Federal Reserve Bank of Chicago
Annual Agriculture Conference

Thomas P. Zacharias, President
National Crop Insurance Services
November 19, 2013
Taming Agricultural Risks

“...the race is not to the swift, nor the battle to the strong... but time and chance happeneth to them all...”

Ecclesiastes 9:11
Production Risks, Contracting, and Insurance

Organization

- NCIS Background/Services (“Who Are You?”)
- Institutional/Regulatory Framework
- The Companies (“Who Are Those Guys?”)
- United States Profile
- Program Costs
- Farm Bill (and Beyond)
National Crop Insurance Services

Purpose

• Service Organization for Crop Insurance Industry

Structure

• NCIS Members are Crop Insurance Companies and Reinsurers

“…getting to know you, getting to know all about you….”
Membership

Involvement/Participation

• NCIS Governed by Board of Directors
• Industry Participates in Technical Committees
Industry Committees

- Loss Adjustment, Policy and Procedures
- Actuarial Analysis and Data Reporting
- Industry Training
- Industry Communications

Monthly Conference Calls/Formal Meetings with United States Department of Agriculture/Risk Management Agency (USDA/RMA)
Regional/State Committees

Northwest
- California
- Nevada

Colorado Wyoming
- Montana

North Dakota
- Nebraska

South Dakota
- Iowa

Minnesota
- Wisconsin

Southeast
- Missouri
- Kentucky
- Tennessee

East
- Illinois
- Indiana Ohio Michigan

Southwest
- Colorado
- Wyoming

Kansas Oklahoma
- Arkansas
- Gulf States

North Dakota
- South Dakota

North Carolina
- South Carolina

Minnesota
- Illinois

Southeast
- Ohio

East
NCIS Services and Functions
• Economic and Actuarial Research

• Individual Coverage Versus Area Schemes
  – American Journal of Agricultural Economics - 2012

• Ex Ante Crop Insurance Versus Ex Post Disaster
  – American Agricultural Economics Association Meetings - 2013

• Industry Rate of Return and Standard Reinsurance Agreement
  – NCIS Today Magazine

• Review of RMA’s Actuarial Methodology Change
  – RMA Website

• Understanding Costs of Crop Insurance Program
  – NCIS Today Magazine
Schools and Education
Major Conferences
- Train the Trainer Conference
- Claims Manager’s Conference
A modern-day farm policy for tomorrow’s challenges

- Securing America’s food supply
- Shielding taxpayers from unnecessary risk
- Strengthening the economy

SUPPORT CROP INSURANCE

CropInsuranceInAmerica.org
Communications and Industry Promotion
Institutional/Regulatory Framework
## Federally Reinsured Crop Insurance Versus State Regulated Crop-Hail Insurance

<table>
<thead>
<tr>
<th></th>
<th>Federal Crop Insurance</th>
<th>State Regulated Crop-Hail Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulator</strong></td>
<td>Risk Management Agency (RMA) of USDA</td>
<td>State Departments of Insurance</td>
</tr>
<tr>
<td><strong>Subsidized?</strong></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Premium Rate</strong></td>
<td>Set by RMA</td>
<td>Set by Individual companies</td>
</tr>
<tr>
<td><strong>Perils covered</strong></td>
<td>All risk basis: Yield losses due to natural causes; Also revenue losses due to price movements and yield losses.</td>
<td>Named perils basis: Losses due to hail and others (fire, lightning, transit, etc)</td>
</tr>
</tbody>
</table>
### The U.S. Partnership (Federally Reinsured)

<table>
<thead>
<tr>
<th></th>
<th><strong>Private Companies (AIPs)</strong></th>
<th><strong>Government (FCIC/RMA)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Players</strong></td>
<td>18 approved companies 16,000 agents &amp; adjusters</td>
<td>450 staff - approximately $80 mil annual budget</td>
</tr>
<tr>
<td><strong>Products</strong></td>
<td>May develop products</td>
<td>May develop products</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td>Sell and adjust all policies; must sell to any farmer wanting coverage</td>
<td>Sells no policies; makes a payment to AIPs for delivery costs</td>
</tr>
<tr>
<td><strong>Premiums</strong></td>
<td>Collect premiums</td>
<td>Sets premium rates; subsidizes premiums</td>
</tr>
<tr>
<td><strong>Underwriting</strong></td>
<td>Bear underwriting risk; share gains/losses with gov.</td>
<td>Sets underwriting standards; shares gains/losses with AIPs</td>
</tr>
<tr>
<td><strong>Claims</strong></td>
<td>Pay all claims</td>
<td>Pays no claims</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Train agents, adjusters, informs producers</td>
<td>Informs producers</td>
</tr>
</tbody>
</table>
Standard Reinsurance Agreement (SRA)

• A Cooperative Financial Assistance Agreement between the Federal Crop Insurance Corporation (FCIC) and an Insurance Company.
• Risk Management Agency Acts on Behalf of FCIC to Administer all Federal Crop Insurance Programs.
Standard Reinsurance Agreement
Cont’d

• Establishes the Terms Under Which FCIC Provides Reinsurance and Subsidies on Eligible Crop Insurance Contracts Sold by the Insurance Company.
  – By Regulation, Insurance Company Must be in Good Financial Standing and in Compliance with State Laws Where Domiciled and Writing Business Prior to being Considered for Approval of an SRA.
“Except as specified below, the Company shall offer and market all plans of insurance for all crops in any State which it writes an eligible crop insurance contract and shall accept and approve applications from all eligible producers. The Company may not cancel so long as the policyholder remains an eligible producer.”

-- we take all comers --
Approved Insurance Providers (AIPs)

“Who are those guys?”
(Butch Cassidy and the Sundance Kid)

• Rain & Hail Insurance Services
  – “…ACE Buys R&H Ace Ltd…December 2010…”
  – “…ACE Group – operations in over 50 countries, employs more than 19,000 people…
  – $92B in assets and $21B gross written premium in 2012”
“Who are those guys?”

• ARMtech - Lubbock TX, subsidiary of Endurance
  – “Endurance is global provider of insurance and reinsurance, approximately $9.6B in assets; $2.7B in shareholders’ equity”

• ProAg – Amarillo TX, subsidiary of CUNA Mutual
  – “…insurance and financial services since 1935…”
  – 2012: approximately $2.5B in GAAP Surplus; $17.3B in assets
“Who are those guys?”

• QBE acquires Agro National November 18, 2010
  – Acquisition completed in March, 2011
  – June, 2010 QBE purchased NAU Country – Ramsey, Minnesota
  – QBE
  • Top 25 insurers/reinsurers
  • Headquartered in Sydney, Australia
  • $46.7B in assets for 2011; approximately $18.3B in U.S. gross premium
“Who are those guys?”

- Rural Community Insurance Services (RCIS) Anoka, MN
  - Wholly owned subsidiary of Wells Fargo and Company

- Great American
  - Founded 1872, 1st crop 1925
  - Owned by Great American Financial Group

- Farmers Mutual Hail – Since 1893
“Who are those guys?”

- John Deere – the green tractors, right?
  - Founded in 1837
  - 2012: $36.2B revenue (entire company)
- ADM
  - Enters in 2010
  - 30,000 staff; 265 processing plants; 140 countries
- Climate Corp – Recently approved for SRA
  - San Francisco-based
  - High-tech weather insurance platform
  - Acquired by Monsanto for approximately $1B
Number of AIPs

Source: 1981-84, RMA; 1985-2013, NCIS
Premium and Number of AIPs per State, 2012

# AIPs/State

State’s Premium, Mil. $
AIP Concentration Ratios, 2012

1.0 = 100% of Industry Premium

- 4-firm
- 6-firm
- 8-firm
How Companies and FCIC Share Gains/Losses

Share of Premium, Commercial Fund, Group 1 States *

*Group 1 = Iowa, Illinois, Minnesota, Nebraska, Indiana
U.S. Profile

“the numbers please”
Where is Crop Insurance Bought and Sold?
## Crop Hail Premium Totals

### US Premium Volume

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$926.4 million*</td>
</tr>
<tr>
<td>2012</td>
<td>$954.1 million</td>
</tr>
</tbody>
</table>

### Top 5 Premium Written States*

<table>
<thead>
<tr>
<th>State</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska</td>
<td>$177.5 million</td>
</tr>
<tr>
<td>Iowa</td>
<td>$116.2 million</td>
</tr>
<tr>
<td>Minnesota</td>
<td>$  92.1 million</td>
</tr>
<tr>
<td>North Dakota</td>
<td>$  88.6 million</td>
</tr>
<tr>
<td>Illinois</td>
<td>$  82.6 million</td>
</tr>
</tbody>
</table>

*Preliminary Verified Total as of 9/23/2013
# Nationwide Summary *

## Liability

<table>
<thead>
<tr>
<th>Year</th>
<th>Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$117.1 billion</td>
</tr>
<tr>
<td>2011</td>
<td>$114.1 billion</td>
</tr>
</tbody>
</table>

## Premium Volume

<table>
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<tr>
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<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$11.1 billion</td>
</tr>
<tr>
<td>2011</td>
<td>$12.0 billion</td>
</tr>
</tbody>
</table>

### Top 10 Liability States

<table>
<thead>
<tr>
<th>State</th>
<th>Premium ($millions)</th>
<th>Liability ($billions)</th>
<th>Acres (millions)</th>
<th>Liability per Acre ($/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>902.8</td>
<td>14.9</td>
<td>21.7</td>
<td>688</td>
</tr>
<tr>
<td>Illinois</td>
<td>772.7</td>
<td>12.1</td>
<td>18.0</td>
<td>678</td>
</tr>
<tr>
<td>Minnesota</td>
<td>824.8</td>
<td>10.0</td>
<td>17.5</td>
<td>574</td>
</tr>
<tr>
<td>Nebraska</td>
<td>668.8</td>
<td>8.7</td>
<td>15.7</td>
<td>557</td>
</tr>
<tr>
<td>North Dakota</td>
<td>968.4</td>
<td>6.3</td>
<td>23.3</td>
<td>272</td>
</tr>
<tr>
<td>Indiana</td>
<td>437.6</td>
<td>5.8</td>
<td>8.7</td>
<td>659</td>
</tr>
<tr>
<td>Kansas</td>
<td>808.7</td>
<td>5.7</td>
<td>18.3</td>
<td>310</td>
</tr>
<tr>
<td>California</td>
<td>261.0</td>
<td>5.4</td>
<td>4.6</td>
<td>1172</td>
</tr>
<tr>
<td>South Dakota</td>
<td>701.2</td>
<td>5.4</td>
<td>15.0</td>
<td>360</td>
</tr>
<tr>
<td><strong>Texas</strong></td>
<td><strong>1,082.4</strong></td>
<td><strong>5.2</strong></td>
<td><strong>48.2</strong></td>
<td><strong>109</strong></td>
</tr>
<tr>
<td>- Texas PRF</td>
<td>114.8</td>
<td>0.5</td>
<td>33.3</td>
<td>15</td>
</tr>
<tr>
<td>- Texas – All Other</td>
<td>967.6</td>
<td>4.7</td>
<td>14.8</td>
<td>320</td>
</tr>
</tbody>
</table>

*Source: RMA Summary of Business as of 9/23/2013; Texas as of 10/11/2012*
## Liability as a Share of Production Value
### 2011-12 avg.

<table>
<thead>
<tr>
<th></th>
<th>Production Value (bil $)</th>
<th>Insured Liability (bil $)</th>
<th>Liability as a % of Prod. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains</td>
<td>84</td>
<td>66</td>
<td>79%</td>
</tr>
<tr>
<td>Oil crops</td>
<td>41</td>
<td>27</td>
<td>66%</td>
</tr>
<tr>
<td>Fruits &amp; nuts</td>
<td>25</td>
<td>7</td>
<td>28%</td>
</tr>
<tr>
<td>Vegetables &amp; melons</td>
<td>21</td>
<td>3</td>
<td>14%</td>
</tr>
<tr>
<td>All other</td>
<td>41</td>
<td>14</td>
<td>34%</td>
</tr>
<tr>
<td>Total crops</td>
<td>212</td>
<td>116</td>
<td>55%</td>
</tr>
</tbody>
</table>
Major Plans of Crop Insurance Sold, 2012

(% of total liability)

- Individual Yield
  - Yield Protection (18.2%)

- Individual Revenue
  - Revenue Protection (70.2%)
  - Revenue Protection—Harv. Price Excl. (2.6%)

- Area Yield & Revenue
  - Group Risk Plan (>1%)
  - Group Risk Income Protection (>0.5%)
  - Group Risk Income Prot.—Harv. Rev. Opt. (2.2%)

- Other
  - Pasture/Rangeland, Aquaculture, Others
Revenue Policies Rationale

• Farmers Face Income Risk

Harvest Price Option
(Replacement Value Contract)

• Protects Farmer with Forward Contracts
• Protects Farmer with Livestock
Insured Share of Planted or Bearing Acres

Data: major field crops, 2012; others, 2011

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Growth in Specialty Crop Coverage

- Whole Farm
- Vegetable
- Nursery
- Fruits/Trees/Nuts

Bil. $ in Liability


© 2013 NCIS
Growth in Share of Acres Covered at 70% or Higher

© 2013 NCIS
Cumulative Product Introductions Since 2000

Of 58 introductions:
- 43 still marketed
- 12 replaced
- 3 terminated

2013 Premium:
- $1.1 bil. for 55 prod.
- $0.1 bil. for 48 prod.
(if major field crops & pasture excluded)
Actuarial Performance of Crop Insurance

*Loss Ratio = Indemnities/Premiums*

![Graph showing actuarial performance of crop insurance from 1981 to 2012. The graph illustrates the ratio of indemnities to premiums over time, with peak years marked for 1983, 1988, 1993, 2002, and 2012.]
2012 Drought

- $17.4 Billion U.S. Indemnity
  - (Approximately 80% Drought-Related)
- $4.1 Billion U.S. Farmer Premium
- $12.7 Billion U.S. Uninsured Losses
  - (Approximately)
Program Costs

("The check please")
Components of CY Taxpayer Cost

Outlay Method = Net Indem. + AIP UGs + A&O

2012/2013 cost: $13.3bil.
Components of CY Taxpayer Cost

Subsidy Method = Prem. Sub. + FCIC Un. Loss + A&O

Bil. $

$13.3bil.

© 2013 NCIS
Real Expenditures on CCC Commodity Programs, Disaster & NAP, Crop Insurance

Bil. 2013 $

Source: USDA and Congressional Budget Office May 2013 Baseline; deflated using index of prices received for crops
The 2013 Farm Bill and Crop Insurance

Summary:

• 2013 Farm Bill (FB) authorizes most programs affecting food, feed, fiber and biofuel production.
  – Nutrition comprises 80% of the FB.

• Funds various farm programs, including conservation, trade, research and crop insurance.

• Lack of FB creates uncertainty in agriculture.

• Crop Insurance is separate from the FB.
  – Crop Insurance has permanent legislation, Federal Crop Insurance Act, so crop insurance program continues to operate despite expiration of 2008 FB on September 30, 2013.
2013 Farm Bill and Crop Insurance

Con’d

• Farm Bill *Does* Affect Crop Insurance
  – FB makes important improvements to crop insurance.

• House and Senate versions authorize two new insurance products that enable producers to buy coverage that supplements their underlying crop insurance policies.

• Supplemental Coverage Option or SCO for all crops except cotton.

• Stacked Income Protection Plan or STAX for cotton.

• These products protect farmers against larger area-wide disasters.
2013 Farm Bill and Crop Insurance Con’d

- Both bills direct development of provisions for peanuts, catfish, whole farm insurance and organic crops.
- Bills set research priorities.
  - Improve product development processes and increase funding for livestock insurance.
- Both bills strengthen crop insurance programs for beginning farmers, address producers’ concerns with declining insurance yield guarantees and provide farmers with more flexibility for determining coverage on land to be insured.
- Key Difference: AGI test and Conservation Compliance in Senate bill but not House bill
2013 Farm Bill and Crop Insurance Con’d

Conclusion:

• Farm safety net spending has trended down over the past decade as farm program spending has declined and importance of crop insurance has risen.

• In this FB, producers have expressed a clear preference to give up traditional farm programs while urging Congress to put a great focus on crop insurance.

• While some resources have been shifted to strengthening crop insurance, overall funding for the farm safety net will be reduced under the FB.

• Since 2008, crop insurance funding has been cut by $12 billion.
Why Crop Insurance is Now in a Position of Strength

1--Producers share program cost
2--Producers take personal responsibility for risk management
3--Producers get individual risk management solutions
4--Producers receive indemnities in the timeliest way
5--Program can be quickly adjusted and is self-correcting
6--Payments are not in excess of losses
7--Protection can be used as collateral for loans
8--Program enables pre-harvest marketing
9--Producers not subject to payment limits
10--Producers benefit from the efficiencies of private sector delivery
11--Crop insurance can be green box under the WTO and has flexibility to meet WTO support limits
12--Crop insurance has contributed to deficit reduction
Beyond the Farm Bill
Policy & Program Issues

• **Interaction of Crop Insurance and Farm Programs**
  – Interaction & implementation issues
  – Will farmers buy down?
  – Effectiveness of area plans

• **Private Delivery**
  – Concern over delivery cost (different regulatory model, less costly products, alternative approach?)

• **Underwriting Gains**
  – Degree of public/private risk sharing and returns

• **Premium Subsidies**
  – Level
  – Structure
Websites

NCIS
www.ag-risk.org

Crop Insurance in America
*Just the Facts Tab
www.cropinsuranceinamerica.org

Support Crop Insurance
www.supportcropinsurance.org

Social Media

Twitter
@USCropInsurance

Facebook/Pinterest
CropInsuranceInAmerica

NCISAmerica