Evaluation of Returns and Delivery Costs of Private Crop Insurance Companies

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Multi-peril crop insurance is a Federal risk management program that is delivered through private crop insurance companies. The compensation levels, cost structures, and returns of these crop insurance companies continue to face public scrutiny. As crop insurance programs have grown, concerns have been raised about the level of compensation relative to risk sharing associated with private companies (Glauber). These concerns continued to build in the mid- to late-2000s as the size of the crop insurance program increased substantially. The 2008 Farm Bill included provisions that limited reimbursements to crop insurance companies, and the compensation to private companies was significantly reduced in reinsurance agreements that occurred after 2010. In 2015, further cuts to crop insurance were proposed in the *Assisting Family Farms through Insurance Reform Measures* (AFFIRM) Act introduced into the U.S. Congress (United States Congress). While the AFFIRM Act did not pass, the introduction of the bill signals that efforts will likely continue to reduce compensation to private crop insurance companies.

In this article, we evaluate returns to crop insurance companies using a measure of the net returns to retained premium. The Risk Management Agency (RMA) uses returns to retained premium when judging whether crop insurance companies are adequately compensated during reinsurance renegotiations. We developed a net returns to retained premium measure using publicly available data for the years from 1998 to 2015, a period spanning the modern crop insurance program. Overall, we find that crop insurance returns are within benchmarks set by the RMA, and that those returns have declined meaningfully since the 2010 Standard Reinsurance Agreement (SRA).

Background

Multi-peril crop insurance is a Federally-subsidized, Federally-regulated program providing risk protection to U.S. farmers. Multi-peril crop insurance is delivered to farmers by a public-private partnership between the Federal government and private crop insurance companies. The Risk Management Agency (RMA), an agency of the U.S. Department of Agriculture, administers the multi-peril program for the U.S. government. RMA develops products, sets underwriting and loss adjustment standards, and determines the premiums on crop insurance policies.

Crop insurance companies are responsible for delivering policies to farmers and managing the claims adjustment process. All crop insurance companies provide the same policies to farmers using the same underlying rates. Crop insurance companies also bear a portion of the risks associated with the performance of the policies. Compensation to crop insurance companies comes in two forms: Administrative and Operating (A&O) reimbursements and underwriting gains. As its name implies, A&O reimbursements are meant to compensate crop insurance companies for the costs associated with providing crop insurance to farmers, although the A&O reimbursements do not cover the entire expenses of delivering crop insurance policies. Underwriting gains represent returns from bearing the risk of crop insurance losses. Insurers earn positive underwriting gains in years when crop insurance indemnities are low, and underwriting losses occur in years with high indemnity payments.

The Standard Reinsurance Agreement (SRA) is an agreement between the Federal Government and the crop insurance companies that participate in the program. The SRA defines the obligations of the government and the private insurance companies that participate in the program. The terms of the SRA are identical for all crop insurance companies. A&O reimbursements are a function of A&O payment rates contained within the SRA. Similarly, underwriting gains are directly impacted by the

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SRA's risk sharing provisions and that year's indemnity experiences. Due to the potential for catastrophic losses, the Federal government and crop insurance companies share in the underwriting gains and losses associated with crop insurance. As losses become larger, the Federal government bears a greater share of the losses and the Federal government receives more of the gain when gains are larger. The SRA sets the risk-sharing relationships for underwriting gains and losses and then allows companies to assign policies to different funds with different risk sharing agreements (more detail is provided in Shields). The SRA contains ceding provisions that allow crop insurance companies to cede a limited number of policies to crop insurance companies. On ceded premium, crop insurance companies do not receive underwriting gains or losses. Crop insurance companies receive gains on the remaining "retained" premium.

Major provisions of the SRA are periodically renegotiated, with the last major change completed in 2010. The 2010 SRA renegotiations were implemented in the 2011 SRA, with 2012 through 2017 agreements containing the same major provisions as the 2011 agreement (RMA, *Standard Reinsurance Agreement*). Future SRAs will contain the same provisions as the 2011 through 2017 SRAs until the SRA is renegotiated. Overall, changes made in the 2011 SRA reduced crop insurance companies' exposure to underwriting gains and losses. Ashenbrenner and Ballweg, and AIR estimated that expected underwriting gains would decrease by 1 to 2 percentage points as a result of the changes. In addition, the SRA reduced A&O reimbursement rates, resulting in overall reimbursement rates being cut by 2 to 3% (Shields). Because of language contained in the 2008 Farm Bill, total A&O reimbursement to crop insurance companies was capped and floored for SRAs after 2011. Within the SRAs, these limits are stated as a percentage of 2008 total A&O reimbursement (RMA, Standard Reinsurance Agreement). If a subsequent year's liability equals 2008 total liability, total A&O reimbursement cannot exceed 61.5% of 2008 A&O reimbursement and cannot be less than 48.9% of 2008 A&O reimbursement. These limits change proportionally based on a comparison to a specific year's total liability to 2008 total liability.

These limits also are impacted by inflation. As a result of these substantial changes, this study examines returns both before and after the 2010 SRA renegotiations, and compares these to typical or expected rates of return reported in other studies.

Compensation to Crop Insurance Companies

A&O reimbursements and underwriting gains are shown in Table 1 for 1998 through 2015. These values are publicly available from the Risk Management Agency (RMA) website. Table 1 also adds A&O reimbursement and underwriting gains together to represent the total compensation. This compensation is net of insurance payments as underwriting gains equal premiums minus insurnace payments. This total also does not give net income to crop insurance companies as costs for delivering crop insurance policies are not subtracted from the total.

Total compensation increased from $722 million in 1998 to $3,919 million in 2009. Much of this upward trend is related to increases in the size of the multi-peril crop insurance program. Acres insured under the crop insurance program increased from 182 million acres in 1998 to nearly 318 million acres in 2013 to 2015 (see Figure 1). Also, total premium paid into the crop insurance program increased from $1,876 million in 1998 to $9,788 million in 2009 (see Figure 1). Total premium then decreased in 2009 and 2010 before reaching a high of $11,877 million in 2011. In 2014 and 2015, total premium decreased slightly, with premium equaling $9,889 million in 2014 and $9,566 million in 2015. Premium decreases in recent years did not occur because of lower acres insured, but because of reductions in market prices for the major insured commodities. Most crop insurance policies have their market liability directly tied to prices on futures contracts. Total premiums are reduced when market and corresponding futures prices decline.

To control for the impacts of the size of the multi-peril program, the A&O reimbursements, underwriting gains, and total compensation are each divided by total premium to express as ratios (see Figure 2). As can be seen in Figure 2, A&O reimbursements and underwriting gain do not exhibit upward trends during the entire 1998 through 2015 time period.

Between 1998 and 2010, A&O reimbursements as a percent of total premium averaged 21%, compared to a 13% rate between 2011 and 2015. This difference in reimbursement percentages illustrate the impacts of the 2010 SRA renegotiations. Since these renegotiations, A&O reimbursements as a percentage of total premium have been sharply lower than they were prior to 2010 (see Figure 2).

Underwriting gains as a percentage of total premium vary substantially from year-to-year. Underwriting gains tend to be high in years of low loss and vice versa, although there are also scale effects and limits in the SRA which affect relative measures. Comparisons of the percentage underwriting gain to loss ratios illustrate the relationship. Loss ratios equal insurance payments divided by total premium. Loss ratios below 1.0 indicate that payments are less than premium and vice versa. Figure 3 shows loss ratios for the entire crop insurance program, as obtained from Summary of Business data released by RMA. Also shown in Figure 3 are underwriting gains percentages, the same values as shown in Figure 2. Note the negative relationship between loss ratios and underwriting gain percentages. The correlation coefficient between these two series is -.97. Loss ratios were below .60 in four years: 2005, 2007, 2009, and 2010. These years had the highest underwriting gains: 23% in 2005, 24% in 2007, 65% in 2009, and 25% in 2010. Conversely, loss ratios were the highest in 2002 (1.39 loss ratio) and 2012 (1.58 loss ratio). Underwriting gain percentages were negative in these years: -2% in 2002 and -12% in 2012.

Delivery Costs and Net Returns

Table 1 also contains delivery costs of private crop insurance companies. Crop insurance companies report specific delivery costs to RMA, with values in Table 1 taken from reports by Grant and Thornton LLP. Delivery costs include loss adjustment expenses, crop insurance agent commission, and other costs. Between 1998 and 2014, commission costs represented 65% of delivery costs, loss adjustment costs were 12%, and other costs were 23%.

Delivery costs were $553 million in 1998. From the 1998 level, delivery costs increased in most years, reaching a level of $2,124 million in 2008 and $2,230 by 2015. Similar to A&O reimbursements and underwriting gains, increases in delivery costs relate to increases in the size of the multi-peril program. Figure 4 shows delivery costs on a per acre and per dollar of total premium basis. On a per acre basis, delivery costs increased over time from $3.04 per acre up to $9.31 per acre in 2009. These costs then decreased to a low of $5.80 per acre in 2012. Since 2012, costs increased to $6.80 per acre in 2015. Costs per dollar of total premium generally decreased over time. In 1998, delivery costs were $.29 per dollar of premium in 1998, with a general declining trend to $.18 per acre in 2011. From the 2011 level, delivery costs increased to $.21 per dollar of premium in 2015. Delivery costs are tied to both acres insured and total premium. For example, expected loss adjustment costs are related to acres insured as acres insured tend to influence expected adjustment costs. On the other hand, commissions paid to crop insurance agents are a function of total premium which is heavily influenced by commodity prices more so than by acreage. In any case, delivery costs have largely exhibited a downward trend when measured per dollar of total premium. Controlling for total premium per acre results in stable costs over time on a per acre basis.

Some have questioned whether crop insurance companies have incentives to reduce costs (e.g., Babcock). Crop insurance companies do not control premiums or A&O reimbursement rates which are the same for all crop insurance companies. Thus, one of the few ways that a crop insurance company can increase returns relative to other crop insurance companies is to maintain low costs. Hence, crop

insurance companies can gain competitive advantages over other crop insurance companies by maintaining lower delivery costs.

In all years, delivery costs have been above A&O reimbursements. For example, delivery costs exceeded A&O reimbursement by $430 million in 2012, $691 million in 2012 and $781 million in 2014 (see Table 1). Delivery costs exceeding A&O reimbursements indicates that underwriting gains are important for the financial viability of the insurance industry. Overall, crop insurance companies must receive sufficient underwriting gains over time to remain profitable as A&O reimbursements do not cover delivery costs.

Subtracting delivery costs from total compensation gives net return of crop insurance companies (see Table 1). Net returns varied over time. In recent years, net returns have been $1,074 million in 2011, -$1,749 million in 2012, -$62 million in 2013, and $239 million in 2014. Variations in net returns through time represents a critical risk that crop insurance companies face.

Net Return as a Percent of Retained Premium

Net returns as a percentage of retained premium, hereafter referred to as net return percentage, will be used as the primary measure for evaluating returns to crop insurance companies, as this measure reflects a return to retained premium. Moreover, two other studies (Apple and Borba, Grant, Thornton LLP) have used this measure in making comparisons to property and casualty companies. A secondary measure will be underwriting gain as a percent or retained premium. This measure is selected because RMA uses this measure as a benchmark when negotiating SRAs. RMA's current benchmark is a return to retained premium between 14 and 15% (Willis). Note that RMA's benchmark is flawed because there is an implicit assumption that A&O reimbursements cover delivery costs.

Net returns percentages represent a return to the policies held by the crop insurance companies, essentially a measure of returns from retained premiums. Crop insurance companies must meet regulatory requirements for holding capital to cover losses from retained policies. Crop insurance companies can do this through various combinations of equity capital and reinsurance of the crop insurance policies. Through reinsurance, a crop insurance company pays a reinsurance company a fee to bear loss risk. For a crop insurance company, reinsurance will lower expected returns from retained policies, but also lower risk. Each crop insurance company will make different decisions concerning holdings of equity and reinsurance. These decisions influence a crop insurance company's finance and reinsurance costs, net incomes, and return on equity. While net incomes and returns to equity vary across companies, all crop insurance companies will face roughly the same earning possibilities from retained premiums, as measured by the net return percentage.

Net returns percentages equal the crop insurance net returns divided by retained premium. Yearly values of these measures are shown in Table 2. The net returns shown in Table 2 are the same as those calculated in Table 1. Retained premium values are taken from *Reinsurance Reports* published by RMA. On average, crop insurance companies retained 79% of total premium between 1998 through 2015.

In addition to the annual calculations, several sub-periods are presented in the lower portion of the table. From 1998 to 2015, net return percentages averaged 10.6%. The highest net return of 26.4% occurred in 2009 while the lowest return of -20.6% occurred in 2012. Net returns percentages have been lower on average since the 2010 SRA renegotiations. Between 1998 and 2010, net return percentages averaged 14.1%, compared to a 1.5% average from 2011 to 2015. The 2012 drought year net return percentage of -20.2% had a large impact on the 2011-2015 average. However, even if 2012 is omitted from the period of 2010-2015, the resulting average net return percentage is 6.9.

Underwriting gains as a percent of retained premium also are shown in Table 2. These values differ from net return percentages because A&O reimbursements and delivery costs are not included in the calculations. Because delivery costs are greater than A&O reimbursements, underwriting gain percentages are higher than net return percentages.

We include the underwriting gain percentage here because RMA uses this measure as a benchmark. Since renegotiating the SRA, the underwriting gain percentage has averaged 9.2%, well below the 14 to 15% benchmark used by RMA. Note that this measure does not include the impacts of large reductions in A&O reimbursements included in the 2010 renegotiations. As a result, underwriting gain expense understates the decline in return to crop insurance companies. Net return percentages decreased from 14.1% in the 1998-2010 period to 1.5% in 2011-2015, a decrease of 12.6 percentage points. Underwriting gains declined by 11.0 percentage points from 20.2 percent in the 1998-2010 period to 9.2% in the 2011-2015 period.

Net Return Percentages, Loss Ratios, and the 2010 SRA Renegotiations

Much of the variability in year-to-year returns to crop insurance companies is due to differences in crop insurance losses. The relationship between net returns and loss ratios is made explicit in Figure 5, which shows a scatter graph of net return percentages graphed against loss ratios. As expected, there is a strong, negative relationship between net return percentages and loss ratios, with a simple correlation coefficient of -.97. Also note in Figure 5 that there are three years that lie below the fitted line: 2013, 2014, and 2015. These three years all occur after the 2010 SRA renegotiations. These deviations provide evidence that the 2010 SRA renegotiations reduced compensation and returns to crop insurance companies.

Additional quantification of the magnitude of the decrease in net return percentages from the

2010 SRA renegotiations can be obtained from a regression analysis where the dependent variable is net

return percentage. The independent variables are simply the loss ratio and a dummy variable taking on

a value of 1 for the years between 1998 and 2010, and 0 otherwise. If significant, the dummy variable

indicates the average change in net returns before and after the 2010 SRA renegotiations. The

regression results are:

Net return percentage = .4393 - .0414 loss ratio + .0527 dummy variable
                            (.0236) (.0206)   (.0124)

with standard errors in parenthesis. The loss ratio and dummy variables are significant. The regression

equation has a .9680 adjusted r-square and a standard error of .0225. The dummy variable coefficient

indicates that net return percentages are 5.27% lower after the 2010 SRA renegotiations.

The 2010 renegotiations occurred in an environment where crop insurance company returns

had been relatively higher in the previous years. Between 1998 through 2010, compensation to

companies had been growing due to growth in the multi-peril program (see Figure 1 and 2). Moreover,

the ten years from 2001 through 2010 were low loss years. The average loss ratio from 2001 to 2010

was .81, well below the 1998-2015 average of .90. Low loss ratios were even more pronounced

between 2006 and 2010. During this 2006-2010 period, the program wide loss ratio average .66, leading

to high net return percentages. It is quite possible that the SRA renegotiations were influenced by

perceptions of high crop insurance company returns that were the result of an extended period of low

losses.

AS a result of the renegotiations, companies' net return percentages have averaged much lower

since the 2010 SRA renegotiations. Between 2011 and 2015, net return percentages averaged 1.5%.

Often the last ten years of returns are used to judge recent returns. The ten-year average from 2006 to

2015 was 11.5%. These ten years include net return percentage from 2006 to 2010, years that occurred

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before the 2010 SRA renegotiations. To assess the likely performance under the current SRA, the yearly percentages prior to the current SRA should be adjusted downward to create similar bases. Using the dummy variable regression coefficient to adjust 2006 to 2010 returns to reflect the impact of the current SRA results in an 8.8% net return percentage.

Comparison of Net Returns to Property and Casualty Companies

There often is a desire to compare crop insurance company returns to those of another industry. If returns are comparable on some risk-adjusted basis, crop insurance companies could be said to be generating a suitable return. Two studies have made comparisons using property and casualty insurance companies as the comparison. Both of these studies began before the 2010 SRA renegotiations. To one extent or another, both used net returns a percent of retained premium in their calculations and comparisons.

Under a contract with RMA, Milliman, Inc. developed measures of the rate of return on equity for the crop insurance industry, and then compared crop insurance returns to those for the property and casualty sector (Apple and Borba). Their findings suggested that crop insurance companies averaged a 17.1% return on equity between 1989 and 2008, 4.3% above the 12.8% return received by property and casualty companies. It should be noted that the Milliman study was unable to calculate the actual return on equity for the crop insurance industry because the amount of equity was not known. Milliman instead developed an imputed equity based on allocating the equity of the entire property and casualty insurance industry to the crop insurance segment of the industry.

The report by Milliman faced a number of criticisms (RMA), with the largest being that Milliman assumed that crop insurance delivery costs exactly equaled the A&O reimbursement. Milliman begins with a net gain as a percent of retained premium in calculating return to equity. When deriving return

on equity, Milliman's net gain is conceptually similar to net returns in this study, except that delivery assumes that costs exactly equal to A&O reimbursement. In arriving at return to equity, Milliman adjusted the net return percentage by a corporate tax rate and an assumed premium-to-equity ratio. To these adjusted premium returns, after-tax net gains to equity were added to arrive at a return on equity.

To assess the impact of Milliman's delivery cost assumption, we substitute net returns from retained premium calculated in this article for those calculated used by Milliman. For the years from 1998 to 2008, the substitution results in a reduction in return-to-equity from 18.3% in Milliman to 13.1%, a reduction of 5.2 percentage points. The revised return-to equity is much closer to the 11.2% return average reported for property and casualty companies.

Another issue with the Milliman study is that in the return to equity calculations, corporate tax rates and after-tax net gains to equity are needed to complete the calculations. Milliman used corporate tax rates and equity gains from the property and casualty companies. Since these are not specifically available for crop insurance companies and the equity commitment to different lines of insurance can differ dramatically, the comparison of return-to-equity has limited value.

Under a contract from National Crop Insurance Services (NCIS), Grant and Thornton LLP conducted a follow-up study, and have been providing updates to that work as additional data accumulate. Grant and Thornton compared the net return percentages for crop insurance companies to a similarly defined measure for property and casualty companies. For property and causality companies, the measure is:

Pretax net income / adjusted net earned premium

Pretax net income includes net underwriting gains (loss) plus net investment income, plus realized capital gain. Note that pre-tax net income includes investment income while crop insurance returns do not. This is justified due to the timing of premium received by the respective sectors. Property and

casualty policies are pre-paid and thus the companies receive premiums before the insurance period

begins. As a result, property and casualty companies can invest premium proceeds and receive

investment income, often a large source of PC income. On the other hand, crop insurance companies

receive A&O reimbursements and underwriting gains after the insurance period is over, thereby not

allowing investment income on premium. Adjusted net earned premiums equal:

Earned premiums – total net expenses

Net expenses are subtracted from total premiums in order to make property and casualty premiums

consistent with those for the crop insurance industry because retained premiums for crop insurance

companies are not expense loaded. Over time, RMA's premium rating procedures should result in an

overall loss ratio near 1.0. As a result, crop insurance companies receive A&O reimbursements.

Grant and Thornton calculated pretax net income divided by adjusted net earned premium for

property and casualty companies for the period from 1992 through 2014, finding an average of 17.4%.

During the same period, net return as a percent of retained premium was 10.7% for crop insurance

companies, considerably below the average for property and casualty companies.

Summary and Concluding Comments

Returns to crop insurance companies were substantially reduced by the 2010 SRA. Overall, net

returns as a percent of retained premiums should be expected to average 5% post 2010 as compared to

before 2010. Furthermore, underwriting gains as a percent of returns premium have averaged below

RMA benchmark since 2010. This suggests that returns to crop insurance companies have been reduced

by the 2010 SRA renegotiations.

Some will question whether this is a sufficient return to maintain an adequate number of private crop insurance companies to provide insurnace to farmers. As of yet, there has not been a broad exodus of companies from the industry, suggesting that returns are adequate. However, there are elements that could occur in the future that would make net returns less attractive. Between 2000 and 2010, a period of low crop insurance losses occurred, leading to a period of high returns for crop insurance companies. While a similar period of low losses could occur in the future, it is also possible that a string of years of high losses could occur. Several years of poorer yields are very possible in agriculture, as happened in the 1980s. A string of high loss years could lead to a re-evaluation by crop insurance companies of the desirability of being in the crop insurance industry.   Stated alternatively, given the relatively lower margins, crop insurance performance driven by random weather could determine the continuing participation of companies far more directly than in the past.

Since the 2008 financial crisis, there have been relatively low returns on interest-bearing investments. These lower alternative returns could make the returns from crop insurance look attractive even after they have been lowered by the 2010 SRA renegotiations. Thus, future increases in rates on interest bearing assets could negatively impact the desirability of being in the crop insurance industry.

Obviously, future returns will be determined by random loss experiences. Given loss experiences that in turn result in loss ratios that average .90 over the next several years, net return as a percent of retained premium will likely be in the range of 7 to 9 percent under the existing SRA. This rate of return does not appear excessive, but whether it is attractive to crop insurance companies likely will depend on the earning potential outside of agriculture.

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Table 1. Compensation, Costs, and Net Returns to Crop Insurance Industry for Multi-Peril Products.

| Year | Crop Insurance Company Compensation | | | Insurance Company Delivery Costs [3] | Insurance Company Net Returns | A&O Reimburse. Minus Delivery Cost |
	Administrative and Operating (A&O) Reimbursement [1]	Under-writing Gain [2]	Total			
			$ (million)			$ (million)
1998	443	279	722	553	169	-110
1999	499	272	771	615	156	-116
2000	552	282	834	692	142	-140
2001	636	345	981	819	162	-183
2002	628	-47	581	826	-245	-198
2003	736	377	1,113	896	217	-160
2004	894	691	1,585	1,021	564	-127
2005	833	915	1,748	990	758	-157
2006	962	822	1,784	1,164	620	-202
2007	1,335	1,572	2,907	1,565	1,342	-230
2008	2,011	1,094	3,105	2,124	981	-113
2009	1,621	2,298	3,919	2,113	1,806	-492
2010	1,371	1,914	3,285	1,876	1,409	-505
2011	1,363	1,662	3,025	1,951	1,074	-588
2012	1,405	-1,319	86	1,835	-1,749	-430
2013	1,398	629	2,027	2,089	-62	-691
2014	1,384	1,011	2,404	2,165	239	-781
2015 [4]	1,473	1,786	3,259	2,230	1,029	-757

[1] Data from Risk Management Agency, Program Costs and Outlays.

[2] Data from the Risk Management Agency, Reinsurance Reports.

[3] Taken from Grant and Thornton reports.

[4] Delivery costs in 2013 are estimates.

Table 2. Net Return, Retained Premium, and Net Return as a Percent of Retained Premium.

Year	Net Return [1]	Retained Premium [2]	Net Return as a Percent of Retained Premium [3]	Underwriting Gain as a Percent of Retained Premium [4]	Loss Ratio [5]
	\$ (million)				
1998	169	1,592	10.6%	17.5%	0.89
1999	156	1,837	8.5%	14.8%	1.05
2000	142	1,894	7.5%	14.9%	1.02
2001	162	2,372	6.8%	14.5%	1.00
2002	-245	2,294	-10.7%	-2.0%	1.39
2003	217	2,606	8.3%	14.5%	0.95
2004	564	3,140	18.0%	22.0%	0.77
2005	758	2,891	26.2%	31.6%	0.60
2006	620	3,500	17.7%	23.5%	0.77
2007	1,342	4,898	27.4%	32.1%	0.55
2008	981	7,696	12.7%	14.2%	0.89
2009	1,806	6,831	26.4%	33.6%	0.59
2010	1,409	6,063	23.2%	31.6%	0.57
2011	1,074	9,539	11.3%	17.4%	0.91
2012	-1,749	8,642	-20.2%	-15.3%	1.59
2013	-62	9,226	-0.7%	6.8%	1.04
2014	239	7,897	3.0%	12.8%	0.93
2015	1,029	7,384	13.9%	24.2%	0.67
1998-2015			10.6%	17.2%	0.90
1998-2010			14.1%	20.2%	0.85
2011-2015			1.5%	9.2%	1.03
2011-2015 (without 2012)			6.9%	15.3%	0.89
2006-2015			11.5%	18.1%	0.85

[1] See Table 1.

[2] Data from the Risk Management Agency, Reinsurance Reports.

[3] Net return divided by retained premium.

[4] Equals underwriting gain from Table 1 divided by retained premium.

[5] Data from RMA, Summary of Business.

Figure 1. Total Premium and Acres Insured, Federal Crop Insurance Program, 1998 - 2015.
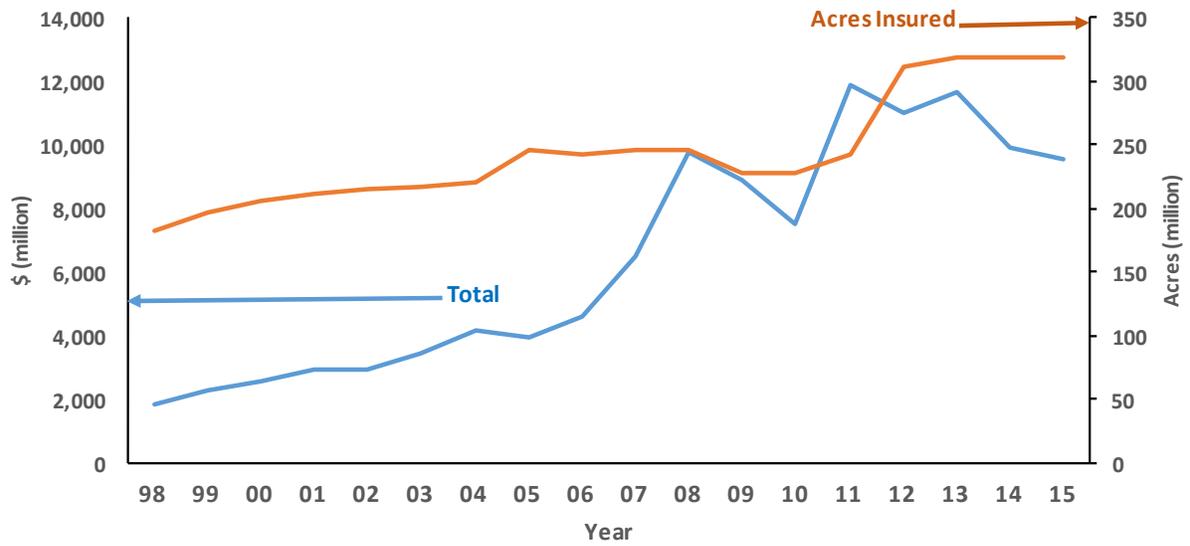
Figure 2. Compensation to Crop Insurance Companies Divided by Total Premium.

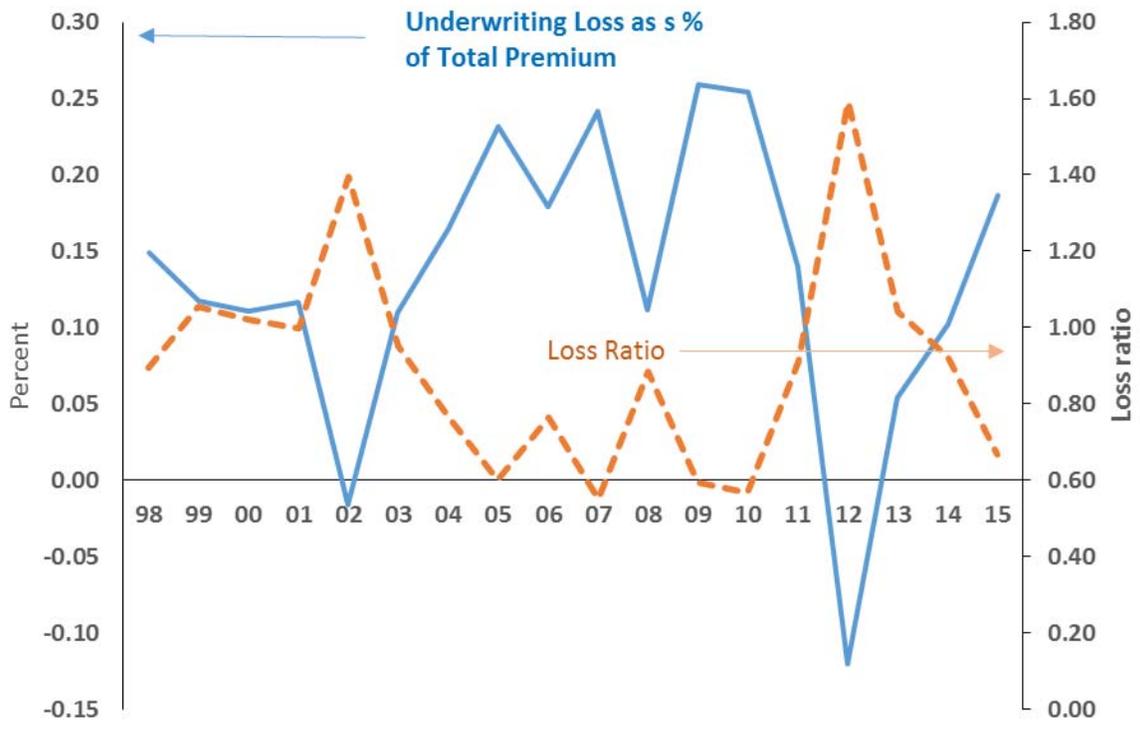Figure 3. Underwriting Gain and Loss Ratios, 1998 - 2015.

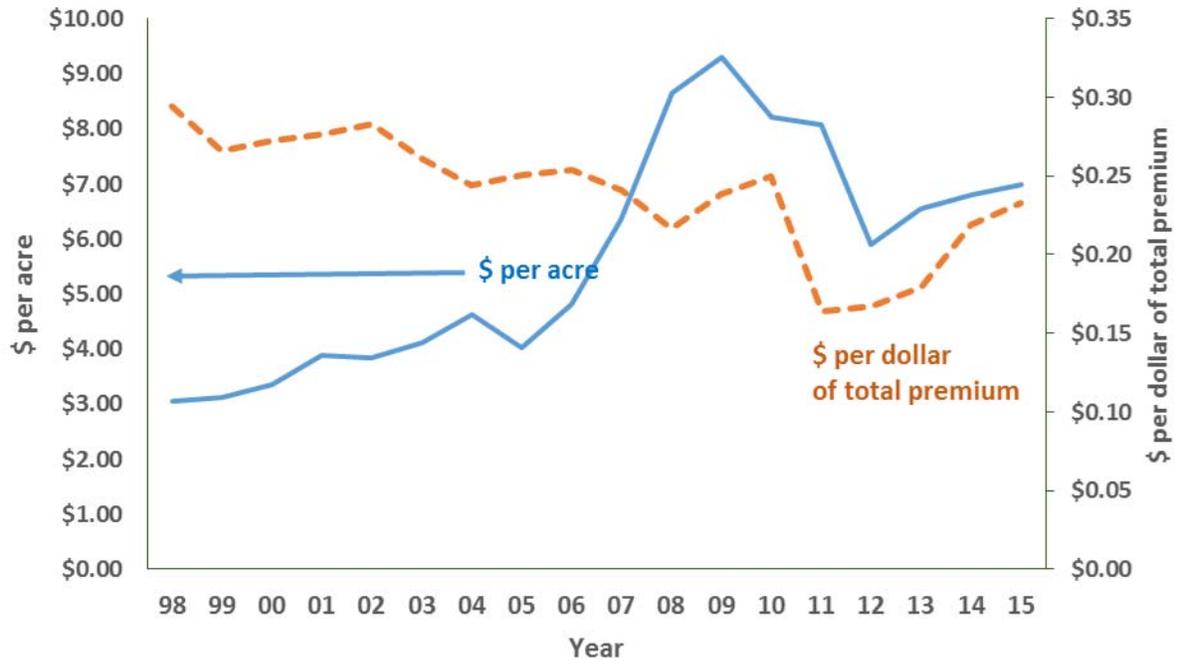**Figure 4. Delivery Costs on a Per Acre and Per Dollar of Premium Basie.**

Figure 5. Net Returns as a Percent of Retained Premium Related to Loss Ratios, 1998 to 2015.