

Top Trends in Auto and Home Insurance Underwriting

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Presentation Outline



- Pricing Trends in Auto & Home Insurance
- Premium and Growth Trends: Auto and Home
- Exposure Trends in Auto and Home Insurance
- Economic Trends Impacting Auto and Home Insurance
- Key Cost Drivers in Auto Insurance
- Claim Trends in Auto Insurance
 - BI, PD Liability, PIP, Collision and Comprehensive
- Underwriting Trends in Auto and Home Insurance
- Trends in Fraud and Abuse
 - New York Case Study: No-Fault Claims Fraud
- Catastrophe Loss Trends
- Demographic Trends Impact Personal Lines
- Underwriting: The Technological Arms Race
- Q&A



Pricing Trends in Auto and Home Insurance

Modest Improvements in Pricing Can Will Help Profitability Amid Slack Demand

Average Expenditures on Auto Insurance



Countrywide Auto Insurance Expenditures Increased 2.6% in 2008 and 3.5% Pace in 2009 (est.) and 4% in 2010 (est.)

* Insurance Information Institute Estimates/Forecasts

Source: NAIC, Insurance Information Institute estimates 2008-2010 based on CPI data.

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Monthly Change in Auto Insurance Prices*



* Percentage change from same month in prior year. Source: US Bureau of Labor Statistics





Countrywide Home Insurance Expenditures Increased by an Estimated 2.5% in 2008, 3% in 2009 and 2010

* Insurance Information Institute Estimates/Forecasts **Excludes state-run insurers. Source: NAIC, Insurance Information Institute estimates 2008-2010 based on CPI data.

Average Commercial Rate Change, All Lines, (1Q:2004–4Q:2009)

(Percent)



Source: Council of Insurance Agents & Brokers; Insurance Information Institute

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Exposure Trends in Auto and Home Insurance

Recession, Unemployment, Credit Crisis Have Hurt Personal Lines Exposures, But a Gradual Recovery Is Underway

New Private Housing Starts, 1990-2011F



Little Exposure Growth Likely for Homeowners Insurers Due to Weak Home Construction Forecast for 2010-2011. Also Affects Commercial Insurers with Construction Risk Exposure, Surety

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (2/10); Insurance Information Institute.

Average Square Footage of Completed New Homes in U.S., 1973-2010:Q4



Source: U.S. Census Bureau: <u>http://www.census.gov/const/www/quarterly_starts_completions.pdf;</u> Insurance Information Institute.

Auto/Light Truck Sales, 1999-2011F



Car & Truck Sales Will Begin to Recover but Weak Economy, Credit Woes Are Still Restraining Sales; Gas Prices Could Remain a Factor Too

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (2/10); Insurance Information Institute.

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New Boat Sales Symptomatic of Decline in Insured Exposure Growth for Luxury/Discretionary Items



Sources: National Marine Manufacturers Association, 2008 Abstract (latest available as of Feb. 2010); Insurance Information Institute.

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Economic Trends Impacting Auto/Home Insurance Markets

Recession, Recovery Can Influence Claiming Behavior

Unemployment and Underemployment Rates: Rocketing Up in 2008-09



January 2000 through January 2010, Seasonally Adjusted (%)



Source: US Bureau of Labor Statistics; Insurance Information Institute.

US Unemployment Rate



2007:Q1 to 2011:Q4F*



* _____ = actual; _____ = forecasts Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (2/10); Insurance Information Institute

Unemployment Rates by State, December 2009: Highest 25 States*



*Provisional figures for December 2009, seasonally adjusted.

Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Unemployment Rates By State, December 2009: INSURANCE Lowest 25 States*



*Provisional figures for December 2009, seasonally adjusted. Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Do Changes in Miles Driven Affect Auto Collision Claim Frequency?



Collision Claim Frequency

Paid Claim Frequency = (No. of paid claims)/(Earned Car Years) x 100



Sources: Federal Highway Administration (<u>http://www.fhwa.dot.gov/ohim/tvtw/09dectvt/page2.cfm;</u> ISO Fast Track Monitoring System, *Private Passenger Automobile Fast Track Data*: 3rd Qtr. 2009, published Dec. 31, 2009 and earlier reports. *2009 ISO/FHWA figure is for 12 months ending 9/30/2009.

Unemployment's Effect on Percent of Uninsured Motorists, 1989-2014F



Source: *Uninsured Motorists, 2008* Edition, Insurance Research Council; Blue Chip Economic Indicators (Unemployment data, including forecasts); Insurance Information Institute.

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Auto Insurance: Claim Frequency Impacts of Energy Crisis/Recession of 1973/74



Auto Insurance: Claim Severity Impacts of Energy Crisis/Recession of 1973/74



Source: ISO.

Estimated Homeowner Vacancy Rates Quarterly, 1991-2009:Q3



Source: U.S. Census Bureau, http://www.census.gov/hhes/www/housing/hvs/qtr309/files/tab1.xls

Estimated Rental Vacancy Rates, Quarterly, 1991-2008:Q3



Source: U.S. Census Bureau, http://www.census.gov/hhes/www/housing/hvs/qtr309/files/tab1.xls

Value of Claims Paid to Policyholders with Creditor-Placed Homeowners Insurance, 2004-2008





Creditor-Placed Home Insurers paid \$3.6 billion in claims on behalf of policyholders from 2004-2008. If lenders had not purchased this coverage on behalf of homeowners, tens of thousands of families would have had no source of recovery and would still be responsible for mortgage payments.

Source: Insurance Information Institute calculations based on data from NAIC Credit Insurance Experience Exhibit.



Premium Growth Trends in Auto and Home Insurance

Modest Improvements in Pricing Can Will Help Profitability Amid Slack Demand

Strength of Recent Hard Markets by NWP Growth





Shaded areas denote "hard market" periods Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute

Auto & Home vs. All Lines, Net Written Premium Growth, 2000–2009P*



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^{*2009} figure is preliminary. Sources: A.M. Best; Insurance Information Institute.

Net Written Premium Growth by Segment: 2008-2010P





Rate and exposure are more favorable in personal lines, whereas a prolonged soft market and sluggish recovery from the recession weigh on commercial lines. Low catastrophe losses and ample capacity are holding down reinsurance prices while higher insurer retentions impact premiums

Sources: A.M. Best (historical and estimates/projected for 2009 and 2010); Insurance Information Institute.



Cost Drivers in Auto Insurance

Auto Insurers Experience Inflation Very Differently Than the Overall Economy

Annual Inflation Rates (CPI-U, %), 1990–2011F



Annual Inflation Rates (%)



Low Overall Inflation Does Not Imply Any Lack of Cost Pressure on Auto Insurers

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators, Feb. 10, 2010 (forecasts).

P/C Insurers Experience Inflation More Intensely than 2009 CPI Suggests



Healthcare and Legal/Tort Costs Are a Major P/C Insurance Cost Driver. These Are Expected to Increase Above the Overall Inflation Rate (CPI) Indefinitely

Source: CPI is Blue Chip Economic Indicator 2009 estimate, 12/09; Legal services, medical care and motor vehicle body work are avg. monthly year-over-year change from BLS; BI and no-fault figures from ISO Fast Track data for 4 quarters ending 09:Q3. Tort costs is 2009 Towers-Perrin estimate. WC figure is I.I.I. estimate based on historical NCCI data.

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Top Concerns/Risks for Insurers if Inflation Is Reignited



Concerns The Federal Reserve Has Flooded Financial System with Cash (Turned on the Printing Presses), the Federal Gov't Has Approved a \$787B Stimulus and the Deficit is Expected to Mushroom to \$1.8 Trillion. All Are Potentially Inflationary.

- What are the potential impacts for insurers?
- What can/should insurers do to protect themselves from the risks of inflation?

Key Risks From Sustained/Accelerating Inflation

Rising Claim Severities

Cost of claims settlement rises across the board (property and liability)

Rate Inadequacy

Rates inadequate due to low trend assumptions arising from use of historical data

Reserve Inadequacy

Reserves may develop adversely and become inadequate (deficient)

Burn Through on Retentions

Retentions, deductibles burned through more quickly

Reinsurance Penetration/Exhaustion

 Higher costs → risks burn through their retentions more quickly, tapping into reinsurance more quickly and potentially exhausting their reinsurance more quickly

Over the Last Three Decades, Total Tort Costs* as a % of GDP Appear Somewhat Cyclical

(\$ Billions)



* Excludes the tobacco settlement, medical malpractice

Sources: Tillinghast-Towers Perrin, 2008 Update on US Tort Cost Trends, Appendix 1A; I.I.I. calculations/estimates for 2009 and 2010

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The Nation's Judicial Hellholes: 2010

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Source: American Tort Reform Association; Insurance Information Institute



Claim Trends in Auto Insurance

Rising Costs Held in Check by Falling Frequency: Can That Pattern Be Sustained?

Bodily Injury: Severity Trends Above Decline in Frequency



Annual Change, 2005 through 2009*



Cost Pressures Will Increase if Current BI Frequency and Severity Trends Continue

*2009 figure is for the 4 quarters ending 2009:Q3 Source: ISO/PCI *Fast Track* data; Insurance Information Institute
Property Damage Liability: Frequency Trends Offsetting Rising Severity

Annual Change, 2005 through 2009*



Favorable Frequency Trend is Keeping PD Costs in Check, But Is the Trends Sustainable?

*2009 figure is for the 4 quarters ending 2009:Q3 Source: ISO/PCI *Fast Track* data; Insurance Information Institute

No-Fault (PIP) Liability: Frequency and Severity Trends Are Adverse*





Multiple States Are Experiencing Severe Fraud and Abuse Problems in their No-Fault Systems, Especially FL, MI, NY and NJ

*2009 figure is for the 4 quarters ending 2009:Q3. No-fault states included are: FL, HI, KS, KY, MA, MI, MN, NY, ND and UT. Source: ISO/PCI *Fast Track* data; Insurance Information Institute

Collision Coverage: Frequency and Severity Trends Have Been Favorable*





The Recession, High Fuel Prices Have Helped Push Down Frequency and Temper Severity, But this Trend Will Likely Be Reversed Based on Evidence from Past Recoveries

*2009 figure is for the 4 quarters ending 2009:Q3 Source: ISO/PCI *Fast Track* data; Insurance Information Institute

Comprehensive Coverage: Frequency and Severity Trends Favorable in 2009*

Annual Change, 2005 through 2009*



Weather Creates Volatility for Comprehensive Coverage; Recession Has Helped Push Down Frequency and Temper Severity, But This Factors Will Weaken as Economy Recovers

*2009 figure is for the 4 quarters ending 2009:Q3 Source: ISO/PCI *Fast Track* data; Insurance Information Institute



Underwriting Trends in Auto and Home Insurance

Modest Improvements in Pricing Can Will Help Profitability Amid Slack Demand

Calendar Year Combined Ratios by Segment: 2008-2010P





Overall deterioration in 2010 underwriting performance is due to expected return to normal catastrophe activity along with deteriorating underwriting performance related to the prolonged commercial soft market

After-Tax Return on Surplus (ROE) by Segment: 2008-2010P





Profitability will rise or stabilize across most p/c lines, barring a financial crisis relapse or major catastrophic losses

Change in Policyholder Surplus by Segment: 2008-2010P



Rapid growth in policyholder surplus to pre-crisis levels combined with ongoing slow growth or declines in premiums (esp. in commercial lines) implies a build-up of excess capacity—a major factor in weak commercial lines and reinsurance pricing

Change in Net Investment Income by Segment: 2008-2010P*

Investment income consists primarily of interest on bonds and stock dividends. Both were hit hard during the financial crisis as the Fed slashed interest rates to near zero and corporations cut dividends. A recovery in investment asset values beginning in Q2 2009—which reduced realized capital losses—has helped offset some of the decrease in investment income.

Investment Yield by Segment: 2008-2010P*

The Fed slashed interest rates in 2008 and has kept them low since, eroding the yield on all types of bonds, especially US Treasury securities. Yields will not recover until the Fed begins monetary policy tightening.

Auto & Home Combined Ratios vs. All Lines, 2000–2010P*

Sources: A.M. Best; Insurance Information Institute.

Reduction in Combined Ratio Necessary to Offset 1% Decline in Investment Yield to Maintain Constant ROE, by Line*

Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

*Based on 2008 Invested Assets and Earned Premiums

**US domestic reinsurance only.

Source: A.M. Best; Insurance Information Institute.

Fraud & Abuse in Private Passenger Auto Insurance

Skyrocketing No-Fault (PIP) Claim Costs Are a Major Concern in Several States

Average No-Fault Claim Severity, 2009:Q3

Several States Have Severe and Growing Problems With Rampant Fraud and Abuse in their No-Fault Systems. Claim Severities Are Up Sharply.

Source: ISO/PCI Fast Track data; Insurance Information Institute.

Increase in No-Fault Claim Severity: 2004-2009*

The no-fault systems in MI, NJ, NY and FL are under stress due to rising fraud and abuse which will ultimately lead to higher premiums for drivers

*2009 figure is for the 4 quarters ending 2009:Q3.

**Since 2006 the increase in Florida was 17.3% (average severity that year was \$6,674).

Sources: Insurance Information Institute research from ISO/PCI Fast Track data.

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New York State No-Fault Claim Severity, 1997–2009:Q3

No-Fault Claim Severity

About 20% of No-Fault Claim Costs Are Attributable to Fraud and Abuse

Sources: ISO/PCI Fast Track data; Insurance Information Institute.

Estimated Cost of No-Fault Fraud in New York State, 2005-2009*

*No-fault severity reached a post-reform low in 2004 before, hence selection of 2005 as the first year of analysis. Actual no-fault losses in 2005 and beyond are higher than estimates indicate due to base level of fraud imbedded in 2004 data.

**2009 figure is estimated based on 4 quarters ending 2009:Q3 (latest available).

Source: Insurance Information Institute analysis and research.

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Estimated Cumulative Cost of No-Fault Fraud in New York State, 2005-2010F*

*No-fault severity reached a post-reform low in 2004 before, hence selection of 2005 as the first year of analysis. Actual no-fault losses in 2005 and beyond are higher than estimates indicate due to base level of fraud imbedded in 2004 data.

**2009 figure is estimated based on 4 quarters ending 2009:Q3 (latest available).

Source: Insurance Information Institute analysis and research.

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Estimated Per-Claim Cost of No-Fault Fraud in New York State, 2005-2010F*

*No-fault severity reached a post-reform low in 2004 before, hence selection of 2005 as the first year of analysis. Actual no-fault losses in 2005 and beyond are higher than estimates indicate due to base level of fraud imbedded in 2004 data.

**2009 figure is estimated based on 4 quarters ending 2009:Q3 (latest available).

Source: Insurance Information Institute analysis and research.

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Average Expenditure on Auto Insurance 7 In NY State, 1997-2007*

Sources: NAIC; Insurance Information Institute.

Catastrophic Loss – Catastrophe Losses Trends Are Trending Adversely

US Insured Catastrophe Losses

2009 CAT Losses Were Less than Half of 2008. 2005 Was by Far the Worst Year Ever for Insured Catastrophe Losses in the Decade of the 2000s Were More than Double the 1990s, But the Worst Has Yet to Come

* 2009 figure is Munich Re estimate.

Note: 2001 figure includes \$20.3B for 9/11 losses reported through 12/31/01. Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = \$12.2B.

Sources: Property Claims Service/ISO; Insurance Information Institute.

States with Highest Insured Catastrophe Losses in 2009

*As of February 22, 2010. Source: PCS/ISO

Insured Property Catastrophe Losses as % Insurance Insurance Net Premiums Earned, 1984–2008

Sources: ISO, A.M. Best, Swiss Re Economic Research & Consulting; Insurance Information Institute.

Insured Property Catastrophe Losses as % Net Premiums Earned, 1984–2009P

Source: A.M. Best; Insurance Information Institute.

Global Natural Catastrophes 1980–2009 Overall and insured losses with trend

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Source: Munich Re NatCatSERVICE; Insurance Information Institute.

As of January 2010	Fatalities	Estimated Overall Losses (US \$m)	Estimate Insured (US \$m)	ed Losses
Tropical Cyclones	8	Minor	Minor	
Severe Thunderstorms	21	13,710	9,625†	
Winter Storms	70	1,600	770†	2009 was a near record
Wildfires	6	280	185	year for thunderstorr losses
Floods	22	1,600	232	

U.S. Significant Natural Catastrophes in 2009

\$1+ billion economic loss and/or 50+ fatalities (as of Jan. 2010)

Date	Event	Est. Economic Losses (US \$m)	Estimated Insured Losses (US \$m)
January 26 - 28	Winter Storm	1,100	565†
February 10 - 13	Thunderstorms	2,500	1,350 [†]
March 25 - 26	Thunderstorms	1,500	995†
March – April	Flood	1,000	75
April 9 -11	Thunderstorms	1,700	1,150 [†]
June 10 -18	Thunderstorms	2,000	1,100†
July 20 -21	Thunderstorms	1,000	800†

U.S. Significant Natural Catastrophes, 1950 – 2009

Number of Events (\$1+ Bill economic loss and/or 50+ fatalities)

Losses from U.S. Significant Natural Catastrophes 1950 – 2009

(\$1+ billion economic loss and/or 50+ fatalities)

Sources: MR NatCatSERVICE

Insured Losses Due to Weather Perils in the U.S.: 1980 – 2009

(Tropical Cyclone, Thunderstorm, and Winter Storm only)

Distribution of US Insured CAT Losses: TX, FL, LA vs. US, 1980-2008*

Florida Accounted for 19% of All US Insured CAT Losses from 1980-2008: \$57.1B out of \$297.9B

* All figures (except 2006-2008 loss) have been adjusted to 2005 dollars. Source: PCS division of ISO.

Top 12 Most Costly Disasters in US History

(Insured Losses, 2008, \$ Billions)

8 of the 12 Most Expensive Disasters in US History Have Occurred Since 2004; 8 of the Top 12 Disasters Affected FL

* PCS estimate as of August 1, 2009.

Sources: PCS; Insurance Information Institute inflation adjustments.

Total Value of Insured Coastal Exposure

(2007, \$ Billions)

Demographic Trends Impacting Auto/Home Insurance Markets

Aging, Immigration Will Influence Insurance Demand

Increase in Population by Age Category, 2010 to 2020

Claim Trends in Personal Lines Will Shift With Demographics; Insurers Must Adapt
Younger and Older Drivers Are Over-Represented in Fatal Crashes





Immigration and High Birth Rates in Some Demographic Groups, Combined With Baby Boomers Aging Creates Challenges for Insurers and Auto Safety Experts

Sources: US DOT, NHTSA, Federal Highway Administration; Insurance Information Institute

Motor Vehicle Deaths per 100,000 Persons by Age, 2008



The elderly are almost as likely to be killed in a motor vehicle accident as a teenager. As the Baby Boomers age, this is a looming public health crisis



Problem: How to Keep the Elderly Safe in Cars (Not Just When They're Behind the Wheel)

Sources: Insurance Institute for Highway Safety; Insurance Information Institute



Underwriting Technology: The Competitive Front Line

Underwriting Acumen Will Determine Long-Run Success A Technological Arms Race?

Competition: Success Defined More by Underwriting Acumen than by Price



- Consumers see competition mostly in terms of price and service
- While personal lines insurance is generally very price competitive, longrun success for insurers is not solely correlated with the lowest price
- Underwriting is the key to accurate risk assessment and pricing
- An insurer that systematically prices business more accurately will turn in a better financial performance and lead competitors misprice
- There are theoretically no boundaries when it comes to underwriting
- The past 15 years launched a technological revolution in underwriting
 - Now we're in the midst of a Technological Arms Race
- From Credit, to Predictive Modeling to Telematics to....???
- Next Wave of Innovations Will Include Integration of Real-Time Information About the Vehicle and Driver
- Interactive Technologies
 - Allows drivers to "log on" to view how driving behaviors influence risk and price
- Ability for Consumer to Adjust Behaviors
 - Tremendous public policy, public safety implications

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