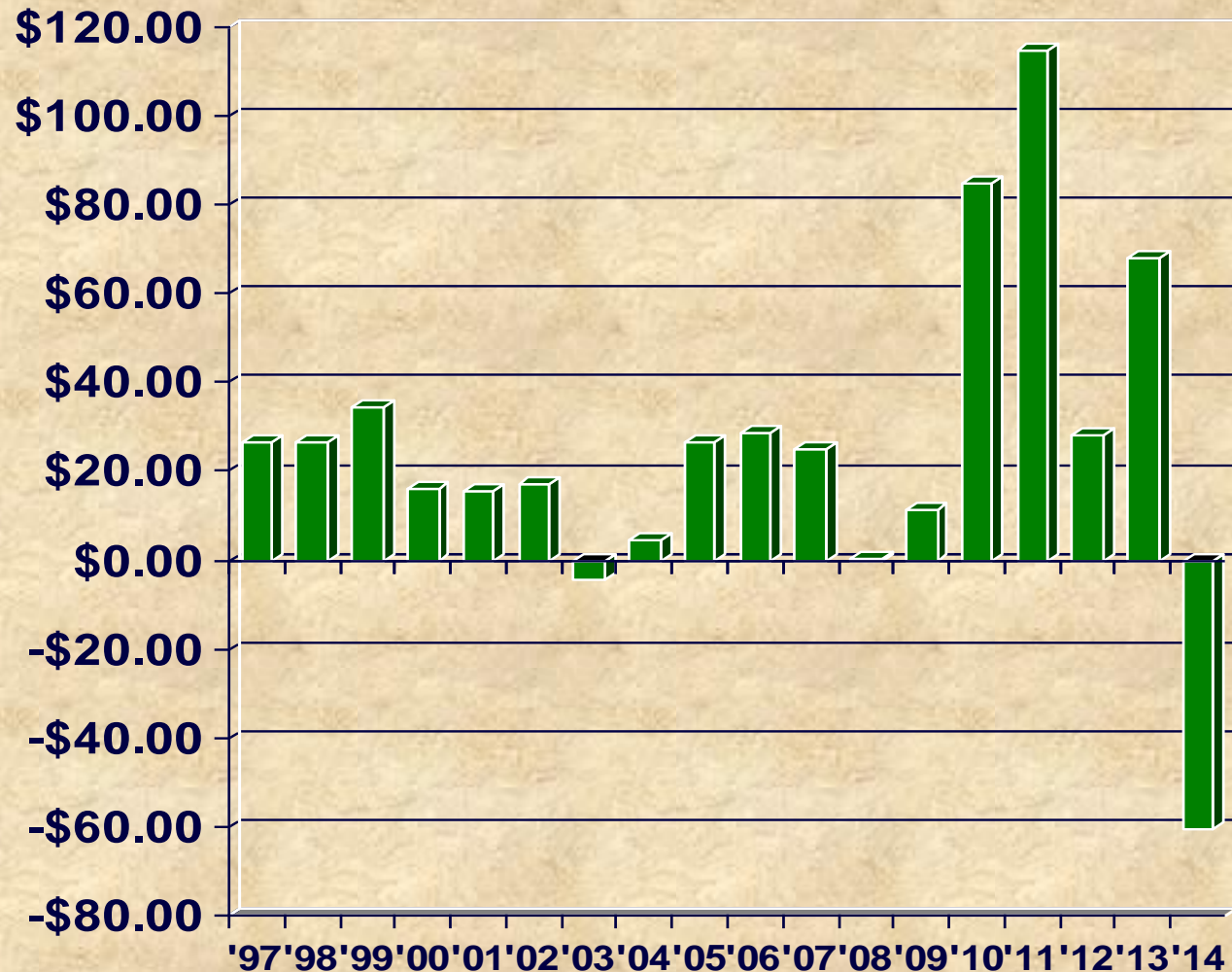
Other Beef Cow Items:

- Total average of all costs are \$688.86/cow.
- Average Profit per cow at \$628.84
- Avg. weaning wt. 565 lbs. (11# more than 2013)
- Pounds weaned per exposed female 510 lbs.(+7 lbs)
- Avg. feed cost per cow of \$398.09 (up \$16.58)
- Avg. range or pasture cost per cow \$130.77 (+\$19.26)
- Avg. cost per AUM was \$20.78 for rented pasture.
- Avg. cost to produce a ton of grass hay \$47.73
- Avg. cost to produce a ton of alfalfa hay \$55.05
- Avg. cost to produce a ton of corn silage \$34.79 wet, or approximately \$90-100/ton for 90% dry matter.

Beef Backgrounding, Net Return/Head

Per Calf

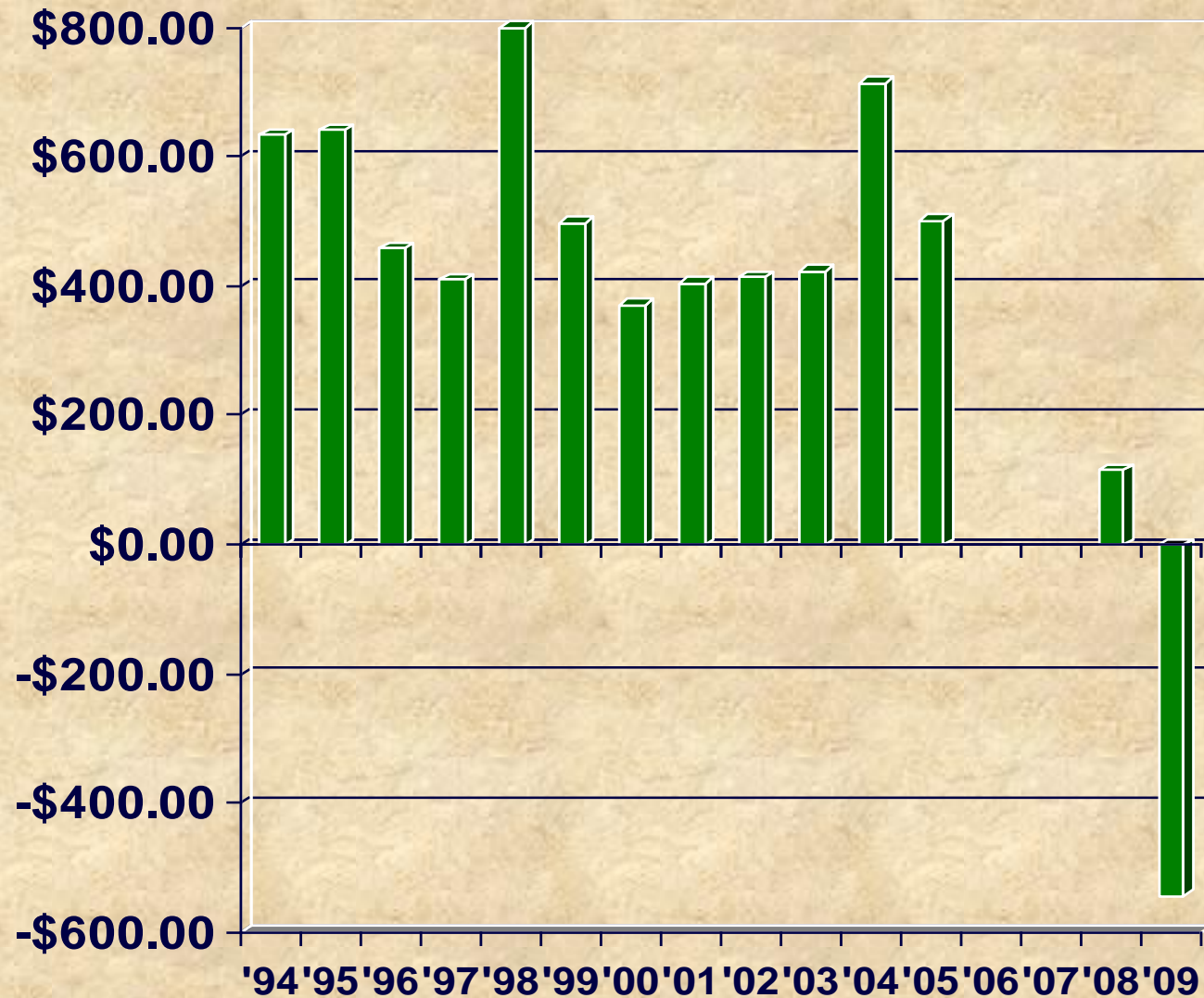
● 1997	26.71
● 1998	26.62
● 1999	34.56
● 2000	16.23
● 2001	15.52
● 2002	17.37
● 2003	-4.35
● 2004	4.29
● 2005	26.62
● 2006	28.90
● 2007	24.74
● 2008	.49
● 2009	11.54
● 2010	84.63
● 2011	114.85
● 2012	27.96
● 2013	68.19
● 2014	-60.39



Net Return per Dairy Cow, No data for 2010-2014

Dairy Cow

● 1994	634.22
● 1995	640.49
● 1996	457.99
● 1997	409.67
● 1998	799.50
● 1999	497.41
● 2000	370.63
● 2001	403.94
● 2002	413.60
● 2003	422.63
● 2004	713.67
● 2005	501.60
● 2006	
● 2007	
● 2008	115.65
● 2009	-543.74

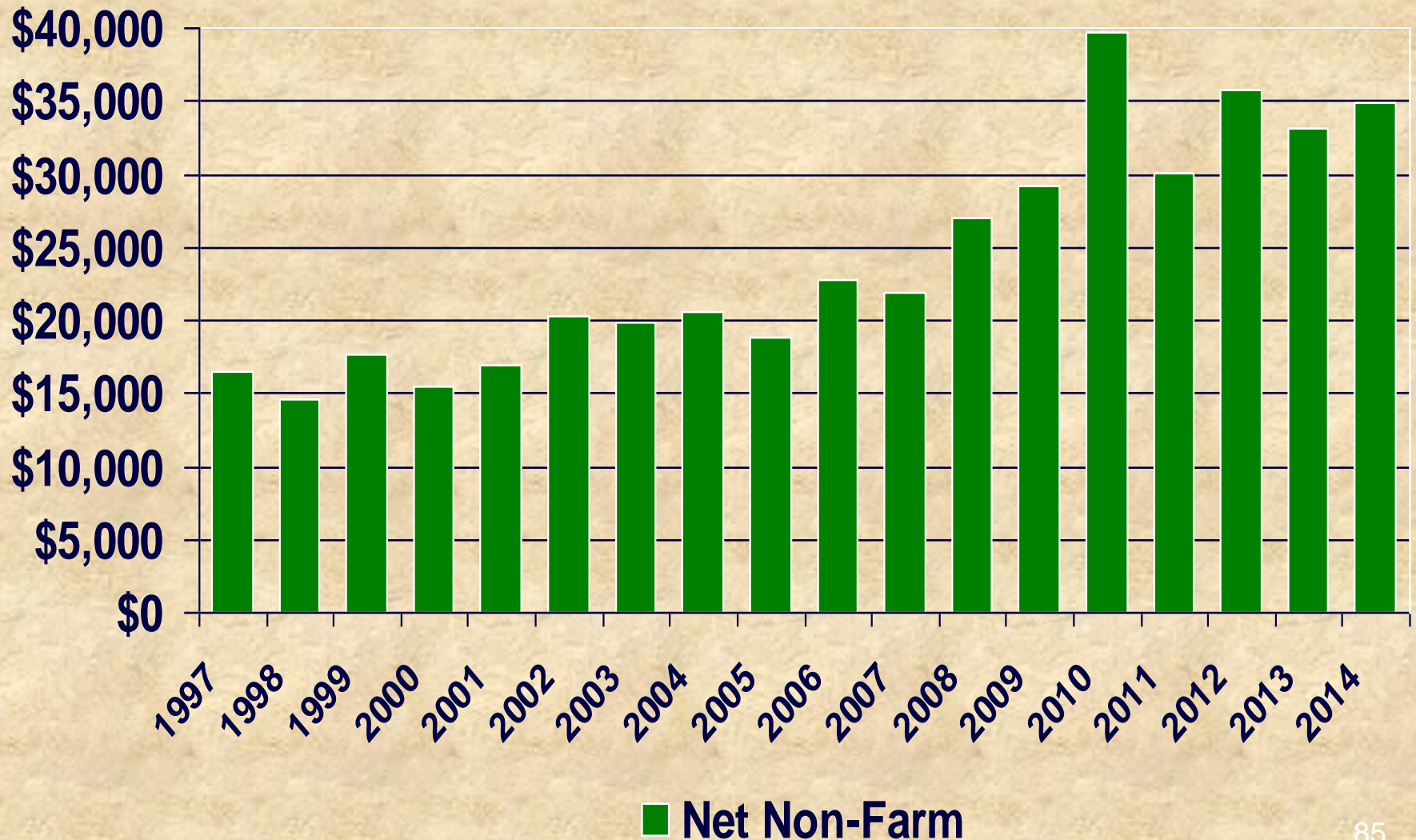


Beef producer's greatest fear!

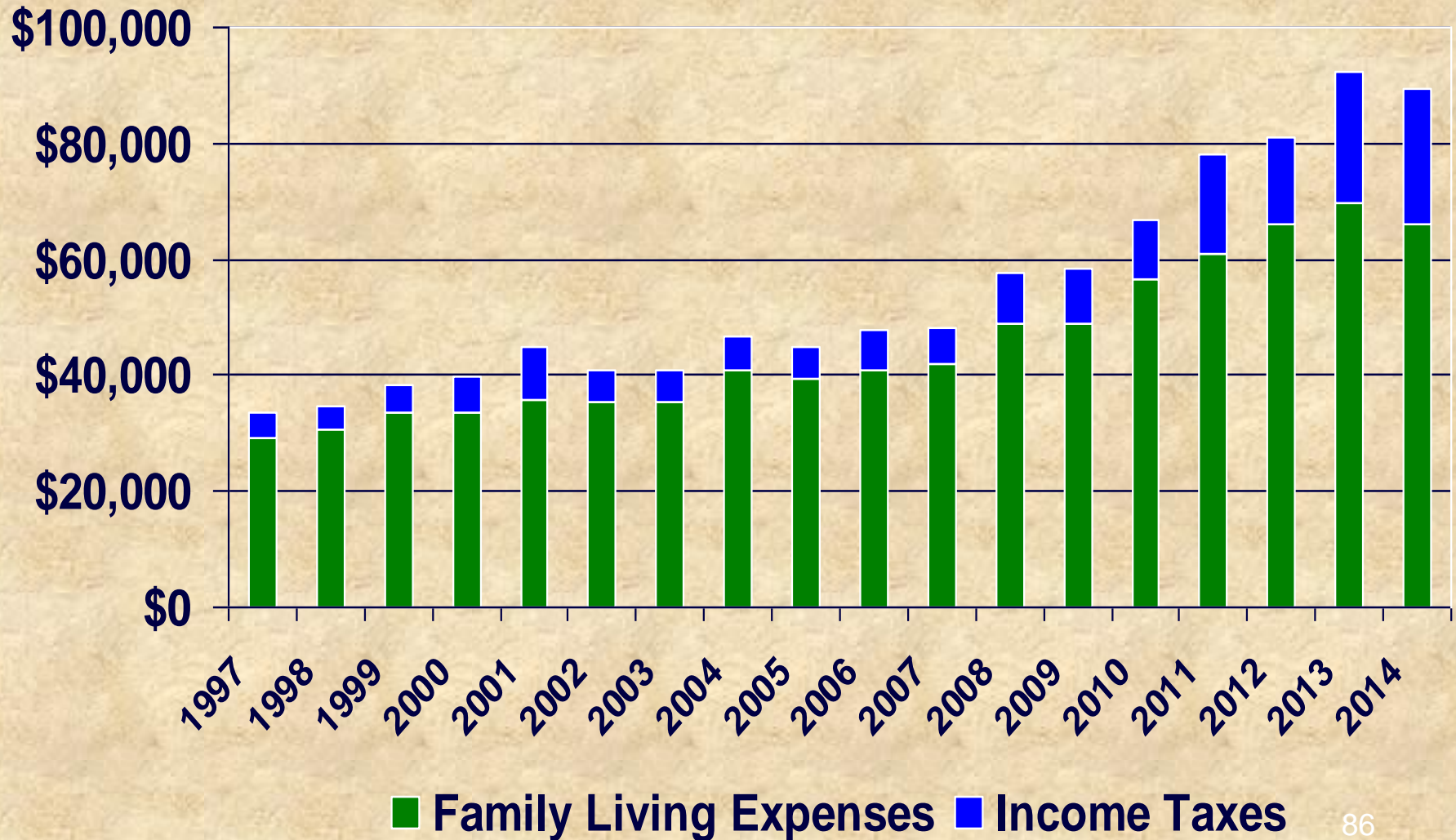


Non-Farm Income and Family Living Information

Non-Farm Income Per Farm



Average Family Living Expenditures and Income Taxes for Region 3



Family Living Expenses, 2.6 members, Based on itemization from 59 Farms

● Food & Meals	\$ 7,169	● Utilities	\$ 3,734
● Medical Care	\$ 4,226	● Veh. Exp.	\$ 3,414
● Health Insur.	\$ 7,484	● Household Rep	\$ 2,215
● Donations	\$ 1,862	● NF Interest	\$ 894
● Household	\$ 8,050	● Life Insurance	\$ 3,040
● Clothing	\$ 2,007	● Miscellaneous	\$ 1,291
● Personal	\$ 6,399	● Recreation	\$ 4,452
● Child Care	\$ 552	● Prop. Insurance	\$ 388
● Gifts	\$ 1,889	● Other Items	\$ 905
● Education	\$ 1,189	● Total of all	\$61,159

ND FARM MANAGEMENT EDUCATION

**The North Dakota Farm Business Management Education
Program is sponsored by the
North Dakota Department of
Career and Technical Education**



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Thank You!

