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Federal Crop Insurance Program Delivery Cost Study

First Industry Presentation
Cost of Delivery Estimation Methodology
July 10, 2012

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Agenda

Project Team

Project Team

KPMG LLP ("KPMG") engagement team is made up of economists, actuaries, sampling specialists, survey specialists, and insurance industry specialists

- Jon Silverman, Ph.D. – Project Lead*
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- Jerome Albright – Industry specialist
- Sharon Carroll – Actuary

*** Present today**

Introduction

Introduction

- In March 2012, Risk Management Agency ("RMA") engaged KPMG to prepare a study of the economic costs of delivery for the Federal Crop Insurance Program ("FCIP").
- Purpose of the Study
  - Identify and measure on a regional and national basis the current reasonable and necessary economic costs required for delivery of the FCIP.
- Motivation for the Study
  - The Government Accountability Office ("GAO") April 2009 findings suggest that Administrative and Operating ("A&O") payments have tripled between 2000 and 2009 due to the calculation method that takes into account the value of crop rather than actual cost of selling and servicing policies.
- Purpose of this Presentation
  - Discuss study objectives, proposed methodology, and receive industry feedback.
- Note: Data presented in this presentation are preliminary and should not be considered final.

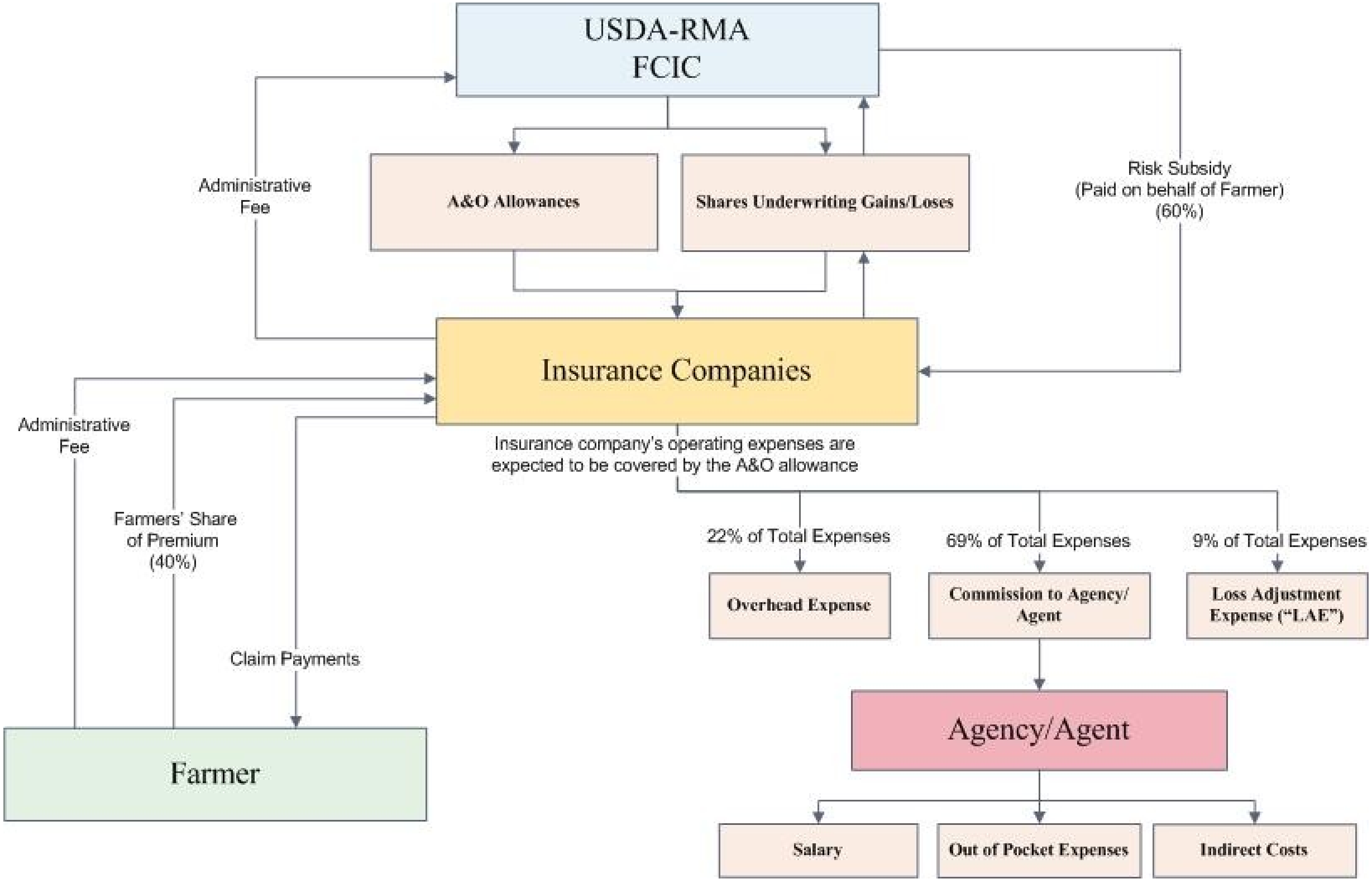
Background

Overview of the Federal Crop Insurance Program

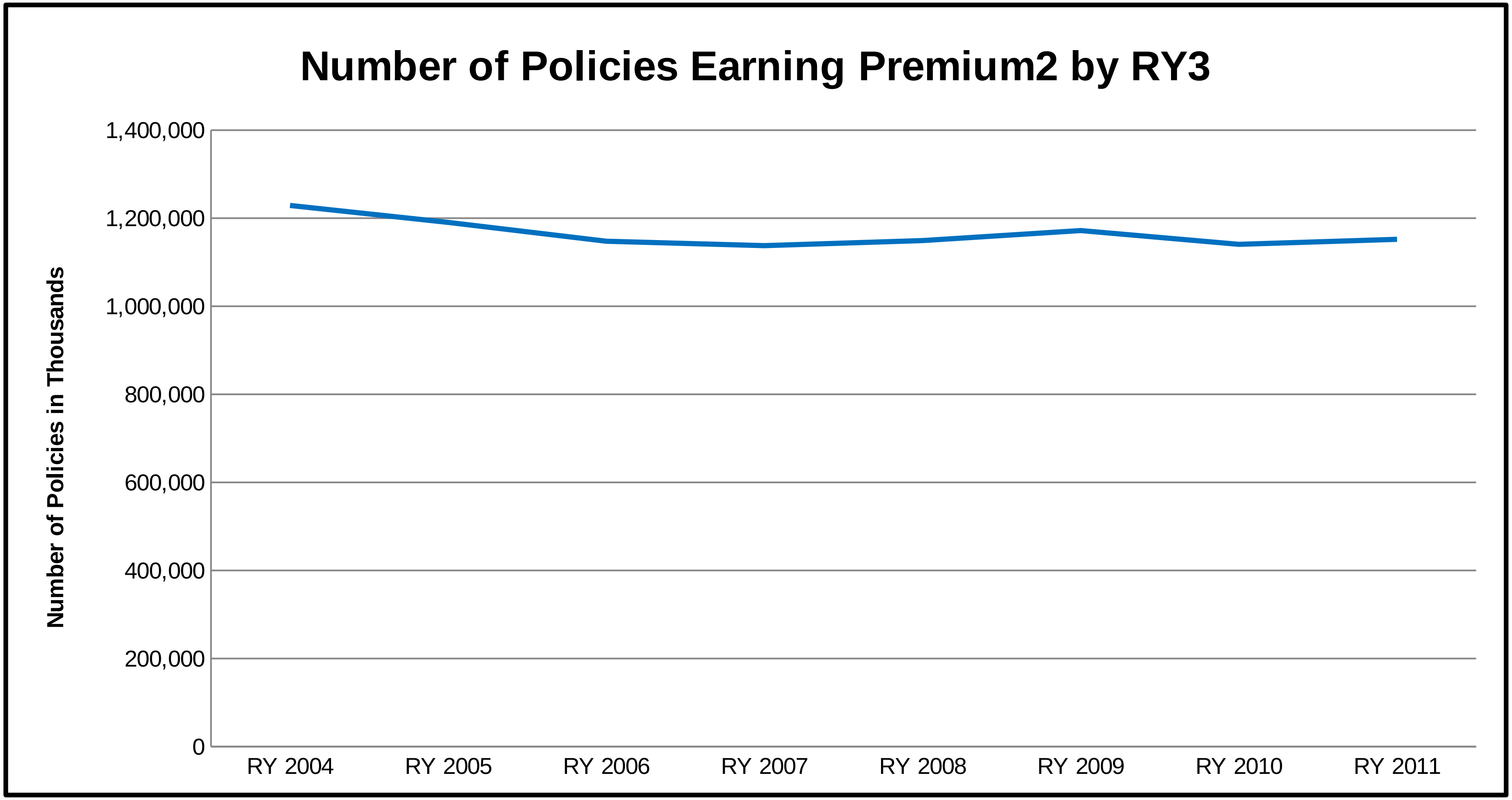
- In 2011, the Federal crop insurance program provided[1]
  - coverage for 265.7 million acres
  - insured liability of $114.2 billion
  - generated total premiums of $12 billion of which $7.5 billion were premium subsidies
  - $10.8 billion in indemnity payments
- Insurance Agents in FCIP
  - About 12,400 agents sold federal crop insurance in Reinsurance Year (“RY”) 2011
  - 1.2 million policies earning premium were written in RY 2011
  - Average premium for policies earning premium was $10,387 in RY 2011

[1] Source: http://www3.rma.usda.gov/apps/sob/current_week/sobrpt2009-2012.pdf as of 06-26-2012.

How Money Flows Through the Federal Crop Insurance Program



Number of Policies Earning Premium By RY



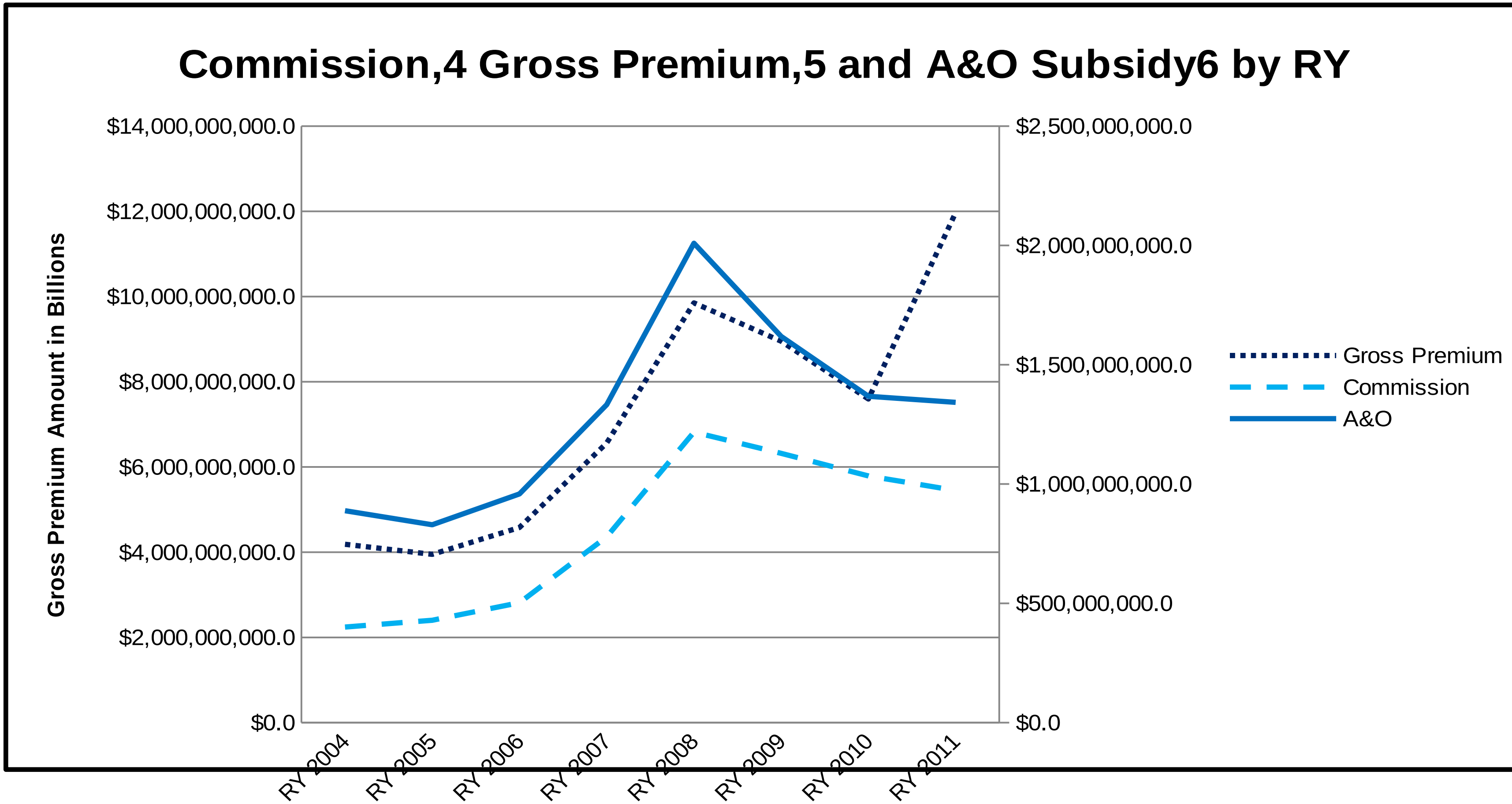
[2] Number of Policies data taken from the 2004 – 2011 Summary of Business (“SOB”) information on the RMA website.
[3] RY begins on July 1st and ends on June 30th of the following calendar year.

Special Features of the Federal Crop Insurance Program

FCIP has some unique features:

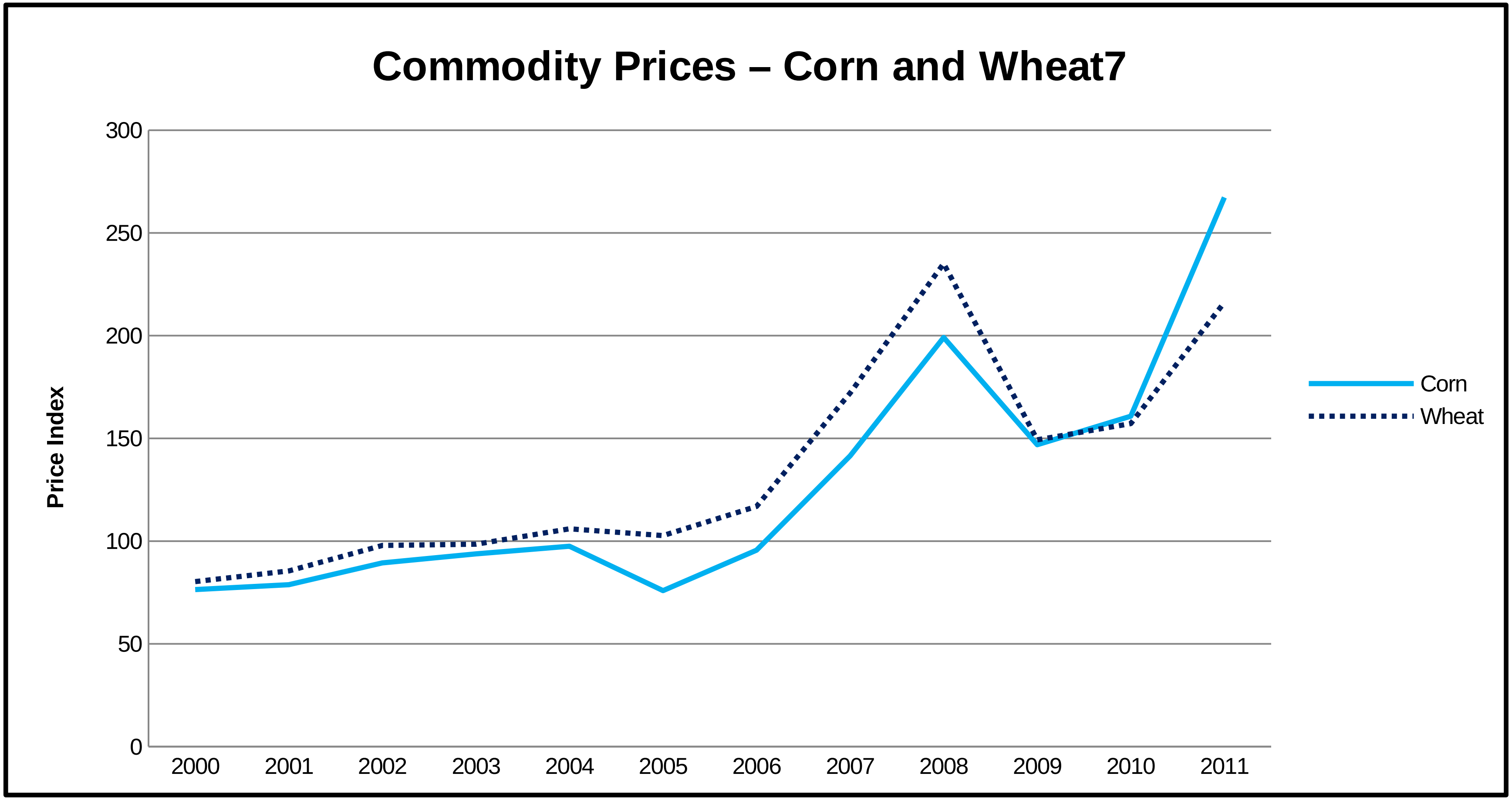
- Product homogeneity
  - RMA sets premium rates for all Federal crop insurance policies;
  - RMA establishes underwriting standards, policy terms and conditions, etc. for all Federal crop insurance policies; and
  - Companies compete for market share on factors other than price.
- FCIP premiums are not loaded for expenses. Instead, RMA pays AIPs the A&O subsidy to cover their operating expenses.
- Agencies/agents operate independently of the AIPs and can change company affiliations.
- AIPs must accept all eligible farmers in a state in which they operate.
- Extensive quality control reviews are required for the delivery of a government program.
- Selling and servicing the Federal crop insurance policies requires greater frequency of contacts between an insurance agent and the insured farmer relative to Property and Casualty ("P&C").

Commission, Gross Premium, and A&O Subsidy by RY



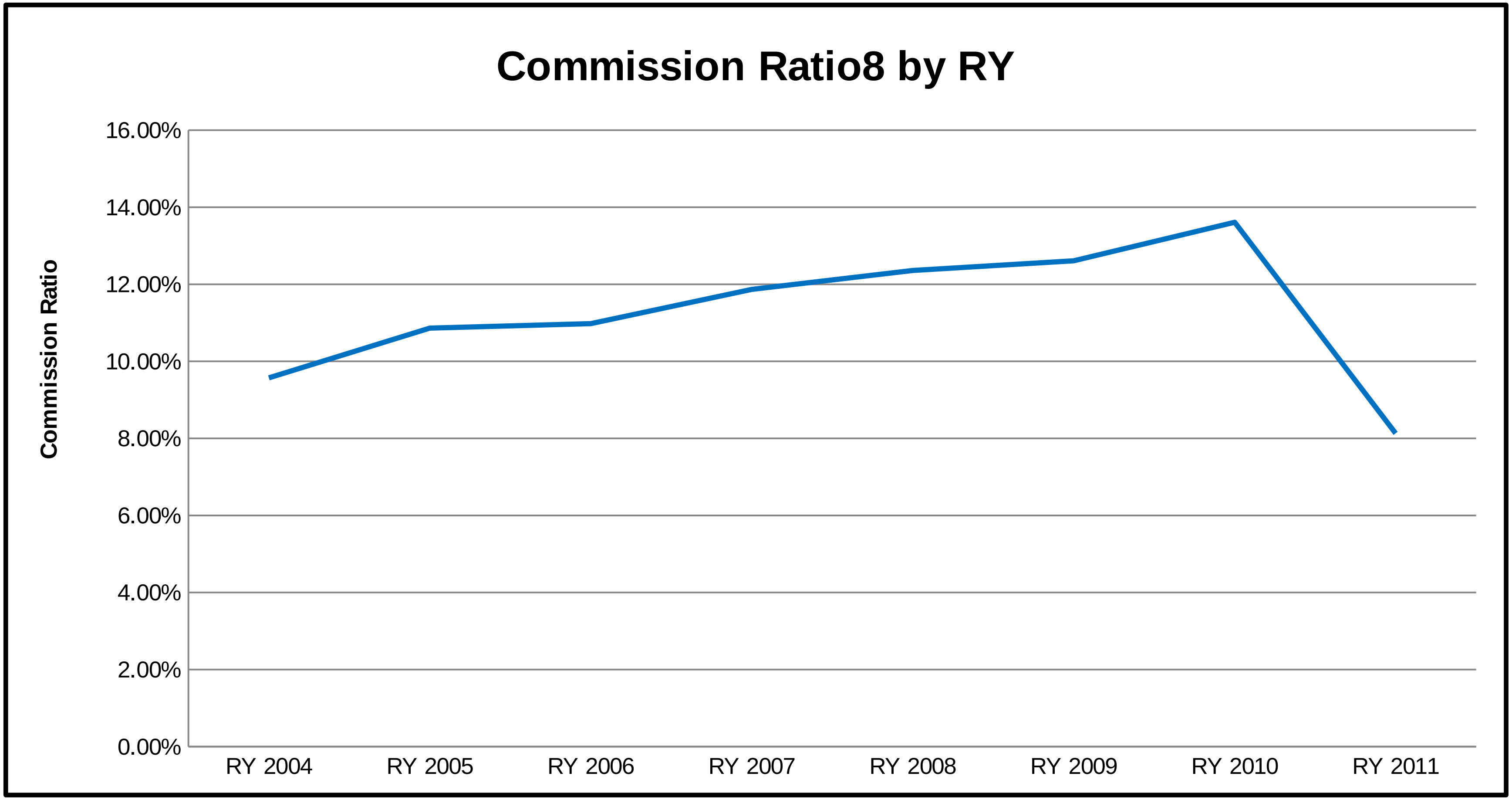
[4] RMA provided total expense templates containing Commission data.
[5] The RMA website provided the SOB containing the Gross Premium data.
[6] RMA provided internal accounting reports containing A&O data.

Commodity Prices for Corn and Wheat



[7] "ftp://ftp.bls.gov/pub/time.series/wp/" as of 07-02-2012.

Commission Ratio by RY



[8] Commission Ratio is equal to Commission amount divided by Gross Premium value. Commission data was taken from the total expense templates provided by RMA. Gross Premium Data was taken from the SOB on the RMA website.

Previous Studies on A&O Payment and AIP Profitability

- 2009 GAO Report[9]
  - A&O payments nearly tripled between 2000 and 2009 because the method used for calculating A&O payments considers the value of the crop rather than the actual costs for selling and servicing the Federal crop insurance.
- 2010 Grant Thornton Report Commissioned by NCIS[10]
  - All studies conducted by Grant Thornton 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.
- 2009 Milliman Report Commissioned by RMA[11]
  - From 1989 -2008, the estimated earned rate of return on equity for MPCI insurers was approximately 17.1 percent as compared with an average reasonable rate of return of 12.8 percent over the same period.

[9] "Crop Insurance: Opportunities Exist to Reduce the Cost of Administering the Program." GAO-09-445, U.S. Government Accountability Office, April 2009.
[10] "Federal Crop Insurance Program: Profitability and Effectiveness Analysis 2010 Update" Grant Thornton, LLP. Prepared on behalf of National Crop Insurance Services, Inc., January 13, 2011.
[11] "Historical Rate of Return Analysis." Milliman, Inc. Prepared for the Risk Management Agency , August 18, 2009.

RMA Requests an Independent Study to Determine the Economic Cost of Delivery

- A number of previous studies have typically approached the issue of cost of the crop insurance program from an accounting perspective, with the assumption that the accounting costs reported by AIPs by themselves represent the economic cost of delivery of the FCIP:
  - Although the sales expenses reported by AIPs are likely to be highly correlated with the level of efforts required for the agents to sell and service the crop insurance policies, they may not be an accurate reflection of the true program delivery cost incurred by the insurance agents;
  - For LAE and overhead expenses, significant disparities are not presumed to exist between accounting costs (AIP reported expenditures) and economic costs, and these categories are comparatively small relative to sales expenses.
- No study has been conducted to appropriately measure the economic cost of delivery for the FCIP, especially the economic cost of delivery incurred by insurance agencies/agents in selling and servicing Federal crop insurance.

Difference between Accounting and Economic Costs

- Accounting Costs
  - Accounting costs are reported by AIPs to RMA and State insurance departments.
- Economic Costs
  - Economic costs are more difficult to identify and analyze.
  - Economic costs can exceed accounting costs because there is no recognition on the books and records of the opportunity costs of an activity, e.g., the opportunity cost of use of an owned building for one activity is the rent forgone if the building is rented out.
  - Accounting costs could also exceed economic costs if the underlying cost of resources could be acquired at a lower price, e.g., at their opportunity cost or value in next best use.
  - RMA is concerned that accounting costs of the delivery could be greater than economic costs if the method used to compensate agents is driven by premium linked to commodity prices rather than say by level of effort required or wage in an alternative use.

Study Objectives

Determine the Economic Cost of Crop Insurance Delivery

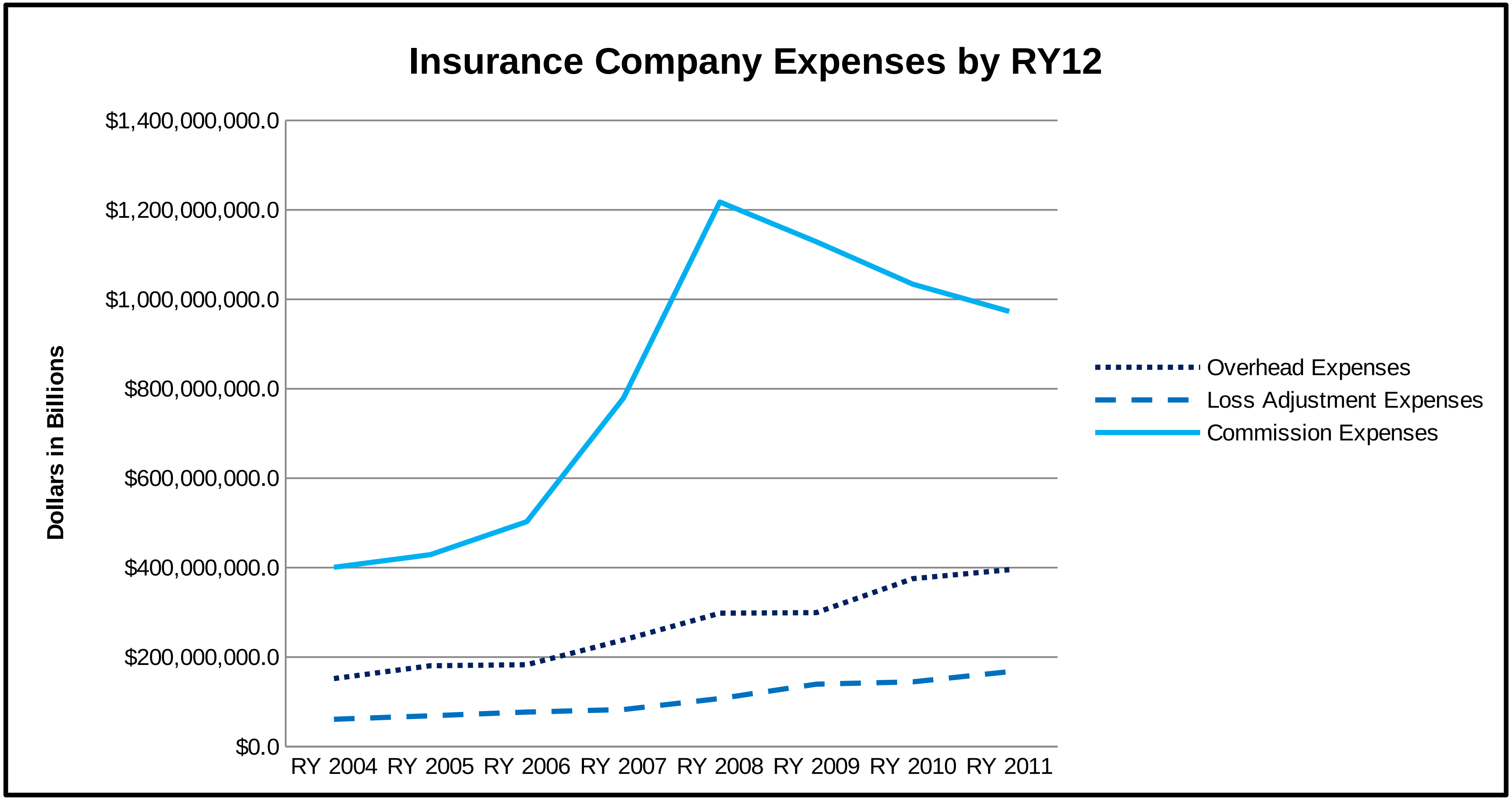
Determine Costs Incurred by Insurance Agencies/Agents

- Sales Expenses
  - Costs incurred by insurance agencies and their agents who sell crop insurance to farmers.
  - Costs of actual provision of services, including salaries, out of pocket expenses (e.g. transportation), and other overhead expenses (e.g. office expenses).
  - The sales expenses incurred by the AIPs represent the revenue of the insurance agency/agent rather than their cost.

Determine Costs Incurred by AIPs

- Loss Adjustment Expenses
  - Fees paid to insurance adjusters to verify claims.
- Overhead Expenses
  - Company overhead, such as employee salaries and labor burden, information technology, general and administrative expenses, underwriting expenses, agent and adjuster training costs, quality control, and maintaining capital levels required by Federal regulations.

Insurance Company Expenses by RY



12 RMA provided total expense templates containing the expense data.

Consider Factors Potentially Affecting the Program Delivery Cost

- Factors that might potentially affect the LAE and Overhead Expenses incurred by AIPs:
  - Geographical Regions: by state or by other geographical segmentation (e.g. Corn Belt), and
  - Size of the Company: measured primarily by premiums written each year.
- Factors that might potentially affect the cost of delivery incurred by insurance agencies/agents:
  - Geographical Regions: by state or by other geographical segmentation (e.g. Corn Belt),
  - Agent Type: captive vs. independent Agents,
  - Policy Characteristics: new policies vs. renewal policies,
  - Crop Coverage: regular crops (e.g. corn, wheat, soybean) vs. specialty crops, and
  - Type of Insurance: Catastrophic Loss Coverage (CAT), Area, Yield and Actual Production History (APH)/Revenue.

Technical Approach

Understand Operations of the Federal Crop Insurance Program

- To better understand the operations of the FCIP, we conduct interviews with:
    - AIPs
    - Crop Insurance Agents
    - Insured Farmers
- Information obtained from the interviews will assist us in designing survey instruments and determining the type of data we need to collect from insurance agents and insured farmers.

Analyze LAE and Overhead Expenses Incurred by AIPs

- Use RMA data to analyze LAE and Overhead Expenses
  - Use RMA data reported by AIPs to analyze costs AIPs incurred in selling and servicing Federal crop insurance.
- Perform benchmarking analysis to compare operational costs of MPCI insurers with those of insurers in other P&C lines of business.
  - Financials reported by AIPs to RMA and financials for insurers in P&C lines of business from SNL will be used for this analysis.
  - Compare expense ratios for the MPCI insurers with expense ratios observed in other P&C lines of business.

Analyze LAE and Overhead Expenses Incurred by AIPs

- The benchmarking analysis includes a comparison of the following key ratios across industries:
  - Commission Ratio: measures expenditure insurers pay to its sales force
  - Taxes, Licenses, and Fees Ratio
  - Overhead Expense Ratio
  - Total Expense Ratio: defined as sum of all three ratios above, measures overall operational efficiency
  - LAE Ratio: measures expenditure insurers pay to the adjusters
  - Loss Ratio: measures overall effectiveness in risk control and management
  - Combined Ratio: measures overall profitability
  - Delivery Expense Ratio: defined as Total Expense ratio plus LAE ratio, measures the delivery expense incurred by insurance company in selling and servicing the respective insurance policies

Develop Cost of Delivery Estimate for Insurance Companies and Agents

- AIP costs directly from benchmark insurance industry data.
- Estimate insurance agency/agent costs by building up costs using:
  - Statistics of Income ("SOI") Bulletin for Sole Proprietorship Returns
    - The income statement for insurance agencies and brokerages reported by SOI division at the Internal Revenue Service, and
    - Industry-level income and itemized expenses such as commissions, salaries and wages, utilities, and office expenses are reported.
  - Bureau of Labor Statistics
    - Wage data for insurance sales agents by state.
  - Insurance Agents Data by State and Agent Commission/Compensation Data by State (RMA)
  - Survey of the Insurance Agents
- Develop a range of AIP costs using distribution of expenses and by considering possible variations in assumptions.

Develop Cost of Delivery Estimate for Insurance Agents

- The percentage of itemized expenses over income from SOI serves as our baseline percentage estimate of expenses incurred by Federal crop insurance agents.
- The baseline percentages need to be properly adjusted to account for the difference between selling and servicing Federal crop insurance and other lines of insurance.
- Appropriate adjustments will be made to the baseline estimates based on the survey data:
  - Sampled insurance agents will be asked to quantify the variations in the percentage of expense over income for each category of expenses incurred relative to the baseline percentages.
  - Reported variations (either downward or upward adjustments) in percentages will then be used to calculate the appropriate expense percentages applicable for selling and servicing Federal crop insurance.
  - Together with the average commission/compensation calculated using the RMA data (Agent Commission/Compensation and Insurance Agent data), develop a delivery cost estimate for each sampled insurance agent.

Conduct Surveys of Crop Insurance Agents and Insured Farmers

- The purpose of the surveys of the insurance agents is to collect relevant cost data incurred by the insurance agents in selling and servicing Federal crop insurance policies. Information to be gathered from the survey includes:
  - Time insurance agents spend tasks required for selling and servicing the Federal crop insurance;
  - Out of pocket expenses incurred by insurance agencies/agents for support staff and travel;
  - Variation in percentages of expense over the income relative to the SOI baseline estimates; and
  - Other general background information, e.g., geographical region, types of crop insurance sold, agent type, crop coverage, and number of crop insurance policies sold.
- A parallel survey of the insured farmers to whom the sampled insurance agents sell crop insurance will be conducted to determine the level of services (e.g., number of insurance agent visits, educational services, and other services) necessary for farmers to make an informed decision.
  - Data gathered from survey of insured farmers serves as a consistency check and are not to be directly used to estimate the cost of delivery incurred by insurance agent.

Determine Sample Sizes and Select Representative Samples

Insurance Agents

- Approximately 12,400 insurance agents sold crop insurance in RY 2011.
- Of these agents approximately 20 percent will be sampled.
- The sample is selected to ensure insurance agents in all of the following regions are represented:
  - Midwest
  - Plains
  - South
  - West
  - Mountain
  - Northeast

Determine Sample Sizes and Select Representative Samples

Insured Farmers

- A sample of farmers insured with the sampled agents will be selected.
- Of the farmers, 20 percent of those associated with sampled agents will be sampled.
- The sample is selected to ensure insured farmers in all of the following regions are represented:
  - Midwest
  - Plains
  - South
  - West
  - Mountain
  - Northeast

Data Analyses: Other Statistical Analyses

- Baseline Trend Analysis
  - Compare the trends in insurance agent wage to the trends in actual agent commissions paid by AIPs.
- Statistical Analysis on Agent Compensation
  - Using RMA data on agent compensation and macroeconomic variables in public domain to investigate the influence of various factors on agent compensation.
- Statistical Analysis on LAE and Overhead Expenses
  - Using RMA data on LAE and Overhead expenses and macroeconomic variables in public domain to investigate the influence of various factors on LAE and Overhead Expenses.
- Statistical Analysis on Cost of Delivery by Insurance Agent
  - Using costs of delivery estimated through the survey and other macroeconomic variables to investigate the influence of various factors on the cost of delivery incurred by insurance agent.

Challenges

- Increase the Response Rates for Agents and Farmers
  - The expected response rates for agents and farmers are likely to be low
  - Ways for us to increase the response rates of the agents
    - Survey Format (internet, phone, mail)
    - Survey Time
    - Survey Duration
  - Suggestions /Potential Assistance from AIPs
    - Awareness Campaign
    - Advance Notification Email
    - Reminder Email
- In estimating the cost of delivery by insurance agents, consider the myriad of differences in levels of selling efforts across geographies, types of crops, insurance plans, coverage levels, and sizes of acreage.

Questions and Comments

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Thank you

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