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Kansas Crop Insurance Claims Gaining on Texas[1]

Introduction. Kansas farmers have suffered recent crop losses and the crop insurance data available on the Risk Management Agency's (RMA) WEB site confirms this fact. Over the last five years only 2001 generated a loss ratio under 1.0[2]. The largest loss ratio was in 2002 with a statewide loss ratio of 2.64, which was the largest loss ratio since 1989 when it was 3.46. The data for 1989 was the first available year on the RMA WEB site.

However, the insurance program was more important in 2002 because the insured acres more than doubled from 1989 to 2002 and provided over three times the dollars of coverage! RMA could clearly claim Kansas as a success story. However, under current policy the large number of claims over the past five years caused the APH to decline causing future lower guarantees while simultaneous increasing rates. The next question will likely be should RMA increase the base rates for Kansas beyond the automatic rate increase?

By contrast over the past five years Iowa had no loss ratios above 1.0. The largest loss occurred in 2003 with a loss ratio of 0.94 and low in 2002 of 0.25. Over the past seventeen years Iowa only had one loss ratio over 1.00 and that was in 1993 but the loss ratio was a whopping 4.65! However, when Iowa does have a loss it has a big impact nationally because Iowa in 2004 had over $5 billion in coverage and nearly 20 million insured acres.

By contrast Nevada had a five year loss ratio of 2.18, the highest in the nation, but only about $100 million in coverage. Even though Nevada's loss ratio was much higher that the five year Kansas loss

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[2]RMA targeted loss ratio for "actuarial soundness" is 1.07. That means for every dollar collected in premiums, including both the farmer paid premiums and the premium subsidies, RMA expects to payout $1.07 over the "long run".

ratio of 1.46 the impact is much less because there is so little coverage written in the state. Large dollars of coverage requires a large acreage of insurable crops and large participation.

While Texas is a much bigger state than Kansas, it is not when it comes to crop insurance. In 2002, Kansas farmers insured more acres than Texas farmers. However, Texas farmers purchased more dollars of coverage. These are aggregated data that includes all crops so it is likely that cotton was the reason for the higher dollars of coverage. In 2002 Texas had a loss ratio of 1.21 versus Kansas at 2.64. Texas also had a lower five year loss ratio, 1.26 versus 1.46 for Kansas over the most recent five year period. The reason Texas had a lower loss ratio was all caused by a single year of 2004 with a loss ratio of 0.53, the best ever! Over the past seventeen year period the Kansas loss ratio was 1.23 versus 1.38 for Texas, so Texas will need several good crop years to drop the "long run" loss ratio below Kansas. Over this same seventeen year period Iowa's loss ratio was 0.57 and Iowa farmer paid premiums exceeded indemnity payments.

Therefore, in this program it is better to be small, e.g. Nevada with few crop acres or Delaware with 3 agricultural counties or large like Iowa and Illinois but with very low loss ratios. Kansas is neither. In crop insurance terms Kansas is as big as Texas and the loss ratio has increased with the current multiple year droughts. While Kansas will match Texas in size on crop insurance, Kansas only has 4 congressmen while Texas could fill a classroom. The reader must remember while this may be an insurance program there is a public policy impact.

As explained in the last AgManager posting, crop insurance works well for the single year crop loss, e.g. Iowa with a big 1993 loss but followed with a lot of good crops. Crop insurance does not handle multiple year losses very well for farmers because of declining APH's and increasing premium rates nor for RMA who must make judgments on setting rates with very "short" insurance histories for multiple year droughts.

While declining APH's are an issue with Kansas farmers, it is clearly a fact that Kansas has benefited from the crop insurance program. Without crop insurance the Kansas agricultural sector would have been in some financial difficulty with four poor crops out of the last five years. Clearly the Kansas Congressional Delegation and RMA can claim Kansas as a success story but if these losses continue rates will become an issue. However, this is aggregated data that includes all crops so the crop losses have not been evenly distributed across the state. The results will differ by crop, irrigated versus dryland, and by county or location.

Even with these large Kansas losses the national loss ratio for both the seventeen year period and the more recent five year period is a "dead on" actuarially sound 1.0 loss ratio. In order for the national loss ratio to be sound it requires other states to have underwriting gains to offset underwriting losses in Kansas. As a result, many insured farmers have asked; "are my crop insurance premium dollars being sent to Texas, Kansas and other high risk states to cover underwriting losses?"

Data. The data in tables 1 and 2 are based on all of the reinsured contracts sold for the period 1989-2004 and 2000-2004, respectively. The data for the periods 1989-2004 and 2000-2004 was collected from the RMA web page located at http://www.usda.rma.gov.

The objective of this analysis was to answer the question are farmer paid premiums being shifted to other states. All contracts were included and would include all of the reinsured products, i.e. Crop Revenue Coverage (CRC), Revenue Assurance (RA), Income Protection (IP), Group Revenue Insurance Plan

(GRIP), Group Risk Plan (GRP), Actual Production History (APH)[3], Catastrophic (CAT) and all other coverage's purchased on all insurable crops.

In the following analysis, loss ratios were defined as the summation of total indemnity payments divided by summation of total premiums over the 17-year period (table 1). The same loss ratio measure was also applied to the most recent five year period (table 2). The average annual loss ratio was also reported for both the seventeen year period and the most recent five year period. The net gain in dollars to farmers was defined as the difference between the sum of farmer paid premiums and the sum of the indemnity payments collected over this 17-year period. The same statistic was also reported for the most recent five years.

The loss ratio gives one the performance of the individual state and to be considered actuarially sound the loss ratio should be under one. This would translate into a farmer paid premium of about 58 cents for every dollar in indemnity payments collected by farmers. The net gain and the dollars of coverage demonstrates how important the crop insurance program is in some states versus others. Coverage measures the total amount of protection provided by the insurance program where Iowa ranks first while the net gain measures the total indemnity dollars exceeding farmer paid premiums and Texas ranks first under this criteria.

A 17-year period may not be sufficient time to make any judgments about actuarial soundness especially in low risk states where the frequency of loss is very low. This approach gives the recent crop history greater weight because in most states participation has increased since 1989. The most recent five year period demonstrates that it makes a difference in loss history based on the period being analyzed.

Top 10 States with Highest Loss Ratio. The seventeen years of crop insurance data is presented in table 1 and the 10 states with the highest loss ratio versus number 20 Kansas is presented in figure 1. The 10 states with the highest seventeen year aggregate loss ratio include Nevada, Connecticut, Massachusetts, Oregon, Utah, Alabama, Wyoming, North Carolina, Arizona, and Texas (figure 1).

Nevada had the highest loss ratio of 1.90. However, total indemnity payments amounted to less than $12 million dollars for the state of Nevada. Texas ranked 10th and North Dakota ranked 18th, which are 2 states that are typically identified as states with "high" loss ratios (table 1). Texas, over this 17-year period, had a loss ratio of 1.38 while North Dakota had a loss ratio of 1.29. This loss ratio is roughly a third of Nevada's loss ratio but both Texas and North Dakota have large amounts of participation. Therefore, these loss ratios have a greater impact on the Risk Management Agency/insurance companies.

Nevada also had the highest loss ratio of 2.18 for the most recent five years (figure 2). Nevada was followed by Massachusetts, Wyoming, Montana, Oregon, Connecticut, Utah, Colorado, Alaska, and Kansas. Kansas moved from number 20 based on seventeen years of data to number 10 for the most recent five years, replacing Texas.

Ranked by loss ratios, Kansas came in number 30 out of the 50 states with a loss ratio of 1.05 for years prior to 2001. This would represent a 5-cent "underwriting loss" for the state of Kansas; however the loss ratio is below the RMA target of 1.07. The most recent five years of losses has greatly increased the Kansas loss ratio. There were 22 states that had a loss ratio under 1.00, which is normally considered to be the actuarially sound rate (the expense load to cover agent commissions, insurance company expenses,

[3]The Multi-Peril Crop Insurance (MPCI) product was recently renamed by RMA to Actual Production History (APH).

funding of the RMA are funded under separate budget items).[4] There were 19 states that had loss ratios under 1.0 over the past five years. The national loss ratio was 1.0 for the seventeen year and five year period, and that is well below the RMA target of 1.07.

Top 10 States with Lowest Loss Ratio. The states are ranked by loss ratio and the 10 states with the lowest loss ratios are presented in figure 3. The 10 states with the lowest loss ratio include Idaho, Indiana, New Jersey, California, Washington, Missouri, Iowa, Rhode Island, Illinois, and Hawaii (figure 3).

Idaho ranked 41st and Indiana ranked 42nd with a loss ratio of 77 cents. Indiana ranked 44th with a loss ratio of 74 cents. Iowa ranked 47th with a loss ratio of 57 cents followed by Illinois with a loss ratio of 52 cents. However, the current drought in Illinois may give a very different result next year. The state with the lowest loss ratio was Hawaii but there is very little participation (figure 3).

Based on the most recent five years of history the top ten states with the lowest loss ratio were Kentucky, Idaho, Indiana, Washington, Missouri, California, New Jersey, Rhode Island, Iowa, and Illinois (figure 4).

The states were also ranked for the highest simple average loss ratio. This removes the effect of greater sales in later years but the underlying risk of the total book may also have changed because of new insurance buyers. Based on seventeen years of history, Nevada was first and Texas ranked tenth (figure 5). Kansas made the top ten list of highest simple loss ratios over the past five years (figure 6).

The top ten states with the lowest simple average loss ratios started with Kentucky while Hawaii had the lowest (figure 7). Over the most recent five years Iowa and Illinois generated the lowest simple average loss ratio (figure 8). The 2005 Illinois drought will likely put Iowa ahead of Illinois. However, the Illinois loss ratio for the most recent five year period will likely remain below 1.0 when the 2005 losses are included.

Top 10 States with Highest Net Dollar Gain by Farmers by State. The states are ranked by the amount of total dollars gained by farmers over the seventeen year period in figure 9. The gain is defined as the difference between total indemnity payments collected and the total of farmer paid premiums. This measurement identifies the greatest benefit to the individual states and identifies where crop insurance has been more heavily accepted. The 10 states with the highest farmer net dollar gain include Texas, North Dakota, Kansas, South Dakota, Georgia, North Carolina, Minnesota, Montana, Nebraska, and California (figure 9).

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[4]In a private insurance market typically premiums paid in exceed indemnity payments. It is typical for a policyholder to pay in $1.00 and collect back 60 to 70 cents in indemnity payments. The difference between the indemnity payments and the private premium paid cover the operating expenses of the insurance company, buying reinsurance, loss adjustment costs, and paying commissions to the insurance agents who sell the policies. The USDA pays the expense/commissions on reinsured products from a separate fund and is normally not identified as a farmer subsidy.

This relationship is true for nearly all lines of private property, casualty insurance; including private hail insurance, auto policies, and other property casualty contracts. Insurance buyers who buy private insurance contracts are buying protection because over the long run one is expected to be a net loser on premiums. The reason that is not true for the federally reinsured contracts is because of the farmer premium subsidy and the expenses are paid by USDA. Therefore in most states farmers actually collect more in indemnity payments than they pay in premiums.

Texas ranks first with a net dollar gain by farmers of $3.1 billion dollars followed by North Dakota with $1.7 billion dollars (figure 9). Kansas ranks third with a net gain of $1.2 billion dollars. California was a "surprise" number 10 with a net gain of $485 million dollars.

Top 10 States with Highest 5 Year Net Dollar Gain by Farmers by State. The states were also ranked by the amount of total dollars gained by farmers over the most recent five year period (figure 10). The 10 states with the highest farmer five year net dollar gain include Texas, North Dakota, Kansas, South Dakota, Nebraska, Montana, Colorado, Minnesota, North Carolina, and Georgia (figure 10).

Texas ranks first with a net dollar gain by farmers of $1.4 billion dollars followed by North Dakota with $1 billion dollars (figure 10). Kansas ranks third with a net gain of $922 million dollars combined with an "actuarially unsound" loss ratio of 1.46. Nebraska was a "surprise" number 5 with a net gain of $462 million dollars. However, Nebraska had an "actuarially sound" five year loss ratio of 0.94.

Top 10 States with Lowest Net Dollar Gain by Farmers by State. The 10 States with the lowest net dollar gain by farmers is presented in figure 11. The 10 states with the lowest farmer net dollar gain include New Jersey, Delaware, Nevada, Vermont, New Hampshire, Alaska, Rhode Island, Hawaii, Illinois and Iowa (figure 11).

Iowa ranked 50th with a $96.8 million dollar loss, i.e. farmers paid $96.8 million dollars more in premiums then were collected in indemnity payments by farmers in the state of Iowa. Farmers in Illinois also paid more in premiums than indemnity payments collected.

Iowa and Illinois switched rankings over the most recent five years (figure 12). Illinois ranked 50th with a $25 million dollar loss, i.e. farmers paid $25 million dollars more in premiums then were collected in indemnity payments by farmers in the state of Illinois over the five years from 2000 to 2004.

Top 10 States with the Highest Dollars of Coverage by State. Another measurement of insurance is the risk protection provided. The states are ranked by the total dollars of coverage provided to farmers over the 17-year period is presented in figure 13. The total dollars of coverage is the sum of the coverages provided by all contracts sold in the state. The total dollars of coverage is the maximum indemnity payment that could be paid under the crop insurance contract. While an individual farmer can and do collect the full coverage because of a zero yield, there is no chance that the dollars of coverage would equal indemnity payments at the state level because that would require a zero state yield. The 10 states with the highest dollar amount of protection include Iowa, Minnesota, Illinois, California, Nebraska, Texas, North Dakota, Florida, Kansas, and Indiana (figure 13).

Iowa ranked first with a total coverage of $48 billion dollars over this 17-year period (figure 13). Minnesota ranks second with $33 billion dollars of coverage followed by Illinois at $32 billion dollars. Surprisingly, Iowa and Illinois farmers have purchased a considerable amount of coverage while at the same time collecting lower than expected indemnity payments. Kansas ranked ninth with a total of $18 billion dollars of aggregate coverage purchased over this 17-year period. Over the most recent five years, Iowa and Illinois lead the way. Kansas was ninth with $8.5 billion of coverage (figure 14).

Top 10 States with the Lowest Dollars of Coverage by State. The 10 states with the lowest aggregate dollars of coverage by state are presented in figure 15. The 10 states with the lowest dollar amount of protection include Massachusetts, New Jersey, Delaware, West Virginia, Utah, Vermont, Nevada, New Hampshire, Rhode Island and Alaska (figure 15).

Massachusetts ranked 41st in aggregate dollars of coverage but 3rd in loss ratio at 1.67. While Iowa ranked first in aggregate dollars of coverage but was 47th in loss ratio at 0.57. This would suggest that underrated crop insurance contracts do not necessarily increase participation. Rhode Island and Alaska ranked 49th and 50th based on the aggregate dollars of coverage (figure 15). Maine made the top 10 list for the most recent five years, while New Jersey dropped off the list (figure 16).

Are Farmer Paid Premiums Sent to Other States to Cover Underwriting Losses? When farmers ask the question "are my premium dollars being sent to other states to pay losses?" the answer clearly is no for most states. However, those 19 states with loss ratios under 1.00 have shifted tax revenues to the higher risk states. Illinois and Iowa farmers would have the best argument that their premium dollars have been used to pay losses in higher risk states. However, one must remember seventeen years is still a very short time horizon to be measuring loss ratios. This is especially true in a state where one expects a low frequency of claim, like Iowa. A large single loss year of 4.65 that occurred in 1993 in Iowa required several years to recover the underwriting loss because Iowa has a low frequency of claims.

Change Rates? If rates and underwriting are improving as some "experts" have argued then one would expect the loss ratio in high risk states to be lower for the most recent five year period than they were for the seventeen year period. That is true for Texas but not Kansas. The Texas loss ratio improved from 1.38 to 1.26 while Kansas generated larger underwriting losses with the loss ratio increasing from 1.23 to 1.46. Weather can mess up anyone's rating model.

This would suggest rates should be increased in Texas, North Dakota, and Kansas while reducing rates in Iowa and Illinois. However, even within states there may be differences between irrigated versus dryland, or wheat versus corn. Therefore, one would not want to do an "across the board" rate change. The other issue is this is an unusual weather trend that may reverse itself over the next five years.

The seventeen year USA loss ratio was 1.0 and the five year loss ratio was 1.0. These loss ratios would be considered actuarially sound for the entire book, but that loss ratio historically has not been evenly distributed by state. Iowa and Illinois would have the strongest argument they are "sending" premiums to high risk states to cover losses. These states have very little irrigation and are mostly corn and soybeans, so there is little chance the crop mix is a factor.

The one problem when considering rates is that low risk states have "low" rates combined with a low frequency of claim. A single loss year like 1988 or 1993 requires many years with underwriting gains to recover the loss. However, if rate reductions were provided, most actuaries would likely apply those reductions to Iowa, and Illinois.

Most private actuaries would also do a rate evaluation of states with higher loss ratios. In most cases they would either suggest rate increases or underwriting changes or both. Many of the states with high loss ratios also have multiple crops (beyond corn and soybeans) that may grow during different time periods and under irrigation. Those factors would be a part of any actuarial study and it is unlikely that private actuaries would recommend "across the board" rate increases, even in states with high loss ratios.

Summary. This analysis gives no credit for the risk reduction. People buy property-casualty insurance where the expected indemnity payout is less than the paid premiums. The difference between premiums and the indemnity payment is used to pay agent commissions, insurance company expenses, and profits for stockholders. The government pays all of the expenses plus a premium subsidy that averages about 58% of total premiums.

The current rates in Iowa and Illinois would be very close to a private property-casualty rate. So why does the private sector not offer a private product? A private product would be very unlikely without

government reinsurance to cover the catastrophic risk that would bankrupt most insurance companies, i.e. the one in a 500 year drought. Farmers also receive Farm Service Agency payments that reduce risk and the demand for insurance. Also, any unsubsidized product would have to overcome the USDA expense and premium subsidies, a very unlikely result.

Both Iowa and Illinois have a large amount of participation. Suggesting these farmers are buying risk protection and don't expect payments that will provide subsidies.

Kansas farmers have had the advantage of risk reduction and they have captured the crop insurance subsidies. Over the past five years they have also captured underwriting losses.

Texas and North Dakota farmers continue to capture all of the subsidies and the underwriting loss where indemnities exceed premiums (includes farmer and USDA premiums paid) over the past five years and the last seventeen years. These farmers have received an "unintended subsidy" that is covered by taxpayers.

Conclusions.

1. Kansas farmers have greatly benefited from the RMA crop insurance program.
2. Without crop insurance and four poor crops out of the last five years, many Kansas farmers would be suffering financial stress.
3. The 2002 crop with a loss ratio of 2.64 was the worst Kansas crop since 1989 with a loss ratio of 3.46. However, the 2002 crop losses were not evenly distributed by wheat versus fall harvested crops or by location.
4. Since 1989, insured acres in Kansas have more than doubled and dollars of coverage have tripled.
5. Kansas farmers insure more acres than Texas in 2002, 2003 and 2004 with nearly the same dollars of coverage.
6. Those few Kansas farmers left who believe their yields do not vary enough to ever collect crop insurance payments under APH products should consider GRP or GRIP, if available.
7. APH claims have lowered future crop insurance guarantees and automatically increased Kansas premium rates.
8. Those farmers with greatly reduced APHs and increased premium rates may want to consider GRIP or GRP, if available. Currently there is no GRIP available on Kansas wheat (this may change in the near future) and wheat GRP is not available in all Kansas counties. The greatest interest seems to be in GRIP on dryland corn but that is available only in a few Kansas counties.
9. Because of the recent crop losses the Kansas' loss ratio is gaining on the Texas loss ratio but Texas still generates a much larger net dollar gain, about $480 million more than Kansas over the last five years.
10. These losses may have some impact on future RMA set base premium rates, but do not jump to conclusion based on this aggregated data. Before any rates changes RMA will evaluate the data by crop, county, practices, etc. RMA will also address how much of the current weather is a short run issue because Kansas had similar weather back in the 1950's but no crop insurance.

Table 1. 1989-2004 Crop Insurance History for USA Crop Insurance, All Crops, All Insurance Plans[1]

St	Policy Sold (000)	Policy Earn Prem (000)	Policy Indemnified (000)	Net Acres (Million)	Liability (Billion)	RANK	Total Prem (Million)	Subsidy (Million)	Indemnity (Million)	Aggregate Loss/ Ratio[2]	RK Ag L/R	Annual Avg L/R[3]	RK Annual Avg L/R	Farm Paid Agg L/R[4]	RK Farm Paid Agg L/R	Farm Paid Annual Avg L/R	RK Farm Paid Annual Avg L/R	Aggregate Total Farm gain (000)	RK Aggregate total farm gain
AL	155.6	100.7	35.0	13.8	3.72	28	350.9	158.6	531.9	1.52	6	1.67	2	2.77	19	2.80	1	339.6	14
AK	0.4	0.2	0.0	0.1	0.00	50	0.5	0.3	0.6	1.23	21	1.01	30	4.00	4	2.91	2	0.5	46
AZ	23.1	13.5	2.3	4.3	1.58	33	86.2	44.3	121.1	1.40	9	1.56	9	2.89	14	2.86	3	79.1	29
AR	437.1	274.7	47.2	55.3	5.27	20	507.6	348.0	415.8	0.82	38	1.17	25	2.60	27	2.65	4	256.2	18
CA	392.4	301.3	38.2	43.2	27.12	4	1,459.8	893.7	1,051.6	0.72	44	0.79	43	1.86	40	1.79	5	485.5	10
CO	307.4	210.2	71.4	44.2	4.99	22	521.4	261.7	678.9	1.30	17	1.14	27	2.61	25	2.22	6	419.2	11
CT	4.0	3.3	0.6	0.3	0.53	39	20.0	13.1	36.0	1.80	2	1.61	4	5.17	2	3.86	7	29.0	36
DE	16.8	12.4	2.8	2.6	0.32	43	22.6	13.7	20.2	0.89	33	0.96	38	2.27	33	2.21	8	11.3	42
FL	155.3	125.4	11.9	13.3	17.71	8	730.9	484.4	619.5	0.85	36	1.01	31	2.51	28	2.33	9	373.0	13
GA	384.6	235.3	69.3	31.8	9.68	13	876.9	440.1	1,158.1	1.32	14	1.54	11	2.65	24	2.71	10	721.3	5
HI	1.5	1.2	0.0	0.3	1.05	36	12.1	7.3	4.8	0.40	50	0.25	50	1.01	48	0.75	11	0.0	48
ID	144.2	95.1	17.0	18.7	3.92	27	275.6	136.6	212.3	0.77	41	0.93	39	1.53	42	1.57	12	73.4	31
IL	2,013.7	1,716.8	249.5	183.0	32.44	3	1,752.4	758.9	905.8	0.52	49	0.60	48	0.91	50	0.97	13	-87.7	49
IN	722.7	590.6	119.3	79.0	14.99	10	915.6	384.5	678.8	0.74	42	0.82	42	1.28	47	1.33	14	147.8	26
IA	2,500.0	2,204.6	317.2	258.1	47.63	1	2,505.4	981.3	1,427.3	0.57	47	0.72	46	0.94	49	1.09	15	-96.8	50
KS	**2,558.3**	**1,793.2**	**494.7**	**198.2**	**17.66**	**9**	**1,630.8**	**791.6**	**2,011.8**	**1.23**	**20**	**1.23**	**22**	**2.40**	**30**	**2.26**	**16**	**1,172.7**	**3**
KY	503.0	370.0	43.1	18.7	4.13	25	267.3	142.0	238.0	0.89	34	0.84	41	1.90	39	1.72	40	112.7	28
LA	282.4	153.8	38.6	34.3	4.46	23	413.5	257.7	456.7	1.10	24	1.30	18	2.93	13	2.90	41	300.9	16
ME	7.9	6.5	1.1	1.0	0.51	40	33.9	22.4	35.7	1.05	26	1.57	7	3.12	11	3.19	42	24.2	38
MD	54.1	43.5	8.8	7.2	1.11	35	80.4	48.2	71.2	0.89	35	1.00	33	2.21	35	2.19	43	39.0	35
MA	7.9	6.8	1.1	0.3	0.49	41	20.1	12.3	33.6	1.67	3	1.59	6	4.27	3	3.72	44	25.7	37
MI	377.4	281.0	55.3	36.5	5.97	19	437.0	251.2	411.5	0.94	32	1.00	32	2.22	34	2.10	45	225.8	21
MN	1,824.9	1,384.2	269.7	212.5	33.18	2	2,385.5	1,074.8	1,857.8	0.78	40	0.96	37	1.42	46	1.56	46	547.2	7
MS	194.7	114.4	29.7	38.6	5.01	21	463.6	265.2	534.1	1.15	22	1.21	23	2.69	22	2.52	47	335.8	15
MO	979.1	701.0	146.0	76.3	8.18	15	815.0	458.0	567.4	0.70	46	0.78	45	1.59	41	1.66	48	210.4	22
MT	468.4	317.8	100.2	138.1	6.40	18	652.6	285.8	893.6	1.37	12	1.27	19	2.44	29	2.36	49	526.8	8
NE	1,967.9	1,434.8	346.8	166.8	26.94	5	1,820.3	805.6	1,517.3	0.83	37	0.89	40	1.50	43	1.49	50	502.6	9
NV	1.3	0.7	0.2	0.3	0.07	47	6.3	4.0	12.1	1.90	1	2.61	1	5.24	1	4.48	51	9.8	43
NH	1.3	1.1	0.1	0.1	0.06	48	2.4	1.7	2.3	0.98	30	0.97	36	3.24	10	3.49	52	1.6	45
NJ	12.9	10.0	1.7	1.5	0.45	42	22.5	18.3	16.6	0.74	43	0.99	34	3.90	5	4.15	53	12.4	41
NM	44.0	28.7	10.9	7.6	0.69	38	85.8	51.4	94.6	1.10	25	1.32	17	2.75	20	2.80	54	60.2	33
NY	66.5	50.3	8.1	6.8	1.45	34	90.7	65.0	92.9	1.02	27	1.07	29	3.61	6	3.00	55	67.2	32
NC	509.8	387.0	86.6	33.2	12.32	12	708.8	343.8	1,024.5	1.45	8	1.46	14	2.81	17	2.77	56	659.4	6
ND	2,190.4	1,288.0	452.6	267.4	21.36	7	2,332.3	1,055.9	3,011.6	1.29	18	1.27	20	2.36	31	2.21	57	1,735.1	2
OH	613.3	492.1	107.1	53.2	8.72	14	522.9	246.3	526.5	1.01	28	0.97	35	1.90	38	1.78	58	249.9	19
OK	488.1	338.3	119.8	64.2	4.42	24	486.2	248.4	652.7	1.34	13	1.51	12	2.75	21	2.80	59	414.9	12
OR	73.0	49.9	11.9	11.4	3.61	29	126.9	66.4	211.0	1.66	4	1.42	16	3.49	7	2.61	60	150.5	24
PA	127.9	106.4	29.1	9.5	1.68	32	148.6	91.0	194.9	1.31	16	1.59	5	3.38	8	3.33	61	137.3	27
RI	0.6	0.4	0.1	0.0	0.02	49	0.6	0.4	0.3	0.54	48	0.53	49	1.48	45	1.70	62	0.1	47
SC	129.9	91.1	25.3	12.3	3.13	31	239.4	139.1	330.9	1.38	11	1.47	13	3.30	9	3.23	63	230.6	20
SD	1,339.3	905.2	289.3	150.9	14.23	11	1,477.5	716.2	1,635.6	1.11	23	1.17	26	2.15	36	2.16	64	874.2	4
TN	262.6	183.2	34.4	17.1	3.96	26	250.5	159.6	241.2	0.96	31	1.18	24	2.65	23	2.74	65	150.2	25
TX	2,047.1	1,283.2	510.3	200.0	24.51	6	3,493.6	1,764.4	4,834.5	1.38	10	1.54	10	2.80	18	2.83	66	3,105.2	1
UT	15.7	10.7	3.0	1.7	0.13	45	16.4	7.7	26.6	1.62	5	1.66	3	3.04	12	3.07	67	17.9	39
VT	5.3	4.7	0.6	0.6	0.08	46	5.7	4.0	4.6	0.80	39	0.69	47	2.61	26	2.93	68	2.8	44
VA	204.3	146.6	37.2	11.4	3.47	30	220.8	104.4	273.5	1.24	19	1.26	21	2.35	32	2.31	69	157.1	23
WA	197.2	155.4	22.9	31.7	7.21	16	339.6	179.7	237.0	0.70	45	0.79	44	1.48	44	1.44	70	77.2	30
WV	14.6	11.0	3.2	0.6	0.14	44	14.9	8.1	19.6	1.31	15	1.56	8	2.87	15	2.98	71	12.8	40
WI	585.4	469.3	82.3	45.4	7.11	17	530.6	280.2	520.9	0.98	29	1.10	28	2.08	37	2.03	72	270.5	17
WY	58.0	39.4	10.5	5.6	0.72	37	49.4	23.2	74.5	1.51	7	1.44	15	2.85	16	2.71	73	48.4	34
USA				2,609	404.5		30,231	14,920	30,530	1.01				1.99				15,220	

[1]Source: Risk Management Agency, USDA, Washington, D.C., WEB Page: http://www.rma.usda.gov/data/, for years 1989 to 2004.

[2]Aggregate total loss ratio is the sum of the 17 years of indemnity payments divided by the sum of the 17 years premiums paid (includes premium subsidy)

[3]Average annual loss ratio defined as an average of the annual indemnity payment divided by annual premiums paid (includes premium subsidy)

[4]Aggregate total Farmer paid loss ratio is the sum of the 17 years of indemnity payments divided by the sum of the 17 years of farmer paid premiums (Does NOT included premium subsidy)

Table 2. 2000-2004 Crop Insurance History for USA Crop Insurance, All Crops, All Insurance Plans[1]

St	Policy Sold (000)	Policy Earn Prem (000)	Policy Indemnified (000)	Net Acres (Million)	Liability (Billion)	RANK	Total Prem (Million)	Subsidy (Million)	Indemnity (Million)	Aggregate Loss/ Ratio[2]	RK Ag L/R	Annual Avg L/R[3]	RK Annual Avg L/R	Farm Paid Agg L/R[4]	RK Farm Paid Agg L/R	Farm Paid Annual Avg L/R	RK Farm Paid Annual Avg L/R	Aggregate Total Farm gain (000)	RK Aggregate total farm gain
AL	62.2	34.3	11.7	5.31	1.34	31	155.4	86.9	195.6	1.26	16	1.30	15	2.86	24	2.80	29	127.1	19
AK	0.2	0.1	0.0	0.02	0.00	50	0.3	0.2	0.5	1.55	9	1.62	8	5.33	4	5.45	3	0.4	47
AZ	10.3	5.4	1.1	1.88	0.75	34	44.8	24.6	62.2	1.39	11	1.38	12	3.07	19	3.16	19	42.0	32
AR	183.3	107.8	18.0	24.70	2.48	23	240.8	165.1	186.0	0.77	38	0.78	38	2.46	35	2.44	38	110.3	22
CA	175.3	136.5	14.8	20.11	14.43	4	740.7	512.0	448.4	0.61	46	0.61	46	1.96	41	2.00	42	219.7	13
CO	140.1	82.8	43.4	18.75	2.53	22	301.1	165.5	494.0	1.64	8	1.63	7	3.64	11	3.66	13	358.4	7
CT	2.2	1.8	0.4	0.13	0.35	38	13.5	9.3	24.2	1.79	6	1.92	5	5.70	3	6.00	2	20.0	36
DE	7.3	5.3	1.4	1.25	0.19	43	14.7	9.9	12.9	0.87	33	0.96	34	2.67	30	2.91	24	8.0	41
FL	90.9	77.2	5.8	7.19	12.60	5	467.0	330.3	393.4	0.84	35	0.86	36	2.88	22	2.89	25	256.7	11
GA	155.9	79.9	25.1	12.60	3.73	16	406.2	236.0	445.3	1.10	25	1.12	26	2.62	32	2.64	35	275.1	10
HI	0.7	0.6	0.0	0.13	0.52	36	6.0	3.9	4.6	0.77	39	0.77	39	2.20	39	2.29	40	2.5	44
ID	49.3	29.7	6.5	7.88	2.06	26	159.6	90.7	111.9	0.70	42	0.71	41	1.62	45	1.62	46	42.9	30
IL	702.0	580.5	97.1	73.87	15.41	2	980.3	484.2	471.1	0.48	50	0.48	50	0.95	50	1.00	50	-25.0	50
IN	264.1	211.9	53.4	35.17	8.00	10	570.5	269.7	385.5	0.68	43	0.68	43	1.28	48	1.38	48	84.6	25
IA	806.8	694.3	123.4	97.28	20.20	1	1,274.4	614.3	650.1	0.51	49	0.52	49	0.99	49	1.05	49	-9.9	49
KS	**1,049.1**	**642.2**	**253.7**	**78.39**	**8.50**	**9**	**916.8**	**502.9**	**1,336.3**	**1.46**	**10**	**1.49**	**9**	**3.23**	**16**	**3.30**	**17**	**922.4**	**3**
KY	153.9	101.8	15.4	9.26	1.89	28	144.6	82.1	104.8	0.72	41	0.74	40	1.68	44	1.72	45	42.3	31
LA	120.4	55.1	13.6	14.29	2.11	25	181.6	116.0	210.6	1.16	22	1.16	22	3.21	17	3.19	18	145.0	18
ME	3.7	2.9	0.5	0.51	0.26	41	19.1	14.1	20.0	1.04	29	1.01	29	3.94	10	4.04	10	14.9	38
MD	24.0	19.3	4.6	3.43	0.70	35	52.9	35.0	41.9	0.79	37	0.88	35	2.34	38	2.65	34	24.0	35
MA	4.3	3.5	0.7	0.15	0.22	42	10.3	7.1	21.8	2.12	2	2.22	1	6.81	1	6.81	1	18.6	37
MI	136.7	100.6	27.9	16.30	3.42	17	238.7	146.4	253.5	1.06	27	1.05	28	2.75	28	2.81	28	161.2	17
MN	638.0	436.6	103.9	81.01	14.84	3	1,214.3	637.0	898.4	0.74	40	0.71	42	1.56	47	1.55	47	321.0	8
MS	84.0	42.1	10.9	16.79	2.59	21	249.2	133.3	329.4	1.32	13	1.24	18	2.84	27	2.61	36	213.6	14
MO	386.7	258.2	53.9	34.52	4.26	14	446.6	267.0	285.2	0.64	45	0.66	44	1.59	46	1.73	44	105.6	23
MT	162.3	98.5	46.4	71.04	2.61	20	303.8	171.4	581.2	1.91	4	2.03	2	4.39	6	4.62	5	448.8	6
NE	756.2	500.0	187.3	67.20	12.58	6	1,026.7	525.0	964.0	0.94	31	1.01	30	1.92	42	2.01	41	462.3	5
NV	0.4	0.2	0.1	0.12	0.05	47	5.4	3.3	11.7	2.18	1	1.43	10	5.78	2	4.13	9	9.7	39
NH	0.7	0.6	0.1	0.05	0.04	48	1.6	1.1	1.4	0.86	34	0.96	33	3.16	18	3.42	15	0.9	46
NJ	7.2	5.5	0.8	0.80	0.31	39	15.1	12.6	8.4	0.55	47	0.55	47	3.30	15	3.41	16	5.8	42
NM	17.7	9.9	4.0	3.00	0.35	37	44.6	28.6	47.1	1.06	28	1.08	27	2.94	21	2.99	22	31.1	34
NY	26.8	20.2	5.3	3.20	0.92	33	60.2	43.7	72.5	1.20	19	1.24	19	4.37	7	4.45	7	55.9	28
NC	184.1	128.5	32.4	15.39	4.90	12	356.6	201.6	442.1	1.24	17	1.26	17	2.85	25	3.04	21	287.1	9
ND	797.5	389.9	169.4	96.90	9.37	8	1,204.0	648.9	1,578.6	1.31	14	1.34	13	2.84	26	2.92	23	1,023.5	2
OH	221.8	177.1	55.3	23.81	4.84	13	333.9	170.4	356.3	1.07	26	1.13	24	2.18	40	2.42	39	192.8	15
OK	203.2	115.6	43.2	25.00	1.98	27	254.5	146.9	287.3	1.13	23	1.19	21	2.67	31	2.75	31	179.6	16
OR	29.1	18.5	6.7	4.67	2.32	24	85.2	47.6	162.4	1.91	5	1.93	4	4.31	8	4.38	8	124.7	20
PA	68.9	56.6	16.9	5.36	1.11	32	109.4	70.8	131.1	1.20	20	1.31	14	3.40	13	3.67	12	92.6	24
RI	0.3	0.2	0.0	0.01	0.01	49	0.3	0.2	0.2	0.54	48	0.55	48	2.44	36	2.67	33	0.1	48
SC	51.1	32.9	11.2	5.55	1.38	30	127.0	79.0	172.5	1.36	12	1.42	11	3.59	12	3.83	11	124.5	21
SD	519.9	309.0	114.6	62.89	7.43	11	843.4	462.7	980.0	1.16	21	1.23	20	2.57	34	2.84	27	599.3	4
TN	97.7	63.3	13.0	9.49	2.75	19	152.5	99.9	125.5	0.82	36	0.84	37	2.38	37	2.44	37	72.8	27
TX	891.8	446.4	190.2	77.37	10.25	7	1,652.1	967.2	2,087.5	1.26	15	1.28	16	3.05	20	3.06	20	1,402.5	1
UT	3.9	2.7	1.0	0.58	0.05	46	6.8	4.1	11.2	1.65	7	1.78	6	4.19	9	4.50	6	8.6	40
VT	2.7	2.4	0.4	0.32	0.06	45	3.8	2.7	3.5	0.92	32	0.99	32	3.32	14	3.51	14	2.4	45
VA	68.8	46.4	14.5	4.80	1.50	29	110.6	63.0	124.2	1.12	24	1.14	23	2.60	33	2.80	30	76.5	26
WA	76.0	57.3	8.9	11.77	3.77	15	178.1	109.8	119.1	0.67	44	0.65	45	1.74	43	1.75	43	50.8	29
WV	5.4	3.7	1.2	0.25	0.06	44	7.7	4.8	7.8	1.01	30	1.01	31	2.69	29	2.86	26	4.9	43
WI	183.2	141.7	40.0	18.36	3.38	18	278.5	159.8	340.1	1.22	18	1.12	25	2.87	23	2.74	32	221.5	12
WY	22.6	13.5	5.4	2.22	0.28	40	24.0	14.3	46.8	1.95	3	1.96	3	4.84	5	4.84	4	37.1	33
USA				1,071	195.7		16,036	8,983	16,050	1.00				1.99				8,997	

[1]Source: Risk Management Agency, USDA, Washington, D.C., WEB Page: http://www.rma.usda.gov/data/, for years 2000 to 2004.

[2]Aggregate total loss ratio is the sum of the 5 years of indemnity payments divided by the sum of the 5 years premiums paid (includes premium subsidy)

[3]Average annual loss ratio defined as an average of the annual indemnity payment divided by annual premiums paid (includes premium subsidy)

[4]Aggregate total Farmer paid loss ratio is the sum of the 5 years of indemnity payments divided by the sum of the 5 years of farmer paid premiums (Does NOT included premium subsidy)

Figure 1. Top 10 States with Highest 17 Yr Aggregate Loss Ratio (07/15/05)

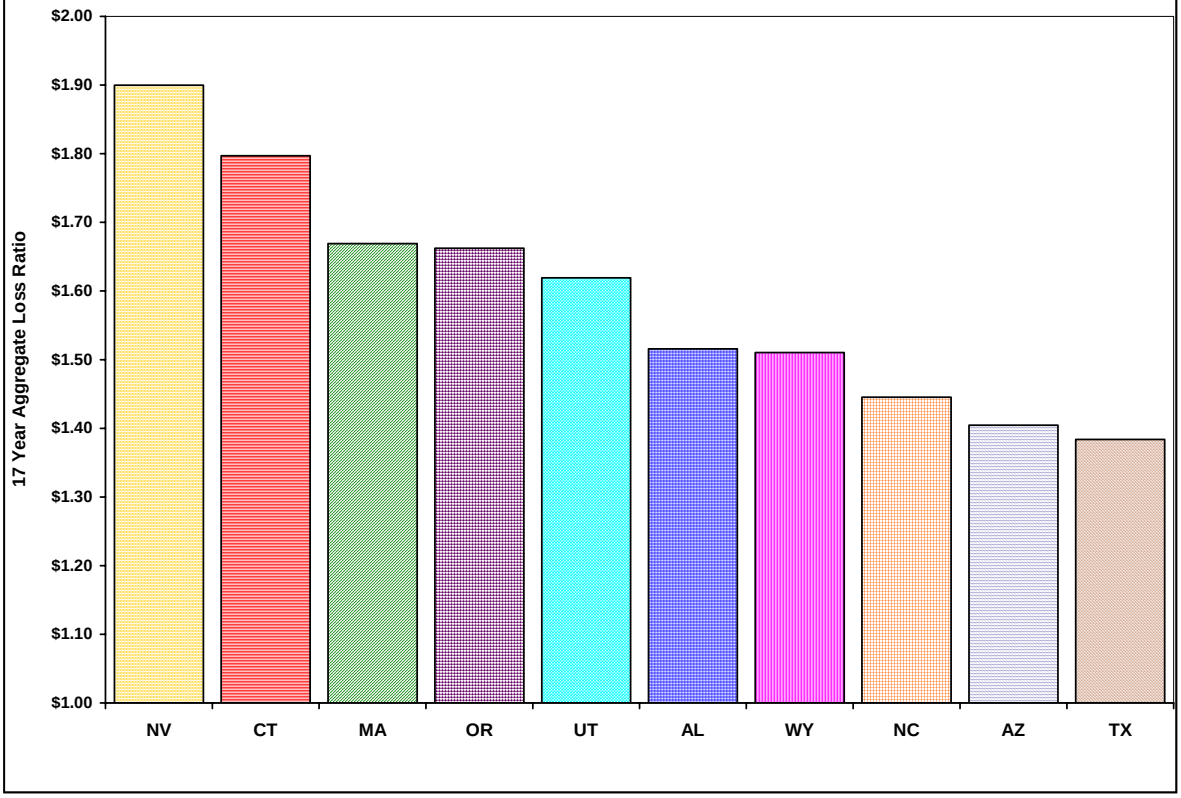


Figure 2. Top 10 States with Highest 5 Yr Aggregate Loss Ratio (07/15/05)

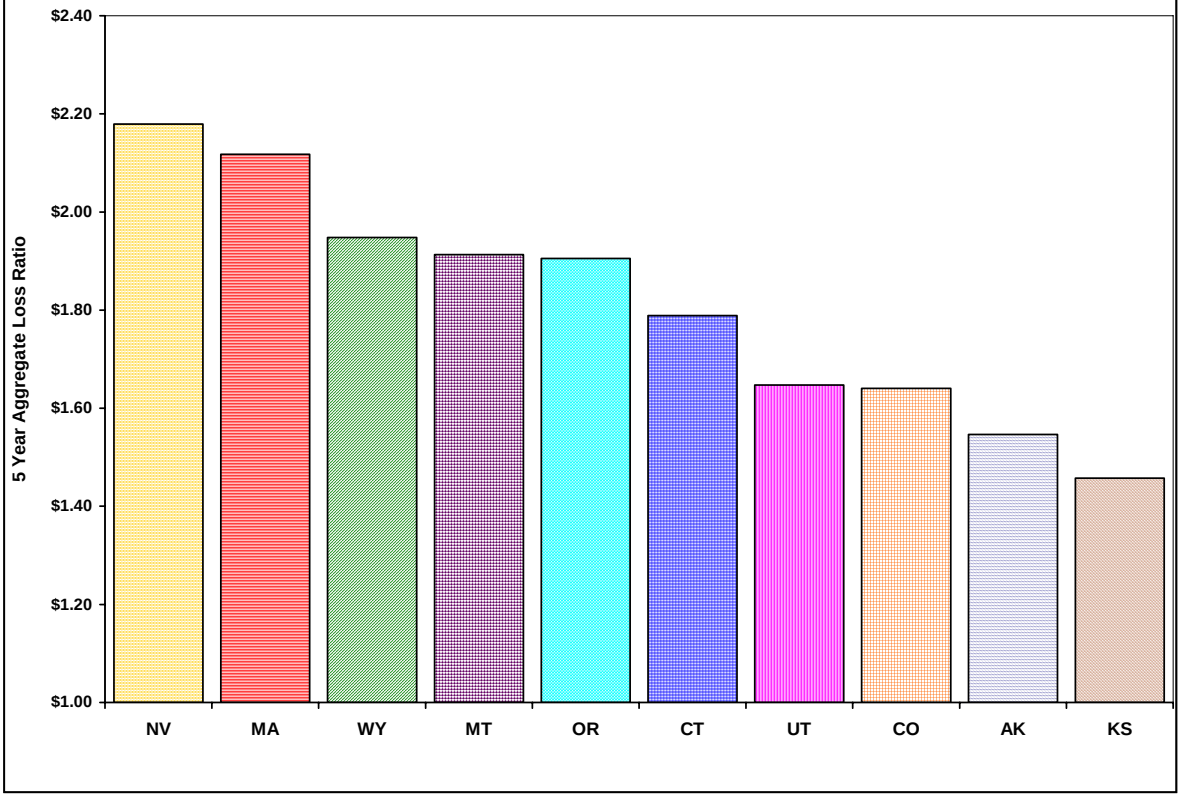


Figure 3. Top 10 States with Lowest 17 Yr Aggregate Loss Ratio (07/15/05)

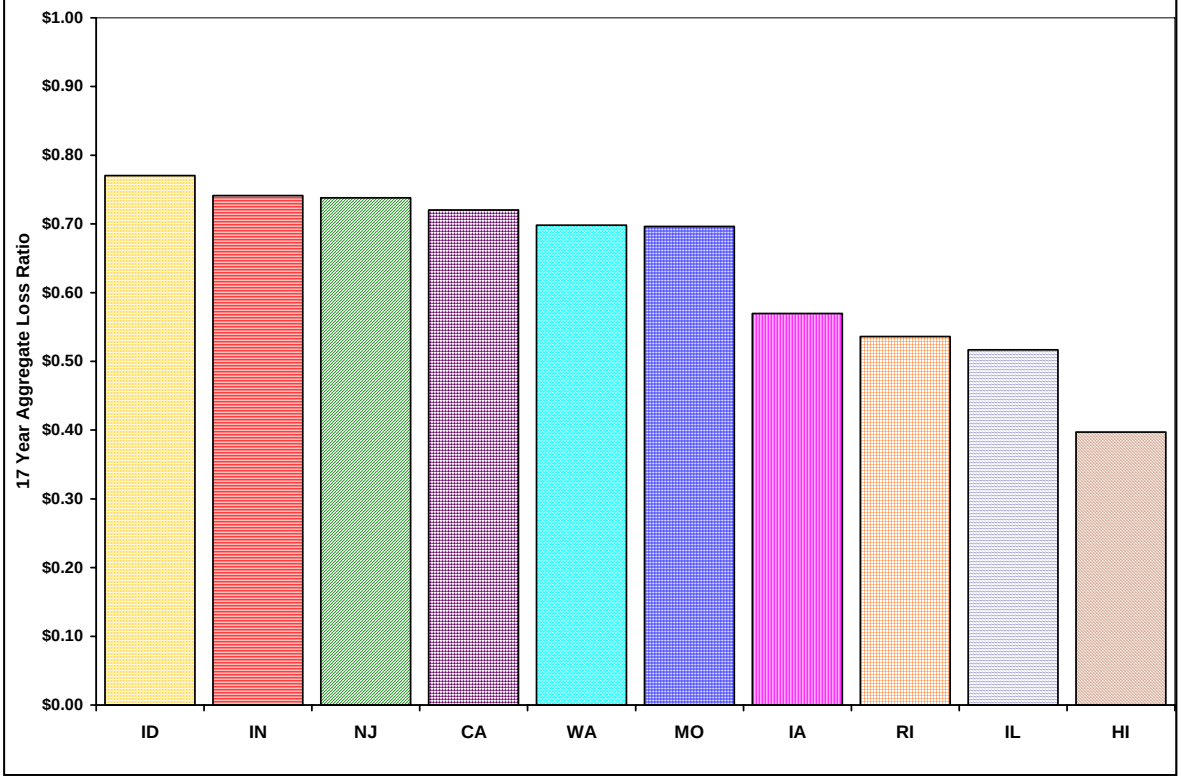


Figure 4. Top 10 States with Lowest 5 Yr Aggregate Loss Ratio (07/15/05)

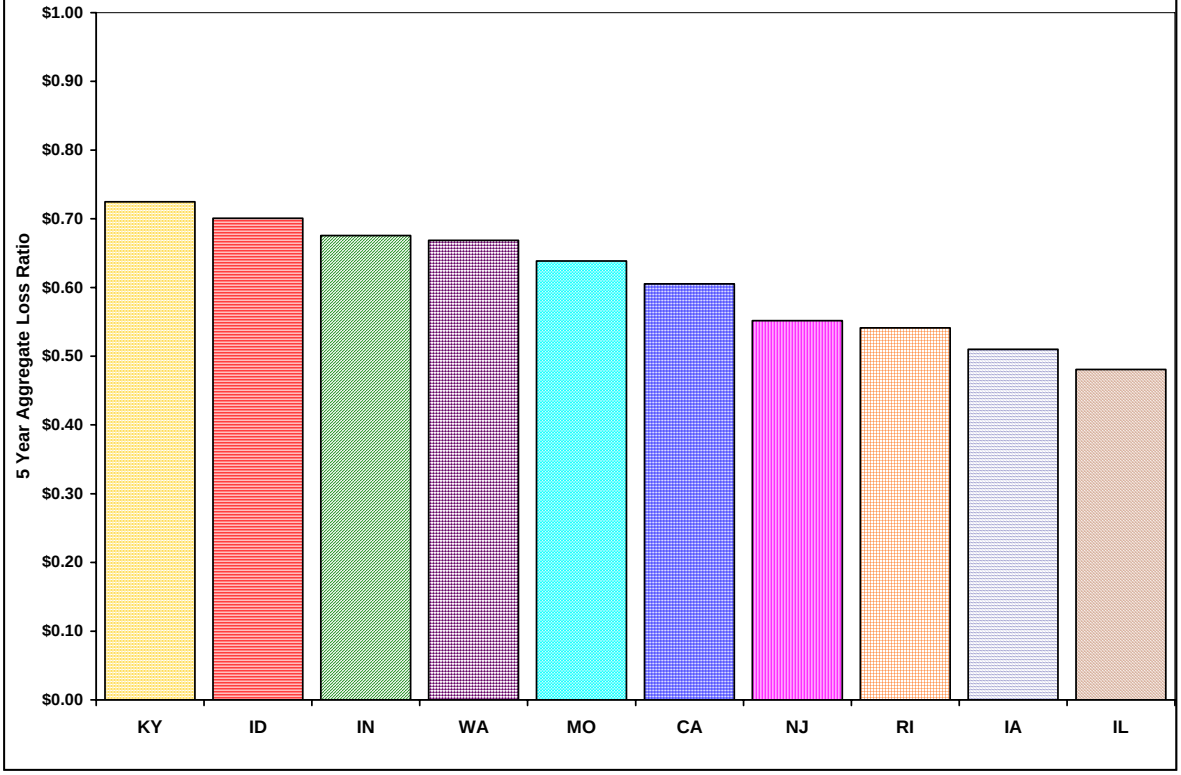


Figure 5. Top 10 States with Highest Annual Simple Average Loss Ratio (07/15/05)

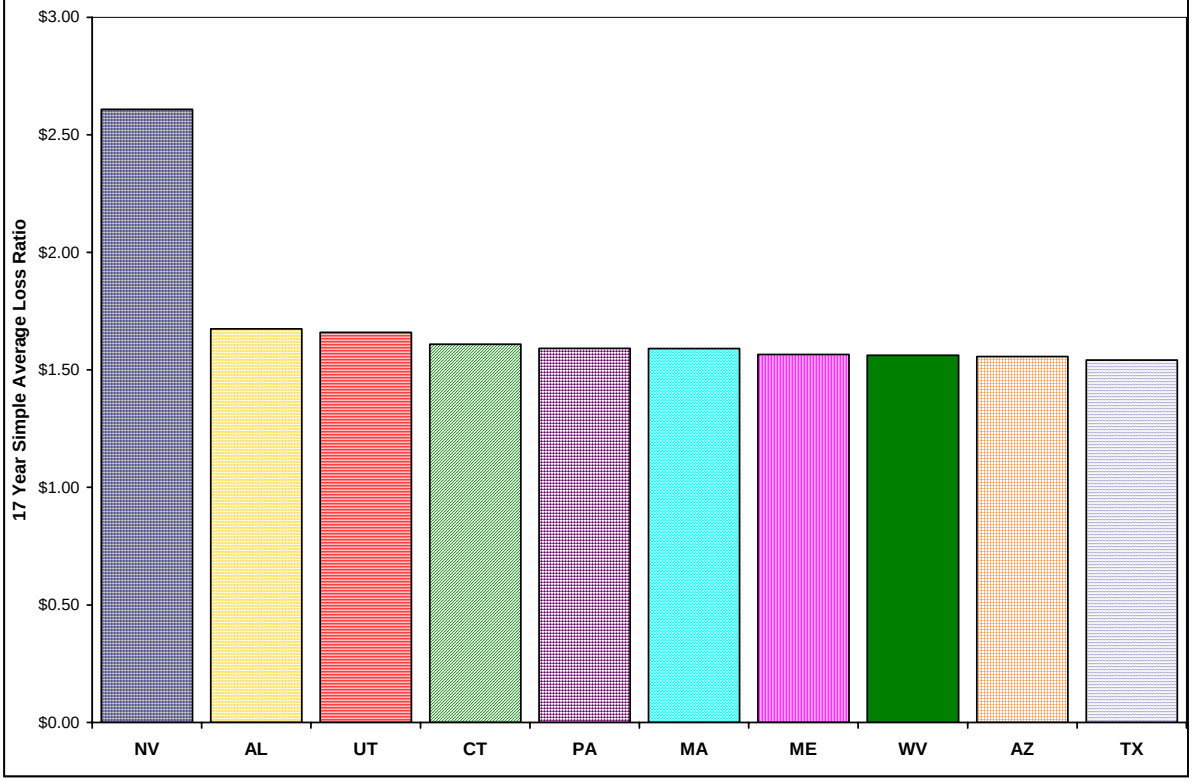


Figure 6. Top 10 States with Highest Annual Simple Average Loss Ratio (07/15/05)

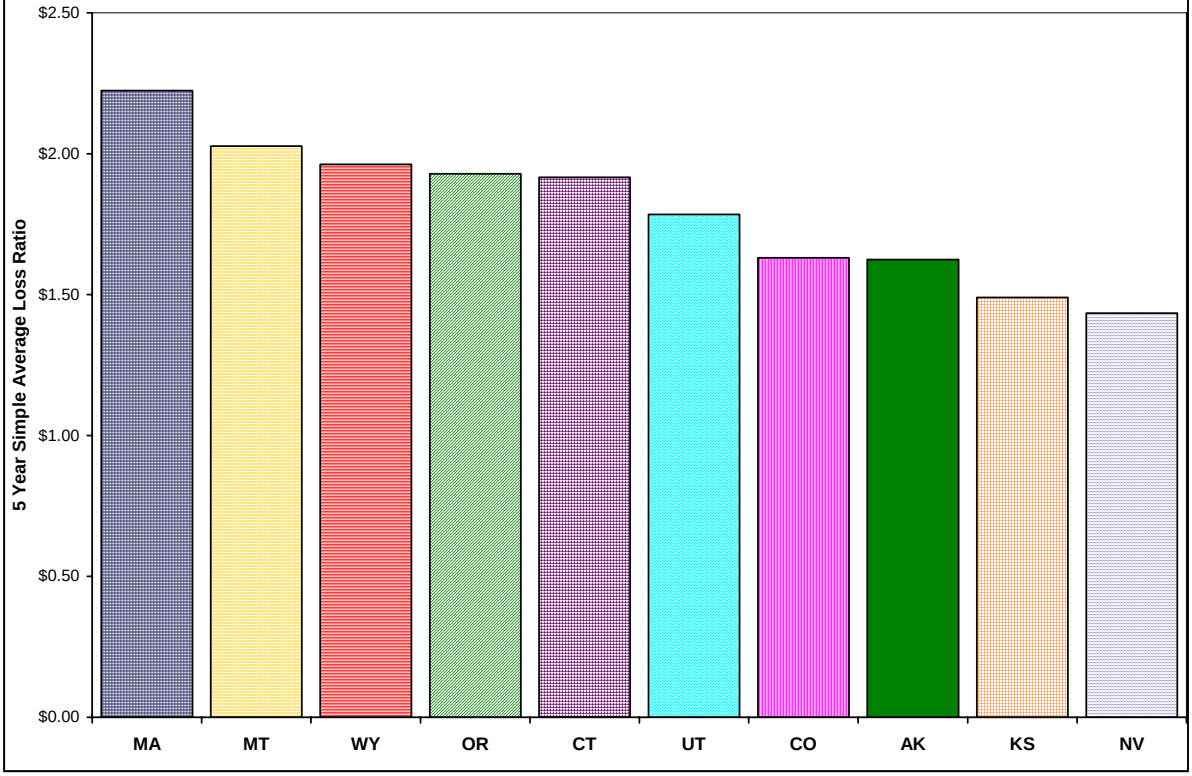


Figure 7. Top 10 States with Lowest Annual Simple Average Loss Ratio (07/15/05)

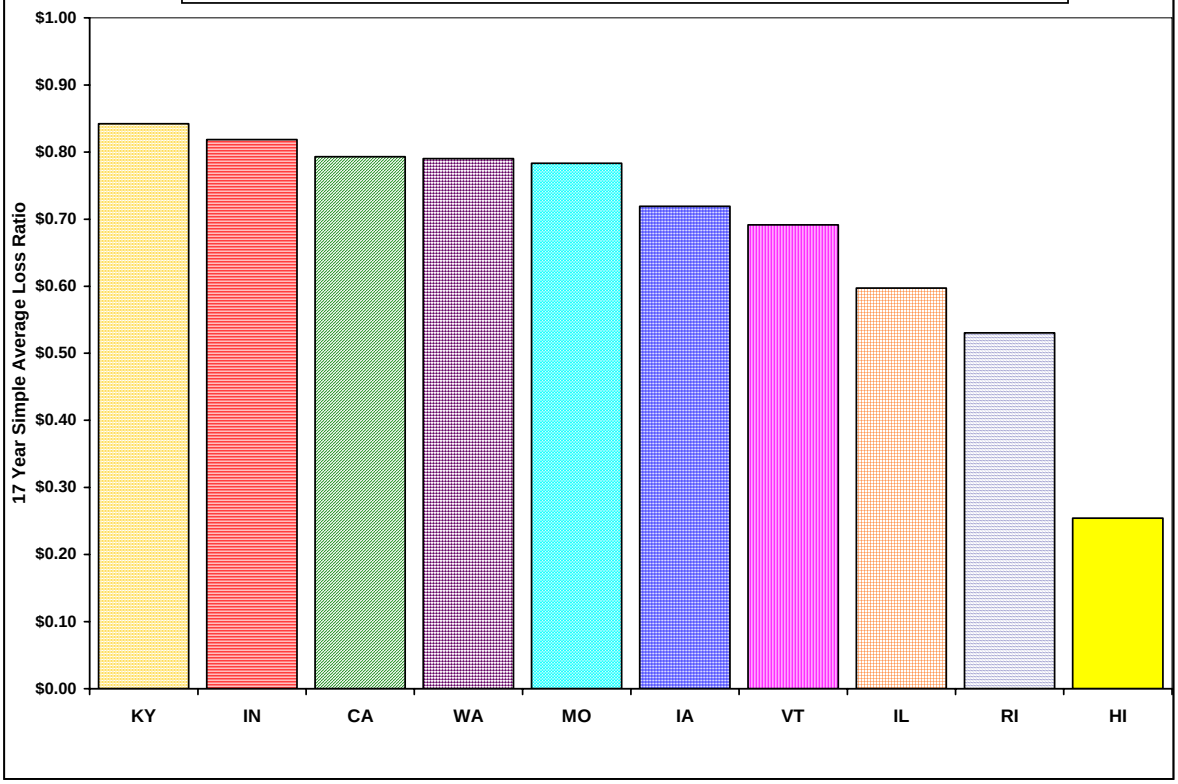
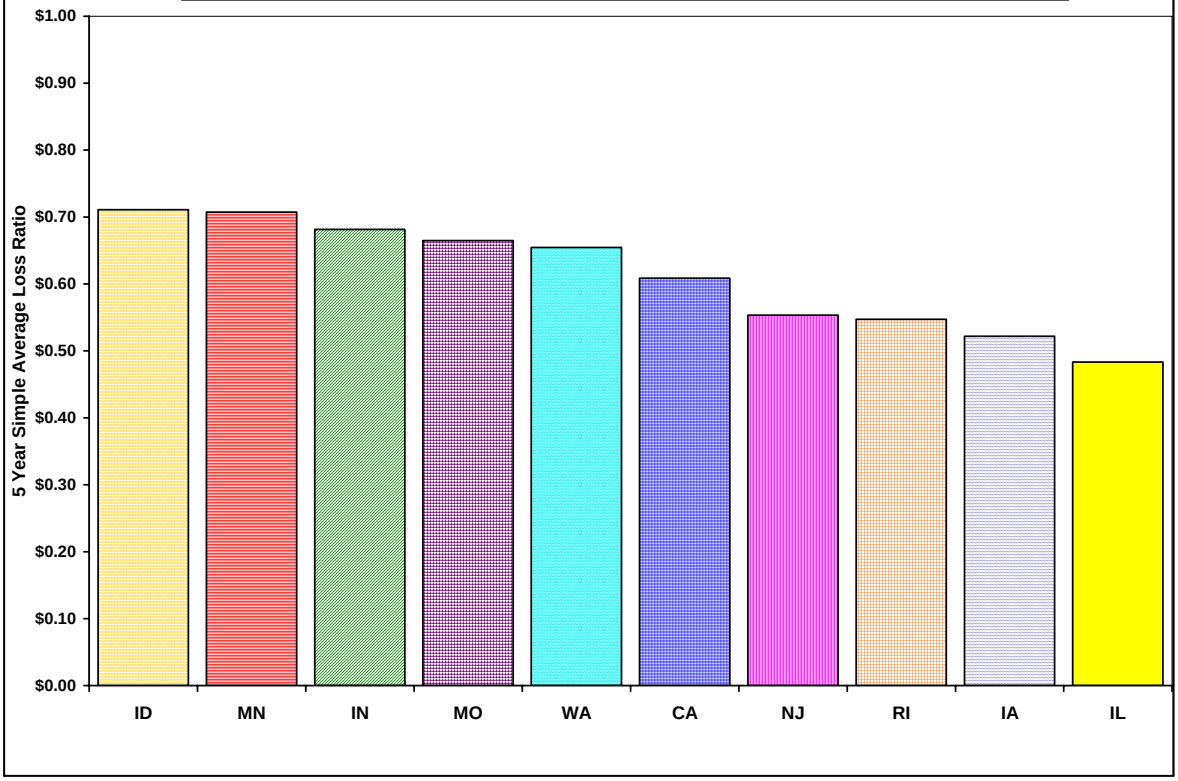


Figure 8. Top 10 States with Lowest Annual Simple Average Loss Ratio (07/15/05)



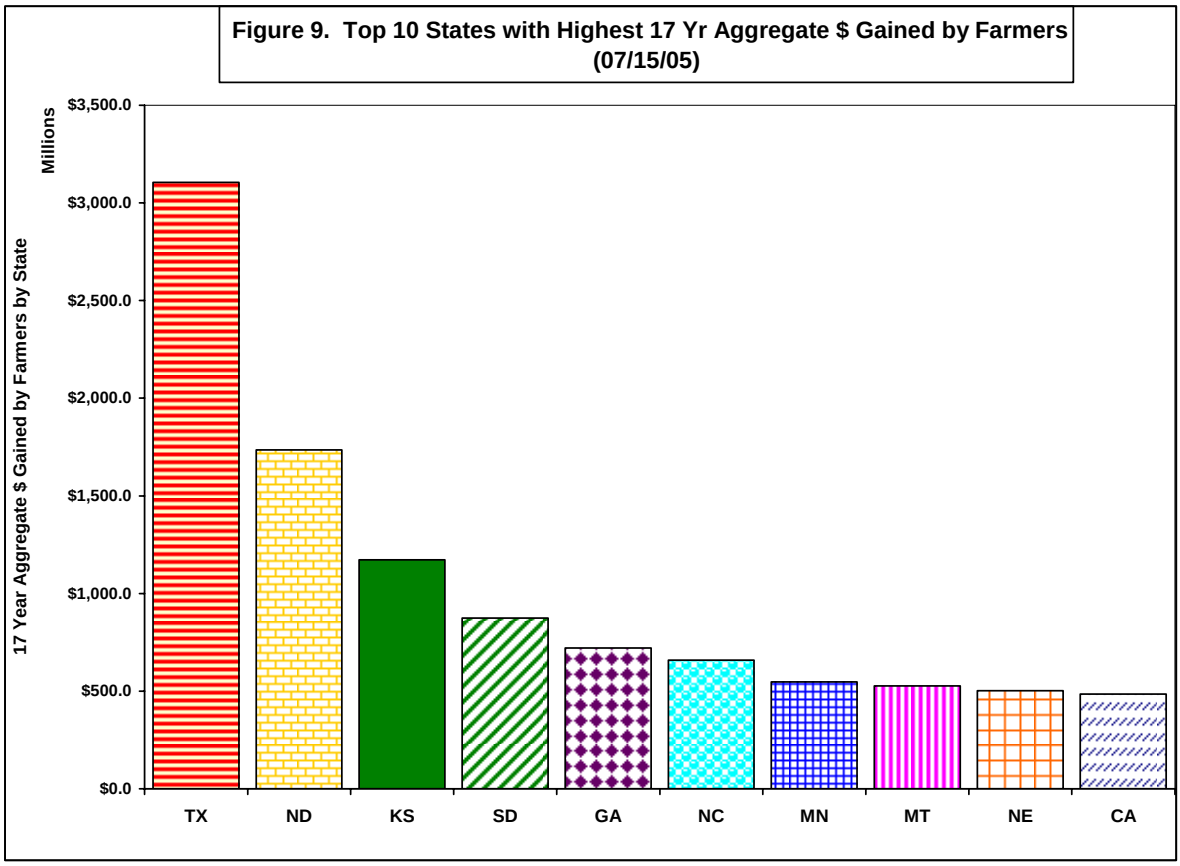


Figure 9. Top 10 States with Highest 17 Yr Aggregate $ Gained by Farmers (07/15/05)
17 Year Aggregate $ Gained by Farmers by State
Millions
$3,500.0
$3,000.0
$2,500.0
$2,000.0
$1,500.0
$1,000.0
$500.0
$0.0
TX
ND
KS
SD
GA
NC
MN
MT
NE
CA

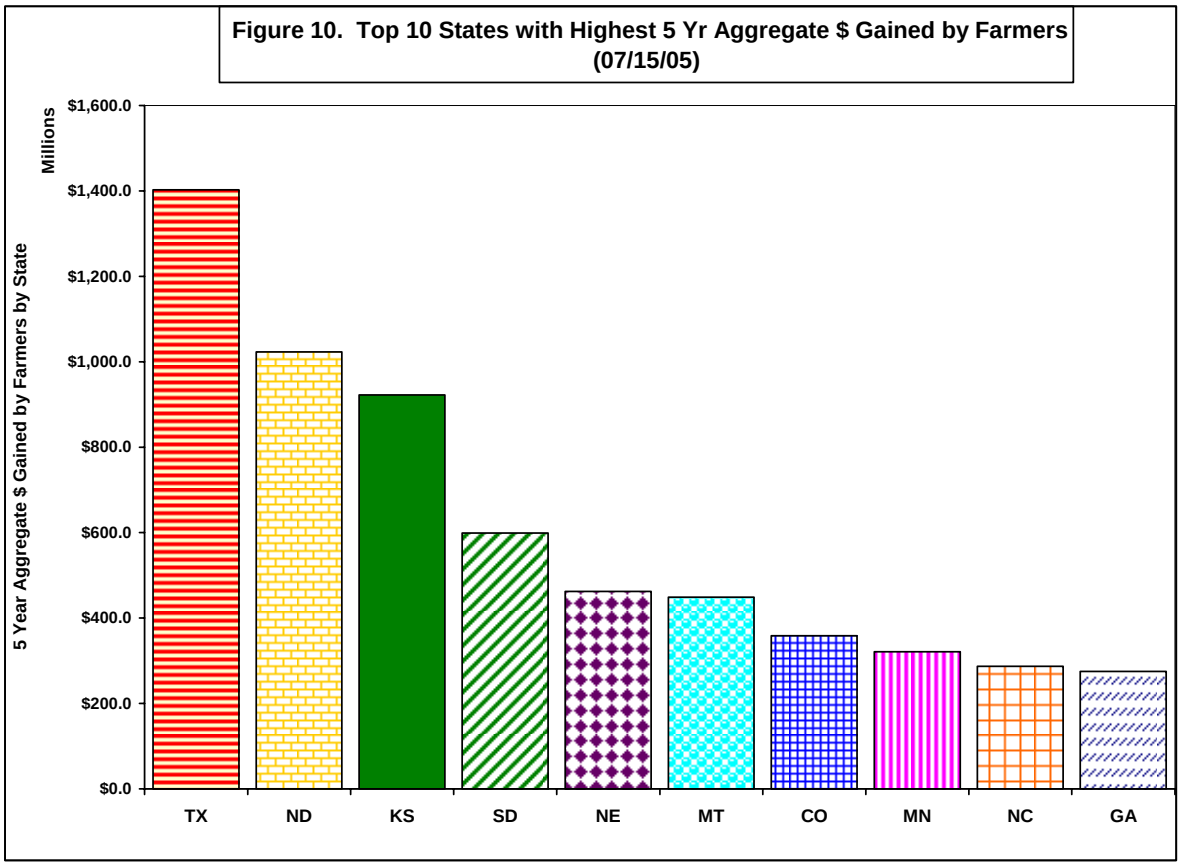


Figure 10. Top 10 States with Highest 5 Yr Aggregate $ Gained by Farmers (07/15/05)
5 Year Aggregate $ Gained by Farmers by State
Millions
$1,600.0
$1,400.0
$1,200.0
$1,000.0
$800.0
$600.0
$400.0
$200.0
$0.0
TX
ND
KS
SD
NE
MT
CO
MN
NC
GA

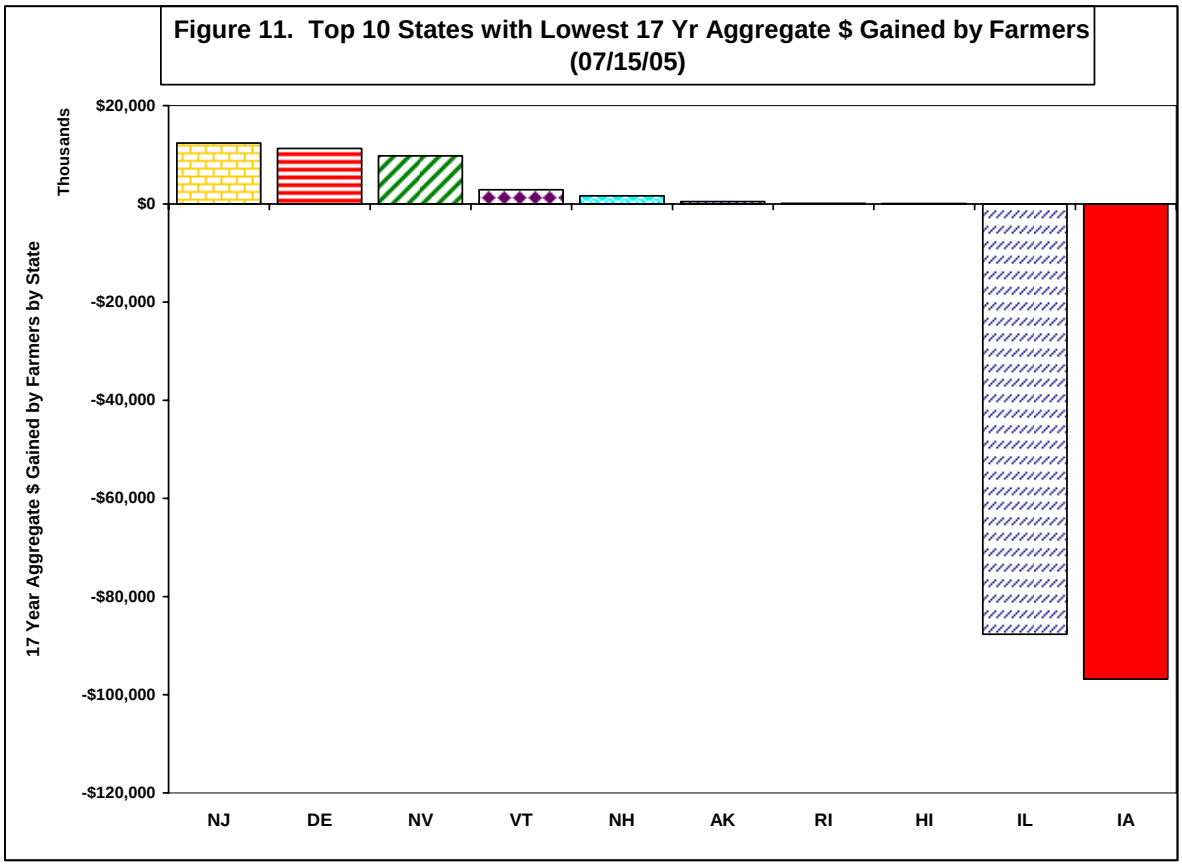


Figure 11. Top 10 States with Lowest 17 Yr Aggregate $ Gained by Farmers (07/15/05)
Thousands
$20,000
$0
-$20,000
-$40,000
-$60,000
-$80,000
-$100,000
-$120,000
17 Year Aggregate $ Gained by Farmers by State
NJ
DE
NV
VT
NH
AK
RI
HI
IL
IA

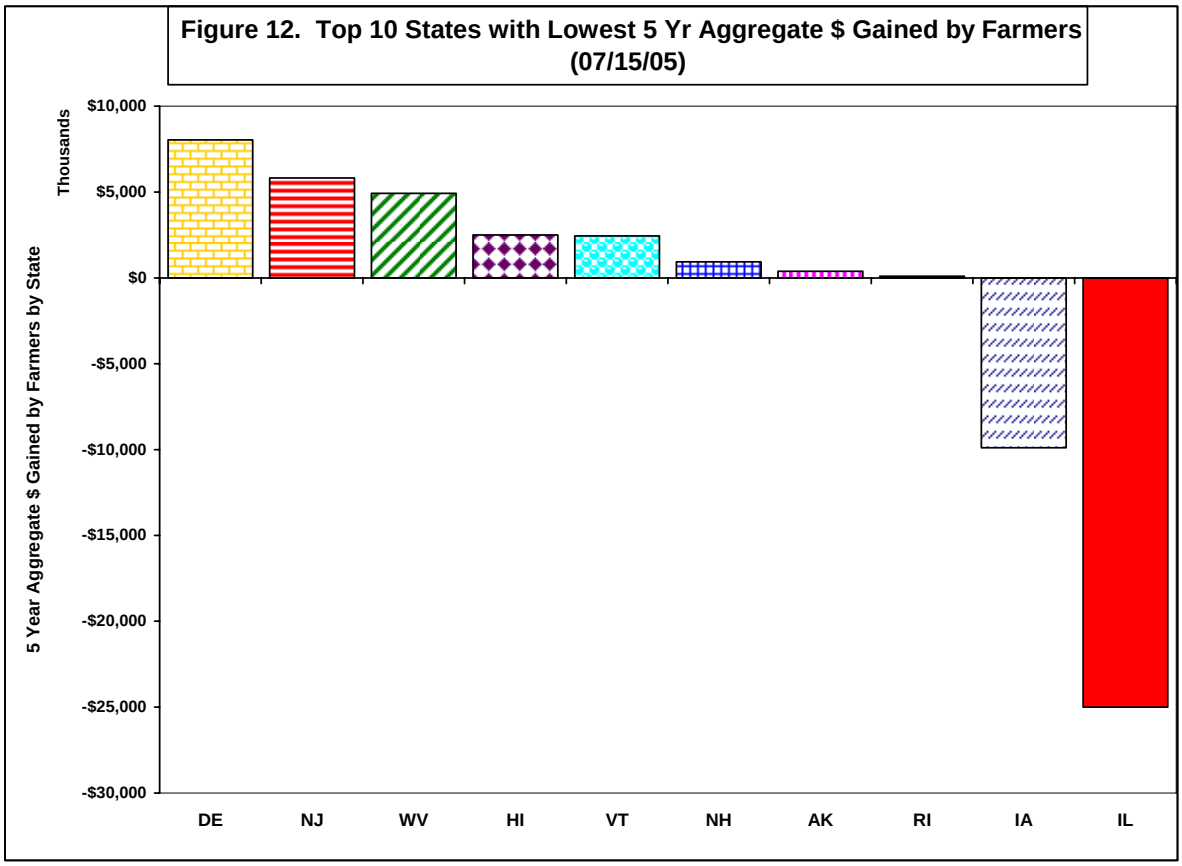


Figure 12. Top 10 States with Lowest 5 Yr Aggregate $ Gained by Farmers (07/15/05)
Thousands
$10,000
$5,000
$0
-$5,000
-$10,000
-$15,000
-$20,000
-$25,000
-$30,000
5 Year Aggregate $ Gained by Farmers by State
DE
NJ
WV
HI
VT
NH
AK
RI
IA
IL

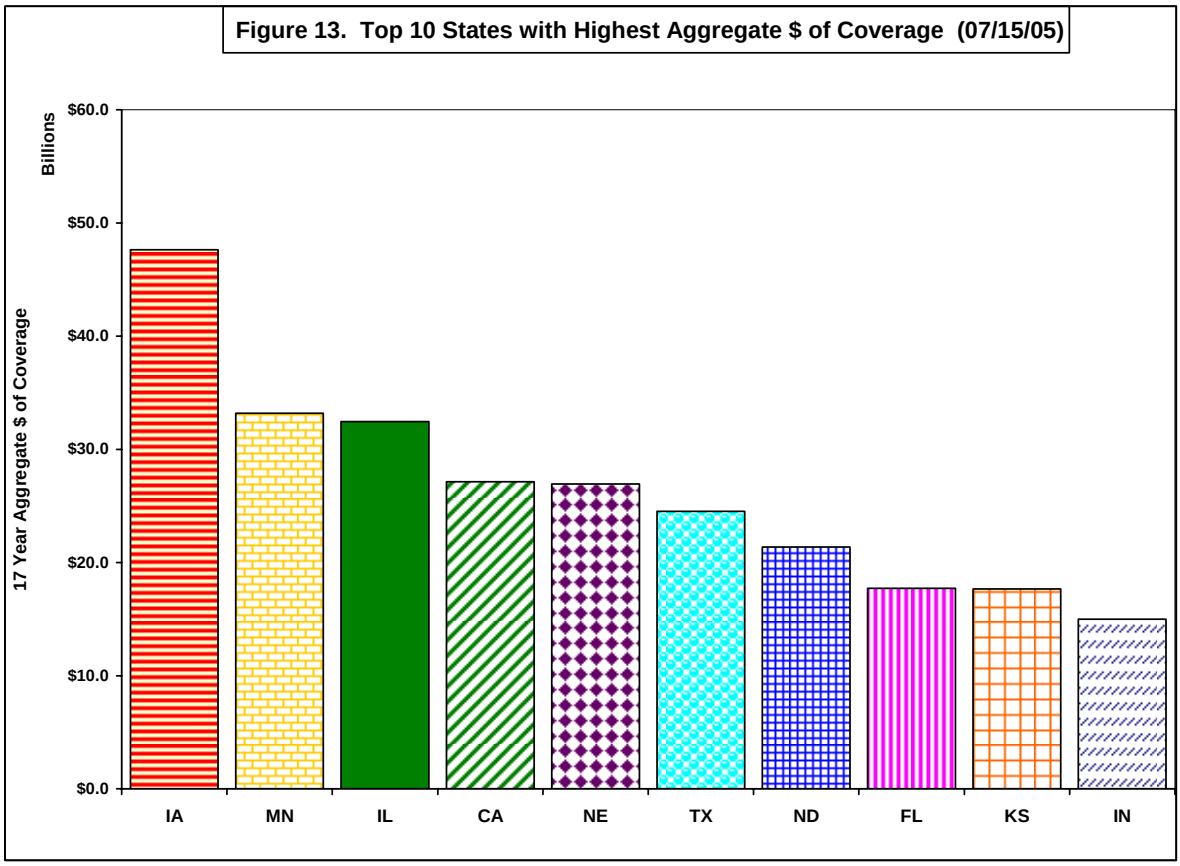


Figure 13. Top 10 States with Highest Aggregate $ of Coverage (07/15/05)
Billions
17 Year Aggregate $ of Coverage
$60.0
$50.0
$40.0
$30.0
$20.0
$10.0
$0.0
IA
MN
IL
CA
NE
TX
ND
FL
KS
IN

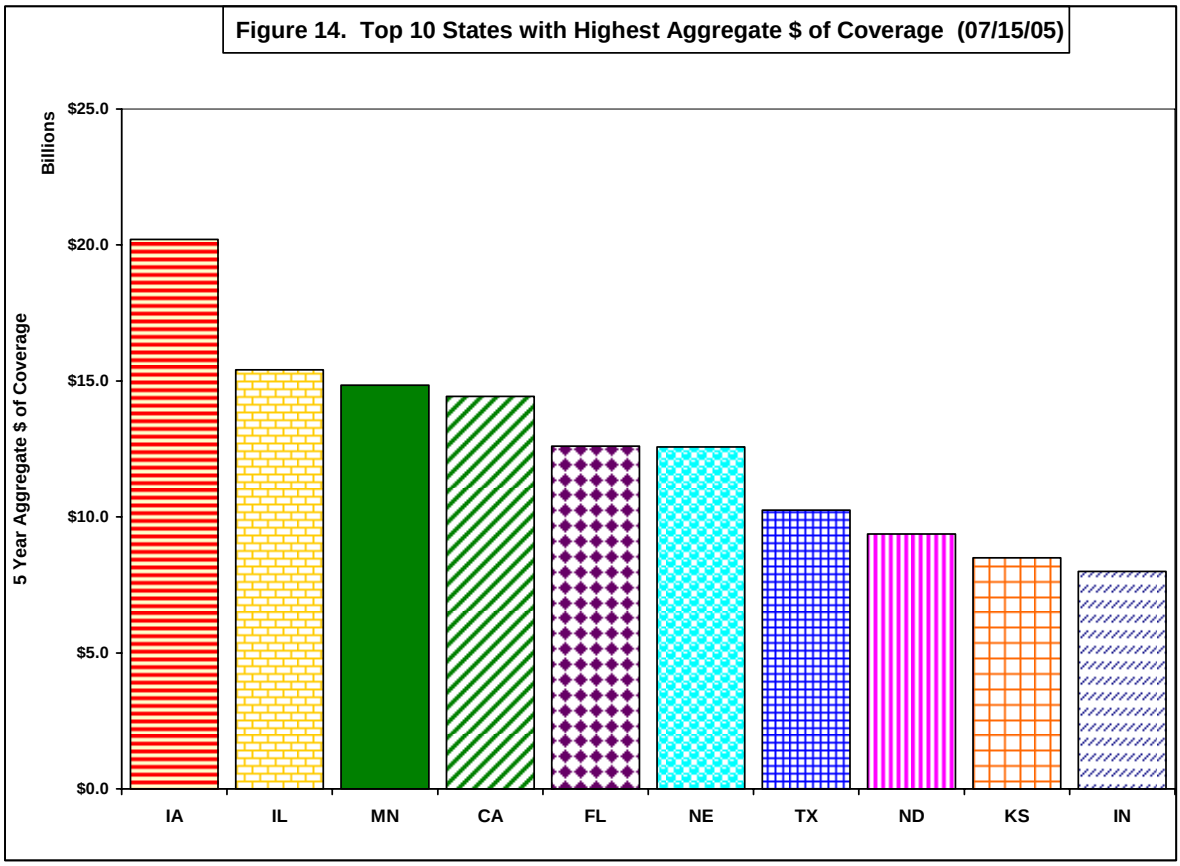


Figure 14. Top 10 States with Highest Aggregate $ of Coverage (07/15/05)
Billions
5 Year Aggregate $ of Coverage
$25.0
$20.0
$15.0
$10.0
$5.0
$0.0
IA
IL
MN
CA
FL
NE
TX
ND
KS
IN

Figure 15. Top 10 States with Lowest Aggregate $ of Coverage (07/15/05)

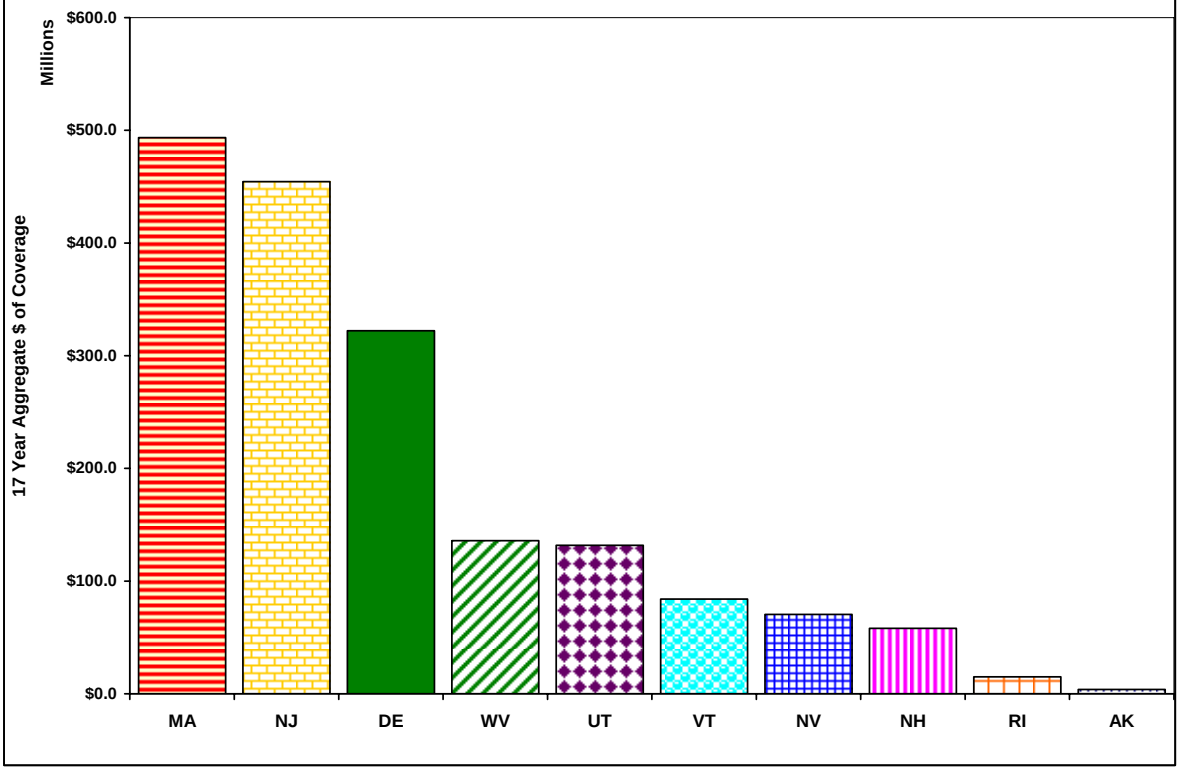


Figure 16. Top 10 States with Lowest Aggregate $ of Coverage (07/15/05)