



ND Farm & Ranch Business Management 2013 Region 3 Annual Report

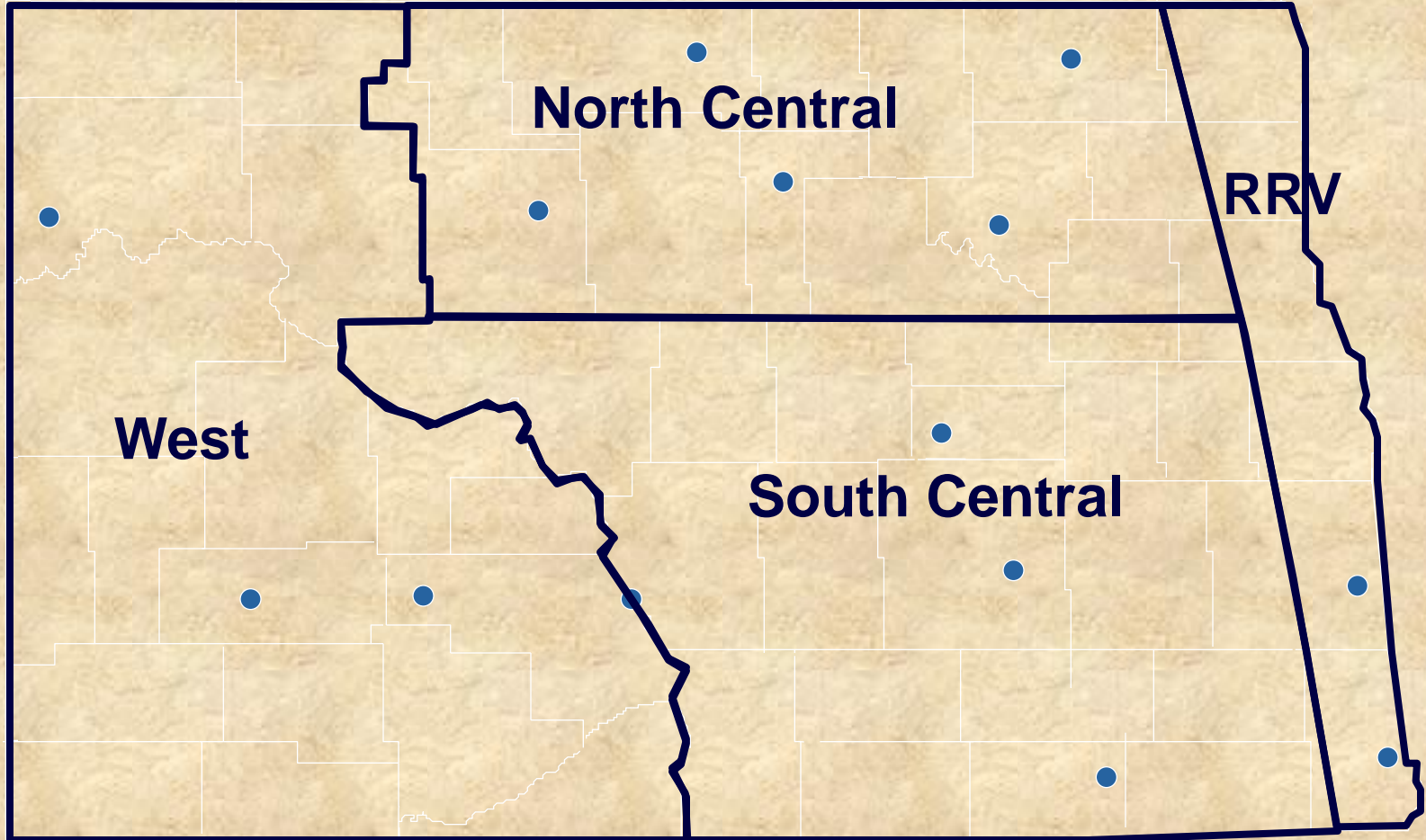
Steve Metzger

Carrington Research Extension Center and

Carrington Public Schools

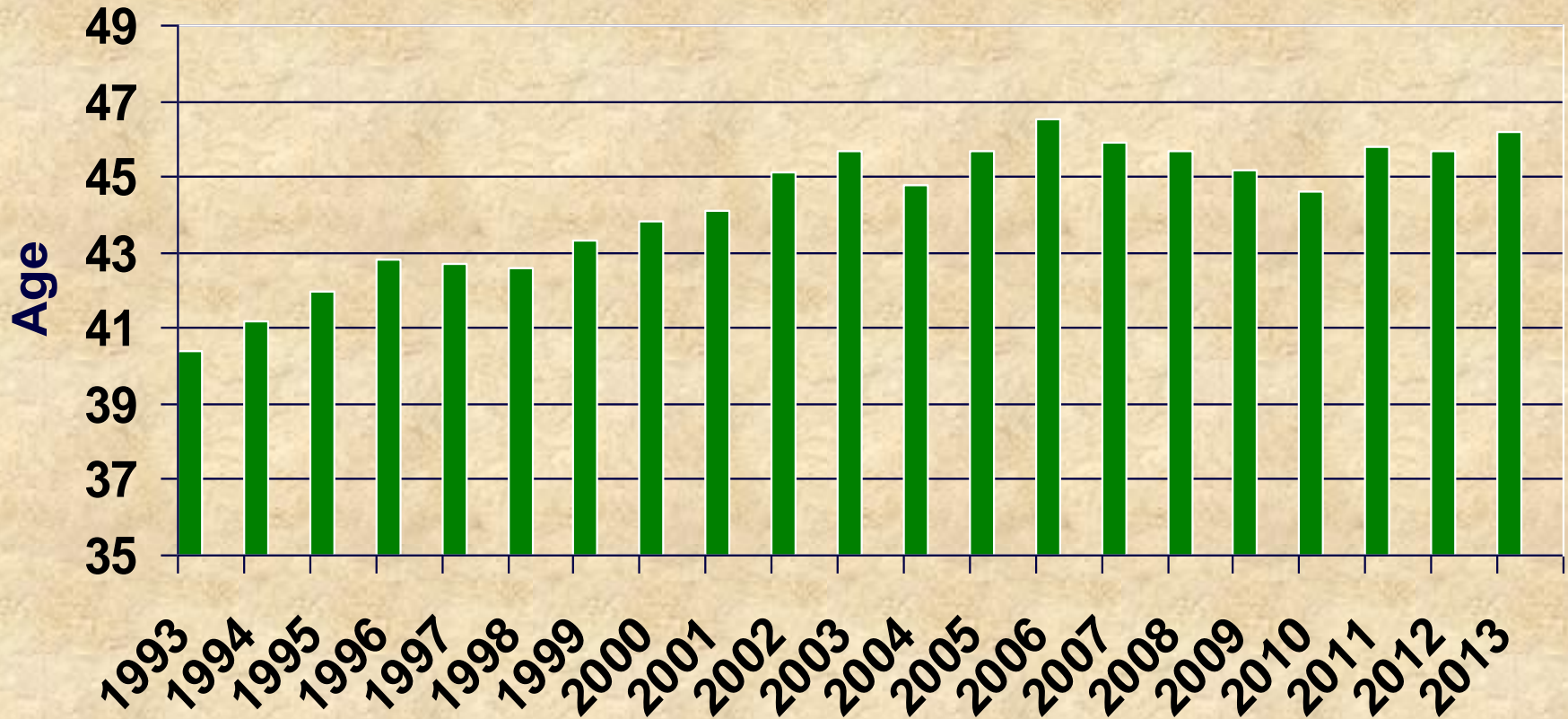
Carrington, ND

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

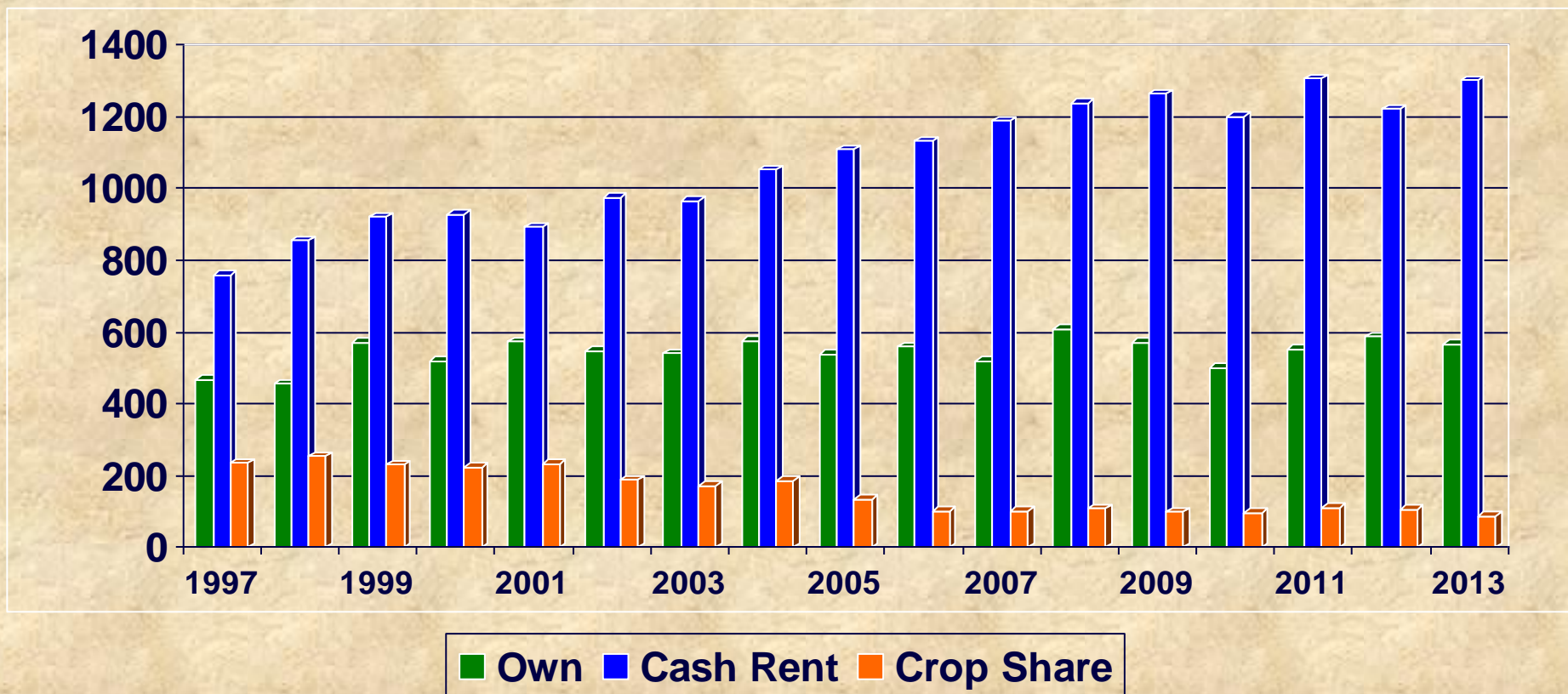


**WHAT TYPE OF FARMS
MAKE UP THE
BASE OF INFORMATION?**

Average Farmer Age in Region III



Crop acres totaled 1,952 in 2013, Increasing 16% since 2003



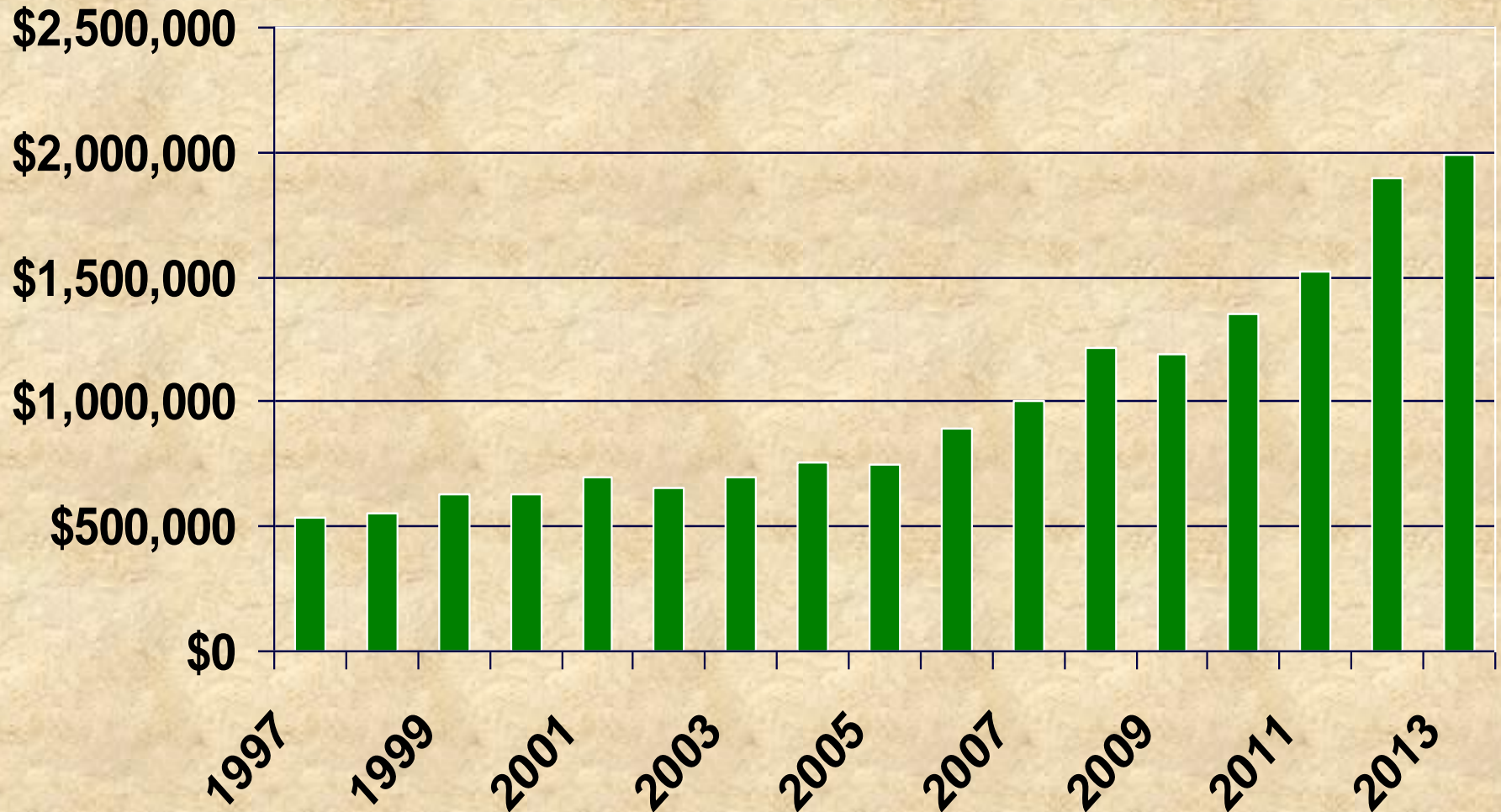
Total Farm Assets, Cost Basis

Total farm assets for enrolled farms increased 5% or \$90,334 from last year. An increase of 187% in the last 10 years.

● 2003	\$693,493
● 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



Growth of Farm Assets in Region 3



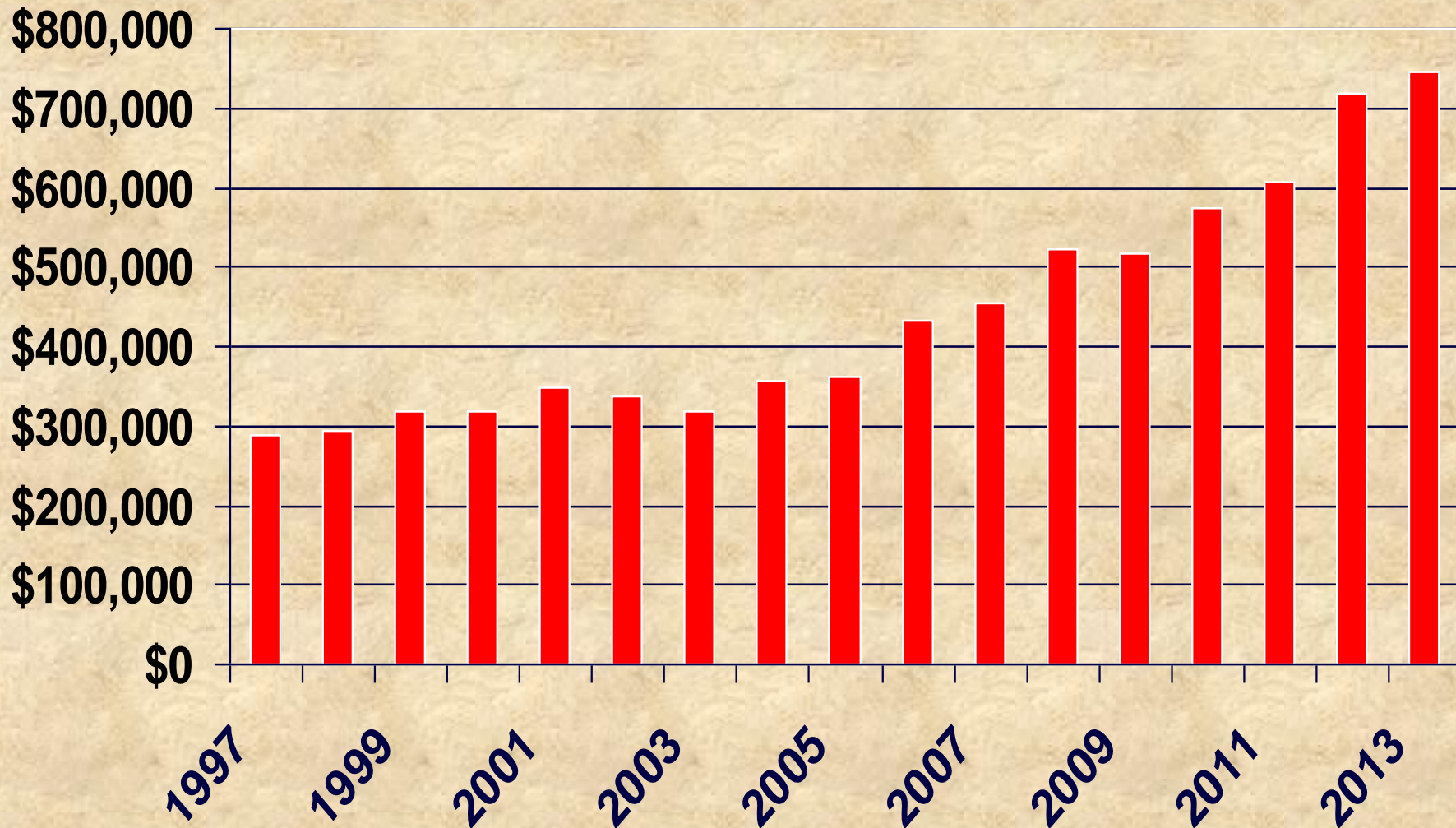
Total Farm Liabilities

Total average farm liabilities increased \$26,154 or 3.6% from last year. This is an increase of 135% since 2003. Last decreased in 2009.

● 2003	\$ 317,242
● 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



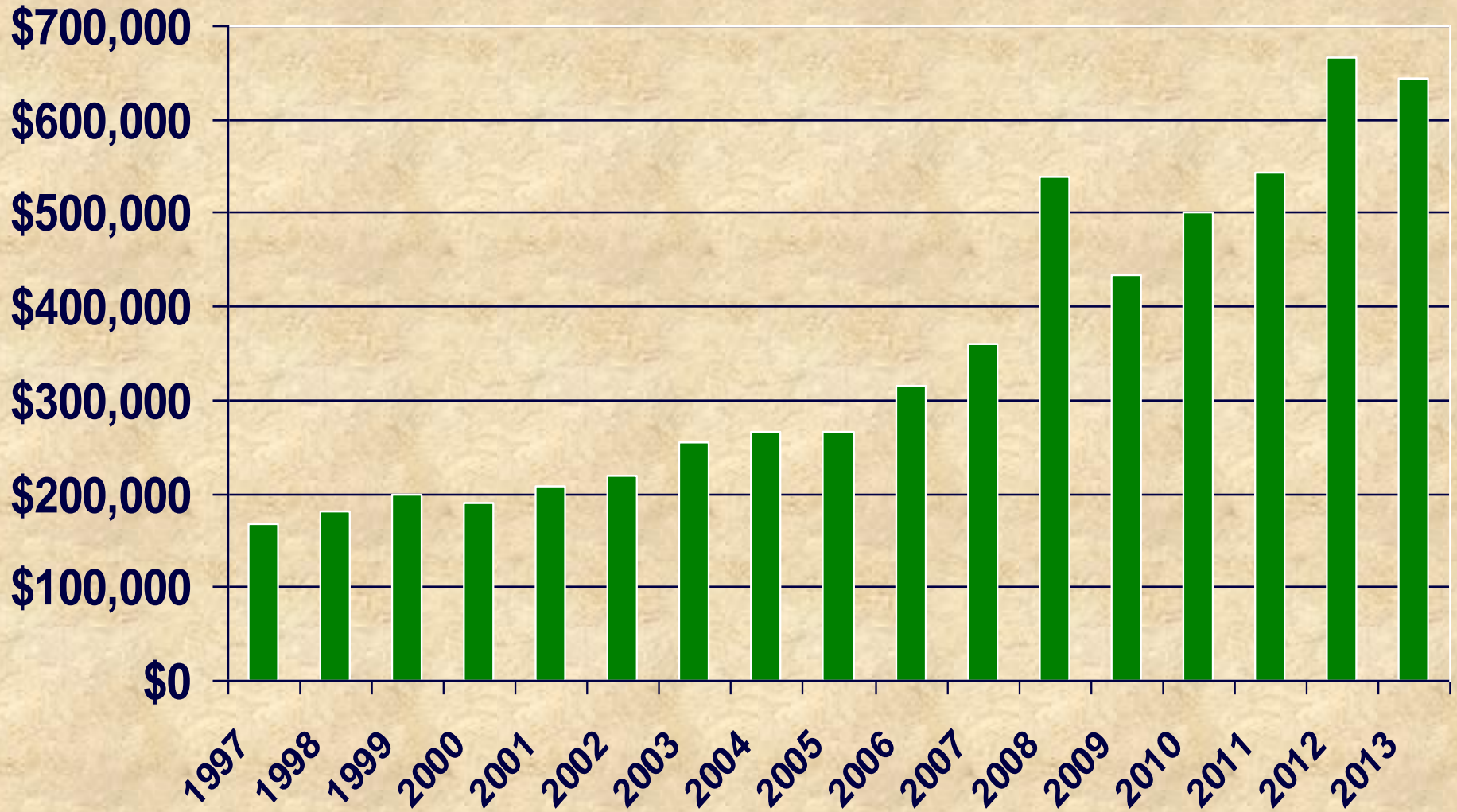
Growth of Average Farm Liabilities Region 3, An increase of 150% since 1997



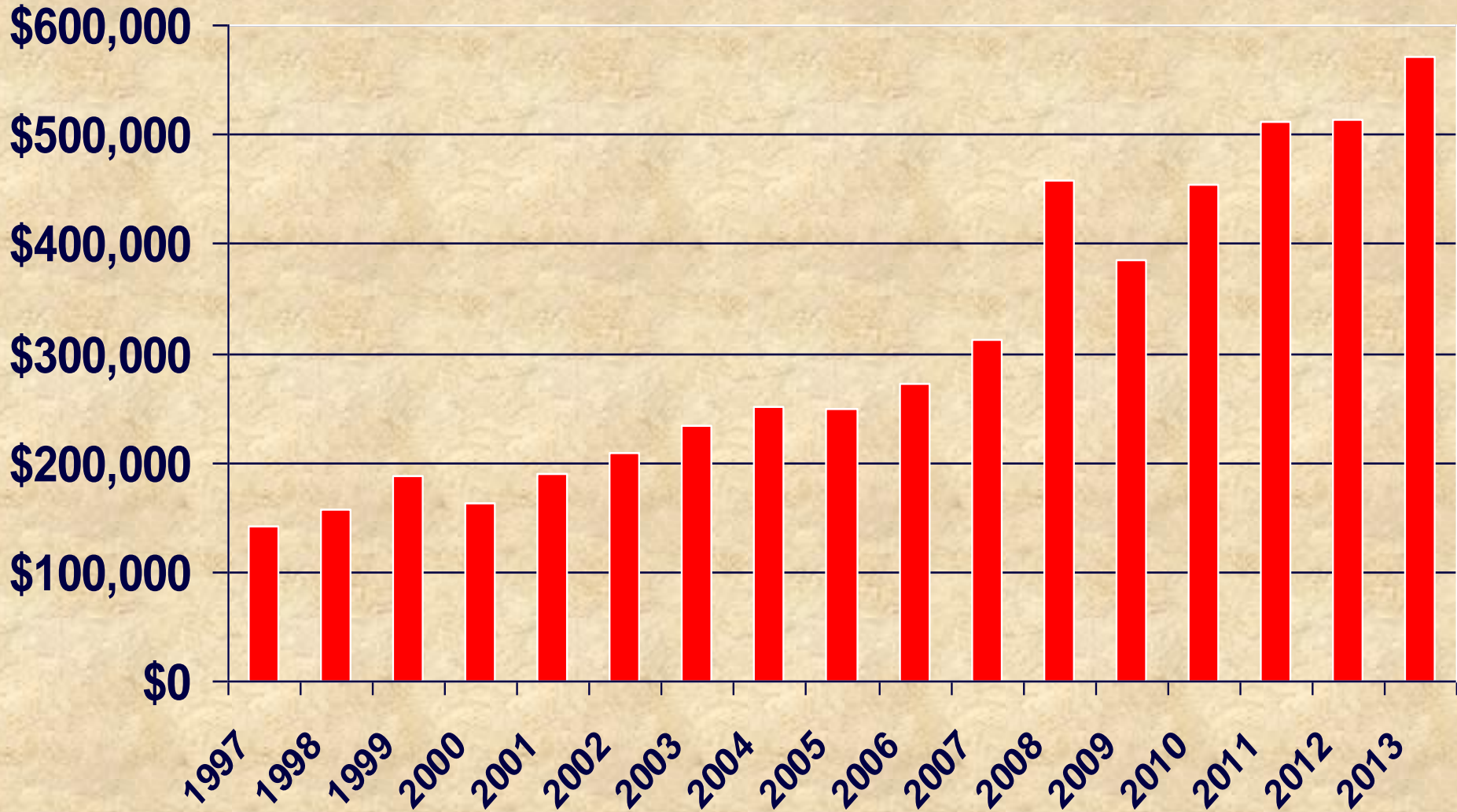
Comparing 2003 to 2013 per Cropland Acre, Cost Basis Values

- Crop land acres, including haylands, have increased 274 acres per farm, up 16%
- Asset value per acre has increased from \$413 to \$1,018 per acre of cropland, up 146% in the last 10 years.
- Liabilities have increased from \$189 to \$381 per acre of crop land, up 102% in the last 10 years.

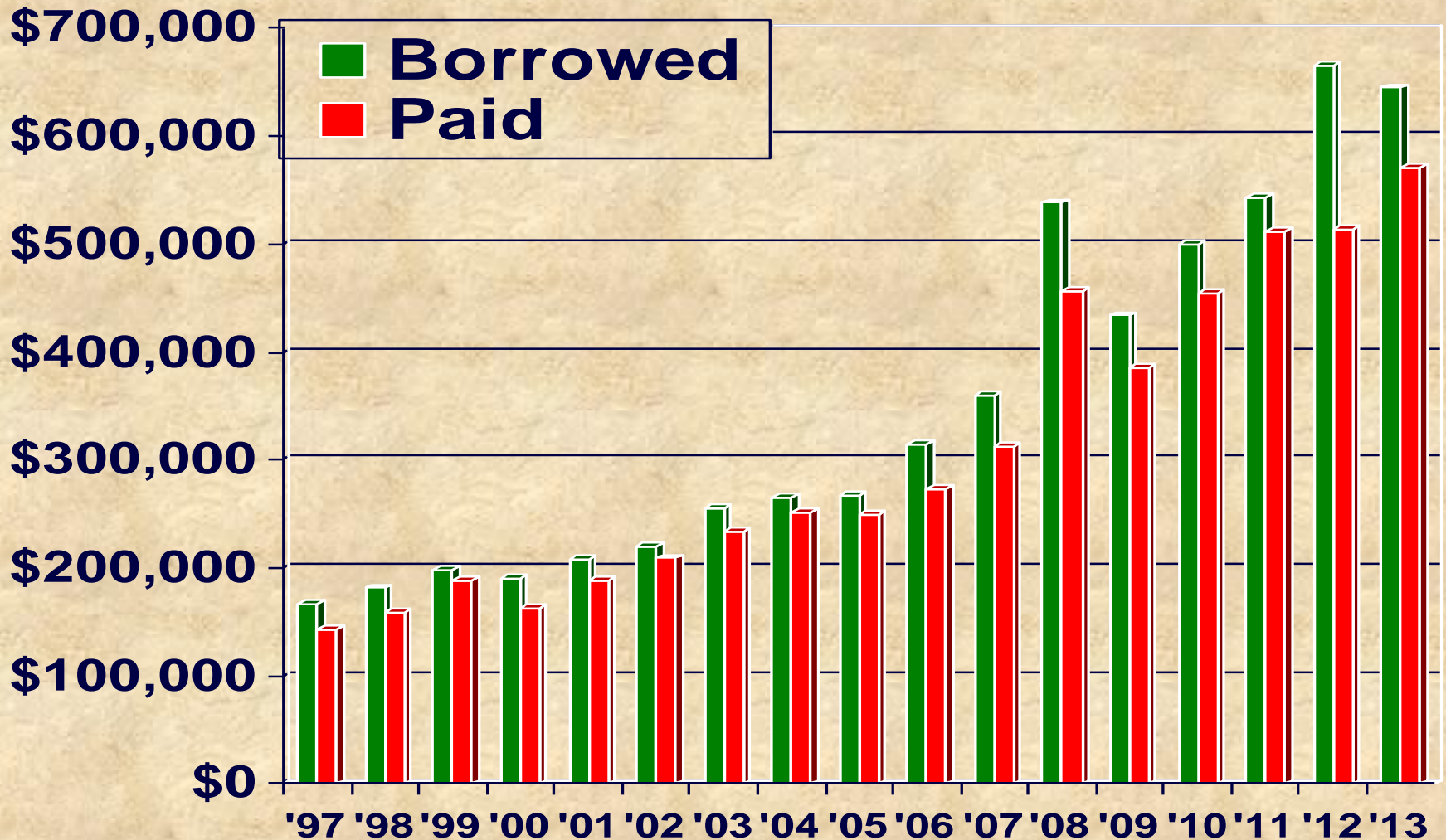
Money Borrowed per Farm Region 3



Principal Paid Per Farm Region 3



Money Borrowed & Repaid, Region 3

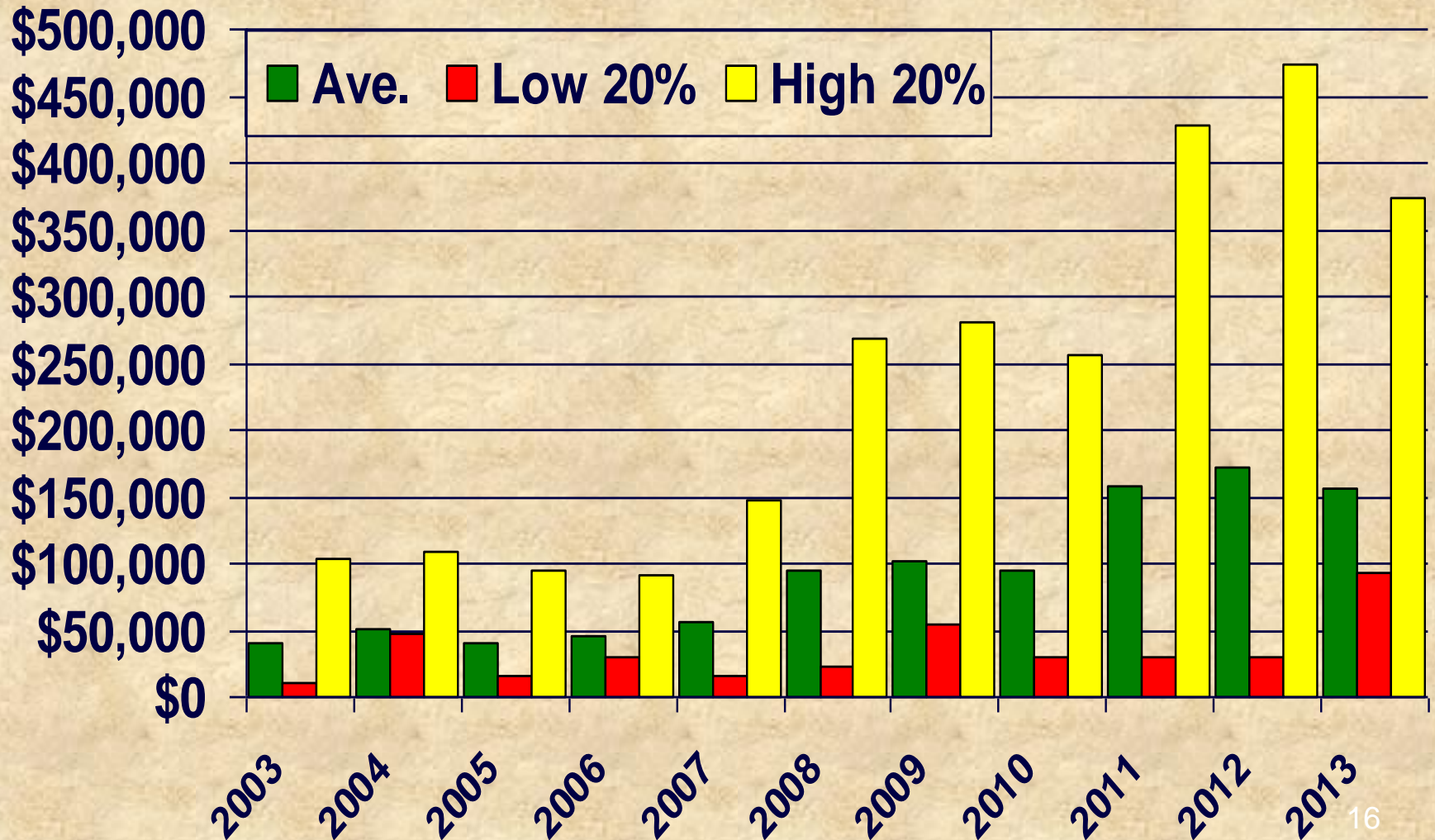


CAPITAL ASSETS, REPLACEMENT and DEPRECIATION

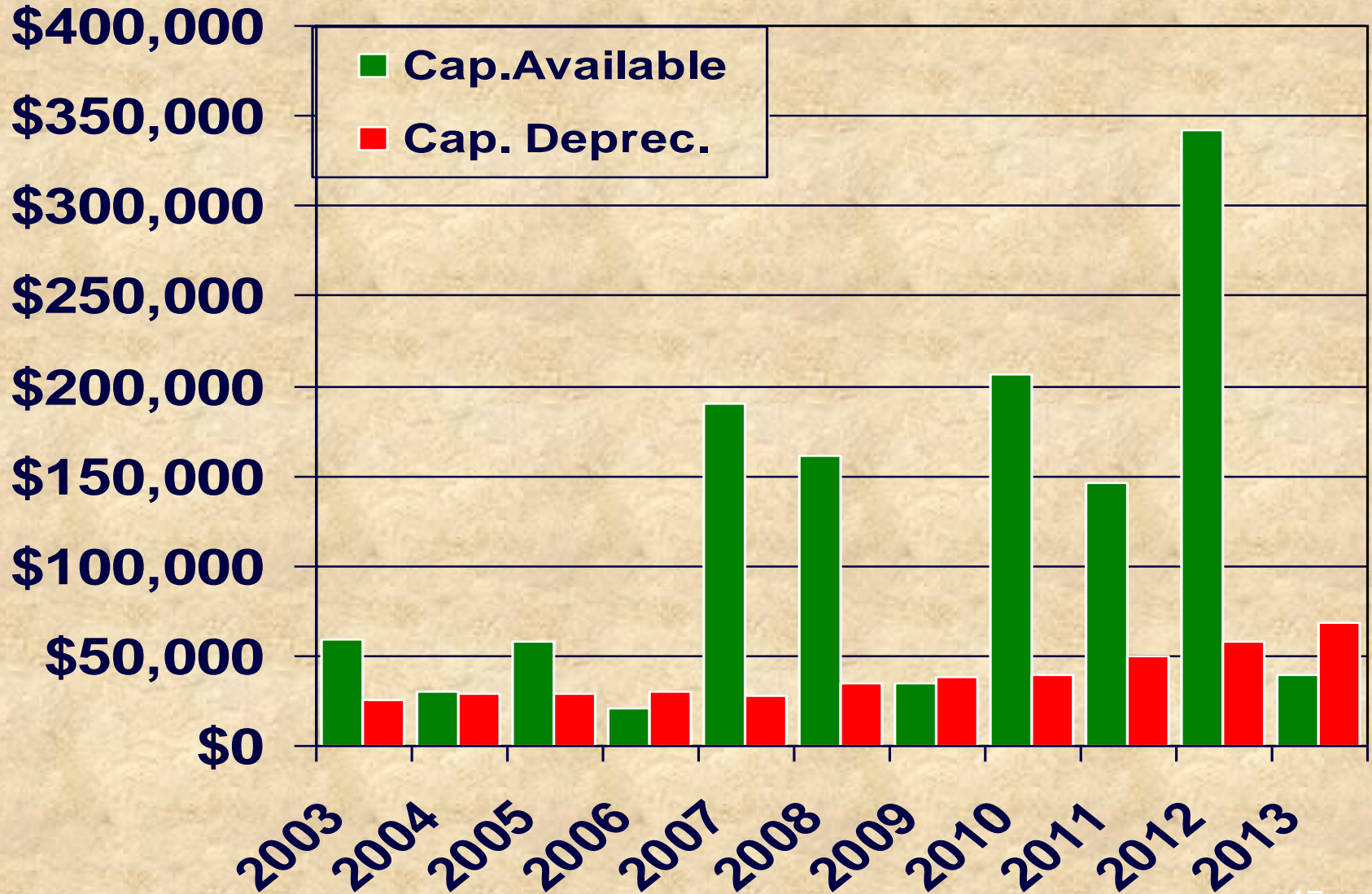
This is not what they mean by “rolling your equipment inventory”!



Capital Purchases of Machinery, Equipment & Farm Vehicles



Capital Replacement Margin compared to Depreciation/Capital Adjustment

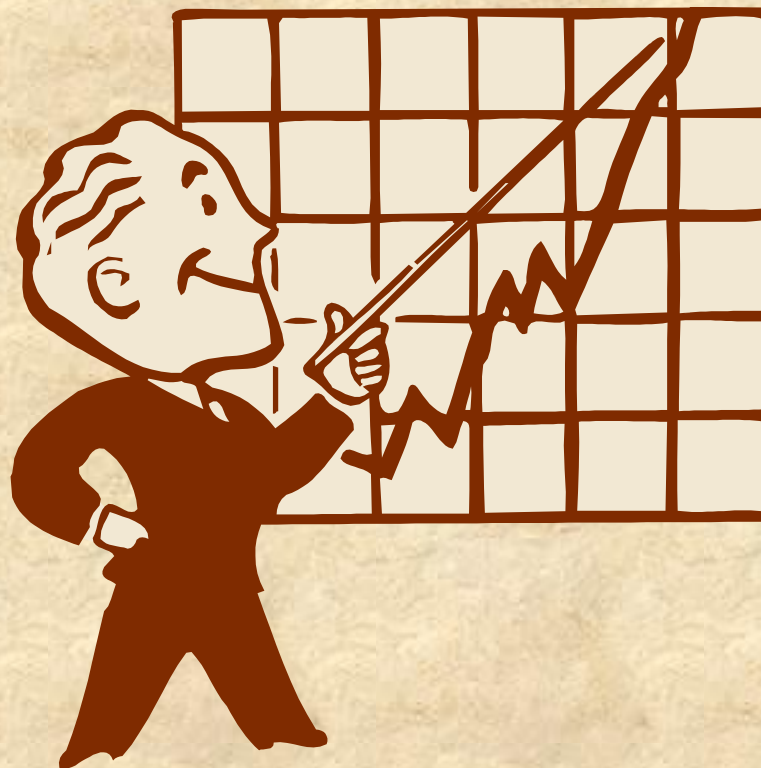


Net Worth Change

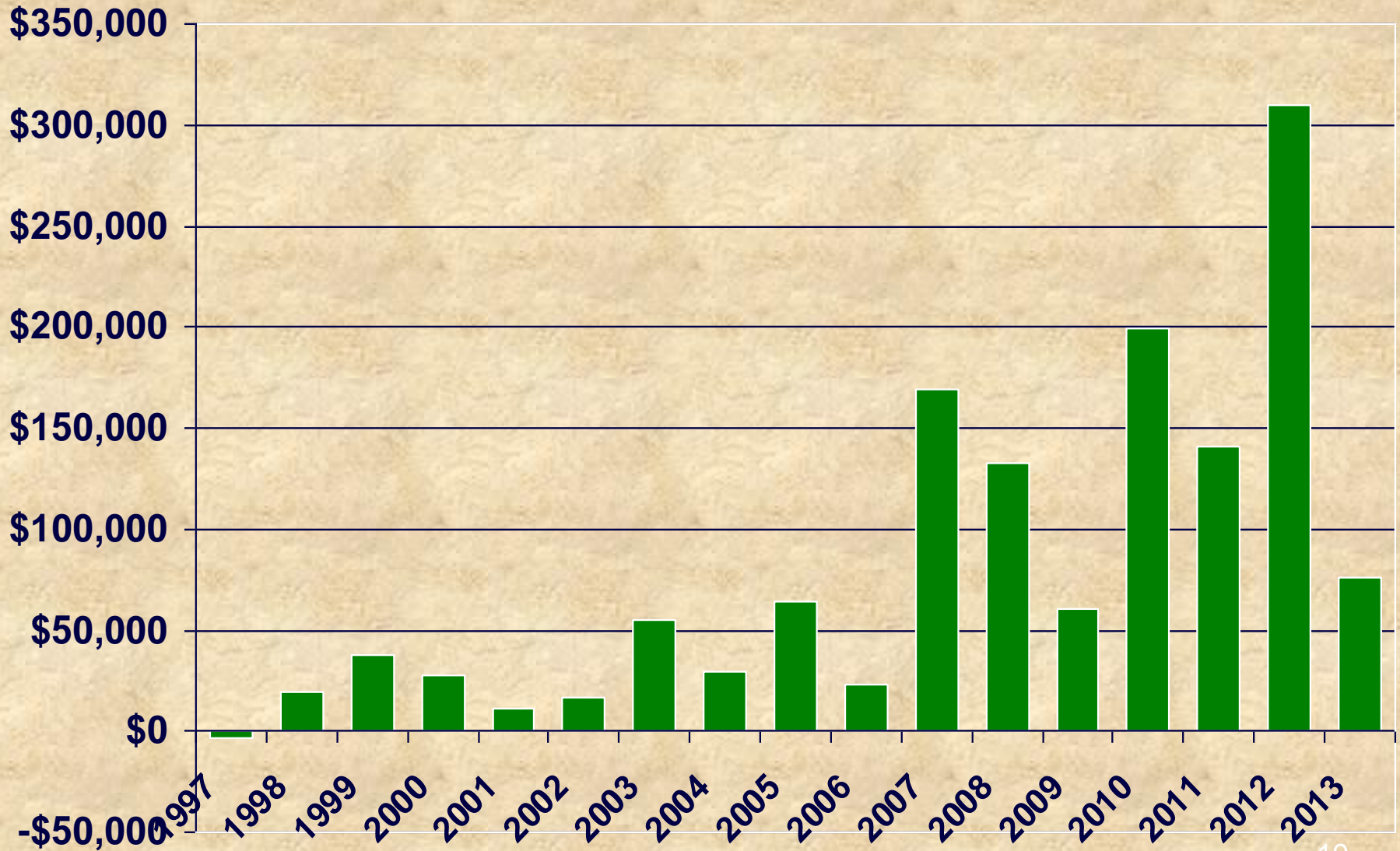
(Change in Retained Earnings)

- This year we saw a positive change in retained earnings of \$76,053 as measured on a cost basis balance sheet.

● 2003	\$ 55,123
● 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



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



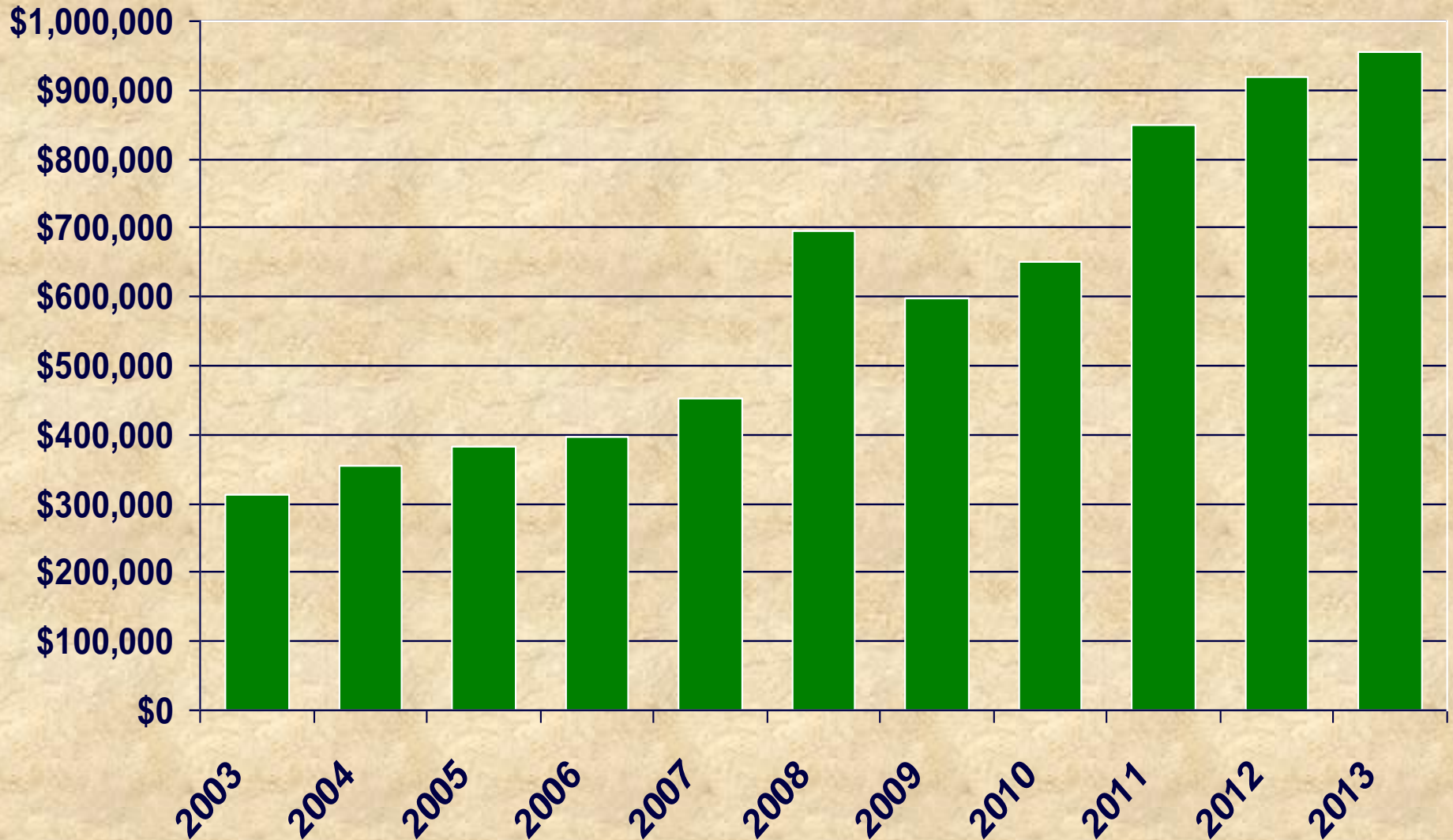
Cash Farm Receipts

Average Cash Farm Receipts increased \$37,158

● 2003	\$ 312,889	+	13.8%
● 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%

Total Change '03 to '13 = + 205%

Cash Farm Receipts, Region 3

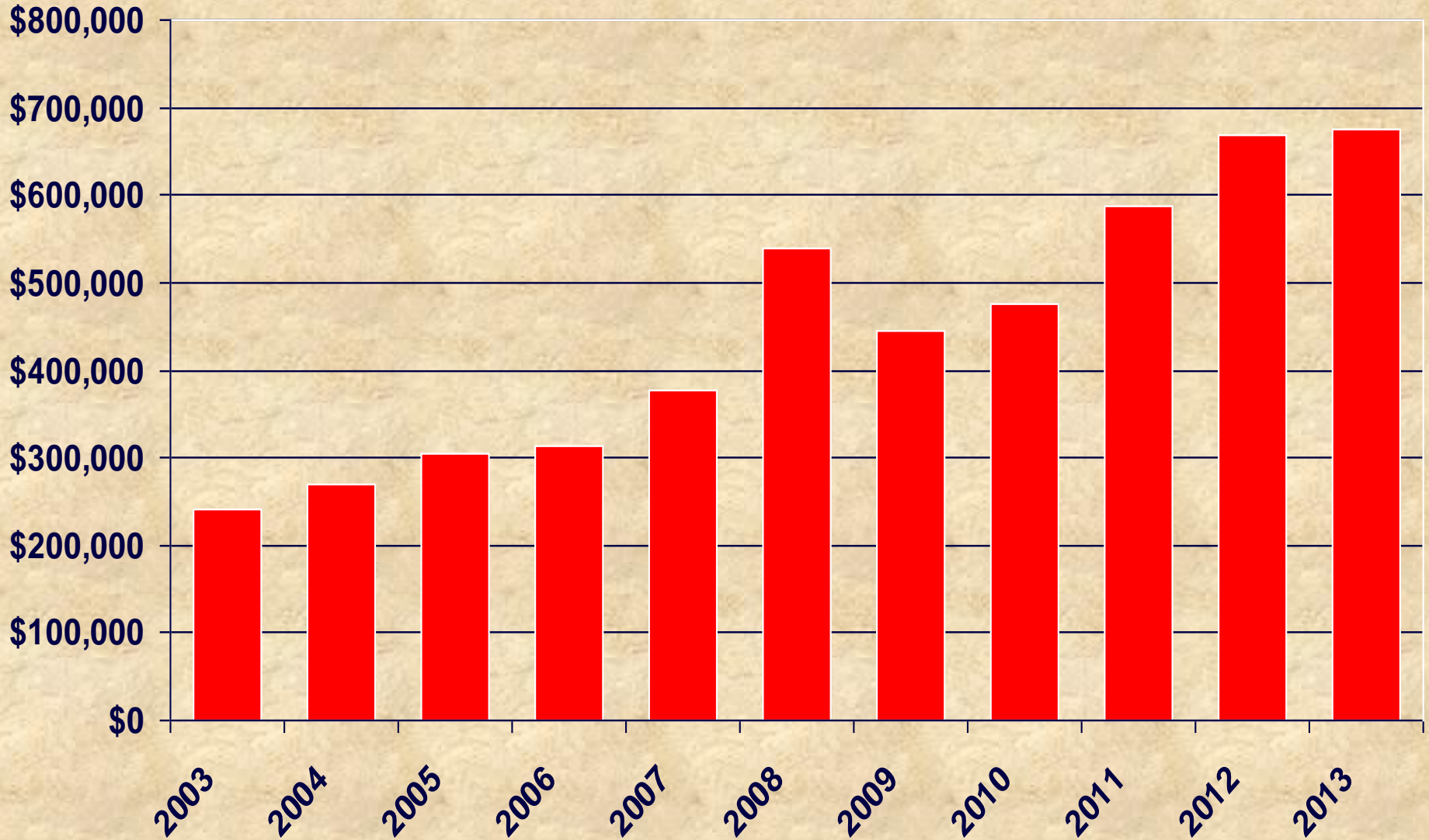


Cash Farm Expenses

● 2003	\$ 241,392	+ 9.7%
● 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%

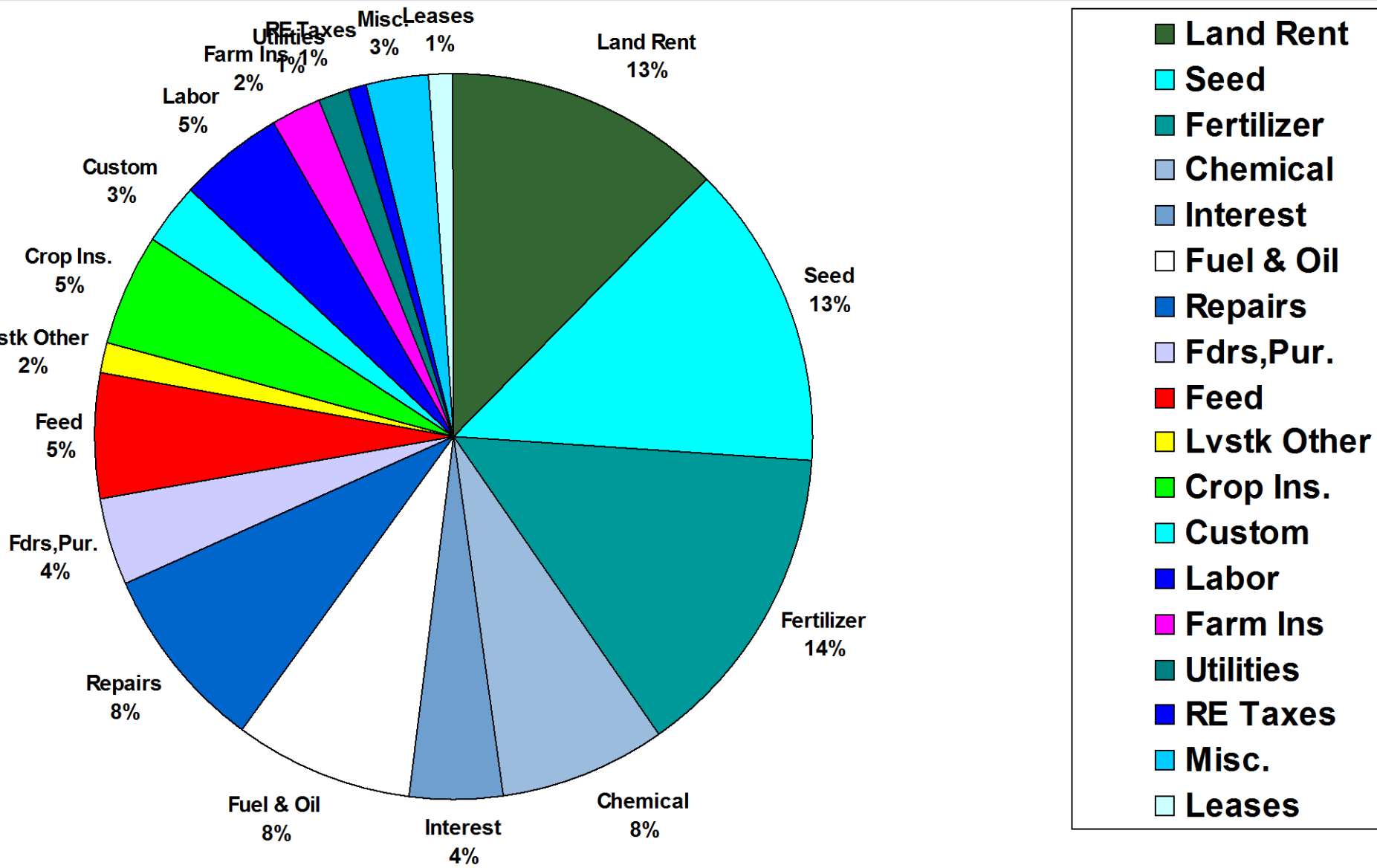
Total increase '03 to '13 = + 180%

Cash Farm Expenses Region 3

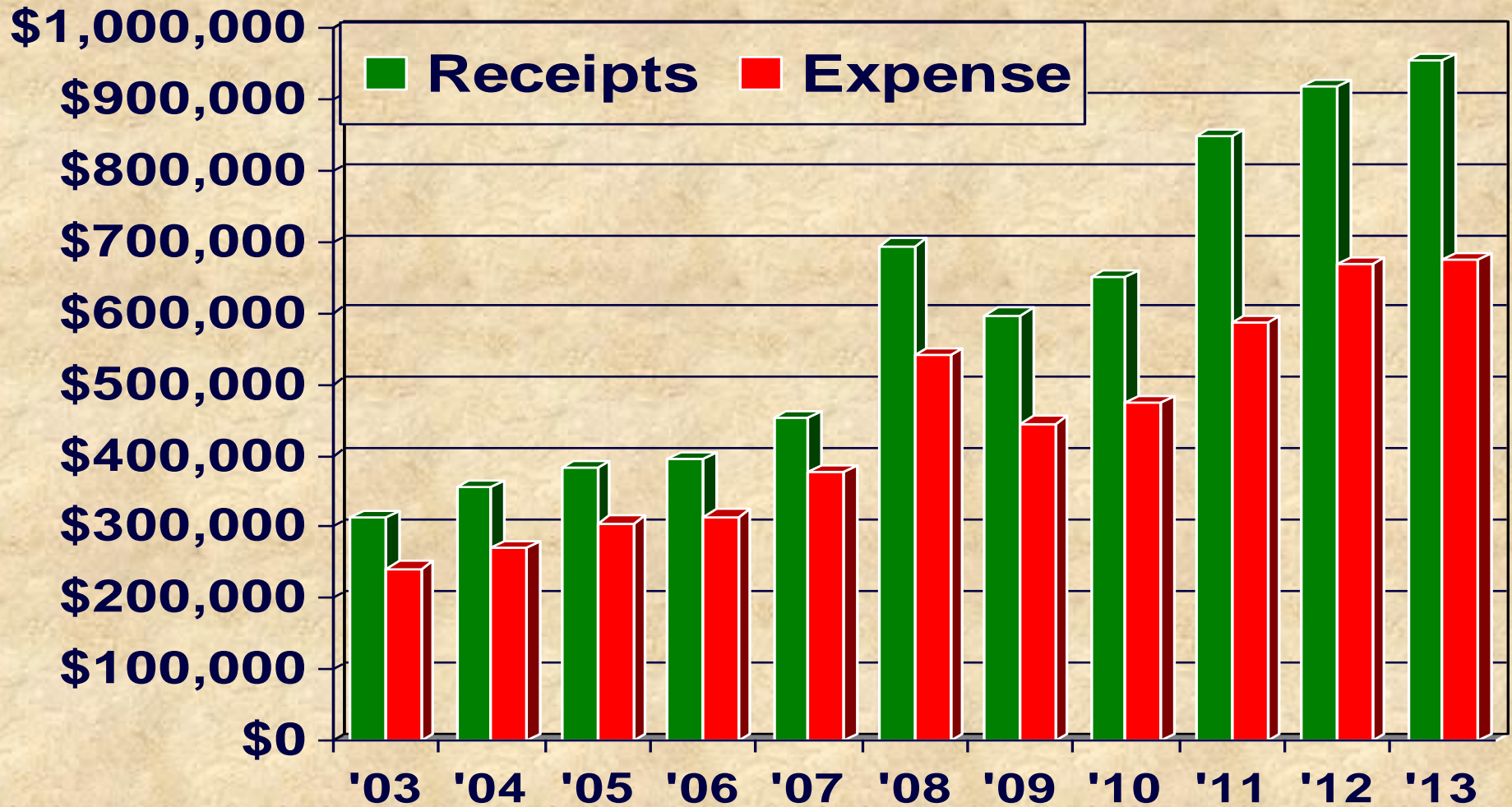


Where was the money spent?

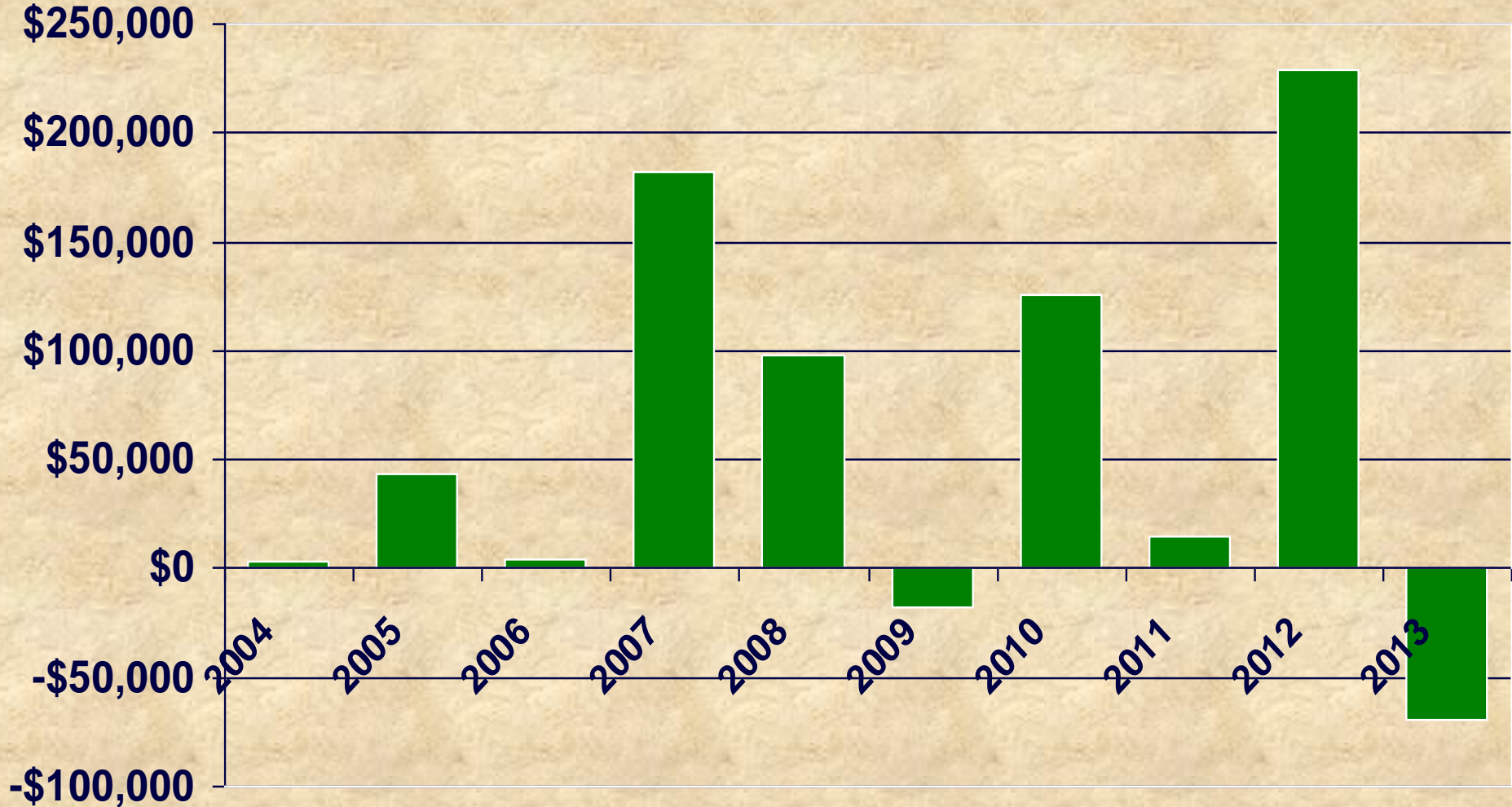
Cash Expenses of \$674,927 in 2013



Gross Cash Income and Cash Expenses



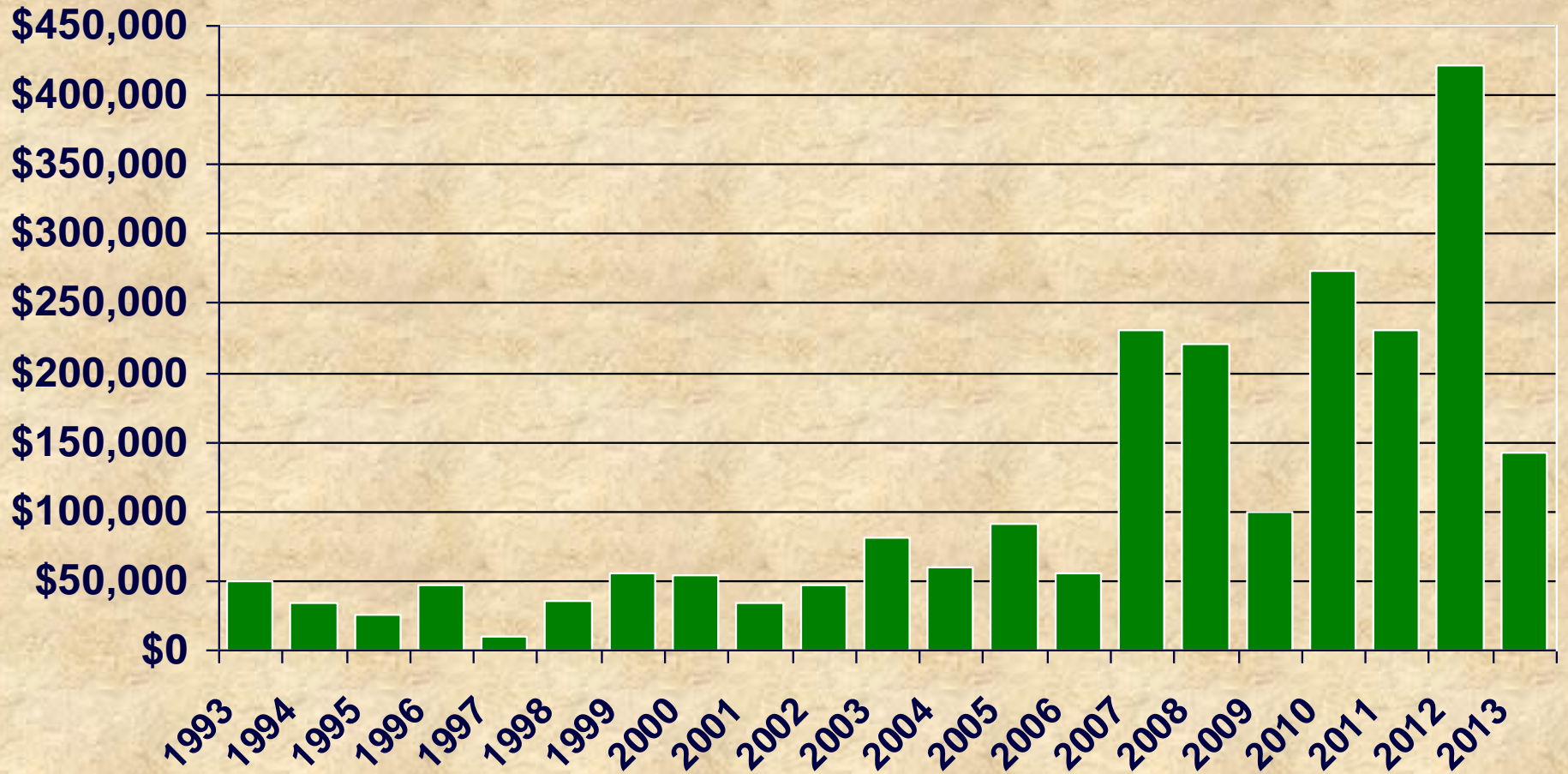
Total Inventory Change per farm, Region 3



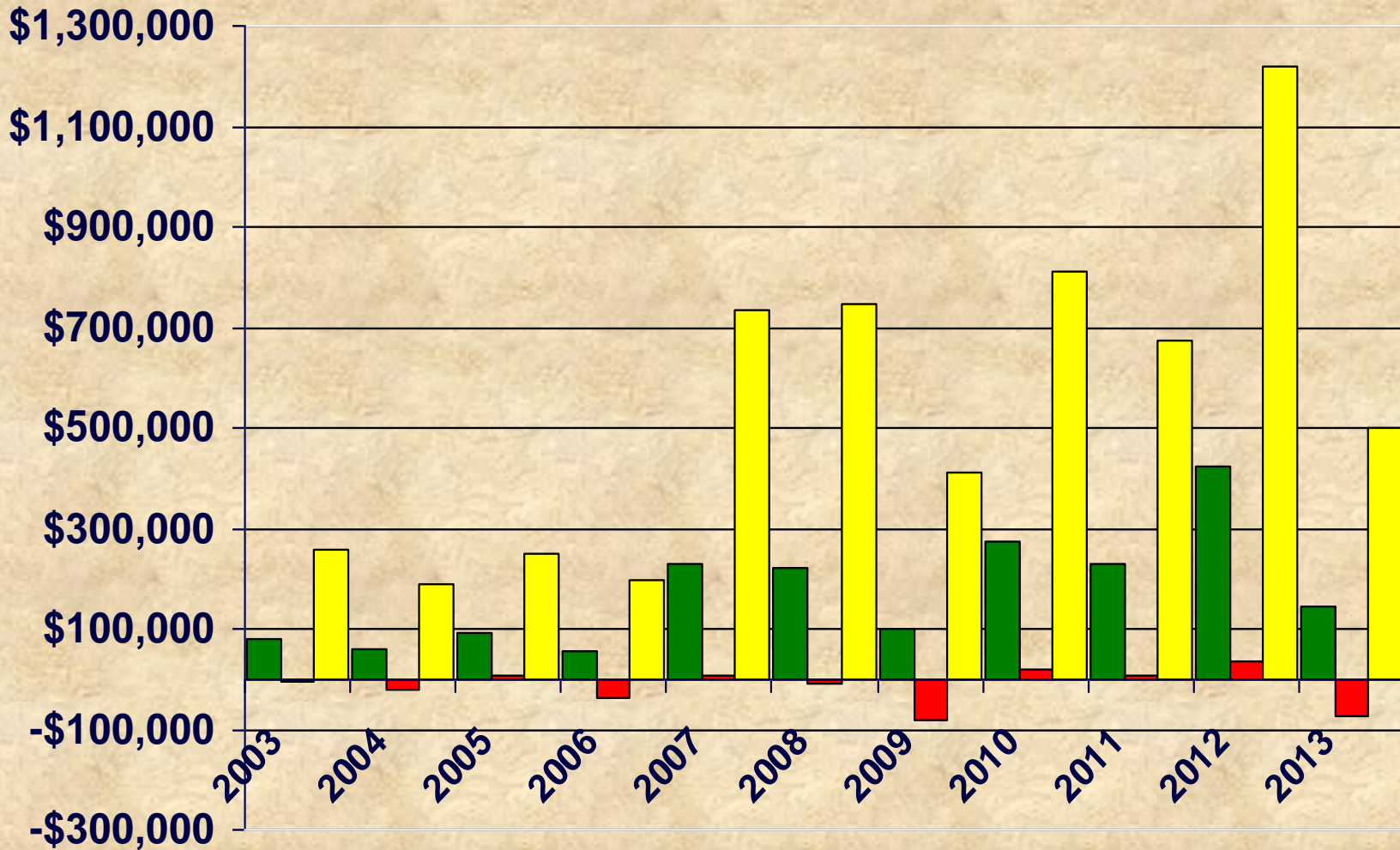
Net Farm Income

- 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



2013 Net Farm Income by Profitability Groups



■ Ave. ■ Low 20% ■ High 20%

Net Farm Income For Region III

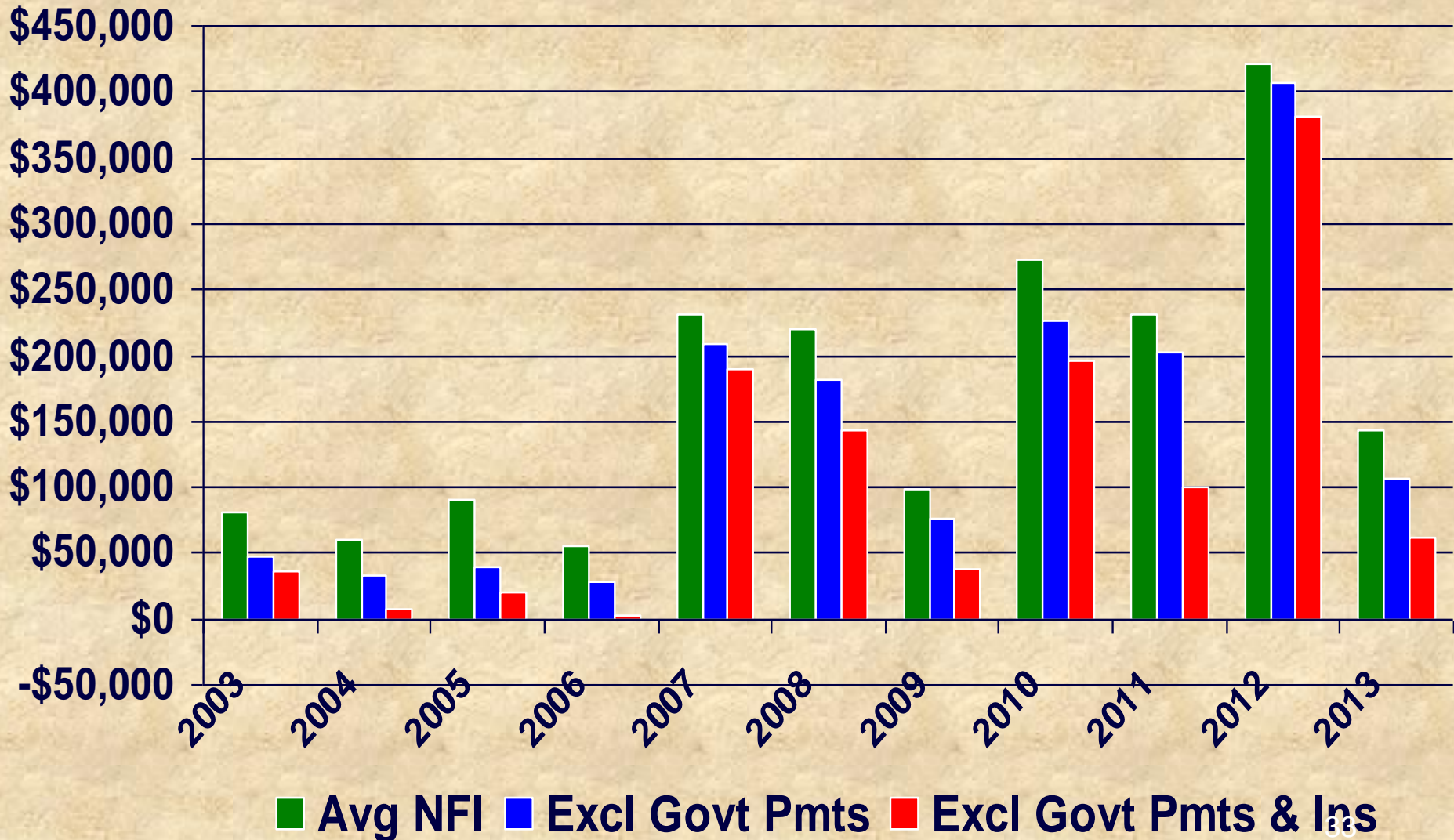
- **Net farm income for farms in Region III averaged \$143,105. (Decreased 66% from 2012)**
- **Net farm income for the low profit 20% of the farms averaged (\$74,624) (Down \$108,465 from 2012)**
- **Net farm income for the high profit 20% of the farms averaged \$499,860 (Decreased by \$718,829 or 59% compared to 2012)**

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


- **Average Profit, based on 1,952 crop acres was \$73.31 per acre.**
- **Low Profit, based on 1362 acres was (\$54.79) per acre.**
- **Mid Profit, (40%-60%) \$85,948 from 994 acres was a profit of \$86.47 per acre.**
- **High Profit, based on 4,052 acres was \$123.36 per acre.**

Average Net Farm Income

ND Farm Business Management, Region 3

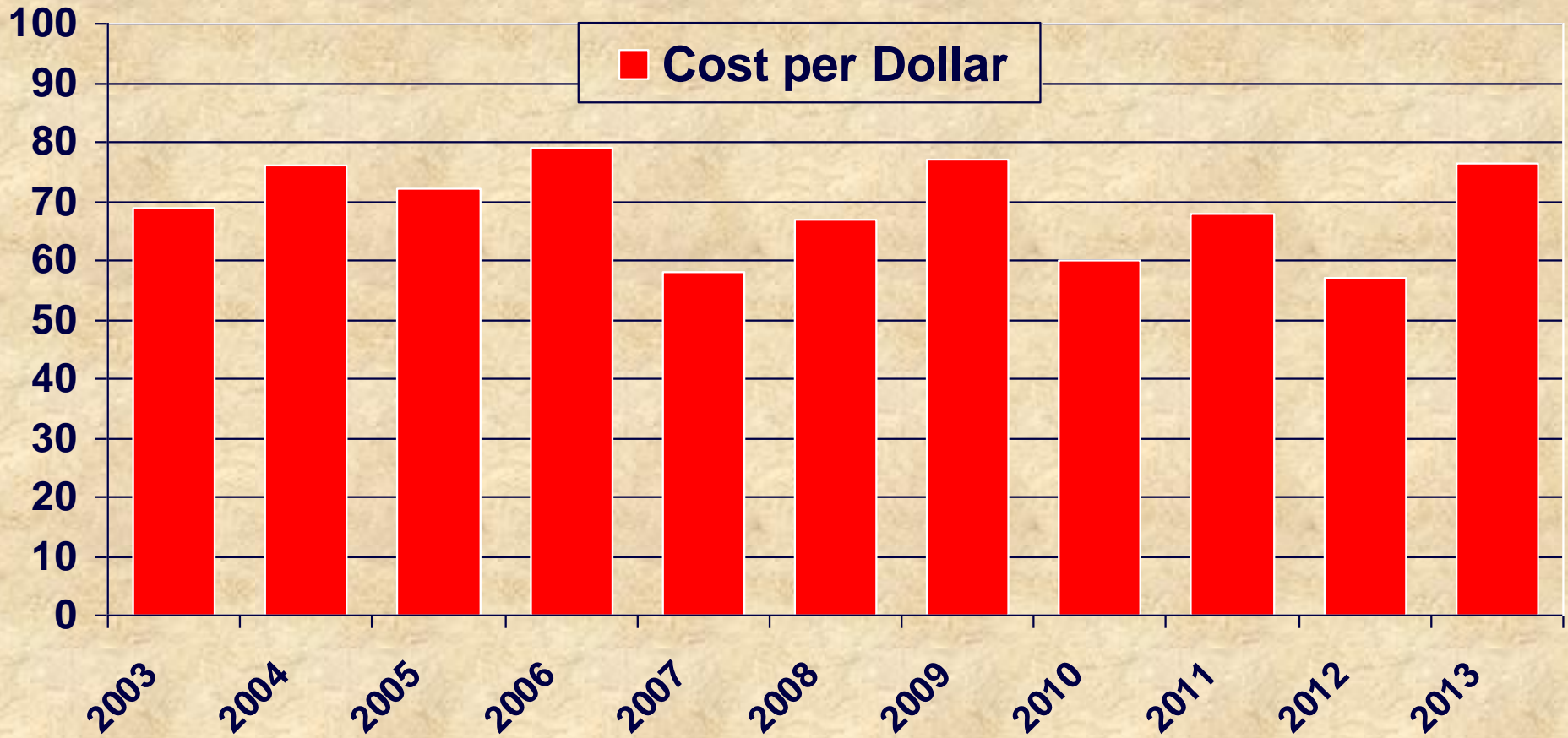


Cost to produce \$1.00 of Accrued Income

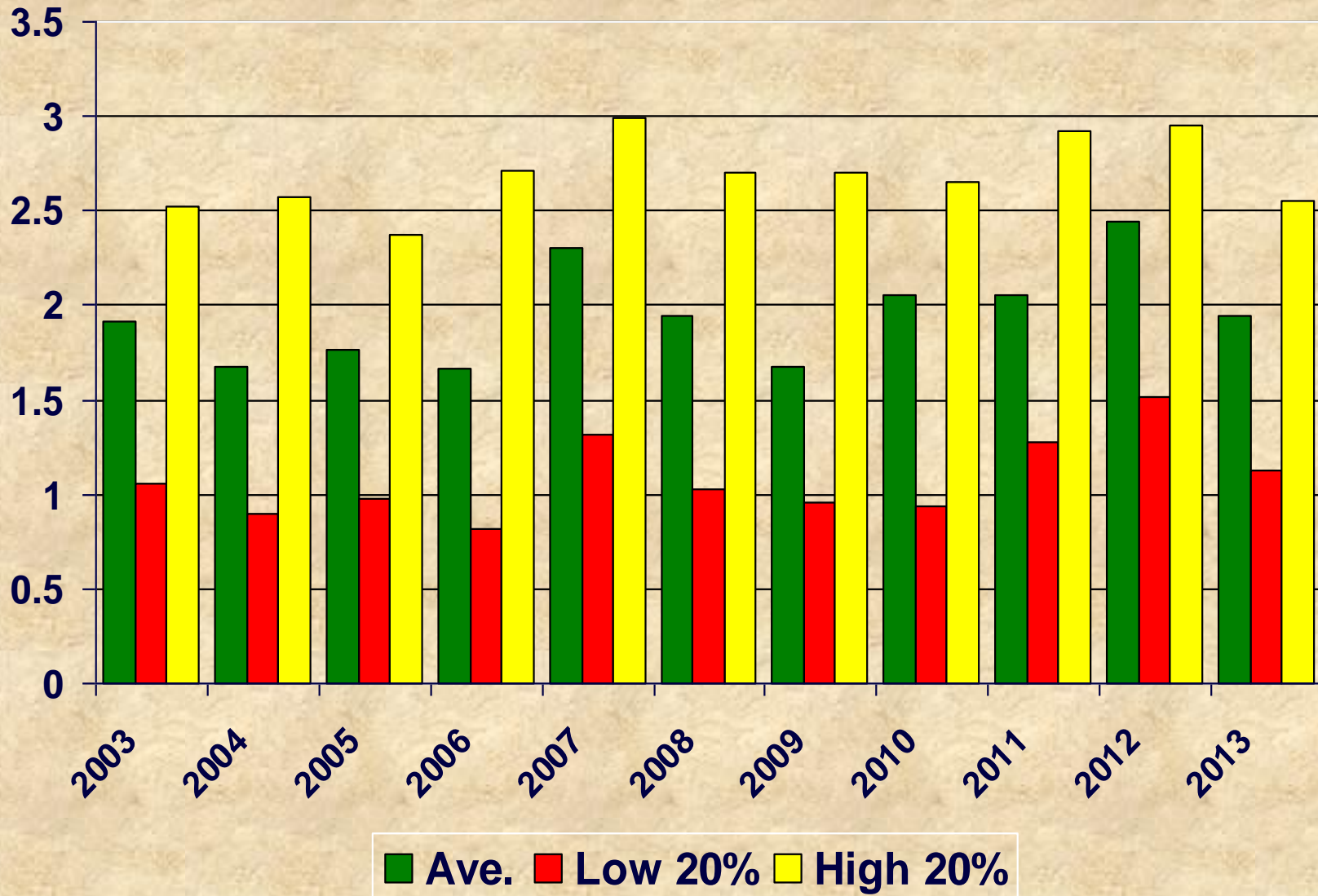
- This year it cost an average Region 3 farmer \$.76 (accrual) to produce a dollar's worth of income, compared to \$.57 last year. (2013 Oper. Expense \$.733 + Interest of \$.031)
- High profit farms created a dollar of income for \$.66 up from \$.53 cents in 2012. 
- Low profit farms created a dollar of income for \$1.06 of expenses, including interest, up from \$.74 in 2012. Retained Earnings of (\$65,069)

These figures do not include depreciation \$.05-\$.08

Average Cost per Dollar of Income

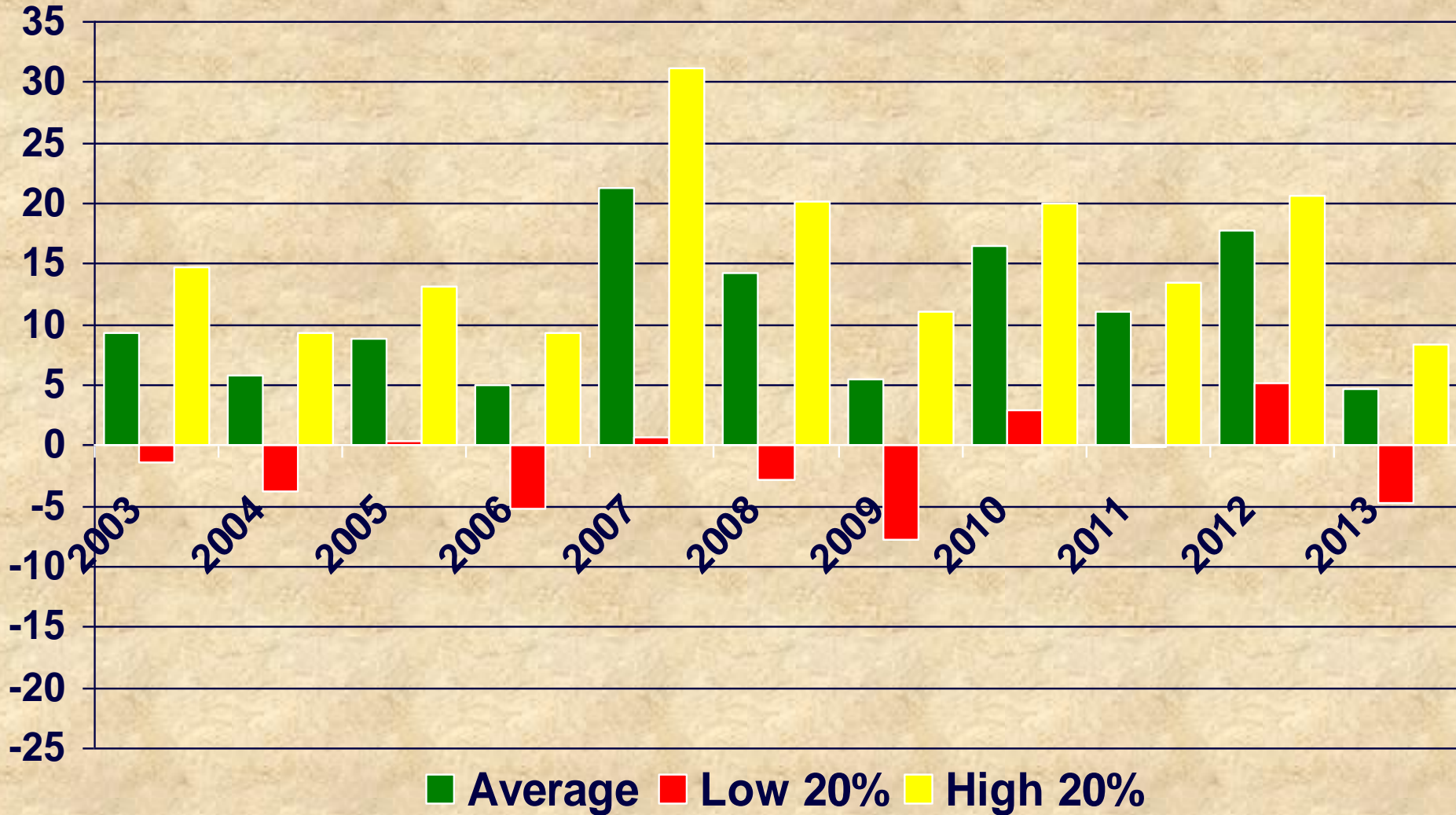


Current Ratio by Profitability Group, Current assets divided by Current Liabilities

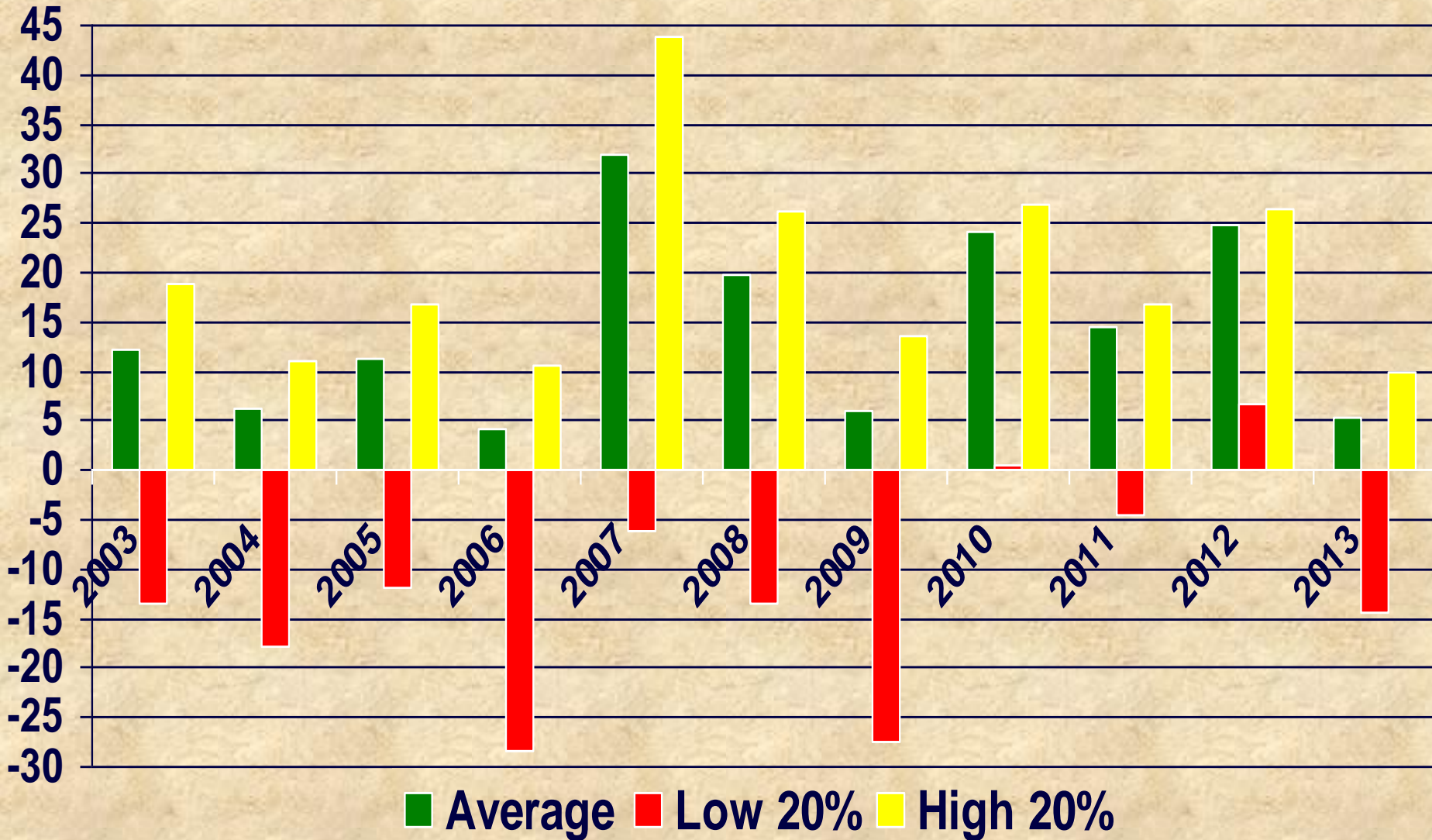


% Return on Assets, Cost Basis

ND Farm Business Management, Region 3



% Return on Equity, Cost Basis

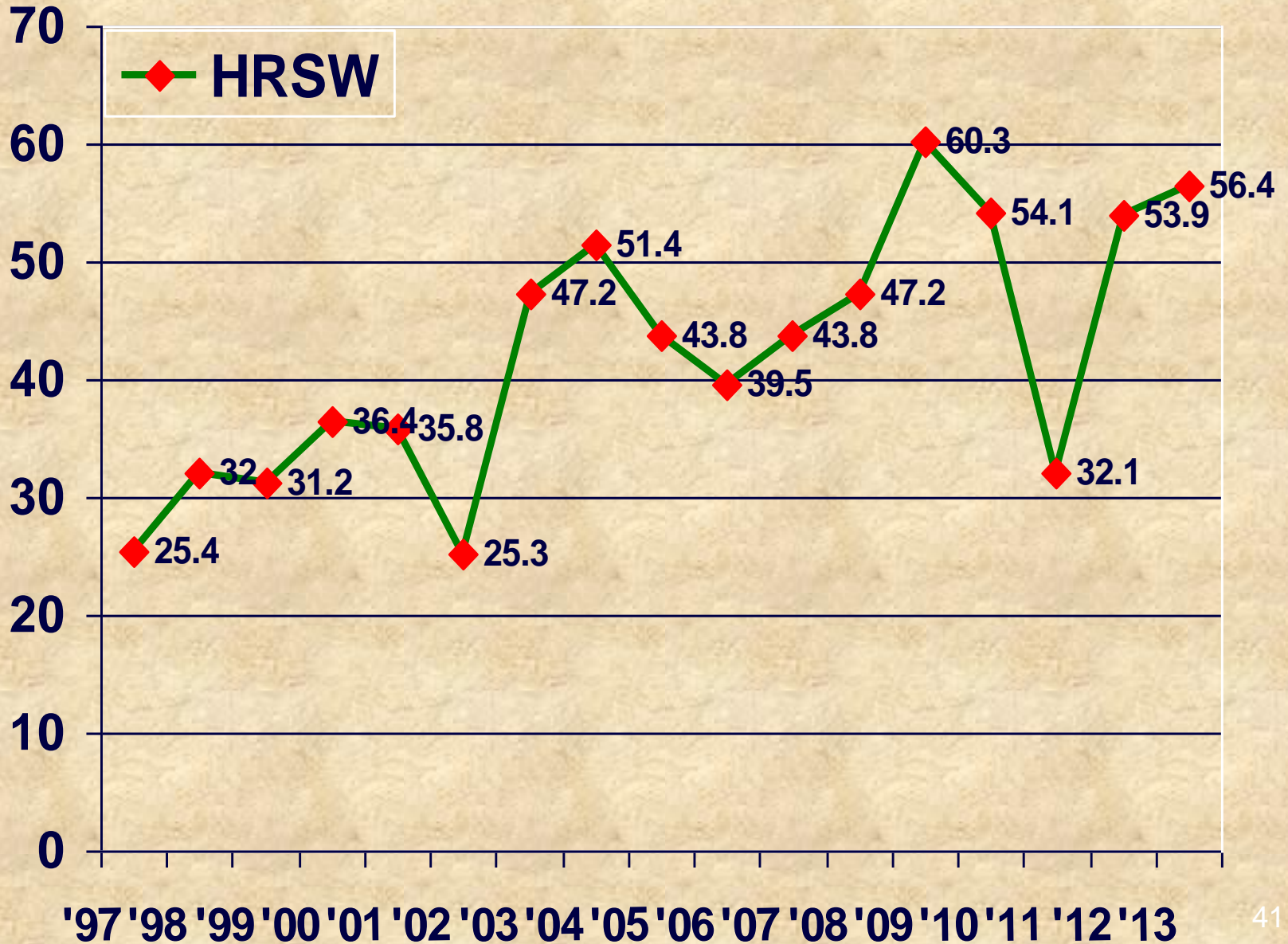


Crop Yields, Costs and Returns for 2013

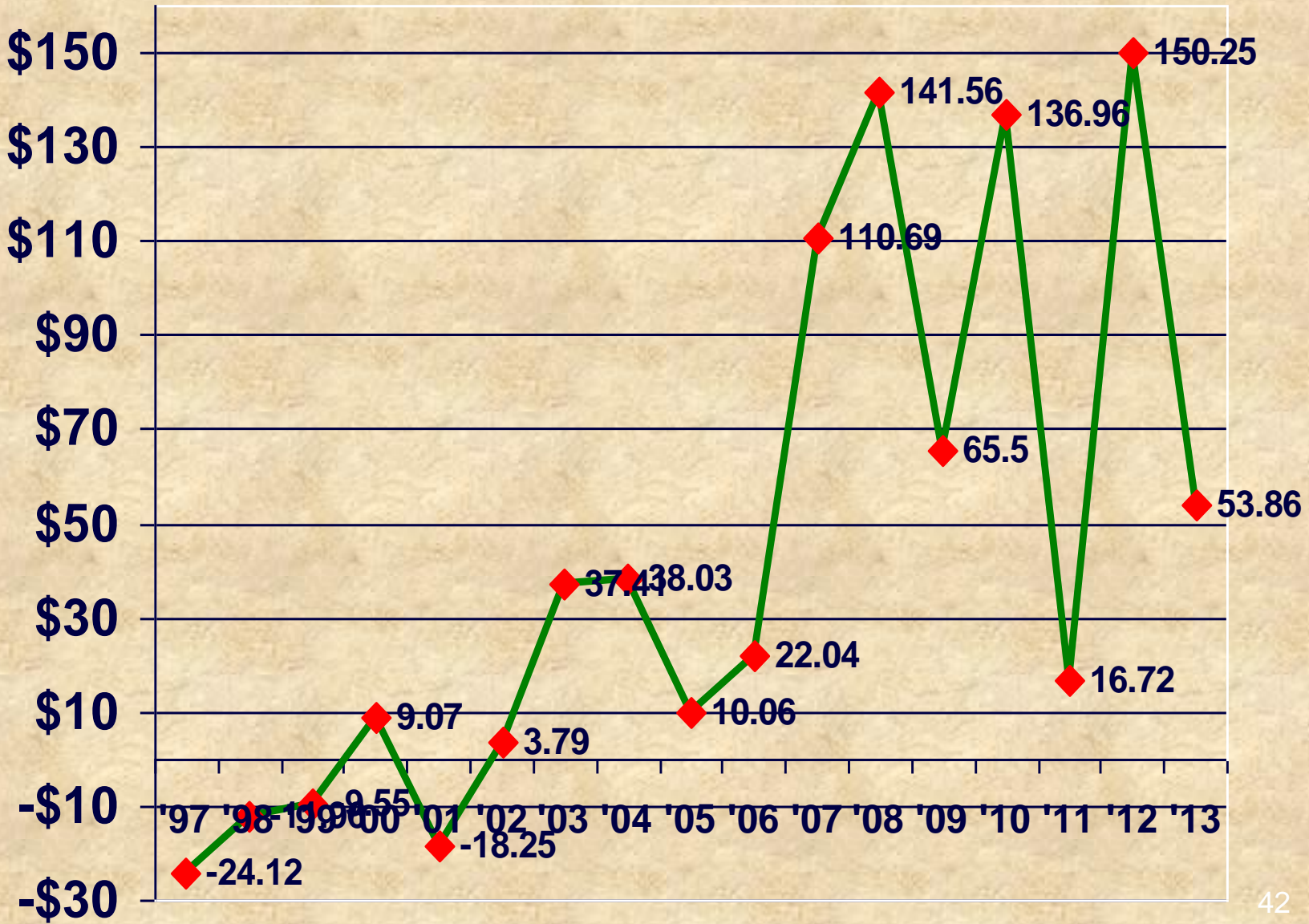
Net Return for Crops

- 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

HRSW Average Yields, Region 3



HRSW Net Return per Acre on Cash Rented Land, Avg. Rent \$54.38

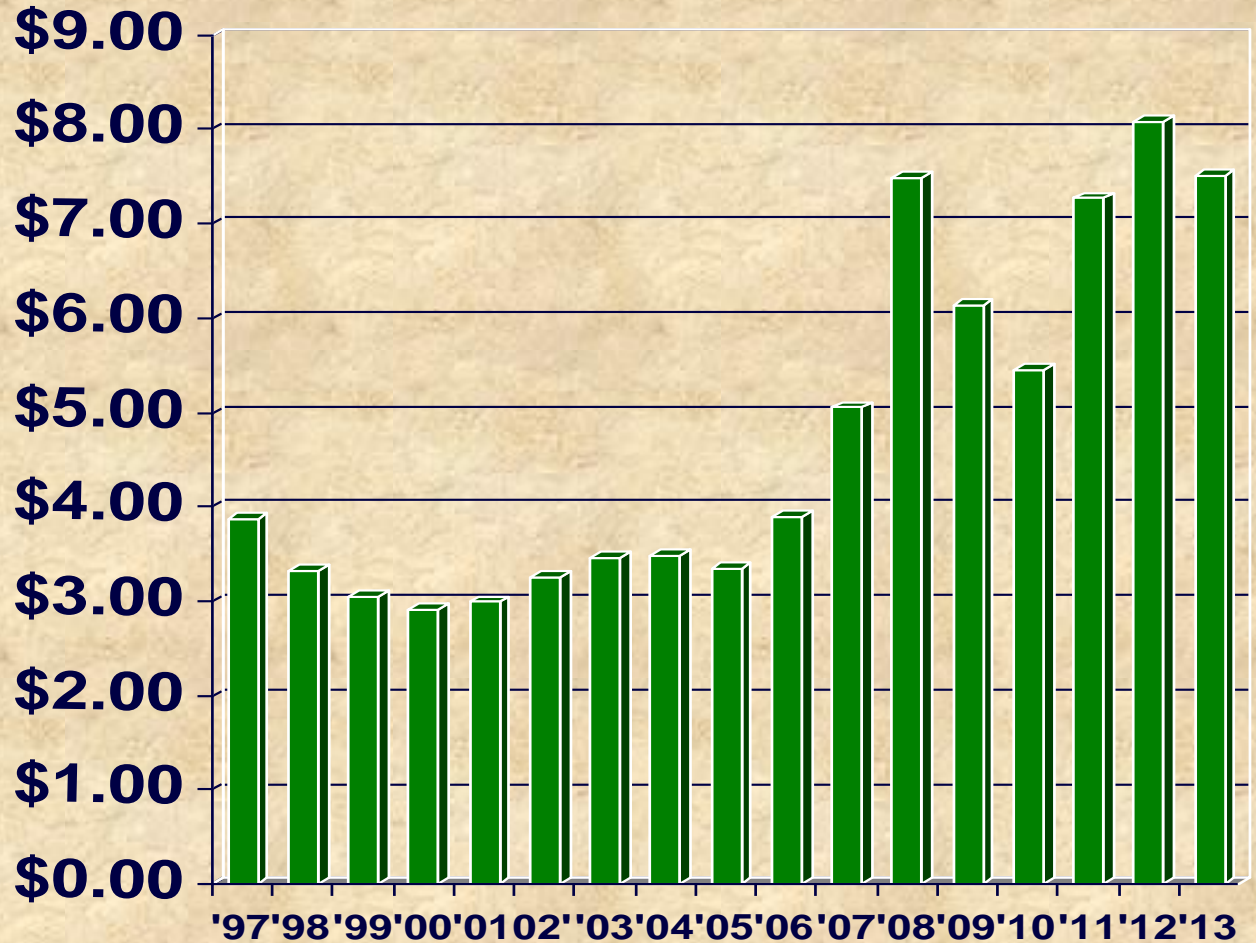


Spring Wheat Net Return/Acre on Cash Rented Land, 2013

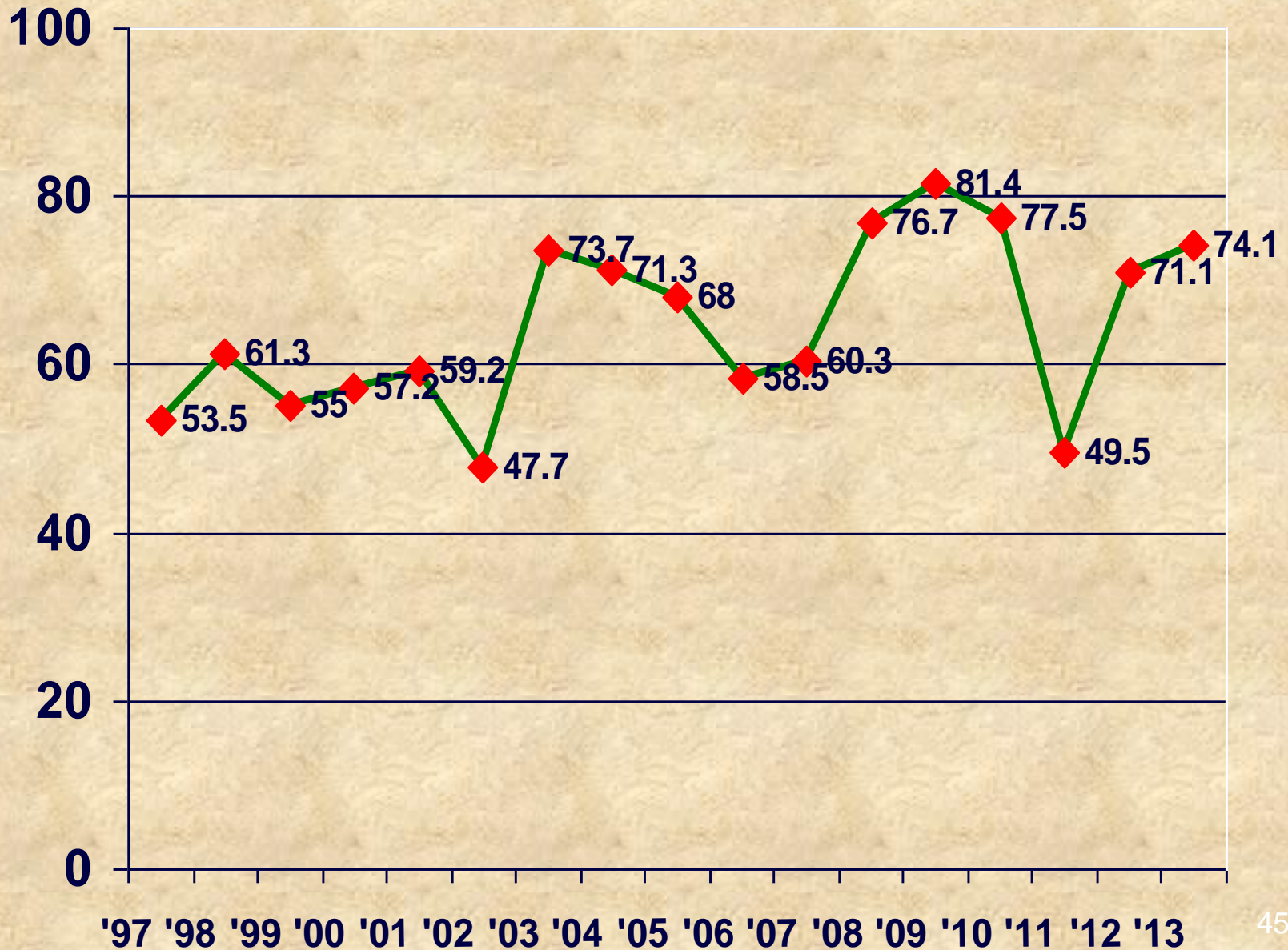
● Average	\$ 53.86	at 56.7 Bu.
High 20%	\$ 137.69	at 65.7 Bu.
Low 20%	- \$ 50.56	at 42.3 Bu.

Average Price Received, Cash Sales

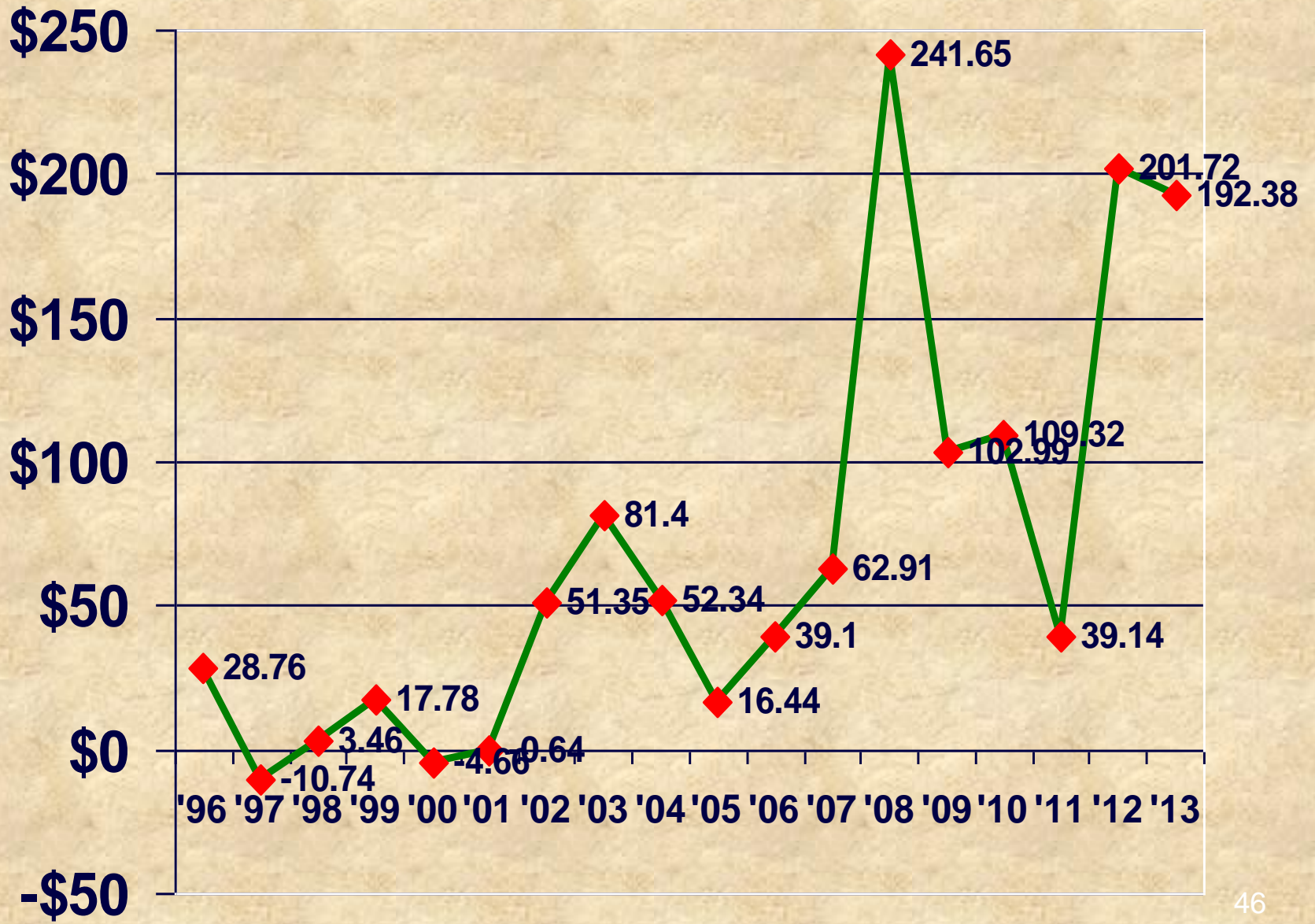
● 1997	3.87
● 1998	3.33
● 1999	3.05
● 2000	2.90
● 2001	2.99
● 2002	3.26
● 2003	3.46
● 2004	3.48
● 2005	3.34
● 2006	3.89
● 2007	5.05
● 2008	7.48
● 2009	6.14
● 2010	5.45
● 2011	7.27
● 2012	8.08
● 2013	7.51



Barley Average Yields, Region 3

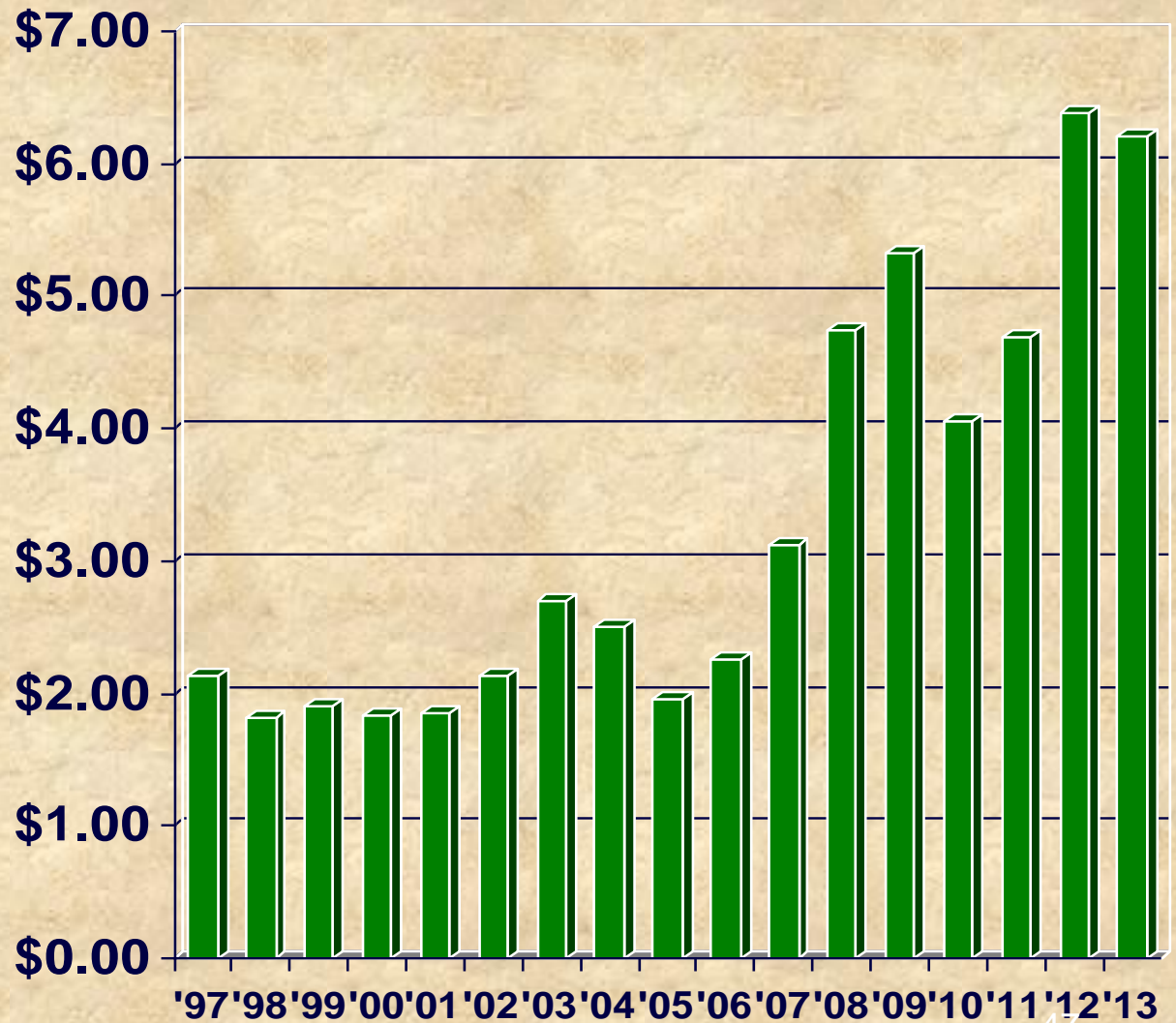


Barley Net Return per Acre on Cash Rented Land, Avg. Rent \$62.69

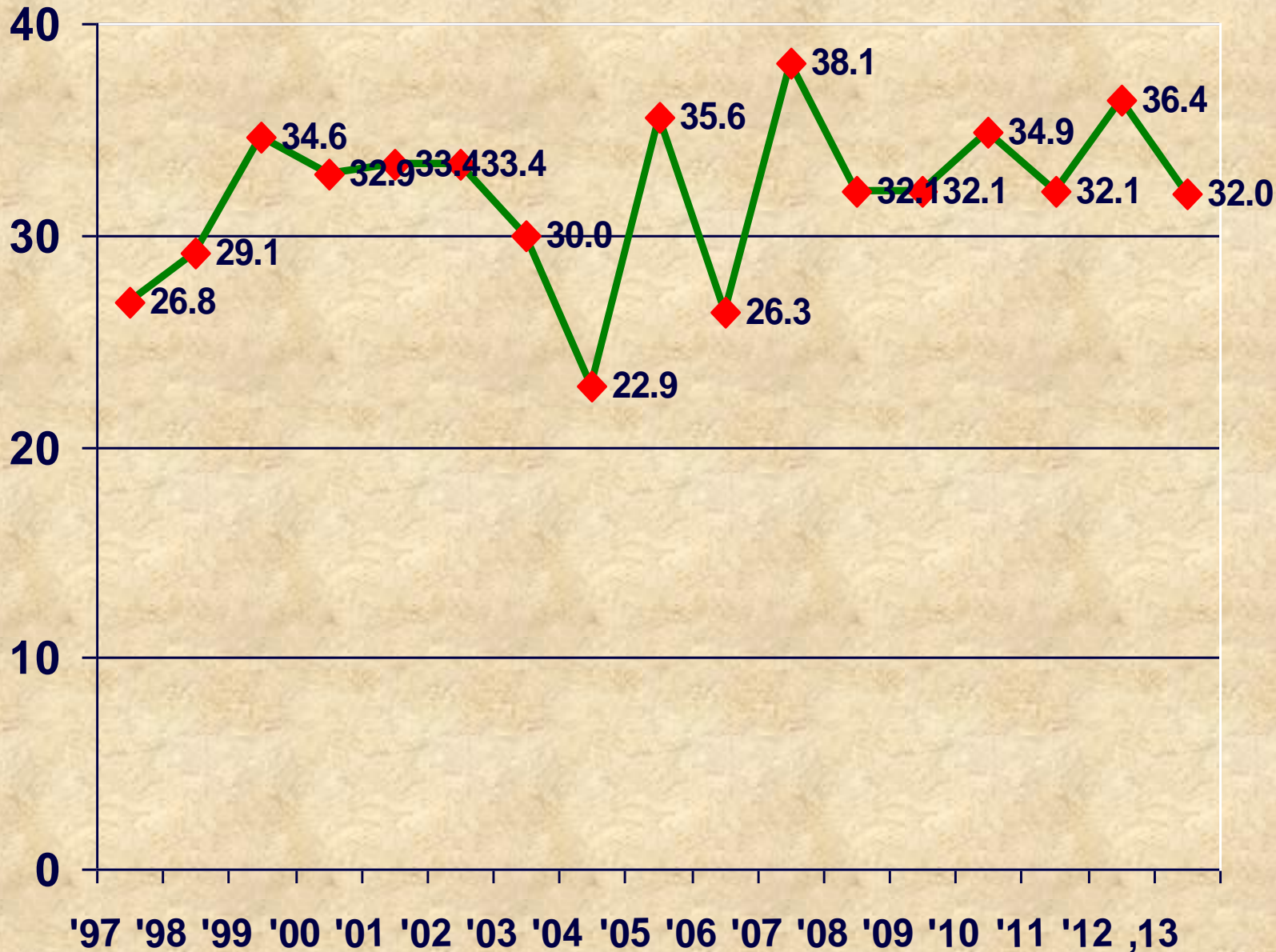


Average Received for Barley Cash Sales

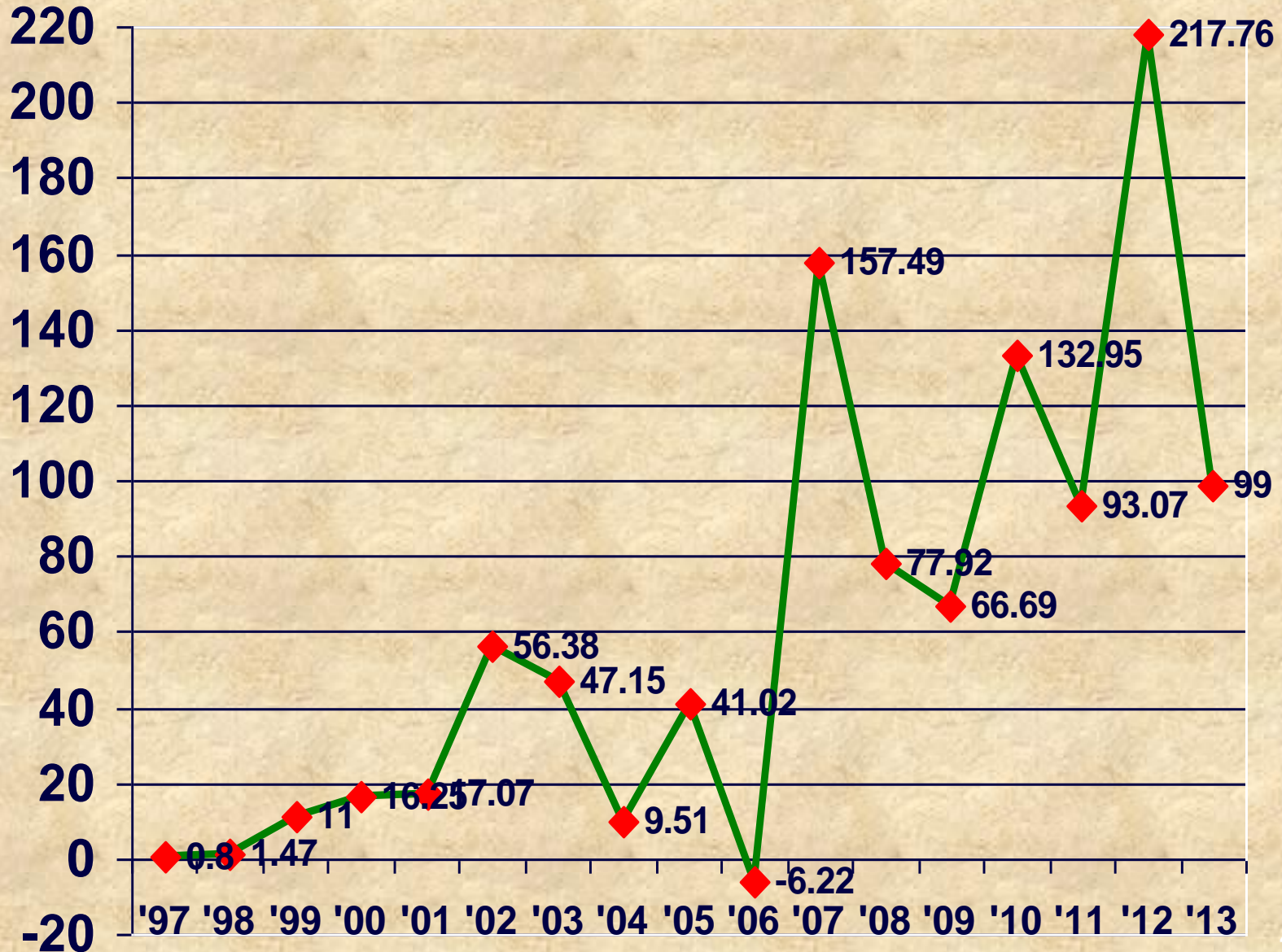
● 1997	2.13
● 1998	1.82
● 1999	1.91
● 2000	1.83
● 2001	1.85
● 2002	2.14
● 2003	2.70
● 2004	2.50
● 2005	1.95
● 2006	2.26
● 2007	3.12
● 2008	4.75
● 2009	5.32
● 2010	4.05
● 2011	4.69
● 2012	6.39
● 2013	6.20



Soybean Average Yields, Region 3



Soybean Net Return per Acre on Cash Rented Land, Avg. Rent \$68.54

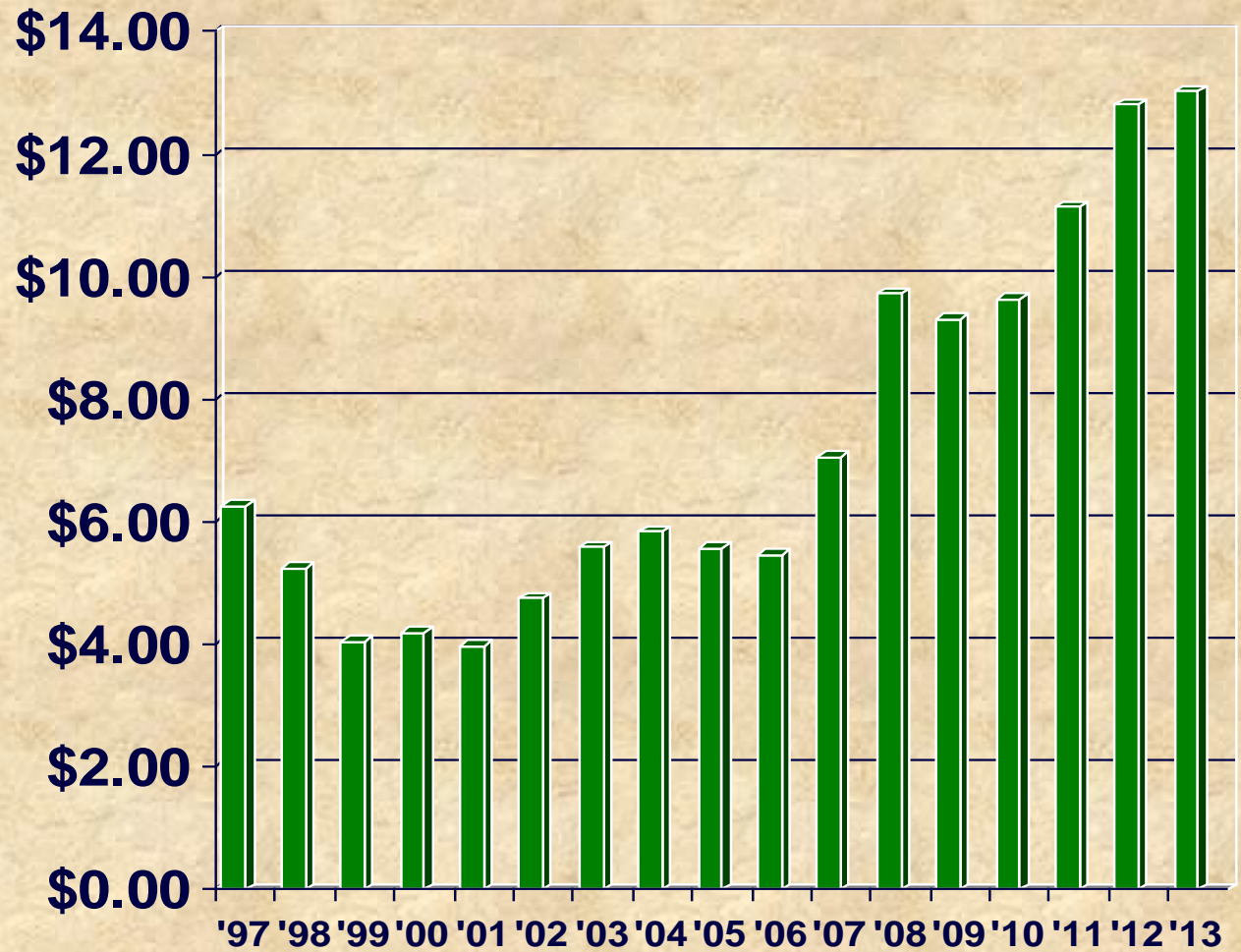


Soybeans Net Return per Acre on Cash Rented Land, 2013

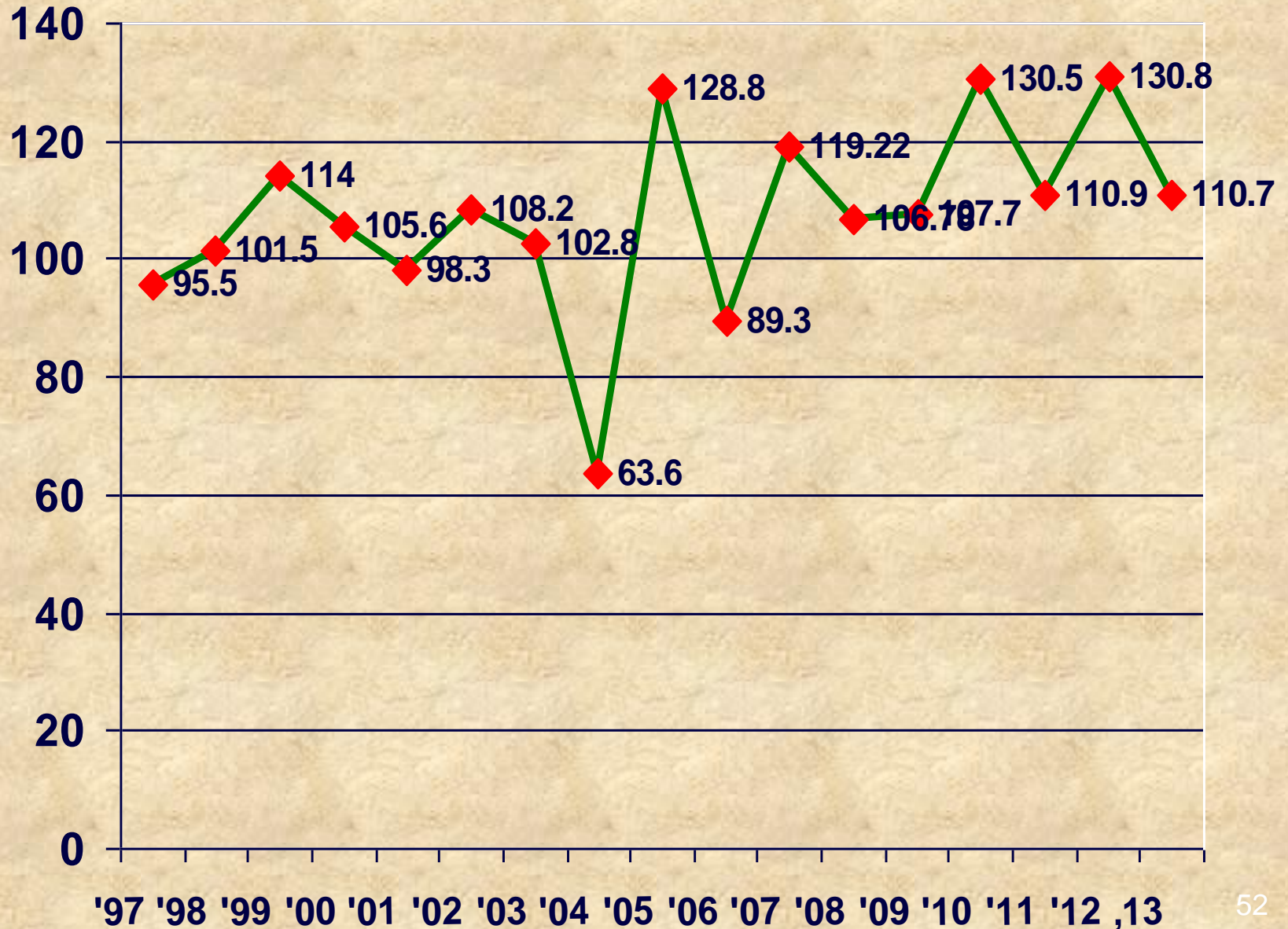
Average	\$ 99.00 at 31.9 Bu.
High 20%	\$ 205.89 at 38.3 Bu.
Low 20%	\$ -40.90 at 21.2 Bu.

Average Price Received for Cash Sales

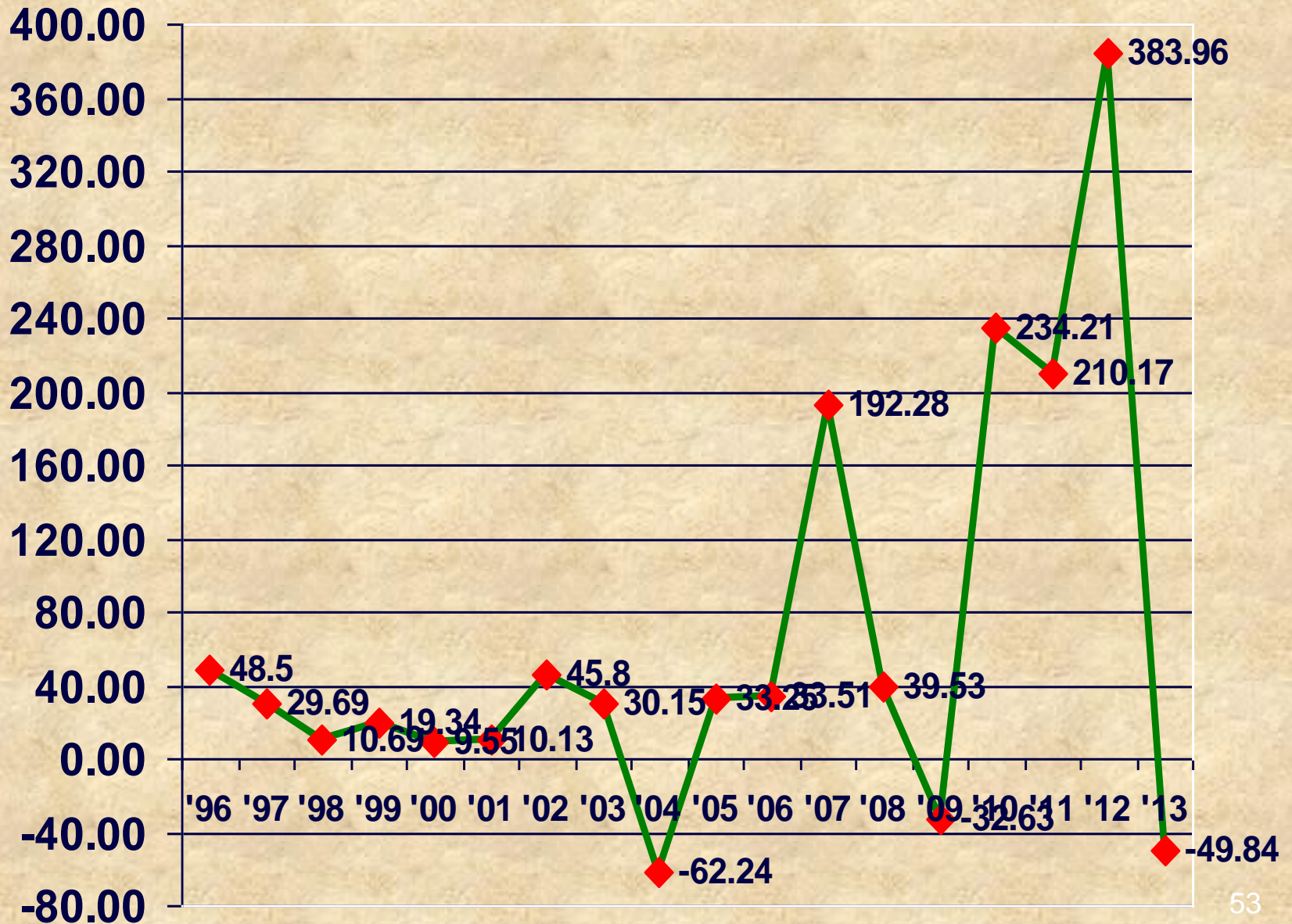
● 1997	6.26
● 1998	5.24
● 1999	4.05
● 2000	4.19
● 2001	3.97
● 2002	4.75
● 2003	5.59
● 2004	5.84
● 2005	5.56
● 2006	5.45
● 2007	7.06
● 2008	9.73
● 2009	9.30
● 2010	9.64
● 2011	11.13
● 2012	12.81
● 2013	13.02



Corn Average Yields, Region 3



Corn Net Return per Acre on Cash Rented Land, Avg. Rent \$63.01



Corn Net Return/Acre on Cash Rented Land, 2013

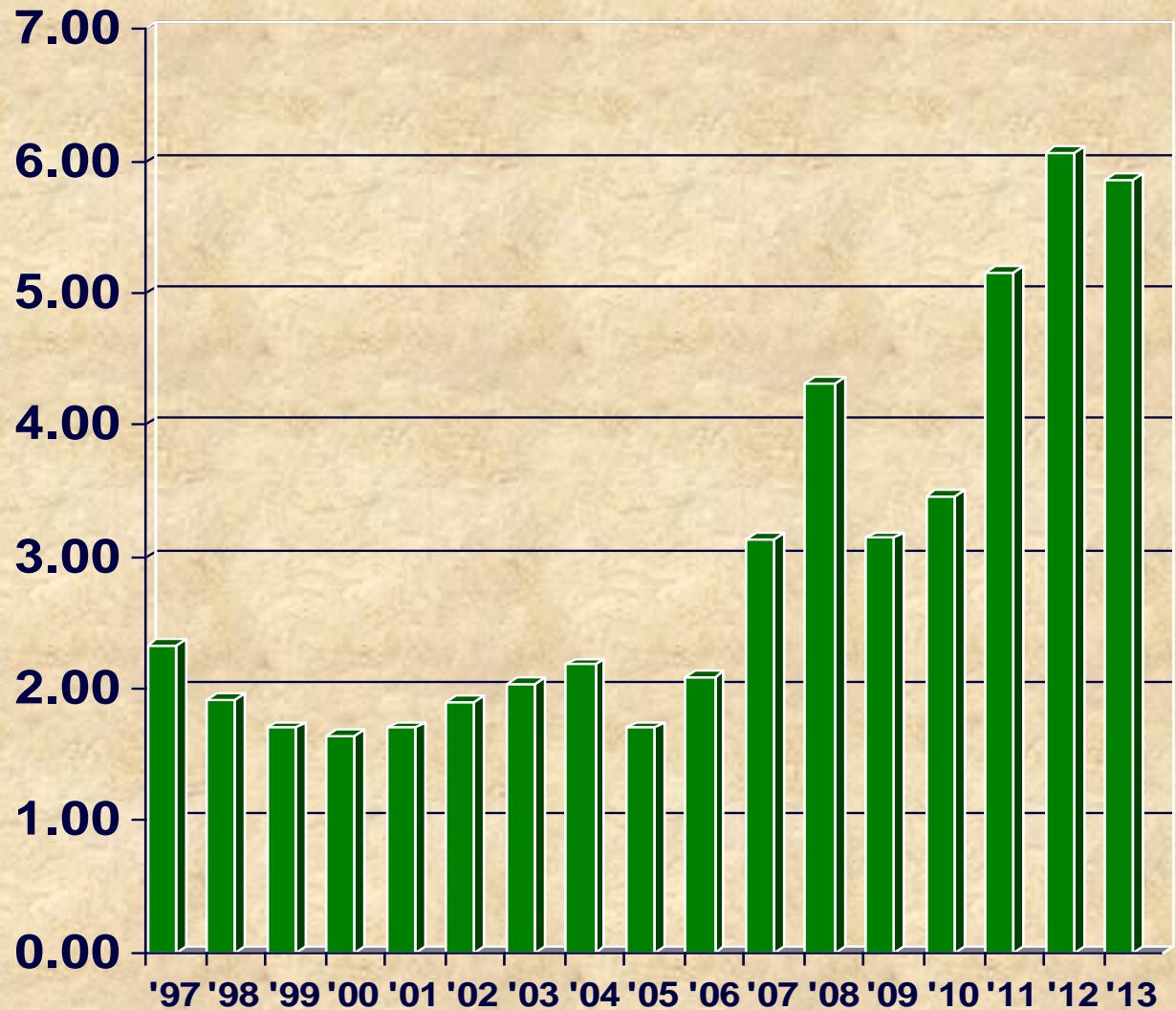
Average	\$ - 49.84	at 110.6 Bu.
Low 20%	\$ - 194.04	at 108.3 Bu.
High 20%	\$ 99.96	at 117.7 Bu.



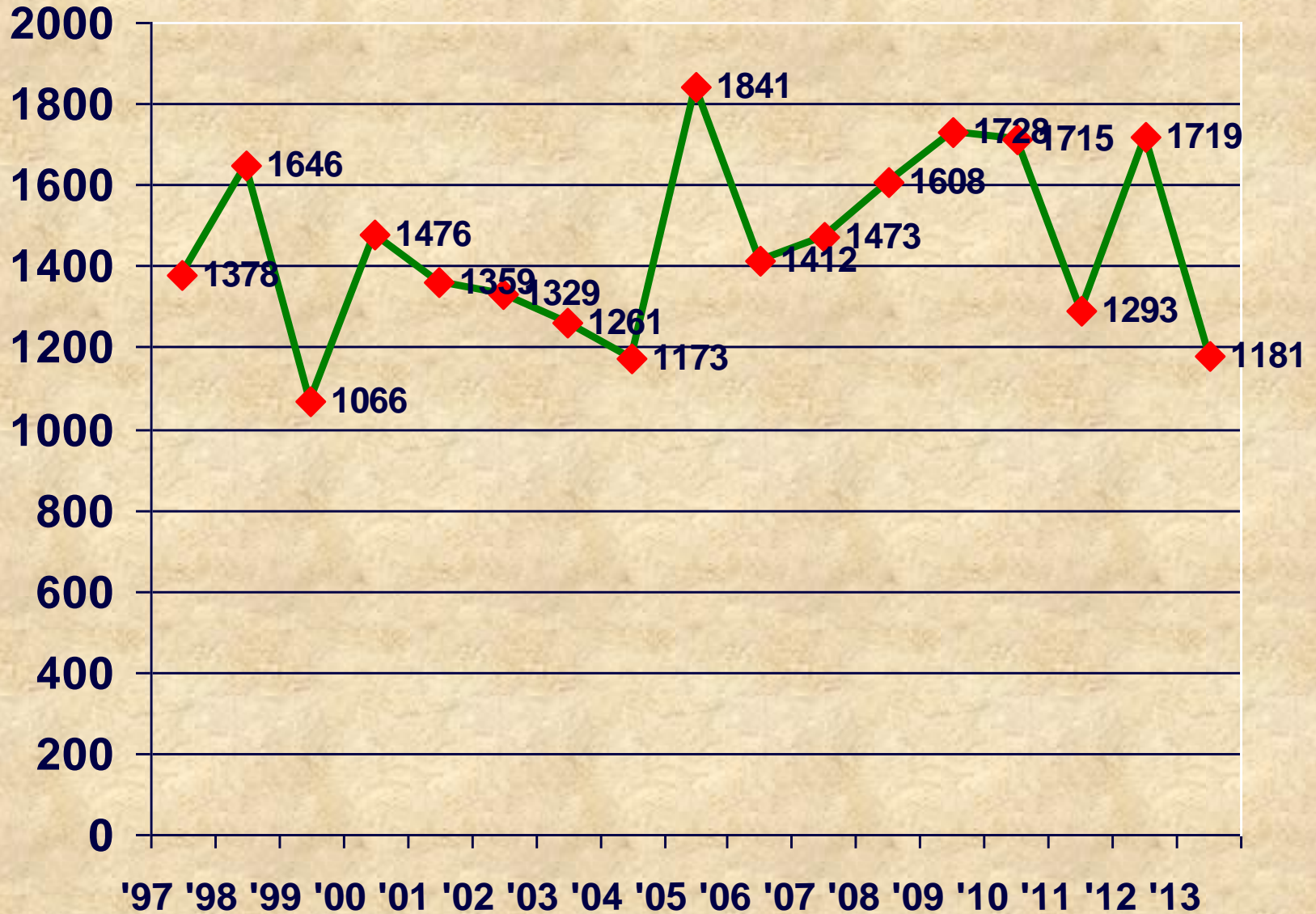
Average Price Received Cash Sales

Corn

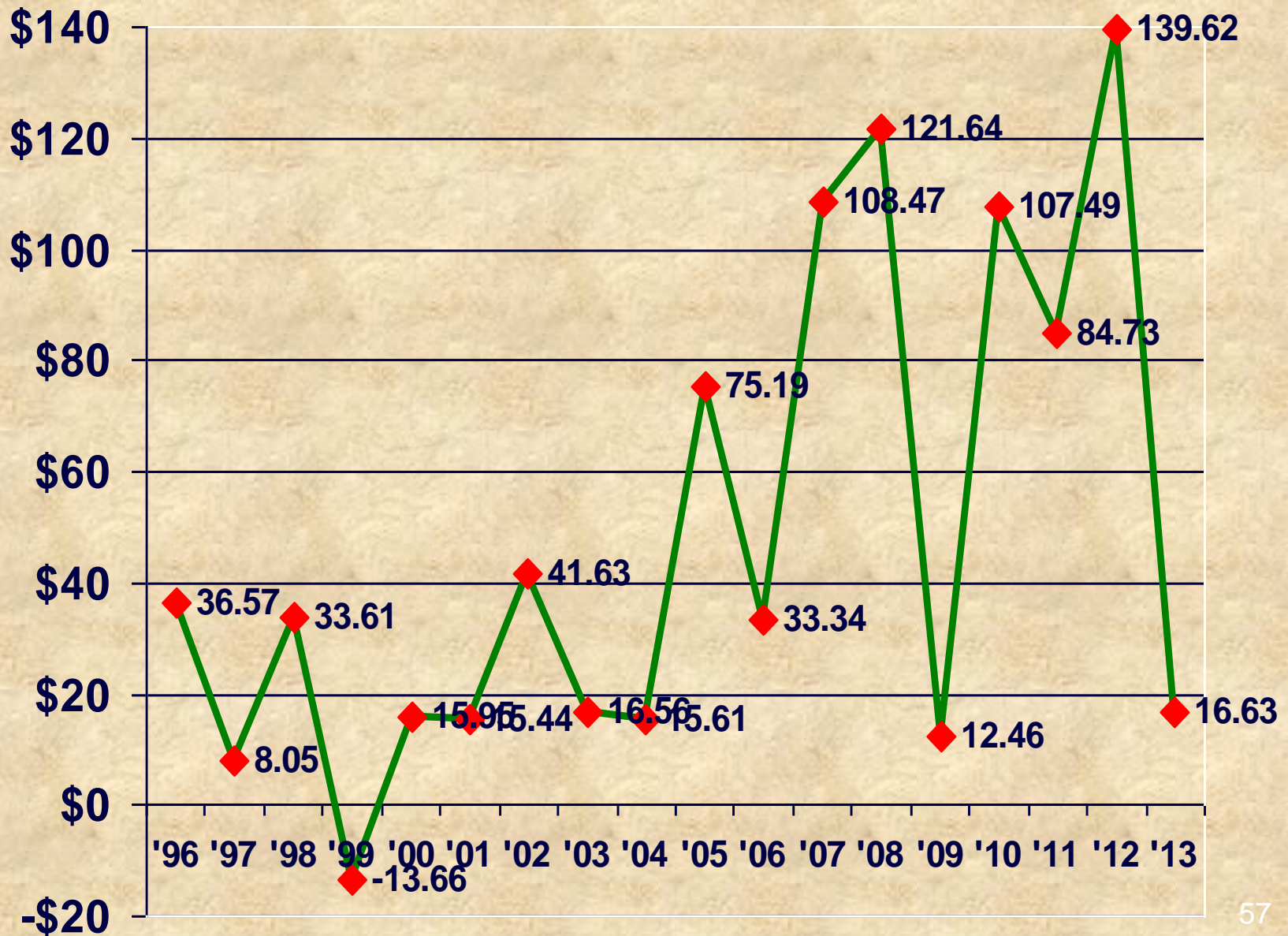
● 1997	2.33
● 1998	1.91
● 1999	1.70
● 2000	1.64
● 2001	1.70
● 2002	1.90
● 2003	2.03
● 2004	2.18
● 2005	1.70
● 2006	2.09
● 2007	3.13
● 2008	4.31
● 2009	3.14
● 2010	3.46
● 2011	5.15
● 2012	6.06
● 2013	5.86



Oil Sunflower Average Yields, Region 3



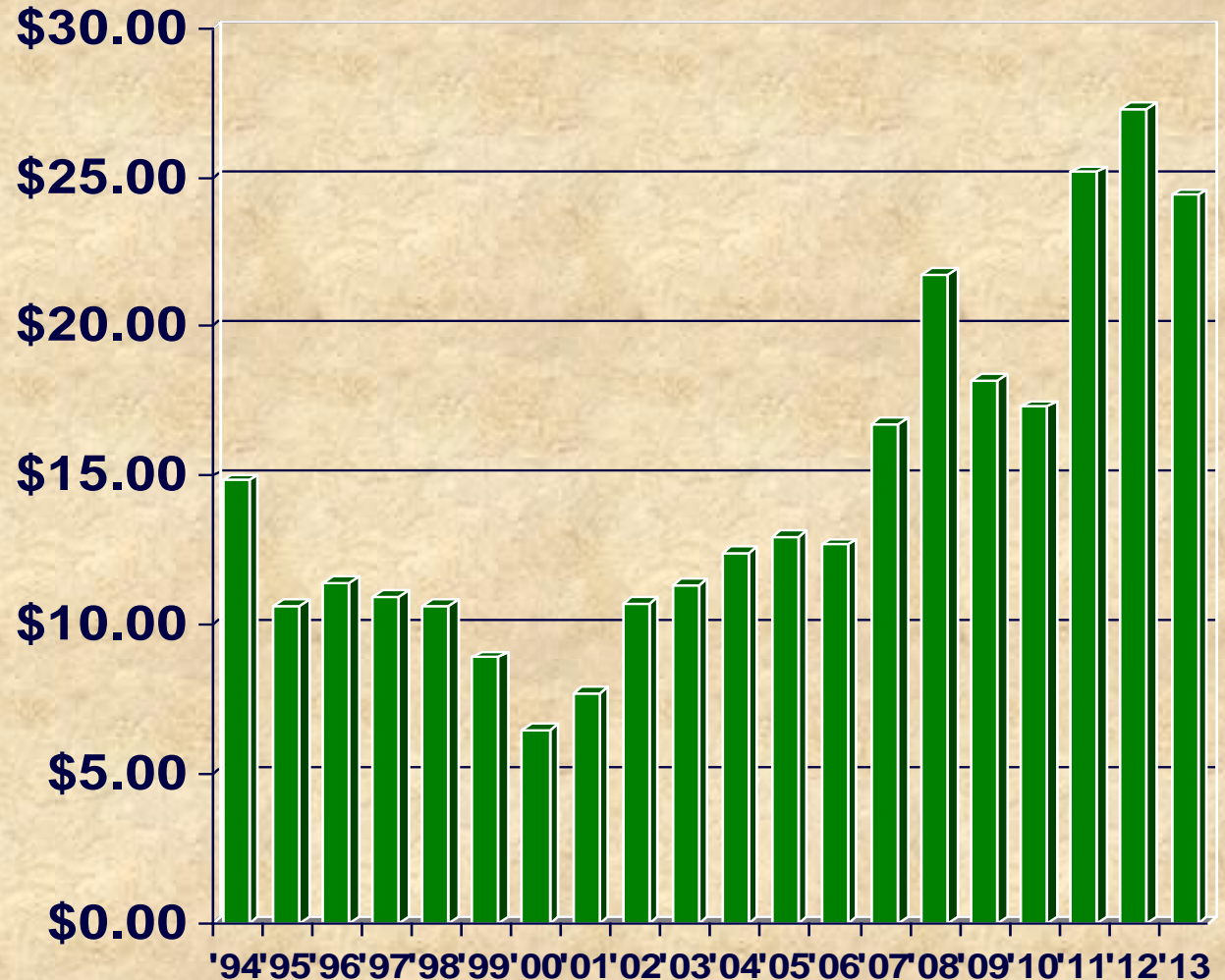
Oil Sunflower Net Return per Acre on Cash Rented Land, Avg. Rent \$38.57



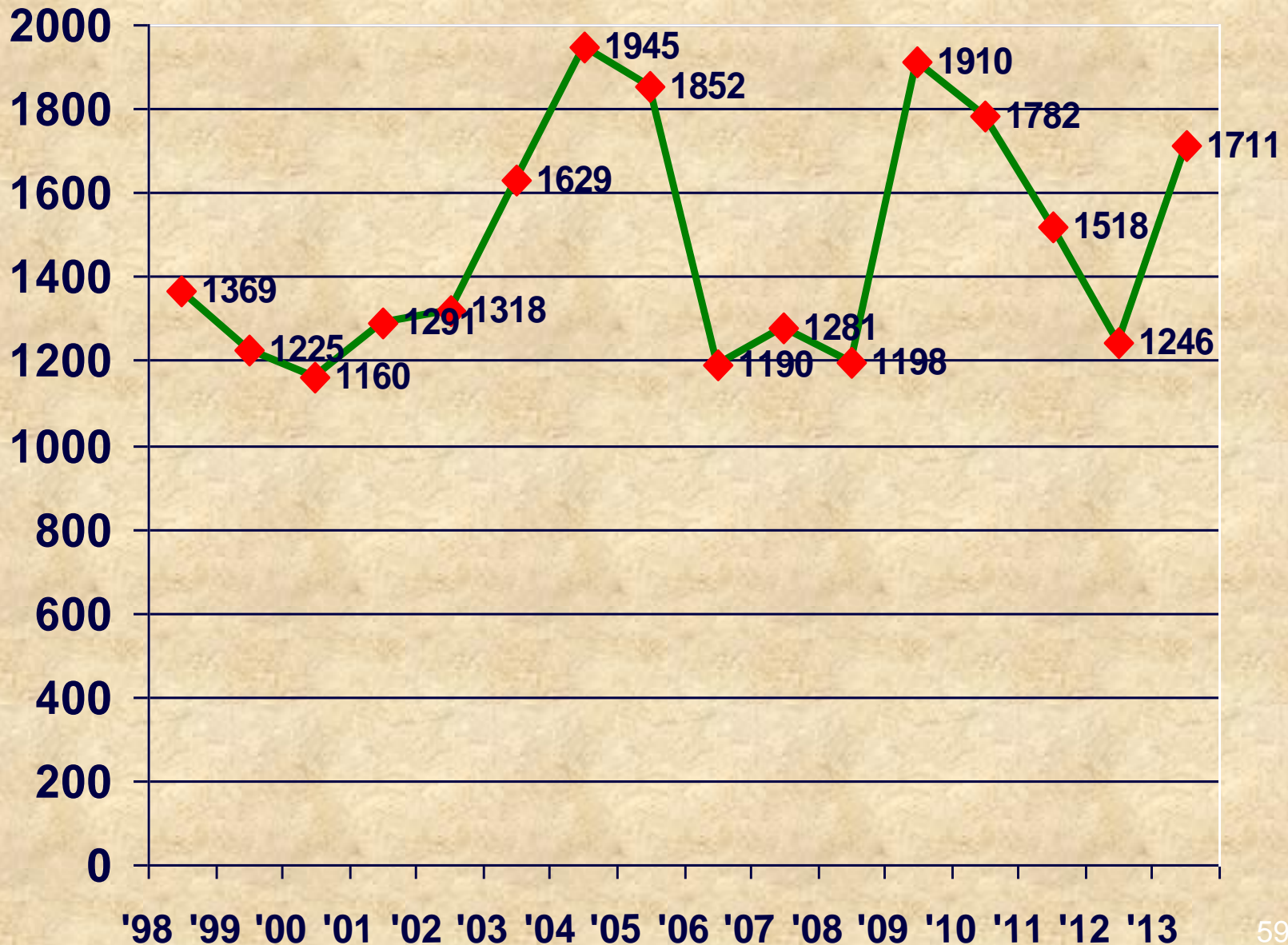
Average Price Received Cash Sales

Oil Sunflowers

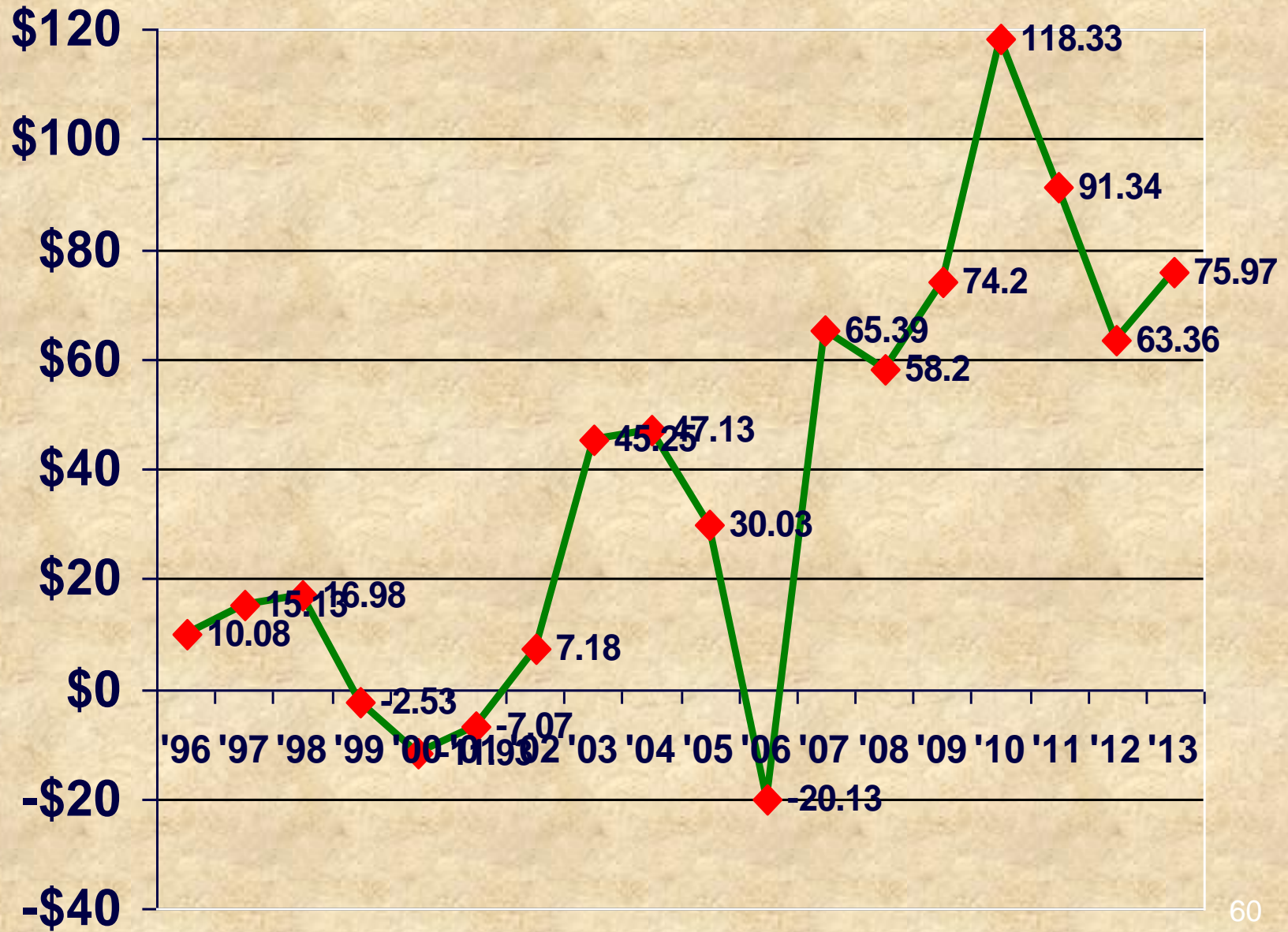
● 1997	10.94
● 1998	10.66
● 1999	8.90
● 2000	6.50
● 2001	7.73
● 2002	10.71
● 2003	11.32
● 2004	12.41
● 2005	12.94
● 2006	12.68
● 2007	16.74
● 2008	21.74
● 2009	18.18
● 2010	17.32
● 2011	25.19
● 2012	27.30
● 2013	24.40



Canola Average Yields, Region 3



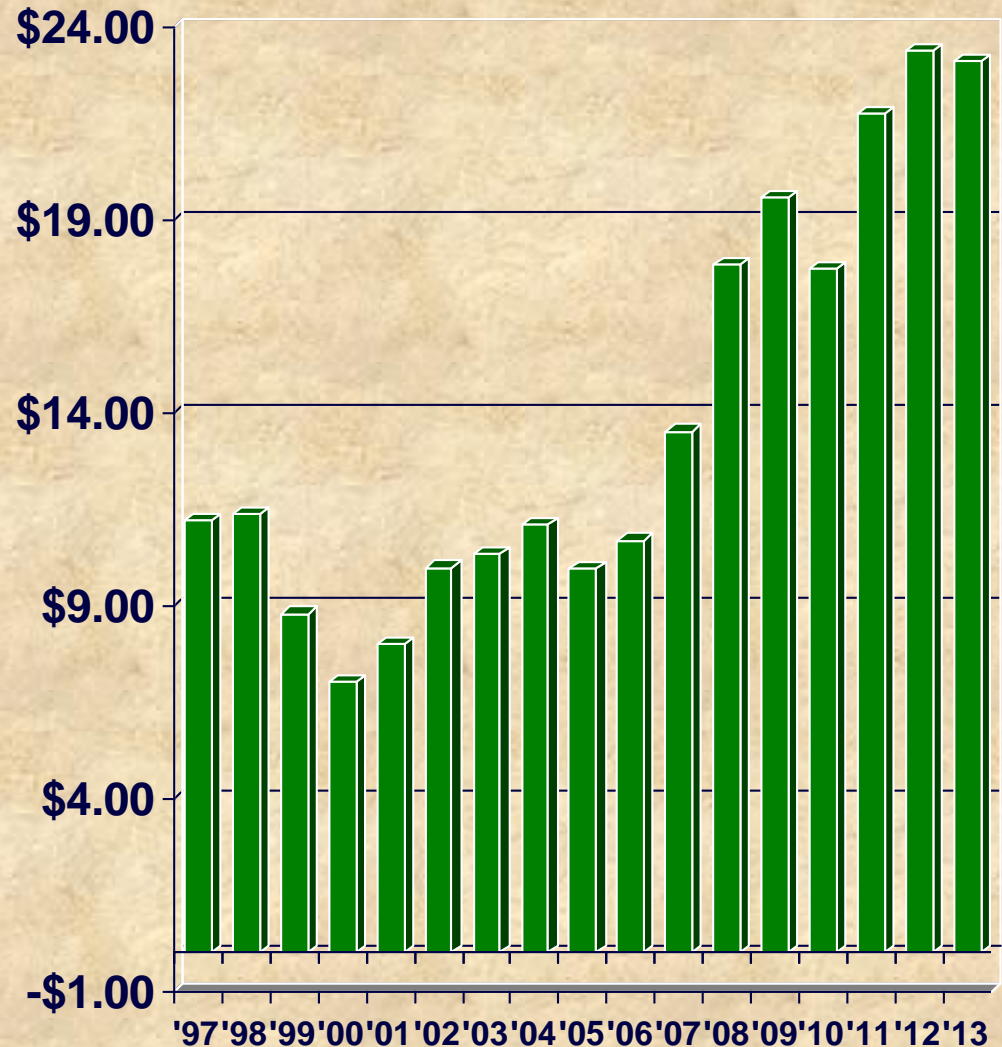
Canola Net Return per Acre on Cash Rented Land, Avg. Rent \$47.29



Average Price Received Cash Sales

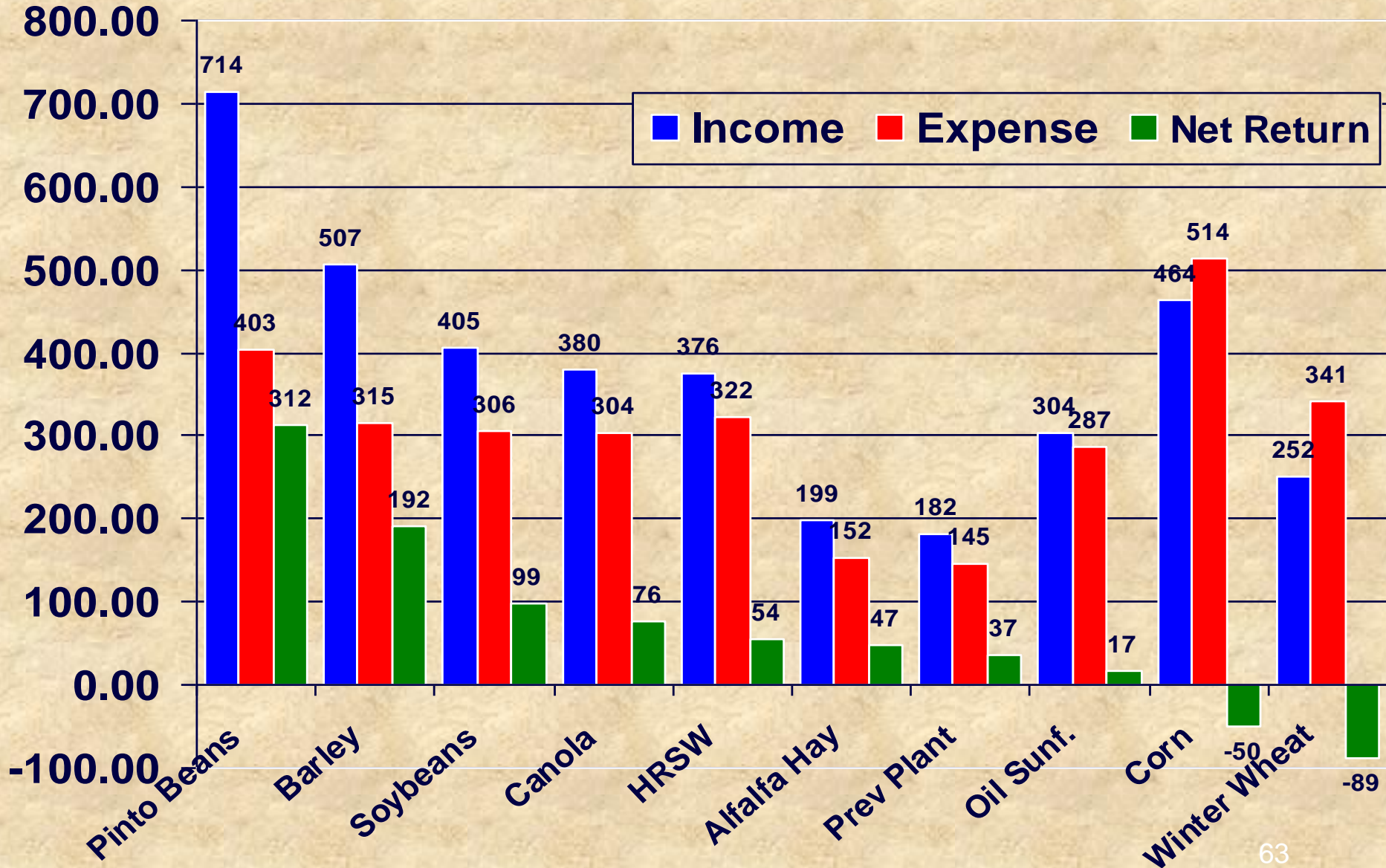
Canola

● 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

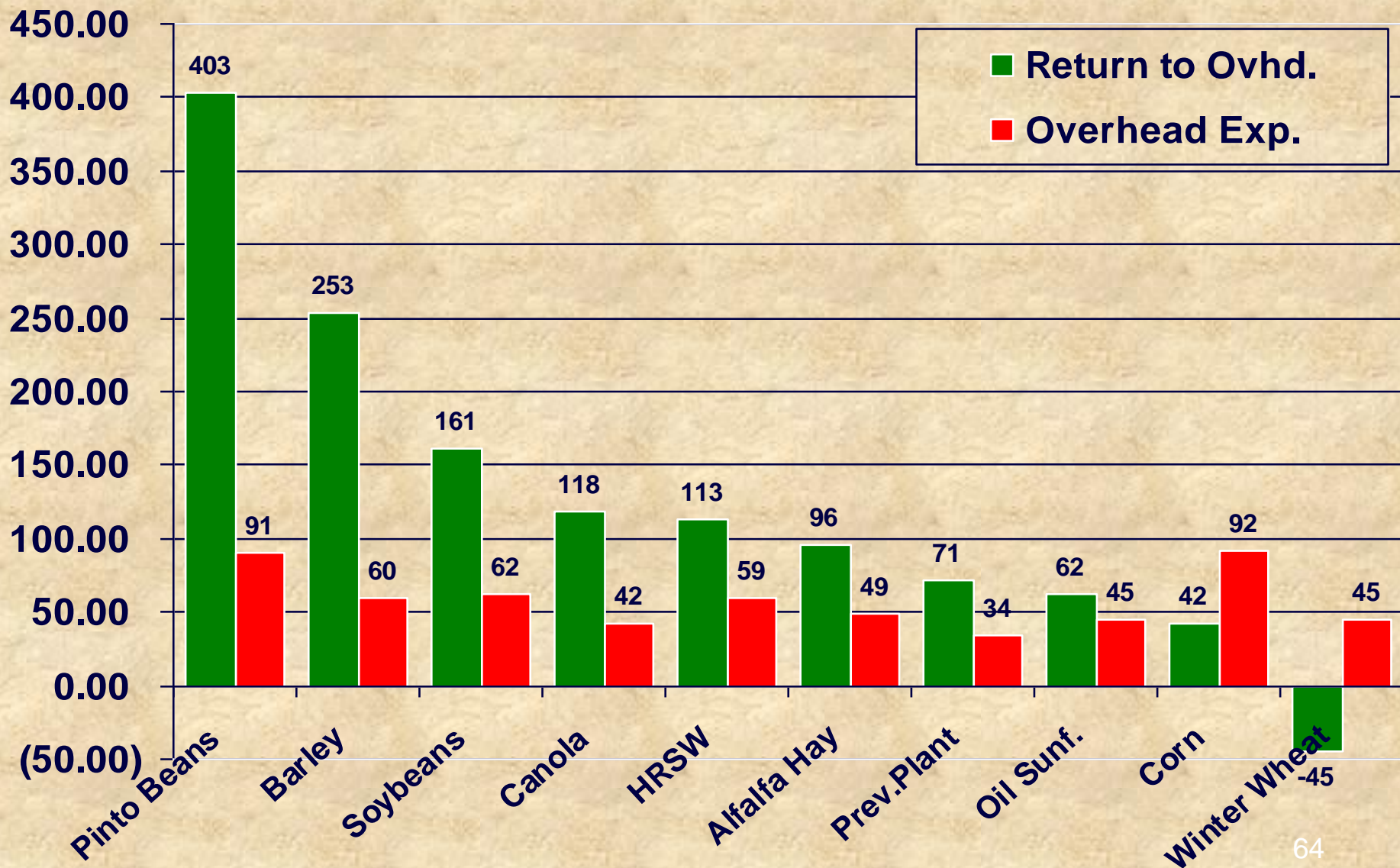


Comparing Crop Profitability

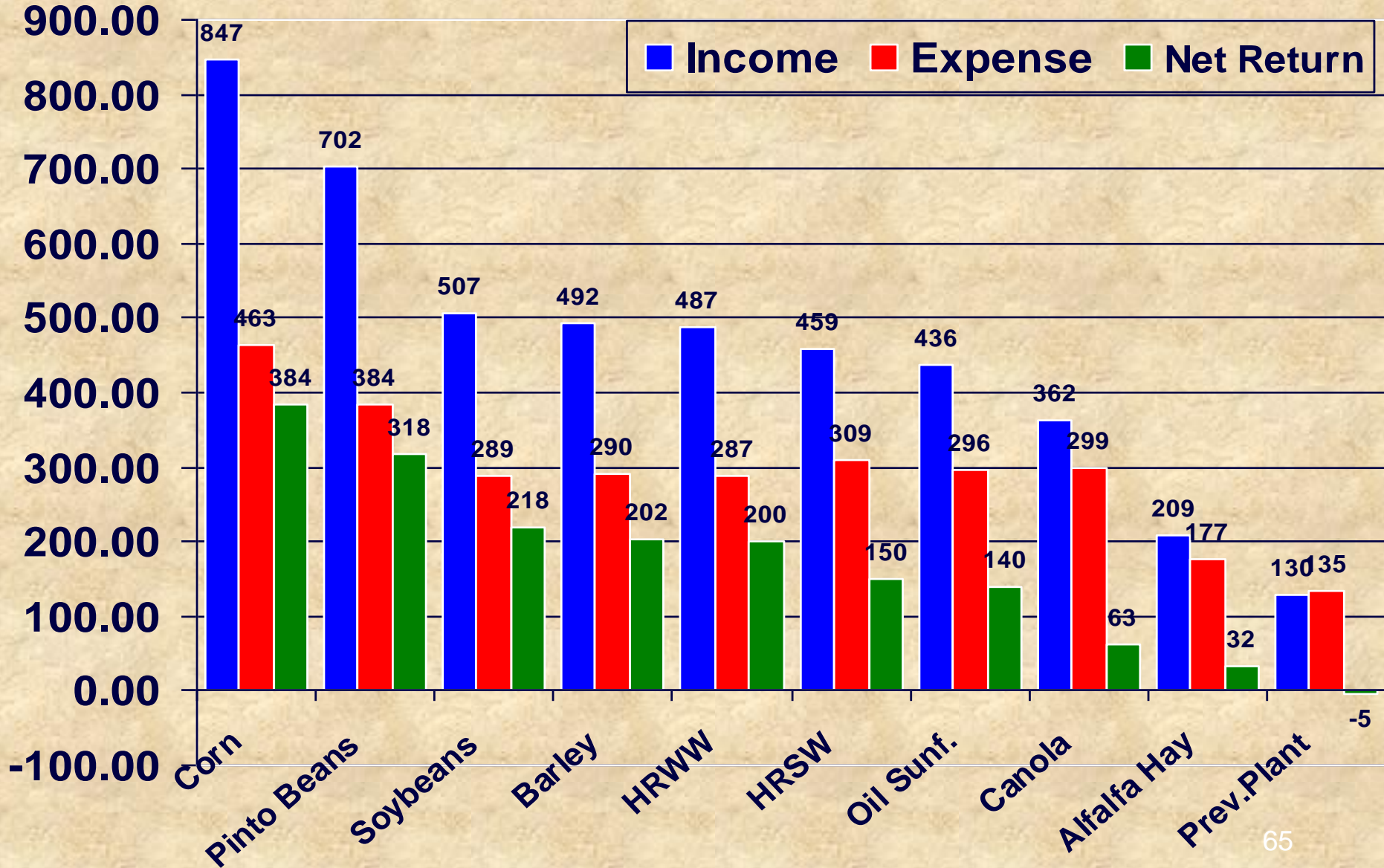
2013 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



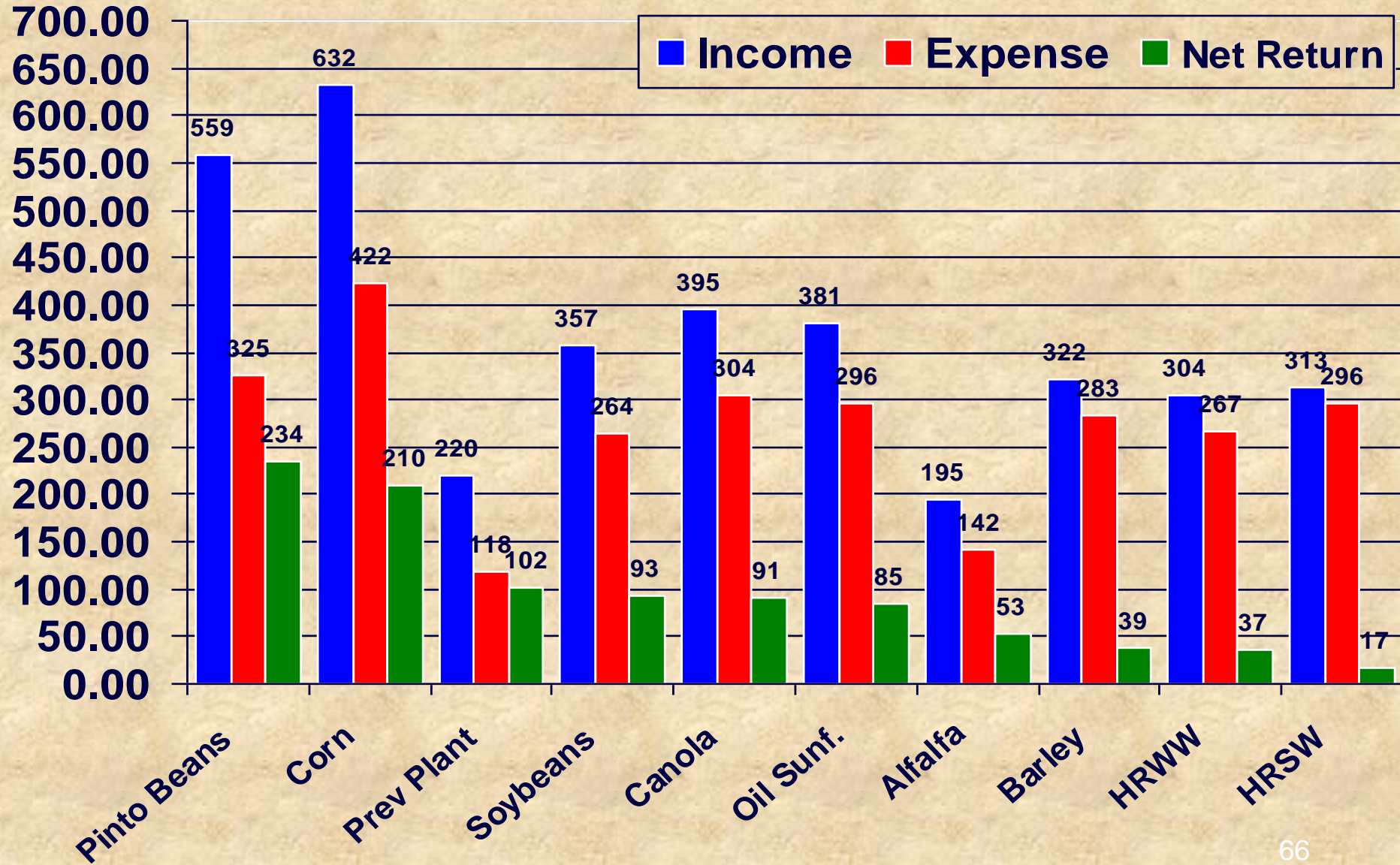
Return to Overhead per Cash Rented Acre without Direct or Counter-Cyclical Payments, Region 3, 2013



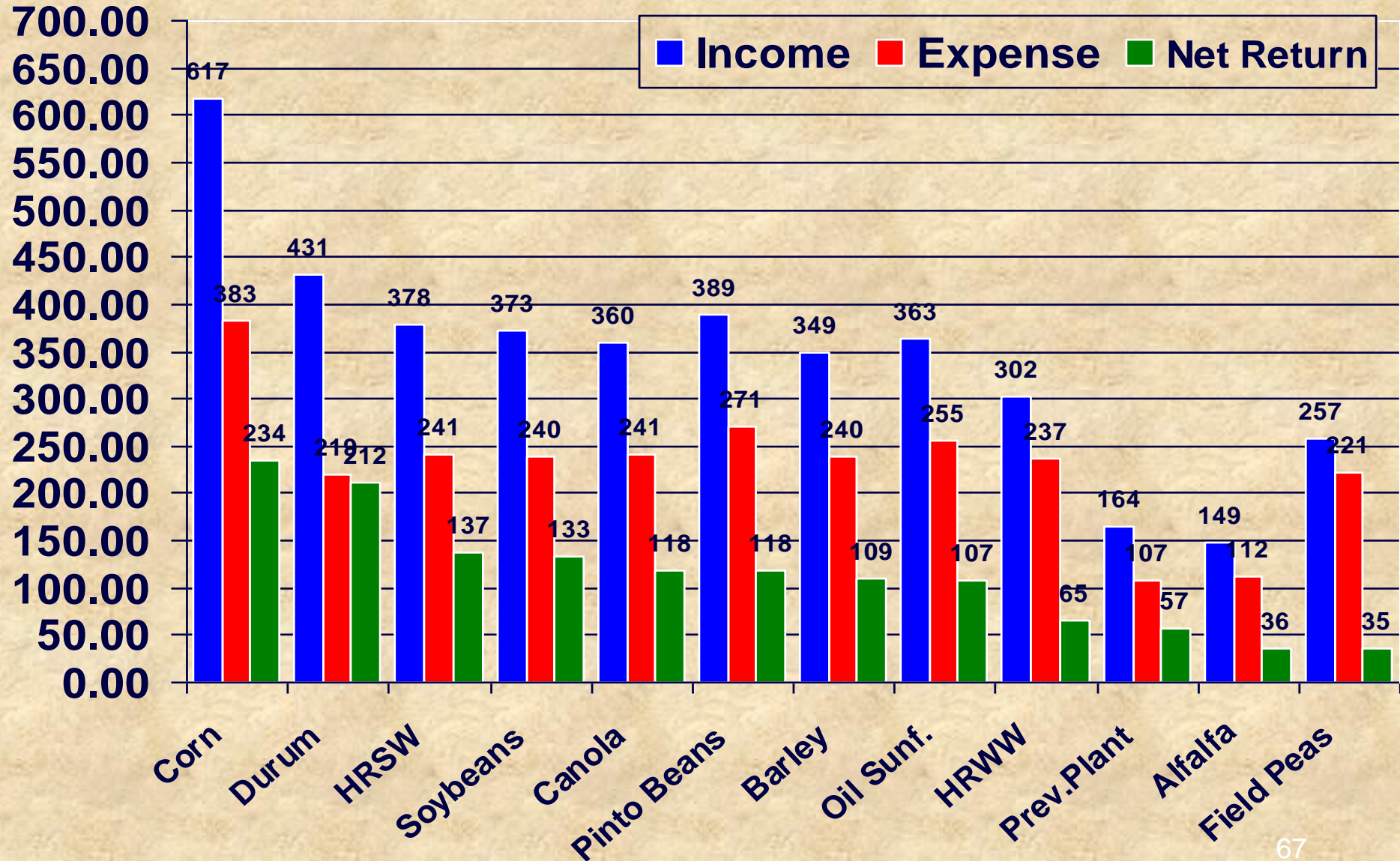
2012 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



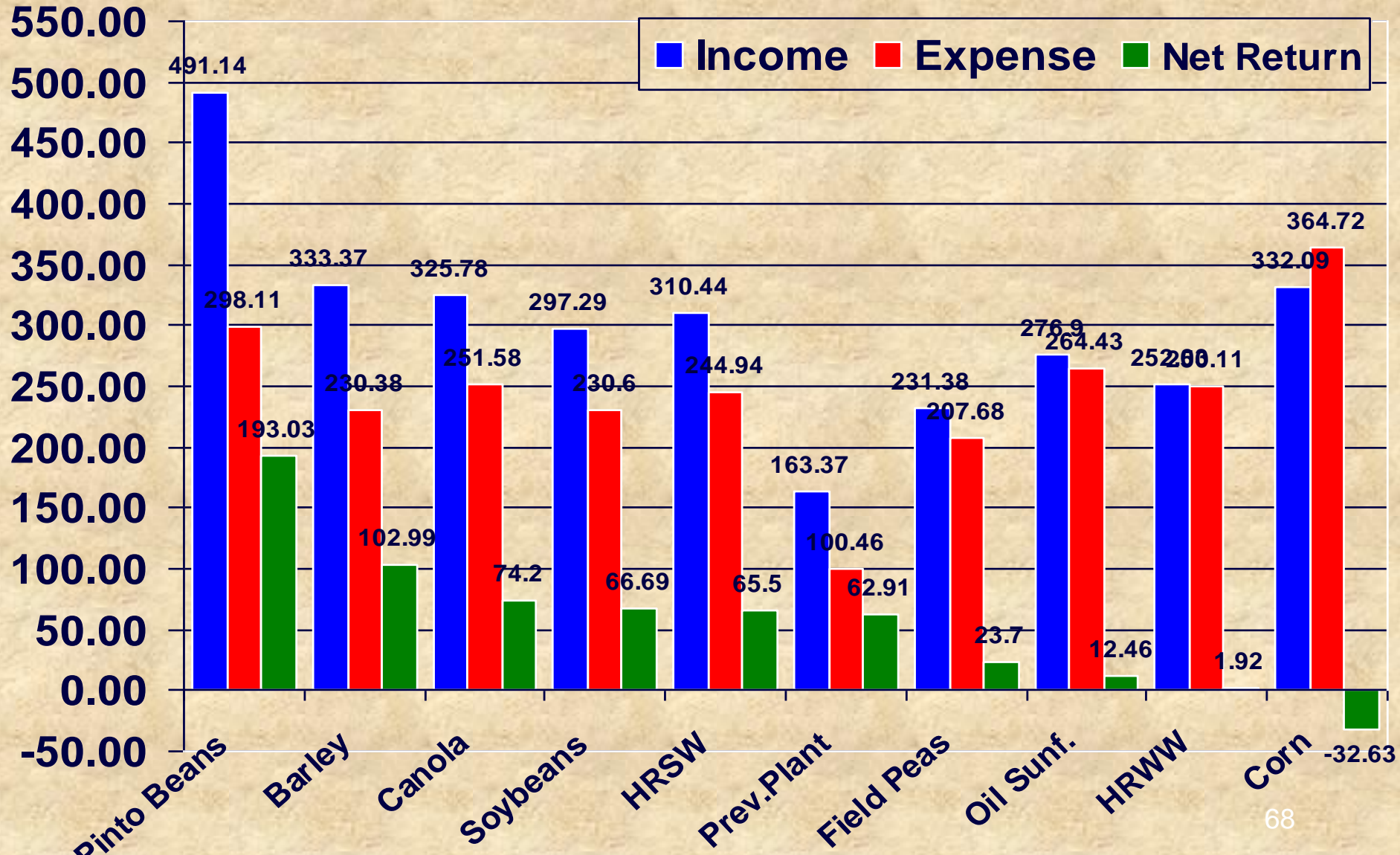
2011 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



2010 Income, Expenses & Net Return/Acre on Cash Rented, Does not included direct or counter-cyclical payments.



2009 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 \$70-\$80, Row Crops \$100-\$130

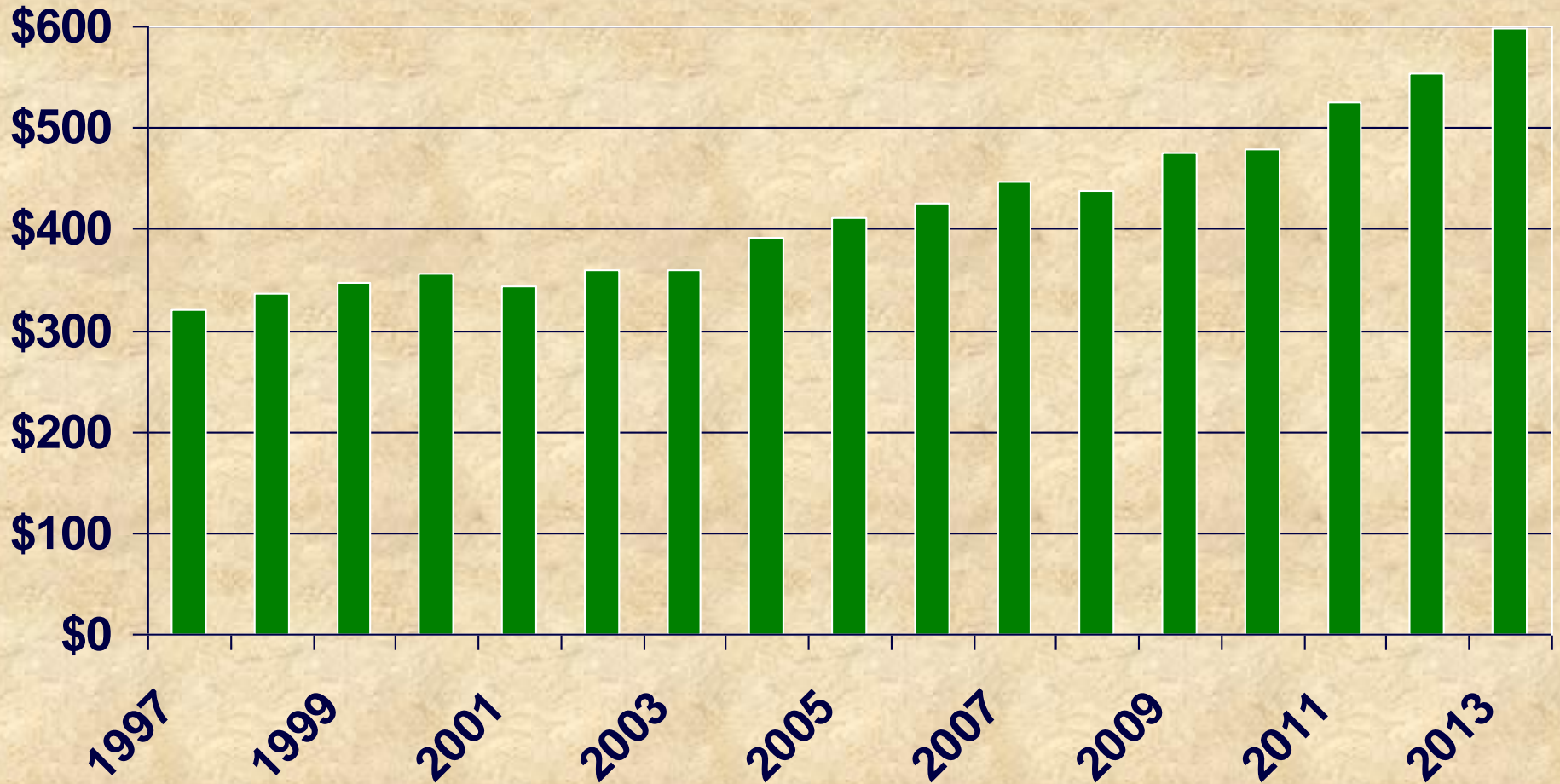
2013 Machinery Costs per acre, Cash Rented



Beef Production in 2013

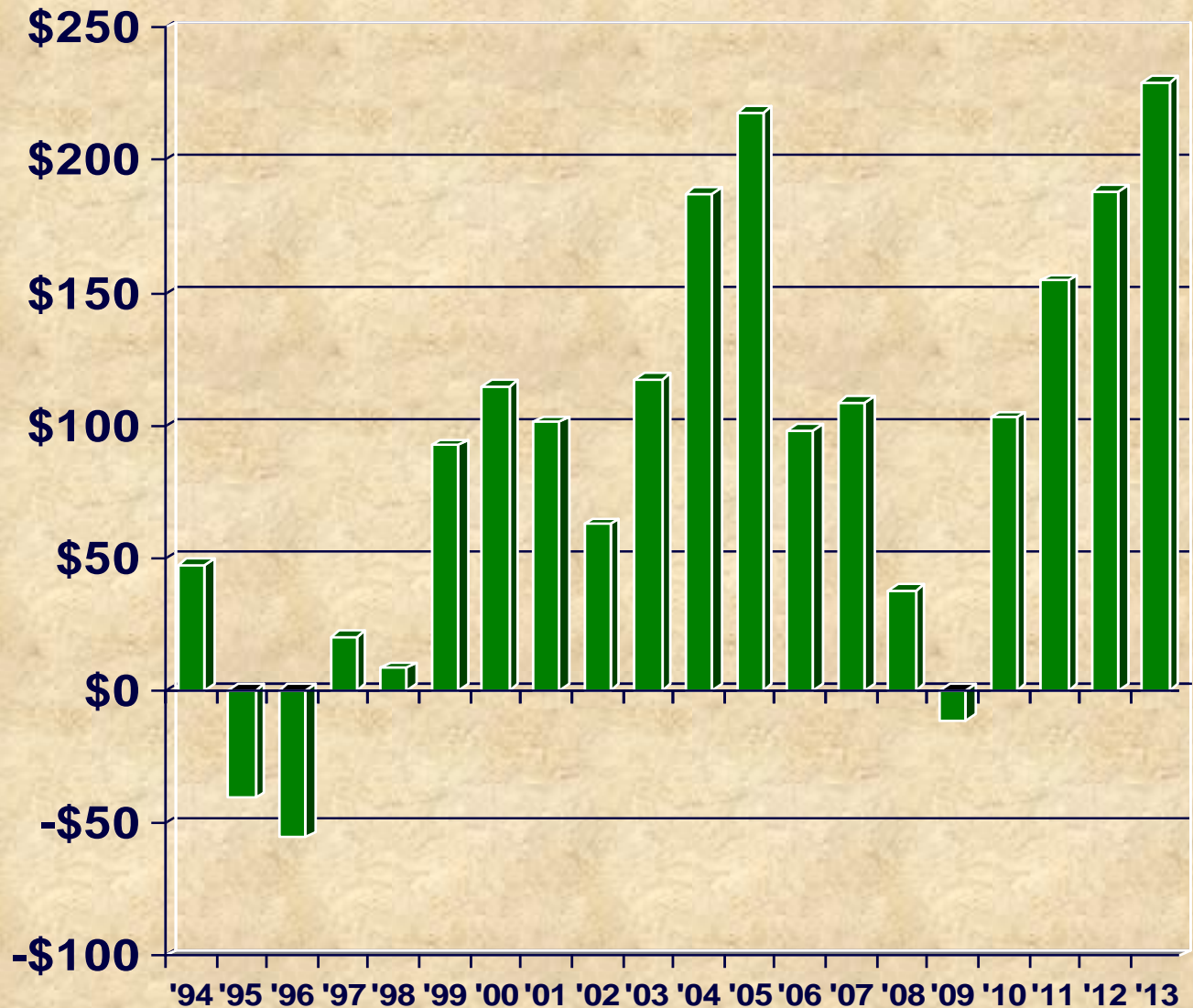


Direct & Overhead Expenses per Cow, does not include net inventory change of \$86.45



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



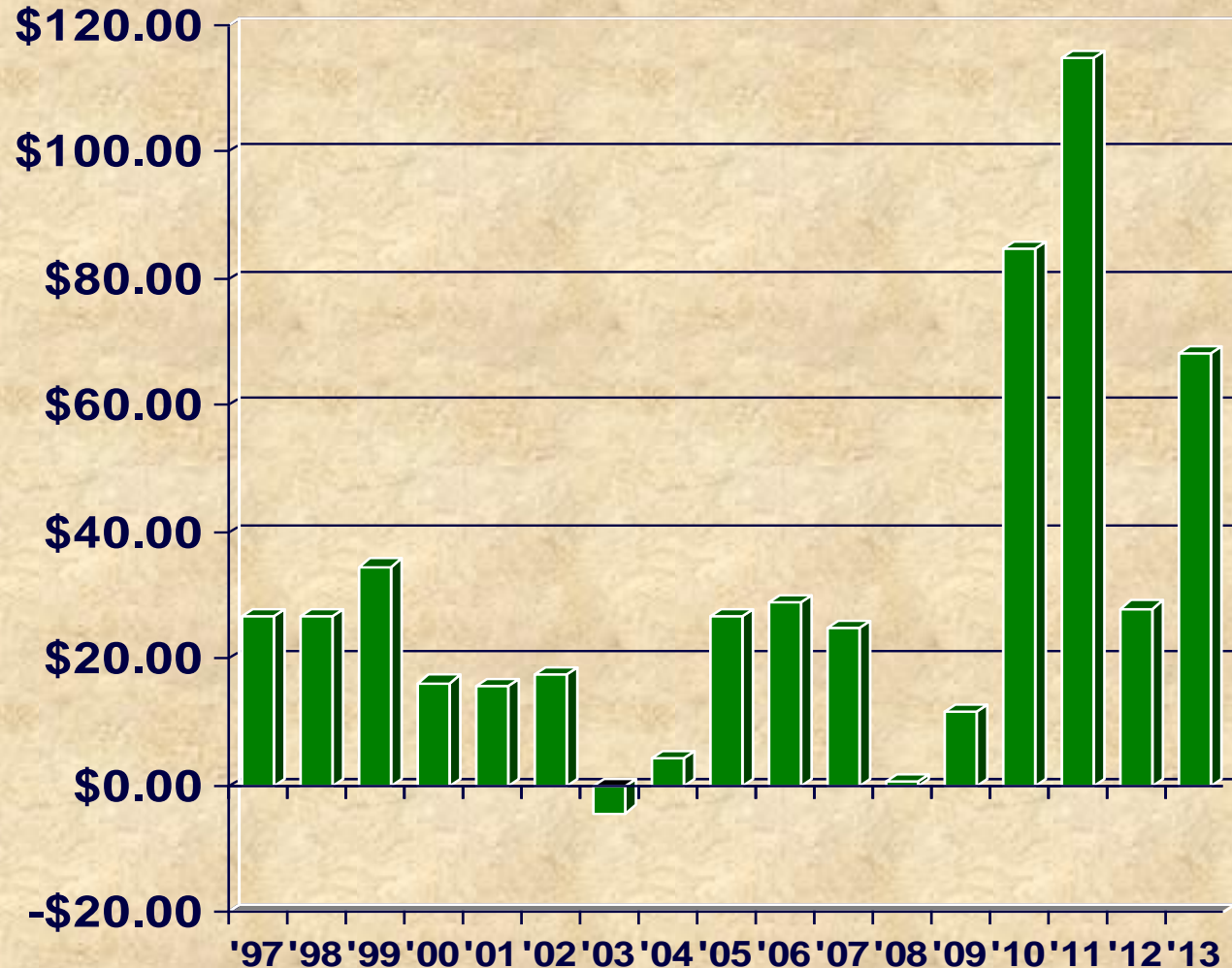
Other Beef Cow Items:

- Total average of all costs are \$685.27/cow.
- Average Profit per cow at \$229.46
- Avg. weaning wt. 554 lbs. (7# more than 2012)
- Pounds weaned per exposed female 503 lbs.(+11 lbs)
- Avg. feed cost per cow of \$381.51 (up \$40.64)
- Avg. range or pasture cost per cow \$111.51
- Avg. cost per aum was \$18.49 for rented pasture.
- Avg. cost to produce a ton of grass hay \$51.11
- Avg. cost to produce a ton of alfalfa hay \$63.73
- Avg. cost to produce a ton of corn silage \$35.51 wet, or approximately \$90-100/ton for 90% dry matter.

Beef Backgrounding, Net Return/Head

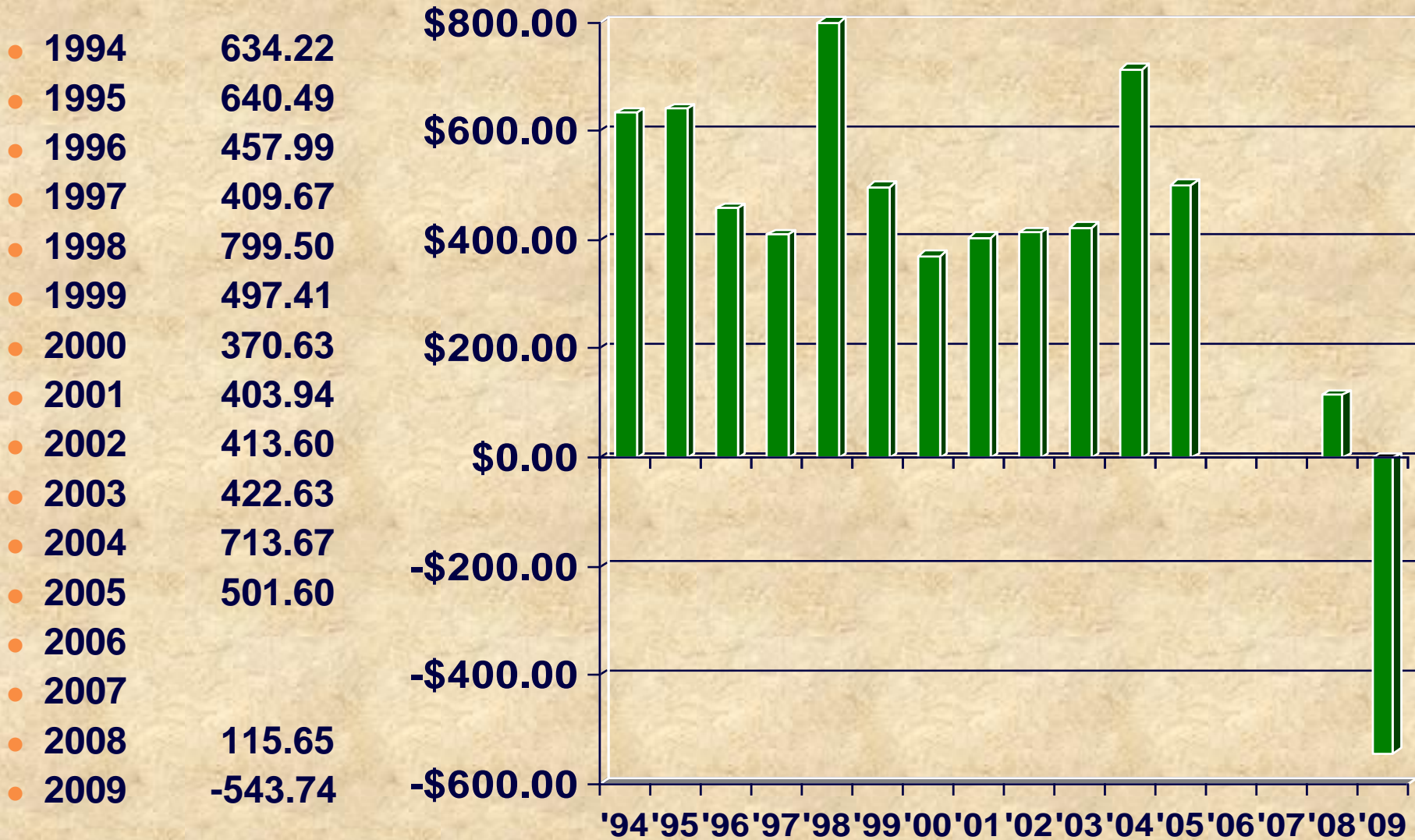
Per Calf

● 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



Net Return per Dairy Cow, No data for 2010-2013

Dairy Cow

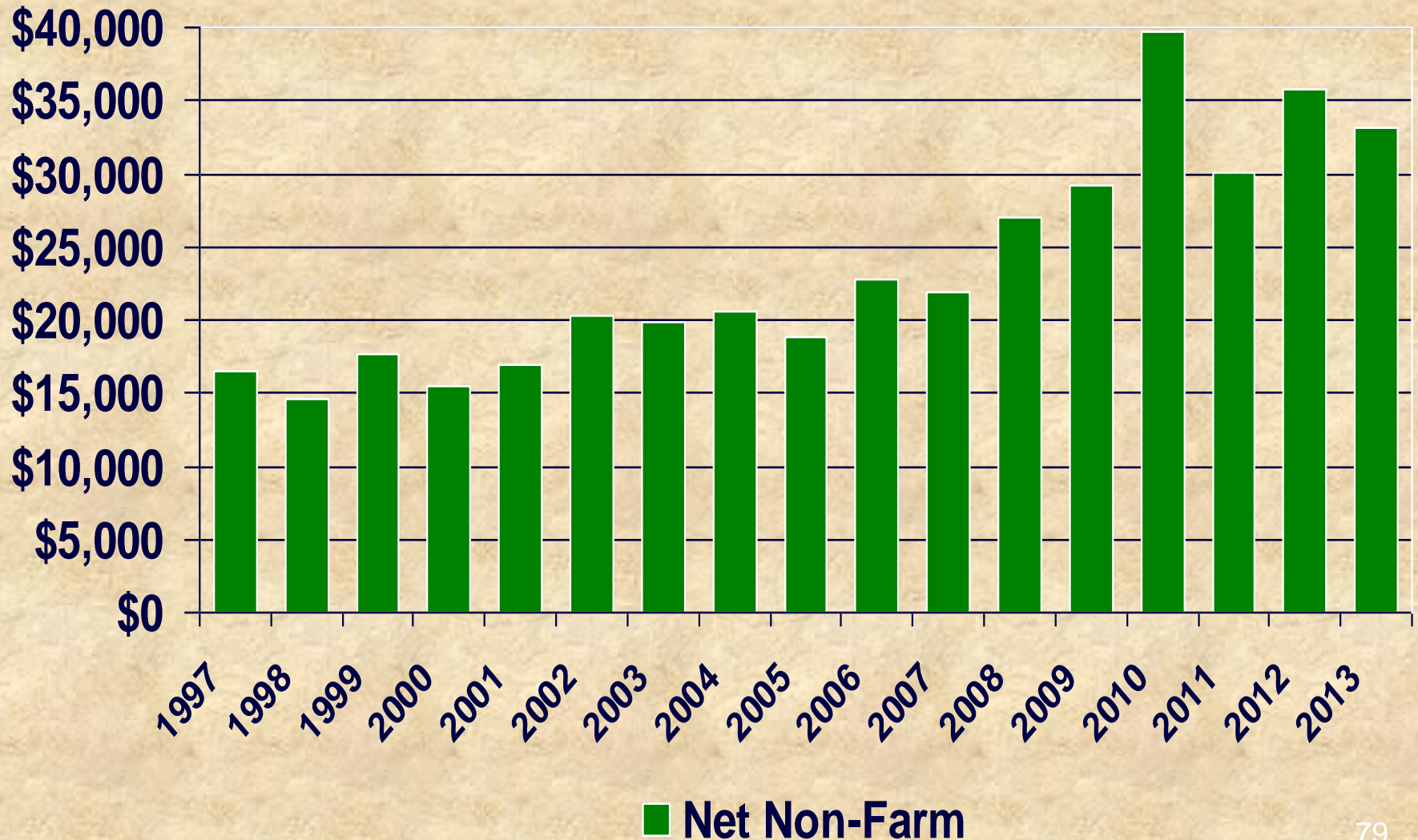


Beef producer's greatest fear!

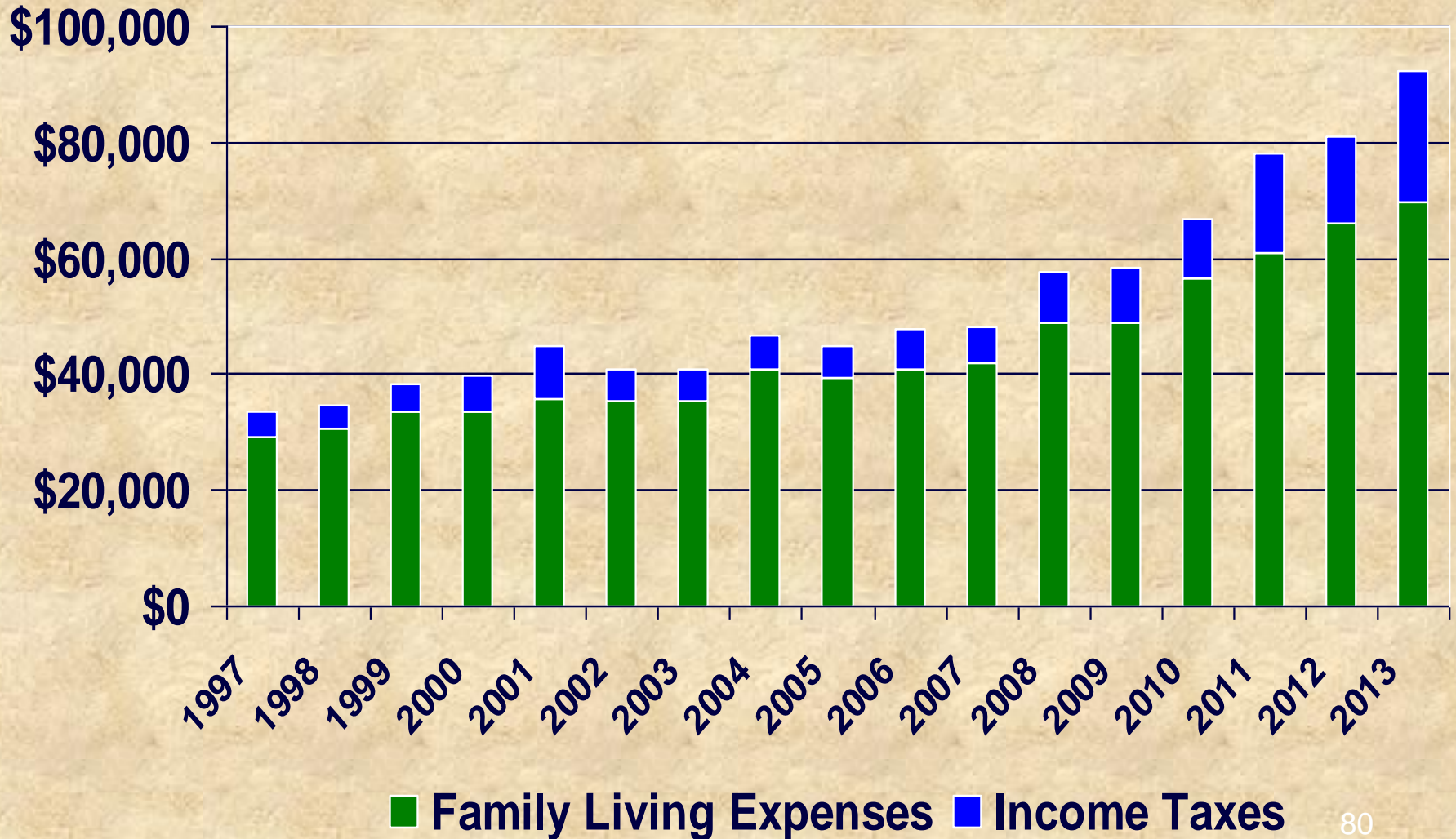


**Non-Farm Income
and
Family Living Information**

Non-Farm Income Per Farm



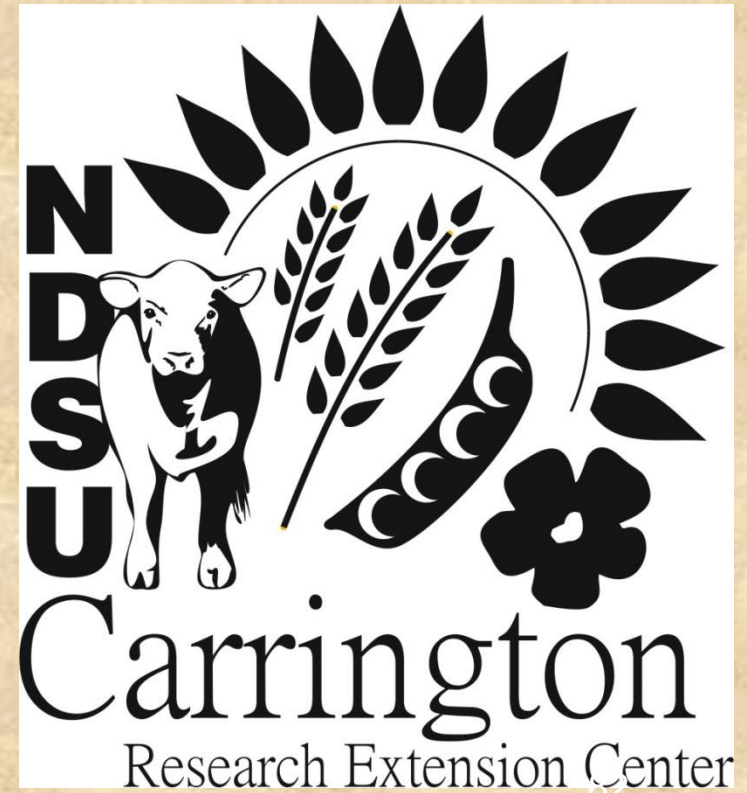
Average Family Living Expenditures and Income Taxes for Region 3



Family Living Expenses, 2.9 members, Based on itemization from 66 Farms

● Food & Meals	\$ 7,314	● Utilities	\$ 3,350
● Medical Care	\$ 4,713	● Veh. Exp.	\$ 3,310
● Health Insur.	\$ 7,337	● Household Rep	\$ 4,110
● Donations	\$ 1,926	● NF Interest	\$ 872
● Household	\$ 7,332	● Life Insurance	\$ 2,071
● Clothing	\$ 2,207	● Miscellaneous	\$ 684
● Personal	\$ 8,048	● Recreation	\$ 4,062
● Child Care	\$ 429	● Prop. Insurance	\$ 229
● Gifts	\$ 1,538	● Other Items	\$ 1,186
● Education	\$ 1,584	● Total of all	\$62,302

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ND FARM MANAGEMENT EDUCATION

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



Thank You!

