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## Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

2011 CAS Ratemaking and Product Management Seminar

March 21, 2011

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### Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

#### Outline

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### Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

#### Overview of Exposure by Line of Business

- Property
  - Wind-driven oil-water on exterior – damage likely less than deductible
  - Wind-driven oil-water that enters home through missing roof – likely a total loss anyway – no different than regular sea water
  - Wind-drive oil-water that enters home through broken window
- Auto
  - Exposure from wind-driven oil-water to autos minimal – both physical damage to auto and increased hazard from driving on oil-slicken road in event of hurricane
- Workers Comp (Jones Act) – slip and fall from oil
- Commercial Specialty Hull – oil damage to exterior of ship
- Business Interruption/Involuntary Unemployment – significant – tourism, fishing, oil drilling, etc.

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Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

Debt Protection

- There exist insurance products that protect against involuntary unemployment, but the product presented here is debt protection
  - A banking product, not an insurance product
  - Customer pays a "fee", not a "premium"
  - Financial Institution pays a "benefit", not a "loss"
- From an actuarial perspective, works like insurance – benefits (losses) are analyzed, which leads to development of fees (premiums)
  - Note – all customers pay same rate
- Protections (analogous term in insurance world is "Coverages")
  - Involuntary Unemployment (IU)
  - Disability
  - Death
  - Leave of Absence from Work
  - Hospitalization
  - Miscellaneous Events (Marriage, Divorce, Birth, Adoption, Retirement, Moving)

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Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

Debt Protection (continued)

- Called "Debt Protection" because the customer's debt is protected –
  - Two main categories of debt protected –
    - Credit cards
    - Mortgages
- Benefits generally fall into one of two categories:
  - Cancel minimum monthly payments on Credit Card and principal and interest payment on Mortgage, up to a maximum number of months
  - Balance Cancellation (up to limit), in event of Death for Credit Card product
- Rather than cancel the monthly payment, some debt protection products only suspend the payment
- Rate is per \$100 of outstanding balance

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Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

Basic Approach to Exposure Analysis –

Initial Estimate

- Start with estimate of # Employed in Tourism & Agriculture in Gulf Coast – consider various sources of estimates – media reports, government labor websites, etc and select reasonable number
- Divide by Total # Employed in Gulf Coast States to estimate % of population affected
- Multiply by In-Force Book in Gulf Coast States to estimate # of customers affected
- Multiply by Average Severity to estimate \$ Impact
- Probably produces a high-end – not all tourism jobs will be lost, as clean-up crews will need to stay in hotels and eat in restaurants
- Initial Estimate should state caveats and have a wide range

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Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

Basic Approach to Exposure Analysis –

Considerations for More Refined Estimate

- Distribution of in-force book by zip code likely not uniform across each state – will impact loss dollars
- Not all customers have Involuntary Unemployment protection – analogous to not all auto customers having physical damage coverage
- Average severity will vary by location – depends on balances carried on credit card and on average mortgage payment

Overall Points

- Data critical to making accurate estimate, which sets expectations for management
- Portfolio analysis critical for product w/o individual pricing
- Analysis of concentration of exposures important in all lines
- Total \$ Impact estimated by this approach was immaterial

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Gulf Coast Oil Spill Impact on Debt Protection - Involuntary Unemployment Claims

Actual Results

- By Report Month – oil spill occurred in April 2010 – impact not expected for 3 mo
  - Credit Card – uptick in IU frequency from June 2010 to July 2010 for Gulf Coast states, but uptick also present for rest of U.S. in-force book
    - Look at ratio of Gulf Coast state IU Freq/rest of U.S. IU Freq –
      - Uptick in July, but also an uptick in May, so July result could be random volatility
  - Mortgage – no uptick apparent in June or July
    - Theory – impacted workers more likely to be seasonal/migrant workers and thus less likely to own a home
- By Incurred Month – more meaningful, as report month data combines data from past incurred months
  - Credit Card – insignificant difference between Gulf Coast and rest of U.S. – Gulf Coast customers filed their claims earlier, thus driving the report month data higher in the initial months
  - Mortgage – no difference between Gulf Coast and rest of U.S.
- Overall – the immaterial \$ impact in the initial estimate turned out to be very conservative

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