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# *Economic Trends Affecting Automobile Insurance*

## AIPSO 10th Residual Market Planning Conference
## Providence, RI
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# The Strength of the Economy Will Affect P/C Insurer Growth Opportunities

## Growth Will Expand Insurable Exposures and Help Absorb Excess Capital

# Real GDP Growth: Past Recessions and Recoveries, Yearly, 1970-2012

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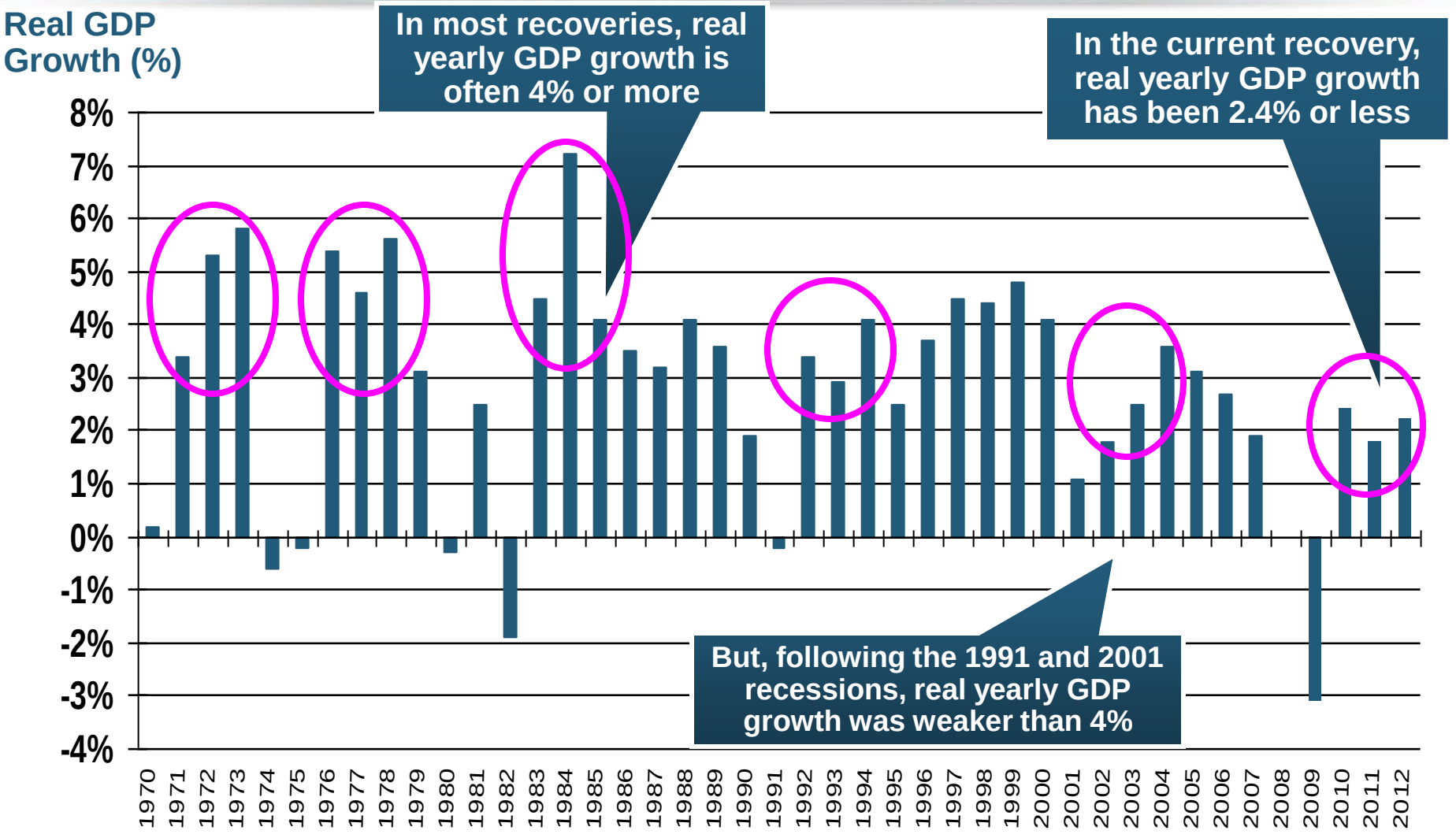
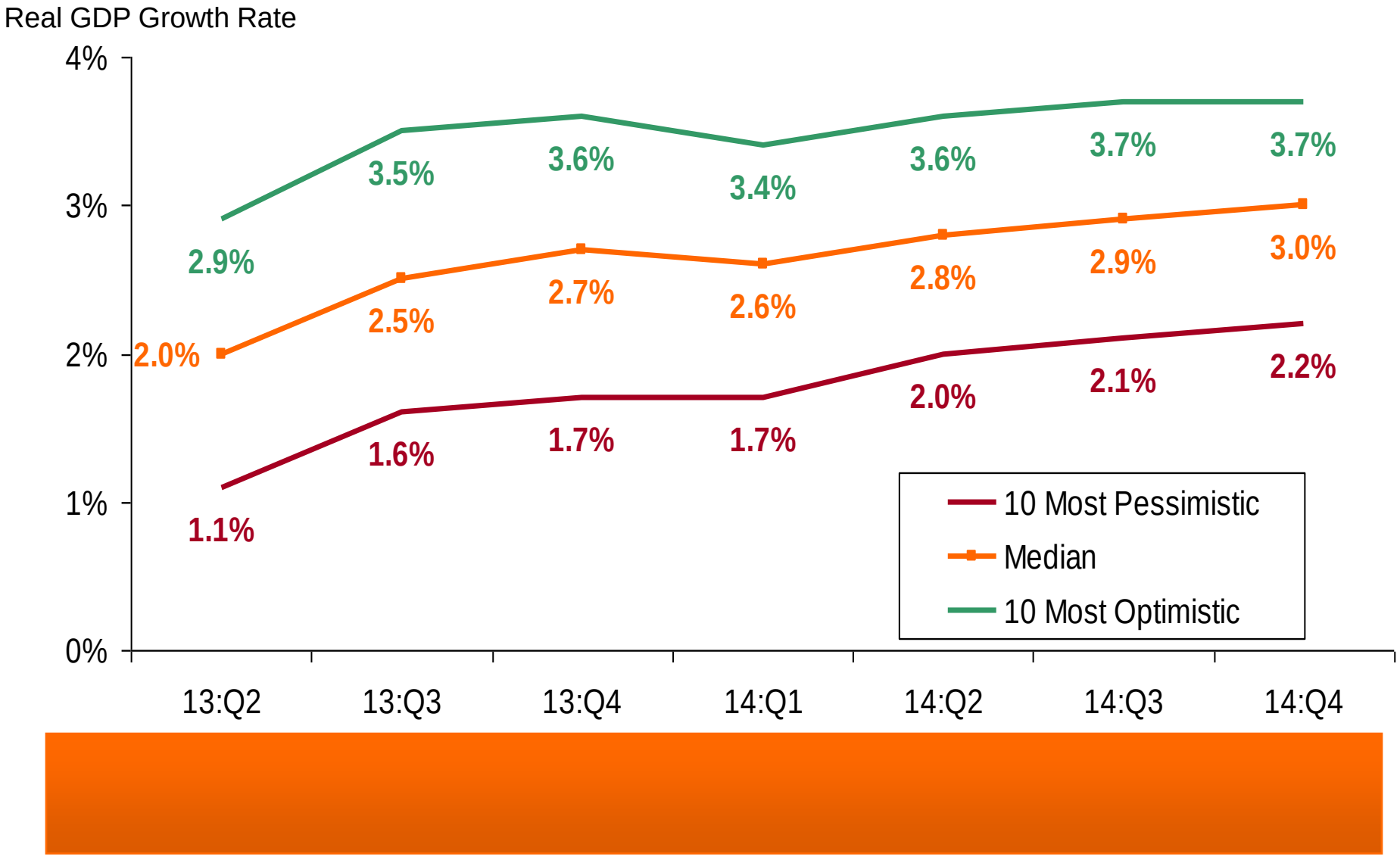



Source: (GDP) U.S. Department of Commerce at http://www.bea.gov/national/xls/gdpchg.xls.

# March 2013 Forecasts of Quarterly US Real GDP for 2013-14

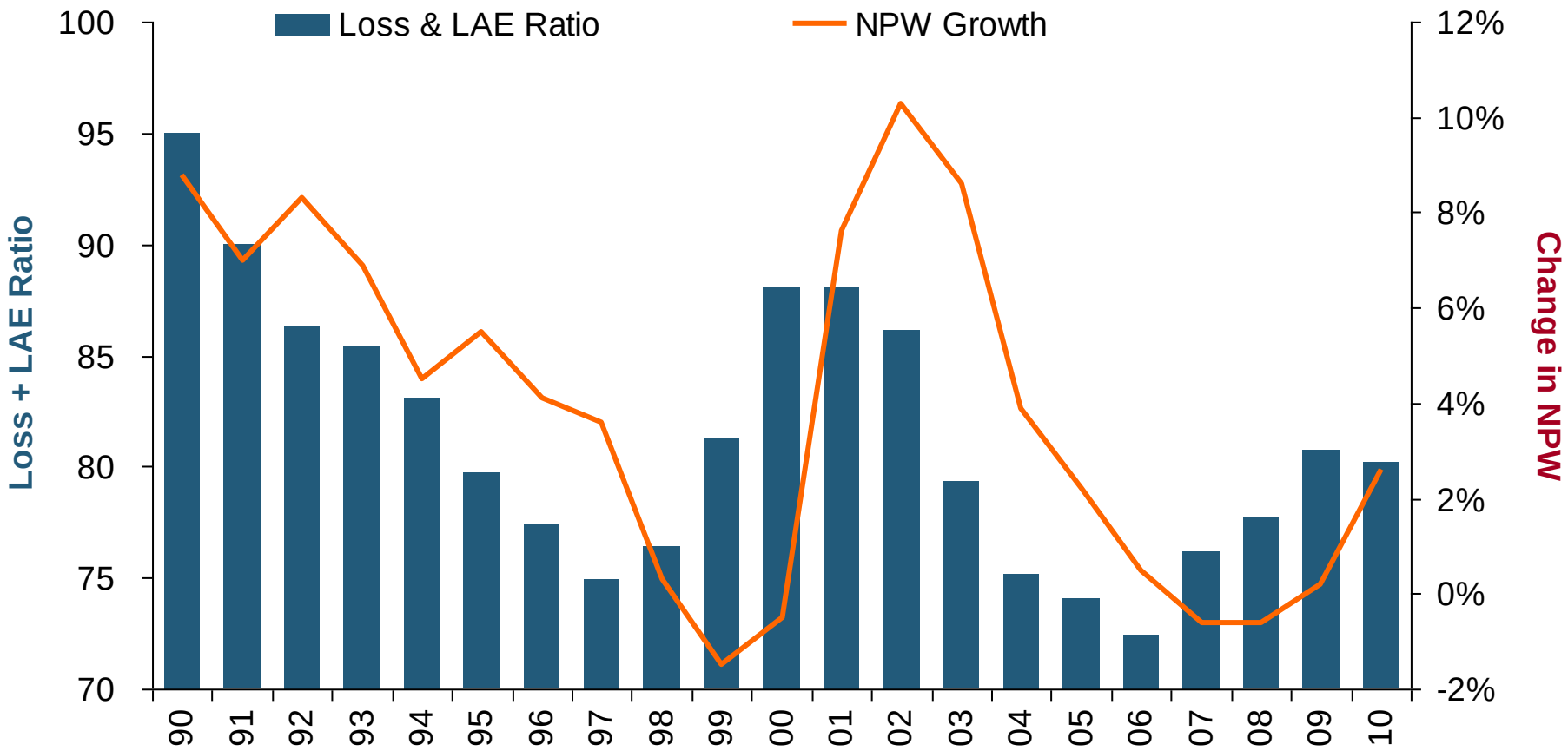



Sources: Blue Chip Economic Indicators (3/13); Insurance Information Institute

# Personal Auto Insurance Premium Growth

## Depends on Exposure Growth, Price Level Changes, and Other Factors

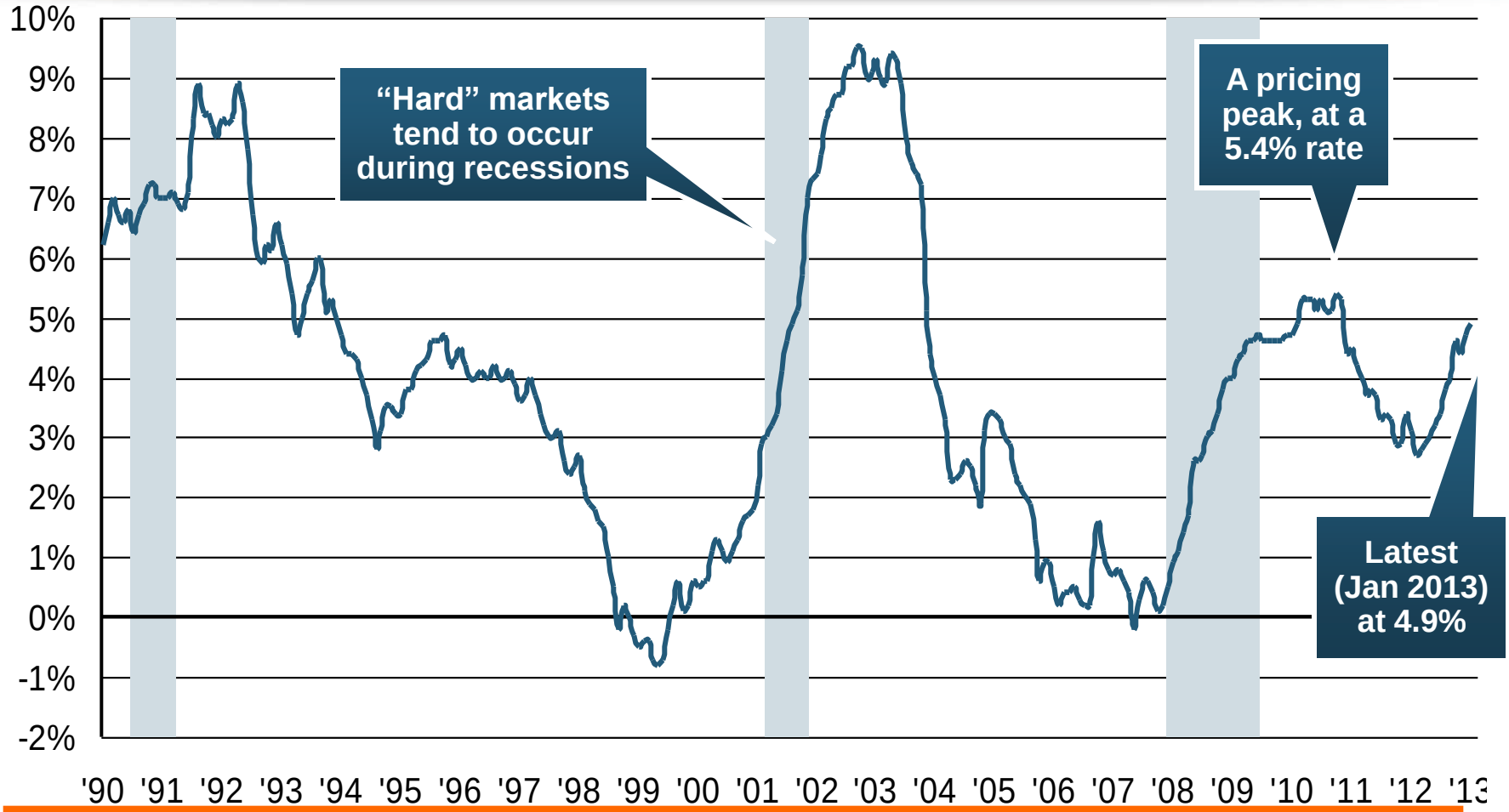
# PP Auto Liability: Loss + LAE Ratio vs. Change in Net Premiums Written, 1990-2010




**Historically, loss trends are a main driver of premium volume changes.**

Sources: A.M. Best; Insurance Information Institute

# Monthly Change* in Auto Insurance Prices, 1991–2013



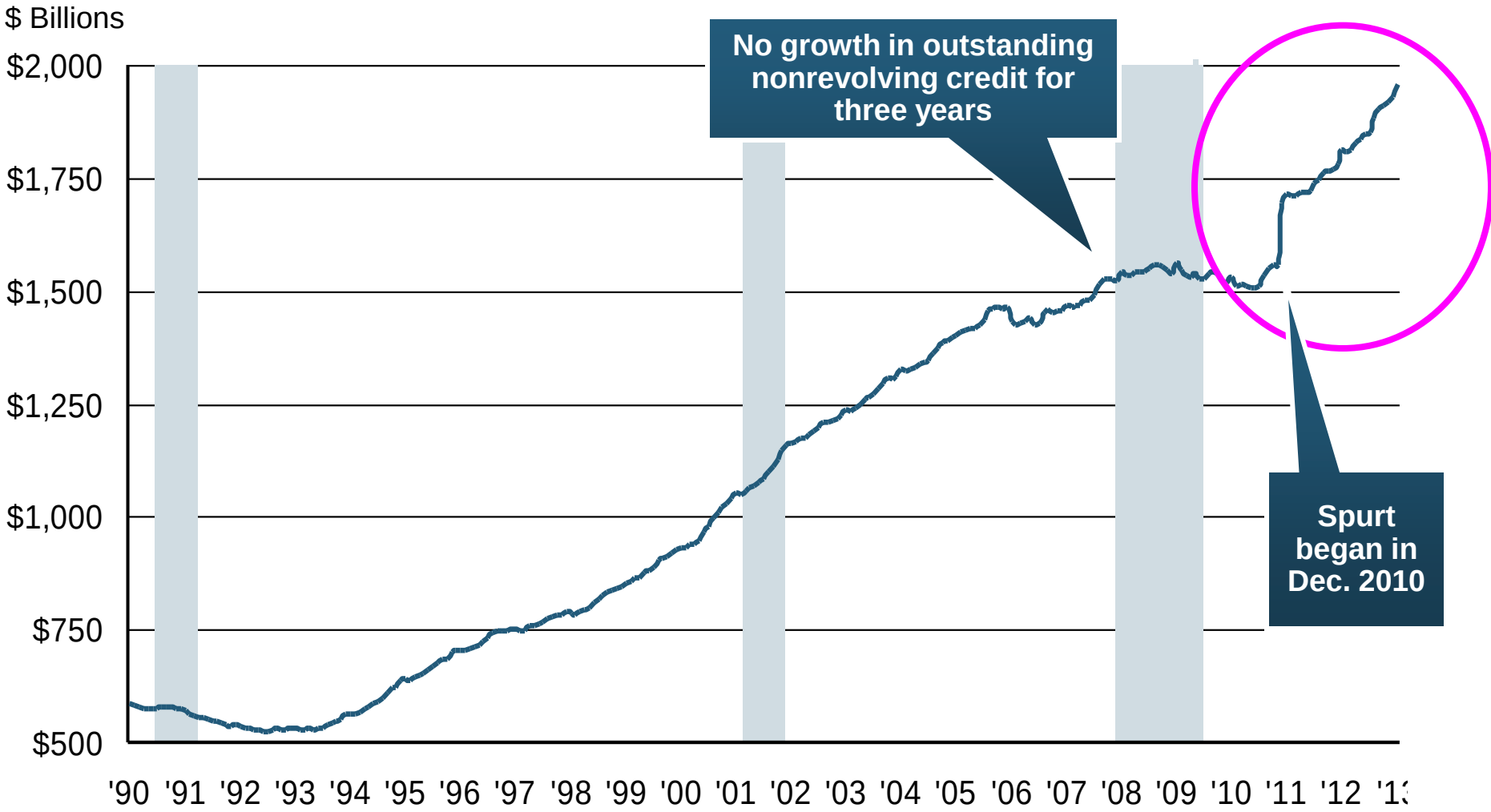

**Cyclical peaks in PP Auto tend to occur approximately every 10 years (early 1990s, early 2000s, and possibly the early 2010s)**

*Percentage change from same month in prior year; through January 2013; seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institute.

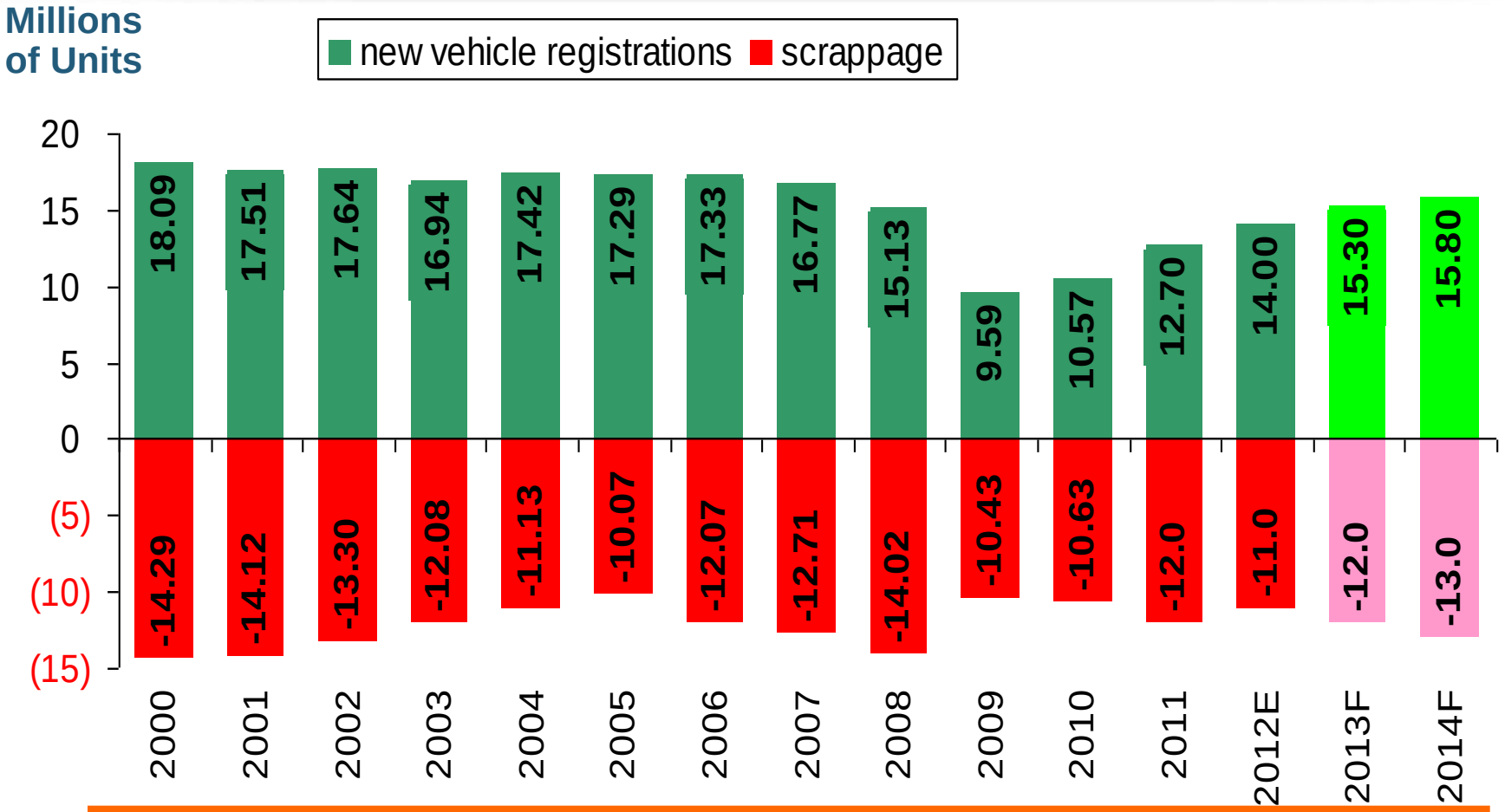
# Auto Loans and other Nonrevolving Credit Outstanding, 1990–2013*




Note: Recessions indicated by gray shaded columns. *Latest data is for January 2013, preliminary

Sources: Federal Reserve at http://www.federalreserve.gov/datadownload/Download.aspx?rel=G19&series=8ee7aa36107a130bcc862d44824a3b86&lastObs=&from=&to=&filetype=csv&label=include&layout=seriescolumn&type=package
National Bureau of Economic Research (recession dates); Insurance Information Institutes.

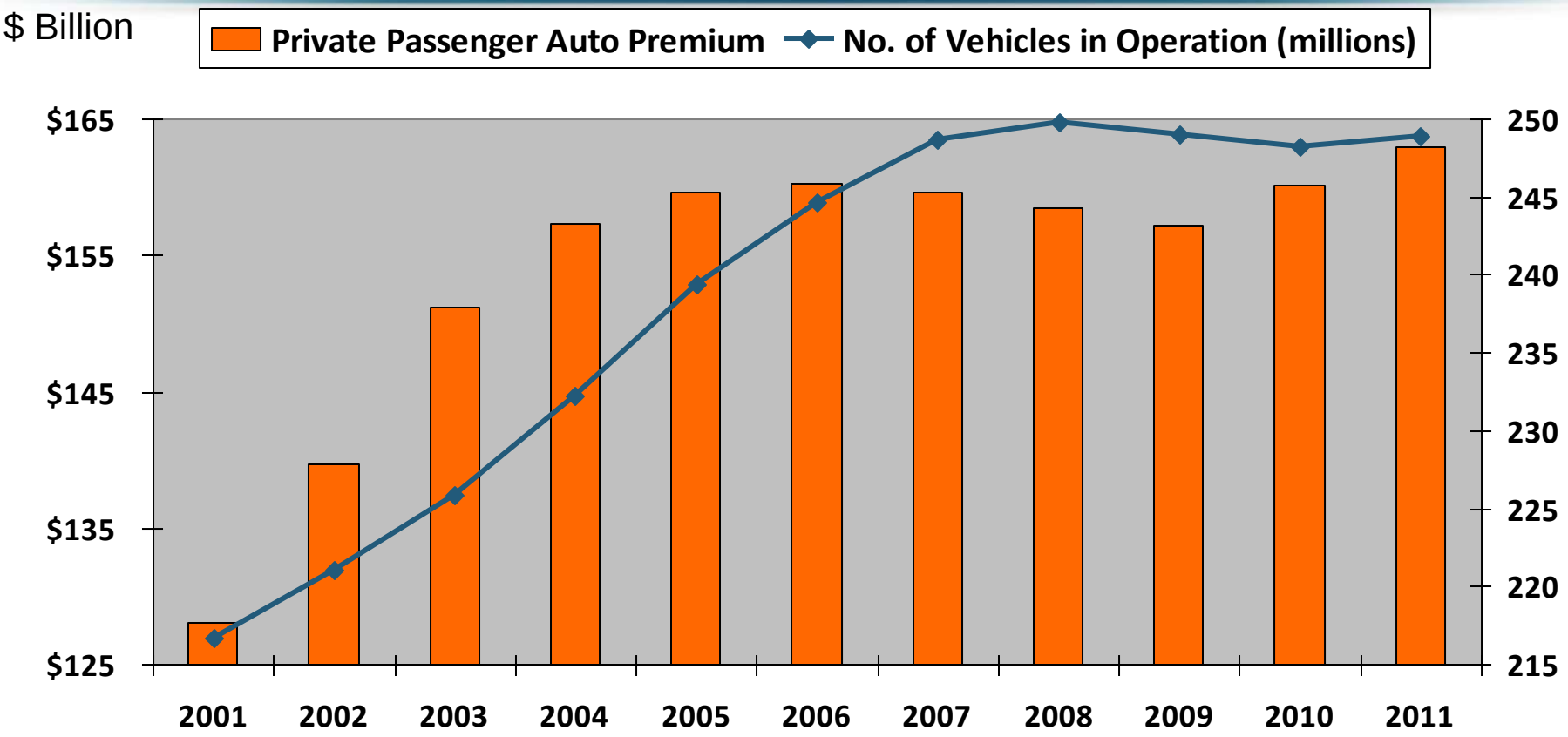
# Auto/Light Truck Exposure Changes, 2000-2014F




**In a "normal" 2-year span, new cars would replace about 25 million old cars, but in 2009-10 only about 17 million old cars were replaced**

Sources: NADA, *State of the Industry Report 2012*, p. 16, at www.nada.org/nadadata citing R. L. Polk; new vehicle estimate/forecasts from Blue Chip Economic Indicators, 3/2013 issue; scrappage estimates/forecasts from Insurance Information Institute.

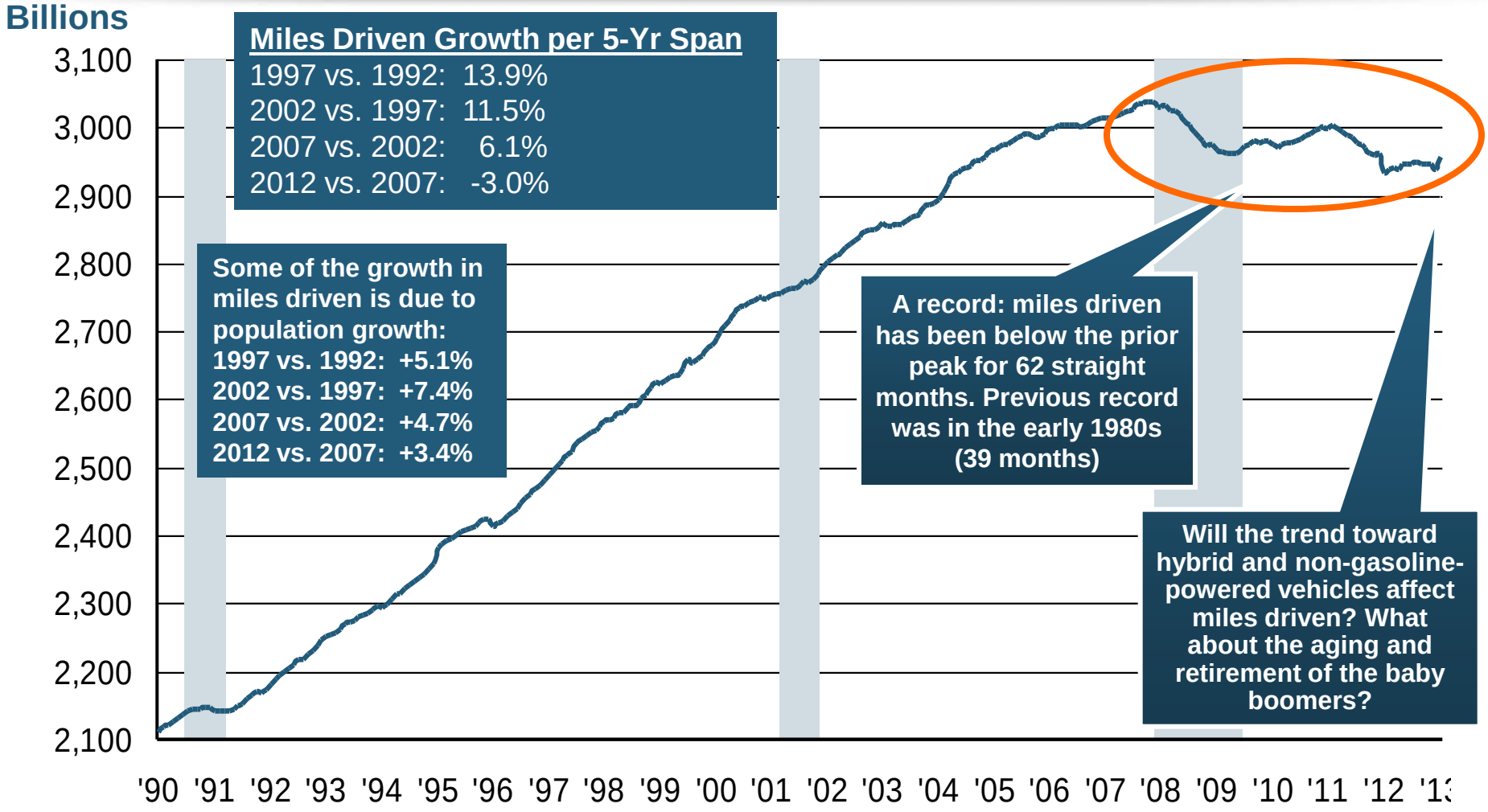
# PP Auto NWP vs. # of Vehicles in Operation, 2001–2011




**PP Auto premiums written are recovering from a period of no growth attributable to the weak economy affecting new vehicle sales, car choice, and increased price sensitivity among consumers**

Sources: A.M. Best; NADA, *State of the Industry Report 2012*, p. 16, at www.nada.org/nadadata citing R. L. Polk; Insurance Information Institute.

# Something Unusual is Happening: Miles Driven*, 1990–2013

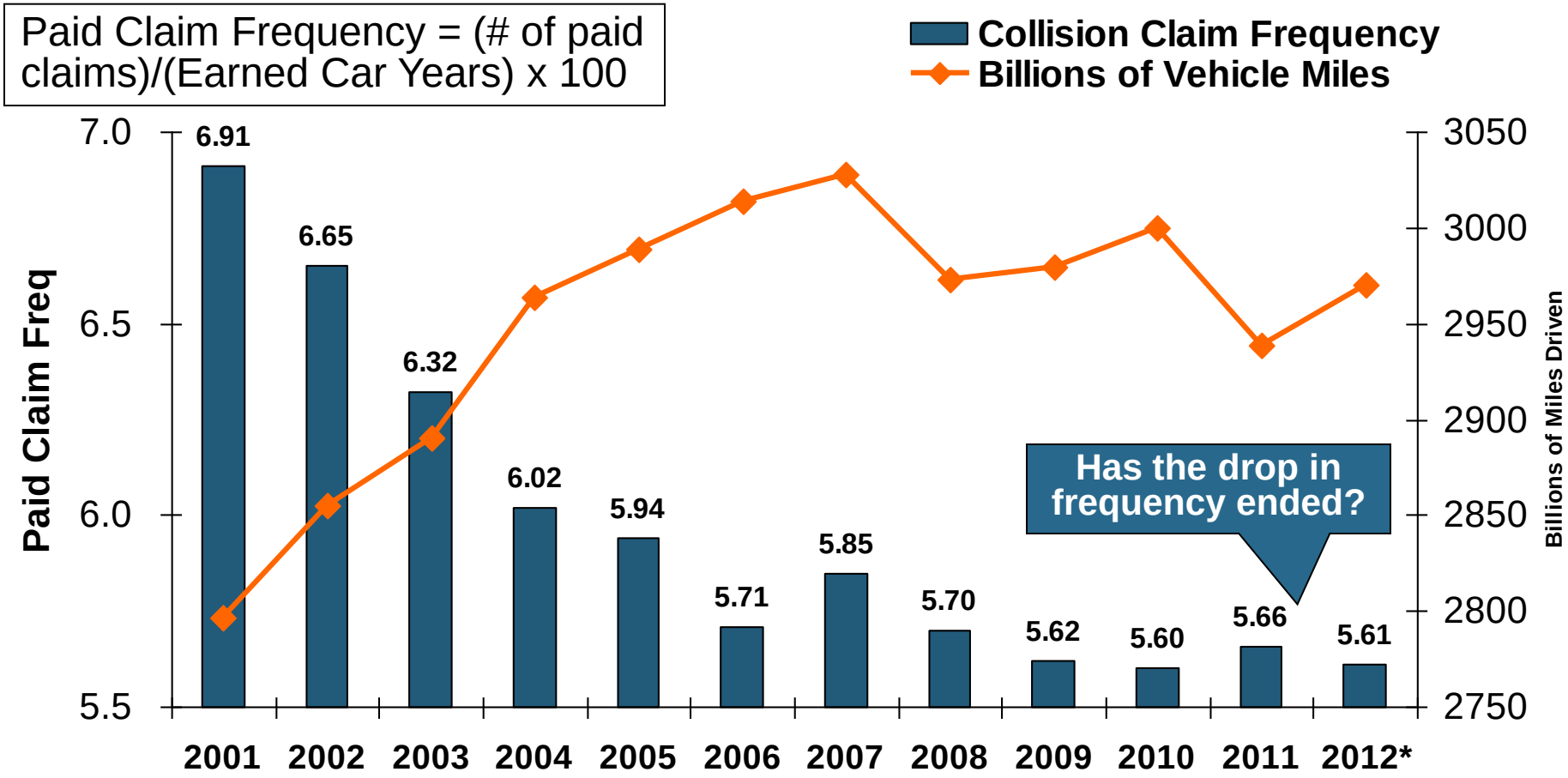



*Moving 12-month total. The latest data is for January 2013. Note: Recessions indicated by gray shaded columns..

Sources: Federal Highway Administration (http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm ); National Bureau of Economic Research (recession dates); Insurance Information Institute.

# Do Changes in Miles Driven Affect Auto Collision Claim Frequency?

Paid Claim Frequency = (# of paid claims)/(Earned Car Years) x 100




**"Pay-As-You-Go" Auto Insurance: Fluctuations in miles driven will affect exposure**

*2012 collision claim frequency data is for twelve months ending September 2012.
Sources: Federal Highway Administration (http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm; ISO Fast Track Monitoring System, *Private Passenger Automobile Fast Track Data*: 3rd Qtr. 2012, published January 8, 2013, and earlier reports.

# Do Changes in Miles Driven Affect Auto Claims Payments (BI+PhysDam)?

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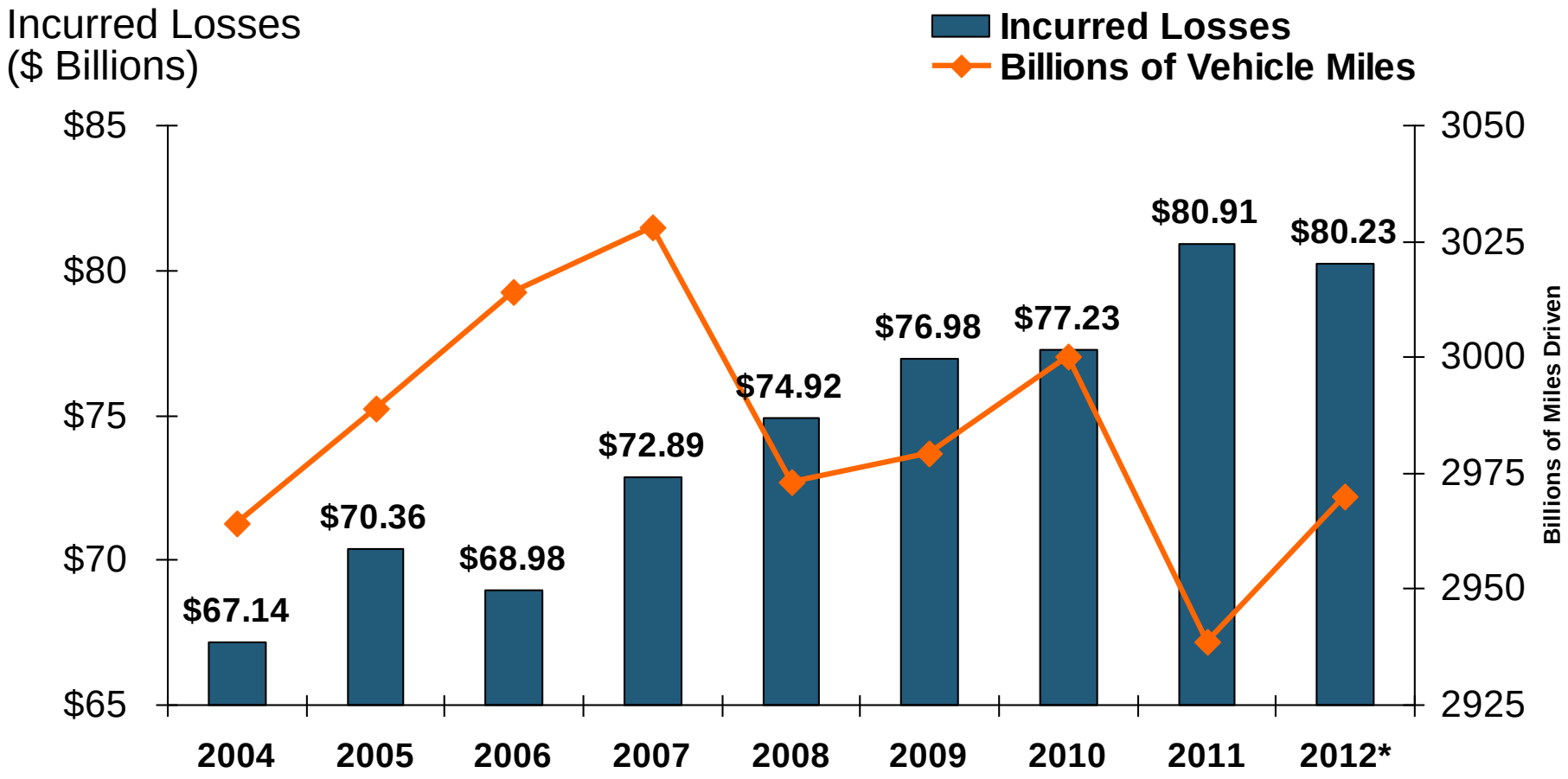


**The sharp drop in miles driven in 2008 and the smaller drop in 2011 didn't slow the growth of auto insurance incurred losses**

*2012 claims data is for twelve months ending September 2012.
Sources: Federal Highway Administration (http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm; ISO Fast Track Monitoring System, *Private Passenger Automobile Fast Track Data*: 3rd Qtr. 2011, published January 8, 2013, and earlier reports.

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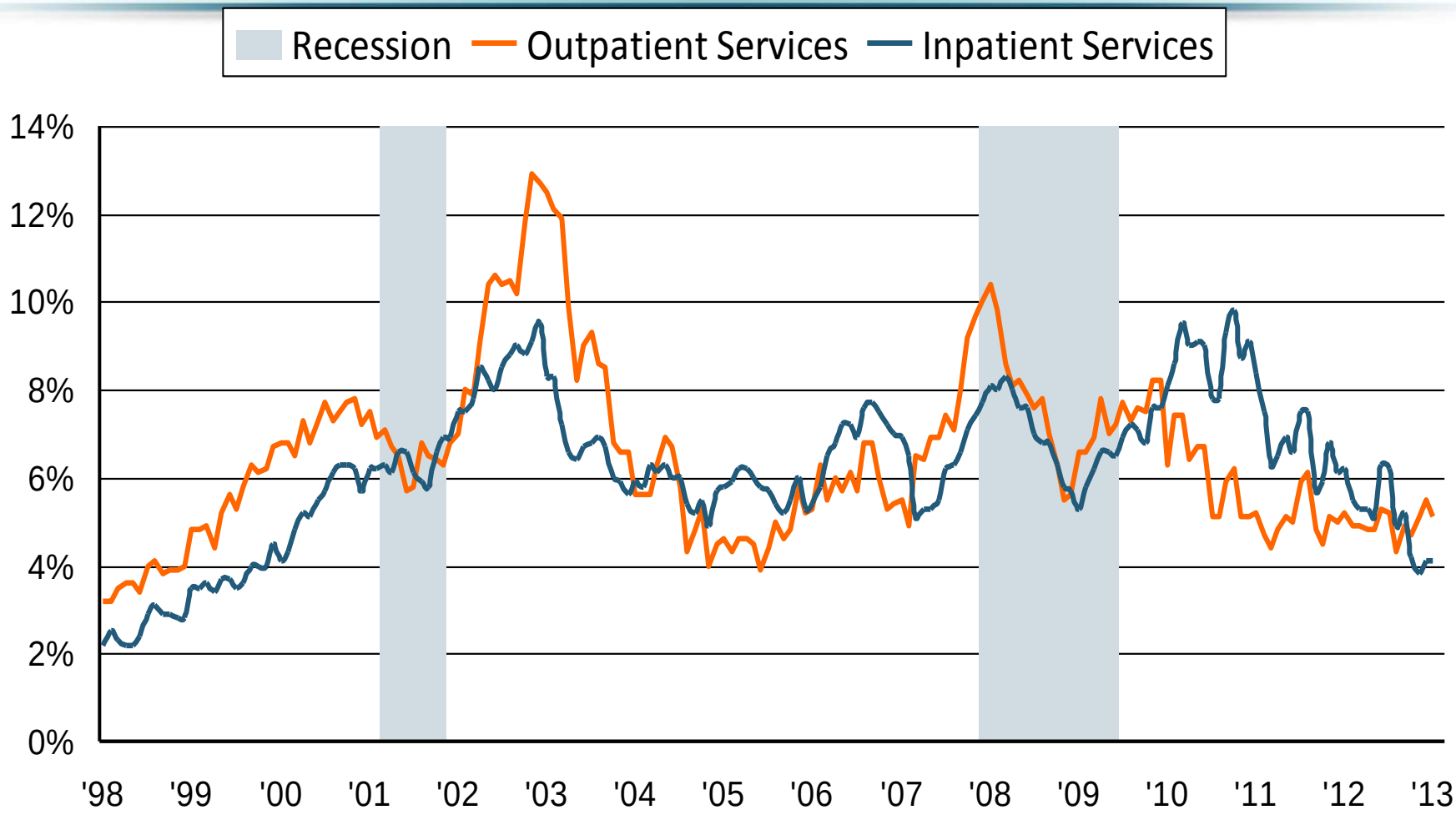
# Inflation and Claims Trends

# Prices for Hospital Services:
## 12-Month Change,* 1998–2013

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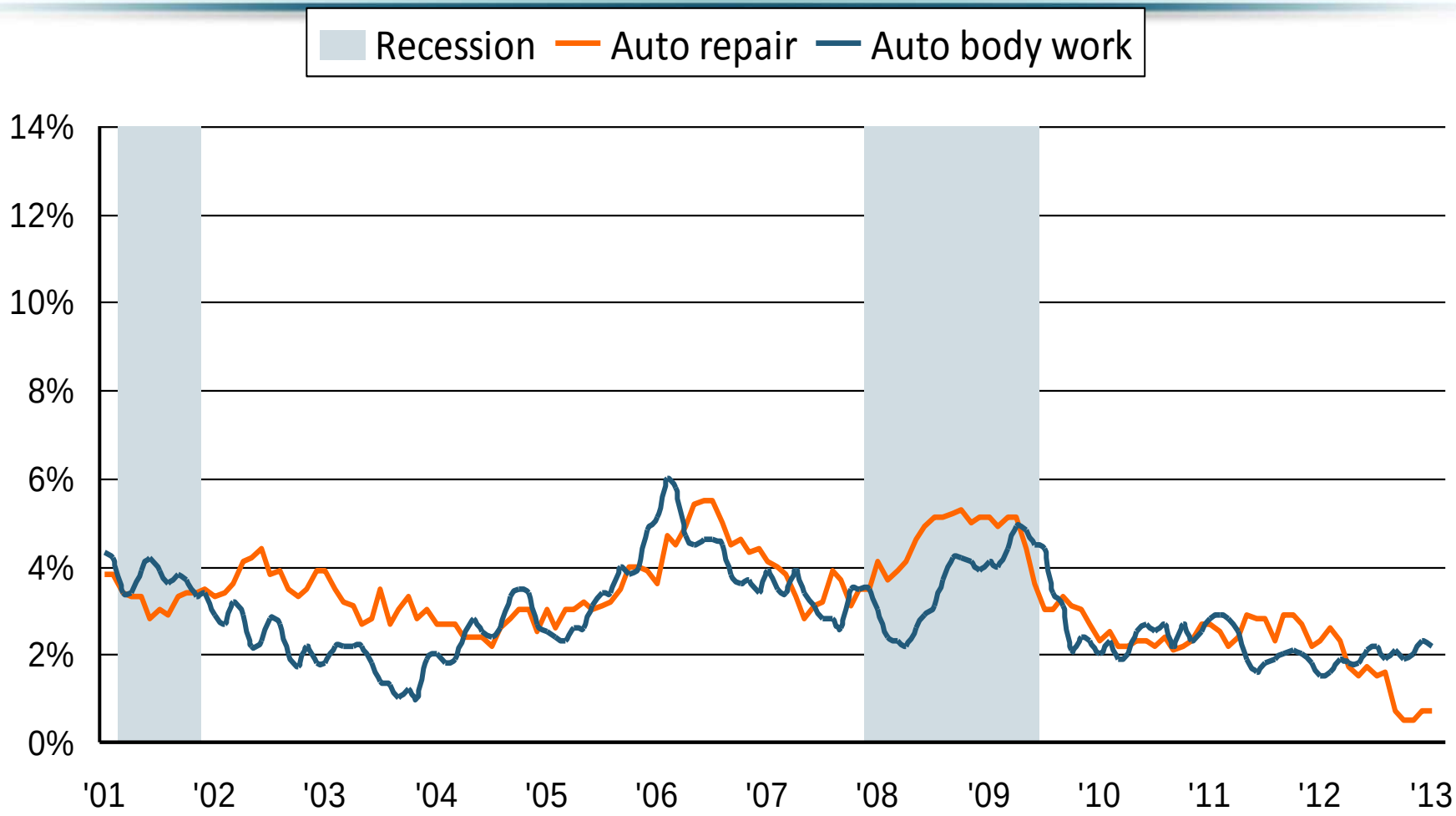
Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institute.

# Forces that Drive Car Repair Costs:
## 12-Month Change,* 2001–2013

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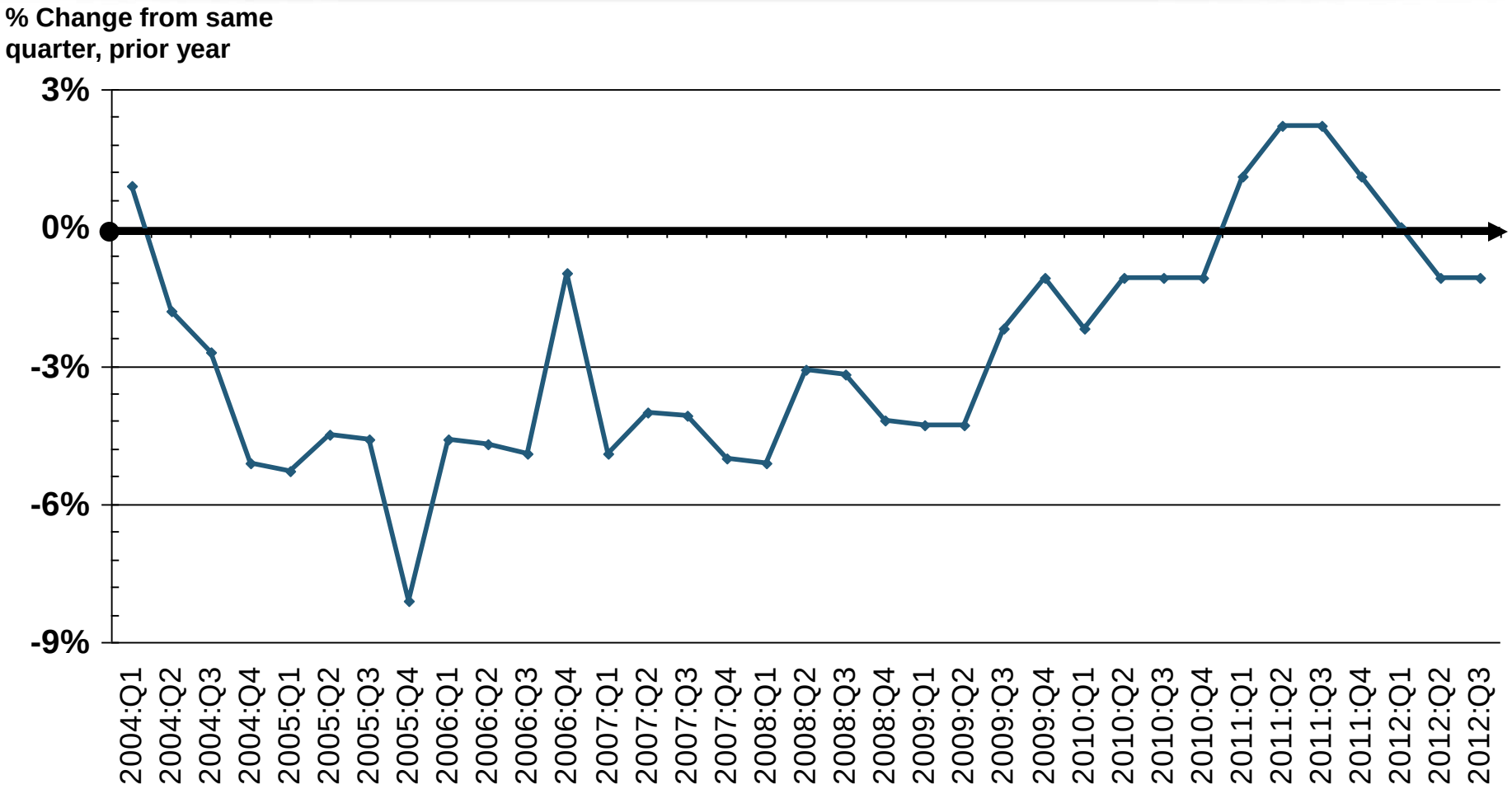
*Percentage change from same month in prior year; through January 2013; seasonally adjusted

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institute.

# PP Auto BI Liability Paid Claim Frequency*, 2004:Q1-2012:Q3

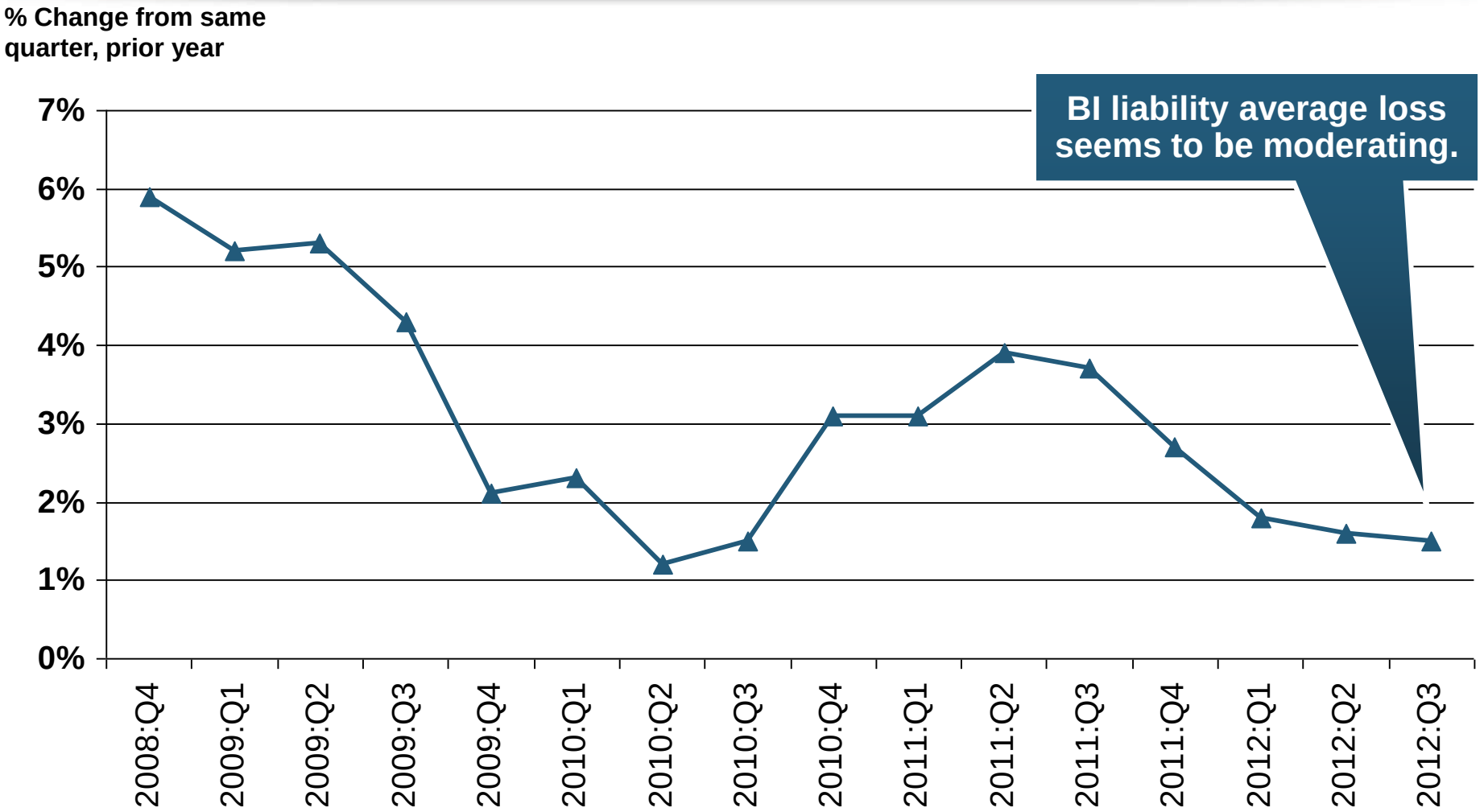



**The frequency of PP Auto BI paid claims (paid claims as a percent of earned-car-years) fell (at a slowing rate) from 2004-2010, rose in 2011, fell again.**

*measured as % change from same quarter, prior year

Source: ISO Fast Track data.

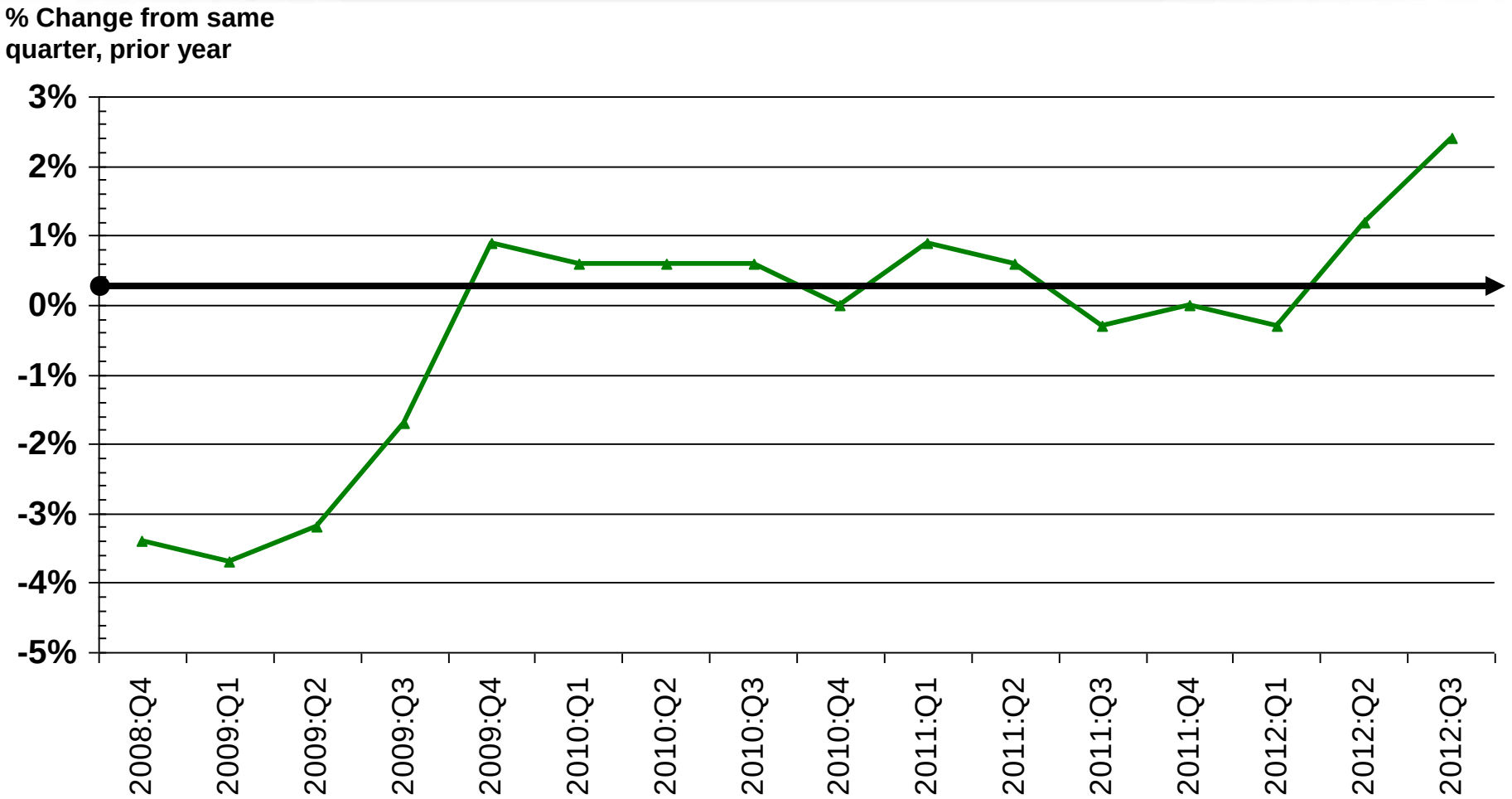
# Trend in PP Auto BI Liability Average Loss* 2008:Q4-2012:Q3




*measured as % change from same quarter, prior year

Source: ISO Fast Track data.

# PP Auto PD Liability Paid Claim Frequency*, 2008:Q4-2012:Q3

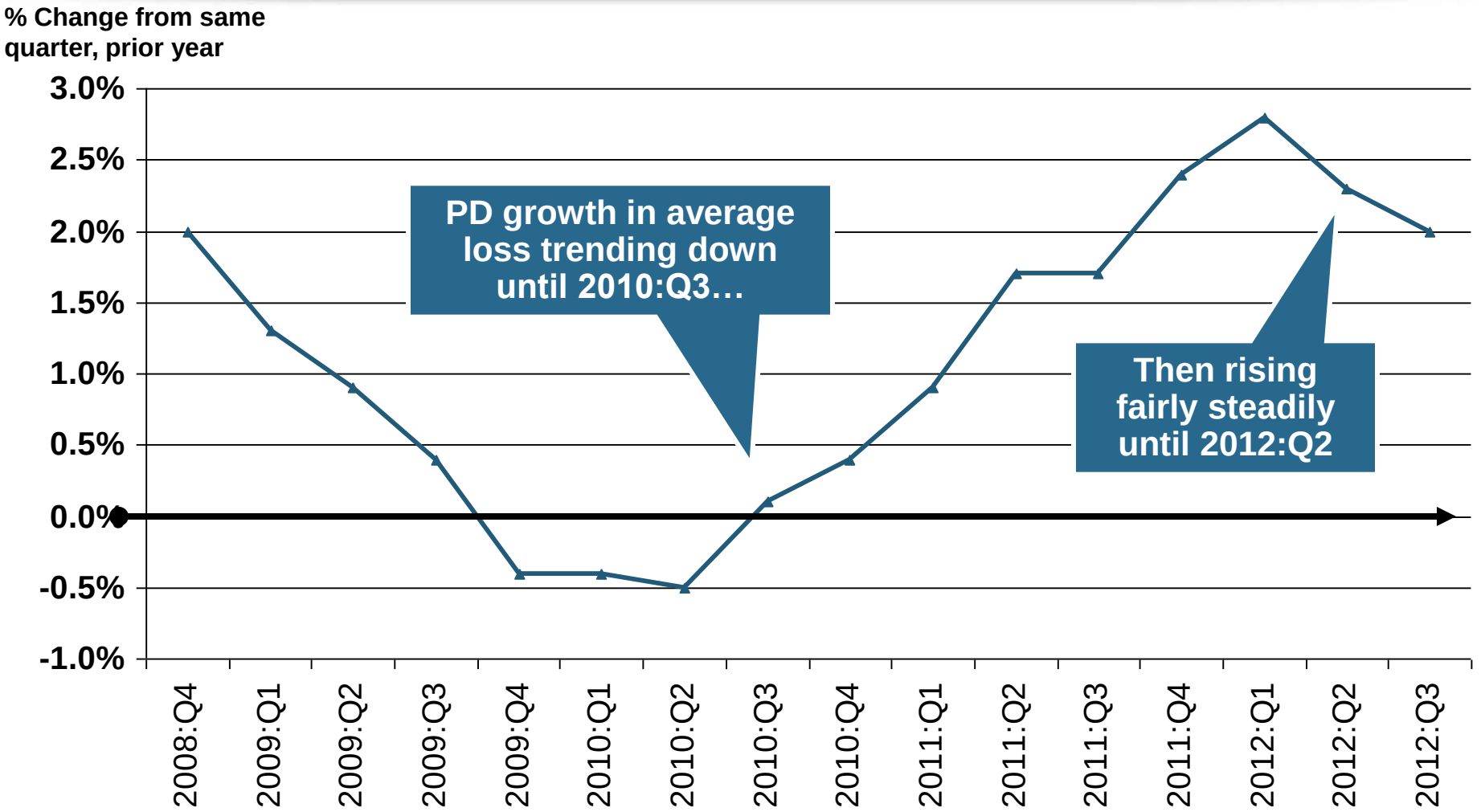



**The frequency of PP Auto PD liability paid claims fell in 2008-09 but has been essentially flat 10 the last 12 quarters.**

*measured as % change from same quarter, prior year

Source: ISO Fast Track data.

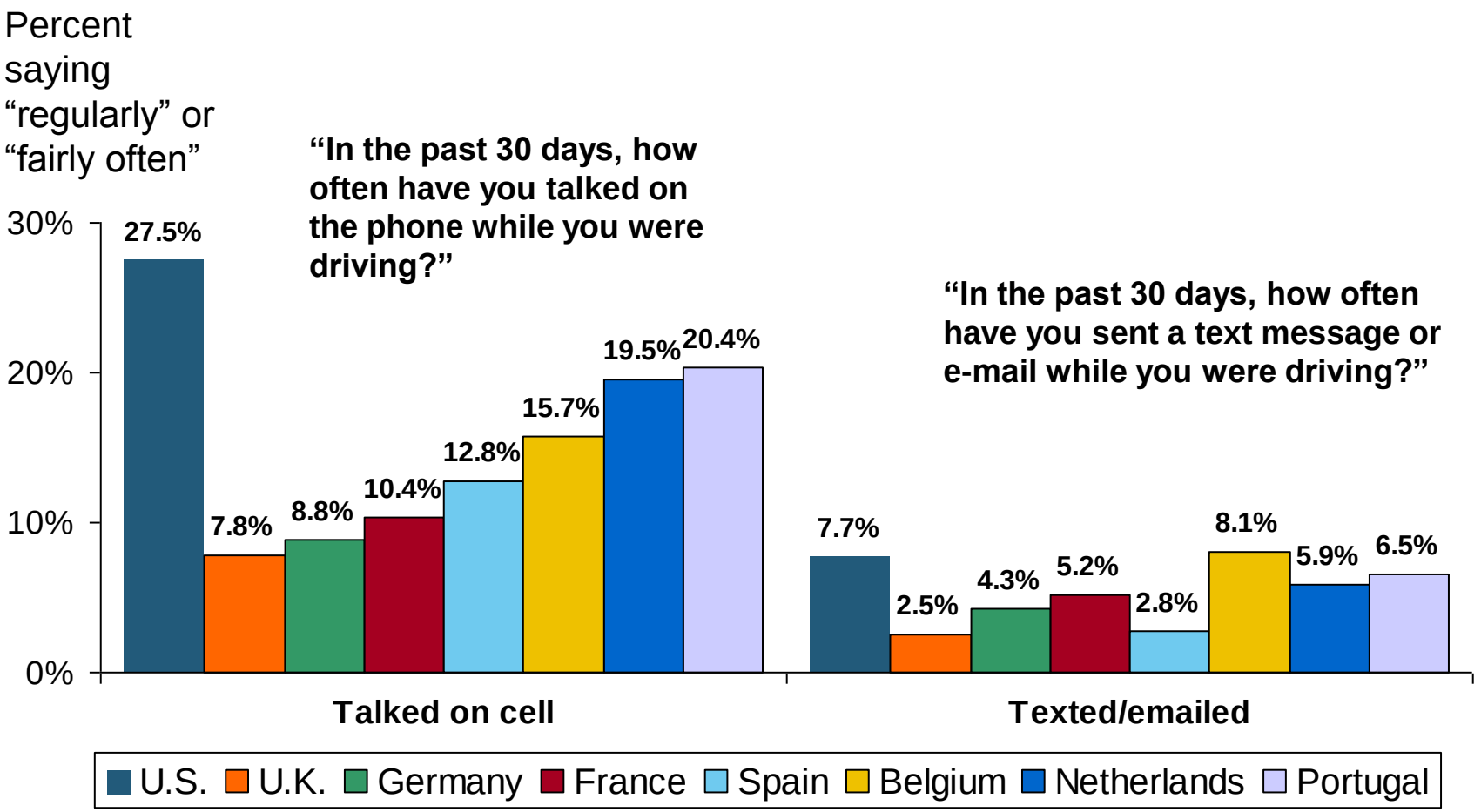
# Trend in PP Auto PD Liability Average Loss 2008:Q4-2012:Q3




*measured as % change from same quarter, prior year

Source: ISO Fast Track data.

# CDC Report: Cell Phone Use While Driving, US and Europe, Fall 2011




Sources: "Mobile Device Use While Driving—United States and Seven European Countries, 2011," in *Morbidity and Mortality Weekly Report*, Centers for Disease Control and Prevention, Vol. 62, No. 10, (March 15, 2013) available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6210a1.ht5m?s_cid=6210a1_e ;Insurance Information Institute

# Investments

# U.S. Treasury Security Yields*: A Long Downward Trend, 1990–2013

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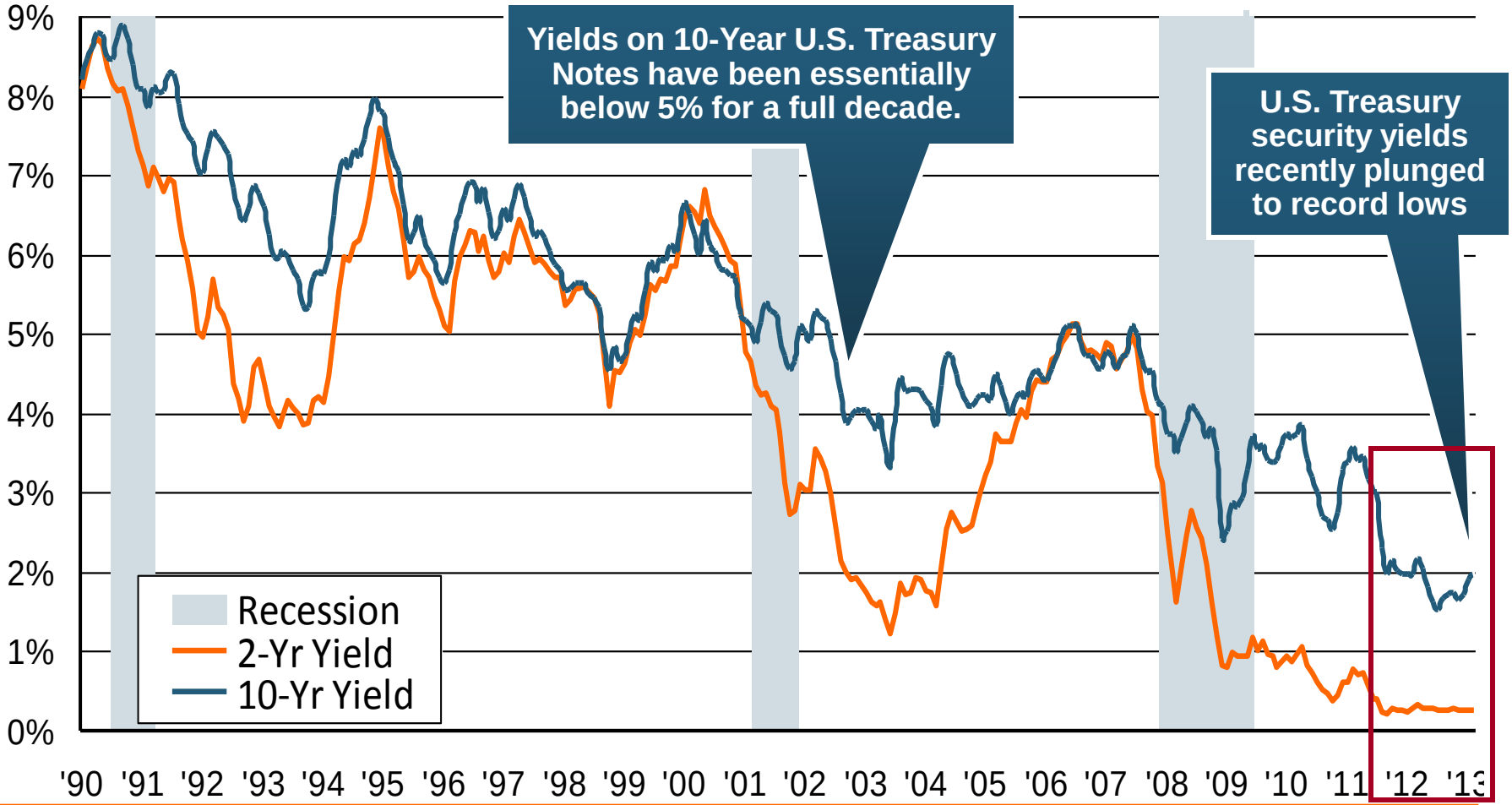
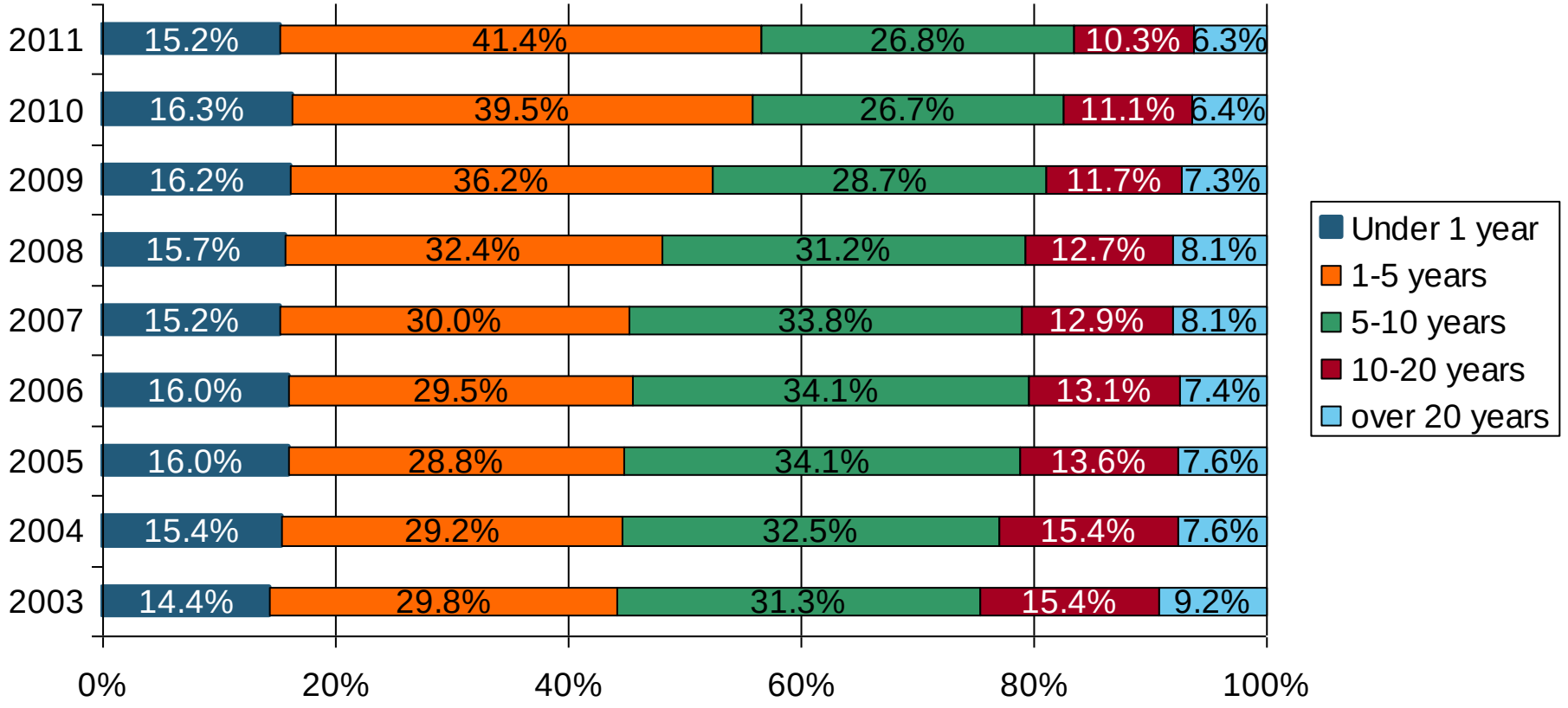



**Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.**

*Monthly, constant maturity, nominal rates, through Feb 2013.

Sources: Federal Reserve Bank at http://www.federalreserve.gov/releases/h15/data.htm.
National Bureau of Economic Research (recession dates); Insurance Information Institutes.

# Distribution of Bond Maturities, P/C Insurance Industry, 2003-2011




**The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry first trimmed its holdings of over-10-year bonds (from 24.6% in 2003 to 16.9% in 2011) and then trimmed bonds in the 5-10-year category. Falling average maturity of the P/C industry's bond portfolio is contributing to a drop in investment income along with lower yields.**

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

**Insurance Information Institute Online:**

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***Thank you for your time and your attention!***