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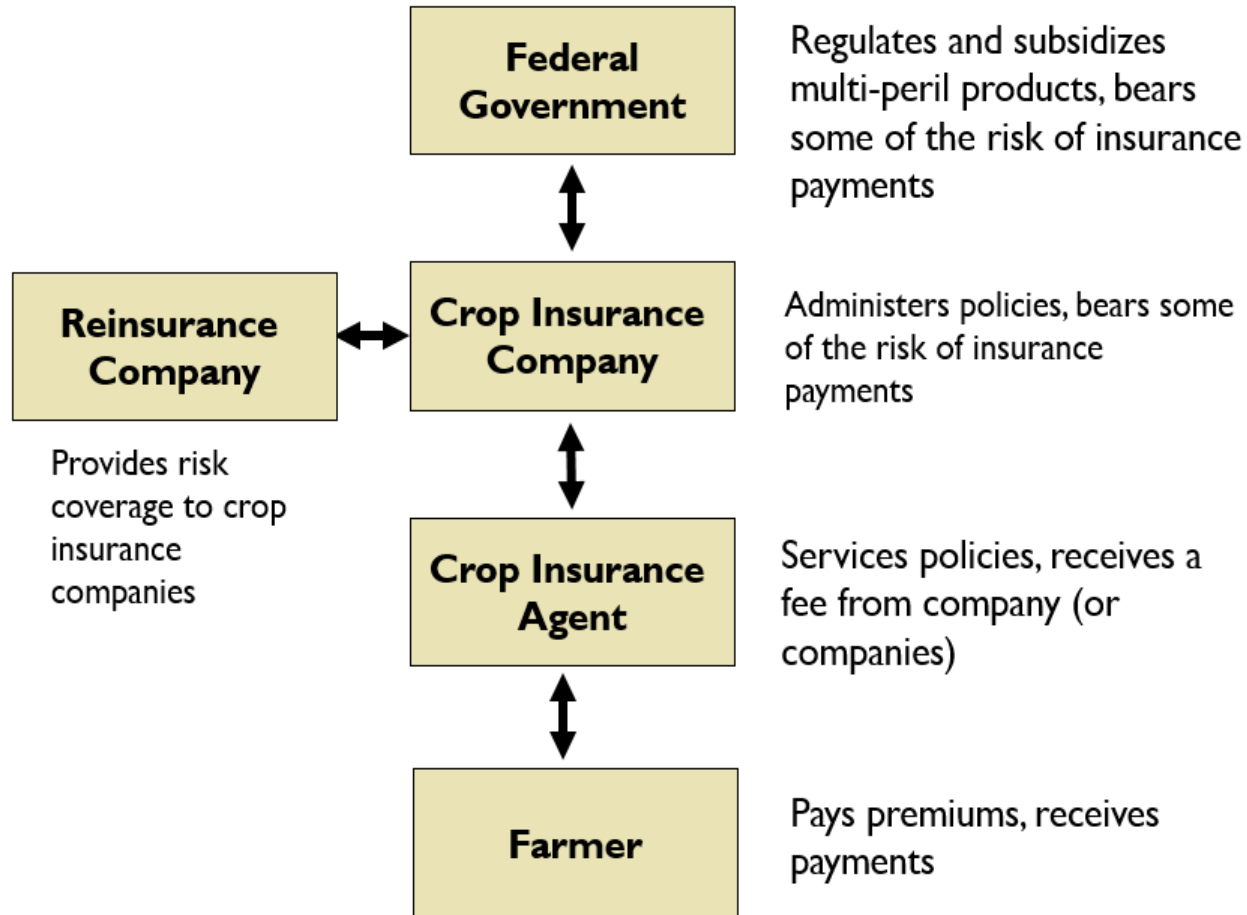
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# Evaluation of Returns and Delivery Costs of Private Crop Insurance Companies

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# Public-Private Partnership



# Background

- **Crop insurance compensation terms set by Federal agencies and terms do not vary across companies**
  - Premiums set by RMA
  - Standard Reinsurance Agreement (SRA) sets A&O reimbursements and risk sharing terms
  
- **25% of Federal costs of crop insurance associated with crop insurance compensation**
  - A&O reimbursement
  - Underwriting gain or loss of companies



# Issues

- **Concerns about too high of compensation to crop insurance companies**
- **Led to renegotiation of SRA (Implemented in 2011)**
  - Lowered A&O reimbursements
  - Changed risk sharing to be less favorable
- **Continue to introduce new legislation targeting crop insurance compensation**



# Study

**Evaluate net returns from 1998 to 2015 and show**

- **2011 SRA significantly reduced returns**
- **Much of the concern in 2000s may have resulted from:**
  - **Growth in program**
  - **Low loss years**



**Figure 1. Total Premium and Acres Insured, Federal Crop Insurance Program, 1998 - 2015.**

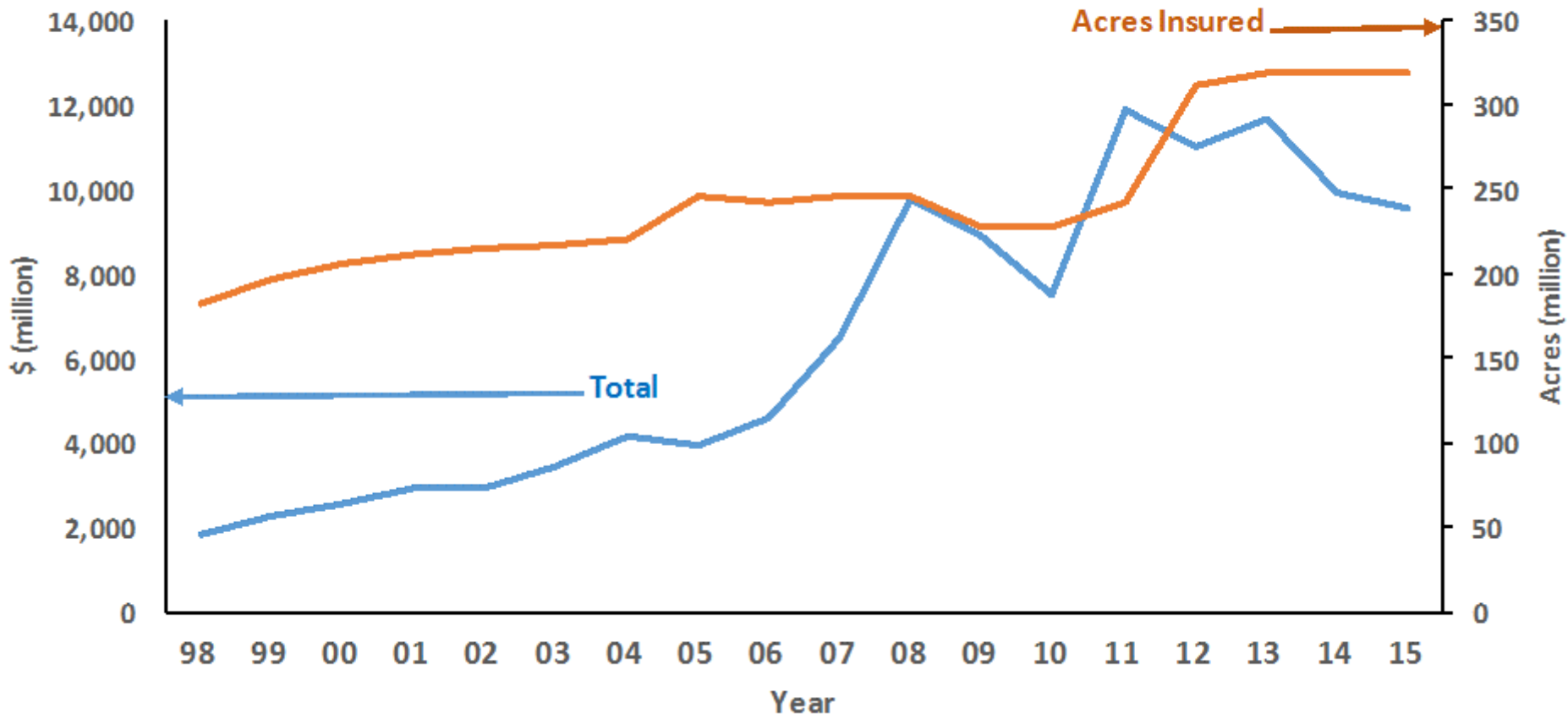


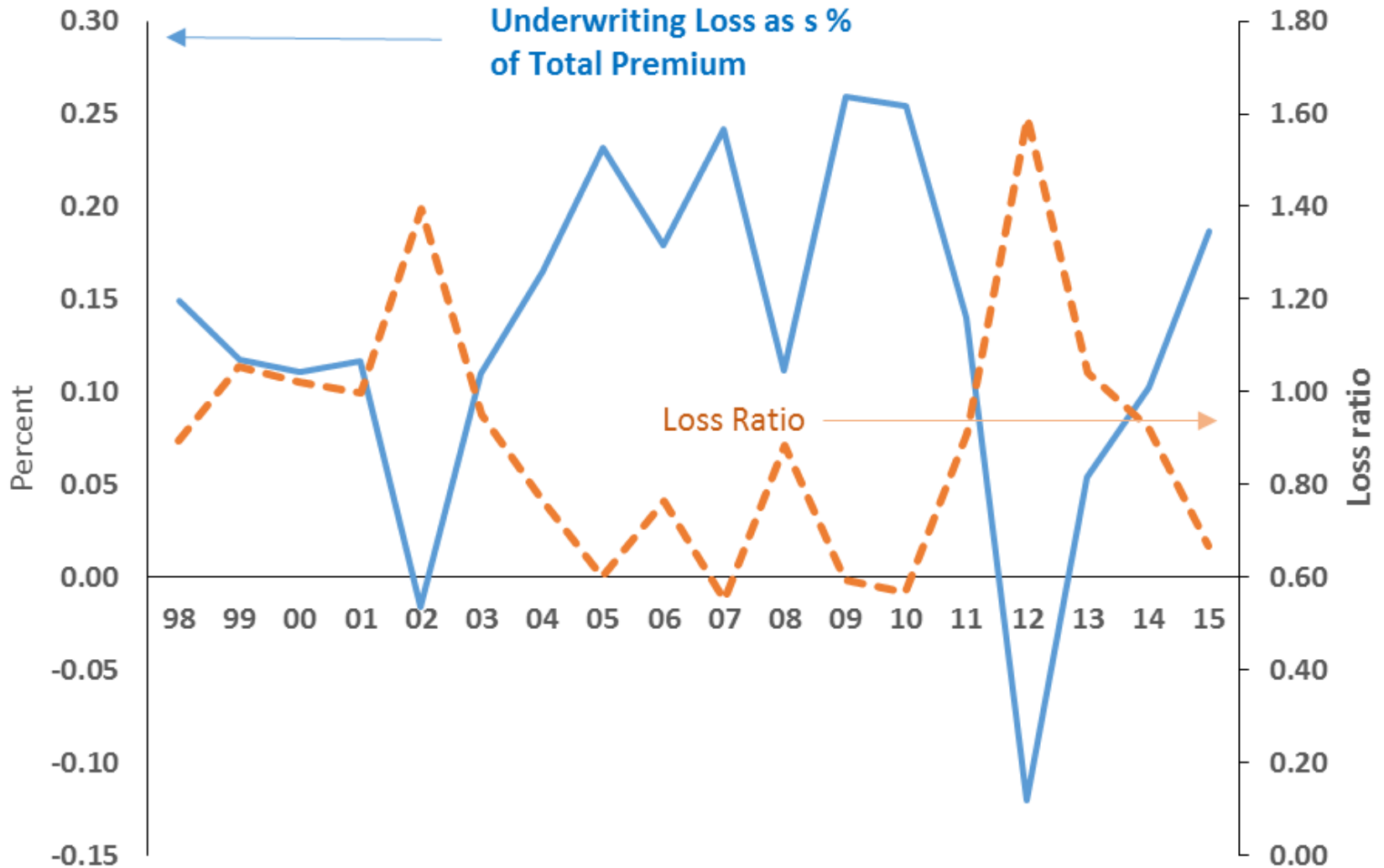




Figure 2. Compensation to Crop Insurance Companies Divided by Total Premium.



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



Year	Crop Insurance Company Compensation			Insurance Company Delivery Costs <sup>3</sup>	Insurance Company Net Returns	A&O Reimburse. Minus Delivery Cost
	Administrative and Operating (A&O) Reimbursement <sup>1</sup>	Under- writing Gain <sup>2</sup>	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 <sup>4</sup>	1,473	1,786	3,259	2,230	1,029	-757

# A&O Reimbursements Do Not Cover Costs (Underwriting Gains Needed for Private Involvement)

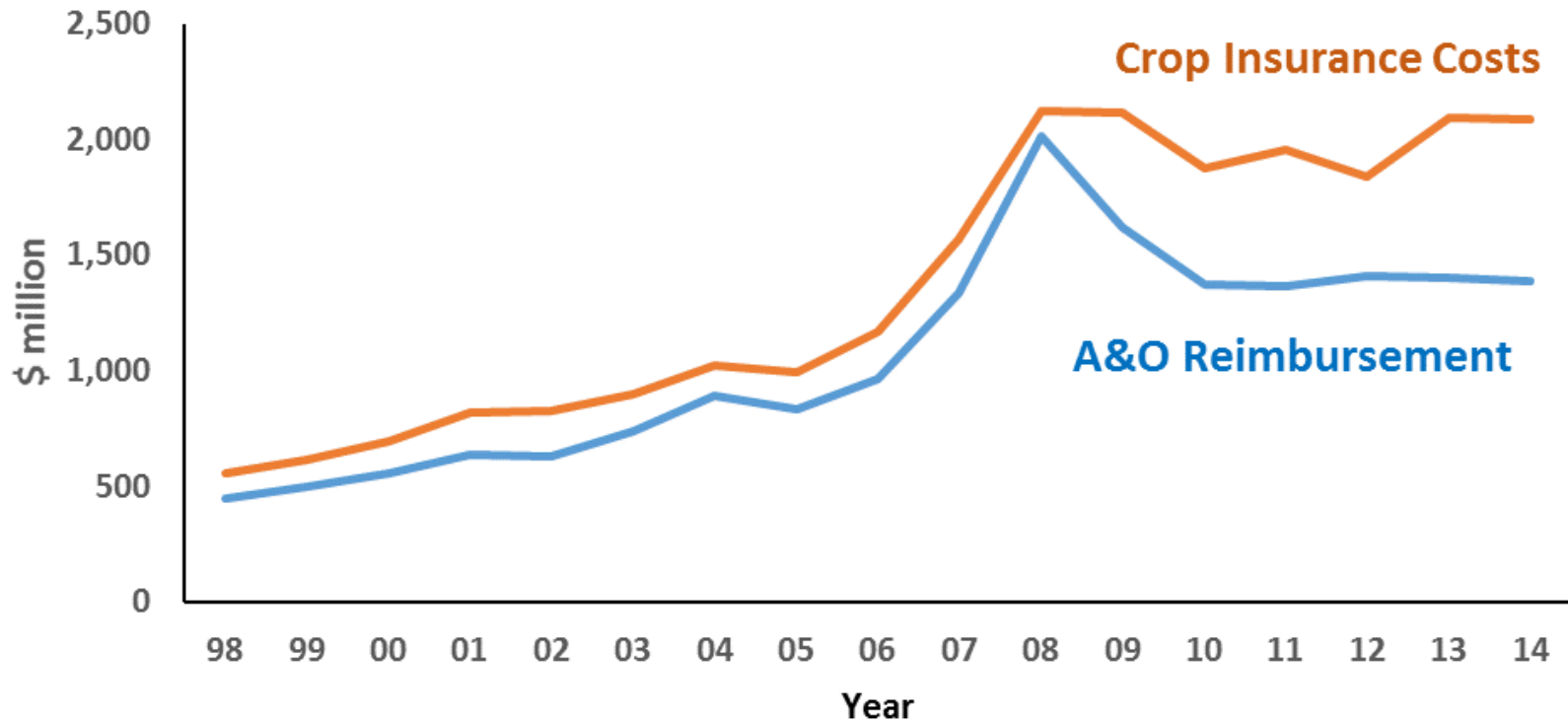
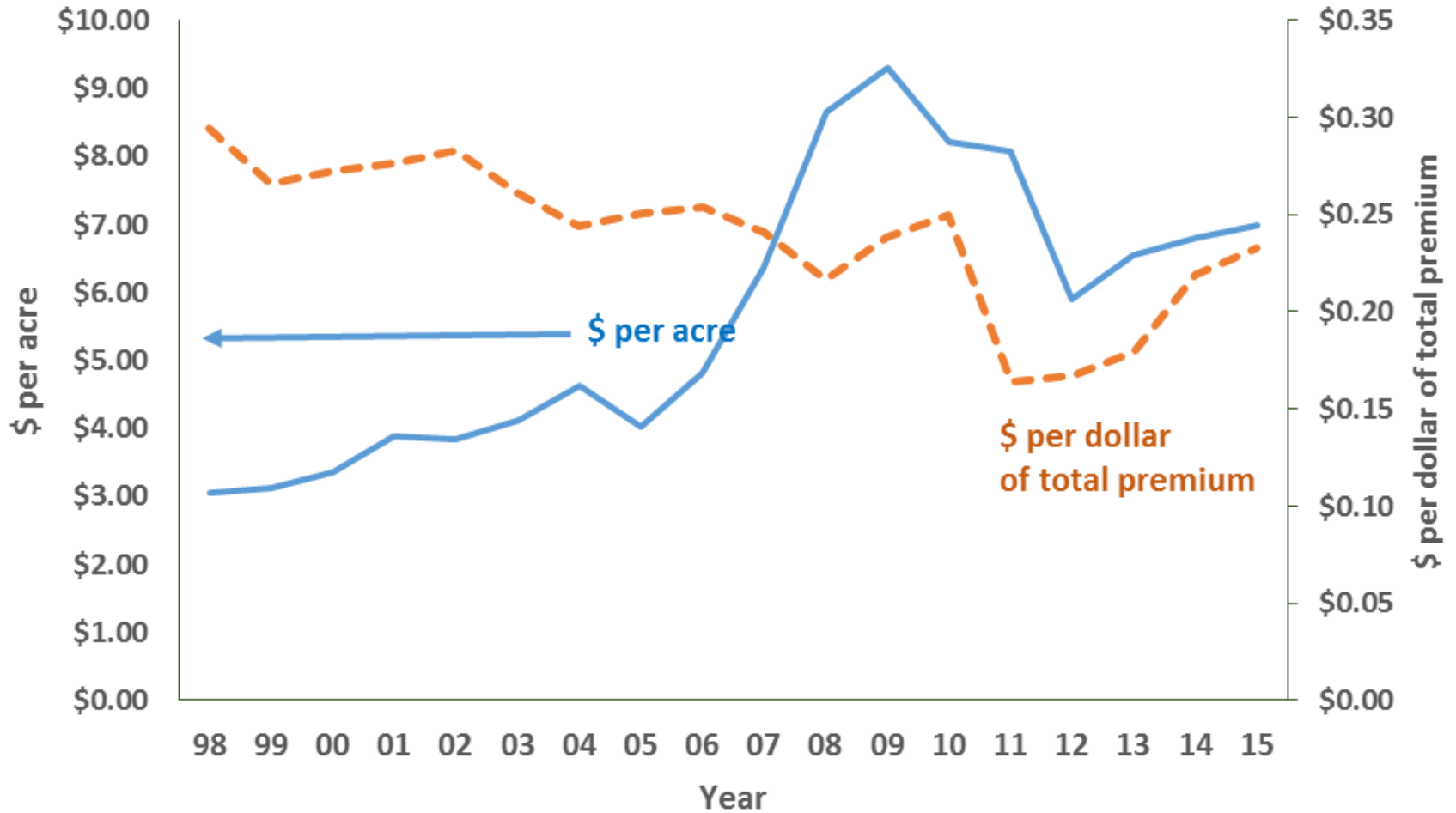


Figure 4. Delivery Costs on a Per Acre and Per Dollar of Premium Basis.





Year	Net Return <sup>1</sup>	Retained Premium <sup>2</sup>	Net Return as a Percent of Retained Premium <sup>3</sup>	Underwriting Gain as a Percent of Retained Premium <sup>4</sup>	Loss Ratio <sup>5</sup>
	\$ (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



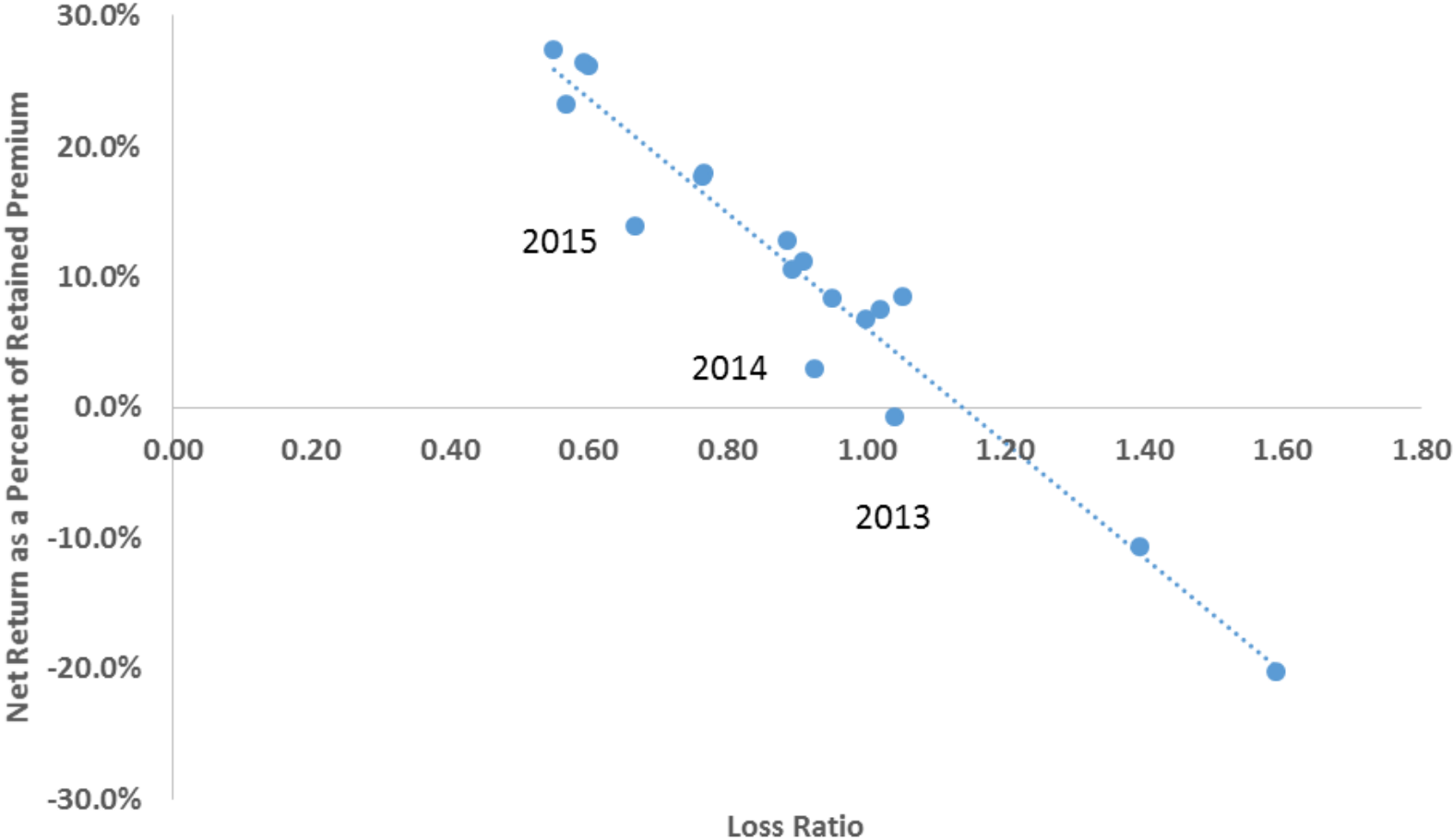
Year	Net Return <sup>1</sup>	Retained Premium <sup>2</sup>	Net Return as a Percent of Retained Premium <sup>3</sup>	Underwriting Gain as a Percent of Retained Premium <sup>4</sup>	Loss Ratio <sup>5</sup>
1998-2015			10.6%	17.2%	0.90
1998-2010			14.1%	20.2%	0.85
2011-2015			1.5%	9.2%	1.03
2011-2015 (without 2012)			6.9%	15.3%	0.89
2006-2015			11.5%	18.1%	0.85

Regression with net return related to loss ratio and dummy variable (1 in 2011 and after) imply a 5% lower return after 2011





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

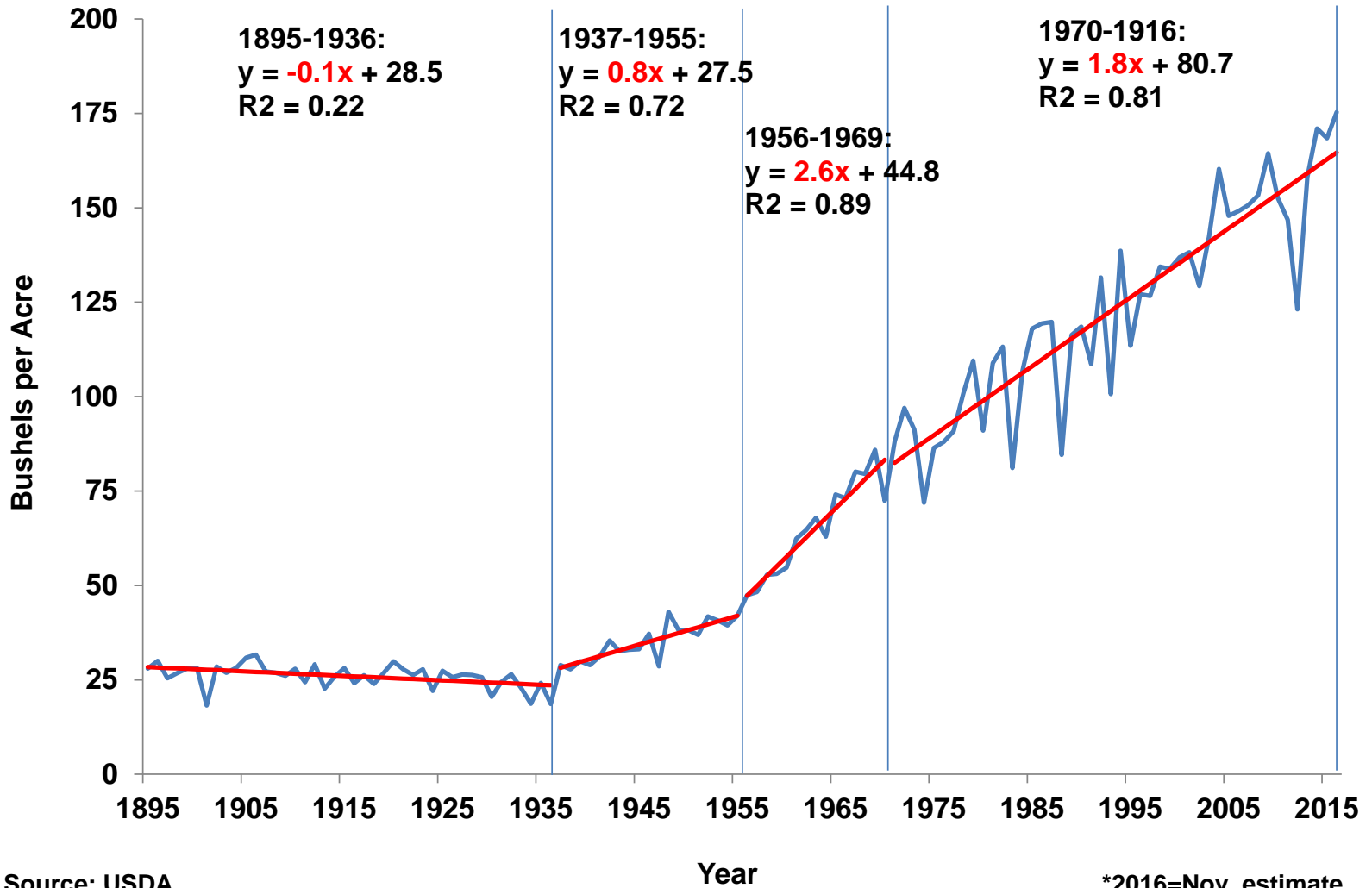


# Summary

- **2011 SRA resulted in reduction in net returns by about 5%**
- **Future returns impacted by:**
  - Interest rates
  - Loss ratios



# U.S. Average Corn Yield, 1895-2016\*



# Summary

- **2011 SRA resulted in reduction in net returns by about 5%**
- **Future returns impacted by:**
  - **Interest rates**
  - **Loss ratios (more variable loss experience would lower underwriting gains)**



# Impacts of SRA on Company Losses in Commercial Fund

