Workers Compensation and the New Economy: Trends, Challenges and Opportunities

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Insurance Industry: Financial Update & Outlook

2014 Was a Reasonably Good Year
2015: A Repeat of 2014?

- 2005 ROE* = 9.6%
- 2006 ROE = 12.7%
- 2007 ROE = 10.9%
- 2008 ROE = 0.1%
- 2009 ROE = 5.0%
- 2010 ROE = 6.6%
- 2011 ROAS1 = 3.5%
- 2012 ROAS1 = 5.9%
- 2013 ROAS1 = 10.3%
- 2014 ROAS1 = 7.6%

• ROE figures are GAAP; 1Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 7.7% ROAS through 2014:Q2, 9.8% ROAS in 2013, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009.

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

Net income rose strongly (+81.9%) in 2013 vs. 2012 on lower cats, capital gains
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2014:Q3*

*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.

Source: Insurance Information Institute; NAIC, ISO, A.M. Best.
*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers. Source: Insurance Information Institute; NAIC, ISO, A.M. Best, Conning
P/C Profitability Is Both by Cyclicality and Ordinary Volatility

- Hugo
- Andrew
- Northridge
- Katrina, Rita, Wilma
- Sept. 11
- 4 Hurricanes
- Sandy
- Record Tornado Losses
- Lowest CAT Losses in 15 Years

Sources: ISO, Fortune; Insurance Information Institute.
*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers. 2014 figure is through Q3.
Source: Insurance Information Institute; NAIC, ISO, A.M. Best.
Note: Data through 1934 are based on stock companies only. Data include state funds beginning in 1998.
Source: A.M. Best; Insurance Information Institute.
Commercial lines is prone to more cyclical volatility that personal lines. Recently, growth has stabilized in the 4% to 5% range.
As Recently as 2001, Insurers Paid Out Nearly $1.16 for Every $1 in Earned Premiums

Heavy Use of Reinsurance Lowered Net Losses

Relatively Low CAT Losses, Reserve Releases

Relatively Low CAT Losses, Reserve Releases

Avg. CAT Losses, More Reserve Releases

Higher CAT Losses, Shrinking Reserve Releases, Toll of Soft Market

Best Combined Ratio Since 1949 (87.6)

Cyclical Deterioration

Sandy Impacts

Lower CAT Losses


Sources: A.M. Best, ISO.
A 100 Combined Ratio Isn’t What It Once Was: Investment Impact on ROEs

A combined ratio of about 100 generates an ROE of ~7.0% in 2012/13, ~7.5% ROE in 2009/10, 10% in 2005 and 16% in 1979.

Combined Ratios Must Be Lower in Today’s Depressed Investment Environment to Generate Risk Appropriate ROEs

* 2008-2014 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2014:9M combined ratio including M&FG insurers is 97.7; 2013 = 96.1; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%.

Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.
The most profitable states over the past decade are widely distributed geographically, though none are in the Gulf region.

Profitability Benchmark: All P/C
US: 7.9%

<table>
<thead>
<tr>
<th>State</th>
<th>Profit Rate</th>
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<td>MA</td>
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<td>MT</td>
<td>9.5</td>
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<tr>
<td>MD</td>
<td>9.5</td>
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</tbody>
</table>

Source: NAIC; Insurance Information Institute.
Some of the least profitable states over the past decade were hit hard by catastrophes.
Commercial lines have tended to be more profitable than personal lines over the past decade, though WC has lagged behind.
RNW Workers Comp: MN vs. U.S., 2004-2013

Average 2004-2013
US: 7.1%
MN: 6.8%

Source: NAIC, Insurance Information Institute
Minnesota Workers Comp profitability is comparable to the US average and regional average.
Reserve Change

Reserve releases are expected to gradually taper off, but will continue to benefit the bottom line and combined ratio through at least 2016.

Source: A.M. Best; Barclays research for estimates.
Capital Accumulation Has Multiple Impacts

The industry now has $1 of surplus for every $0.73 of NPW, close to the strongest claims-paying status in its history.

2010:Q1 data includes $22.5B of paid-in capital from a holding company parent for one insurer’s investment in a non-insurance business.

Sources: ISO, A.M. Best.

The P/C insurance industry entered 2015 in very strong financial condition.
US Policyholder Surplus: 1975–2014*

Surplus as of 9/30/14 was a record $673.9, up 3.2% from $653.3 of 12/31/13, and up 53.6% ($234.5B) from the crisis trough of $437.1B at 3/31/09.

“Surplus” is a measure of underwriting capacity. It is analogous to “Owners Equity” or “Net Worth” in non-insurance organizations.

The Premium-to-Surplus Ratio Stood at $0.73:$1 as of 9/30/14, a Near Record Low (at Least in Recent History)

* As of 9/30/14.
The larger surplus is in relation to premiums—the lower the P:S ratio—and the greater the industry’s capacity to handle the risk it has accepted.

Surplus as of 9/30/14 was $0.75:$1, a near-record low (at least in modern history).

9/11, Recession & Hard Market

The Premium-to-Surplus Ratio Stood at $0.75:$1 as of 9/30/14, a Record Low (at Least in Recent History)

* As of 9/30/14.

Surplus Redundancy (Deficiency)

Excess Capital

Barclay’s suggests that surplus is approximately $200B (~30%)

The Industry’s Strong Capital Position Suggests Insurers Are in a Good Position to Increase Risk Appetite, Repurchase Shares and Pursue Acquisitions

Source: Barclays Research estimates.

Source: Calculations from A.M. Best data by Insurance Information Institute.
INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Depressed Yields Will Necessarily Influence Underwriting & Pricing
Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014.

1 Investment gains consist primarily of interest and stock dividends. *2014 figure is estimated based on annualized data through Q3.

Sources: ISO; Insurance Information Institute.
Distribution of Invested Assets: P/C Insurance Industry, 2013

$ Billions

- Bonds, 62%
- Stocks, 22%
- Cash, Cash Equiv. & ST Investments, 6%
- All Other, 10%

Total Invested Assets = $1.5 Trillion


Yields on 10-Year U.S. Treasury Notes have been essentially below 5% for a full decade.

U.S. Treasury yields plunged to historic lows in 2013. Longer-term yields rebounded then sank fell again.

Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through Mar. 2015.
The yield on invested assets continues to decline as returns on maturing bonds generally still exceed new money yields. The end of the Fed’s QE program in Oct. 2014 should allow some increase in longer maturities while short term interest rate increases are unlikely until mid-to-late 2015.

Sources: Conning.
Interest Rate Forecasts: 2015 – 2021

A Full Normalization of Interest Rates Is Unlikely Until 2018 or Later, More than a Decade After the Onset of the Financial Crisis

Sources: Federal Reserve Board of Governors (historical); Blue Chip Economic Indicators (4/15 for 2015 and 2016; for 2017-2021 3/15 issue); Insurance Info. Institute.
Slack in the U.S. economy and falling energy prices suggests that inflationary pressures should remain subdued for an extended period of times.

Inflation peaked at 5.6% in August 2008 on high energy and commodity crisis. The recession and the collapse of the commodity bubble reduced inflationary pressures in 2009/10.

Inflationary expectations have slipped (due in part to falling energy costs) allowing the Fed to maintain low interest rates.

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.
P/C Insurer Net Realized Capital Gains/Losses, 1990-2014:Q3

Realized capital gains rose sharply as equity markets rallied in 2013-14

Insurers Posted Net Realized Capital Gains in 2010 - 2014 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were a Primary Cause of 2008/2009’s Large Drop in Profits and ROE

Sources: A.M. Best, ISO, Insurance Information Institute.
Total Investment Gains Were Flat in 2014 as Low Interest Rates Pressured Investment Income but Realized Capital Gains Remained Robust

1 Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

* 2005 figure includes special one-time dividend of $3.2B;

Sources: ISO; Insurance Information Institute.
Volatility is endemic to stock markets—and may be increasing—but there is no persistent downward trend over long periods of time.

*Through April 9, 2015.

Performance by Segment
Commercial Lines Combined Ratio, 1990-2015F*

Commercial lines underwriting performance is expected to improve as improvement in pricing environment persists.

*2007-2012 figures exclude mortgage and financial guaranty segments.
Workers Compensation Combined Ratio: 1994–2014E

Workers Comp Results Began to Improve in 2012. Underwriting Results Deteriorated Markedly from 2007-2010/11 and Were the Worst They Had Been in a Decade.

Sources: A.M. Best (1994-2009); NCCI (2010-2014F) and are for private carriers only; Insurance Information Institute.
Commercial Property Underwriting Performance Has Been Volatile in Recent Years, Largely Due to Fluctuations in CAT Activity

Source: Conning Research and Consulting.

Commercial Auto is Expected to Improve Only Slowly as Rate Gains Barely Offset Adverse Frequency and Severity Trends

Sources: A.M. Best (1990-2014E); Conning (2015F); Insurance Information Institute.

Commercial General Liability Underwriting Performance Has Been Volatile in Recent Years

Source: Conning Research and Consulting.
Commercial Multi-Peril Underwriting Performance is Expected to Improve in 2013 Assuming Normal Catastrophe Loss Activity

*2014E-2015F figures are Conning figures for the combined liability and non-liability components.
Sources: A.M. Best; Conning; Insurance Information Institute.
Inland Marine Combined Ratio: 2004–2015F

Inland Marine Underwriting Performance Has Been Consistently Strong for Many Years

Workers Compensation
Operating Environment

Workers Comp Results Have Improved Substantially in Recent Years
Workers Compensation Combined Ratio: 1994–2014E

Workers Comp Results Began to Improve in 2012. Underwriting Results Deteriorated Markedly from 2007-2010/11 and Were the Worst They Had Been in a Decade.

Sources: A.M. Best (1994-2009); NCCI (2010-2014F) and are for private carriers only; Insurance Information Institute.
Workers Compensation Premium: Third Consecutive Year of Increase

Net Written Premium

$ Billions

State Funds ($ B)
Private Carriers ($ B)

Source: 1990–2013 Private Carriers, Annual Statement Data, NCCI.
1996–2013 State Funds: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT Annual Statements
State Funds available for 1996 and subsequent

Pvt. Carrier NWP growth was +5.4% in 2013 and 8.7% in 2012
PRIVATE CARRIERS: Overall 2013 Growth = +5.4%

While growth rates varied widely, all states experienced positive growth in 2013

*Excludes monopolistic fund states (in white): OH, ND, WA and WY.
Source: NCCI.
Workers Comp. DWP Growth: MN vs. U.S., 2005-2013

(Percent)

Average 2005-2013

US: -0.04%
MN: 1.7%

Source: SNL Financial.
Workers Compensation Lost-Time Claim Frequency Declined in 2013

Lost-Time Claims

Cumulative Change of −55.4% (1991–2011 adj.)

Frequency Change: 2007—2012
Contracting: 7.9→7.1  -9.3%
Manufacturing: 13.6→12.0  -11.8%

*Adjustments primarily due to significant audit activity.
2013p: Preliminary based on data valued as of 12/31/2013
1991–2012: Based on data through 12/31/2012, developed to ultimate
Based on the states where NCCI provides ratemaking services, including state funds; excludes high deductible policies
Frequency is the number of lost-time claims per $1M pure premium at current wage and voluntary loss cost level
Source: NCCI.
Workers Compensation Medical Severity
Moderate Increase in 2013

Medical
Claim Cost ($000s)

Average Medical Cost per Lost-Time Claim

Accident Year

Annual Change 1991–1993: +1.9%
Annual Change 1994–2001: +8.9%
Annual Change 2002–2013: +5.2%

Cumulative Change = 256%
(1991-2013p)

1991-2012: Based on data through 12/31/2012, developed to ultimate
Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.
Workers Compensation
Change in Medical Severity
Comparison to Change in Medical Consumer Price Index (CPI)

Percent Change

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<th>Year</th>
<th>Change in Lost-Time Medical Claim Severity</th>
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Change in lost-time medical claim severity, 2013p: Preliminary based on data valued as of 12/31/2013
1995–2012: Based on data through 12/31/2012, developed to ultimate; excludes high deductible policies
Average severity for the states where NCCI provides ratemaking services, including state funds; excluding WV
Sources: NCCI from US Medical CPI: US Bureau of Labor Statistics (BLS)
WC Medical Severity Generally Outpaces the Medical CPI Rate

Average annual increase in WC medical severity from 1995 through 2011 was well above the medical CPI (6.8% vs. 3.8%), but the gap is narrowing.

Medical Cost Inflation vs. Overall CPI, 1995 – 2014*

Though moderating, medical inflation will continue to exceed inflation in the overall economy.

Average Annual Growth Average
1995 – 2013
Healthcare: 3.8%
Total Nonfarm: 2.4%

*July 2014 compared to July 2013.
U.S. health care expenditures have been on a relentless climb for most of the past half century, far outstripping population growth, inflation of GDP growth.

From 1965 through 2013, US health care expenditures had increased by 69 fold. Population growth over the same period increased by a factor of just 1.6. By 2022, health spending will have increased 119 fold.

Health care expenditures as a share of GDP rose from 5.8% in 1965 to 18.0% in 2013 and are expected to reach 19.9% of GDP by 2022.

Since 2009, health expenditures as a % of GDP have flattened out at about 18%--the question is why and will it last?

Growth Analysis by State and Business Segment

Post-Crisis Paradox?

*Premium Growth Rates Vary Tremendously by State*
Net Premium Growth: Annual Change, 1971—2016F

Net Written Premiums Fell 0.7% in 2007 (First Decline Since 1943) by 2.0% in 2008, and 4.2% in 2009, the First 3-Year Decline Since 1930-33.

2015-16F: 4.0%
2014E: 4.0%
2013: 4.6%
2012: +4.3%

*2014 figure is estimate based on actual data through Q3:2014.
Shaded areas denote “hard market” periods
Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.
Direct Premiums Written: Total P/C
Percent Change by State, 2007-2013

Top 25 States

North Dakota was the country’s growth leader over the past 6 years with premiums written expanding by 74.6%, fueled by the state’s energy boom.

Growth Benchmarks: Total P/C
US: 7.9%

Sources: SNL Financial LC.; Insurance Information Institute.
Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

Bottom 25 States

Growth was negative in 7 states and DC between 2007 and 2013

Sources: SNL Financial LC.; Insurance Information Institute.
Advertising Expenditures by P/C Insurance Industry, 1999-2013

P/C ad spend hit an all time record high of $6.175 billion in 2013, up 1.5% over 2012. The pace of growth has slowed from 15.8% in 2011 and 23.8% in 2010.

P/C ad spending has more than tripled since 2002 (up 256% from 2002-2013)

Source: Insurance Information Institute from consolidated P/C Annual Statement data, Insurance Expense Exhibit (Part I).
Overall Growth in Ad Spending has greatly exceeded growth in capacity (policyholder surplus) or premium growth. This suggests that there are diminishing returns to advertising.

Sources: Insurance Information Institute analysis from A.M. Best data.
Direct Premiums Written: Comm. Lines
Percent Change by State, 2007-2013

Top 25 States

Only 30 states showed any commercial lines growth from 2007 through 2013

Growth Benchmarks: Commercial
US: 1.3%

Sources: SNL Financial LLC.; Insurance Information Institute.
Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013

Bottom 25 States

Nearly half the states have yet to see commercial lines premium volume return to pre-crisis levels.

States with the poorest performing economies also produced the most negative net change in premiums of the past 6 years.

Sources: SNL Financial LLC.; Insurance Information Institute.
Direct Premiums Written: Workers’ Comp Percent Change by State, 2007-2013*

Top 25 States

*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.
Direct Premiums Written: Worker’s Comp
Percent Change by State, 2007-2013*

Bottom 25 States

*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.
Commercial Lines Pricing Trends

Survey Results Suggest Commercial Pricing Has Flattened Out
Average Commercial Rate Change, All Lines, (1Q:2004–1Q:2015)

(Percents)

Q2 2011 marked the last of 30th consecutive quarter of price declines

Pricing as of Q1:2015 had turned (slightly) negative for only the 3rd time in 3 years

KRW Effect

Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents & Brokers; Insurance Information Institute
Change in Commercial Rate Renewals, by Account Size: 1999:Q4 to 2014:Q4

Percentage Change (%)

Peak = 2001:Q4 +28.5%

Pricing Turned Negative in Early 2004 and Remained that way for 7 ½ years

KRW : No Lasting Impact

Pricing turned positive in Q3:2011, the first increase in nearly 8 years; Q1:2014 renewals were up 1.5%; Some insurers posted stronger numbers.

Trough = 2007:Q3 -13.6%

Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.

Despite several years of gains, pricing today for midsized accounts is where it was in late 2001 (around 9/11), suggesting additional rate need going forward, esp. in light of record low interest rates.

Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.
Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.
Directional Pricing Trend in Large Account P/C Renewals

Early 2009 through Early 2015

Few accounts are seeing increases

Source: Barclays’ Commercial Insurance Buyers Survey.
Change in Commercial Rate Renewals, by Line: 2015:Q1

Percentage Change (%)

Employment Practices rate increases are large than any other line, followed by Commercial Auto and D&O

Major Commercial Lines Renewals Were Mixed to Flat in Q1:2015; EPL and Commercial Auto Led the Way

Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents and Brokers; Insurance Information Institute.
Workers Compensation Approved Changes in Bureau Rates/Loss Costs

All States

Percent Change

Calendar Year

*States approved through 4/8/2014
Countrywide approved changes in advisory rates, loss costs, and assigned risk rates as filed by the applicable rating organization, relative to the previously filed rates
Workers Compensation
Approved Changes in Bureau Rates/Loss Costs
All States vs. NCCI States

Cumulative 2005–2013
–18.1% All States
–15.1% NCCI States

*States approved through 4/8/2014
Countrywide approved changes in advisory rates, loss costs, and assigned risk rates as filed by the applicable rating organization, relative to the previously filed rates
Current NCCI Voluntary Market Rate/Loss Cost Changes
Approved or Pending Rate/Loss Cost Changes
Excludes Law-Only Filings

States approved or pending as of 4/8/2014
IN and NC filed in cooperation with state rating bureau
The Strength of the Economy Will Influence P/C Insurer Growth Opportunities

Growth Will Expand Insurer Exposure Base Across Most Lines
US Real GDP Growth*

Real GDP Growth (%)

The Q4:2008 decline was the steepest since the Q1:1982 drop of 6.8%

Recession began in June 2009

Q1 2014 GDP data were hit hard by this year’s “Polar Vortex” and harsh winter

Demand for Insurance Should Increase in 2015 as GDP Growth Accelerates Modestly and Gradually Benefits the Economy Broadly

* Estimates/Forecasts from Blue Chip Economic Indicators.
Source: US Department of Commerce, Blue Economic Indicators 4/15; Insurance Information Institute.
State-by-State Leading Indicators through August 2015

Growth in the West is finally beginning to pick up

The economic outlook for most of the US is generally positive, though flat-to-negative for 2 states

North Dakota was the economic growth juggernaut of the US in 2013—by far.

Only 9 states experienced growth in excess of 3% in 2013, which is what we would see nationally in a more typical recovery.

Growth Benchmarks: Real GDP
US: 1.8%

Sources: U.S. Bureau of Economic Analysis; Insurance Information Institute.
Real GDP by State Percent Change, 2013: Lowest 25 States

Growth rates in 11 states were still below 1% in 2013

DC and Alabama were the only states to shrink in 2013

Sources: US Bureau of Economic Analysis; Insurance Information Institute.
Percent Change in Real GDP by State, 2013

Sources: US Bureau of Economic Analysis; Insurance Information Institute.
Stubbornly high unemployment and underemployment constrain overall economic growth, but the job market is now clearly improving.

Consumer confidence had been low for years amid high unemployment, falling home prices and other factors adversely impact consumers, but improved substantially over the past 2+ years, as job growth and falling energy prices aid consumers.

Source: University of Michigan; Insurance Information Institute
New Private Housing Starts, 1990-2021F

(Millions of Units)

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959

Job growth, low inventories of existing homes, low mortgage rates and demographics should continue to stimulate new home construction for several more years

Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (3/15); Insurance Information Institute.
New auto/light truck sales fell to the lowest level since the late 1960s. Forecast for 2014-15 is still below 1999-2007 average of 17 million units, but a robust recovery is well underway.

Job growth and improved credit market conditions will boost auto sales in 2014 and beyond.

Yearly car/light truck sales will likely continue at current levels, in part replacing cars that were held onto in 2008-12. New vehicles will generate more physical damage insurance coverage but will be more expensive to repair. PP Auto premium might grow by 5% - 6%.

Sales have returned to pre-crisis levels.
Mortgages rates plunged to near-record lows in early 2013 but rose as the Fed initiated tapering in its QE program, but have come down again through mid- and late-2014.

Yields on 30-Year mortgages have been below 6% for a six years

Mortgage interest rates remain low by historical standards, aiding the housing recovery. Changes in Fed policy could push rates up modestly later in 2015.

Small business optimism has dropped somewhat since reaching post-crisis highs in late 2014.


<table>
<thead>
<tr>
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<th>Thousands</th>
</tr>
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<td>2014:Q4</td>
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</tr>
</tbody>
</table>

Business bankruptcies in 2014 were below both the Great Recession levels and the 2003:Q3-2005:Q1 period (the best five-quarter stretch in the last 20 years). Bankruptcies restrict exposure growth in all commercial lines.

Sources: U.S. Courts at [http://www.uscourts.gov](http://www.uscourts.gov); Insurance Information Institute
Business Bankruptcy Filings, 1980-2014

% Change Surrounding Recessions

<table>
<thead>
<tr>
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<th>Change</th>
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<tr>
<td>1980-82</td>
<td>58.6%</td>
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<tr>
<td>1980-87</td>
<td>88.7%</td>
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<tr>
<td>1990-91</td>
<td>10.3%</td>
</tr>
<tr>
<td>2000-01</td>
<td>13.0%</td>
</tr>
<tr>
<td>2006-09</td>
<td>208.9%</td>
</tr>
</tbody>
</table>

2014 bankruptcies totaled 26,983, down 18.8% from 2013—the 5th consecutive year of decline. Business bankruptcies more than tripled during the financial crisis.

Significant Exposure Implications for All Commercial Lines as Business Bankruptcies Begin to Decline

Private Sector Business Starts: 1993:Q2 – 2013:Q4* As Strong as Ever?

Business Starts
2006: 861,000
2007: 844,000
2008: 787,000
2009: 701,000
2010: 742,000
2011: 781,000
2012: 800,000
2013: 870,000**

Thousands

Recessions in orange

2013:Q1 578,000 business starts*

*A classification change in 2013:Q1 resulted in a report of 578,000 businesses started in that quarter. Seasonally adjusted. **2014 number assumes 1st quarter equaled average of other three quarters

Labor Markets Trends: RECOVERY CONTINUES

2014

Largest Increase in Jobs Since 1997
Unemployment Rate Fell to Lowest Level Since 2008

Payrolls Expanded to Record High
Unemployment and Underemployment Rates: Still Too High, But Falling

January 2000 through March 2015, Seasonally Adjusted (%)

U-6 soared from 8.0% in March 2007 to 17.5% in October 2009; Stood at 10.9% in Mar. 2015. 8% to 10% is “normal.”

“Headline” unemployment was 5.5% in Mar. 2015. 4.5% to 5.5% is “normal.”

Stubbornly high unemployment and underemployment constrain overall economic growth, but the job market is now clearly improving.

US Unemployment Rate Forecast

2007:Q1 to 2016:Q4F*

Rising unemployment eroded payrolls and WC’s exposure base.
Unemployment peaked at 10% in late 2009.

Unemployment forecasts have been revised modestly downwards. Optimistic scenarios put the unemployment as low as 5.0% by Q4 of 2015.

Jobless figures have been revised downwards for 2015/16

* = actual; = forecasts

In March, 23 states and the District of Columbia had over-the-month unemployment rate decreases, 12 states had increases, and 15 states had no change.

*Provisional figures for March 2015, seasonally adjusted.

In March, 23 states and the District of Columbia had over-the-month unemployment rate decreases, 12 states had increases, and 15 states had no change.

*Provisional figures for March 2015, seasonally adjusted.

Monthly Change in Private Employment

January 2007 through Mar. 2015 (Thousands, Seasonally Adj.)

2,722,000 jobs were created in 2014

129,000 private sector jobs were created in March. In March 2014, the last of the private jobs lost in the Great Recession were recovered

Private Employers Added 11.20 million Jobs Since Jan. 2010 After Having Shed 5.01 Million Jobs in 2009 and 3.76 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)


Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.
Sources: [http://research.stlouisfed.org/fred2/series/WASCUR](http://research.stlouisfed.org/fred2/series/WASCUR); National Bureau of Economic Research (recession dates); Insurance Information Institute.
Payroll vs. Workers Comp Net Written Premiums, 1990-2014P

Payroll Base*
$Billions

WC NWP
$Billions

$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0
7/90-3/91 3/01-11/01 12/07-6/09

Wage & Salary Disbursements
WC NPW

WC premium volume dropped two years before the recession began

WC net premiums written were down $14B or 29.3% to $33.8B in 2010 after peaking at $47.8B in 2005

Sources: NBER (recessions); Federal Reserve Bank of St. Louis at http://research.stlouisfed.org/fred2/series/WASCUR; NCCI; I.I.I.

Continued Payroll Growth and Rate Gains Suggest WC NWP Will Grow Again in 2015

*Private employment; Shaded areas indicate recessions. WC premiums for 2014 are I.I.I. estimates.
Construction Employment, Jan. 2010—March 2015*

Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

*Seasonally adjusted.
The “Great Recession” and housing bust destroyed 2.3 million constructions jobs.

Construction employment troughed at 5.435 million in Jan. 2011, after a loss of 2.291 million jobs, a 29.7% plunge from the April 2006 peak.

Construction employment peaked at 7.726 million in April 2006.

Construction employment as of Mar. 2015 totaled 6.344 million, an increase of 990,000 jobs or 16.7% from the Jan. 2011 trough.

Gap between pre-recession construction peak and today: 1.38 million jobs.

The Construction Sector Was a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.

Note: Recession indicated by gray shaded column.
Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

*Seasonally adjusted.
Despite recent declines, Oil and gas extraction employment is still up 26.8% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

After peaking at its highest level since 1986, O&G employment is falling as oil and gas prices decline
POSITIVE LABOR MARKET DEVELOPMENTS

Key Factors Driving Workers Compensation Exposure
Average Weekly Hours of All Private Workers, Mar. 2006—Mar. 2015

(Hours Worked)

Hours worked plunged during the recession, impacting payroll exposures

Hours worked totaled 34.5 per week in March, just shy of the 34.6 hours typically worked before the “Great Recession”

*Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

The average hourly wage was $24.86 in Mar. 2015, up 17.2% from $21.22 when the recession began in Dec. 2007.

Wage gains continued during the recession, despite massive job losses.

*Seasonally adjusted
Note: Recessions indicated by gray shaded columns.
ADVERSE LONG-TERM LABOR MARKET DEVELOPMENTS

Key Factors Harming Workers Compensation Exposure and the Overall Economy
Labor Force Participation Rate, Jan. 2002—March 2015*

Labor Force Participation as a % of Population

*Defined as the percentage of working age persons in the population who are employed or actively seeking work.

Note: Recessions indicated by gray shaded columns.

Number of “Discouraged Workers,”
Jan. 2002—March 2015

In recent good times, the number of discouraged workers ranged from 200,000-400,000 (1995-2000) or from 300,000-500,000 (2002-2007).

Notes: Recessions indicated by gray shaded columns. Data are seasonally adjusted.
In March 2015, ProPublica/NPR published a series entitled “The Demolition of Workers Comp”

Thesis: WC benefits have been hollowed out and that workers were often no longer well served by the system

Series relied on a number of anecdotal cases of claimants who believed they were adversely impacted

Claims 33 states have watered down benefits under the guise of “reform”

I.I.I. made forceful rebuttal, demonstrating that:
- Insurers spend $40B+ each year treating injured workers
- Workplace is materially safer, in part due to WC incentives
- Application of managed care to WC reduces cost with no adverse impact on outcome (“blank check” unsustainable)
The Construction Sector Is Critical to the Economy and the P/C Insurance Industry
Private Construction Activity is Moving in a Positive Direction though Remains Well Below Pre-Crisis Peak; Residential Dominates

*2015 figure is a seasonally adjusted annual rate as of February.
Sources: US Department of Commerce [http://www.census.gov/construction/c30/c30index.html](http://www.census.gov/construction/c30/c30index.html); Insurance Information Institute.
Overall Construction Activity is Up, But Growth In the Private Sector Slowed in Late 2014 While Picking In the State/Local Sector Government Sector as Budget Woes Ease in Some Jurisdictions

*seasonally adjusted
Value of Private Construction Put in Place, by Segment, Feb. 2015 vs. Feb. 2014*

Led by the Manufacturing and Office segments, Private nonresidential sector construction activity continues to rising after plunging during the “Great Recession.” Residential weakened.

Private Construction Activity is Up in Many Segments, though the Key Residential Construction Sector Weakened in Late 2014/Early 2015; Mixed Outlook for 2015, though Expansion Should Continue

*seasonally adjusted

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Residential</td>
<td>13.9%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Total Nonresidential</td>
<td>2.9%</td>
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<tr>
<td>Office</td>
<td>2.8%</td>
<td>20.8%</td>
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<tr>
<td>Commercial</td>
<td>26.5%</td>
<td>23.6%</td>
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<tr>
<td>Health Care</td>
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<td>2.8%</td>
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<tr>
<td>Educational</td>
<td>-0.3%</td>
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<tr>
<td>Public Safety</td>
<td>-10.7%</td>
<td>-19.7%</td>
</tr>
<tr>
<td>Amusement &amp; Rec.</td>
<td>-19.7%</td>
<td>3.1%</td>
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<tr>
<td>Transportation</td>
<td>6.6%</td>
<td>7.1%</td>
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<tr>
<td>Power</td>
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<tr>
<td>Highway &amp; Street</td>
<td>-16.5%</td>
<td>-16.5%</td>
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<tr>
<td>Sewage &amp; Waste Disposal</td>
<td>2.9%</td>
<td>2.9%</td>
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<tr>
<td>Water Supply</td>
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<td>23.6%</td>
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<tr>
<td>Conservation &amp; Develop.</td>
<td>13.9%</td>
<td>13.9%</td>
</tr>
</tbody>
</table>

Public sector construction activity is down substantially in many segments, a situation that will likely persist, dragging on public entity risk exposures. Amusement & Recreation, Sewage & Waste Disposal and Commercial projects lead public sector construction.

*Public Construction Activity is Beginning to Recover from its Long Contraction which Will Drive Demand in Many Commercial Insurance Lines*

*seasonally adjusted
Source: U.S. Census Bureau, [http://www.census.gov/construction/c30/c30index.html](http://www.census.gov/construction/c30/c30index.html); Insurance Information Institute.
Real (Inflation-Adjusted) Nonresidential Construction, 2000-2014*

(Bar = CAGR; Line = Y/Y Growth Rate)

Construction activity has generally been positive since late 2010 but has occasionally been erratic. Forecast is for slowing improving growth.

Source: US Dept. of Commerce; Wells Fargo Securities (June 6, 2014 research report).
Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Contracted As State/Local Governments Grappled with Deficits and Federal Sequestration

*2014 figure is a seasonally adjusted annual rate as of December; [http://www.census.gov/construction/c30/historical_data.html](http://www.census.gov/construction/c30/historical_data.html)
Sources: US Department of Commerce; Insurance Information Institute.
### New Private Housing Starts, 1990-2021F

**Source:** U.S. Department of Commerce; Blue Chip Economic Indicators (4/15 and 3/15); Insurance Information Institute.

**Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure**

- **New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959.**

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<thead>
<tr>
<th>Year</th>
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<tr>
<td>20F</td>
<td>1.52</td>
</tr>
<tr>
<td>21F</td>
<td>1.52</td>
</tr>
</tbody>
</table>

**Job growth, low inventories of existing homes, low mortgage rates and demographics should continue to stimulate new home construction for several more years.**

*Note: Data represents millions of units.*
Construction Employment, Jan. 2010—March 2015*

Construction employment is +990,000 above Jan. 2011 (+16.7%) trough

Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

*Seasonally adjusted.
The “Great Recession” and housing bust destroyed 2.3 million construction jobs.

Construction employment troughed at 5.435 million in Jan. 2011, after a loss of 2.291 million jobs, a 29.7% plunge from the April 2006 peak.

Construction employment as of Mar. 2015 totaled 6.344 million, an increase of 990,000 jobs or 16.7% from the Jan. 2011 trough.

Gap between pre-recession construction peak and today: 1.38 million jobs.

The Construction Sector Was a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.

Note: Recession indicated by gray shaded column.
The U.S. Is Experiencing a Mini Manufacturing Renaissance but Headwinds from Weak Export Markets and Strong Dollar Have Hurt

The value of Manufacturing Shipments in Feb. 2015 was $481.3B—down slightly since the July 2014 record high of $508.1B

Monthly shipments in Feb. 2015 are similar to pre-crisis (July 2008) peak but has declined in recent months. Manufacturing is energy-intensive and growth leads to gains in many commercial exposures: WC, Commercial Auto, Marine, Property, and various Liability Coverages.

* Seasonally adjusted; Data published Apr. 2, 2015.
Manufacturing Growth for Selected Sectors, 2015 vs. 2014*

Manufacturing of durable goods is stronger than nondurables in 2015

Impact of falling energy prices

Manufacturing Is Expanding in Many Sectors But Declining Energy Prices Are Dragging Down Industry Figures. Continued Gortwh Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages

*Seasonally adjusted; Date are YTD comparing data through February 2015 to the same period in 2014.
In the past 5 years (from January 2010) manufacturing employment is up (+857,000 or +7.5%) and still growing.

Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

*Seasonally adjusted; Feb. and Mar. 2015 are preliminary
The manufacturing sector expanded for 61 of the 63 months from Jan. 2010 through Mar. 2015. Pace of recovery has been uneven due to the rising dollar and economic weakness in Europe and China.

Insurance exposures for industrial production will continue growing in 2015, and commercial insurance premium volume with them. Y-o-Y growth to December 2014 was 4.6%. Both production and premium volume growth for 2015 should exceed this.

Many economists expect business investment to rise in 2015.

Peak at 100.82 in December 2007 (officially the 1st month of the Great Recession)

December 2014 Index at 106.5

Index of Total Industrial Production:*
A Near Peak as of December 2014

*Monthly, seasonally adjusted, through December 2014 (which is preliminary). Index based on year 2007 = 100
Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

Business Fixed Investment is Forecast to Grow Steadily in 2015-16, Fueling Commercial Exposure Growth

Business investment will drive commercial property and liability insurance exposures and should drive employment and WC payroll exposures as well (with a lag).

Sources: Wells Fargo Economic Group; Insurance Information Institute.
ENERGY SECTOR: OIL & GAS INDUSTRY FUTURE IS BRIGHT BUT VOLATILE

US Is Becoming an Energy Powerhouse but Fall in Prices Will Have Negative Impact
Crude oil production in the U.S. is expected to increase by 90.6% from 2008 through 2016—and could overtake Saudi Arabia as the world’s largest oil producer.

The U.S. is already the world’s largest natural gas producer—recently overtaking Russia. This is a potent driver of commercial insurance exposures.

Despite recent declines, Oil and gas extraction employment is still up 26.8% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

After peaking at its highest level since 1986, O&G employment is falling as oil and gas prices decline.

*Seasonally adjusted
Proportion of Businesses Interested in Buying Insurance Online

<table>
<thead>
<tr>
<th>Percent of Survey Respondents</th>
<th>Overall</th>
<th>Less than USD 100k</th>
<th>USD 101k to less than USD 250k</th>
<th>USD 250k to less than USD 500k</th>
<th>USD 500k to less than USD 1mn</th>
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Likelihood of small US businesses buying insurance online directly from the insurer, overall and by annual company revenue, in 2013

The Affordable Care Act & Implications for P/C Insurance

The ACA Is Now Being Fully Implemented; Consequences for P/C Insurance Are Yet to Be Determined
The projected decline in the uninsured population is very sensitive to the enrollment rate under the Affordable Care Act

*Under age 65.
<table>
<thead>
<tr>
<th>Issue</th>
<th>Concern</th>
<th>Contravening Argument</th>
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<tbody>
<tr>
<td>Surge in People Covered by Health Insurance</td>
<td>• System is overwhelmed</td>
<td>• Over time, people will have access to preventative care, improving the general health of the population</td>
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<td>• MD shortage</td>
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<td>• Patient care adversely impacted</td>
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<td>• Greater use of PA’s, etc.</td>
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<td>Electronic Health Records</td>
<td>• Cost</td>
<td>• Computerization of patient data could help flag issues and improve risk management and improve patient outcomes</td>
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<td>Claim Shifting</td>
<td>• Provider/patient may prefer claim handled via WC system</td>
<td>• Reduction in uninsured population reduces shifting</td>
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<tr>
<td>Reimbursement Rates</td>
<td>• Cuts in MC reimbursement rates could makes docs less willing to take WC claims</td>
<td>• Impact would be short-lived. All MC-linked states already boost WC reimbursements</td>
</tr>
</tbody>
</table>

Source: Insurance Information Institute research; WCRI.
ACA Impact on WC May Occur via Changes in Rates Set by State Regulators

- WC rates often tied to Medicare but can change for reasons independent of this link
- There could be both positive and negative effects of a cut in Medicare rates on WC performance in states which tie reimbursement to Medicare
  - WC reimbursement rates would go down
  - Doctors may be unwilling to see WC patients:
    - 64% of Dr.’s surveyed said they would stop accepting new Medicare patients if planned rate cuts go through; some of these same doctors may also refuse WC patients if WC rates also decrease
- These effects would likely be short lived
  - All states which tie their fee schedules to Medicare already increase the Medicare rates to set WC rates, so any drop in the Medicare rates would likely be soon offset by a higher WC adjustment

**WC Maximum Allowable Reimbursement Rates**

-as Percentage of Medicare-

PPACA May Have Distinct Impacts on WC Depending on Claim Frequency/Severity

Potential ACA Impact

- Expanded coverage may shift some small claims to the health insurance system (+)
- Physician access problems could lead to indemnity increases and may bleed into the complicated cases (-)
- Preventative care and early record keeping decreases WC comorbidities (+)
- Soft tissue treatments, a large portion of “slow burn claims,” may decrease in cost (+)
- No significant impacts

**Source:** Christopher Cunniff, FCAS, *Impacts of Healthcare Reform on Workers Compensation.*
Possible Effects on Workers Comp

1. Could slow the growth in WC medical care costs
   - IPAB recommendations and PCORI reports, plus Medicare changes, could have beneficial effects on cost and treatment effectiveness

2. Could ACA be first step in federal regulation of insurance products and markets?
   - Will regulation like that requiring products to be priced to meet Medical Loss Ratios be applied to WC?
   - Will cost-control mechanisms such as the Independent Payment Advisory Board be developed for WC?
   - Will WC insurers lose their limited exemption from anti-trust laws that they have had under McCarran-Ferguson since 1945?
Thank you for your time and your attention!

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