FEDERAL CROP INSURANCE PROGRAM

PROFITABILITY AND EFFECTIVENESS ANALYSIS

2013 UPDATE

Prepared on behalf of National Crop Insurance Services, Inc.
By Grant Thornton LLP

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INTRODUCTION

Grant Thornton LLP was engaged by National Crop Insurance Services, Inc. ("NCIS") to update the "Federal Crop Insurance Program Profitability and Effectiveness Analysis 2012 Update" with 2012 results.[1] The analysis benchmarks the Multi-Peril Crop Insurance ("MPCI") program against the Property & Casualty ("P&C") insurance industry.[2] The 2012 results are based on an aggregation of the data contained in surveys returned by 15 MPCI companies participating in the program in reinsurance year 2012.[3]

The Federal Crop Insurance program, commonly known as MPCI, has been offered to U.S. farmers since the 1930s. Originally available only through the Federal government, the program has operated since 1981 as a public-private partnership between members of NCIS, as direct insurers or their managing general agents, and the Federal Crop Insurance Corporation ("FCIC"), as their principal reinsurer. The basic terms of this relationship are set forth in a Standard Reinsurance Agreement ("SRA") signed by FCIC and each individual direct insurer. FCIC, a federally owned corporation, delegates the responsibility of managing the program to the Risk Management Agency ("RMA") of the U.S. Department of Agriculture ("USDA"). In crop year 2012, the MPCI program: provided coverage on 283 million acres of eligible acreage of major U.S. crops, insured liability of $117.1 billion, generated total premiums of $11.1 billion (of which $7.0 billion were premium subsidies), and distributed $17.4 billion in indemnity payments.[4]

As a Congressionally authorized insurance program subsidized by the U.S. Treasury, FCIC and RMA are responsible for ensuring that the profitability of the MPCI program is reasonable in relation to the financial risk retained by the participating insurers. In addition, the government has a duty to taxpayers to ensure that the program insures farmers in a cost effective manner.

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[1] This report was prepared for NCIS to be used by its members solely in evaluating aggregated, historical data using the general methodology from previous Grant Thornton reports at the request of NCIS. Our services were provided in accordance with the Statement on Standards for Consulting Services promulgated by the American Institute of Certified Public Accountants and, accordingly, do not constitute the compilation, review or audit of any information. The report does not express a view with regard to the results for any individual member of NCIS. This update primarily addresses the MPCI and P&C information for 2012. However, previous years' data was amended if more current information for any year was available from Best's Aggregates & Averages Property & Casualty ("Best's A&A") or RMA. We reserve the right to further update this analysis as we obtain additional information.

[2] This report uses aggregate historical data on both the MPCI program and the P&C industry. MPCI data used in this report were taken from a survey by NCIS of its member companies and from public sources (USDA/RMA). Responses were received from all 15 of the MPCI companies surveyed in the form of financial data for the 2012 reinsurance year. Gross Premium, Retained Premium and Net Gain/(Loss) reported by RMA as of November 2013, http://www3.rma.usda.gov/apps/reins_public/, were within 0.01%, .02% and .03%, respectively, of amounts submitted by the survey respondents, demonstrating the consistency of our surveys with that of RMA. Data on the P&C industry were obtained from Best's A&A. Data utilized from previous versions of Best's A&A have been updated with data from the 2013 edition where possible. Data were also obtained from the 2004 analysis prepared by Deloitte and from the 1997 and 1999 analyses prepared by PwC.

[3] Fifteen companies participated in the program in 2012. We received survey responses from all market participants.

[4] http://www3.rma.usda.gov/apps/sob/current_week/sobrpt2011-2014.pdf viewed on December 2, 2013.

The purpose of this report is to analyze how effectively the program and the private sector delivery system perform in meeting these objectives. This analysis consists of a benchmark comparison of the MPCI program to similar private sector industries.

MPCI companies write policies that are a specific class of Property and Casualty ("P&C") insurance. As such, P&C industry-wide results or specific segments of the P&C industry provides informative benchmarks for evaluating the profitability and expenses of the crop insurance industry. However, any comparison of crop insurance and P&C insurance, in general, must consider the different operational and financial characteristics of the MPCI program, including the unique way in which crop insurers recover their delivery costs. These differences are described in the following table.[5]

	P&C Insurance	MPCI Program
Premium	Expense loaded – meaning administrative expenses are included in the premium charged.	Not expense loaded -administrative and overhead expenses are partially reimbursed to companies through A&O Reimbursements.
Premium Rates	Set by company, approved by State regulators. Rates will differ by company due to risk and administrative loads.	Set by RMA - the same rates apply to all companies.
Premium Payments	Upfront at time of sale. Held by company to generate investment income.	Mid-season, with companies turning over funds to RMA within 30 days. Minimal to no investment income. Credit risk to company of nonpayment by policyholders.
Underwriting	Ability to underwrite risks. Can choose whether or not to accept risks and to modify rates and coverage to amend participant risk profile.	No ability to underwrite risks. Must take all eligible participants regardless of risk profile.
Reinsurance	Private	Mixture of private and federal

[5] Adapted from Crop Insurance Testimony by Ron Brichler to General Farm Commodities and Risk Management Subcommittee; House Committee on Agriculture, June 7, 2007, updated to conform to the 2008 Farm Bill.

	P&C Insurance	MPCI Program
Administrative Expenses	Set by company and approved by State regulators as part of the Premium rate.	A&O Reimbursement set by statute or contractually by FCIC and may not cover actual expenses incurred.[6]

Given these differences, a comparison of the P&C industry to the MPCI program is only valid as long as the major differences between the latter specific line of coverage and the more general former lines of coverage are recognized, understood, and adjusted for appropriately. Our analysis takes the appropriate adjustments into consideration to the extent possible from the information sources utilized.

KEY FINDINGS

The key findings of our analysis can be summarized as follows:[7]

- The MPCI program is not as profitable as the P&C industry and writing MPCI coverage entails greater risk.
    - The profitability of the program can be evaluated on the basis of either a simple or weighted average of historical experience. On a simple average basis, MPCI's ratio of Pretax Net Income as a percentage of Adjusted Retained Premium averaged 11.6% for the period 1992-2012. In comparison, P&C's ratio of Pretax Net Income as a percentage of Adjusted Net Earned Premium averaged 16.5% over the same period. Furthermore, the volatility of MPCI's historical earnings was 13.7% compared to only 9.2% for the P&C industry. Measured on this basis, the MPCI industry was significantly less profitable than the P&C industry while simultaneously being riskier. (Please refer to the Profitability Analysis section of this report.)
    - Evaluating the historical performance of the two programs on a weighted average basis also shows that the MPCI industry was significantly less profitable than the P&C industry while simultaneously being riskier.[8] This has only a modest effect on the P&C industry results noted above, with the income measure rising to

[6] The Food, Conservation, and Energy Act of 2008 ("2008 Farm Bill") reduces the amount of A&O Reimbursement paid in 2009. Please refer to the "Effect of the 2008 Farm Bill" section of this report for further discussion. Further reductions were introduced by the 2011 SRA. Please refer to the "The 2011 Standard Reinsurance Agreement" section of this report for further discussion.

[7] Profitability ratios for the MPCI program for the 2007-2012 updates include an adjustment to retained premium for Quota Share for the years 2005-2012.

[8] As the MPCI and P&C industries have grown over time (e.g., see Column 5 of Exhibit 1 and Column 5 of Exhibit 2, respectively), measuring profitability on a weighted average basis places greater importance on the industries' experiences in recent years when they were larger.

17.0% while the variability measure is 9.2%. For MPCI, the income measure is unchanged at 11.6%, while the variability measure increases to 14.7%. Measured on this basis, MPCI again provides a lower return to investors than the P&C industry despite having a higher degree of risk.

- MPCI Expense-Premium ratios are significantly below those of the P&C industry.
    - The cost effectiveness of the MPCI industry, measured by the ratio of MPCI Total Expenses to Gross Premium, was only 26.3% for the period 1992-2012, compared to P&C's average ratio of Total Expenses to Adjusted Direct Premiums of 60.6% for the same period. Unlike P&C's ratios that have generally been stable or increasing in recent years, expenses for the MPCI industry have fallen from 33.8% in 1992 to 16.5% in 2012. (Please refer to the Effectiveness Analysis section of this report.)
    - In recent years, the MPCI Industry continued to deliver the program in a highly cost effective manner. The expense to premium ratio of 16.5% was up slightly from 16.2% in 2011, but still well below the 24.9% level in 2010. (Please refer to the Effectiveness Analysis Section of this report).

- Under the current SRA, A&O Reimbursements continue to be below actual MPCI expenses incurred by private insurers. The shortfall is absorbed by MPCI insurers as a reduction in their pre-tax net income.

    - For 2011, MPCI companies incurred Total Expenses equal to 16.2% of Gross Premiums while A&O Reimbursements only totaled 11.5% of Gross Premiums, resulting in an approximate 4.7% ($561.9 million) shortfall. (Please refer to the A&O Reimbursement Shortfall section of this report.)
    - For 2012, MPCI companies incurred Total Expenses equal to 16.5% of Gross Premiums while A&O Reimbursements only totaled 12.6% of Gross Premiums, resulting in an approximate 3.9% ($430.6 million) shortfall. (Please refer to the A&O Reimbursement Shortfall section of this report.)

These findings are consistent with findings contained in prior years' studies. All studies consistently show that the MPCI program is less profitable than the P&C industry as a whole in the area of profitability and more efficient than the P&C industry in the area of expense management. The remainder of this report provides a detailed discussion of the analysis supporting each of these key findings.

METHODOLOGY FOR BENCHMARK COMPARISONS

In this report, we measure the costs and profitability of the MPCI and P&C industries relative to its revenue, rather than its equity. An important advantage of this approach is that all of the information required for an analysis of the insurance industry is publicly available and assumptions are minimized.

Expense Metric

The standard metric utilized within the P&C insurance industry for evaluating cost effectiveness is the ratio of expense to direct premium. Direct premium represents the gross revenue generated from sales activity and excludes reinsurance adjustments. The corresponding term for the MPCI industry is gross premium. However, the two premium measures differ in that MPCI gross premiums represent just the expected benefits payable to policyholders, whereas P&C direct premiums also include a large loading to cover the insurer's expenses. In addition, P&C expense loadings differ widely for different lines of insurance.

In order to provide a valid comparison of cost effectiveness across the two industries, the premiums need to be restated on a common basis. One solution would be to combine the A&O reimbursements of the crop insurance industry with the MPCI gross premiums. However, this adjustment would not fully eliminate the distortion in the comparison of the two industries in that the A&O reimbursements are significantly less than the P&C industry's expenses in relation to premium. A better solution is to compare expenses to the expected benefits delivered to policyholders. For the P&C industry, this means removing the expense loading from the P&C premiums. In this context, the expected benefits can be considered to be to the wholesale cost of the insurance product. Expected benefits can also be considered to be the true measure of the value provided to society by the programs.

The following table illustrates how the P&C industry's adjusted gross expense ratios used in this analysis were prepared. Historical expense ratios and premiums were obtained from data compiled by A.M. Best. The table below shows the calculations for the last five years. The final four columns of the table develop the adjusted gross expense ratios reported in **Exhibit 5.2**. A similar approach is used to develop the adjusted gross expense ratios for Homeowners and Private Passenger Auto Physical Damage shown in **Exhibit 7** as well as total net expenses shown in **Exhibit 2**.

Expenses Ratio Restatement Process Illustration of how the Adjusted Expense Ratios are developed P&C Industry Totals										
				Amounts in Millions of Dollars			Ratios to Adjusted Direct Premiums Written			
Year	Gross Loss Adjustment Expense as a % of Direct Premiums Earned [a]	Gross Commissions & Brokerage Fees Incurred as a % of Direct Premiums Written [a]	Gross Other Underwriting Expenses Incurred as a % of Direct Premiums Written [a]	Direct Premiums Written [a]	Direct Premiums Earned [a]	Adjusted Direct Premiums Written [b]	Gross Loss Adjustment Expense	Gross Commissions & Brokerage Fees Incurred	Gross Other Underwriting Expenses	Total Gross Expenses
Formula	(1)	(2)	(3)	(4)	(5)	(6)	(7) = (1) *(5)/ (6)	(8) = (2) *(4) / (6)	(9) = (3) *(4) / (6)	(10) = (7) +(8) + (9)
2008	11.5%	11.4%	15.3%	$490,861	$493,385	$303,062	18.7%	18.5%	24.8%	62.0%
2009	12.4%	11.4%	15.0%	$474,082	$476,812	$289,800	20.4%	18.6%	24.5%	63.5%
2010	11.9%	11.4%	15.4%	$476,240	$474,290	$292,167	19.3%	18.6%	25.1%	63.0%
2011	11.8%	11.2%	15.1%	$495,271	$490,373	$307,151	18.8%	18.1%	24.3%	61.2%
2012	11.6%	11.3%	15.2%	$512,290	$503,595	$318,116	18.4%	18.2%	24.5%	61.1%

Notes:

[a] 2008-2012: Best's Aggregates & Averages 2013, Cumulative By Line Underwriting Experience

[b] = (4) - { (1) * (5) + (2) * (4) + (3) * (4) }

Profitability Metric

In the expense analysis section above, cost effectiveness of the MPCI and P&C industries is evaluated based on the amount of revenue received from sales. Gross revenue for the MPCI program is simply gross premium, while gross revenue for the P&C industry is obtained by removing expenses from direct premium. The exclusion of expenses is essential to ensure that both sets of expense ratios are measured on a consistent basis. By excluding expenses, the expense ratios for the two industries are evaluated in terms of the expected benefits delivered to policyholders.

A similar rationale also applies to the profitability analysis. For this purpose, revenue needs to be further modified to account for the effects of reinsurance. Net revenue is obtained by offsetting the revenue received from sales by the amount of revenue ceded to reinsurers. On this basis, the profitability metric is defined as the ratio of net income to net revenue, both measured after the effects of reinsurance. Net income for the MPCI industry recognizes the effect of the shortfall in A&O reimbursements to fully compensate the industry for its expenses. Similarly, net income for the P&C industry is reported net of any difference between the industry's actual expenses and the expenses recouped through the expense provision included in the premium charged to policyholders.

Due to differences in terminology and financial arrangements, net revenue for the two programs must be measured in different ways. For the MPCI program, net revenue corresponds to retained premium, the amount of premium remaining after applying the reinsurance and quota share provisions of the SRA. To ensure consistency with RMA-published information, reinsurance not required under the SRA is excluded from consideration in this study.

For the P&C industry, net revenue is obtained by removing net expenses from net premium. This adjustment is essential to ensure the consistency of the profitability metric between the two programs. It also ensures that profits are measured in relation to the revenue responsible for generating those profits. Although an insurer's premium includes both a risk component as well as an expense component, only the risk component is considered relevant in terms of generating profits for the insurer. This is consistent with economic theory, which suggests that profits are the result of taking risk. This justifies the decision to exclude the insurer's expenses from the premium in evaluating the profitability of the program.

PROFITABILITY ANALYSIS

Profitability is measured as a function of Pretax Net Income for both the P&C industry and the MPCI program. For the P&C industry, we measured Pretax Net Income as the sum of Net Underwriting Income (Loss), Net Investment Income and Realized Capital Gain (Loss). For the MPCI program, we measured Pretax Net Income as the sum of Net Underwriting Gain (Loss) and Net Expense Gain (Loss). Underwriting Gains are defined in the SRA as "the amount by which the Company's share of retained net book premium exceeds its

retained ultimate net losses."[9] However, Underwriting Gains do not represent pure profit to the MPCI companies. As stated by former RMA Administrator Eldon Gould, *It would be a mistake to consider them [Underwriting Gains (Losses)] pure profit or absolute loss for the reinsured companies. Underwriting Gains serve a number of functions - they cover partial delivery expenses for some companies, they are used to build reserves to meet the required policyholder surplus and they provide a return on equity."*[10] Therefore, the Net Expense Gain (Loss) must be included in the calculation of MPCI Pretax Net Income to arrive at a profitability measure.

Furthermore, the function that Underwriting Gains serve in building required policyholder surplus in the MPCI program is substantial. As part of RMA's financial integrity requirements, the insurance companies must maintain, at a minimum, adequate policyholder surplus to pay losses resulting from two consecutive years of a 500 percent loss ratio (losses equal to 500% of premiums).[11]

The policyholder surplus requirements are generally more stringent than those of state regulators for the P&C industry. As the MPCI program's premiums increase, the required policyholder surplus increases. The policyholder surplus requirement has implications for the amount of underwriting gains that would need to be retained in order to build the reserves to the required minimum level. It could also affect the amount of commercial reinsurance that MPCI insurers would need to purchase to maintain the required capitalization standard. In either case, this would reduce the available income that would otherwise be paid out to shareholders and reduce the financial incentive for new participants to enter the program. As Mr. Gould testified in June 2007, "*To put this requirement in perspective, the highest loss ratio the program has experienced was 2.39(239%) in 1988. The recent underwriting gains provide the surplus needed to cushion and plan for catastrophic weather events and years like 1988 and 1993. This is important as the companies today retain risk on almost 80 percent of the premiums written, with much of the retained premium in the riskiest Commercial Fund."*[12]

Exhibit 1 provides the data required to calculate Pretax Net Income for the MPCI program while **Exhibit 2** provides data required to calculate Pretax Net Income for the P&C industry as a whole. **Exhibits 3** and **3.1** compare the MPCI and P&C Pretax Net Income figures on a value and percentage basis, respectively.

These Exhibits show that while the MPCI industry lost money in 2012 as compared to being profitable for the prior decade, the P&C industry's profitability almost doubled between 2011 and 2012.

While MPCI premiums fell slightly between 2011 and 2012, the 2012 drought generated large underwriting losses. For example, the MPCI industry generated approximately $1.3 billion in underwriting losses in 2012 as compared to a $1.7 billion underwriting gain in 2011.

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[9] SRA definition of Underwriting Gains from www.rma.usda.gov/pubs/ra/#09SRA

[10] Statement by RMA Administrator Eldon Gould before the House Agriculture Subcommittee on General Farm Commodities and Risk Management, June 7, 2007.

[11] Ibid.

[12] Ibid.

On the other hand, the P&C industry had record claims in 2011 due to catastrophes in that year. The reduction in the number of claims in 2012 caused the P&C industry's 2012 underwriting loss to be one-third of its 2011 loss. As a result, the P&C industry's Pretax Net Income almost doubled from $23.7 billion to $44.5 billion between 2011 and 2012, while its profit margin increased from 9.2% to 16.7%.

In addition to the comparison of MPCI and P&C Pretax Net Income, we also analyzed MPCI and P&C returns and the risk associated with those returns in the form of their annual standard deviation.[13] To measure returns for the MPCI program, we divided aggregate annual Pretax Net Income by aggregate annual Retained Premiums.[14] To measure P&C returns, we divided aggregate annual Pretax Net Income by aggregate annual Net Earned Premiums[15] minus aggregate annual Total Net Expenses to obtain Adjusted Net Earned Premiums ("Adj. NEP"). As discussed in the methodology section above, premium data for MPCI and P&C lines are not stated on the same basis. P&C premiums are expense loaded, while MPCI premiums are not. Expenses for MPCI policies are intended to be reimbursed through the A&O Reimbursement. The removal of the expense loading from the P&C premiums ensures that comparisons of P&C and MPCI returns are developed on consistent bases, with denominators of each ratio representing the expected indemnities under each program.

Risk is typically measured as the standard deviation of values. If investors are risk averse, then they will require higher expected returns (or profits) when risks are greater. This is the typical "risk versus reward" analysis referred to in investing literature. In general, one would expect a higher return when taking on more risk.

Exhibits 1 and **2** provide both simple and weighted average returns and the standard deviation of those returns for the MPCI program and the P&C industry, respectively.[16]

The MPCI program has a lower weighted average return of 11.6% compared to 17.0% for the P&C industry. Risk as measured by the weighted standard deviation was 14.7% for the MPCI program compared to 9.2% for the P&C industry. The MPCI program also has a

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[13] Standard deviation is a standard statistical measure of spread in a distribution of values. Previous versions of this report calculated the unweighted or simple standard deviation of the returns. This report calculates the weighted standard deviation as well. In this report, the weights equal Retained Premiums (or Adjusted Net Earned Premiums) in a given year divided by the total Retained Premiums (or Adjusted Net Earned Premiums) observed between 1992 and 2012, inclusive, for the MPCI industry (or the P&C industry). The weighted standard deviation is computed by taking the square root of the sum of the square of the difference between actual returns and expected returns multiplied by the appropriate weight.

[14] 2005-2012 adjusted for Quota Share.

[15] We chose to differ from Deloitte's methodology by using Adj. NEP in the denominator of the return ratio rather than Adjusted Direct Earned Premiums ("Adj. DEP"). We made this change as Net Earned Premium for the P&C industry is after reinsurance ceded as is Retained Premiums after Federal Reinsurance for the MPCI industry.

[16] Milliman presents simple averages in their reports. A comparison of the simple averages for the MPCI program and the P&C industry from Exhibits 1 and 2 in this report, respectively, generates even stronger support for the conclusion that is described in the next paragraph.

lower simple average return of 11.6% as compared to 16.5% for the P&C industry. The simple standard deviation for the MPCI industry was 13.7% compared to 9.2% for the P&C industry.

A review of the MPCI industry's profitability over time shows that while it generates profits in many years, significant drought years like 1993, 2002 and 2012 demonstrate that the industry is susceptible to large losses as well. The threat of such losses is demonstrated by not only the MPCI industry's lower average profits, but also its greater riskiness.

Financial theory tells us that in general, investors require higher expected returns when risks are greater. Therefore, when allocating their capital between the investment alternatives of the MPCI business or the P&C industry, a rational investor would be expected to choose to invest in the P&C industry, as over the long-term it has provided greater profits or returns with less variability or risk than the MPCI program.

The greater risk of the MPCI program is inherent in its structure. As previously detailed, the P&C industry has greater control over its ratemaking and underwriting activities.[17] Insurers can respond to underwriting losses by increasing their rates in subsequent years and/or limiting coverage. In comparison, MPCI companies must adhere to ratemaking decisions of and policy provisions established by FCIC/RMA, regardless of underwriting loss experience.

The overall findings are consistent with the general findings of the previous years' studies. Historically, the MPCI industry is at an overall economic disadvantage as compared to the P&C industry. The results of the current and previous studies are presented on the following page. Please note that the Grant Thornton, Deloitte, and PwC numerical results are not directly comparable due to differences in methodologies used and the time periods covered. The focus is on the overall results of the various studies.[18]

[17] Please refer to chart on page 3 of this Report.

[18] This table updates the standard deviation to be weighted standard deviations for all Grant Thornton reports. All Grant Thornton calculations for MPCI are adjusted for Quota Share. Whereas PwC utilized Surplus as the denominator in the MPCI calculations, Deloitte and Grant Thornton used Retained Premium in the denominator. PwC arrived at its Surplus estimate by assuming that it equaled 130% of Retained Premium. PwC made such an assumption due to the difficulty in assigning Surplus to an individual insurance line like MPCI. On the other hand, Deloitte and Grant Thornton chose to use a publicly available figure such as Retained Premium in their calculations.

Profitability		P&C Industry			MPCI Industry		
Report	Period	Metric	Wtd. Avg.	Std. Dev.	Metric	Wtd. Avg.	Std. Dev
Grant Thornton 2013 Update	1992-2012	Pretax Net Income/Adj. NEP	17.0%	9.2%	Pretax Net Income/ Retained Premium[19]	11.6%	14.7%
Grant Thornton 2012 Update	1992-2011	Pretax Net Income/Adj. NEP	17.0%	9.3%	Pretax Net Income/ Retained Premium[20]	16.0%	9.3%
Grant Thornton 2011 Update	1992-2010	Pretax Net Income/Adj. NEP	17.5%	9.5%	Pretax Net Income/ Retained Premium[21]	16.8%	9.9%
Grant Thornton 2010 Update	1992-2009	Pretax Net Income/Adj. NEP	17.3%	9.9%	Pretax Net Income/ Retained Premium[22]	16.0%	10.2%
Grant Thornton 2009 Update	1992-2008	Pretax Net Income/Adj. NEP	17.5%	10.2%	Pretax Net Income/ Retained Premium[23]	14.2%	10.0%
Grant Thornton 2008 Update	1992-2007	Pretax Net Income/Adj. NEP	18.6%	9.9%	Pretax Net Income/ Retained Premium[24]	14.7%	11.1%
Grant Thornton 2007 Update	1992-2006	Pretax Net Income /Adj. NEP[25]	17.4%	9.4%	Pretax Net Income/ Retained Premium[26]	12.5%	10.5%
Deloitte 2004	1992-2002	Pretax Net Income/Adj. DEP	12.7%	8.9%	Pretax Net Income/ Retained Premium	7.9%	12.9%
PwC 1999	1988-1997/8	Pretax Net Income/Surplus	16.6%	7.6%	Pretax Net Income/ Surplus[27]	15.8%	10.1%
PwC 1997	1988-1995	Pretax Net Income/Surplus	14.1%	7.3%	Pretax Net Income/ Surplus[25]	11.7%	10.4%

As detailed in the above table, the P&C industry has consistently reported higher profitability, usually with less variability in results. In general, this indicates that the participants in the overall P&C industry have the ability to generate greater returns with less risk, and therefore hold a competitive advantage over the MPCI program.

EFFECTIVENESS ANALYSIS

A second basis for comparison between the MPCI program and the P&C industry is their expense ratios. Although there are similarities in the types of expenses incurred by both businesses, expenses incurred by MPCI companies are unique in the insurance industry and involve some costs not usually incurred in other insurance lines, such as loss adjustment training for a wide variety of crops.

We have defined the MPCI Expense ratio as Total Expenses divided by Gross Premiums, while the P&C Expense ratio is defined as Total Expenses divided by Direct Premiums Written net of Expenses ("Adjusted DPW").[19] As previously stated, expenses are removed from P&C premiums in order to restate those premiums on a consistent basis with MPCI premiums, which are not expense loaded. Total Expenses include Loss Adjustment Expense, Commissions and Other Expenses incurred while selling and servicing business.[20]

Exhibit 4 shows the Total Expense to Gross Premium ratio for the MPCI program has declined significantly over time. Since 1993, MPCI Total Expense ratios have never been above 34.2%, and since 2004, they have not exceeded 25.1%. **Exhibit 4** also shows that the Total Expense ratio for the MPCI program is well below the Total Expense ratio observed for the P&C industry. The wide gap between the two programs is due to the fact that P&C industry expenses average close to a third of the total premium. After removing expenses from the premium, the P&C expense ratio rises to roughly 60% on average of the expected benefits delivered to policyholders. The major categories of expense used in our analysis are Commissions, Loss Adjustment Expense, and Other Expenses, which include salaries of company employees, IT support and overhead expenses. **Exhibit 5** provides a breakdown of the components of the Total Expense ratio; the three additional ratios presented are Loss Adjustment Expense/Premium, Commission/Premium and Other Expense/Premium. Overall, the MPCI program has lower expense ratios in all three categories.

[19] As previously noted, in order to compare the P&C expense ratios to those of the MPCI program, we need to account for the fact that the MPCI premium is not expected to cover expenses. In contrast, P&C industry premiums are expected to cover both losses and expenses. To ensure that ratios were comparable, we reduced the P&C Direct Written Premiums by the associated expenses. Expense ratios for the P&C industry were calculated from those adjusted figures. MPCI expense ratios were calculated based on Gross Premiums.

[20] Commission expense is the part of an insurance premium paid by the insurer to an agent or broker for his services in procuring and servicing insurance. Loss adjustment expenses are expenses incurred to investigate and compute losses. Because Direct Earned Premiums are used in this Section, Gross Expenses are deducted rather than the Net Expenses that were deducted in the prior Section.

The decline in MPCI Expense-Premium ratios presented in **Exhibits 4** and **5** is consistent with improved cost effectiveness of the industry as program participation has grown.[21] This decline has occurred even under stringent governmental requirements for insurers to provide service to all eligible producers regardless of the cost. Because of this requirement, private companies are precluded from taking many actions that other types of insurers use to contain costs and enhance economic viability. As a result, MPCI companies are required to offer coverage to growers with poor insurance experience, small acreage or other characteristics that may make them impossible or difficult to serve profitably. While this requirement may significantly increase overall program costs, it does support the social goal of making crop insurance available to all eligible farmers.

Exhibit 6 focuses on commission payments to agents and brokers, which constitute more than one-half of Total Expenses for the MPCI program. It indicates that Commission to Premium ratios for the MPCI program have never exceeded those for the P&C industry as a whole.

Exhibits 4 - 6 show that Expense to Premium ratios and A&O Reimbursement to Premium ratios increased slightly from 2011 to 2012 for the MPCI industry. The dollar value of the expenses incurred by and the dollar value of the reimbursements to the MPCI industry were relatively flat between 2011 and 2012 as a result of requirements imposed by the 2011 SRA.

Exhibit 7 compares 5-year averages (2008 - 2012) of Loss Adjustment Expense, Commission Expense and Other Expense ratios for MPCI to selected P&C lines, as well as Total P&C industry. This is intended to address the concern that the comparison of expenses to the total P&C industry might not be appropriate due to the inclusion of insurance products intended for commercial customers. The two P&C lines, Homeowners Multiple Peril and Private Passenger Automobile Physical Damage coverage, represent insurance coverages sold to individuals rather than to businesses. An additional criterion was to select coverages with low levels of litigation activity to ensure that the MPCI program was compared to P&C coverages that use a similar approach for adjusting claims. The exhibit indicates that Loss Adjustment and Other expense ratios for MPCI are less than either of the selected P&C lines as well as Total P&C industry. While the Commission expense ratio for the Private Passenger Auto Physical Damage line was slightly less than MPCI, the MPCI Commission expense ratio was below that for Homeowners Multiple Peril as well as the P&C industry as a whole.

[21] Program participation rates (defined as the ratio of net insured acres to total eligible acres) have increased dramatically in the past two decades. In 1980, the participation rate was less than 10%. By 1990, participation rates had increased to around 40%, where they hovered in the early 1990s. In 1995, participation rates jumped to over 80%. The jump in participation rates from 1994 to 1995 is coincident with the Federal Crop Insurance Reform Act of 1994, which made enrollment in the crop insurance program a precondition for participating in many of USDA's benefit support programs. Though participation rates decreased some after 1995, they were 77% in 2006, 85% in 2007, 84% in 2008, 83% in 2009, 81% in 2010, 84% in 2011 and 86% in 2012. Percentages updated per National Agricultural Statistics Service data as of November 2013.

A&O REIMBURSEMENT SHORTFALL

As shown in **Exhibit 1**, column (1), the crop insurance industry's Net Expense Gain (Loss) from the listed sources indicate that the amount of the MPCI expenses has exceeded A&O Reimbursements every year since 1997. Renegotiations of the SRA and the passage of the Agricultural Research, Extension and Education Reform Act of 1998 have significantly reduced A&O Reimbursements over time. Since 1998, the A&O Reimbursements have fallen short of MPCI incurred expenses by more than $100 million annually. In 2002, 2006 and 2007 the unreimbursed amounts exceeded $200 million, and in 2009, 2010, 2011 and 2012 the unreimbursed amount exceeded $430 million. The large deficits in 2009 and following years are due in part to the reduction in A&O reimbursements arising from the 2008 Farm Bill. (Discussed in the Section below) In general, A&O in recent years has been sufficient to cover agent compensation and very little else. See **Exhibit 5**. The 2011 SRA introduced caps on agent compensation while simultaneously capping A&O reimbursements. (Discussed in the 2011 Standard Reinsurance Agreement section of this report) The most recent annual deficit decreased to $430.6 million from $561.9 million in the previous year. This decrease is the result of the SRA requirement that companies pay contingent commissions out of their countrywide Net Underwriting gains. Most companies were unable to pay contingent commissions in 2012 due to losses from the drought.

Exhibit 8 compares the historical level of expenses incurred in delivering crop insurance by the MPCI companies to the historical level of A&O Reimbursements. It indicates that although the MPCI companies have reduced expenses over time through efficiencies, the A&O Reimbursements have regularly fallen short of covering the expenses incurred. The inadequacy of the A&O Reimbursements is absorbed by the MPCI companies through a reduction in their pre-tax net income.

EFFECT OF THE 2008 FARM BILL

The Food, Conservation, and Energy Act of 2008 ("2008 Farm Bill") introduced changes starting with the 2009 reinsurance year which affected the profitability of MPCI companies by reducing the amount of A&O Reimbursement and delaying payment by FCIC of both A&O Reimbursement and Underwriting Gains as noted below:

7 U.S.C. § 1508 (b) (11) CAT Loss Adjustment Expense Reimbursement:

- Reduced the maximum rate of reimbursement for "expenses incurred by the approved insurance provider or agent for loss adjustment" from 7.0%[22] to 6.0% of "the premium for catastrophic risk protection that is used to define loss ratio."

7 U.S.C. § 1508 (k) (4) Reinsurance A&O Reimbursement:

- Effective beginning with the 2012 reinsurance year, delays the reimbursement of allowable A&O costs to October of the following reinsurance year. Reimbursements covering the 2012 reinsurance year ending June 30, 2012

[22] The 2008 Farm Bill states the reduction is from 8% to 6%; however, the 2005 SRA had previously reduced the actual reimbursement rate from 8% to 7%.

will not be paid until October 2012.

- For the 2009 and 2010 reinsurance year, reduced the rate of reimbursement of allowable A&O costs for additional (buy-up) coverage (originally 24.2%) by 2.3 percentage points. Only half of the reduction will apply "to the total premium written in a State in which the State loss ratio is greater than 1.2."
- Effective beginning with the 2009 reinsurance year, reduced the reimbursement rate for area policies and plans of insurance to 12.0% of the gross (net book) premium.

7 U.S.C. § 1508 (k) (9) Due Date for Payment of Underwriting Gains:

- Effective beginning with the 2011 reinsurance year, delays the payment of underwriting gains to October 1st of the following calendar year. Payments for underwriting gains covering the 2011 reinsurance year ending June 30, 2011 would not be paid until October 1, 2012.

THE 2011 STANDARD REINSURANCE AGREEMENT

RMA and the crop insurance industry renegotiated the terms of the Standard Reinsurance Agreement during late 2009 and the first half of 2010. These changes became effective on July 1, 2010, the start of the 2011 reinsurance year. The major changes included a sharp reduction in underwriting gain potential in certain states, modest changes in gain and loss potential in other states, and the introduction of an upper limit on the amount of A&O reimbursements to be paid to the companies participating in the program. The following highlight these major changes and their effect on the year in review.

A&O reimbursements were previously paid as a fixed percentage of net book premiums. Under the new agreement, total reimbursements for 2011 were set at a fixed level comparable to 2010, despite the significant increase in gross premiums. A&O in subsequent years would include a small increase for expected inflation. **Exhibit 5** shows that this resulted in a smaller ratio of A&O reimbursements to gross premiums (12.6 % in 2012 and 11.5% in 2011 compared to 18.0% in 2010).

SUMMARY AND CONCLUSIONS

This report analyzes the profitability and effectiveness of the MPCI program based on available data. Specifically, it presents Pretax Net Income, risk and return profiles for the MPCI industry to the broader P&C industry. It also compares expense ratios for the two industries. It further examines MPCI's historical subsidies for A&O Reimbursements and their shortfall when compared to actual expenses incurred by the MPCI companies.

The results of this analysis continue to indicate that the MPCI program is at a risk-return disadvantage relative to the P&C industry. The P&C industry experienced an annual net loss in only one year in its history, 2001, largely due to the extraordinary losses related to the September 11 attack on the World Trade Center and Pentagon. In contrast, the MPCI program as a whole lost money in three years between 1992 and 2012 alone (1993, 2002 and

2012). The delivery cost of the MPCI program as measured by the ratio of expenses to premium continues to be substantially better than the corresponding ratio for the P&C industry. In addition, total A&O Reimbursements have fallen short of MPCI companies' total expenses for all years since 1997. The results of this analysis may be updated and augmented as additional data and information become available.

Exhibit 1

Profitability of the MPCI Program
(in millions)

Calendar Year	Net Expense Gain/(Loss) [a]	Net Underwriting Gain/(Loss) [b]	Net Book Quota Share Gains for State Group 3 [c]	Pretax Net Income	Retained Premium [d]	Pretax Net Income / Retained Premium
Formula	(1)	(2)	(3)	(4) = (1)+(2)+(3)	(5)	(6) = (4)/(5)
1992	$ 5.4	$ 21.8	$ -	$ 27.2	$ 465.6	5.8%
1993	2.6	(83.3)	-	(80.7)	434.5	-18.6%
1994	(4.1)	103.3	-	99.2	534.5	18.6%
1995	20.3	131.7	-	152.0	768.5	19.8%
1996	1.3	247.5	-	248.8	1,155.1	21.5%
1997	(60.5)	352.1	-	291.6	1,263.1	23.1%
1998	(109.7)	279.2	-	169.5	1,591.7	10.6%
1999	(113.5)	271.8	-	158.3	1,836.9	8.6%
2000	(140.1)	281.8	-	141.7	1,894.2	7.5%
2001	(179.9)	345.9	-	166.0	2,373.0	7.0%
2002	(200.3)	(47.4)	-	(247.7)	2,295.0	-10.8%
2003	(164.8)	378.4	-	213.6	2,607.1	8.2%
2004	(134.0)	692.0	-	558.0	3,145.2	17.7%
2005	(160.9)	916.4	-	755.5	2,892.9	26.1%
2006	(201.2)	842.4	-	641.2	3,501.9	18.3%
2007	(233.5)	1,597.4	-	1,363.9	4,898.7	27.8%
2008	(160.8)	1,105.1	-	944.3	7,743.8	12.2%
2009	(476.1)	2,226.4	-	1,750.3	6,626.6	26.4%
2010	(525.3)	1,914.3	-	1,389.0	6,052.6	22.9%
2011	(561.9)	1,666.9	26.6	1,131.6	9,531.4	11.9%
2012	(430.6)	(1,316.2)	-	(1,746.8)	8,639.8	-20.2%
Totals	$ (3,827.6)	$ 11,927.5	$ 26.6	$ 8,126.5	$ 70,252.1	

1992-2012	**Simple Average**	11.6%
	Simple Standard Deviation	13.7%
	Weighted Average	11.6%
	Weighted Standard Deviation	14.7%

See chart after Exhibit 8 for all sources

Exhibit 2

Profitability of the Property & Casualty Insurance Industry (in millions)

Calendar Year	Net Underwriting Gain/(Loss) [a]	Net Investment Income [a]	Realized Capital Gain/(Loss) [b]	Pretax Net Income	Net Earned Premium [c]	Total Net Expenses [d]	Adjusted Net Earned Premium	Pretax Net Income / Adjusted NEP
Formula	(1)	(2)	(3)	(4) = (1)+(2)+(3)	(5)	(6)	(7) = (5) - (6)	(8) = (4) / (7)
1992	$ (36,260)	$ 33,734	$ 9,874	7,348	$ 225,778	$ 92,288	$ 133,490	5.5%
1993	(18,094)	32,645	10,153	24,704	235,514	94,910	140,604	17.6%
1994	(22,083)	33,687	1,620	13,224	244,230	98,557	145,673	9.1%
1995	(17,375)	36,834	5,997	25,456	254,048	104,074	149,974	17.0%
1996	(17,162)	37,962	9,249	30,049	266,552	106,147	160,405	18.7%
1997	(6,030)	41,499	11,068	46,537	275,801	110,275	165,526	28.1%
1998	(17,669)	41,097	17,506	40,934	280,335	115,450	164,885	24.8%
1999	(24,750)	40,071	13,034	28,355	285,501	118,804	166,697	17.0%
2000	(32,143)	42,650	16,484	26,991	298,233	121,790	176,443	15.3%
2001	(52,692)	39,849	6,978	(5,865)	317,596	129,303	188,293	-3.1%
2002	(32,347)	41,099	2,824	11,576	358,554	142,043	216,511	5.3%
2003	(5,230)	41,147	6,519	42,436	399,126	153,895	245,231	17.3%
2004	1,692	41,776	9,191	52,659	423,662	162,830	260,832	20.2%
2005	(6,676)	51,879	12,121	57,324	428,763	167,916	260,847	22.0%
2006	34,141	54,826	3,585	92,552	445,527	172,735	272,792	33.9%
2007	18,779	58,054	8,995	85,828	447,953	175,719	272,234	31.5%
2008	(21,819)	54,421	(21,223)	11,379	446,301	174,477	271,824	4.2%
2009	(198)	50,918	(8,254)	42,466	426,195	172,416	253,779	16.7%
2010	(10,362)	49,861	8,296	47,795	425,137	174,853	250,284	19.1%
2011	(35,207)	51,370	7,580	23,743	438,584	179,125	259,459	9.2%
2012	(13,806)	49,237	9,035	44,466	450,391	184,193	266,198	16.7%
Totals	$ (315,291)	$ 924,616	$ 140,632	$ 749,957	$ 7,373,781	$ 2,951,800	$ 4,421,981	

1992-2012	**Simple Average**	16.5%
	Simple Standard Deviation	9.2%
	Weighted Average	17.0%
	Weighted Standard Deviation	9.2%

See chart after Exhibit 8 for all sources

Exhibit 3 Comparison of Pretax Net Income

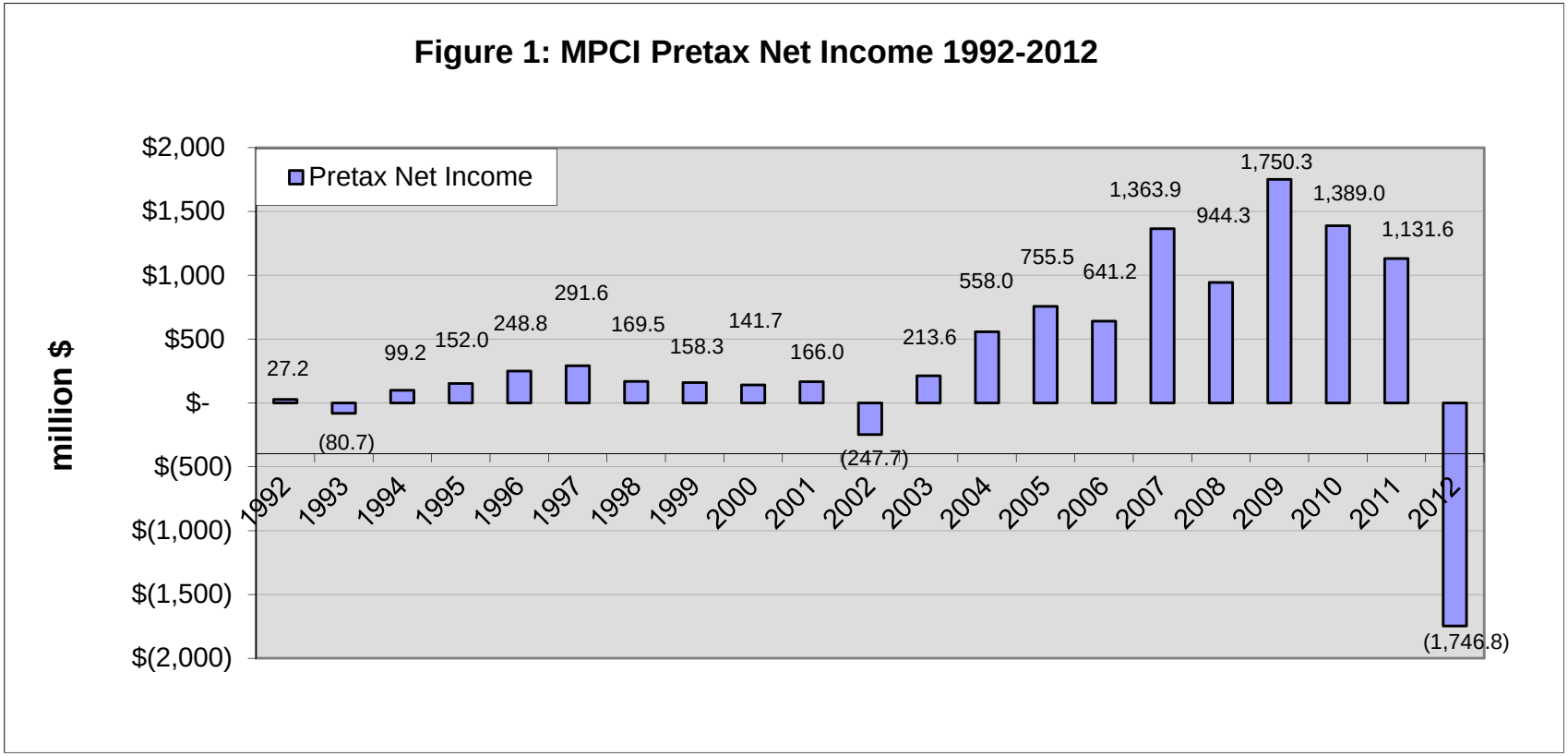
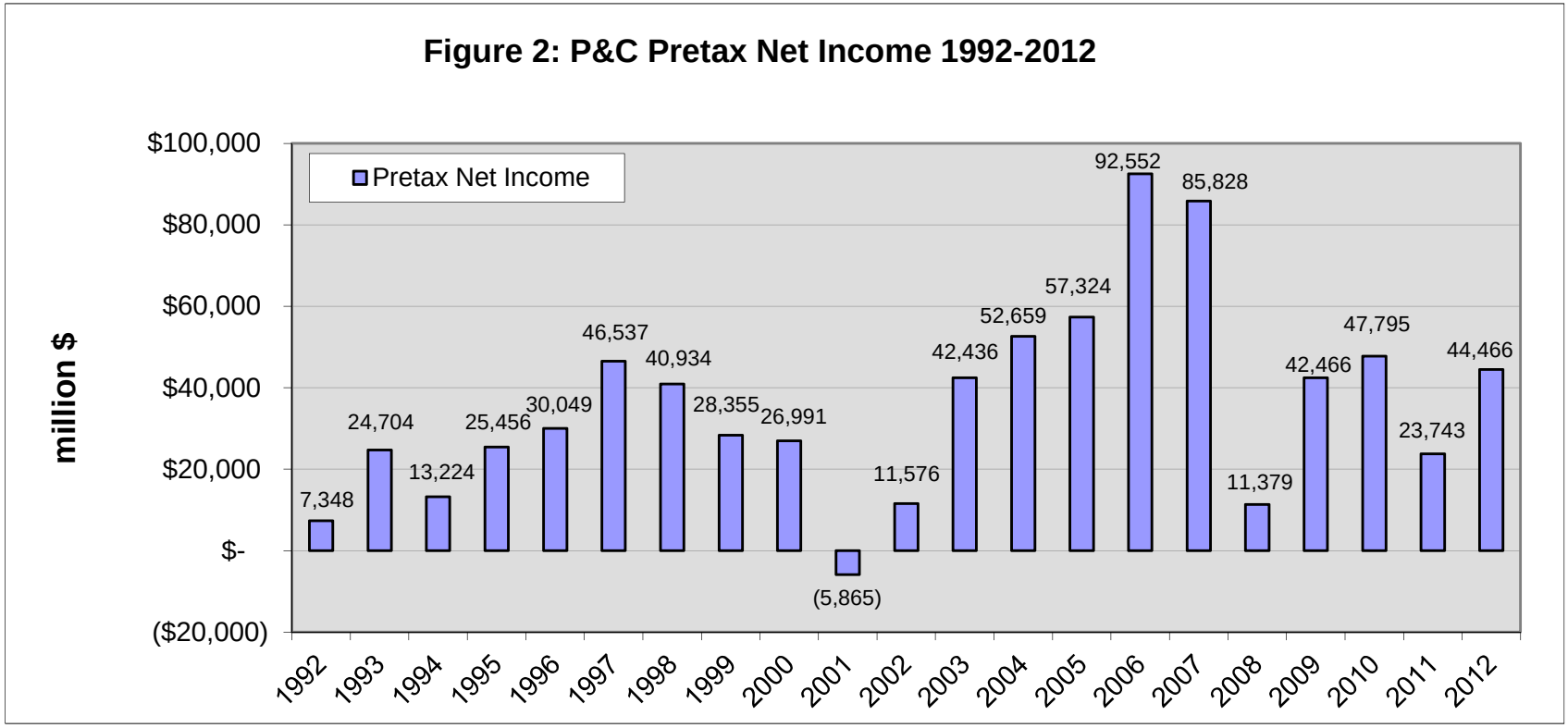


Exhibit 3 Comparison of Pretax Net Income



See chart after Exhibit 8 for all sources

Exhibit 3.1 Comparison of Pretax Net Income as a Percentage of Premium

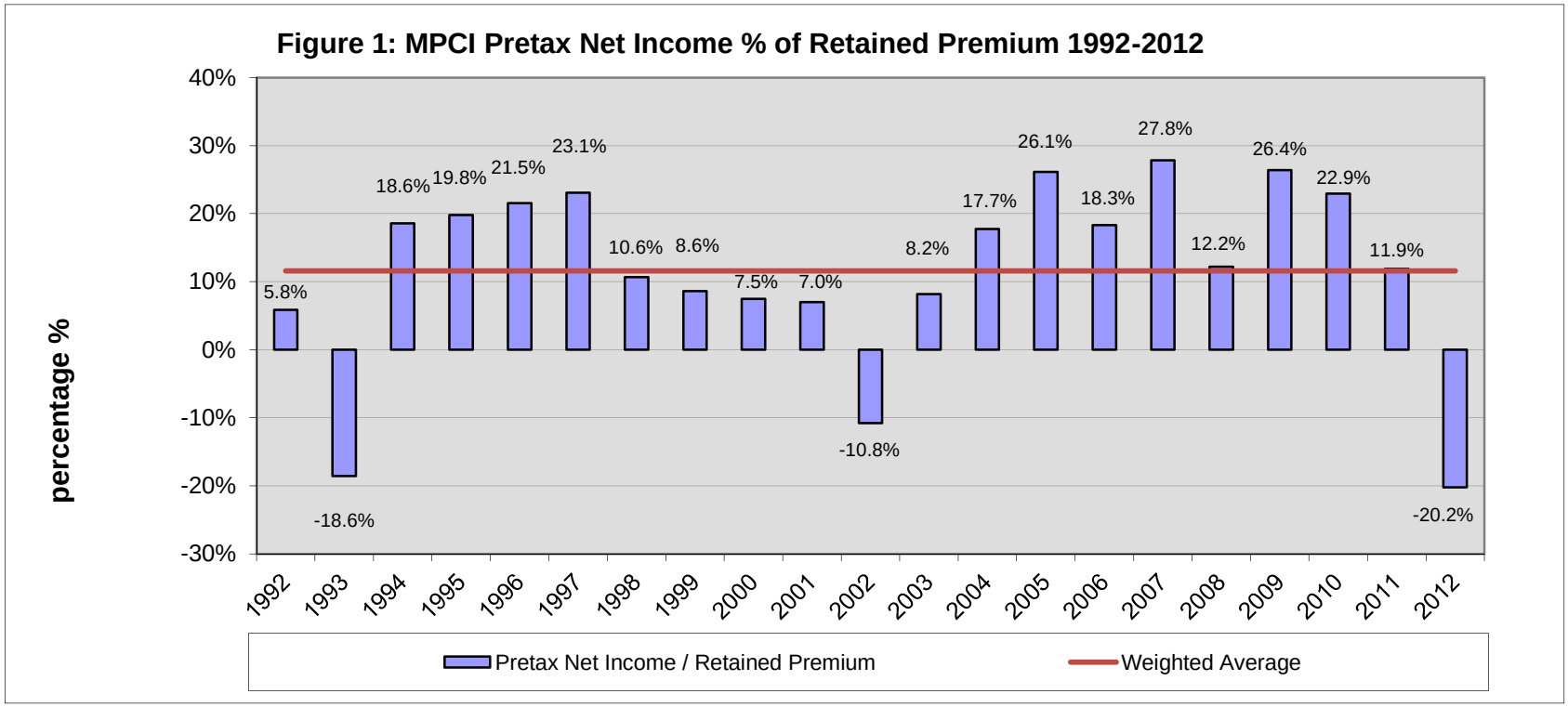
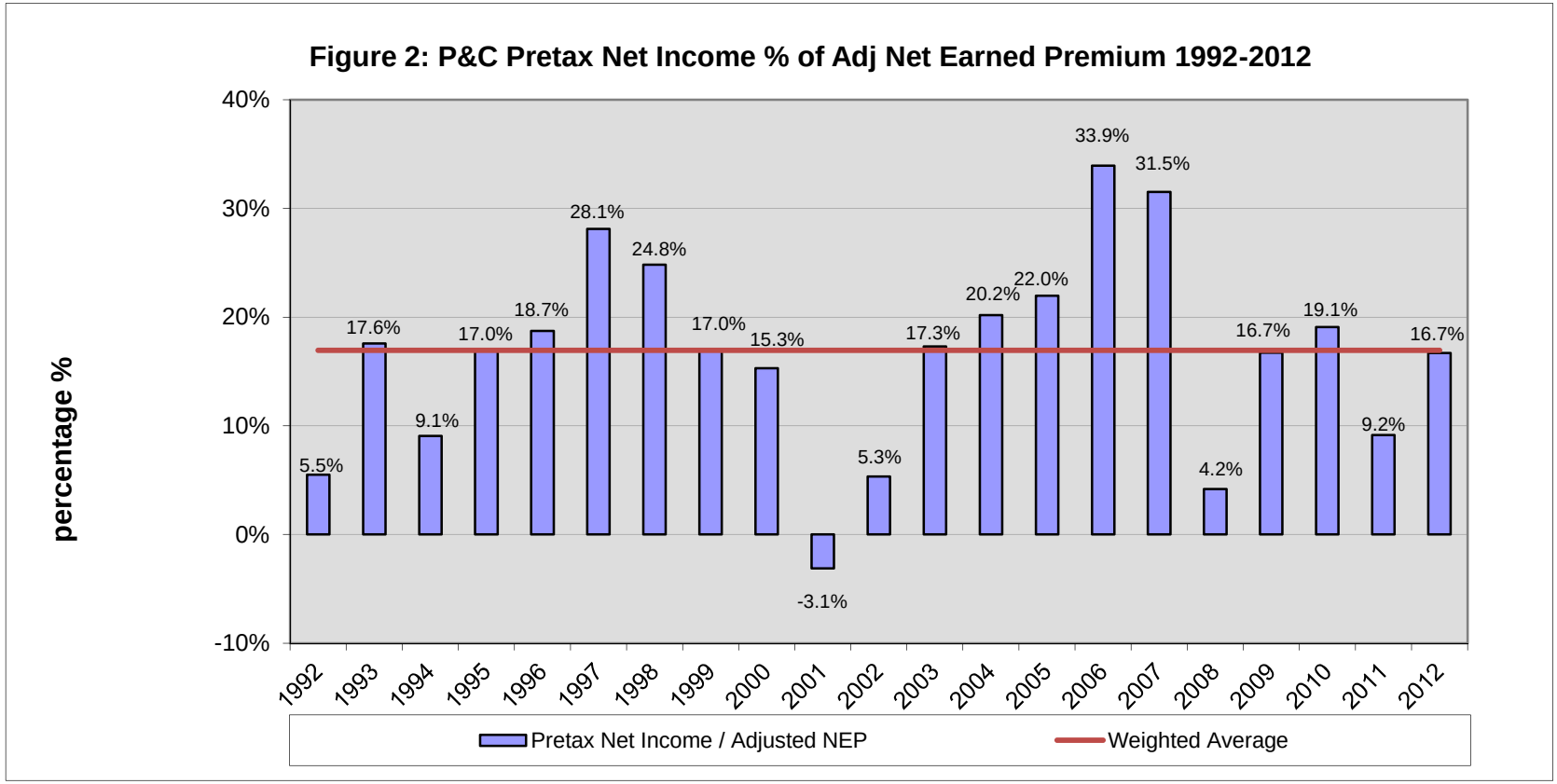


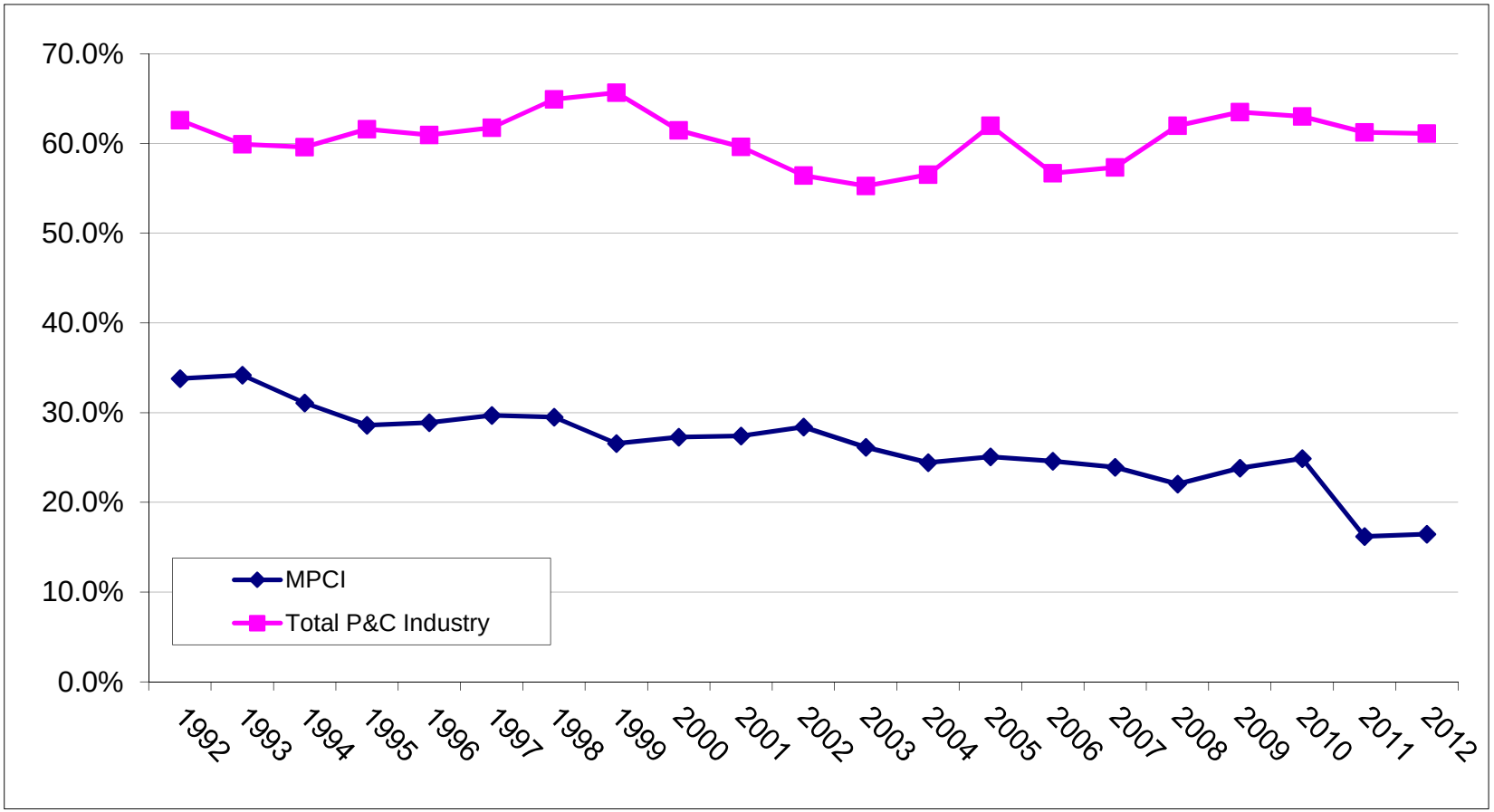
Exhibit 3.1 Comparison of Pretax Net Income as a Percentage of Premium



See chart after Exhibit 8 for all sources

Exhibit 4

Total Expense to Premium Ratios
MPCI vs. Property & Casualty



See chart after Exhibit 8 for all sources

Exhibit 5 Expense to Premium Ratios

5.1: MPCI

Year	Loss Adjustment Expense / Gross Premium	Commission / Gross Premium	Other Expense / Gross Premium	Total Expense / Gross Premium	A&O Reimbursement / Gross Premium	A&O Reimbursement Excess / (Shortfall)
1992	4.2%	16.0%	13.6%	33.8%	34.6%	0.8%
1993	5.4%	16.8%	12.0%	34.2%	34.6%	0.4%
1994	3.9%	17.0%	10.3%	31.1%	30.7%	-0.4%
1995	3.9%	14.9%	9.8%	28.6%	30.2%	1.6%
1996	3.6%	15.9%	9.4%	28.9%	29.0%	0.1%
1997	3.4%	15.6%	10.6%	29.7%	26.1%	-3.6%
1998	3.7%	16.6%	9.2%	29.5%	23.7%	-5.8%
1999	3.1%	15.5%	8.0%	26.6%	21.6%	-4.9%
2000	3.5%	15.9%	7.9%	27.3%	21.8%	-5.5%
2001	3.7%	15.7%	8.1%	27.4%	21.4%	-6.0%
2002	4.2%	15.8%	8.4%	28.4%	21.5%	-6.9%
2003	3.3%	15.9%	6.9%	26.2%	21.4%	-4.8%
2004	2.8%	15.6%	6.0%	24.4%	21.2%	-3.2%
2005	3.3%	15.2%	6.6%	25.1%	21.0%	-4.1%
2006	2.9%	15.6%	6.2%	24.6%	20.3%	-4.3%
2007	2.3%	17.0%	4.6%	23.9%	20.4%	-3.6%
2008	1.8%	16.8%	3.0%	22.1%	20.4%	-1.6%
2009	2.5%	17.0%	4.1%	23.8%	18.3%	-5.5%
2010	2.8%	16.7%	5.2%	24.9%	18.0%	-6.9%
2011	2.2%	10.7%	3.4%	16.2%	11.5%	-4.7%
2012	2.7%	9.8%	4.0%	16.5%	12.6%	-3.9%
Simple Averages 1992-2012	3.3%	15.5%	7.5%	26.3%	22.9%	-3.5%

Exhibit 5 Expense to Premium Ratios

5.2: Total P&C Industry

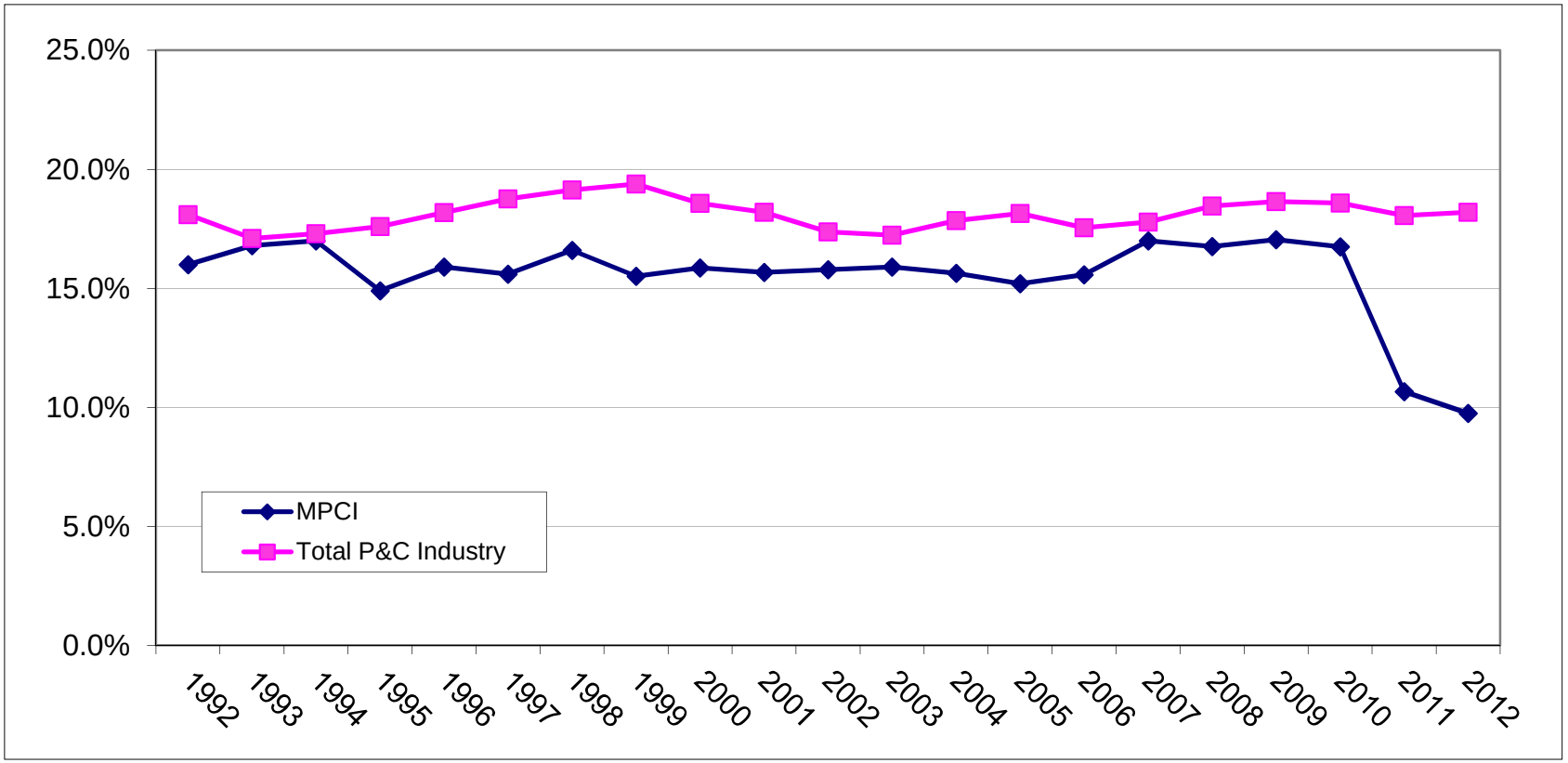
Year	Gross Loss Adjustment Expense / Adjusted DPW [a]	Gross Commission / Adjusted DPW [a]	Gross Other Expense / Adjusted DPW [a]	Total Gross Expense / Adjusted DPW [a]
1992	21.7%	18.1%	22.8%	62.6%
1993	20.0%	17.1%	22.7%	59.9%
1994	20.1%	17.3%	22.3%	59.6%
1995	20.8%	17.6%	23.1%	61.6%
1996	20.1%	18.2%	22.7%	60.9%
1997	19.5%	18.8%	23.5%	61.8%
1998	21.2%	19.1%	24.6%	64.9%
1999	20.9%	19.4%	25.3%	65.7%
2000	19.3%	18.6%	23.6%	61.5%
2001	19.7%	18.2%	21.7%	59.6%
2002	18.6%	17.4%	20.5%	56.4%
2003	18.0%	17.2%	20.0%	55.3%
2004	18.8%	17.8%	19.9%	56.5%
2005	22.8%	18.1%	21.1%	62.0%
2006	17.8%	17.5%	21.3%	56.7%
2007	17.4%	17.8%	22.2%	57.3%
2008	18.7%	18.5%	24.8%	62.0%
2009	20.4%	18.6%	24.5%	63.5%
2010	19.3%	18.6%	25.1%	63.0%
2011	18.8%	18.1%	24.3%	61.2%
2012	18.4%	18.2%	24.5%	61.1%
Simple Averages 1992-2012	19.6%	18.1%	22.9%	60.6%

[a] Adjusted DPW equals Direct Premium Written less Total Expenses

See chart after Exhibit 8 for all sources

Exhibit 6

Commission Expense to Premium Ratios
MPCI vs. Property & Casualty



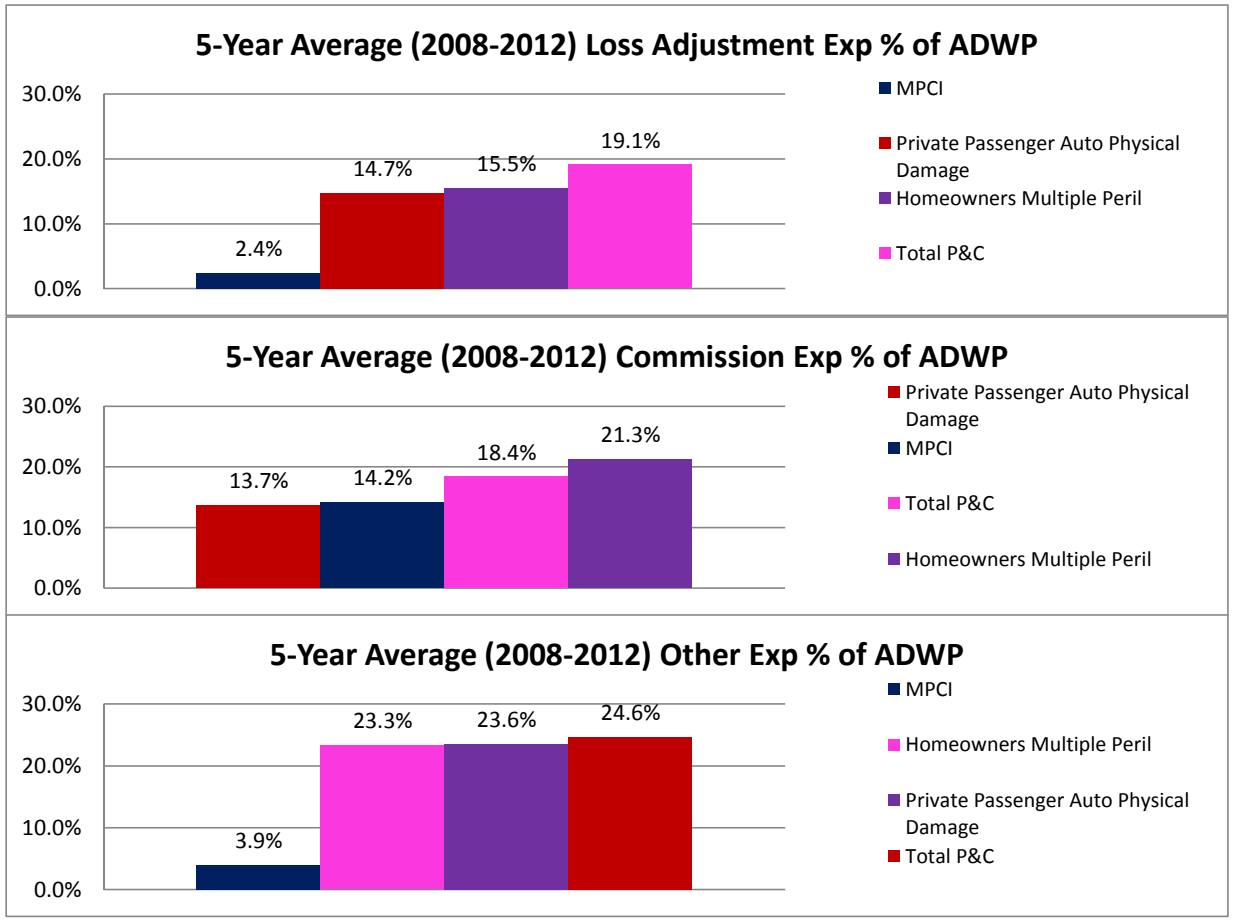
See chart after Exhibit 8 for all sources

Exhibit 7

Comparison of Expense Ratios

MPCI to Various Property & Casualty Insurance Lines

5-yr Average of Loss Adjustment, Commission and Other Expenses to Premium Ratios

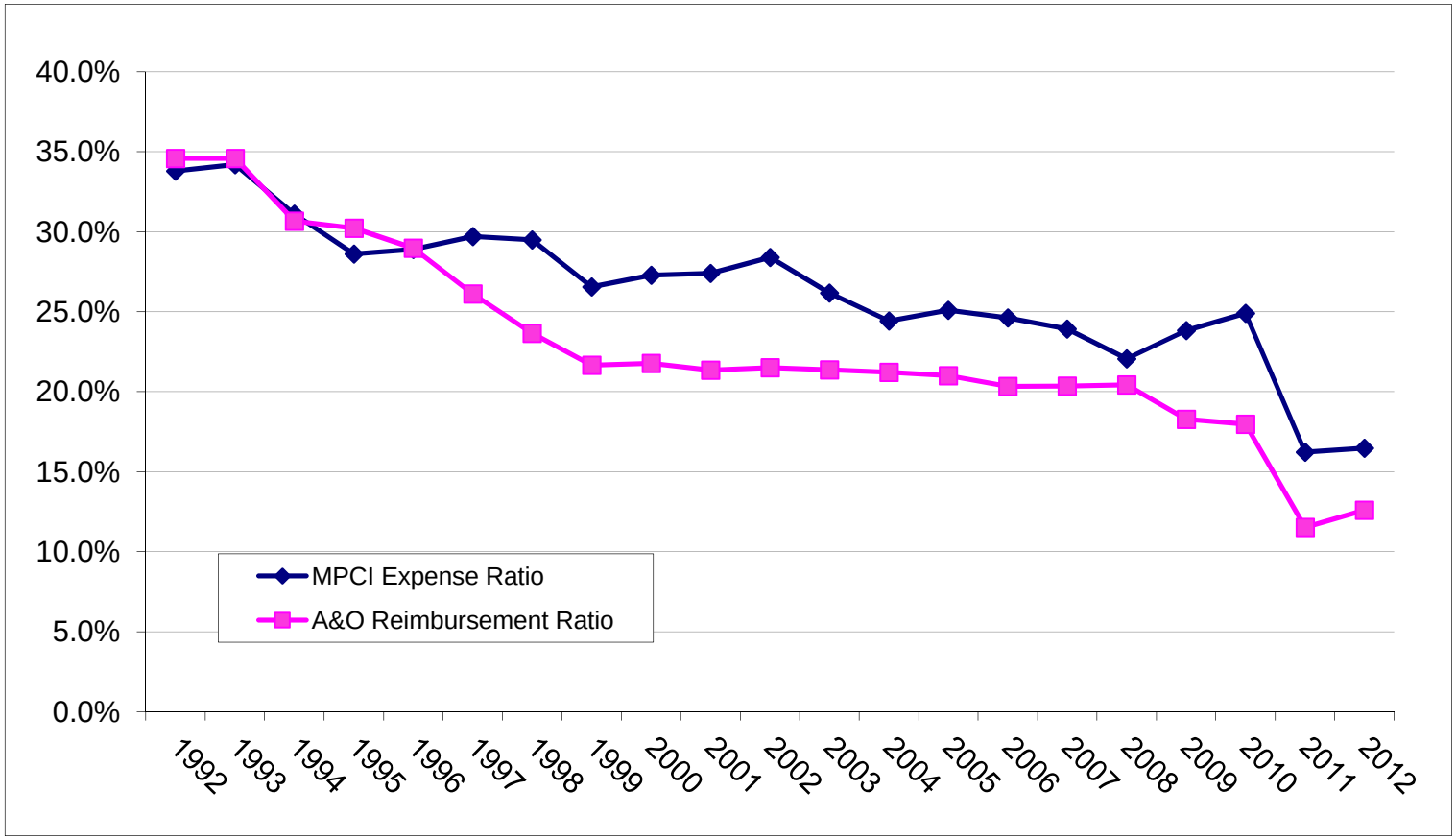


See chart after Exhibit 8 for all sources

Exhibit 8

Comparison of A&O Reimbursement to Total Expense

Ratio of A&O Reimbusement to Gross Premium and Total Expense to Gross Premium



See chart after Exhibit 8 for all sources

Sources to Exhibits

Exhibit 1	**[a] Expenses:** 1992-1998: PwC 1999 Update Exhibit 4 and Deloitte 2004 Report Exhibit 5.1 1999-2012: Surveys of NCIS member companies **A&O Reimbursement:** 1992-2006: MPCI data from RMA charts, August 14, 2007 as provided by NCIS 2007-2012: Surveys of NCIS member companies **[b]** 1992-1994: MPCI data from RMA charts, August 14, 2007 as provided by NCIS 1995-2006: Net Underwriting Gain/Loss data from RMA, excludes CAT business written by FSA 2007-2012: Surveys of NCIS member companies **[c]** 2011-2012: Surveys of NCIS member companies. Current year estimated at time of survey, prior year amount was adjusted based on amounts reported in current year survey **[d]** 1992-2006: From Net Underwriting Gain/(Loss) data per RMA adjusted to remove CAT business written by FSA 2007: RMA Reinsurance runs as of October 2008 2008-2012: Surveys of NCIS member companies
Exhibit 2	**[a]** 1992-2002: Best's Aggregates & Averages 2007, Industry Operating Results, p. 407, includes State Funds 2003-2012: Best's Aggregates & Averages 2013, Industry Operating Results, p. 367, includes State Funds **[b]** 1992-1996: PriceWaterhouseCoopers 1999 Update, Exhibit 1 (used in Deloitte 2004 report Exhibit 2) 1997-2000: Best's Aggregates & Averages 2002, QAR p. 106 2001: Best's Aggregates & Averages 2006, QAR, p. 89 2002-2004: Best's Aggregates & Averages 2007, QAR, p. 91 2005: Best's Aggregates & Averages 2010, QAR, p. 81 2006: Best's Aggregates & Averages 2011, QAR, p. 81 2007: Best's Aggregates & Averages 2012, QAR, p. 81 2008-2012: Best's Aggregates & Averages 2013, QAR, p. 81

Sources to Exhibits

Exhibit 2	**[c]** 1992-1995: Best's Aggregates & Averages 2002, Cumulative By Line Underwriting Experience, Net Premiums, p. 278 1996: Best's Aggregates & Averages 2006, Cumulative By Line Underwriting Experience, Net Premiums, p. 407 1997 & 2000: Best's Aggregates & Averages 2007, Cumulative By Line Underwriting Experience, Net Premiums, p. 417 1998-1999 & 2001-2002: Best's Aggregates & Averages 2008, Cumulative By Line Underwriting Experience, Net Premiums, p. 417 2003-2012: Best's Aggregates & Averages 2013, Cumulative By Line Underwriting Experience, Net Premiums, p. 377 **[d]** 1992-1995: PriceWaterhouseCoopers 1999 Update, Exhibit 1 (used in Deloitte 2004 report Exhibit 2) 1996: calculated from ratios in Best's Aggregates & Averages 2006, Cumulative By Line Underwriting Experience, Net Premiums, p. 407 1997 & 2000-2001: calculated from ratios in Best's Aggregates & Averages 2007, Cumulative By Line Underwriting Experience, Net Premiums, p. 417 1998-1999 & 2002-2003: calculated from ratios in Best's Aggregates & Averages 2008, Cumulative By Line Underwriting Experience, Net Premiums, p. 417 2004-2012: calculated from ratios in Best's Aggregates & Averages 2013, Cumulative By Line Underwriting Experience, Net Premiums, p. 377 The values derived from ratios in Best's Aggregates and Averages could differ from actuals due to rounding.
Exhibit 3	Exhibits 1 and 2
Exhibit 3.1	Exhibits 1 and 2
Exhibit 4	Exhibits 5.1 and 5.2
Exhibit 5.1	**Expenses:** 1992-1998: PwC 1999 Update Exhibit 4 and Deloitte 2004 Report Exhibit 5.1 1999-2012: Surveys of NCIS member companies **A&O Reimbursement:** 1992-2006: MPCI data from RMA charts, August 14, 2007 as provided by NCIS 2007-2012: Surveys of NCIS member companies

Sources to Exhibits

Exhibit 5.2	1992-1995: PwC 1999 Update Exhibit 4 and Deloitte 2004 Report Exhibit 5.2 1996: A.M. Best's Aggregates & Averages 2006, expense ratios converted to adjusted Direct Premiums Written 1997 & 2000: A.M. Best's Aggregates & Averages 2007, expense ratios converted to adjusted Direct Premiums Written 1998-1999 & 2001-2003: A.M. Best's Aggregates & Averages 2008, expense ratios converted to adjusted Direct Premiums Written 2004-2012: A.M. Best's Aggregates & Averages 2013, expense ratios converted to adjusted Direct Premiums Written
Exhibit 6	Exhibits 5.1 and 5.2
Exhibit 7	**Homeowners Multiple Peril, Private Passenger Auto Physical Damage, and Total P&C (Total All Lines):** 2008-2012: A.M. Best's Aggregates & Averages 2013 pgs 380, 383, 385. **MPCI** 2008-2012: Surveys of NCIS member companies
Exhibit 8	Exhibit 5.1