



P&C Insurance - Global

2018 Outlook stable as further premium growth offsets investment and reserving headwinds

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2018 Global P&C Outlook - Stable

NEGATIVE

What could change outlook to negative

- » Prospect of high single-digit declines in overall P&C pricing
- » Large increases in catastrophe exposure relative to capital
- » Materially weaker economic growth, e.g., Moody's central forecast for G-20 real GDP growth falling below 1%
- » Projected 10% decline in P&C capital due to a confluence of claims events
- » Technology-related disruption

STABLE

- » Continued global economic expansion to support further premium growth, especially in China
- » Still-low interest rates constrain investment income, but promote underwriting discipline
- » Capital to remain robust despite rising claims costs and lower reserve releases
- » Further investment in technology and innovation is improving efficiency

POSITIVE

What could change outlook to positive

- » P&C prices rising ahead of loss cost trends, while capital remains robust
- » Gradual rise in interest rates by 200-300bps from current levels
- Materially stronger economic growth, e.g., Moody's central forecast of G-20 real GDP growth exceeding 4%

The Industry Outlook (stable) indicates our forward-looking assessment of fundamental credit conditions that will affect the creditworthiness of the property & casualty insurance industry over the next 12-18 months. As such, the outlook provides our view of how the operating environment for the property & casualty insurance industry, including macroeconomic, competitive and regulatory trends, will affect, among other things, asset quality, capital, funding, liquidity and profitability. Since outlooks represent our forward-looking view on credit conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of the rating outlooks of issuers in the industry, but rather our assessment of the direction of credit fundamentals overall within the industry broadly.

Premiums growing, but profit pressured

Premiums growing and capitalization robust, but investment and reserving face headwinds

Key credit themes

- » Continued global economic expansion to support premium growth, especially in China and other emerging economies, although competition will act as a constraint
- » Capitalization to remain robust and resilient to a range of stress scenarios, with US insurers absorbing 2017 hurricane losses mostly from earnings
- » Price rises will offset rising claims frequency and costs, but will be kept in check by strong competition, especially in personal auto
- » Reserve releases will continue to support profits, but to a lesser extent as claims inflation increases
- » Still low investment yields will curtail profit margins, despite a gradual increase in interest rates and a continued gradual shift towards higher risk investments
- » Insurers to invest more in IT, predictive modelling and new partnerships, but new opportunities will attract competition and bring heightened risk of cyber attacks

2018 country outlooks are mostly stable

Outlook Key:

NEGATIVE

STABLE

POSITIVE

NO OUTLOOK

Global non-life premiums by country (2016 figures: total \$2.1 trillion)

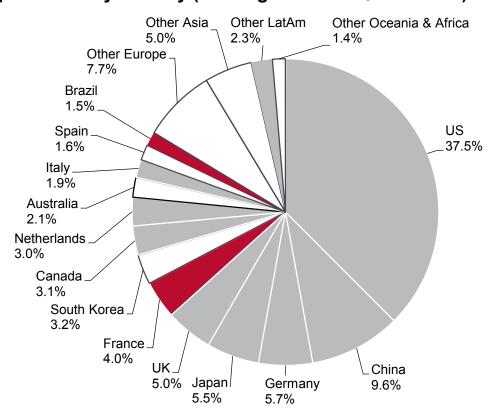


Chart breaks out the top 13 countries based on 2016 nonlife premiums in USD; in Latin America, our P&C sector outlooks are stable for Argentina, Bolivia, Colombia, Mexico, Peru and Uruguay, in addition to the negative for Brazil Sources: Swiss Re Sigma, Moody's Investors Service

P&C insurance forecasts by region

Moody's 12-18 month forecasts highlight regional differences

	North America	Europe	Asia	Latin America
Global P&C market share	41%	29%	23%	4%
Nominal premium growth	Low single digits	Low single digits	Mid-single digits overall, low double-digits in China	Low single digits in real terms with economic recovery in Brazil
Based on:				
Real GDP growth	2% - 2.5%	1.5% - 2.5%	3.5% - 4.5%	1% - 3%
P&C penetration	Flat at more than 4% of GDP	Flat at nearly 3% of GDP	1.5% - 2% of GDP, rising gradually	1.5% - 2% of GDP, rising gradually
P&C pricing	Personal lines up by low single digits, commercial property lines stable with pockets of strength, casualty lines flat to modestly lower	Flat to modestly positive, with UK, Germany, France, Netherlands up by low single digits; Italy and Switzerland flat/slightly down	Overall flat, with small decreases on the back of intense competition and detariffing	Declining yields could prompt higher prices, offset by competition
Combined ratios (assuming no major catastrophes)	Modest deterioration to 100% or more from mid-to-high 90s, with challenges in auto and casualty	Stable to small increase, with most markets remaining in the 95% - 100% range	Most markets are in the mid to high 90s range	Most markets are in the 98% - 105% range
Investment income	Slightly higher, with growing investment portfolios and rising interest rates	Slightly down, weighed by low interest rates	Flat overall. Slow pick up in interest rate, and good equity market performance	Lower in Brazil, Mexico and Argentina due to declining interest rates
Balance sheets	Investment risk leveling off, declining reserve cushion, but healthy capitalization even after significant catastrophes	Incremental investment risk, declining reserve cushion, good capitalization	Increasing investment risk, adequate reserves, healthy capitalization	Improving solvency; significant concentration in LatAm sovereign bonds

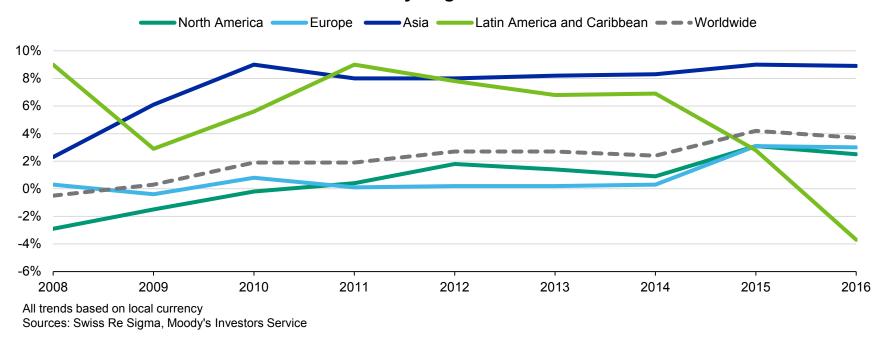
Global market shares are based on 2016 nonlife premiums in USD; gross worldwide premiums were USD 2.1 trillion or 2.8% of worldwide GDP; Oceania and Africa account for the remaining 3% of market share

Sources: Swiss Re Sigma, Moody's Economy.com, Moody's Investors Service

Global premium growth set to continue

2016 growth down but historically high, expansion in China offsetting LatAm downturn

Real Annual Growth in Non-Life Premiums by Region

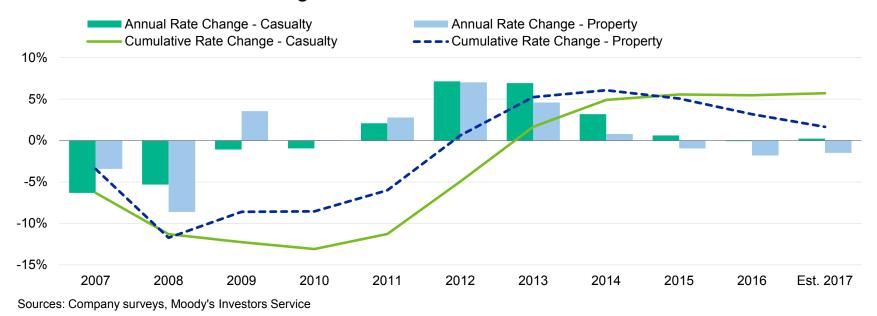


» Future growth will be driven by continued global economic expansion and a gradual rise in insurance penetration rates in emerging markets, partly offset by competition

Advanced markets – focus on US (1/2)

Property rates to stabilize, casualty rates flat to down

US Commercial Lines Rate Changes

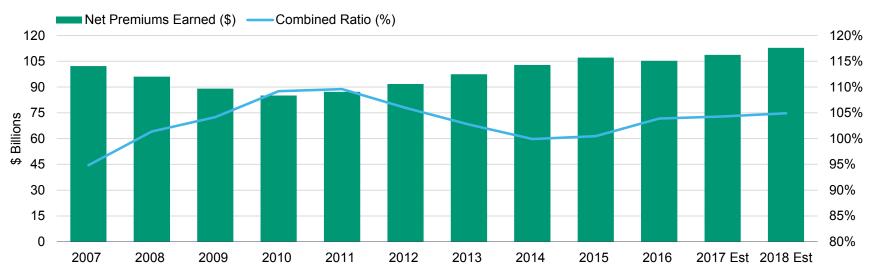


- » Property rates constrained by ample capacity, although hurricanes Harvey and Irma will lead to firmer pricing in affected areas for the next 1-2 years
- » We expect moderate rate reductions in workers' compensation, and continued rate increases in commercial auto, reflecting increased claims frequency and severity

Advanced markets – focus on US (2/2)

Weakening underwriting results

US Commercial Casualty Premiums and Accident Year Combined Ratios



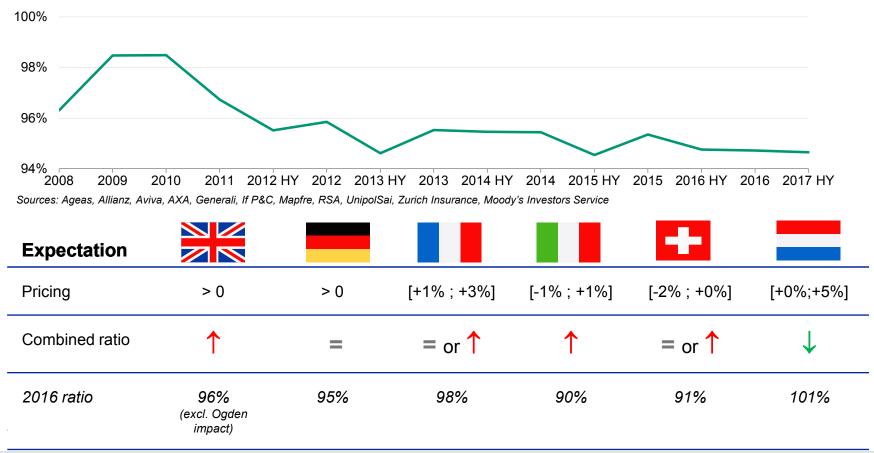
Sources: SNL Financial L.C. (Contains copyrighted and trade secret materials distributed under license from SNL, for recipient's internal use only), Moody's Investors Service

With rate increases falling short of loss cost increases, we expect the accident year combined ratio for major US casualty lines to weaken by another point or so in 2017-18 from around 104% in 2016

Advanced markets – focus on Europe

Combined ratios to deteriorate from current good levels due to rising claims and tough competition

Average Combined Ratio Reported by Selected Large European Insurers



Good growth potential in emerging markets

P&C insurance penetration is highest in North America and Europe, but China is catching up

Non-life Insurance Premiums as % of GDP - 2016

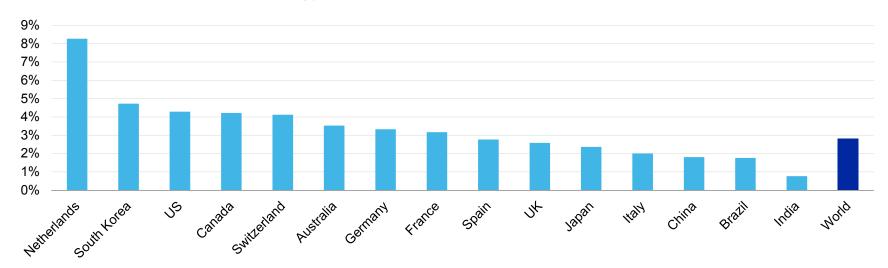


Chart reflects the top 15 countries based on 2016 nonlife premiums in USD; the Dutch nonlife sector encompasses health insurance, which boosts its premium volume relative to other nonlife markets

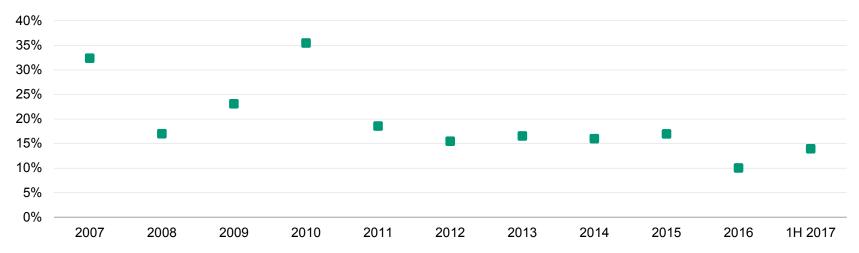
Sources: Swiss Re Sigma, Moody's Investors Service

- » China, Brazil and other emerging markets have P&C insurance penetration rates in the range of 1.5% 2% of GDP, well below North America (more than 4%), Europe (nearly 3%) and the worldwide average of 2.8%
- » Growing household income and supportive policies in emerging economies will boost insurance penetration, driving P&C market growth in excess of GDP growth

Emerging markets – focus on China

China remains a fast-growing major insurance market

Chinese P&C Sector Year-on-Year Premium Growth: 2007-1H 2017



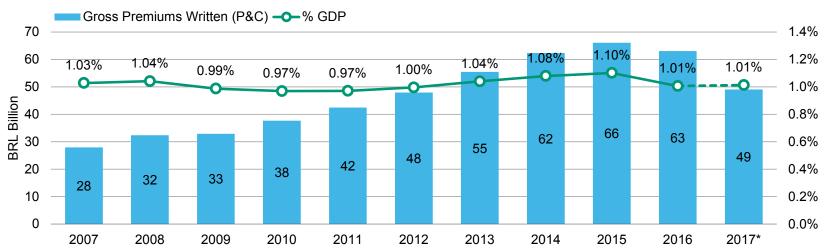
Sources: CIRC, Moody's Investors Service

- » We have lowered our growth forecast for Chinese GDP to 6.3% in 2018 and 6.6% in 2017
- » We expect China's P&C premium growth to remain in low-double digits over the next 12-18 months. Stable new car sales and strong demand for non-motor insurance, partly driven by the "Belt and Road" initiative, supports premium growth, despite pricing reform in non-mandatory motor insurance since mid-2016

Emerging markets – focus on Brazil

Brazil's insurance market will remain subdued until economy recovers more sustainably

Brazilian Insurance Premiums (Non-life) Relative to GDP



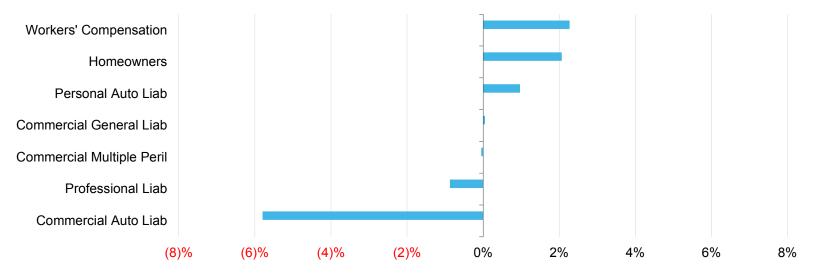
(*) GPW as of September 2017, %GDP estimated for YE2017 Sources: SUSEP, Brazilian Central Bank, Moody's Investors Service

- We expect Brazil's insurance market to grow modestly, in line with our forecast that GDP growth will turn slightly positive in 2017 and increase by low single digits through 2018
- » Market penetration (nonlife) has been relatively stable over the years but remains low, suggesting the sector has room to expand further once macroeconomic conditions improve
- » Historically low interest rate levels (~7% p.a.) will improve underwriting discipline

Reserve cushions diminishing (1/2)

US P&C personal lines redundant, commercial breakeven

US Personal Lines and Workers' Comp Redundant, Commercial Auto Weak



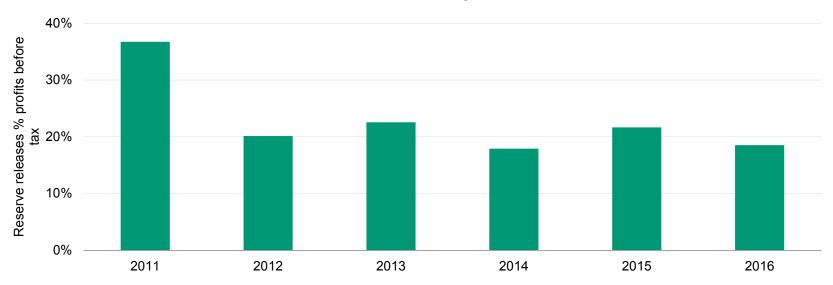
Redundancy/deficiency as a % of reserves for Accident Years 2007-2016 as of YE2016

- » Personal auto reserves improving as loss cost trends stabilize/start to decline
- » Some US insurers could report adverse reserve development in Q4 2017 for commercial liability lines, including general and professional liability
- » Rising interest rates generally correlate with loss cost inflation, which could hit reserve adequacy and expose insurers to the risk of under-pricing

Reserve cushions diminishing (2/2)

European reserve releases are a wild card

Reserve Releases as a % of Pre-Tax Profits for European Insurers

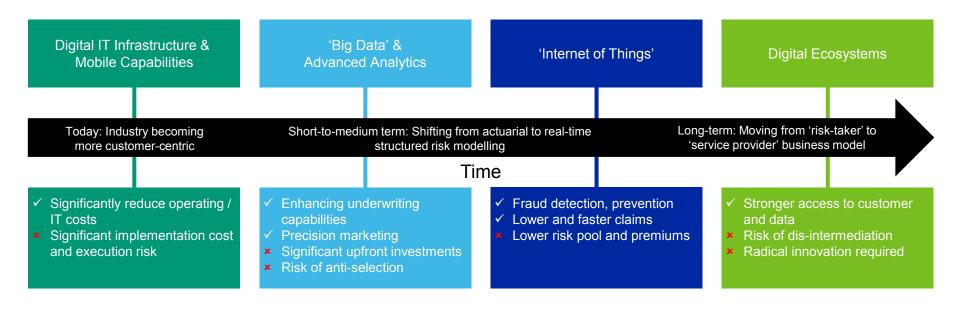


Sources: Data disclosed by Direct Line, RSA, Aviva, Allianz, AXA, Zurich, Generali, Bupa, Mapfre, If P&C, Tryg AS, Ageas, Macif, Swiss Re, Munich Re, Unipol, Lloyd's of London, Moody's Investors Service

- » Reserve releases account for around 20% of European insurers' consolidated pre-tax profits
- » In many countries (e.g., Italy, UK), reserve releases have reached unsustainably high levels

Insurers adapt to technological change

Technology is transforming the insurance landscape

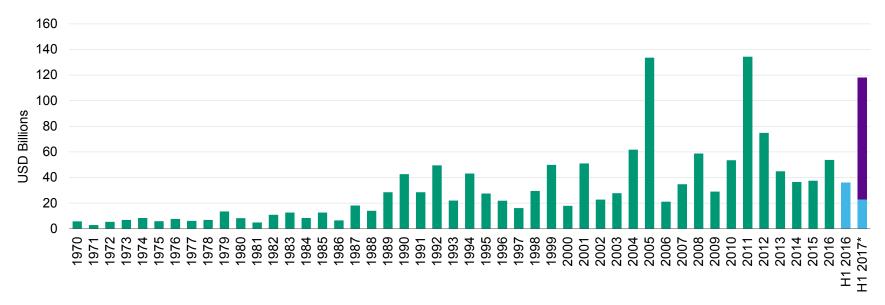


- » Artificial intelligence, machine learning, Big Data and the Internet of Things will play more prominent roles for insurers over the next few years
- » Insurers are investing in technology and innovation to become more efficient and effective at distribution, underwriting, claims handling and product development
- » But changing technologies can open doors to new competitors, and lead to heightened risk of cyber attack

Nat cat losses always a challenge (1/2)

Annual catastrophe losses are trending upward...

Global Insured Catastrophe Losses Since 1970



Amounts indexed to 2016;

*Purple area reflects estimated cat losses of USD95bn from hurricanes Harvey/Irma/Maria and earthquakes in Mexico in H2 2017 as per Swiss Re Sigma publication Sources: Swiss Re Sigma, Moody's Investors Service

- » P&C insurers manage underwriting, reinsurance and capital to withstand major catastrophes
- » We believe that P&C insurers have sufficient capital to absorb losses from hurricanes Harvey, Irma, and Maria

Nat cat losses always a challenge (2/2)

...and there is potential for larger events

Largest Insured Loss Events Since 1970

Insured Loss (USD Blns)	Start Date	Event	Country/Region
80.7	25-Aug-2005	Hurricane Katrina, storm surge, damage to oil rigs	US, Gulf of Mexico
37.3	11-Mar-2011	Earthquake triggers tsunami	Japan
30.1	24-Oct-2012	Hurricane Sandy, storm surge	US, Caribbean, Canada
27.4	23-Aug-1992	Hurricane Andrew, floods	US, Bahamas
25.5	11-Sep-2001	Terror attack on WTC, Pentagon, other buildings	US
24.8	17-Jan-1994	Northridge earthquake	US
22.6	6-Sep-2008	Hurricane Ike, floods, damage to oil rigs	US, Caribbean, Gulf of Mexico
17.1	22-Feb-2011	Earthquake, aftershocks	New Zealand
16.4	2-Sep-2004	Hurricane Ivan, damage to oil rigs	US, Caribbean, Venezuela
16.0	27-Jul-2011	Heavy monsoon rains, extreme flooding	Thailand
~ 95.0	H2 2017	Hurricanes Harvey, Irma, Maria; Earthquakes in Mexico	US, Caribbean, Mexico

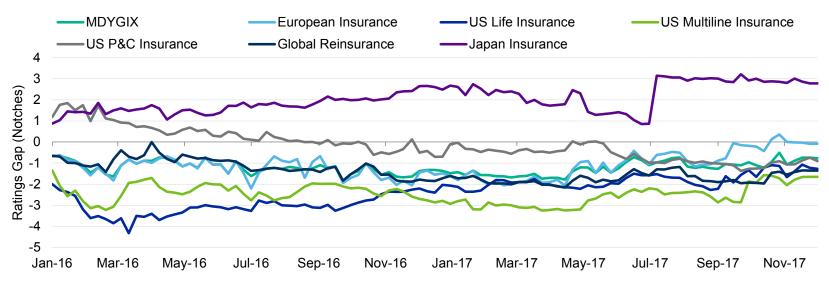
Amounts (except for the H2 2017 events) indexed to 2016; insured losses reflect property and business interruption claims, and exclude liability and life insurance claims; US natural catastrophe figures based on Property Claim Services, including claims covered by US National Flood Insurance Program Sources: Swiss Re Sigma, Moody's Investors Service

- » Most of the costliest events have occurred in the past decade, including 2017 hurricanes, reflecting commercial and residential expansion in exposed coastal zones
- » Insurers are closely tracking climate change and potential rises in sea levels, which could result in more severe events

Appendices

Japan Insurance has positive rating gap

CDS-Implied Rating Gaps for Insurance Sectors



Implied rating gaps based on median five-year credit default swaps (CDS) for each sector Sources: Moody's Analytics, Moody's Investors Service

» Japan Insurance continues to trade with a positive rating gap (i.e. implied rating higher than Moody's rating), and European Insurance has improved to around zero; other insurance sectors trade with negative rating gaps

Country/regional sector outlooks (1/2)

Outlook Key:

NEGATIVE

STABLE

POSITIVE

STABLE

US

- » Commercial property rates stabilize, rising in cat-hit areas, casualty rates flat to down slightly
- » Although rising, still-low interest rates dampen earnings
- » Balance sheets solid, investment risk leveling off but reserve margins declining
- » Healthy capitalization

STABLE

China

- » Stable new car sales and growth in non-motor insurance supports premium growth
- » Capitalization remains solid
- » Underwriting profitability of smaller players under pressure amid motor pricing liberalization
- » Higher asset risk from more alternative investments

STABLE

Germany

- » Price increases tapering off after years of significant increases
- » Combined ratios to be relatively stable
- » Low interest rates constrain earnings
- » Moderate but steady economic growth supports stable outlook

STABLE

UK

- » Underwriting profitability to remain robust
- » Rising claims inflation and falling reserve releases to pressure profitability
- » Low interest rates constrain earnings
- » Capitalization to remain healthy; moderate downside risk from Brexit

STABLE

Japan

- Underwriting profits remain strong despite motor pricing cuts
- » Capital position remains solid, supported by internal capital generation ability
- Improving risk management, governance and regulatory supervision mitigate rising new business risk

Country/regional sector outlooks (2/2)

Outlook Key:

NEGATIVE

STABLE

POSITIVE

NEGATIVE

France

- » Combined ratios around 100%
- » Fierce competition limits price increases
- » Low interest rates put further pressure on profits

STABLE

Netherlands

- » Combined ratios, which have been consistently above 100%, should improve but competition to remain fierce, especially in motor
- Recent price increases to improve underwriting performance
- » Economic conditions supportive of insurance demand

STABLE

Italy

- » Motor insurers will likely make a collective loss in 2017, leading to gradual price stabilisation
- » Combined ratios are estimated to increase to 92-93% in 2018 from the low level of 90% in 2016
- » Reserve releases likely to taper off

NEGATIVE

Brazil

- » Prolonged weak economic environment curbs insurance demand
- » Lower investment income will pressure earnings, reducing internal capital generation
- » P&C insurers will have limited room to increase rates
- » P&C penetration rates will gradually increase

STABLE

Other Latam

- P&C outlooks stable for Argentina, Bolivia, Colombia, Mexico, Peru and Uruguay
- Stability of insurers' financial positions and improving solvency and regulatory frameworks support our stable outlooks



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