

**FEDERAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Prepared for:

Morrison & Hecker L.L.P. on behalf of National Crop Insurance Services

April 1997

Price Waterhouse LLP



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Table of Contents

- I. Introduction
- II. Profitability
- III. Program Expenses

APPENDIX: Comments on specific issues from the GAO Report



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

I. INTRODUCTION

Price Waterhouse has been engaged by Morrison & Hecker L.L.P. on behalf of National Crop Insurance Services to conduct a Profitability and Effectiveness Analysis of the Multiple Peril Crop Insurance (“MPCI”) market. This material represents a final report of our findings regarding this program.

The pages that follow review the approach used for measuring profitability of Multiple Peril Crop Insurers. To prepare the benchmark analysis, Price Waterhouse accumulated data from the nine companies audited by the General Accounting Office (GAO). MPCI premium of these nine companies account for 85% of total MPCI premium. To the extent possible, our analysis focuses on data made available by private insurers. Where necessary, we have supplemented aggregate numbers for the MPCI program with figures from the Property/Casualty industry.

Section II of this document discusses our analysis of profitability. We first address appropriate measures of profitability, recognizing that MPCI reinsured companies are Property/Casualty insurers. One difference between the Federal Crop Insurance Program and other government insurance programs (for example, Medicare) is that the companies in the Federal Crop Insurance Program participate as insurers, rather than as administrators hired to perform administrative services on behalf of the government. In doing so, these companies place their own capital at risk. Therefore, the appropriate benchmark for comparison of the profitability of MPCI insurers is other risk-taking Property/Casualty insurers.

Section III of this document provides further analysis and a comparison of the components of MPCI and Property/Casualty industry expenses. This section also addresses the results of Federal Crop Insurance Corporation (FCIC) simplification efforts and an appropriate basis for determining allowable expenses.

Finally, in an Appendix, we address specific issues raised in the draft report of the GAO in its audit of MPCI companies for the 1994 - 1995 years.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

As members of a class of Property/Casualty insurers, profitability of MPCCI reinsured companies is appropriately benchmarked against other Property/Casualty insurers with like risk-profiles. The volatility of profitability results for the MPCCI business is greater than that of the Property/Casualty industry as a whole, indicating that MPCCI is a more risky line of business. In addition, as demonstrated within Section III, the MPCCI business is more complex than that of other Property/Casualty lines. Regulations have been developed to make the Federal Crop Insurance Program accessible to all farmers, which present additional financial and administrative difficulties to the MPCCI reinsured companies. For example, remittance of premium at harvest reduces the amount of funds available for investment by the companies.

A comparison of the profitability of the MPCCI insurers with the Property/Casualty industry as a whole demonstrates at an aggregate level the profits are lower than the industry. In addition, MPCCI insurers encounter a higher degree of risk and market a more complex product.

Below are the key points of each section of the report. Please refer to the body of the document for further details.

Profitability

The pre-tax rate of return on the MPCCI line of business (11.7%) over the eight year period from 1988-1995 is lower than that of the Property/Casualty industry as a whole (14.1%).

The volatility of returns over the eight year period from 1988-1995 is almost fifty percent greater in the MPCCI line of business than in the Property/Casualty industry as a whole. This volatility demonstrates inherently greater risk in the MPCCI line.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

The GAO report refers to "7 to 10 percent as a long-term target for underwriting gains on the premiums for which they [insurers] retain risk." While we do not necessarily agree with this standard, we note that the underwriting gain of the MPCCI participating companies for the period 1988-1995 averages 7.5% of mean earned premium, which is at the lower end of the GAO's range.

Program Expenses

MPCI companies consistently show lower total expense ratios than the Property/Casualty industry for the 1988-1995 period. In addition, MPCCI expense ratios have decreased over the eight year period. The reduction in expenses shows efficiencies achieved by MPCCI reinsured companies. Where comparisons can be drawn with other delivery systems, private section MPCCI delivery is less costly.

Analysis of process flows for sales and service indicates that the work required to sell or renew an MPCCI policy is considerably more intense than that of the typical Property/Casualty sales process.

The effects of FCIC simplification initiatives are difficult to quantify. From the companies' perspective, simplification efforts do not appear to be yielding the expected savings.

Over the eight year period 1988-1995, the participating companies have operated at a cumulative deficit with respect to expense reimbursement (total reimbursement less than total incurred expenses).



NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS

Despite the cumulative expense deficit, the GAO recommends a 23% reduction in the expense reimbursement percentage from 31% to 24% of premium.

Of this 23% reduction:

- *5% is for the effect of "excess" current reimbursement based on one favorable year's experience in the last eight years;*
- *8% is for expenses that arise in the ordinary course of business; and*
- *10% is for the leveraging effect of higher prices, based on two years of higher crop prices.*



II. PROFITABILITY

KEY POINTS:

The pre-tax rate of return on the MPCCI line of business (11.7%) over the eight year period from 1988-1995 is lower than that of the Property/Casualty industry as a whole (14.1%).

The volatility of returns over the eight year period from 1988-1995 is almost fifty percent greater in the MPCCI line of business than in the Property/Casualty industry as a whole. This volatility demonstrates inherently greater risk in the MPCCI line.

The GAO report refers to “7 to 10 percent as a long-term target for underwriting gains on the premiums for which they [insurers] retain risk.” While we do not necessarily agree with this standard, we note that the underwriting gain of the MPCCI participating companies for the period 1988-1995 averages 7.5% of mean earned premium, which is at the lower end of the GAO’s range.

BACKGROUND

A measure of profitability in any industry is the rate of return on capital employed. MPCCI reinsured companies are Property/Casualty insurers. The companies in the National Crop Insurance Program that write MPCCI business participate as insurers, and in doing so, place their own capital at risk.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

In other government programs (for example, Medicare) insurance companies act as administrators hired to perform administrative services on behalf of the government. If MPCCI insurers were acting simply as administrators, the only source of risk and profit would be their expense reimbursement, and the capital employed would be the capital used to develop systems, to operate processing facilities, etc. There would be no potential for underwriting loss. MPCCI insurers have the same capital requirements as an administrator, in addition to the capital that an insurer must commit to underwriting risk (i.e., “surplus”). In any year, an insurer could make a profit or a loss on either of these components: risk or administration. In the long term, to remain profitable and committed to a particular line of insurance, the insurer needs to earn a satisfactory level of *total* return. Therefore, the appropriate benchmark for comparison of profitability of MPCCI insurers is other risk-taking Property/Casualty insurers.

Profitability of the Property and Casualty Industry

METHODOLOGY

Although there are different definitions of Property/Casualty profitability, it is possible to develop some meaningful measures for both profit and capital employed and to draw some relevant conclusions.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

The Property/Casualty insurance industry generally includes the following components in “profit”:

“**Net underwriting income**” is defined as all income before tax from all sources other than net investment income and capital gains/losses. Specifically, it is defined as premiums less claims, less reserves and loss adjustment expenses, less all other administration expenses.

“**Other miscellaneous income/expenses**” includes miscellaneous items, and is generally not material to Pre-tax operating income.

“**Net investment income**” includes investment income earned during the year, less allocated investment expenses and depreciation on real estate.

“**Realized Capital Gains/Losses**” are pretax capital gains or losses realized on the sale of bonds, common stock, preferred stock, real estate and other invested assets during the year.

“**Unrealized Capital Gains/Losses**” are net unrealized market appreciation or depreciation on the carrying value of invested assets, principally equity securities from the prior year or from date of purchase if held less than one year.

To simplify comparisons, we will exclude consideration of income taxes. Thus, we have defined a measure of return, “Total Pretax Income,” calculated below.

Total		net		other		net		realized		unrealized
Pretax	=	underwriting	+	misc.	+	investment	+	capital	+	capital
Income		income		income/exp.		income		gain/loss		gain/loss



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

For “capital employed,” the measure of shareholder capital committed to Property/Casualty business is the total policyholder surplus. Policyholder surplus is the excess of a company’s assets over its liabilities. Surplus in the insurance industry is referred to as “policyholder surplus” because the policyholder has first claim on surplus from a regulatory perspective. The surplus of a company provides protection against adverse deviation from underwriting and investment results.

RESULTS

Comparable profitability data are provided for the Property/Casualty industry as a whole, for years 1988 through 1995, in Exhibit 1.

- For the industry as a whole, net underwriting income was consistently negative over the entire period. This is largely because many of the casualty longer tailed lines of business are priced to an underwriting loss in anticipation of significant investment income.
- The significant level of assets under investment by Property/Casualty insurers enables the industry to boost its total return on surplus. Factoring in net investment income and realized and unrealized capital gains, total pre-tax return on surplus for the 1988-1995 period is 14.1%. Realized and unrealized capital gains accounted for almost one-half of the total return during the period.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

- There is substantial variation in the total pre-tax income by year. The standard deviation corresponding to the average return of 14.1 is 7.3. In accepted statistical applications, this result implies that for 95 out of 100 observations, the total pre-tax income to surplus ratio will be in the range of -0.5% to 28.7%. Therefore, it is possible to experience good results in one year, with an expectation that a future year will produce poor results. In fact, as may be seen in Exhibit 1, the Property/Casualty industry as a whole had returns in three of the eight years from 1988-1995 of less than 7%, while in two of the years, the returns exceeded 20%.
- All returns and income figures in this report are measured before Federal Income Tax. The effective tax rate of an individual Property/Casualty insurer will depend on the marginal Federal Income Tax Rate (35%), the size of non-deductible reserves (such as reserves for unearned premium), the amount of discounting of reserves required by the tax code, and the investment allocation strategy pursued by the company (which determines the amount of non-taxable investment income earned). In practice, company average tax rates tend to be in the range of 20% to 40% of statutory net income.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

EXHIBIT 1

**Profitability of the Property / Casualty Industry
(in millions)**

Calendar Year	Net Underwriting Income	Underwriting Income/ Surplus	Net Investment Income	Realized Capital Gain/Loss	Unrealized Capital Gain/Loss	Total Pretax Income	Surplus	Total Pretax Income/ Surplus
1988	(11,662)	-9.8%	27,758	2,691	2,855	21,642	118,578	18.3%
1989	(20,769)	-16.4%	31,094	4,636	8,234	23,195	135,020	18.3%
1990	(21,688)	-15.8%	32,798	2,783	(5,021)	8,872	138,791	6.5%
1991	(19,990)	-13.4%	34,032	4,774	13,485	32,311	159,027	21.7%
1992	(36,074)	-22.3%	33,618	9,874	142	7,560	163,942	4.7%
1993	(18,010)	-10.4%	32,740	10,153	923	25,806	184,001	14.8%
1994	(21,936)	-11.7%	33,668	1,620	(1,899)	11,453	192,499	6.1%
1995	(17,375)	-8.2%	36,834	5,997	21,717	47,173	230,001	22.3%
8 Yr. Total	(167,504)	-13.2%	262,542	42,528	40,446	178,012	1,321,859	14.1%

NOTE: All figures are before income tax.

Source: Best's Aggregates and Averages

**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Profitability of the MPCCI Reinsured Companies

METHODOLOGY

In theory, it is possible to analyze the profitability of the MPCCI reinsured companies in the same way as that of the industry as a whole. Some comparable results are presented in Exhibit 2.

Because we have to rely on data from individual companies and because different companies do not necessarily keep the same data, we have had to make reasonable assumptions in certain instances where data were missing. For some companies that write MPCCI business, this line represents a significant portion of their total business, while for other companies from whom we obtained data, MPCCI was a relatively small line. However, we were able to obtain, with few exceptions, MPCCI underwriting results from the nine companies audited by the GAO for the years 1988-1995. For our analysis, we have used the unadjusted expenses allocated to the MPCCI as collected from the nine companies audited by the GAO.

In order to develop the total pre-tax income as a ratio to surplus for the MPCCI program, we require a measure of surplus. This measure is not available for a specific line of business within the audited companies. However, the FCIC stipulates in the SRA that minimum levels of surplus are required. The requirements state that surplus must be equal to a percentage of the maximum possible underwriting loss, varying by fund, and the number of states in which a company operates. We have estimated a surplus requirement of 130% of retained premium for the nine audited companies in our sample.

Net underwriting income for the MPCCI program is a derived item. It is calculated by adding net expense gain/loss to net underwriting gain/loss.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

Net expense gain/loss is the difference between the reimbursement received from the FCIC, and a company's incurred expenses of administration for the MPCCI line. The FCIC establishes a base reimbursement percentage for each reinsurance year. Additional reimbursements may be provided for loss adjustment expenses in years with excessive losses. For our analysis, we have used the base reimbursement percentage. Figures including any additional reimbursement were not available.

Net underwriting gain/loss is the difference between the risk (claim) portion of the premium and incurred claims.

Because of the nature of the MPCCI line and the timing of cash-flows, companies hold relatively little in reserves. This is in sharp contrast with other lines where significant reserves are held for claims, IBNR, etc. Indeed, during the period 1988-95, average total invested funds held by the Property/Casualty industry amounted to approximately 3.5 times the amount of average policyholder surplus. Net investment income on those invested funds averaged 6.0% for the period. We were unable to determine the amount of invested funds or the net investment income earned on the MPCCI line by the audited companies. Therefore, we assumed that companies earn the same net investment income return as was earned on its invested assets by the Property/Casualty industry for the period 1988-95. However, the base on which this investment income is earned is the amount of MPCCI policyholder surplus.

MPCCI is a largely short-term liability, and the ability to invest surplus to take advantage of long-term capital gains is less for MPCCI than for other lines. Interviews with officials of some of the nine audited companies confirmed that their investments are short-term, liquid, interest-bearing securities. Therefore, we consider that the inclusion of a capital gain item in the calculation of MPCCI total return would, in all likelihood, overstate the true investment income earned in this line.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

RESULTS

As a result of this analysis, we have determined that total pre-tax income as a ratio to surplus for the reinsured MPCCI companies was 11.7% for the study period. This level is less than the total pre-tax return on surplus of 14.1% earned in the same period by the Property/Casualty industry as a whole.

As was the case with the Property/Casualty industry results, there is substantial variation in the results from one year to the next. In fact, the MPCCI results show even more volatility. While the average total pre-tax income ratio to surplus was 11.7%, the standard deviation was 10.4. This indicates that the range of results may fluctuate between -9.1% to 32.5% in 95 out of 100 observations. (Recall that the average industry return was 14.1% with a standard deviation of 7.3). This variation in MPCCI returns demonstrates inherently greater risk in the MPCCI line. The higher volatility in MPCCI returns would suggest a higher average required yield on MPCCI than would be required on a less risky investment.

In addition, to estimate the long-term average rate of return in the MPCCI line with a reasonable degree of precision will require more observations than estimates of returns on other less volatile lines (and certainly more than the eight years data that we have available).

A snapshot of profitability in a limited window of time may distort the long-term profitability of this volatile business. In fact, reinsured companies made underwriting gains from 1989-1992. Then in 1993, MPCCI sustained severe underwriting losses, exceeding the total of the underwriting gains made in 1992, 1991, and a portion of 1990 gains. Again, 1994 and 1995 have been years of underwriting gains. However, as the past has shown, a two year period certainly can not be used as a representative measure of profitability of the business.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

The underwriting gain of the MPCCI participating companies for the eight year period 1988-1995 averages 7.5% of mean earned premium. The GAO report refers to a long-term target underwriting gain of 7% to 10% of premium. Although we do not necessarily agree with the GAO's standard, it is worth noting that at 7.5%, the actual experience of MPCCI writers is well within, and at the lower end, of the GAO's range.

EXHIBIT 2

Multiple Peril Crop Insurance Program*

Calendar Year	Net Expense Gain/(Loss)	Net Underwriting Gain/(Loss)	Net Underwriting Income	Underwriting Income/Surplus	Net Investment Income #	Realized Capital Gain/Loss #	Unrealized Capital Gain/Loss #	Total Pretax Income	Surplus #	Total Pretax Income/Surplus
1988	(3,132)	(5,454)	(8,586)	-5.4%	10,056	0	0	1,470	158,214	0.9%
1989	1,859	21,745	23,604	9.5%	16,859	0	0	40,463	340,568	16.2%
1990	(7,302)	35,284	27,982	7.7%	24,061	0	0	52,043	388,678	14.3%
1991	(17,862)	28,278	10,416	2.7%	25,020	0	0	35,436	391,512	9.1%
1992	(3,715)	13,348	9,633	2.4%	24,040	0	0	33,672	414,896	8.4%
1993	(9,749)	(57,908)	(67,657)	-15.4%	24,206	0	0	(43,451)	464,225	-9.9%
1994	(573)	74,185	73,612	13.8%	28,627	0	0	102,239	600,571	19.2%
1995	22,539	97,188	119,727	16.3%	40,558	0	0	160,285	869,821	21.8%
8 Yr. Total	(17,935)	206,666	188,731	5.8%	193,427	0	0	382,157	3,628,485	11.7%

* Sample of MPCCI retained experience as collected from 9 companies audited by GAO

Figures represent estimates

NOTE: All figures are before income tax.

III. PROGRAM EXPENSES

KEY POINTS:

MPCI companies consistently show lower total expense ratios than the Property/Casualty industry for the 1988-1995 period. In addition, MPCI expense ratios have decreased over the eight year period. The reduction in expenses shows efficiencies achieved by MPCI reinsured companies.

Where comparisons can be drawn with other delivery systems, private sector MPCI delivery is less costly.

Analysis of process flows for sales and service indicates that the work required to sell or renew an MPCI policy is considerably more intense than that of the typical Property/Casualty sales process.

The effects of FCIC simplification initiatives are difficult to quantify. From the companies' perspective, simplification efforts do not appear to be yielding the expected savings.

SCOPE

Price Waterhouse was asked to comment on the effectiveness of the current, private sector delivery of crop insurance as it relates to industry benchmarks. Our scope of work did not include detailed analysis of work flows or processes in place in the industry, nor the processes and procedures in alternative delivery channels (such as those policies delivered through the Farm Service Administration (FSA)).

INDUSTRY BENCHMARKS

An insurer's expense ratio is a measure of total administrative expenses divided by total written



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

premium for a given line of business. Total administrative expenses include loss adjustment expense, commissions and other expenses incurred while selling and servicing the business.

The graph on the next page shows total expense ratios for years 1988-1995 for an aggregate of selected property lines in the Property/Casualty industry as well as the Property/Casualty industry as a whole. Expense ratios for the MPCCI line are also reflected in the graph. Property lines, such as homeowners or dwelling insurance, may be thought of as "retail" because they involve servicing of individual policyholders. These lines are labeled "retail" in the graph. "Wholesale" lines, such as commercial property; largely involve servicing commercial risks.

In order to make a comparison of MPCCI expense ratios to the Property/Casualty industry; we needed to adjust premium for the Property/Casualty industry to a basis comparable to the MPCCI program. MPCCI premium contains loss content only. Thus, we reduced the Property/Casualty industry premium by expenses, leaving only loss content. Expense ratios for the industry were calculated from these adjusted figures.

Exhibit 3 demonstrates two key points.

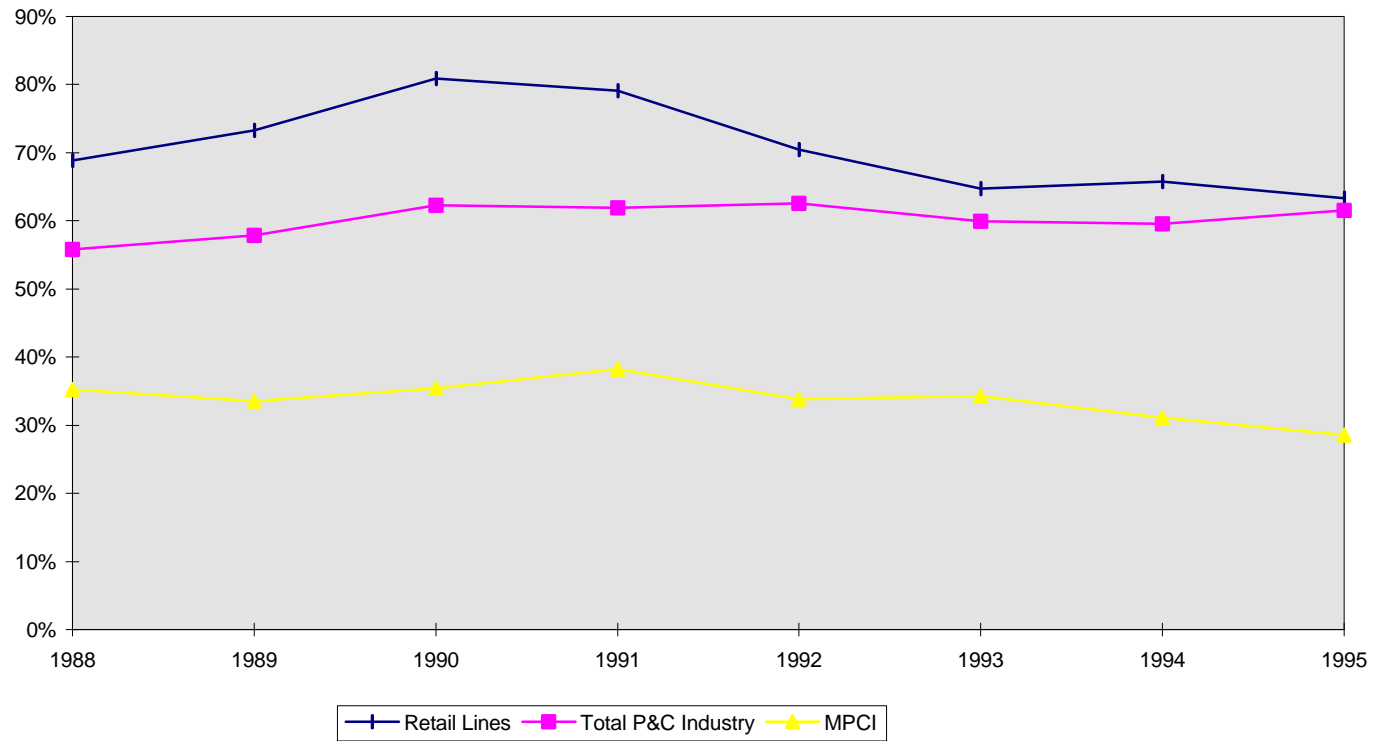
1. MPCCI companies consistently show lower total expense ratios than the Property/Casualty industry for the 1988-1995 period. Expense ratios for the "retail" lines are generally higher than those of the Property/Casualty industry as a whole.
2. MPCCI expense ratios have come down over the eight year period, similar to the trend of the "retail" lines. The reduction in expenses shows efficiencies achieved by MPCCI reinsured companies.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

EXHIBIT 3

Benchmark Analysis of Total Expenses



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Exhibit 4 provides greater breakdown of the total expenses by class of expense: loss adjustment expense, commissions, and other expenses for the 1988-1995 period. Reinsured MPCl companies show lower expense ratios in all classes of expense.

EXHIBIT 4

		Expense Analysis for Comparable Lines of Business Direct Results			
	CY	Loss Adjustment Expense	Commission	Other Expense	Total Expense
Retail	1988	14.9%	29.0%	25.0%	68.9%
	1989	16.9%	29.6%	26.7%	73.2%
	1990	21.3%	30.6%	28.9%	80.9%
	1991	20.7%	29.6%	28.7%	79.1%
	1992	17.3%	27.4%	25.7%	70.4%
	1993	14.0%	25.4%	25.3%	64.7%
	1994	16.4%	25.0%	24.4%	65.8%
	1995	14.8%	24.3%	24.2%	63.3%
Total P & C Industry	1988	17.1%	18.3%	20.5%	55.9%
	1989	18.0%	18.3%	21.6%	57.9%
	1990	20.1%	19.3%	22.9%	62.3%
	1991	20.6%	18.2%	23.1%	61.9%
	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%
MPCI - Reinsured Cos.	1988	7.6%	14.5%	13.1%	35.3%
	1989	6.8%	15.0%	11.7%	33.5%
	1990	7.4%	15.9%	12.1%	35.4%
	1991	6.3%	18.4%	13.5%	38.2%
	1992	4.2%	16.0%	13.6%	33.8%
	1993	5.4%	16.8%	12.0%	34.2%
	1994	3.9%	17.0%	10.3%	31.1%
	1995	3.9%	14.9%	9.8%	28.6%

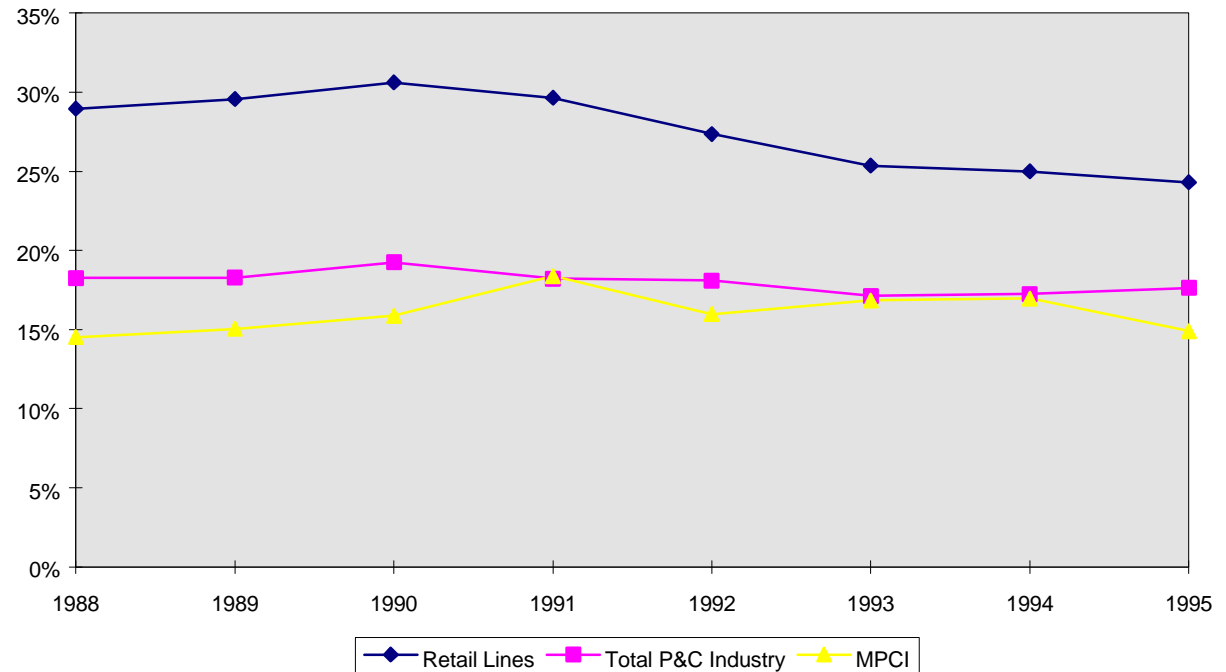


NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

For MPCl, commission expense represents approximately one-half of the total expenses. The graph below shows a comparison of commission expenses for the "retail" lines, the Property/Casualty industry, and MPCl reinsured companies.

EXHIBIT 5

Benchmark Analysis of Commission Expense



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

MPCI commissions are lower than the "retail" lines and comparable to those of the Property/Casualty industry as a whole. The fact that MPCCI commissions are lower than those paid on comparable "retail" lines suggests that the distribution system is not being over-compensated, relative to the Property/Casualty industry.

REVIEW OF COST DATA

In the past, there was both private and public administration of the MPCCI program. Currently, the government sells and services Catastrophic Crop Insurance through the FSA as well as through private companies.

Price Waterhouse has reviewed the results of an earlier study of the relative efficiency of private and public administration of the MPCCI Program, conducted by Arthur Andersen in 1989. At the time of the Arthur Andersen study, both the government and private sector administered similar programs. The report clearly demonstrated that the private sector administered the program more efficiently - as measured by the cost of delivery per policy. Since the Arthur Andersen study was conducted, the participating companies' expense ratios have continued to decline.

In addition, we have reviewed the data provided in Appendix V of the GAO draft report ("Crop Insurance. Opportunities exist to reduce the Government Costs for Private-Sector Delivery" (April 1997) ("GAO Report"). This appendix provides comparative costs to the U.S. Treasury of the delivery of Catastrophic Crop Insurance through the public sector (Farm Service Agency) and participating private sector companies. Private sector delivery is achieved at slightly lower net cost to the Treasury (per policy) and at considerably lower cost per dollar of premium.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Comparative cost to the Treasury* of public and private sector catastrophic policy administration:

	<u>Public Sector</u>	<u>Private Sector</u>
Per policy	\$79.42	\$76.16
Per \$ of premium	22.6%	15.4%

* net cost, after deduction of catastrophic fees collected. A more accurate comparison of costs in each sector would look at costs before fees collected. However, private sector fee collection is not available.

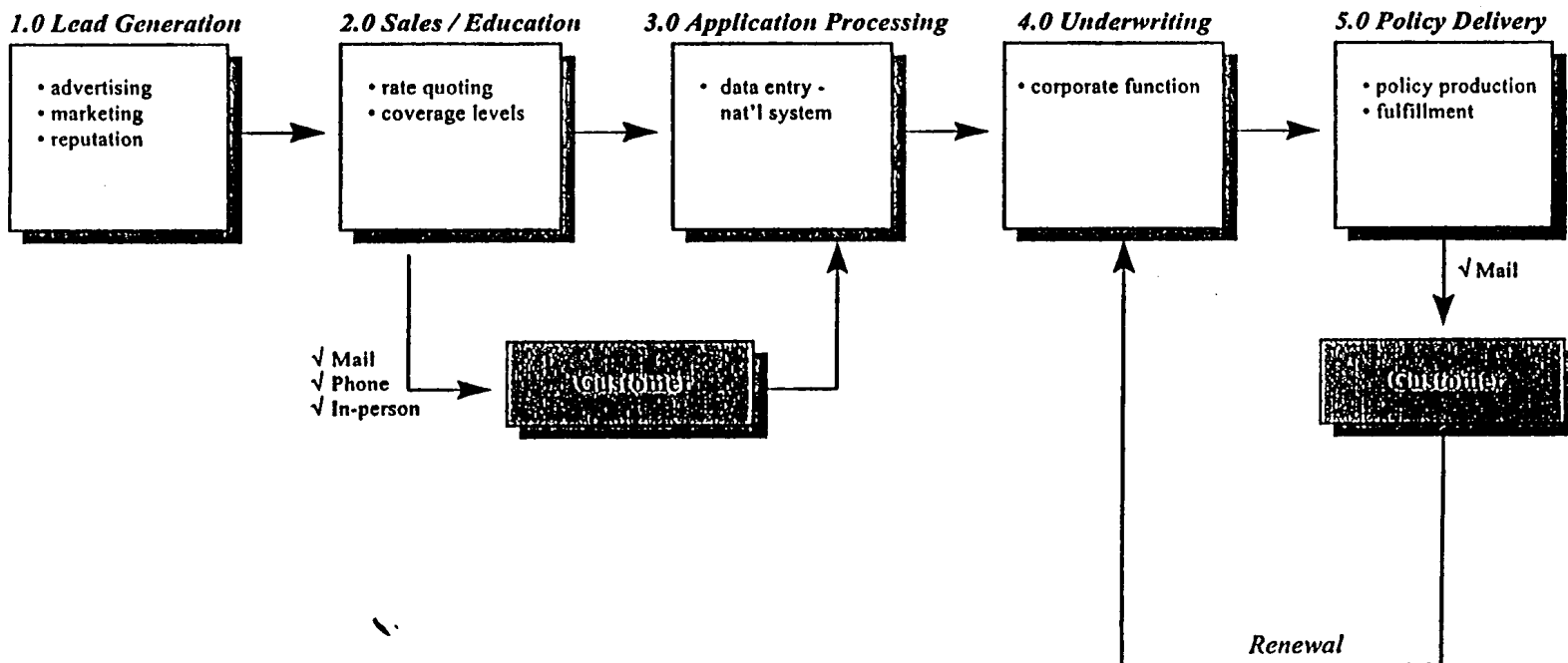
REVIEW OF WORK FLOWS

Price Waterhouse conducted a limited review of one aspect of administration, the agency sales and service processes, in order to gather information about the efficiency of the MPCIA Agency system. Our review was limited to telephone interviews with a sample of agents. As a result of these interviews, we were able to compile work process flows for the agency sales and service functions. Charts that document our findings regarding work flows follow on pages 24-26.

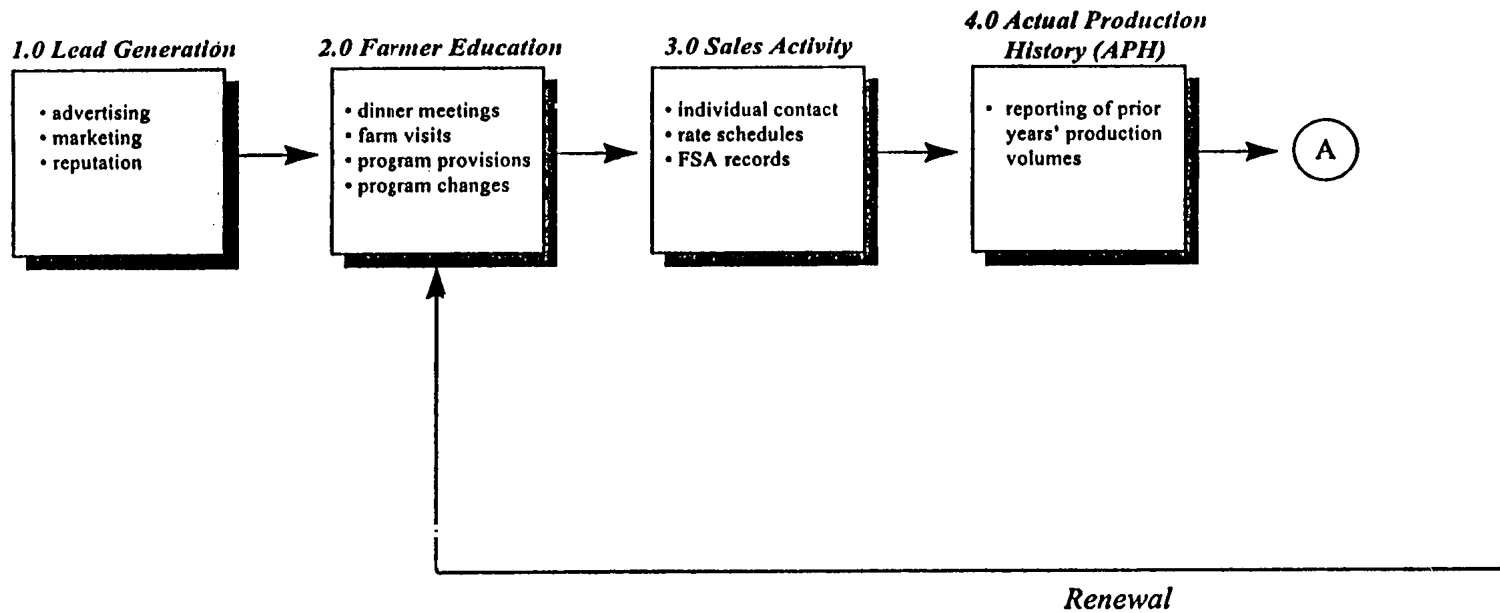
A generic Property/Casualty sales process is shown on page 23. The workflow proceeds linearly from lead generation through quotation, application, underwriting to ultimate policy delivery. The sales and renewal process currently in place in the MPCIA business is shown on pages 24-26.



Generic Property & Casualty Sales Process

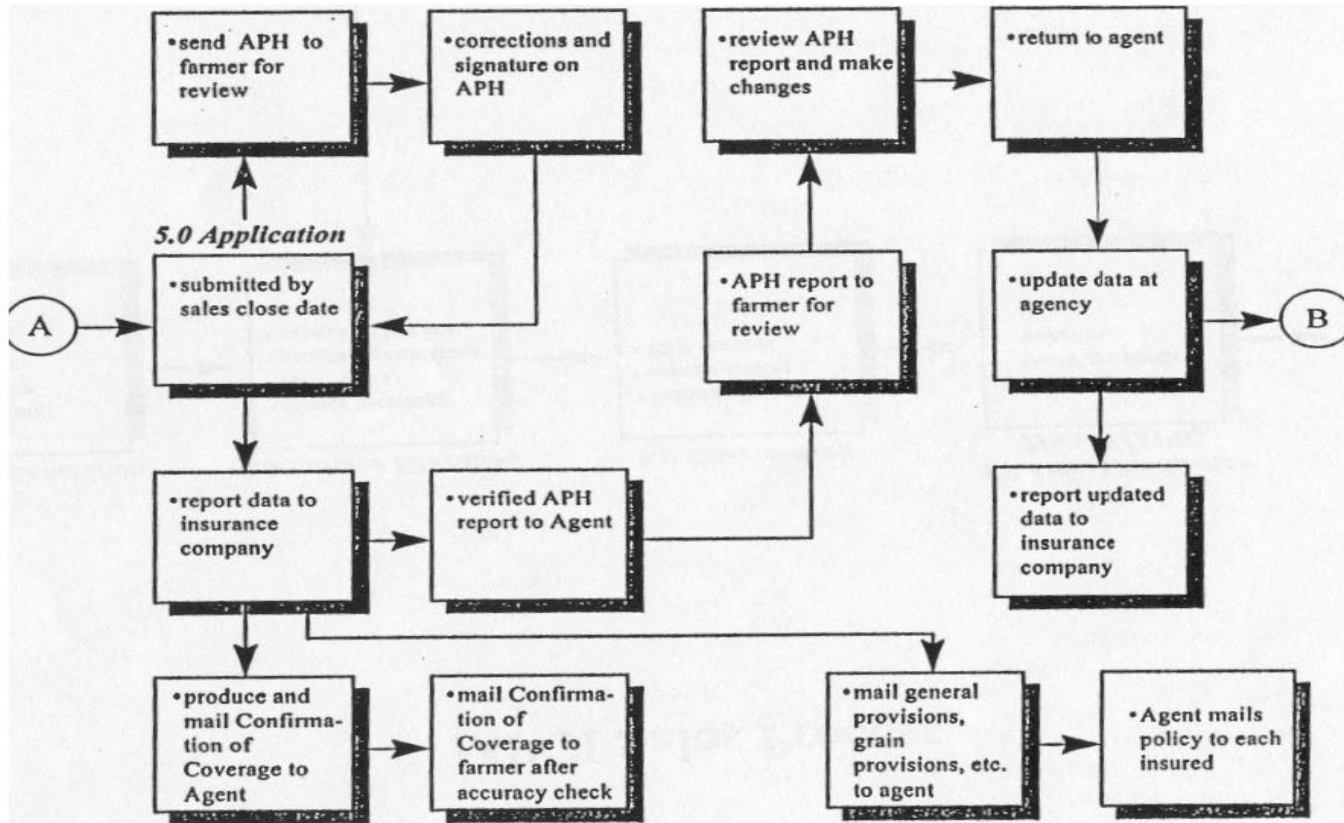


MPCI Sales Process



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

MPCI Sales Process (cont.)



Renewal



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

A review of this process shows that the work required to sell or renew a policy is considerably more intense than that of the typical Property/Casualty sales process. The process charts indicate significant paper flows between farmer, agent and insurer (despite FCIC automation initiatives), and that these flows may occur multiple times in a season before the policy is delivered. Despite the higher level of work effort that is involved in servicing MPCCI, comparative statistics show that the average commission ratio for the MPCCI business is lower than that of most Property/Casualty lines (see Exhibit 4).

PROGRAM SIMPLIFICATION

The Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 (1994 Act) requires that the FCIC undertake steps to simplify the administration of the program before reimbursement of the participating companies is reduced. The GAO report addresses many of the simplification actions taken or planned by the FCIC. Price Waterhouse reviewed the results of the simplification from the perspective of the participating companies in the course of interviews with company personnel. From the companies' perspective, while simplification is a worthy goal, the outcome of simplification efforts has not been reduced effort or cost to the companies.

Changes simplifying the processes and procedures of the Federal Crop Insurance Program are a critical aspect in reducing the overall administrative expenses of the program. Some simplification efforts have been completed, and others are currently in progress that will have some effect on the administrative efficiency of the program. However, the effects on company process flows, and therefore costs, are difficult to quantify. In some cases, simplification efforts have created greater administrative burdens on the private sector.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

The GAO report cites 26 completed simplification actions and 11 currently in progress. The GAO report confuses simplification and computerization. It implies that, because a process has been computerized, it must have been simplified and, therefore, will result in reduced administrative effort and cost to the participating companies. The GAO's assumptions regarding simplification are misleading because:

1. electronic communication may reduce FCIC printing and shipping expenses, but does not necessarily reduce the administrative expenses or the workload of the companies and agents;
2. some simplification projects were supposed to reduce workloads, but the solutions implemented by FCIC have never worked properly;
3. some simplification efforts merely combine program dates and do not actually reduce workload; and
4. changes are made without consideration of impacts to other entities in the program.

Electronic communication may reduce FCIC printing and shipping expenses, but does not necessarily reduce the administrative expenses or the workload of the companies and agents.

The FCIC and insurers have worked at automating a number of the reporting aspects of the program. However, program provisions and the nature of the data requirements still require a significant level of effort to sell and service MPCl. Though the simplification efforts have purported to result in a paperless administrative environment, the program is not yet at that point. In addition, the processes and workflows have not been reduced, merely automated. Communication response time has decreased and the speed of information exchange has increased, but the number of contacts with the farmer, the number of reports that are created and mailed to the insured, and the amount and frequency of reporting is still the same, if not greater.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

For example, the FCIC claims that implementation of electronic actuarial tables has saved the government from printing 4 million pages per year. However, this change represents a savings to FCIC, not the participating companies. The companies will need to print the pages, when required. To the participating companies, the change represents a shift in program responsibilities, with potential increase in the companies' workload.

Some simplification projects were supposed to reduce workloads, but the solutions implemented by FCIC have never worked properly.

Some simplification efforts were intended to facilitate the transfer of information and work during the transition of catastrophic coverage to a single delivery system. From the companies' perspectives, the automation is not completed, and the ineffectiveness of certain projects is contributing to higher expenses for some companies.

For example, FCIC intended to provide producers' production history, crop and acreage data and other pertinent data on computer servers to facilitate the transfer of information (and thus the policies). It has been reported that these servers were not available at the time of APH and acreage reporting deadlines. Insurers and agents were responsible for retrieving historical data from individual producers in order to transfer the farmer's coverage to the private sector. The expense of gathering this data directly from producers, instead of being able to obtain it from FCIC computer servers, was borne by the agents.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

Some simplification efforts merely combine program dates and do not actually reduce workload.

The variety of reporting dates, reporting requirements and policyholder contacts adds a significant level of complexity to this line of business. Different reporting dates include sales-closing, acreage-reporting, final-planting, late planting, end-of-insurance period, cancellation and termination. Historically, the FCIC has had sales-closing dates of October 31, November 1, and November 15 for different crops in the same area. The FCIC, to the extent permitted by sound underwriting principles, has consolidated sales-closing dates for as many crops as possible in a given area.

The FCIC claims that combining dates whenever possible makes it easier for farmers, agents and others to remember to perform all required tasks in a timely manner. While this may be true, this simplification does not necessarily contribute to the reduction of insurance company or agent expenses. Combining dates would contribute to meeting the 1994 reform act's mandate to make the program more easily understood in the farming community, but it does not reduce the level of effort required to sell or service a policy.

Currently, agents who service multiple lines of property and casualty insurance often commit substantial portions of their staff to servicing MPCCI policies during critical reporting times (e.g., sales-close dates, acreage reporting dates). The need to staff for seasonal administrative requirements adds to the challenges of managing an agency. Nevertheless, this challenge illustrates why MPCCI is better delivered through a decentralized and flexible system of individual agents, than a centralized bureaucracy (such as the prior delivery system through the Federal government). As the agents are the ultimate interface with the farmer, they are also the ultimate determinant of whether the simplification efforts have increased or decreased workload. Our interviews with agents suggest no significant reduction in workload.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

Changes are made without consideration of impacts to other entities in the program.

FCIC efforts to simplify the program have caused companies to incur additional costs in their administration of the program. Companies report significant additional systems costs due to the FCIC re-writing business applications. Systems improvements and new computer applications provided by the FCIC do not consider companies' expenses in implementing the new systems. For example, the FCIC does not seem to recognize the impact of new versions and releases of its programs on participating company software. Companies and agents often need to upgrade software and hardware to adjust to system modifications. One company reported enough systems changes that they needed to hire 83% more programming staff to react to FCIC systems and procedural changes.



ALLOWABLE EXPENSES

KEY POINTS:

Over the eight year period 1988-1995, the participating companies have operated at a cumulative deficit with respect to expense reimbursement (total reimbursement less than total incurred expenses).

Despite the cumulative expense deficit, the GAO recommends a 23% reduction in the expense reimbursement percentage from 31% to 24% of premium.

Of this 23% reduction:

- *5% is for the effect of “excess” current reimbursement based on one favorable year’s experience in the last eight years;*
- *8% is for expenses that arise in the ordinary course of business; and*
- *10% is for the leveraging effect of higher prices, based on two years of higher crop prices.*

GENERAL

An expense is an outflow of assets or the incurral of liabilities, or both, during a period, as a result of the delivery or production of goods, the rendering of services, or other earnings activities that constitute an entity’s major or primary operations. The essential characteristic of an expense is that it is incurred in the generation of revenue.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

A basic component of accounting theory is the matching principle. The matching principle means that revenues generated and expenses incurred in generating those revenues should be reported in the same income statement. Accordingly, expenses are reported in the income statement for the accounting period in which the related revenues are realized. The matching principle emphasizes the cause-and-effect association or relationship between expense and revenue. General guidelines in applying the matching principle include:

- Associating cause and effect.
- Systematic and rational allocation; some costs are incurred to acquire assets that provide benefits to the entity over a period of years (e.g. goodwill). Such costs must be allocated to revenue using a systematic and rational allocation method.
- Immediate recognition; some costs may be incurred when there is no ascertainable future benefit or when the future benefits are highly uncertain. These costs are recorded as expenses in the period incurred.

Accounting principles generally provide for the allocation of expenses to applicable lines of business as a means by which to measure the overall profitability of a particular line of business. As the items discussed in the GAO report appear to be costs and expenses of operating in the MPCCI crop insurance business, the allocation of such costs to the MPCCI line of business appears reasonable.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

GUIDELINES FOR EXPENSE REPORTING AND ALLOWANCE

As insurance companies, MPCCI participants are required to classify and report expenses according to National Association of Insurance Commissioners (NAIC) guidelines for statutory reporting purposes, and/or according to generally accepted accounting principles (GAAP) if the company reports according to GAAP principles. It is our understanding that the FCIC published limited guidance in 1994 (FCIC Guidelines) simultaneously with the requirement to report actual incurred expenses. The FCIC reporting guidelines are primarily a *classification system*, as the compensation payable to a participating company was unaffected by either its incurred expenses or how it chose to classify its expenses.

Expenses can generally be classified broadly as direct, indirect and overhead. Direct expenses are those categories that are directly related to the line (for example commissions, which arise on MPCCI premiums). Indirect expenses are expenses which relate to a line, but cannot be directly tied to that line (For example, claims settlement expenses or information systems expenses which may be incurred in respect of multiple lines and then allocated to individual lines such as MPCCI.) Overhead expenses include the expenses of General and Corporate management that are incurred in support of all lines and must be allocated to individual lines of business. When a company reports by line of business (such as MPCCI) all expenses must be allocated to a line.

The Arthur Andersen report of 1989 contains several recommendations that the FCIC should determine what specific expenses should be allowable and chargeable to the MPCCI program. (For example, “The FCIC should make a determination regarding which of the contractors’ costs are allowable for reimbursement and communicate the information to the contractors, preferably within the contractor agreements” (Arthur Andersen 1989, page 10)). The Arthur Andersen study noted that “we did not disallow any costs in our analysis as inconsistent with terms and conditions and rates of compensation prevailing in the insurance industry” (*ibid.* page 10). Therefore, there appears to be no clear authority as to what expenses are allowable, or that companies should be following any other standard than “terms and conditions and rates of compensation prevailing in the insurance industry”.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

**DISALLOWANCE OF
SPECIFIC EXPENSES**

Price Waterhouse has not audited specific expenses of the participating MPCCI companies. Therefore, we cannot comment specifically on the expenses that the GAO has disallowed in the GAO report. However, two outcomes are likely from the GAO report:

- guidance will be provided to participating MPCCI companies regarding allowable expenses; and/or
- the FCIC will propose a reduced reimbursement percentage to the participating MPCCI companies, effectively taking into account the GAO’s recommendations for disallowed expenses.

The GAO report (page 43) recommends a reduction from the current reimbursement level of 31% to a reimbursement percentage of 24%. The reduction is based on an aggregation of several factors, as follows:

Current reimbursement:	31.0%
“Excess” current reimbursement:	(1.5)%
Disallowed expenses:	<u>(2.5)%</u>
Subtotal:	27.0%
Effect of leveraging higher crop prices:	<u>(3.0)%</u>
Recommended reimbursement percentage:	24.0%

Each of these items is, however, subject to other interpretations than that which the GAO places on them.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

“Excess” current reimbursement was observed by the GAO for 1995, and through the GAO's calculation, is assumed to be a permanent feature of the program. Analysis of data from 1988 to 1995 shows that, even including the favorable expense experience of 1995, the participating companies have operated at a cumulative deficit with respect to expense reimbursement (see Exhibit 2). The reduction that the GAO claims for this item is not supported by historical experience.

Disallowed expenses are discussed in detail below. These costs are generally expenses that arise in the normal course of doing business. Examples include the write-off of bad debt, the payment of state taxes, and the cost of re-engineering and consolidating operations. If these expenses are not covered by the reimbursement percentage, they will be paid by companies out of surplus. The expense will be incurred whether or not it is reimbursed. Payment out of surplus will have the effect of raising the target return that the company needs to make on its underwriting to achieve an overall financial result.

We discuss the GAO's technical argument of the effect of leveraging higher crop prices in the Appendix. Our conclusion is that, although there may be some leveraging effect from higher crop prices, this effect is much less than the 3% that the GAO claims, and because of the volatility of prices, can be positive or negative.

DISALLOWED EXPENSES

Below, we discuss the GAO's disallowed expense categories to provide technical support for the inclusion of certain expenses that are consistent with terms and conditions of the insurance industry, and that should be considered as allowable expenses.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

The major categories of disallowed expenses are listed below. The relative importance of each category in the total \$43 million disallowed expense is given in parentheses.

- Expenses related to corporate consolidation and the acquisition of other companies (28%);
- Payment of bonuses to employees (26%);
- Premiums ceded for commercial reinsurance (25%);
- Fronting fees and management fees (11%);
- Write-off of bad debt expense (6%);
- State Income Taxes (4%);
- Lobbying and related expenses (1%);
- Other miscellaneous expenses (-1%).

We believe that a strong case can be made for including all expense categories, as they arise in the normal course of doing business with the exception of expenses specifically disallowed such as lobbying and other related expenses. Price Waterhouse has not performed an audit of the companies' specific expense transactions.

1. Expenses related to corporate consolidation and the acquisition of other companies

This category includes several line-items disallowed by the GAO, specifically: extraordinary write-offs (liability from purchased companies), payments for purchased intangible assets, and payments for non-compete contracts. All of these categories involve expenses that pertain to the acquisition of assets (tangible, intangible and human resource) that are necessary to the operation of the company's insurance business or that will produce future efficiencies in that operation. In total, these items amount to \$12.0 million, or 28% of all expenses disallowed.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

The GAO report excludes costs incurred for the acquisition of business from other insurance companies. For example, the report excludes payments for non-compete agreements and certain lease payments. In addition, the GAO report excludes costs incurred for liabilities identified subsequent to the date of an acquisition.

Accounting Perspective

For financial statements prepared on the basis of GAAP, the excess purchase price (including items such as non-compete agreements and other costs) paid over the net assets acquired are recorded as an intangible asset (e.g. cost of business acquired, goodwill, etc.). This intangible asset is amortized into income over an estimated useful life. In theory, the expense is matched against the income stream generated from the business acquired. To the extent that the intangible asset is believed to be impaired, it is amortized into income in the current period.

Furthermore, GAAP provides for a one year period in which to identify and resolve acquisition-related contingencies (e.g. the identification of additional liabilities subsequent to the date of acquisition). Such liabilities are presumed to have existed at the date of acquisition and serve to reduce the net assets acquired and increase any intangible asset (e.g. goodwill) recorded at the date of acquisition. Consistent with the paragraph above, such intangible asset is amortized into income over an estimated useful life.

For financial statements prepared on the basis of statutory accounting principles, the intangible asset (excess above 10% of capital and surplus) discussed above is generally recorded as a non-admitted asset in the period incurred. Such recording results in an immediate surplus strain to the insurance company. Consistent with GAAP, the intangible asset is amortized into income over an estimated useful life. The expense recorded in the current period is offset by a like change in the insurance company's surplus (e.g. change in non-admitted assets).



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

Accordingly, the future amortization of an intangible asset does not result in additional surplus strain to the insurance company.

Business Perspective

The purpose of insurance company consolidation, entered into as a business decision of the parties, is to produce future cost efficiencies as economies of scale develop throughout the surviving companies. For example, certain fixed costs of operating an underwriting department or policyholder service department will be spread over a larger policy base resulting in a decreased cost per policy. Usually, these benefits will initially accrue to the combining insurance companies and their customers. The GAO argues that there is no benefit to the Federal Crop Insurance Program from business combinations. What the GAO argument overlooks, however, is that the expense reimbursement formula *legislates* savings to the program in the form of reduced reimbursement from 1996 to 1998. Accordingly, business combinations are a rational strategy on the part of the participating companies, support the FCIC trend in reimbursement, and should result in an eligible program expense for the amortization of the cost of combination.

The final paragraph of this section of the GAO report relates to costs incurred to provide for liabilities identified subsequent to the acquisition of certain business. The GAO states that this expense reflects a cost that the company incurred to increase its market share and provides no benefit to the program. It appears that the additional liabilities are all costs of operating in the MPCCI business (e.g. disputed claims, bad debts, adjustments to premiums, etc.) and would have been incurred even if the acquisition had not taken place. Accordingly, it does not appear to be appropriate to exclude these costs simply because they were identified subsequent to an acquisition.



2. Payment of bonuses to employees

The GAO report excludes “Bonuses tied to Company Performance.” The amount excluded is \$11.1 million, or 26% of all excluded expenses.

The excluded bonuses were recorded by three of the nine audited companies, which suggests that this is a classification of expense issue with those companies rather than an issue of business practice. We note that, while the amount paid in bonuses by these three companies is large in absolute terms, it is more moderate when viewed from the perspective of the total expenses incurred by those three companies over the two-year period. In total, the bonuses excluded by the GAO amount to less than 3% of the total expenses incurred by the three companies.

Bonuses are a part of the normal compensation package of any operating entity. For example, a survey of industry management compensation conducted in 1995 by the consulting firm of Watson Wyatt, found that for the insurance industry, 71% of executives and 41% of middle managers received bonus compensation. For executives, bonus and other cash compensation amounted to 36% of average paid salary, and for middle managers, bonus compensation amounted to 15% of average salary. We do not have comparable numbers for the three companies that tied bonus compensation to company results. In addition, there is a trend in executive compensation, because of SEC filing requirements, to link executive bonuses more directly to results. Therefore, a reasonable provision for industry-competitive bonuses needs to be made in the total expenses of the participating companies. Additionally, five out of the eight audited companies for which we obtained data apparently did not link bonuses to company performance. To the extent that they compensated their employees through bonuses, these bonuses would have appeared in other line items in the companies’ financial reports. Therefore, the GAO proposal to exclude bonuses linked to company performance as an allowable expense, without adding the amount of the bonuses back into the salary expense line, treats companies inconsistently and understates the aggregate compensation cost for the industry.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

3. Premiums ceded for commercial reinsurance

Charges paid for commercial reinsurance are a difficult issue to assess theoretically. However, the FCIC guidelines do not exclude the charges from allowable expenses.

We understand that smaller companies need commercial reinsurance to maintain underwriting capacity. Therefore, it appears to be appropriate to include the net cost of commercial reinsurance premiums ceded to, minus claims recovered from the reinsurer, as a program cost.

4. Fronting fees and management fees

In discussions with company officials we learned that the parent companies provide services such as computer facilities, human resource management, etc. for MPCCI subsidiaries because it is more cost effective to provide the centralized provision of these services and to allocate their costs to the operating units. We do not believe that there should be any controversy over this category of expense provided that the parent companies' expenses are documented and the allocation is defensible.

5. Write-off of bad debt expense

The GAO excludes "Other adjustments" in both 1995 and 1994, amounting to \$2.4 million or 5.6%, which were identified as "net related income item with expense (interest income, personal mileage credits, legal reimbursement, equipment lease)". Based upon discussions with company officials, a substantial portion of such excluded costs relates to bad debt expense.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

Bad debt expense is a necessary cost of operating in the MPCCI business. The insurer must make a decision to continue collection efforts for a bad debt (and therefore incur additional costs), or determine that the balance is uncollectable and write off the outstanding amount. In either event, additional expenses are incurred. The instructions to the FCIC expense exhibit specifically include fees and expenses for collecting balances as an appropriate expense item. Accordingly, if a business owner elected to continue collection efforts, costs incurred in such efforts would be considered an appropriate expense of the program. To exclude related bad debt expense appears to be inconsistent with the expense exhibit instructions. Furthermore, accounting principles provide for the establishment of a bad debt allowance for amounts believed to be uncollectable. Such allowance is recorded as an expense in the period incurred.

6. State Income Taxes

The GAO report excludes certain additional costs including state income taxes. The amount of state income taxes excluded is \$1.8 million, or 4% of the total excluded amount.

Income taxes, whether federal, state or local, are expenses of operating in the MPCCI business. Such taxes are reported as expenses in the period incurred in both GAAP and statutory financial statements. GAAP financial statements provide for additional tax expense or benefits resulting from deferred income tax items (e.g. differences between book and tax income which result in future taxable income and thus future tax expense).

Included within the FCIC Guideline is a line item for taxes, licenses and fees (line 18). The **only** exclusion stated in the instructions for this line item relates to state, county and municipal taxes, licenses and fees *based upon premium*. The FCIC Guidelines do not specifically exclude state income taxes. Consistent with statutory annual statement instructions for insurance companies,



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

state taxes incurred, whether based upon premium or some other measure, are reported as taxes, licenses and fees in the period incurred.

7. Lobbying and other expenses

Lobbying and political charges are explicitly excluded by the FCIC Guidelines. Therefore, we concur with the GAO position on this item.

8. Expense reported in error omissions and other adjustments

These categories include misclassified and miscalculated expenses, and omitted expenses. They amount to a net reduction of \$0.3 million over the two-year period.

OTHER EXPENSE OPPORTUNITIES

The GAO report devotes some attention to specific issues of expense management. The amounts involved are not large, by any measure associated with the program. We would note that the payment of many of these types of expense is an industry custom, and is governed by guidelines of the industry, as well as the tax-deductibility rules imposed by the IRS. The industry comparisons provided in our report show that the crop insurance agency force is operating at a commission level that is amongst the lowest in the property/casualty industry. Our investigation of process flows for the MPCCI industry shows that the sale and servicing of MPCCI policies is more time-consuming and labor-intensive than other property/casualty lines. Given the cost-efficiency of the MPCCI agency system, we are left wondering whether the small additional expenditure that is implied by the companies' subsidy of conferences, entertainment etc. is not a more effective expenditure than alternatives, such as across-the-board increases in agent compensation.



APPENDIX

COMMENTS ON SPECIFIC ISSUES FROM THE GAO REPORT

ISSUE 1

Cost vs. Profitability: Nature of the agreement between FCIC and MPCIC companies

Unlike other Government contracts, the Standard Reinsurance Agreement is a *Reinsurance Agreement*, and as such, follows certain practices of the industry. It is not a cost-plus or procurement type of contract. Instead, the private industry undertakes to operate the program and share part of the risk with the FCIC. As with any other commercial reinsurance agreement, the participating companies “front” the business (i.e., write 100% of the risk initially) and then share with the reinsurer that portion of the risk that they do not retain for their own account. In reinsurance agreements of this type, compensation of direct writing companies is generally in the form of “administrative allowances” (the reimbursement percentage paid to the participating companies is a typical administrative allowance) together with the underwriting gain that the direct writing company achieves on its retained risk.

The administrative expense is not a direct payment in return for services rendered, as in an “administrative services” contract. The expense allowance is part of the total compensation to the participating companies for assuming the risk, marketing and administering the program. Thus, statements like the following are inaccurate (GAO Report, para. 2, page 18):

“FCIC pays participating companies an administrative expense reimbursement that is intended to reimburse them for the expenses that could be reasonably associated with the sale and service of federal crop insurance”.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

The GAO report consistently treats the contract as though it was a procurement contract. It is not clear from the report whether the GAO appreciates the distinction between the two types of contract, and that, in a reinsurance contract, the appropriate measure of compensation is *Total* return (the margin earned on administration plus the underwriting gain/loss).

Because the expense margin is part of the total return to the participating company, to the extent that the expense margin is reduced, an increase in compensation will be required from other sources in order to maintain a commercially comparable level of return from the MPCCI line.

ISSUE 2

Effect of higher crop prices on reimbursement

The GAO's analysis is flawed and leads to misleading conclusions regarding the management of the program. The GAO's conclusion is that, because reimbursement is linked to underlying crop prices, and because crop prices have risen by 9.2% over the past two years, the GAO's "target" reimbursement percentage (27.1%) may be reduced by 3% to 24.1%. Our analysis, which reflects the realities of the environment in which MPCCI Reinsured companies operates, shows that, instead of the 3.5% "excess" calculated by the GAO, the actual overage is only 0.9%. Given the materiality of this overage, and the volatile environment in which the companies operate, we do not believe that *any* reduction in reimbursement is appropriate. The GAO should amend its Draft report to reflect the true position with respect to reimbursement.

As the report notes, agents' commissions represent 55% and 52% of total reported administrative expenses in 1994 and 1995 respectively. The compensation paid to agents varies directly with the level of premiums, consistent with well-established insurance industry practice.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

The report appears to be arguing for a basis of administrative compensation that is not linked to premiums. Assuming that this basis was adopted, the industry would have to establish an agency compensation system that in turn would not be linked to premium.

Table 2.2 of the GAO report, because it is limited to only three years of crop price history, is misleading. Selection of such a limited time period allows the GAO to convey the impression that the industry is profiting unreasonably. The GAO's numbers can be used to illustrate why use of a short time-period is unreasonable. If the comparison were made only between 1996 and 1997, we could demonstrate that crop prices on average had fallen, and with it, the companies' expense reimbursement.

In addition, the GAO conveys the impression to the reader that the industry has profited excessively from the 9.2% average increase in crop prices. First, in reality, this increase represents a compound annual growth rate that averages 4.5% per year (for all crops). Presentation of a 2-year cumulative increase creates an impression that the increase is greater than it is. Compared with average annual CPI inflation (estimated to be in the range of 2.8% per year) in those years, the "excess" increase in reimbursement due to the link to crop prices is a more modest 2% per year than the figure of 9.2% that the GAO presents in the table.

The GAO report uses faulty logic to conclude that the administrative expense percentage can be reduced by 3%. As best we can deduce, their argument is as follows:

Percentage increase in crop prices from 1995 to 1997: 9.2%

Actuarial increases in underlying premium rates: 3.6%

TOTAL expected increase in premiums: 12.8%



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Reimbursement factor (percentage of premiums) 27.1%

“Excess” reimbursement: $12.8\% * 27.1\% = 3.5\%$

The GAO’s logic is faulty, firstly because it chooses an arbitrary starting point. If we were to repeat the analysis but restrict it to 1996-1997, the crop price change would be a decline. (The average decline is not available from the report, but it appears to be approximately 8%.) Assuming that the underlying increase in rates stays the same, the result is a premium *deficiency* of (1.2)%, not the 3.5% *excess* premium that the GAO calculates. Choice of a different starting point for the comparison therefore affects the conclusion.

Following the GAO's approach, we believe that a more rational analysis of the data is as follows. We use the 1997 over 1995 comparison, not because we believe that this is the correct time period over which to measure changes, but because it produces results that can be compared with the GAO's.

Actuarial increase in premium rates: 3.6%

Increase due to crop prices: 9.2%

TOTAL increase: 12.8%

However, this increase will not accrue to the participating MPCl company with respect to those expenses that are inflation-related (primarily commission). The majority of the increase (55%) relates to premium-related components.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Additionally, reasonable provision should be made for an inflation adjustment to non-premium related expenses. Assuming 2.8% per year CPI increase (estimated) for two years, compounded for two years, (5.68%), and that this increase applies to the complement of the inflation-related expenses, i.e. the remaining 45%, we derive an “allowable inflation” factor by weighting the two inflation factors by their respective weights.

The result is: $12.8\% * 55\% + 5.68\% * 45\% = 9.60\%$

The balance of the increase in premiums $(12.8\% - 9.6\%) * 27.1\%$ is the "excess reimbursement" and amounts to 0.9% of premium income, not the 3.5% figure calculated by the GAO.

ISSUE 3

Cost of the Catastrophic program

The GAO’s conclusion regarding the difference between private and public sector costs of delivering the catastrophic program confuses the total cost of the program with the cost of administering the program. This confusion leads to seriously misleading conclusions about relative efficiency of each distribution channel.

ADMINISTRATIVE COSTS

It is possible to make a limited comparison of the administrative costs of delivering the program, based on one year’s cost data. With respect to administrative expenses, the private sector is marginally more efficient on a per policy basis and significantly more efficient per dollar of catastrophic premium.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Comparative cost to the Treasury* of public and private sector catastrophic policy administration:

	<u>Public Sector</u>	<u>Private Sector</u>
Per policy	\$79.42	\$76.16
Per \$ of premium	22.6%	15.4%

* net cost, after deduction of catastrophic fees collected. A more accurate comparison of costs in each sector would look at costs before fees collected. However, private sector fee collection is not available.

PROGRAM COST

It is not possible to conclude whether the reinsurance of the private sector catastrophic program by the FCIC will result in a long-term net gain or net loss to the Treasury. The reinsurance mechanism produces the opposite underwriting cost result for the Treasury, in gain or loss years, for the private and public sector. As the GAO report shows, in a year of catastrophic program underwriting gains, the reinsurance mechanism results in a cost to the Treasury equal to the private sector gain. In a year of underwriting losses, the private sector losses are borne by the private companies, while the Treasury bears the underwriting loss in the public sector.

A less misleading methodology would include in the comparison some projection of long-term underwriting outcomes in both sectors. Reinsurance of the private sector policies results in long-term stable results to the Treasury, while the FSA (public sector) policies produce fluctuating cost to the Treasury. What we cannot predict is whether, in the long term, the gain and loss years in the private sector will offset each other, nor how this will compare with the long-term gains and losses in the public sector.

Given the underwriting and return on capital objectives of the private sector, it is likely that, over the long-term, the private sector will select risks to produce a long-term underwriting gain.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

However, without detailed analysis of the catastrophic program's rate-setting, company risk-selection processes, and possible loss outcomes, it is simply not possible to make a conclusion regarding the Treasury's cost outcome from this program. To conclude, based on one (favorable) year's experience, that the private sector cost is 250% of the FSA's cost ignores the reality of catastrophic insurance. It is highly misleading of the GAO to suggest that one year's outcome in any way represents the true, long-term cost.

Additionally, because the average size of the private sector policies is larger than the average private sector policy, the absolute underwriting gain/loss of the average private sector policy will be correspondingly larger than that of the average FSA policy, even when the gains as a *percentage of premium* are the same. However, the GAO chooses to use the absolute value of the per policy gain, compounding the misleading impression of the relative efficiency of each sector's delivery.

ISSUE 4

Inaccurate use of statistics

Appendix VII of the GAO report quotes comparative statistics from "Best's Aggregates and Averages: Property-Casualty, 1996 Edition. (Best's)", in order to demonstrate how the surveyed participating MPCCI companies compare with the industry in terms of certain expense measures. For example, based on Appendix VII, Multiple Peril Crop Insurance appears to rank as 8th highest, out of 26 lines of business reported in terms of commissions paid. In terms of total expenses, as a percentage of premium, Multiple Peril Crop Insurance appears to rank 18th out of 26 lines.



**NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS**

Unfortunately, the GAO misunderstands the industry statistics in Best's, as well as the way the MPCCI statistics are reported. In their comparison, the GAO uses MPCCI expense ratios that include loss adjustment expense; however, the Best's expense ratios exclude loss adjustment expense. Additionally, the Property/Casualty insurance industry ratios are based on a premium measure that includes expenses, whereas the MPCCI ratios are based on a premium measure that includes claims only, excluding expenses. Therefore, the MPCCI percentages are overstated relative to the rest of the Industry. On a comparable basis to the other industry percentages provided in Appendix VII.1, the MPCCI percentages (re-stated) are as follows:

1995 Buy-up Commission expenses	11.6%
1995 Buy-up All other expenses (excl. LAE)	7.5%
1995 Buy-up Total expenses	19.1%
1994 Buy-up Commission expenses	13.0%
1994 Buy-up All other expenses (excl. LAE)	7.9%
1994 Buy-up Total expenses	20.9%

Re-statement of the MPCCI numbers shows that the expense of delivering MPCCI is amongst the lowest for any line of Property/Casualty business.

ISSUE 5

Alternative Reimbursement Arrangements

There should be no issue with the basic principle of considering re-structuring compensation, provided that this is not done in such way as to achieve a covert reduction in overall compensation. Unfortunately, the alternatives suggested by the GAO produce reduced compensation, and in some cases are based on faulty logic.



NATIONAL CROP INSURANCE PROGRAM PROFITABILITY AND EFFECTIVENESS ANALYSIS

Table 4.1 purports to represent the “average per policy” reimbursement. While the calculation is mechanically correct (the 31% reimbursement is multiplied by the average premium in each band), no participant in the program (MPCI companies, FCIC, USDA or any other) can claim that the reimbursement percentage was ever intended to represent the cost of delivering policies on a policy-by-policy basis. Like any other average compensation, the reimbursement percentage represents the cost of delivering a participating company’s services for the company’s block of (reasonably distributed) policies. No company can deliver crop insurance services, even on small policies, for a cost of \$66 per policy. (Not even FSA; the GAO’s own figures in Appendix V show that the cost of FSA delivery for Catastrophic policies which are somewhat comparable is \$133 per policy.) Yet the GAO’s methodology in Chapter 4 would result in participating companies being compensated, effectively, \$66 for each of the 186,000 small policies that they currently service. At the other end of the policy distribution, consider what will happen if we apply the GAO-suggested cap at \$6,200 per policy on the 450 largest policies with an average premium of \$89,000 per policy. Assuming that the \$6,200 is shared equally between agent commissions and other administrative expenses, the agent will receive \$3,100 for servicing a policy for which commissions previously averaged about \$14,000.

The alternative proposed in Table 4.3 (a flat reimbursement together with a premium-related element) addresses some of the concerns about agent compensation. However, the level of premium-related reimbursement proposed in two of the three alternatives (17.5%) is approximately the current level of agent compensation, which will result in the balance of the proposed compensation (either \$100 or \$150 per policy depending on the alternative) being available to compensate the participating company. Again, the GAO’s own per policy administrative figure of \$133, derived from the FSA catastrophic program, suggests that the reimbursement alternatives suggested by GAO are not based on realistic analysis of the cost of delivering the program, but rather represent a mathematical exercise in budget balancing.



NATIONAL CROP INSURANCE PROGRAM
PROFITABILITY AND EFFECTIVENESS ANALYSIS

Table 4.4 suffers from the same faulty logic. This alternative takes no account of the mix of business written by a company, and would penalize a company that had a large book of small policies (since compensation would reduce with increased premium volume) and reward a company that wrote a few large policies.

