Swiss Re Institute

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sigma

World insurance in 2016:
the China growth engine steams ahead

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Executive summary

The global economy grew moderately in 2016, with GDP up 2.5%.

Growth in the global economy was little changed in 2016 from the previous year with real gross domestic product (GDP)[1] up 2.5%. Advanced economies' GDP remained below the pre-financial crisis average, but was slightly above the annual average of the previous 10 years. Emerging market growth picked up only marginally, and was still far below the 10-year average. Commodity exporters struggled due to relatively low prices while growth was solid in some key markets like India and China, and improved in Central and Eastern Europe (CEE). Interest rates remained low in Europe and Japan, while the US Federal Reserve (Fed) continued its gradual monetary tightening at the end of the year. Other than in some emerging markets, inflation was low in most countries, even though it started to tick higher.

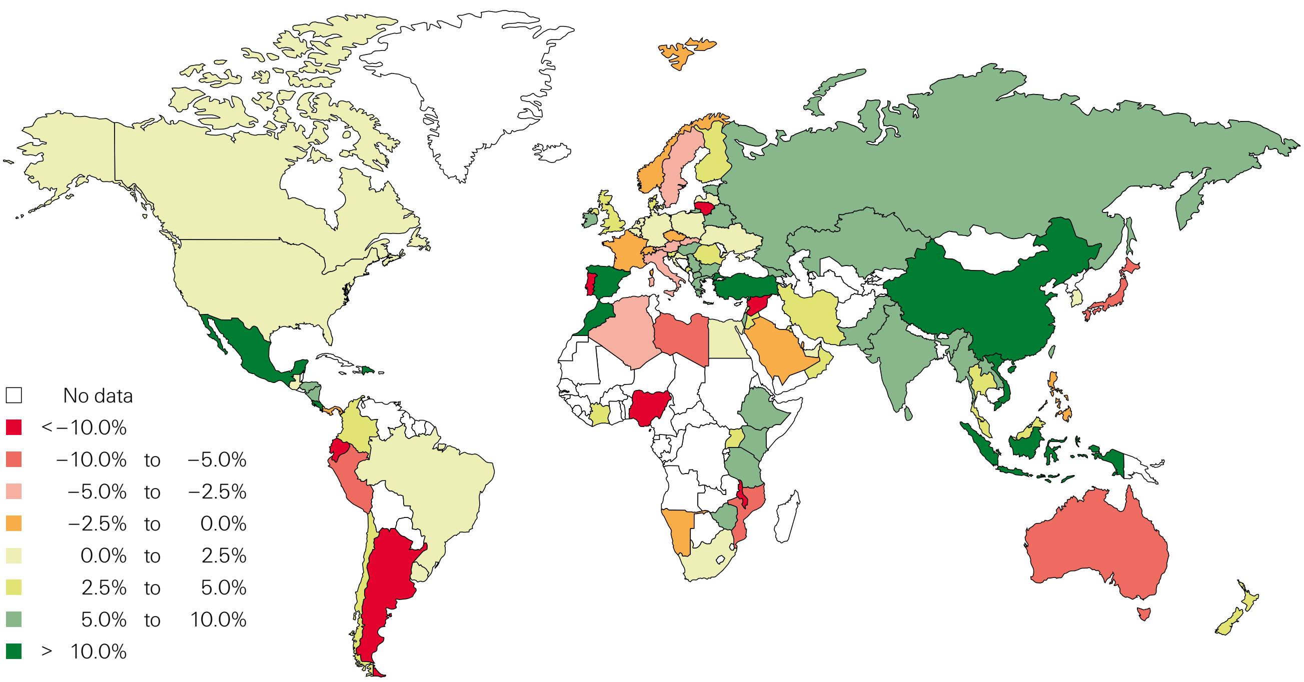
	Life	Non-life	Total
Advanced markets	–0.5%	2.3%	0.7%
Emerging markets	17%	9.6%	14%
World	**2.5%**	**3.7%**	**3.1%**

Total direct insurance premiums written grew by 3.1% in real terms in 2016, down from 4.3% growth in 2015.[2] The slowdown was mainly driven by considerably lower growth in advanced markets. Robust premium growth in China supported the emerging markets which were otherwise also in slowdown mode.

Global life premium growth slowed to 2.5%, due mainly to contraction in the advanced markets.

Global life premium growth slowed to 2.5%, to USD 2 617 billion (2015: 4.4%). Premiums in advanced markets contracted by 0.5%, while they grew rapidly in the emerging economies, driven by China. Premiums were flat in North America and Western Europe, after positive growth in the previous year. Japan weighed on the advanced Asia growth aggregate slightly, while the other markets were robust. Emerging market life premiums increased by 17% in 2016, more than double the long-term average, supported by solid performance in emerging Asia. Growth slowed in Latin America & the Caribbean, and in the Middle East & Central Asia. Premium growth was weak in Africa and continued to decline in CEE.

Figure 1
Total real premium growth, 2016
(click chart to open in sigma explorer)



Source: Swiss Re Institute.

[1] The aggregation of the individual economies that make up the global economy is weighted using US dollar GDP based on market exchange rates. International statistics using purchasing-power parity place more weight on fast-growing countries like China and India and so show higher world GDP growth rates.
[2] All growth figures quoted in this study are in real terms, ie adjusted for local consumer price inflation.

Global non-life premium growth slowed too, also due to weakness in the advanced markets.

Global non-life premium growth slowed to 3.7% to USD 2 115 billion (2015: 4.2%). Advanced markets were the main reason for the slowdown (2.3% in 2016 after 3.3% in 2015), with all regions other than Oceania experiencing lower growth. In advanced Asia, premiums stagnated (0.3%) as Japan's non-life market contracted and growth was weak elsewhere. Premiums in North America and Western Europe grew solidly, but slower than in the previous year. Emerging market non-life premium growth of 9.6% (2015: 7.9%) was mainly driven by China. Excluding China, emerging market premiums were up just 1.7%. Growth trends across regions were mixed. Other emerging Asian markets were solid and there was a rebound in CEE (5.4%), but premiums in Latin America contracted among weak economic conditions there.

Industry profitability remains under pressure. However, the life and non-life sectors are well capitalised.

Interest rates have been low for close to a decade, and this affected life and non-life insurers' profitability yet again in 2016. Return on equity (ROE) declined in both sectors. In life, moderate premium growth in many markets also dragged on profitability, while the non-life sector was further impacted by lower underwriting results. Lower reserve releases and higher losses from natural catastrophes were the key factors in the weaker underwriting results. Both the life and non-life insurance sectors remain well capitalised, however.

Global life premium growth is expected to improve in the coming years, while non-life growth is expected to remain moderate.

Global life premium growth is expected to improve over the next few years, mainly driven by the emerging markets. Advanced markets should also grow, but only moderately. While North America is expected to outperform Western Europe, growth will likely be highest in advanced Asia. In the emerging markets, China and India will remain the growth engines for life insurance. Growth in the non-life sector is expected to remain moderate, driven mainly by stronger activity in the advanced economies. Premium growth is expected to improve in North America and advanced Asia, but remain flat in Western Europe and Oceania. Emerging markets are likely to grow robustly but at a slower pace than in the recent past, mainly supported by healthy growth in China and also India to some extent.

Digital distribution of insurance continues to grow globally, but intermediaries are here to stay also.

There is a special section on advances in digital distribution in this report, an update to the 2014 sigma on this topic. There has been a proliferation of direct digital distribution channels in recent years, in some markets. At the same time, the share of traditionally intermediated insurance business remains dominant globally. The digitalisation of insurance distribution is set to continue, but the pace of change will vary across markets. Digital channels will ultimately be used throughout the distribution process, from information gathering to purchase completion to after-sales service. But not all insurance transactions will migrate online, and intermediaries will continue to play an important role.

The data in this study are the latest available at the time of going to press.

This *sigma* study contains the latest market data available at the time of going to press. The final figures for 2016 are not available for most insurance markets. As such, the *sigma* also contains Swiss Re Institute estimates and provisional data released by supervisory authorities and insurance associations.

The global economy and financial markets in 2016

Global economic growth

The global economy grew by 2.5% in 2016.

The global economy grew by 2.5% in 2016, following a similarly underwhelming gain of 2.7% in 2015. Political uncertainties and some unexpected developments restrained growth below the 2006–15 average of 2.6%, the latter influenced by the global recession of 2008/2009 (see Figure 2 below). Growth in advanced markets underperformed, slipping to 1.7% in 2016 from 2.1% in the previous year. Emerging market growth improved to 3.8% from 3.6%, but this was well below the 10-year average.

Growth in the advanced markets slowed again …

Among the advanced markets, the US saw the most significant slowdown, with real GDP down 1 percentage point (ppt) to 1.6% in 2016. Growth in Canada improved to 1.4% on the back of a moderate recovery in commodity prices. In Western Europe, growth slowed to 1.7% from 2.2% in 2015. A slowdown to 1.8% growth in the UK was a key factor, even though this was a better rate than had been predicted for after the Brexit vote. Consumer spending in the UK was particularly resilient. In the Euro area, growth slipped to 1.7% in 2016 from 1.9%, despite support from low interest rates, low oil prices and a relatively weak euro. The slowdown partly reflects lack of progress in structural reforms in Italy and France, amongst others, while in Germany, growth accelerated to 1.8%. Japan's economy slowed slightly in 2016.

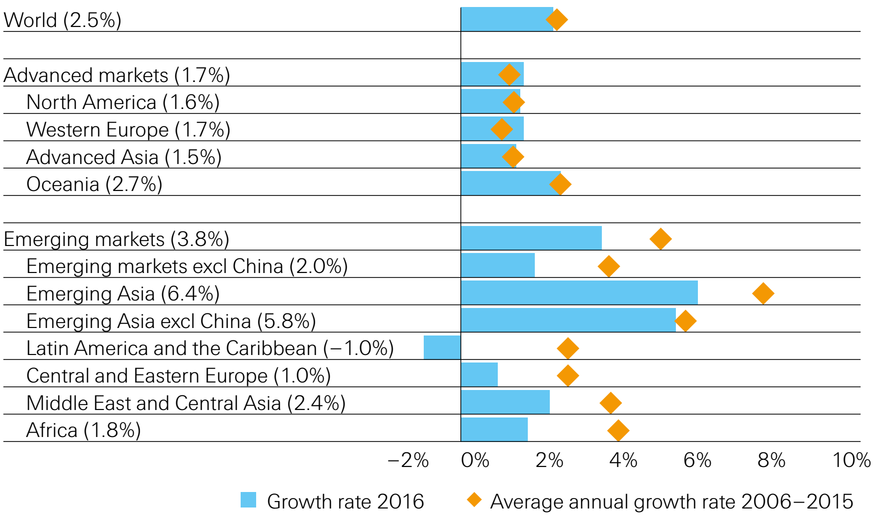
… and aggregate emerging market growth was little changed from the previous year.

At 3.8%, emerging market growth improved marginally but was still weak. Commodity exporters continued to struggle and this weighed on overall emerging market growth. Elsewhere, most notably China and in CEE EU-member countries, growth remained solid. Growth in Latin America was weak, because Brazil remained mired in the worst economic crisis in decades: GDP contracted by 3.6% in 2016 after a 3.8% decline in 2015. Russia deteriorated again in 2016, with the economy contracting by 0.8% after a 3.7% decline in 2015. Higher oil prices supported the economy and Russia has been adapting to the sanctions imposed due to its involvement in the Ukraine conflict.

India was the world's fastest growing large economy in 2016, ahead of China.

The emerging Asian economies expanded unevenly in 2016. India remained the world's fastest growing major economy (7.0%). The surprise demonetisation of high-value notes in November is likely to have slowed growth at the end of the year, but the main impact will only be felt in 2017. China, the world's second largest economy, continued its transition from manufacturing to services. Growth was 6.7% in 2016, ahead of the government's 6.5% target. However, this was largely based on state fiscal and credit expansion, and that is not sustainable in the long-term.

Figure 2
Real GDP growth by region
(2016 readings in brackets)



Note: countries' GDP weighted with market exchange rates.
Source: Oxford Economics, IHS-Markit, WIIW, Swiss Re Institute.

Growth in Africa was the lowest since the early 1990s.

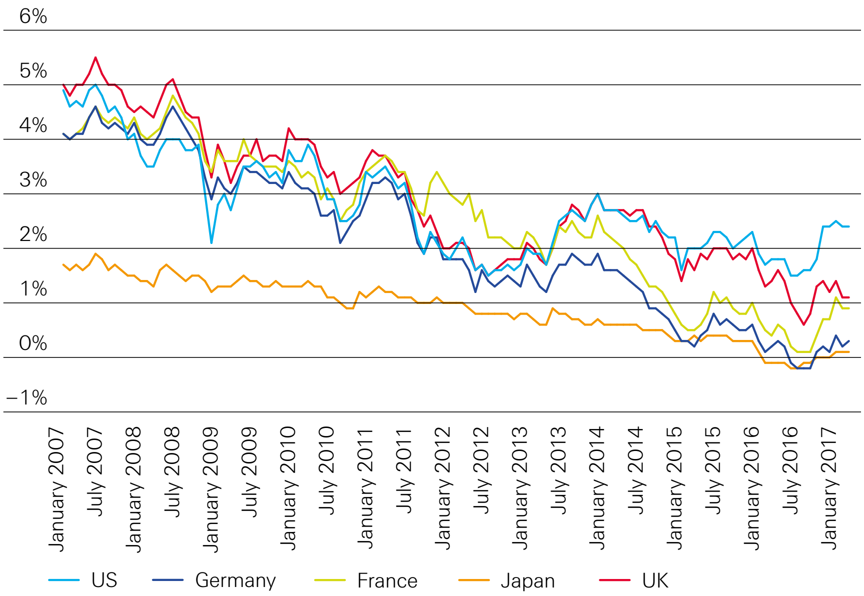
Growth in Africa in 2016 was the lowest since the early 1990s (1.8%). The main reasons were crisis in the three largest sub-Saharan African economies, due to low commodity prices, tight financing conditions, a severe drought in southern and eastern Africa, and lack of economic reforms. Non-commodity exporting countries, on the other hand, continued to grow rapidly in Africa. In the oil-exporting countries of the Middle East, growth in Saudi Arabia slowed to 1.4% in 2016, as low oil prices persisted. A cut in government spending impacted the non-oil sectors also. In Turkey, growth slowed considerably last year, with an attempted military coup and the continuing war in neighbouring Syria weighing on the economy.

Interest rates, inflation and stock market developments

The ECB and BoJ continued quantitative easing in 2016, while the US Fed raised rates once.

Low interest rates continued to challenge insurers in 2016, particularly in Europe and Japan. Political uncertainty, repeated downgrades of growth projections and rising inflation drove financial markets in 2016. The European Central Bank (ECB) and the Bank of Japan (BoJ) continued their expansionary policy programmes as the Euro area and Japanese economies remained fragile, despite deflation risks abating. In the UK, the Bank of England (BoE) lowered interest rates to a record low 25 basis points (bp) and restarted quantitative easing (QE) to pre-empt a potential slowdown after the Brexit vote. In the US, the Fed continued to normalise monetary policy, slowly, raising rates by 25bp, once in December and again in March 2017.

Figure 3
Long-term interest rates, January 2007 to April 2017



Source: Datastream.

Long-term interest rates in the advanced economies, other than US, declined.

Long-term interest rates had been expected to rise in 2016 in anticipation of continued monetary policy normalisation in the US, with the BoE following suit once the EU exit referendum had been rejected. However, a series of worse-than-expected economic data and the UK's unexpected decision to leave the EU, resulted in declining long-term yields in the first half of the year. In the second half, healthier economic readings and the surprise election of Donald Trump as President resulted in US interest rates ending the year only slightly higher at 2.4% (see Figure 3). In the Euro area and UK, long-term rates were down, despite inflation creeping up slowly throughout the year due to oil price-related base effects. Yields in the UK declined after the Brexit referendum and the BoE's decision to both lower rates and restart QE in August. Meanwhile, the ECB extended its QE programme to the end of 2017. In the US, core inflation, which excludes food and energy, rose to 2.2%, above the Fed's target of 2.0%. Inflation also rose in the UK and Euro area, to 0.6% and 0.2%, respectively, from near 0% in 2015. Japan slipped back into deflation.

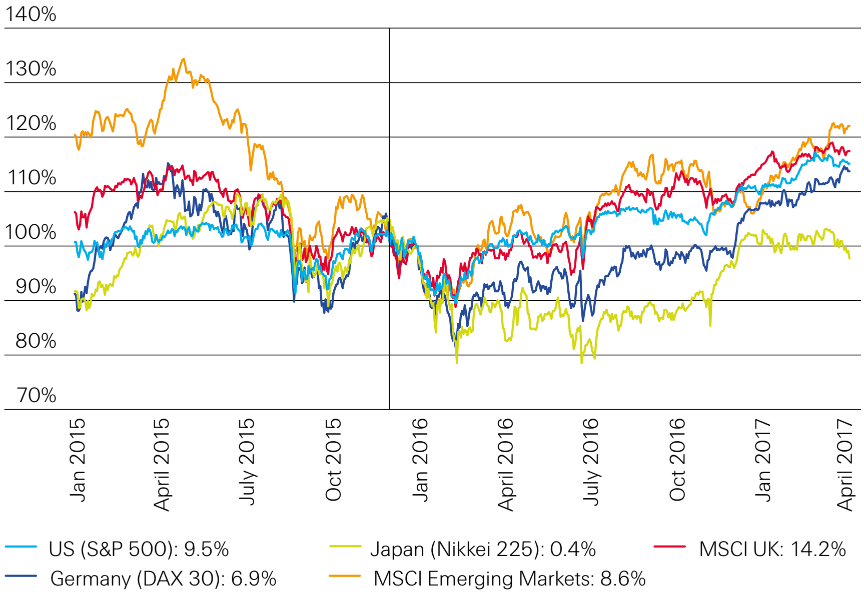
Emerging market inflation levels declined, allowing policy rates to come down also.

In China, the People's Bank of China (PBoC) reacted to the Fed's rate increase by raising the interest rate on its Standing Lending Facility loans slightly. In Brazil, interest rates came down, but remained well above 10% at the year-end to support the real and to prevent capital outflows as the Fed slowly hikes rates. The Central Bank of Russia (CBR) was able to lower rates slowly as inflation came down from above 15% in early 2016, and the rouble appreciated with rising oil prices. Of late, the CBR has moved to dampen rouble appreciation to support economic growth.

Stock markets in the advanced markets performed well in 2016, driven by political developments.

In contrast, investment results of insurers were boosted by healthy stock market performance in the advanced economies in 2016 (see Figure 4). The S&P 500 in the US was up 9.5%, while the MSCI UK index gained 14.2%. Politics drove the gains in both the US (the Trump election) and the UK (sterling's depreciation after the Brexit vote), while the Nikkei 225 in Japan was flat. In the first half of the year, the slow path of monetary policy normalisation was a key driver of the stronger performance of major equity markets. At the year-end and into 2017, an improved global economic outlook supported markets.

Figure 4
Stock market performance, January 2015–April 2017 (31 December 2015 =100)



Source: Datastream.

Emerging market stock indices bounced back in 2016 after a weak 2015, and performance remained strong in the first quarter of 2017.

Emerging market stocks were up 8.6% in 2016, bouncing back from a 17%-fall in 2015. The latter was due to the collapse in commodity prices, which subsequently stabilised and recovered slightly in 2016. Economic upswing in the fourth quarter and into early 2017 meant that emerging market stocks continued to perform well, with markets up 12.4% overall in the first quarter of 2017.

Outlook: improving, but political risks remain elevated

Global economic growth is expected to improve slightly, despite ongoing political uncertainties.

Global economic growth is expected to improve slightly in 2017, continuing a cyclical recovery despite ongoing political uncertainties and structural challenges. Advanced market fundamentals have improved. In the US, real GDP growth is expected to be above 2% this year and next, supported by continued gains in employment and income, as well as a rebound in investments. Growth in the euro area is expected to remain stable. The UK economy is expected to slow as rising inflation constrains real incomes and household consumption, and uncertainty around Brexit weakens business investment and hiring. Real GDP growth in Japan will likely remain weak, at less than 1% annually over the next two years. Inflation in advanced economies is expected to pick up in 2017 and 2018, with higher oil prices one of the drivers. It is forecast to rise above 2% in the US and the UK. In the US, price pressures will come from rising wages and a tight labour market, while in the UK, currency depreciation will keep inflation elevated. In the Euro area, inflation is forecast to pick up in 2017 but remain well below the ECB's 2% target.

Growth in the emerging markets is forecast to pick up again, but challenges remain.

Economic growth in the emerging markets is forecast to strengthen in 2017 with improvement in all regions. Growth in emerging Asia will likely remain high, although China is expected to slow further as the economy continues its transition to become more services oriented and the government liberalises the financial system. In India, Prime Minister Modi is likely to continue reforms, such as the goods and services tax reform, and real estate regulations. The measures are a short-term negative but they should support longer-term growth. Accordingly, growth in India is forecast to slow in 2017 before improving again to more than 7% in 2018. Russia and Brazil are both expected to emerge from recession in 2017, supported by higher commodity prices. In Brazil, President Temer continues to face challenges to governability with accusations of corruption levelled against ministers and more recently himself. Russia remains constrained by inherent structural economic weaknesses and western sanctions. Commodity exporters in the Middle East and Africa are expected to recover along with gains in commodity prices.

Monetary policy divergence will continue, and inflation is expected to accelerate, particularly in the US.

Global monetary policy divergence is expected to continue until 2018 with the Fed likely to maintain the slow pace of interest rate increases. Inflation in the UK is likely to rise above target, driven by oil prices and currency depreciation, but the BoE has indicated that it will not raise rates, conscious of the uncertainty around Brexit negotiations and its expectation that the inflation increase will be temporary. The ECB and the BoJ will continue with QE. Hence, yields on US and UK 10-year government bonds are forecast to rise only modestly by end-2017. German yields will rise slightly while in Japan, yields are expected to remain close to the BoJ's target of zero. Credit spreads have returned to close to pre-global financial crisis lows, supported by central bank QE purchases, and are expected to remain roughly unchanged.

Downside risks to global growth in 2017 remain. As some risks disappear, new ones emerge.

There are several key downside risks. In the US, inflation remains a risk to watch, in light of an economy operating close to capacity, expansionary fiscal policies advocated by President Trump and his comments on Fed independence. Protectionist policies by the US, such as a Border Adjustment Tax (BAT) or import tariffs, would boost inflation and also be detrimental for global growth if they trigger a trade war. However, the US policy agenda around taxes, deregulation, immigration and security remains very uncertain. In Europe, Brexit negotiations and their impact on trade, political developments in Italy, immigration issues and a failure to implement structural reforms in many countries are the main risks. Emerging markets, particularly those with elevated debt levels, remain vulnerable to more rapid US interest rate increases and subsequent tightening in financial conditions. However, the threat of contagion is relatively limited due to the robust financial buffers in many markets. In China, the risk of a hard-landing still lingers as reforms are progressing slowly.

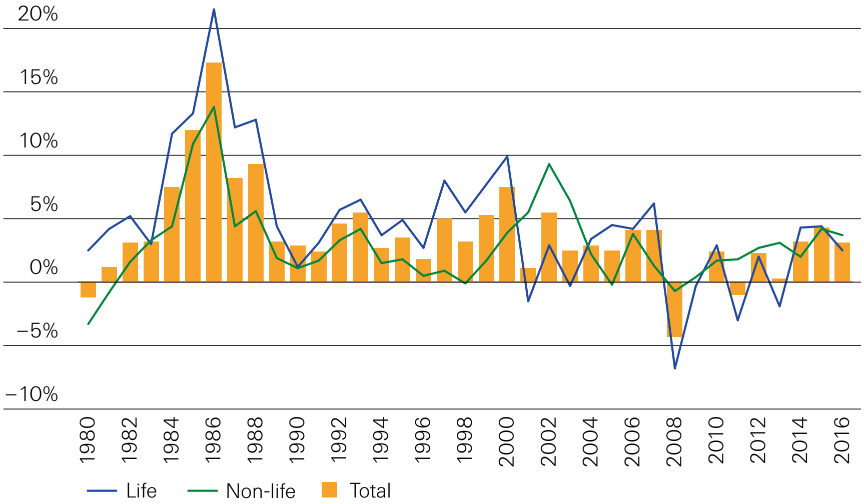
Global life and non-life insurance

Global insurance premium growth slowed

Global premium growth slowed to 3.1% in 2016, mainly due to weaker growth in the advanced markets.

Total direct premiums written grew by a fairly solid 3.1% in real terms in 2016, down from 4.3% in 2015. The slower rate was due mainly to considerably lower growth in the advanced markets, while China pushed up growth among the otherwise also slowing emerging markets. Premiums in nominal USD terms were up 2.9% to USD 4 732 billion. Nominal USD growth was slower than real growth due to currency depreciations, particularly in the UK and some emerging countries.

Figure 5
Global real direct premium growth, 1980–2016
(click chart to open in sigma explorer)

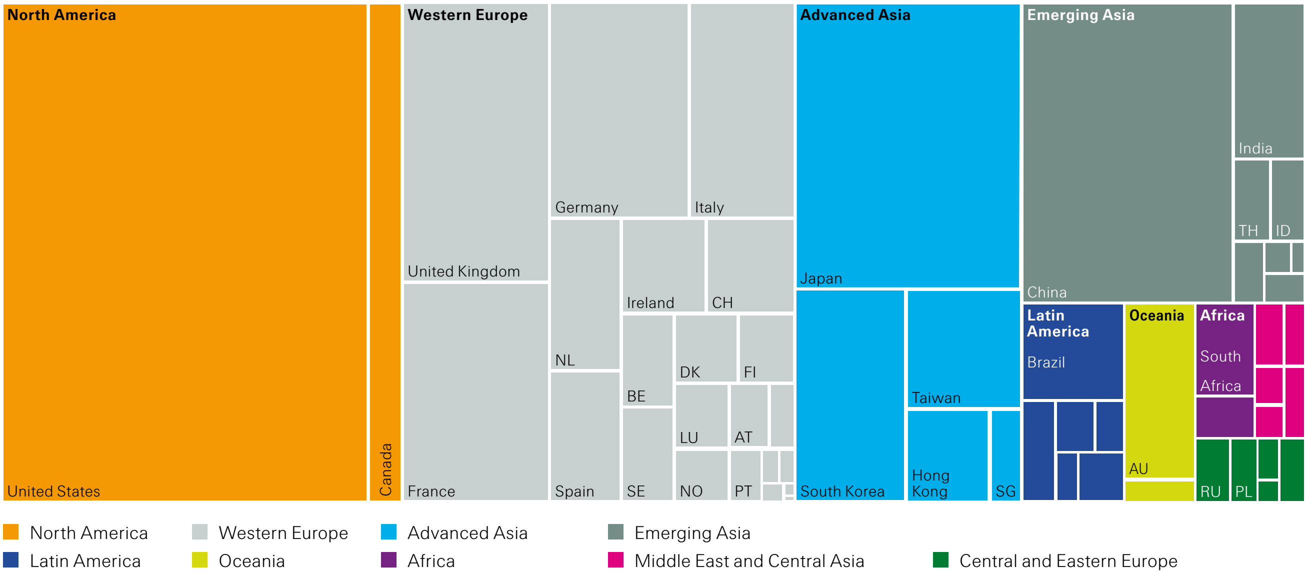


Source: Swiss Re Institute.

China is the world's third largest insurance market in terms of total premiums, after Japan and the US.

Total direct premium volume in North America and Western Europe in 2016 was roughly the same as the previous year, at USD 1.4 trillion. With USD 466 billon, China is the third largest market and almost the same size as the second largest Japan (USD 471 billion), but still much smaller than the US (USD 1.35 trillion). With the interactive infographic Figure 6 below, it is possible to explore the shift of regional premium volumes, and the rise of China from the 16th largest market globally in 2000 to its current position as number 3, which it has held since 2015.

Figure 6
Total premium volumes by region, 2016
(click chart to open in sigma explorer)



AT = Austria, AU = Australia, BE = Belgium, CH = Switzerland, DK = Denmark, FI = Finland, ID = Indonesia, NL = Netherlands, NO = Norway, LU = Luxembourg, PL = Poland, PT = Portugal, RU = Russia, SE = Sweden, SG = Singapore, TH = Thailand.

Source: Swiss Re Institute.

Life insurance: China is the main growth driver

Premium development

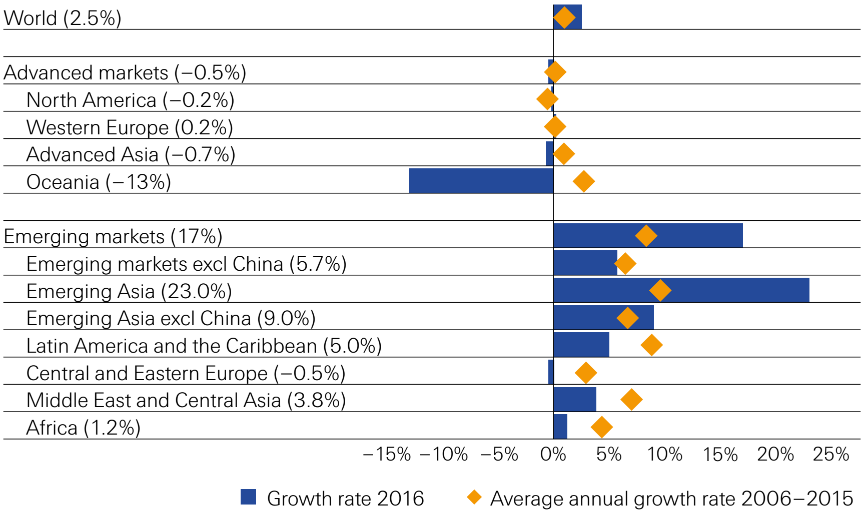
Global life insurance premiums rose by 2.5% in 2016, driven by rapid growth in emerging markets.

Global direct life insurance premiums totalled USD 2 617 billion in 2016, up 2.5% in real terms (see Figure 7). The growth was slower than the 4.4% gain in 2015, but above the 10-year average of 1.1%. Emerging markets remained the main source of growth, while real premium income in the advanced markets declined by 0.5% to USD 2 110 billion. Life premium growth in advanced markets has stagnated over the past 10 years, which includes the recession of 2008/2009.

Life insurance premium growth was mixed in the advanced regions.

Life premium growth in North America and Western Europe was roughly flat. In the US, modest nominal gains were offset by inflation. In Western Europe, a positive contribution from the UK was largely offset by Germany, where premiums were down for a second year due to weak sales of traditional savings, pension and annuity products. In advanced Asia, performance was mixed (see Figure 7) with overall premium volumes down 0.7%. Performance in Japan was notably weak as the enforcement of a negative interest rate policy by the BoJ made it difficult for life insurers to attract new business. Premiums contracted sharply in Oceania as lower yields rendered investment-type products less attractive in Australia.

Figure 7
Life premium growth in real terms, in the advanced and emerging markets (2016 readings in brackets)

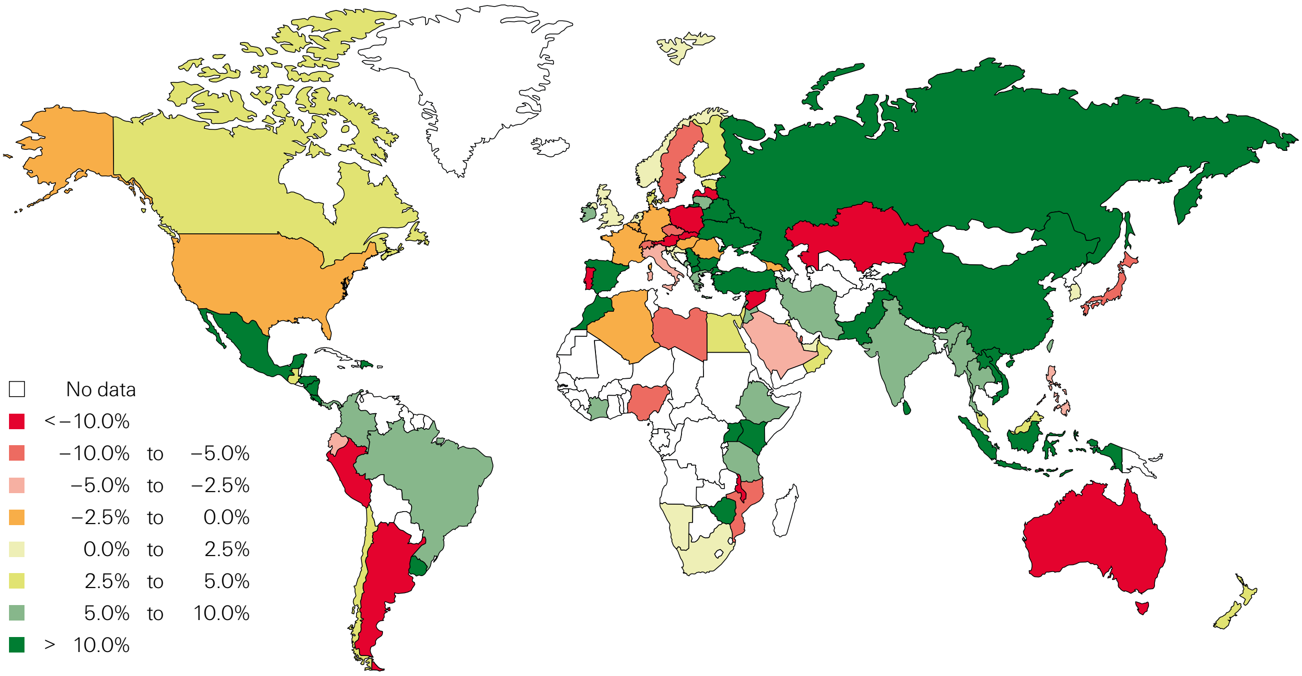


Source: Swiss Re Institute.

Premiums in emerging markets grew rapidly in 2016, with particularly strong growth in China.

Premiums in emerging markets grew by 17% in 2016, more than double the long-term average. Once again, growth was formidable in emerging Asia, fuelled by rapid growth in China where traditional life products were the key drivers. Sales benefitted from further liberalisation of interest rates and government efforts to encourage growth of protection products. Excluding China, growth in emerging markets was significantly lower but still a hearty 5.7%, driven by gains in India, Indonesia and Vietnam. Premiums in Latin America grew by 5%, slower than in 2015 and the 10-year average of 8.9%. Premiums in CEE were down 0.5%, driven by weak performances in Poland and the Czech Republic. In the Middle East and Africa, life premiums were up 3.8% and 1.2%, respectively.

Figure 8
Life real premium growth, 2016
(click chart to open in sigma explorer)

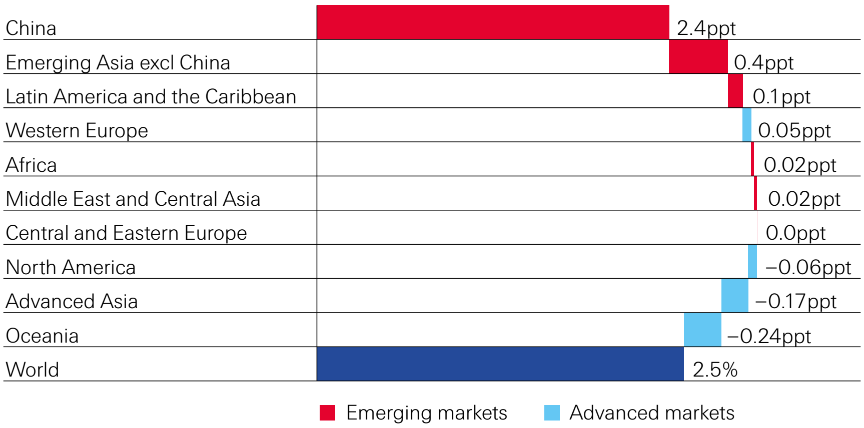


Source: Swiss Re Institute.

A breakdown by region demonstrates China's role as the engine of global premium growth.

A breakdown of life premium growth by region underpins the importance of China as an engine for global growth (see Figure 9). In 2016, China was responsible for 2.4 ppt of the global growth rate of 2.5%. All other markets combined were responsible for the remaining 0.1 ppt. Emerging Asia without China added 0.4 ppt, and Western Europe just 0.05 ppt. Africa, and the Middle East and Central Asia, each added 0.02 ppt. Weak performances in Oceania, advanced Asia and North America pulled global growth down by 0.24 ppt, 0.17 ppt and 0.06 ppt, respectively.

Figure 9
Contribution to real life premium growth by region, 2016



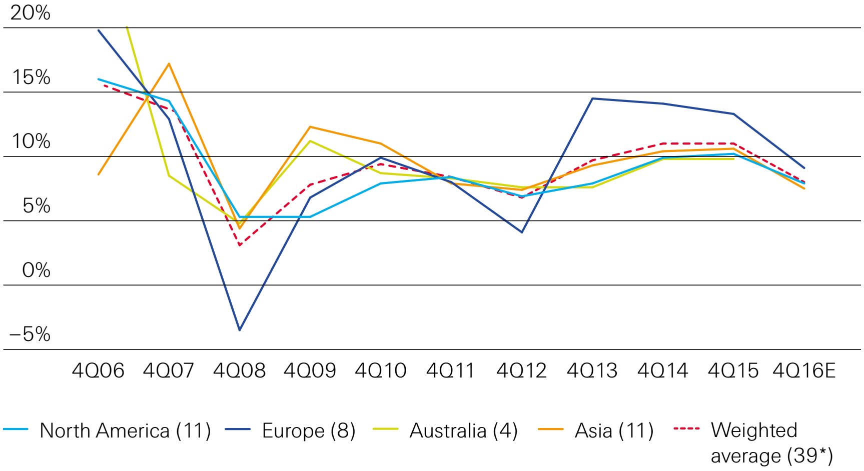
Source: Swiss Re Institute.

Profitability and capital position

Life insurers' profitability – measured by ROE – remains under pressure.

Life insurers in the advanced markets face the ongoing headwinds of moderate premium growth and low interest rates. Under these conditions, sector profitability – as measured by ROE – is suffering. The sector's global ROE (based on a sample of 39 life insurance companies) fell to 8% at the end of 2016 from 11% in 2015 (see Figure 10).[3] The industry has not yet managed to return to pre-financial crisis levels of profitability. In 2006, the sector's ROE for the same sample of insurers was 16.5%. Profitability is a challenge across all regions. In North America, ROE was 8%, in Europe it was 9%, and in Asia it was 7–8%.

Figure 10
ROE of a sample of 39 life insurers (number of companies in brackets)



Note: * Weighted average includes five additional life insurers from Africa; E - estimate.
Source: Company reports, Bloomberg, Swiss Re Institute.

Solvency II introduced a significant regulatory change for insurers in Europe last year.

Solvency II (SII), introduced in Europe in 2016, was a significant regulatory change for insurers. SII and other risk-based prudential regulations around the world aim to move to an economic valuation of insurers' assets and liabilities in order to recognise the full cost of capital required to support the business. With a protracted design process, in particular for the various measures to reduce balance sheet volatility and the smooth transition from the previous regime, most insurers seem to have adapted well to SII.

[3] Based on IFRS/local GAAP data of 39 life insurance companies, including: North America (Aflac, CNO, Great West Lifeco, Lincoln National, Manulife, MetLife, Principal Financial, Prudential, Stancorp, Sun Life, Unum Group); Europe (Anadolu Hayat Emeklilik, Aviva, Legal & General, Old Mutual, Prudential PLC, St. James's Place, Standard Life, Swiss Life); Asia (Cathay Financial Holdings, China Life 'A', China Pacific 'A', Great Eastern, Hanwha Life, Max India, Panin Financial, Samsung Life, Shin Kong Financial Holding, Sony Financial Holdings, T&D Holdings); Australia (AMP, Challenger, nib Holdings, Suncorp); and Africa (Botswana Insurance Company, Discovery Limited, Liberty Holdings, MMI Holdings, Sanlam). The company-specific ROEs were weighted by shareholder equity.

Global life premium income growth is forecast to accelerate.

Life insurance sector outlook

Growth in global life premium income is forecast to be robust over the next few years, with emerging markets the main driver. In advanced markets, growth is expected to turn positive again in the near term but remain significantly lower than in the emerging markets. Nevertheless, given the sheer sizes of the markets, advanced economies are forecast to still account for around half of the premium dollar volumes added worldwide by 2021. In 2016, the advanced markets accounted for 81% of global life insurance premiums. Among the advanced markets, growth will likely be strongest in advanced Asia. Elsewhere, North America is expected to outperform Western Europe. In the emerging regions, stabilising economic growth, growing populations, urbanisation and a rising middle class underpin a positive outlook for life insurance penetration. Growth in these markets is expected to be fuelled by China and India. Global insurers from mature markets will continue to expand into these high-growth markets. At the same time, insurers from emerging economies, especially emerging Asia, will increasingly enter advanced markets to obtain know-how, access large premium pools and diversify geographically.

However, managing legacy savings business with embedded guarantees will remain a major challenge for life insurers.

Managing legacy savings business with embedded guarantees will remain a major challenge for life insurers. Historically low interest rates are likely to persist and limit the sector's ability to offer attractive savings products to boost new business. To maintain an appropriate duration match with liabilities, life insurers must also reinvest in lower-yielding fixed-income assets as they mature, which will lower the profitability of in-force books. Life insurers will continue to re-orientate their business models and shift their focus from traditional savings to life protection products. However, it will take time for a change in product mix to affect profits materially.

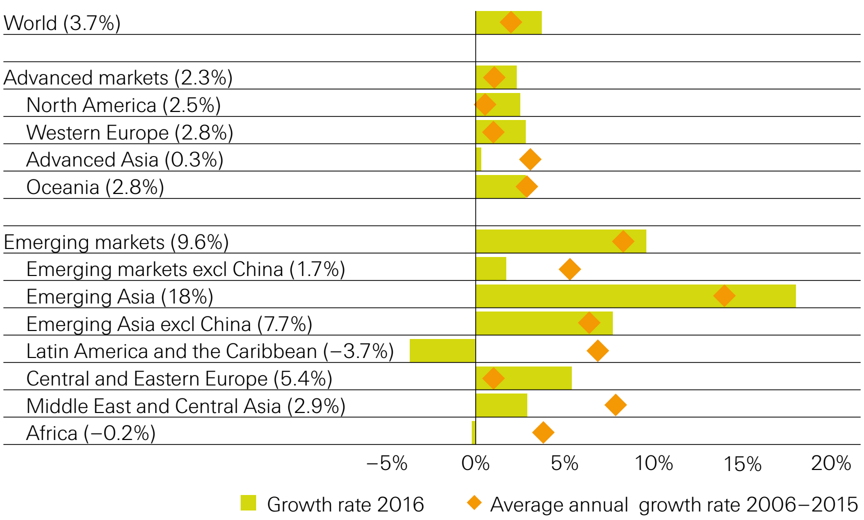
Non-life insurance: premium growth slowed down

Global non-life premiums grew by 3.7%, less than in 2015 but by more than the 10-year average.

Premium development

Global non-life insurance premiums increased by 3.7% in 2016, down from 4.2% in 2015 but more than the 10-year average growth rate of 2.0% (see Figure 11). Premium volumes were USD 2 115 billion in 2016. Emerging market premium growth was almost three times that of the advanced markets but in terms of the contribution to real premium growth, the advanced markets contributed slightly more than the emerging markets (see Figure 13).

Figure 11
Non-life premium growth in real terms, in the advanced and emerging markets (2016 readings in brackets)

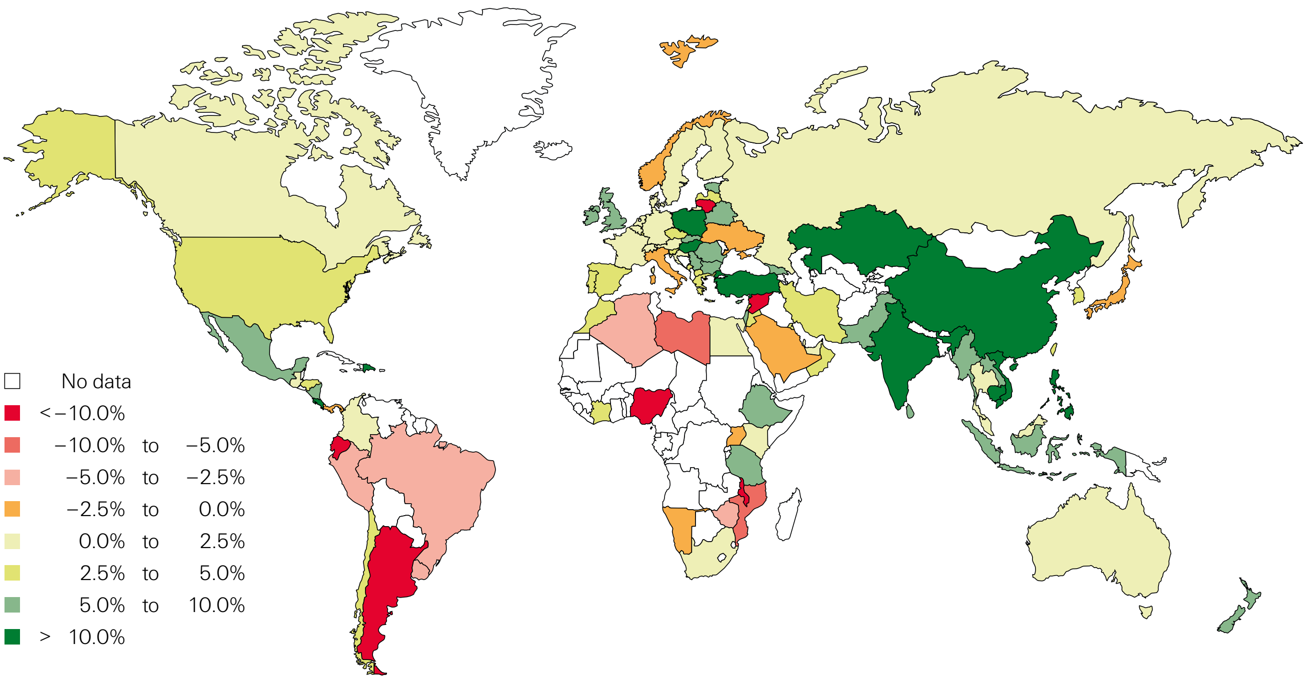


Source: Swiss Re Institute.

Non-life premium growth slowed in all major advanced markets.

Non-life premium growth in the advanced markets slowed to 2.3% in 2016 (2015: 3.3%), but was well above the 10-year average of 1.0%. Growth weakened (but remained solid) in all major advanced regions (with the exception of Oceania) due to lower economic growth and softer rates. In the US, personal lines drove growth. The slowdown in Western Europe was caused by considerably lower growth in Germany and France, two of the biggest markets in the region. Spain, Portugal and Greece continued to recover, while there was another decline in Italy. Premium stagnation in advanced Asia (0.3%) was mainly due to contraction in Japan, but the other markets were also affected by lower economic growth and soft prices.

Figure 12
Non-life real premium growth, 2016
(click chart to open in sigma explorer)



Source: Swiss Re Institute.

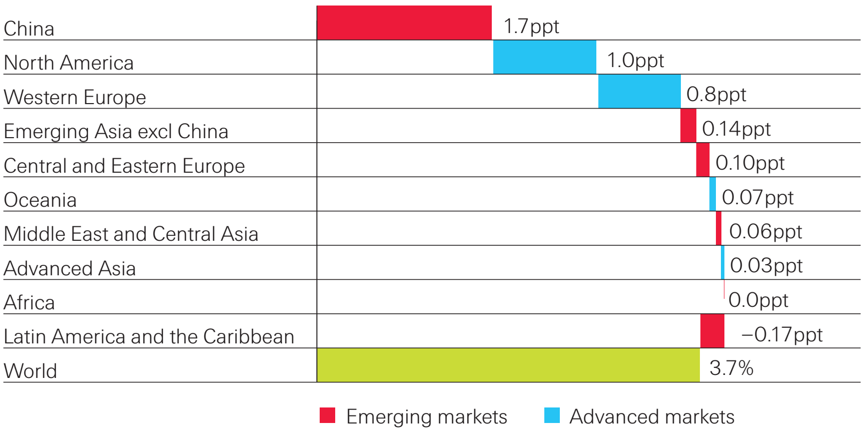
Non-life growth in emerging markets improved, mainly driven by sound growth in China.

Emerging markets' non-life premium growth was sturdy again, up 9.6% in 2016, which was above the 10-year average of 8.3%. China was the growth engine with 20%, but excluding China emerging market premiums overall increased by just 1.7%. Growth trends across regions were mixed. Other emerging Asian countries grew robustly (7.7%) and in CEE, premiums gained 5.4% after declining in the previous two years, driven by rate increases in motor and solid economic advance in the CEE EU-member countries. Premium growth in the Middle East and Central Asia, however, slowed to 2.9%, as premiums contracted in Saudi Arabia for the first time since 2000, and as growth in UAE also slowed. The 3.7% contraction in Latin America and Caribbean mirrors weak economic conditions, particular in Brazil, although premiums in Mexico grew rapidly. In Africa, flat premiums in South Africa, solid growth in North Africa and a steep decline in Nigeria (-12%) resulted in region-wide stagnation.

China (again) was the engine for global growth of non-life premiums.

The advanced and emerging markets made a roughly equal contribution to real non-life premium growth in 2016 (see Figure 13). China (1.7 ppt) played a very important role, providing almost as much growth as North America and Western Europe combined. Emerging Asia and CEE also made significant contribution, while Latin America took 0.17 ppt off the global growth total.

Figure 13
Contribution to real non-life premium growth by region, 2016



Source: Swiss Re Institute.

Catastrophe losses[4]

There were 327 disaster events in 2016 which resulted in a total economic loss of USD 175 billion ...

There were 327 disaster events in 2016, in sigma terms, of which 191 were natural catastrophes, and the rest were man-made. Total economic losses caused by all disasters were estimated at USD 175 billion in 2016, the highest since 2012, and a significant increase from USD 94 billion in 2015. Asia was hardest hit with total losses of USD 83 billion. Losses from the earthquake in Japan's Kyushu Island in April 2016 are estimated to be between USD 25 billion to USD 30 billion.

... of which the insurance sector covered USD 54 billion, highlighting a large protection gap globally against catastrophe events.

Overall, the insurance sector covered USD 46 billion of losses from natural catastrophes and USD 8 billion from man-made disasters in 2016. The biggest insured-loss event of the year was the earthquake in Japan in April 2016, which triggered claims of USD 4.9 billion. The USD 121 billion difference between total and insured losses shows the large global protection gap against catastrophe events.

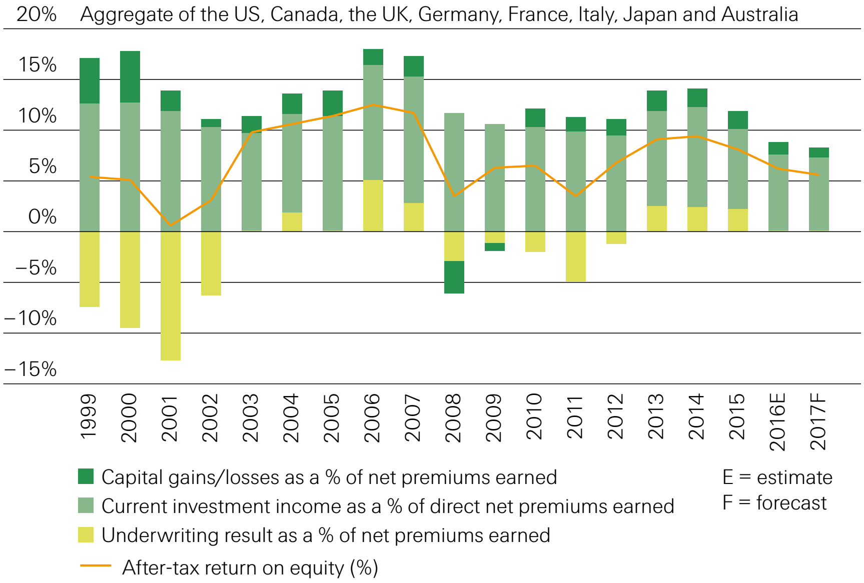
[4] *sigma* 2/2017 – Natural catastrophes and man-made disasters in 2016: a year of widespread damages, Swiss Re Institute.

Weaker underwriting results and lower investment returns weighed on non-life sector profitability in 2016.

Profitability and capital position

The overall profitability of property & casualty insurance in a sample of eight key markets declined again in 2016, with sector ROE dropping to 6.2% from 8.1% in 2015 (see Figure 14). This was driven by weaker underwriting results and lower investment earnings due to declining interest rates. Investment income as a percentage of net premiums earned (NPE) fell by 0.3 ppt to 7.5% in 2016 due to the low interest rate environment. The overall combined ratio for the eight markets deteriorated from 97.8% in 2015 to 99.9% in 2016. However, across regions trends were mixed. The US non-life sector experienced its first underwriting loss in four years, driven by higher catastrophe losses and lower releases from prior-year loss reserves. In Western Europe, underwriting profitability was little changed with a combined ratio of around 95%. A slight improvement in the UK was offset by a worsening in Germany, France and Italy. In Japan, overall underwriting results deteriorated, reflecting mainly higher losses from the Kumamoto earthquake and also higher losses in motor. On the other hand, profitability improved in Australia due to lower property claims and large reserve releases in long-tail business.

Figure 14
Composition of profits as a % of net premiums earned and ROE, aggregate of eight major markets, 1999–2017F

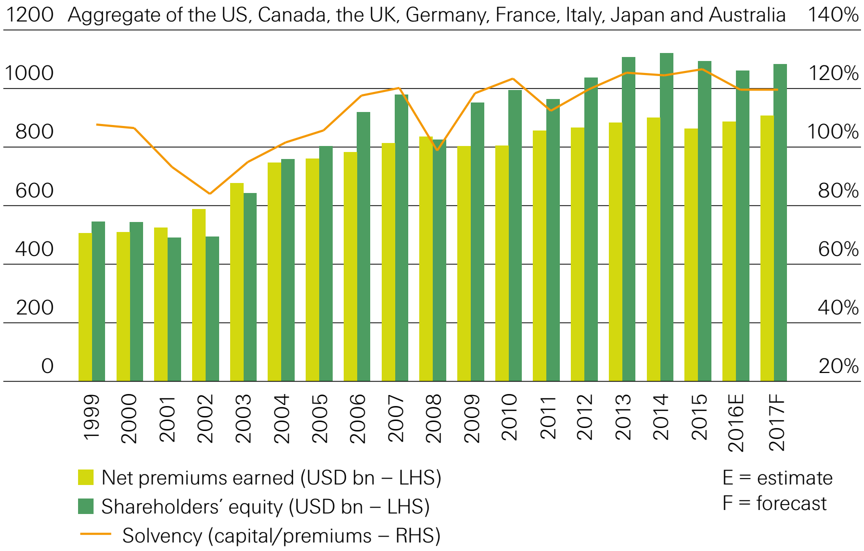


Source: Swiss Re Institute.

Sector capitalisation remains healthy, although solvency declined in 2016.

The overall solvency of the non-life sector declined to 120% in 2016 from the previous year's record high of 127%. This was mainly due to lower policyholders' surplus in the US. Capitalisation will remain strong but support from unrealised gains will gradually weaken once interest rates begin to rise.

Figure 15
Non-life insurers' solvency, 1999–2017F



Source: Swiss Re Institute.

Non-life insurance industry outlook

Improving economic activity in advanced countries will likely support non-life premium growth in 2017.

Global non-life sector growth is expected to remain moderate, supported mainly by improved activity in the advanced economies. In North America, premium growth is projected to improve in 2017, supported by a strengthening economy and higher interest rates in the US. In Western Europe, non-life premium growth will remain subdued in an environment of moderate economic recovery. Improving economic conditions should support non-life premiums in advanced Asia, but intense pressure on rates is likely to remain. Premium growth in Oceania will likely remain slow in 2017, with commercial lines still soft. The outlook for personal lines is more positive.

Premium growth in the emerging markets will be robust, particularly in China and also India.

Premium growth is forecast to remain robust in the emerging markets, although slightly lower than in the recent past. Growth will be supported by the continuing efforts of the Chinese government to increase insurance penetration. State initiatives in India to develop specialty lines, and infrastructure investments in South East Asia should also add to growth. In CEE, premiums are expected to continue to grow driven by solid labour markets and improvement in domestic consumption. In Latin America, premium growth is expected to remain below trend in the short term but improve over the longer term supported by economic reforms, particularly in Brazil and Argentina. In the Middle East, growth will be weak due to reduced government spending in key markets. In Africa, premium growth will recover only moderately, based on an improving economic environment in key markets and in SSA.

Overall sector profitability, however, will remain under pressure.

The profitability of non-life insurers is expected to remain under pressure given still-low investment returns, and as underwriting results are impacted by the continued soft market conditions and dwindling reserve releases.

Digital distribution: turning up the volume

The application of digital technology is becoming widespread, and not just in advanced economies.

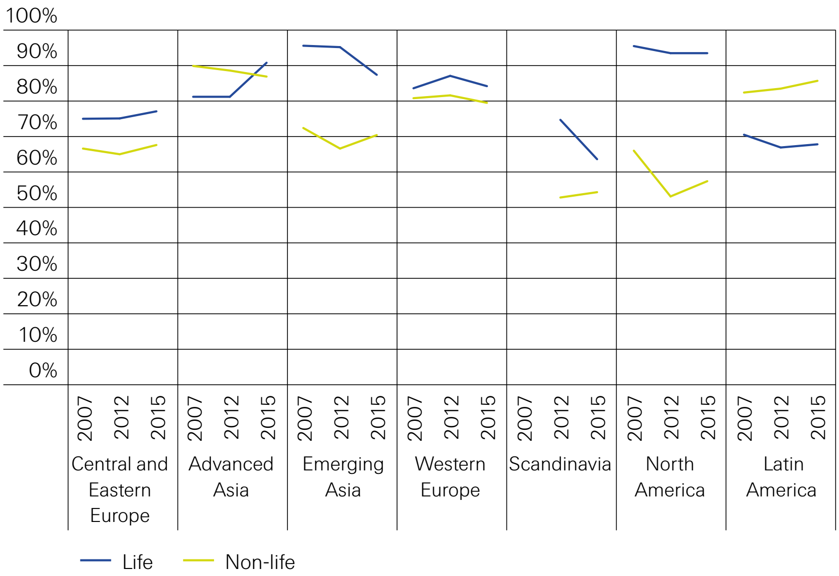
sigma No 4/2014 described the impact of digitalisation on insurance distribution as "a quiet revolution".[5] In the three years since that paper was published, the pace of technological change has accelerated. In particular, internet and social media penetration have grown significantly, and an increasing share of online activity is executed via mobile phones. It's not just in the advanced economies that people are using the internet more and owning more high-tech gadgets: the emerging world is catching up. According to the Pew Research Centre, the average proportion of people in developing economies who reported using the internet at least occasionally or owning a smartphone rose to 54% in 2015, up from 45% in 2013. Much of that increase came from large emerging economies such as Malaysia, Brazil and China. Against that background, this chapter revisits the topic of how technology is changing the business of insurance distribution around the world.

Direct versus intermediated sales

However, sales via intermediaries continue to dominate insurance distribution.

Despite the proliferation of digital technology and consumers' growing comfort levels with e-commerce, traditional intermediaries still dominate distribution globally, at least in terms of point of sale. Agents, brokers and other intermediaries such as banks account for a relatively stable share of around 60-70% of premiums in most insurance markets (see Figure 16). Their role in the sale of life insurance remains especially important, probably reflecting the more complex nature of many of these products and the value prospective policyholders attach to intermediaries' advice.

Figure 16
Share of life and non-life premiums sold through intermediaries in 2007, 2012 and 2015, by region



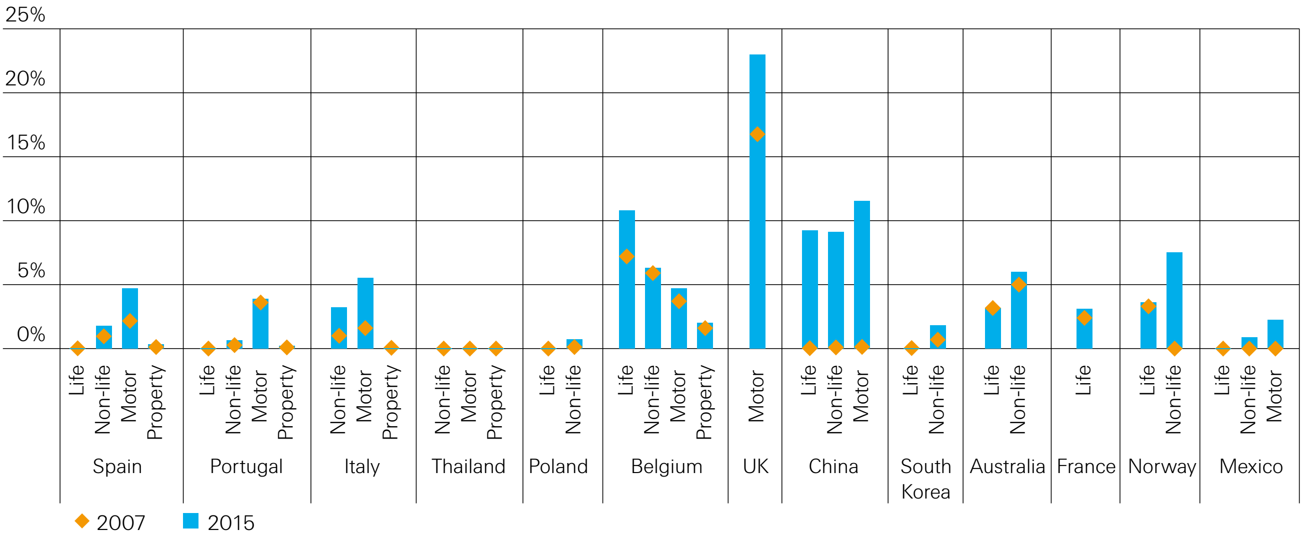
Note: The shares of intermediated premiums by region are based on simple averages of sector-wide shares for selected countries in each region. In a few cases, data are based on country observations in years close to 2007, 2012 or 2015.
Source: Swiss Re Institute calculations, based on various published sources.

[5] *sigma* 4/2014, Digital distribution in insurance: a quiet revolution, Swiss Re.

Direct online sales for selected insurance lines are growing rapidly in some markets,

A 2016 survey of senior insurance executives indicated that 94% expect distribution to be the area where digital technologies have the greatest impact over the next five years.[6] Direct online sales, whereby consumers select and purchase insurance via the internet, are indeed growing rapidly in *some* markets (see Figure 17). In particular, sales of standardised products such as motor and household insurance have increasingly migrated online. The UK is the standout example,[7] and other countries are following suit. For example, online purchases of motor insurance in China more than tripled between 2013 and 2015, and account for over 10% of the domestic market. And in the US, direct-to-consumer auto insurers that sell mainly online or by telephone have progressively gained market share.[8] Even traditional life insurance products such as term-life policies are increasingly sold online.

Figure 17
Market share of direct online insurance premiums in selected countries, 2007 and 2015



Note: orange diamonds with intersecting blue line indicate where the market share is small and there has been little change between 2007 and 2015. In a few cases, data are based on country observations in years close to 2007 or 2015.

Source: Swiss Re Institute calculations based on various published sources.

... prompted in some cases by supportive changes in regulation.

Regulatory changes are catalysing some of these shifts. For example, the China Insurance Regulatory Commission has urged insurers to go online, stressing that both traditional and online insurers should explore technology to reach more customers. It has also removed geographic restrictions on sales of certain life and property insurance products, allowing insurers to sell such products through their own digital sales channels. Similarly, the Insurance Regulatory and Development Authority of India issued guidelines in 2016 requiring all insurance policies in the country to be available in digital format. And since 2015, the Monetary Authority of Singapore has allowed insurers to offer direct-purchase insurance products online without advice.

6 *Insurers under pressure to go digital – Willis Tower Watson Survey*, Willis Towers Watson/ Mergermarket,16 February 2017, https://www.willistowerswatson.com/en/press/2017/02/ insurers-under-pressure-to-go-digital
7 Over half of all personal motor insurance and a quarter of household property insurance are typically purchased directly by consumers. This includes sales directly on insurers' own websites, via price comparison websites and over the telephone. See *UK Insurance & Long-Term Savings. Key Facts*, 2015, ABI.
8 According to Willis Towers Watson US insurers GEICO, Progressive and USAA increased their collective market share by 17ppt between 1996 and 2016. See https://www.willistowerswatson.com/en/ insights/2017/05/quarterly-insurtech-briefing-Q1-2017

Overall, online insurance penetration nonetheless remains low in many countries.

Yet, online sales of insurance actually remain relatively small in many countries, both compared with other distribution channels and e-commerce penetration in other sectors.[9] In the EU, for example, e-commerce sales by non-financial firms amounted to 16% of aggregate turnover in 2015 (up from 12% in 2008) and for some activities such as booking accommodation, the share of internet sales is over 25%.[10] This compares with an average share of direct online insurance of probably less than 5%.[11]

Towards increased insurance e-commerce

In part this could reflect the gradual adoption of digital technology.

The limited penetration of e-commerce insurance is in part due to lack of availability and quality of web-based technology in some countries. In a number of emerging markets, for instance, lack of internet access and poor telecommunications infrastructure make online shopping virtually impossible. And in advanced economies, some insurers may be unable or unwilling to offer direct online purchase facilities. Small, community-based insurers in North and South America in particular have a tight affinity with traditional agent/broker distribution, perhaps linked to budget constraints on the necessary IT upgrades for digital distribution as well as potential worries about channel conflict.[12] The diffusion of new technology into some wholesale re/insurance markets also remains patchy and here too, manual processes still dominate.

Equally, there may be deep-seated factors that limit how far insurance buying migrates online.

There may also be deep-seated behavioural, institutional and culture factors supporting the continued role of insurance intermediaries. For instance, consumers in some societies may be less comfortable doing independent research and making online purchases without personal advice, especially for complex saving and health insurance products (see *Culture and online insurance penetration*). Similarly, buying insurance for large, complex commercial risks continues to be mostly done via brokers, who are often crucial in evaluating companies' risks and matching their needs with an optimal provider. Regulation too can sometimes influence the choice of insurance distribution channel. For example in Indonesia, for index-linked policies, the regulator requires that there be face-to-face discussion between insurer/intermediary and the insured.[13]

9 In principle, online sales could be more significant in terms of number of policies sold if consumers tend use the internet for relatively low-value insurance transactions. However, where the statistics are available the share of online policies still suggests low e-commerce penetration. For example, in Mexico the share of motor insurance policies sold online in 2015 was 4.9% compared with 2% of premiums.

10 *E-commerce statistics*, Eurostat, December 2016, http://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce_statistics#Further_Eurostat_information

11 Based on European countries for which detailed online insurance premium data are available.

12 See *sigma* 4/2016, Mutual insurance in the 21st century. Back to the future?, Swiss Re.

13 See the Indonesian Financial Services Authority Regulation No. 23/POJK.05/2015 on Insurance Products and Insurance Products Marketing, issued in November 2015.

e-commerce penetration differs across countries reflecting various socio-economic, institutional and cultural factors.

Culture and online insurance penetration

Aside from technological developments that influence the availability and effectiveness of digital purchase channels, e-commerce penetration likely reflects a variety of socio-economic, institutional and cultural factors. The importance of these influences is difficult to evaluate, not least because customer preferences and insurers' motives are not directly observable. However, proxy indicators provide a clue as to how far differences in insurance e-commerce are linked to intrinsic characteristics of a country's inhabitants. In particular, Hofstede identified a number of factors that contribute to national cultural values and explain differences in human behaviour which could affect e-commerce trends.[14]

Table 1

Correlation of online insurance buying and country culture indices

	Surveys of online insurance purchases		
Hofstede cultural indices	**Capgemini**	**Bain**	**Eurostat**
Uncertainty avoidance			
Pearson correlation coefficient	–0.6*	–0.3	–0.7*
Kendall rank correlation coefficient	–0.5*	–0.2	–0.6*
Power distance			
Pearson correlation coefficient	0.2	–0.6*	–0.6*
Kendall rank correlation coefficient	0.1	–0.4*	–0.6*
Individualism			
Pearson correlation coefficient	0.1	0.5*	0.6*
Kendall rank correlation coefficient	0.2	0.2	0.5*
Sample size	15	16	26

Note: The survey responses are drawn from three consumer studies: *Customer Loyalty and the Digical Transformation in P&C and Life Insurance: Global edition*, Bain, 2014; *Voice of the Customer Survey*, Capgemini, 2015; *Survey on ICT usage and e-commerce in enterprises*, Eurostat, 2016. Pearson correlation coefficient is a measure of the linear correlation between two variables X and Y. The Kendall-Tau rank correlation coefficient measures statistical dependence between the ranking of the two variables.

* implies statistically significant at the 10% level.

Source: Swiss Re Institute calculations using data from Capgemini, Bain, Hofstede and Eurostat.

Simple bivariate correlation analysis suggests a tendency favouring online insurance purchase in countries where people ...

Table 1 summarises the results of simple bivariate correlation analysis that examines the degree of association between country indicators of insurance e-commerce and Hofstede's cultural indices. The limited number of observations suggests caution in over-interpreting the results, given that the correlation statistics cannot be measured very precisely. Furthermore, simple bivariate correlation analysis does not take into account other country features that might also help explain consumers' internet buying behaviour in addition to cultural factors.[15] Nonetheless, at face value a number of broad inferences can be drawn:

... are highly individualistic ...

- Online insurance is more prominent in individualistic than collectivist cultures. This probably reflects a greater willingness of inhabitants to seek out independent sources of information and select the best insurance solution.

... are less bound by social norms and hierarchies ...

- People in cultures where social hierarchies are clear and well established rely more on personal sources of recommendation. As a result, they make less use of information from impersonal sources such as the internet, and instead favour traditional insurance distribution channels.

... and are more comfortable with uncertainty and ambiguity.

- Societies in which people are generally uncomfortable with uncertainty and ambiguity report less interest in buying insurance online. In those countries, consumers probably tend to have more trust in experts and therefore use intermediaries for arranging their insurance.

[14] For more background on Hofstede's research into cultural differences across countries see https://geert-hofstede.com/countries.html

[15] Regressions that control for differences in internet penetration across countries nonetheless suggest the signs and significance of the (partial) correlations between culture and online insurance buying are broadly maintained.

As internet capacity increases and as more insurers offer online services, insurance e-commerce will grow.

Ultimately, as the geographical reach, reliability and capacity of the internet increases, online insurance solutions will become more viable. Likewise, as insurers themselves become more experienced with digital technology, they will be able to offer customers a more complete online purchase experience. This is especially likely if technological innovations facilitate usage-based insurance where consumers need to review, organise and purchase insurance for particular activities at specific times.

Younger generations' preference for digital distribution channels will likely support increases in online sales.

Generational effects may also be important in fostering internet sales, with surveys indicating that younger policyholders are more likely to embrace new distribution channels. A 2014 Gallup poll found that millennials in the US are twice as likely to buy their policies online instead of dealing with a local agent.[16] This suggests that as the younger cohorts age and buy more insurance, online sales will likely increase.

[16] *Insurance Companies Have A Big Problem With Millennials*, Gallup, March 2015.

Multi-touch, omni-channel: there's more to distribution than point-of-sale

Even if online sales remain modest, digital technology is changing the way customers shop for insurance.

Although insurance e-commerce remains relatively modest, digital technology is nonetheless having a big impact on the whole distribution process: that is, both in terms of how products and services are delivered and more generally how companies interact with their customers. Where once consumers might have relied almost entirely on their agent or broker for all their insurance needs, increasingly they are more self-directed and make use of many different sources and media to research, seek advice and ultimately purchase insurance. Digitalisation has added various channels to the customer service mix including website self-service, e-mail, website live chat, mobile app, text messaging, online forums and social media. According to research by BCG/NICE, insurance customers now use an average of 5.1 different channels and for 15% of consumers, the number could be as high as 10.[17]

Research-online-purchase-offline remains a popular strategy.

Depending on an individual's (or firm's) circumstances, where they find out about insurance may not be where they eventually purchase a policy. The research-online-purchase-offline (ROPO) strategy remains popular, even for standard insurance cover. For example, while around half of US motor insurance customers obtain a quote via insurer websites, only 10% actually purchase their policy online: 33% close through an agent.[18] Similarly in France, two-thirds of internet users who either asked for a quote or took out a policy did research online before buying, although 47% said they would rather visit an agency to buy insurance.[19]

And InsurTech start-ups are heavily focused on upgrading aspects of the distribution process, especially in mature markets.

Another development has been the rapid growth in InsurTech start-ups over the past few years, which symbolises the ongoing reconfiguration of the traditional insurance distribution model. Predominantly US-based and focused largely on personal and small business insurance, close to 40% of all investments in InsurTech start-up projects between 2014 and 2016 were in the field of distribution.[20] These start-ups often partner with incumbent insurers to look for ways to upgrade the whole customer experience, including using mobile phone technology to achieve efficiencies in claims and policy management. Many InsurTech start-ups will inevitably fail, not least because they may underappreciate the complexity of insurance. However, the associated tech-led changes in how insurers interact with customers is likely to endure.

Mobile devices are widening access to microinsurance in emerging markets.

This move to a multi-touch, omni-channel distribution model is most prevalent in mature insurance markets. But even in emerging economies, digital technology is widening the set of options for customers. By leveraging mobile channels for communication, registration, payment of premiums via airtime deduction or mobile money, claims submission and claims payouts, insurance is becoming more accessible and affordable, also in remote, rural regions of Africa, Asia and South America. According to the mobile operators trade body GSMA, over 80% of microinsurance customers subscribe to services directly from their mobile phone.[21]

[17] *Digital Technologies Raise the Stakes in Customer Service*, Boston Consulting Group (BCG) /NICE, May 2016.

[18] US consumers still seem to look for some sort of assurance from a human, no matter their preferred channel for obtaining a quote. See *U.S. Insurance Shopping Study*, J.D. Power, April 2017.

[19] *e-Assurance – La digitalisation des parcours clients, les meilleures pratiques sur les sites et sur mobile*, CCM Benchmark Group, April 2015.

[20] For further discussion of recent themes in InsurTech see *Technology and insurance: themes and challenges*, Swiss Re, 2017.

[21] Based on annual survey of mobile financial service providers around the world. See *Mobile Insurance, Savings and Credit Report*, GSMA, 2015, https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/08/Mobile-Insurance-Savings-Credit-Report-2015.pdf

Whither intermediaries?

At the same time, digital technology is promoting innovation by new and traditional intermediaries.

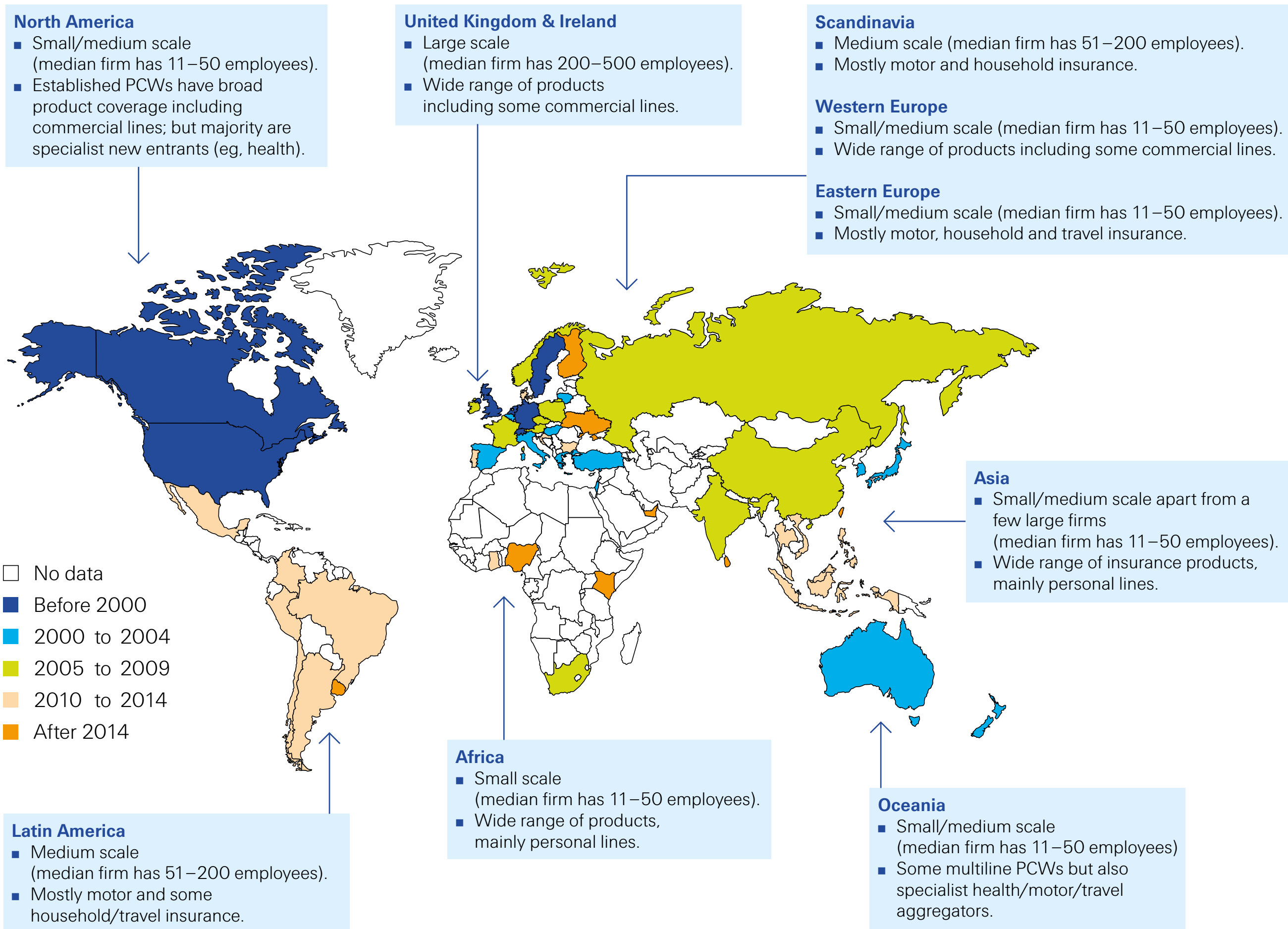
Far from eliminating agents/brokers, however, new technology has spawned new types of insurance intermediary. By the same token, traditional intermediaries are evolving and are deploying digital technology to improve the way they interact with their clients either face-to-face or remotely.

Online price comparison websites (PCWs) have become an important distribution channel for insurance.

Web-based aggregators

Online aggregators (also called price comparison websites – PCWs) have become an integral part of the insurance distribution landscape (see Figure 18). These intermediaries allow customers to compare various insurance products, receive policy quotes immediately, and often complete the sale of a selected policy either on the aggregator's portal or by clicking-through to the chosen insurer's own platform.

Figure 18
Price comparison websites, by region and approximate start year of oldest firm



Note: Oldest PCW per country is based on a combination of when the company was founded or its domain website was created, whichever occurred latest.
Source: Swiss Re Institute, based on individual firms' websites and publicly available information.

PCWs now have a presence in most regions around the world.

UK insurance buyers are the most active users of PCWs but aggregators are also reportedly now an important distribution channel for motor and home insurance in Germany, Italy, Spain and, to a lesser extent, France.[22] More recently too, online aggregators have sprung up in parts of South America and Asia. For instance, consumers in 18 out of 20 countries in Latin America reportedly have access to online aggregators.[23] Similarly the number of web aggregators operating in India exceeds 20, three quarters of which were granted licenses in 2015–2016.[24]

The range of insurance products compared has also broadened.

The range of insurance products featured on PCWs has also expanded. Initially focused largely on motor insurance, a number of aggregators now offer a wide variety of other personal lines such as household and travel insurance, as well as some life protection covers (eg, term-life insurance). Web-based platforms for comparing and purchasing insurance policies for small business have also emerged in recent years, albeit concentrated in a few advanced markets.

Nonetheless, PCWs' market penetration remains low in some countries, linked in part to dominant traditional channels and the large marketing costs to establish a brand.

PCWs have nonetheless struggled to make inroads in some markets, especially in North America where some market estimates suggest that less than 5% of motor policies are purchased through comparison sites, even though they have been a feature of the market place for some time.[25] In Japan too, estimates of aggregators' share of insurance market are only around 5%.[26] This situation partly reflects the dominant position of established channels which have not been easy for new entrants to disrupt. In addition, the marketing expenditure needed to build recognised brands and attract sufficient customers can be prohibitive for start-ups.[27] Even organisations with deep pockets have struggled to make the economics of the comparison business work. For example in 2016, Google wound up its Google Compare PCW after only a year or so in operation in the US and UK, citing challenges in meeting volume and revenue projections.[28]

The reluctance of some insurance carriers to collaborate has also restricted growth of PCWs, although that may be changing.

The unwillingness of insurance companies to collaborate with aggregators has also held back growth of PCWs in some markets.[29] But there are signs insurance carriers' attitudes are changing. A recent poll by Accenture found that insurers are tailoring their products to different channels and making more targeted use of aggregators. The percentage of insurers using aggregators under a sub-brand is expected to rise from 42% to 55% over the next few years, with insurers in Asia-Pacific particularly attracted to this strategy.[30] Some insurers, especially in the UK, are also considering launching their own comparison site.

[22] *Consumer Approaches to Online Insurance Comparison Sites in Selected Global Markets* Series Prospectus, Finaccord, September 2016.
[23] *The Rising Importance of Aggregators in Insurance*, Celent, 2014.
[24] *List of Approved Insurance Web Aggregators*, Insurance Regulatory and Development Authority of India, 31 January 2017, https://www.irdai.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo2337&mid=9.6.1
[25] Finaccord, 2016 op. cit.
[26] *The Evolution of Insurance Aggregators in Japan: A New Era in Choice*, Celent, 2014.
[27] The success of the UK aggregators has been achieved on the back on significant and sustained advertising spending. Besides insurance, they also provide price comparisons of several other products such as telecommunication and mobile services, power supply, etc., which significantly increases their overall brand strength.
[28] Worries about cannibalising its existing businesses were probably a factor too, with insurers and comparison websites often key customers of Google's AdWords pay-per-click advertising tool. For further discussion, see http://blog.riskgenius.com/google-compare
[29] For example, in Germany, three of the top 10 carriers, including the largest carrier, reportedly do not participate in aggregator sites. Similarly some major US carriers refuse to work with comparison sites or have been unwilling to integrate the platforms with their own systems, leaving the aggregators with only lesser-known brand names and/or limited online functionality. See *Coming to Terms with Insurance Aggregators: Global lessons for carriers*, Accenture, 2016.
[30] *Reimagining insurance distribution*, Accenture, 2015.

The increased scope for personalised insurance will likely lead to further shifts in online aggregators' business models.

Aggregators themselves are also looking to expand their value proposition beyond purely price comparisons. This includes additional services such as evaluations of product features, needs analysis and advice, "people like you" comparisons and even some policy/claims management processes.[31] As increased data about individuals become available and smarter ways develop to analyse and assess their risk profiles, the scope for personalised insurance increases. Correspondingly, the value of standard insurance comparisons will diminish in favour of bespoke advice that helps consumers select optimal cover for risks that may change over time.

Regulators are nonetheless keen to ensure that comparison websites work in the best interests of consumers.

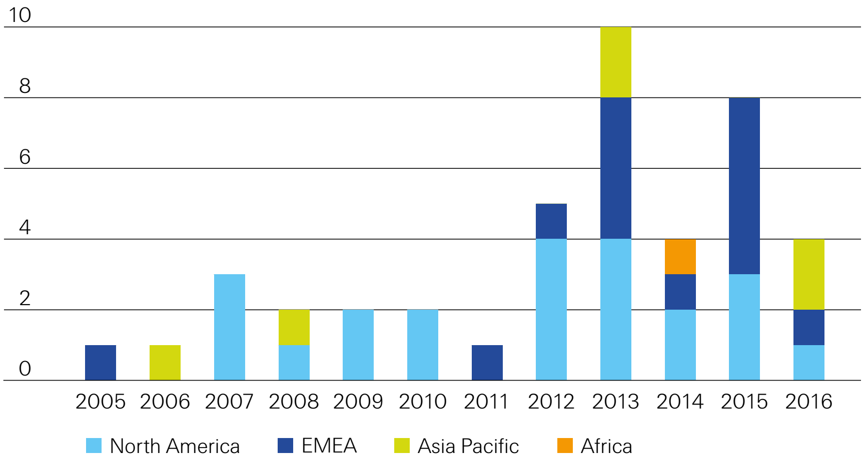
In extending their services, aggregators will, however, need to maintain consumer trust. Lack of clarity about how they earn their income together with related suspicions that internet search results are biased towards particular insurance carriers, has already hit aggregators' reputations in some markets. Regulators have consequently increased their scrutiny of the aggregator sector to ensure high professional standards are maintained.[32]

Robo advisers

AI-driven robo advisers have emerged as low-cost alternatives to traditional financial intermediaries.

Recognising these actual and potential shifts in the market place, a number of new types of intermediary which exploit artificial intelligence (AI) techniques like natural language processing and machine learning to offer personalised insurance advice, have started up recently.[33] Specifically, insurance robo advisers – web-based platforms that provide automated, algorithm-based advice without (or with limited) human intervention, anytime and anywhere – have attracted significant investment funding over the past couple of years in a number of markets (see Figure 19).

Figure 19
Number of robo-adviser start-ups in insurance, by region



EMEA = Europe, the Middle East and Africa.
Source: Swiss Re Institute.

[31] Accenture, 2016, op. cit.
[32] For example, in September 2016 the UK Competition and Market Authorities launched a market study into digital comparison tools to assess the transparency of their business models and how well they serve consumers' interests and promote healthy competition. See https://www.gov.uk/government/news/cma-launches-study-into-digital-comparison-tools
[33] P. Bharal, L. Shapiro, *AI – The Potential for Automated Advisory in the Insurance Industry*, ACORD/Surely Group, February 2016, https://services.surelygroup.com/wp-content/uploads/AI%20%E2%80%93%20The%20Potential%20for%20Automated%20Advisory%20in%20the%20Insurance%20Industry.pdf

Though nascent, consumers appear receptive to using robo advice to organise their insurance.

Robo advisers first came to prominence in wealth management in the US, and are relatively new to insurance. Nevertheless, consumers appear willing to embrace their services, at least for relatively straightforward decisions. A global survey of consumers by Accenture found that 71% of respondents said they would be open to robo advisers helping them determine which insurance cover to purchase, the same percentage as for advice on opening a bank account.[34] Unsurprisingly, many of the respondents open to robo advice were millennials and those from emerging markets, but the survey showed signs of increasing acceptance in mature markets also.

Robo advisers can leverage operational efficiencies to cut costs and widen the reach of insurance.

The promise of robo advisers, aside from real-time access, is that they help counter human bias and improve trust and confidence levels by providing consistent, rule-based advisory services at a fraction of the cost of traditional intermediaries. This could broaden access to insurance for parts of society that have been hitherto underserved by conventional distribution channels, or where the costs of providing advice have been prohibitive.[35] Life insurers in particular have made limited progress in selling direct online, especially savings and pension products, where assessing the best insurance solution requires expert judgement. Robo advisers, by automating some of the information gathering and risk analysis, offer a way to reduce the costs of advice and increase market penetration.

But current automated advice tools may still not be suitable for highly complex insurance products.

Pure, self-directed robo-advice business models nevertheless face some challenges, at least given the current vintage of automated financial advice tools. The limited interaction with customers means that robo advisers cannot provide comprehensive financial advice and may incorrectly assess customers' risk tolerance. While some products are very straightforward, the trend in some areas is towards increasingly complex insurance products, requiring customers to choose from various deductible amounts, deductible types, coverage options, limits, pricing options and available discounts. As a result, consumers are often ill-equipped to evaluate if they are getting value for money and/or whether they are being sold inappropriate/unsuitable products.

This has prompted increased regulatory scrutiny of the robo-advice business model.

A number of investment-focused robo advisers have come under fire for lack of clarity about whether they are providing regulated advice – ie, recommending a course of action or making a judgement on the merits of a particular product – or simply offering information. Likewise, some robo advisers may not always disclose charges in a way that consumers easily understand. For example, consumers may not be aware that a tool appearing to offer "free" and unbiased advice may in fact hide cross-subsidisation between the advice given and the final product/service chosen by the consumer.[36] Regulators in different jurisdictions are looking closely at the standalone robo-advice industry to ensure that consumers and the firms themselves are alert to the risks and benefits involved.[37]

[34] *Transforming Distribution Models for the Evolving Consumer*, Accenture financial services, Global Distribution & Marketing Consumer study: Financial Services Report, 2017.

[35] Regulatory initiatives in various jurisdictions to bring greater transparency to traditional insurance intermediaries' fees and commissions may have encouraged some financial advisers to pull away or make their service prohibitively expensive for one-off or limited advice. In some jurisdictions this has created an 'advice gap' for low/middle income individuals.

[36] *Joint Committee Discussion Paper on automation in financial advice*, EBA/EIOPA/ESMA, December 2015, https://www.eba.europa.eu/news-press/calendar;jsessionid=375AA799DF2CF53AF8835FD853A509B4?p_p_auth=0T9y7lkl&p_p_id=8&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view&_8_struts_action=%2Fcalendar%2Fview_event&_8_eventId=1299860

[37] For example, the UK Financial Conduct Authority has launched an advice unit to provide regulatory feedback to firms developing automated models that seek to deliver low-cost advice to consumers. See https://www.fca.org.uk/firms/innovate-innovation-hub/advice-unit

High costs of attracting clients also represent a challenge to standalone robo advisers.

Moreover, as start-ups most robo advisers must finance strategic marketing campaigns to attract customers. After an initial surge in take up, investment-focused robo advisers have reportedly struggled with the combination of rising client acquisition costs and declining average revenue per client. This has prompted some to shift away from their original core B2C model in search of new growth areas, including supporting institutional investors.[38] Some have also launched services that allow clients the chance to talk to a real, live financial adviser.

Digitally-enabled agents/brokers

Automated advice capabilities are being deployed by some more innovative agents/brokers.

Overall, the adoption of digital technology in agents' and brokers' everyday business practices remains slow. A significant majority of US agents, for instance, do not have key digital tools such as client portals, mobile apps and claims download tools that facilitate automation. But some innovative insurance advisers are customising their own robo-adviser platforms to service some customer needs, enabling them to focus on areas where they may have an inherent competitive advantage such as financial planning, estate planning, relationship building and other services requiring more face-to-face contact with clients.

More broadly, while the pace of change remains slow, traditional intermediaries recognise the need to upgrade their business models.

More generally, there are signs that established agents/brokers recognise the need to embrace technology in a bid to upgrade their operations and customer service. According to a survey of independent agents in the US, 70% have plans to leverage technology, analytics and digital applications to be more responsive to customers' needs, including analytics-guided sales tools that can be viewed on a mobile device.[39] A number of the larger and more internet-savvy insurance brokers now also offer price comparison portals of their own.

Ongoing strategic challenges for insurers

Many insurers are investing in boosting their online presence.

Many insurers are investing heavily in creating digital offerings in a bid to boost their online and contact centre presence.[40] This includes deploying AI to support customers in their purchasing decisions. For example, US insurer Allstate Business Insurance Expert's (ABIe) virtual assistant helps agents quote and issue commercial insurance products. Some insurers are also looking externally to gain digital distribution expertise, including partnering with/investing in InsurTech start-ups, as well as collaborating with established technology and telecommunications firms.

They are also looking to acquire digital distribution expertise.

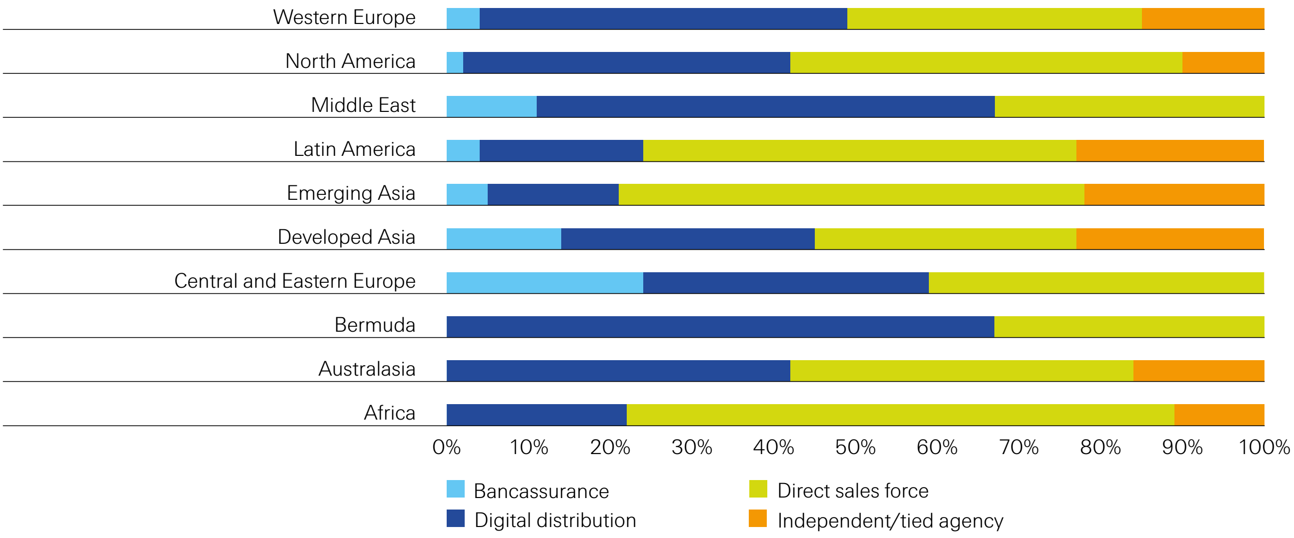
According to a 2016 Willis Towers Watson survey, almost half of insurance executives (49%) expect to make an acquisition over the next three years, directly driven by the desire to acquire digital technologies. Of those, 14% intend to make more than one acquisition. Upgrading distribution is already a significant driver of acquisitions in Western Europe and the Middle East, but a number of insurers also highlighted its importance in emerging markets such as Africa (see Figure 20).

[38] "The B2C Robo-Advisor Movement is Dying, But Its #Fintech Legacy Will Live On!, *www.kitces.com,* 2 May 2016, https://www.kitces.com/blog/robo-advisor-growth-rates-and-valuations-crashing-from-high-client-acquisition-costs/

[39] *The Insurance Digital Transformation Study*, Insurance Digital Revolution, 2016, https://siteassets.pagecloud.com/insurancedigitalrevolution/downloads/Insurance_Digital_Transformation_Study-ID-b364af18-376a-4d9e-cd12-c18eb0a7a869.pdf.

[40] Accenture, 2016, op. cit.

Figure 20
Insurers' views on distribution drivers of recent M&A deals in different regions, by channel



Source: *Defying gravity:Insurance M&A on the rise*, Willis Towers Watson, January 2016.

Digital success is challenging not least because some insurers have to overcome legacy IT system issues and technical skills gaps.

Ultimately insurers anticipate digital technology will lower operational and policy acquisition costs, widen access to underserved customers and improve accuracy of underwriting (thereby lowering claims).[41] But success requires more than simply creating a mobile app or an online customer portal. It typically needs a fundamental change in an organisation's operations and mind-set, affecting all elements in the insurance value chain from the role of the agent to new, advanced, data-analytic capabilities. In the near term, a number of hurdles must be overcome. In particular, insurers adopting new technology often face constraints from poorly integrated IT systems and technical skills gaps. Even among insurers that see themselves as having a competitive advantage over their peers, 61% view legacy systems and processes as a barrier.[42]

And in the short term, digital technology can actually undermine revenue growth and boost costs.

Uncertain returns from digital investments also puts additional emphasis on simultaneously growing premiums and profits in order to cushion against the inevitable failures in some innovation and/or InsurTech start-up investments. Some studies suggest that in the short term, digital technology may actually diminish revenues. For example, McKinsey's global survey of a wide range of industries has shown that digital technology reduces revenue growth at an average rate of 3.5% per year.[43] Moreover, the development of multiple distribution channels likely adds to insurers' costs, at least in the near term. This reflects not only the higher operational complexity of managing many more channels and possible points of customer interaction, but also the additional upfront costs of, for example, establishing a strong brand that is often essential for direct, e-commerce sales.

[41] In the US, for example, policy acquisition costs for personal insurance represent approximately 18% of annual premiums. See Accenture, 2016, op. cit.
[42] *Assessing digital impact across insurer and channel operations*, a study by the Genpact Research Institute and ACORD, November 2016.
[43] *Digital disruption in insurance: Cutting through the noise*, McKinsey, March 2017.

This means that insurers must focus on boosting productivity across all distribution channels.

As a result, insurers will increasingly need to look for ways to boost sales-lead conversion rates across all of the various distribution channels. Smart analytics can help by allowing more informed monitoring of the efficiency of both traditional and new digital channels. Similarly, sophisticated AI-led automation systems (eg, chatbots) can help remove unnecessary costs and improve the productivity of new and existing insurance intermediaries.

Concluding remarks

Digital technology is reconfiguring the insurance distribution process …

The growing digitalisation of insurance distribution is set to continue, but the pace of change will vary across markets. In some markets such as China, the share of direct online insurance premiums has increased very strongly. More globally however, the share of traditionally intermediated insurance business still remains dominant. Digital channels will ultimately be used throughout the distribution process, from information gathering to purchase completion to after-sales service. But this does not mean that all insurance transactions will migrate online, eliminating the need for intermediaries altogether.

… and insurers must continue to adjust their business models in order to remain relevant.

Importantly, consumers may always continue to use the services of intermediaries for buying insurance. These need not be only incumbent agents and brokers. Over the past three years, digital technology has spawned various types of new intermediary like web-based aggregators or robo advisers that seek to exploit technical advances in data capture and analytics to improve customer engagement and satisfaction. The challenge for insurers and traditional intermediaries alike is to modernise their systems and business models to take advantage of the opportunities that digital technologies present. Those that fail to do so will likely become increasingly marginalised in the market place.

Advanced markets

Global share of advanced markets declined to 80.3% in 2016

Slower growth in advanced markets resulted in lower market share in 2016.

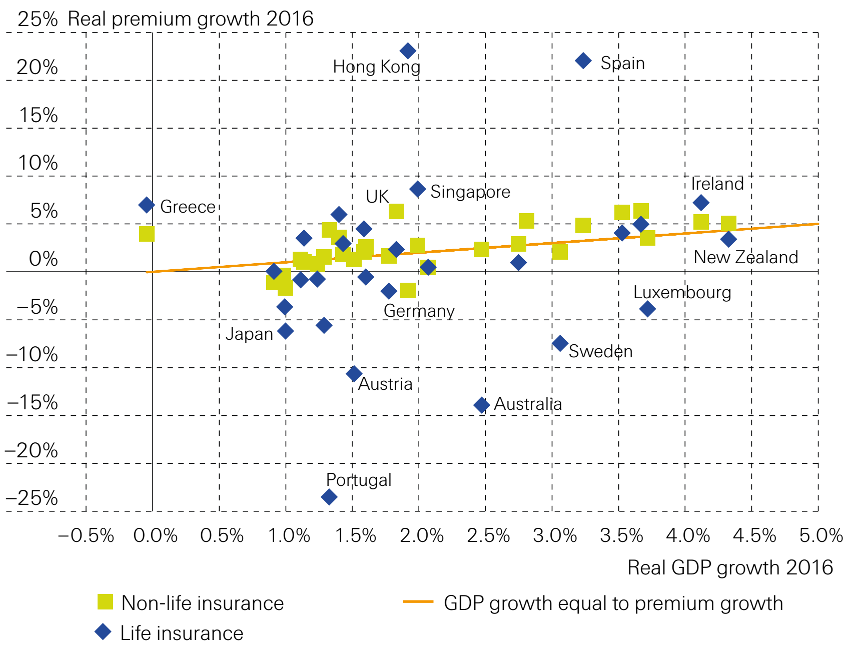
Total insurance premiums in the advanced markets grew by 0.7% in 2016, after robust 3.2% growth in the previous year. In nominal USD terms, the premium increase was stronger at 1.4%, to USD 3 799 billion. The share of advanced markets in global premiums declined to 80.3% in 2016 from 81.5% in 2015, a result of the slowing growth in the advanced regions and strong gains in the emerging markets.

Life insurance

Life insurance premiums growth underperformed economic growth …

Total life premiums in the advanced markets declined by 0.5% in 2016, following robust growth in the previous two years. The gap between advanced market premium growth and GDP growth (1.7%) led to a slight decline in insurance penetration (premiums/GDP). In 16 of the 28 markets for which data are available, life premiums growth underperformed compared to economic growth. In Figure 21, the blue dots below the orange line indicate life premium growth below GDP growth.

Figure 21
Life and non-life premium growth versus GDP growth in the advanced markets, 2016



Source: Swiss Re Institute.

Non-life insurance

… while non-life growth outperformed.

In non-life, total premiums in the advanced markets grew by 2.3% in 2016, slightly lower than in 2015, but higher than aggregate economic growth. Premium growth was higher than GDP growth in 17 of the 29 markets for which data are available.

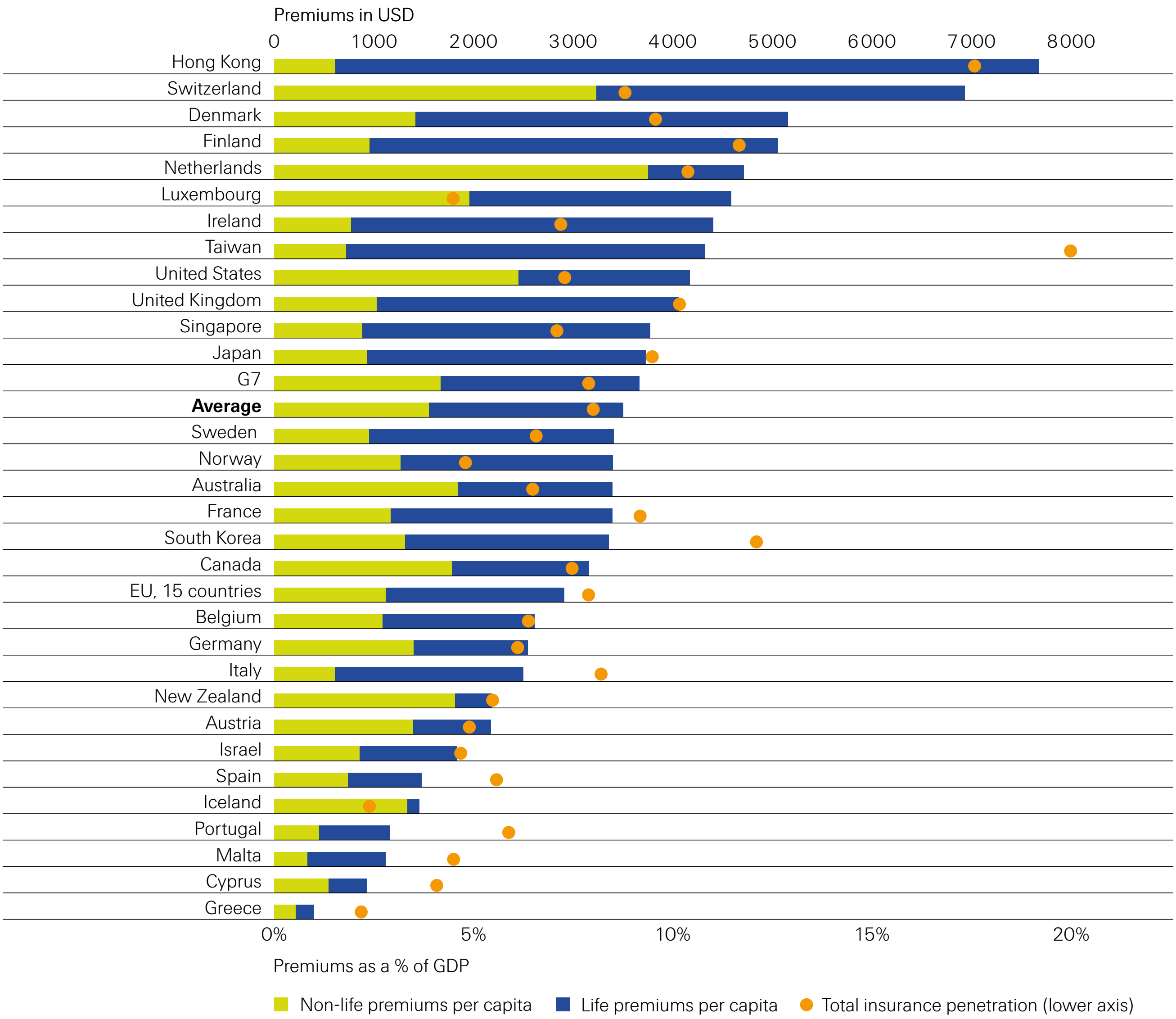
Per capita spending on insurance in the advanced markets increased slightly in 2016.

Insurance penetration and density

Average per capita spend on insurance in advanced markets was USD 3505 in 2016, up 0.8% from 2015. While life per capita spending declined by 0.3% to USD 1954, non-life per capita spending increased by 2.2% to USD 1550. Total insurance penetration edged down slightly during the period.

Figure 22

Insurance density and penetration in advanced markets, 2016



Source: Swiss Re Institute.

North America: both life and non-life premiums decelerated

Life premiums in North America were flat in 2016, following a better year in 2015.

Life insurance

Life premiums in North America were flat in 2016. In the US, premiums declined by 0.5% after a 4.3% increase in 2015. Sales of individual annuities contracted given uncertainty about regulatory concerns (eg, around the Department of Labor's fiduciary rule). Insurers continued to closely manage variable annuity sales, particularly for products with guaranteed living benefits. Individual life business advanced at a modest pace, driven by fairly solid increases in whole life sales due to attractive guarantees. In contrast, universal life and term life sales were flat, and sales of group life products fell. While government bond yields rose, investment yields continued to edge lower and sector ROE declined slightly to 10.5%, well below pre-crisis levels (15%). In Canada, life premium growth remained solid at 3.0% (2015: 3.4%). Individual life new business skyrocketed prior to the removal of tax advantages for permanent products on 1 January 2017. Group sales were also supportive, but individual annuities weighed on growth. Profitability improved with ROE rising to 9.6% from 8.4% in 2015.

Sector profitability will likely remain under pressure in 2017.

In the US, growing employment and consumer spending should support insurance demand in 2017. With interest rates expected to remain low and financial market volatility set to linger, industry profitability will remain under pressure. Focus on capital management, lowering expenses and enhancing investment yields will be key. In Canada, premium growth is expected to remain largely stable and reach trend growth by 2019. Profitability is forecast to remain steady also (albeit well below pre-crisis levels) and capitalisation solid. A new capital framework due to be implemented in 2018 is not expected to change the assessment of industry capitalisation.

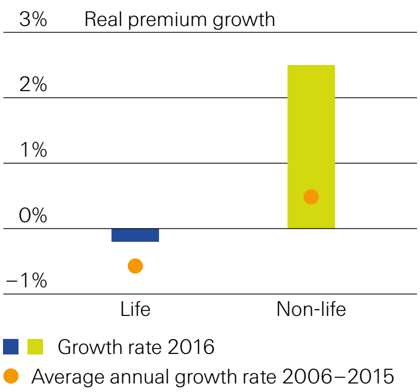
North American non-life premium growth decelerated in 2016, but remained solid.

Non-life insurance

US non-life premiums grew by 2.6% in 2016, despite still soft pricing in commercial insurance. Personal and accident & health lines were strongest, the former supported by rate increases and continued robust growth in auto liability. Profitability for the US non-life sector declined sharply. The drop stemmed from the first underwriting loss in four years due to slowing reserve releases and above-average catastrophe losses, a lower investment result caused by falling yields, and a decline in realised capital gains. ROE fell to 5.9% in 2016 from 8.1% in 2015. In Canada, non-life premiums grew by 1.8% after a 2.8%-gain in 2015. Personal lines were a key driver, as repricing in personal property continued. The motor segment also contributed, while liability and commercial property contracted. Despite record catastrophe losses from the Fort McMurray wildfire (USD 2.8 billion) and several summer storms, the Canadian P&C industry reported an underwriting profit in 2016, as a large share of the fire losses were paid by global reinsurers. Net income for the Canadian P&C sector nevertheless fell by nearly 40%, and the annualised ROE for 2016 was 5.8% (2015: 10.4%).

North America premiums, 2016

	USD bn	World market share
Life	609	23%
Non-life	858	41%



North American non-life premium growth is expected to improve in 2017 and 2018, supported by a strengthening economic backdrop. In the US, broad-based rate increases are expected to contribute. Dwindling reserve releases in US will drag on underwriting results over the next few years while rising interest rates from continued policy rate hikes in the US will only boost investment yields after a few years. In Canada, the impact of the low oil prices of recent times will fade and profitability should recover from the record catastrophe losses in 2016, with ROE returning to more normal levels at around 10%.

Western Europe: life premiums stagnate, non-life returns to growth

Life insurance premiums in Western Europe stagnated in 2016.

Life insurance

In Western Europe, life insurance premiums were flat in 2016 (0.2%). Positive support came from the UK where in-force business rose by around 2.3%. In France, premiums were down 0.8% due to savings business volatility, while in Germany premiums declined by 2%, driven by a weak performance of traditional savings products and pensions and annuities. In contrast, protection business (ie, mortality and disability), continued to grow. In Italy, premiums declined by 3.7% in 2016. Premium income in Spain rose sharply (22%) fuelled by savings business. In Switzerland, life insurers had a disappointing year with premiums down 5.6% in real terms due to weakness in pensions and annuity business. Premiums in the Benelux countries (Netherlands and Belgium) remained roughly flat while in Luxembourg, the volatile growth pattern of recent years continued with premiums down 3.9%. Among the Nordic markets, growth was sturdiest in Finland (4.5%) and Denmark (3.5%), while premiums stagnated in Norway and contracted in Sweden. The ROE of a sample of eight European life insurers decreased to 9% from 10% in 2015 (see Figure 10).

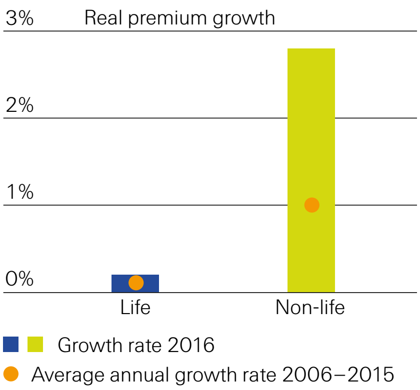
The short-term outlook for the region's life insurers remains bleak.

The short-term outlook for life insurers in Western Europe remains bleak. It is dependent on insurers' ability to adapt their savings business to the low interest rate environment and to regain consumers' confidence in savings products. This is especially true for markets with high-guarantee in-force business and long asset-liability duration mismatches. It will also depend on what Brexit means for the UK market, the largest in Western Europe. In the longer term, Europe's aging population is likely to support demand for protection, savings and retirement products.

Non-life premium in Western Europe grew by 2.8% in 2016.

Western Europe premiums, 2016

	USD bn	World market share
Life	844	32%
Non-life	573	27%



Non-life insurance

Non-life premium growth in Western Europe was a solid 2.8% in 2016, down from 3.7% in 2015 but well above the 10-year average of 1.0%. Germany and France recorded premium volume increases of 1.7% and 1.3%, respectively. In Germany, the motor and property lines were solid while private medical expense business was sluggish. The French market was mainly driven by a 3.5% rise in household insurance, while motor insurance grew with strength in new car registrations. In the UK, premium growth in domestic business was up 2.2%, driven by improvements in motor. The international London Market business expanded rapidly as well, but this was more a reflection of sterling's depreciation after the Brexit vote than growth in underlying business. The Nordic markets were mixed. Among the southern EU countries, premiums continued to rebound in Spain and Portugal. In Greece premiums expanded for the first time after a 35% cumulative contraction since 2010, but in Italy premiums declined again, albeit at a slower pace (–0.2%) than in 2015.

Underwriting profitability in Europe was roughly unchanged in 2016, with a sector combined ratio of around 95%. Underwriting results in Germany and France suffered from cat losses as a result of severe storms and floods (Elvira and Friederike) in May and June, which caused overall insured losses of around USD 3 billion. Underwriting results remained stable in Switzerland and were slightly worse in Italy, mainly driven by a weaker but still profitable motor sector. The earthquakes in Italy in August and October had only minimal impact on 2016 underwriting profitability given low insurance take up in the impacted regions. Other markets such as the UK, the Nordics and Spain experienced some improvement based on motor. Non-life premium growth in Western Europe will remain subdued in an environment of just moderate economic growth. Underwriting profitability is expected to deteriorate as a result of softer rates in commercial lines and motor insurance, while claims growth will remain moderate. Profitability will remain under pressure due to still-low investment yields.

Advanced Asia: slowdown in both life and non-life

Performance in the life markets in advanced Asia was mixed in 2016 …

Life insurance

Life insurance premiums contracted by 0.7% in the advanced Asian markets in 2016 after a 3.6% gain in 2015, mainly due to developments in Japan. The BoJ's negative interest rate policy made it difficult for insurers to attract new savings business, leading to a 6.2%-decline in premiums there. South Korea also had a challenging year with premiums up just 1.0% (2015: 5.2%), given weak sales of both savings-type products and annuity business. In comparison, premiums in Hong Kong's life business surged 23% in 2016 on the back of robust demand from mainland Chinese visitors who accounted for more than a third of new premiums. In Taiwan, a double-digit increase in individual life business more than offset a sharp fall (–33%) in historically volatile investment-linked annuity premiums. Premiums in Singapore grew steadily (8.7%) on the back of a rebound in single-premium sales. Low interest rates remained the major drag on sector profitability in advanced Asia, particularly in Japan, where 10-year bond yields remained negative for most of 2016. Japanese yields turned positive later in the year but were below 2015 levels.

… and the outlook remains challenging.

The outlook for advanced Asia life premium growth remains challenging, as low interest rates are dampening insurers' ability to offer attractive returns to consumers. In Hong Kong, the recent tightening of capital controls by China could reduce the number of Chinese visitors acquiring life insurance in the territory. The outlook for investment income remains uninspiring given that most central banks in advanced Asia are expected to maintain interest rates at current lows, despite rising US rates.

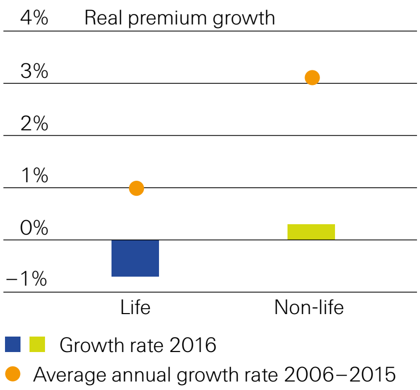
Non-life premium growth slowed in 2016 on softer pricing and economic growth.

Non-life insurance

Growth of non-life premiums in advanced Asia stagnated in 2016 (0.3%) after a 4.2%-increase in 2015, mostly from softer premium rates in all markets and slower economic growth in some. In Japan, the largest non-life market in the region, premiums are estimated to have dropped by 1.7%, mainly due falling sales of fire covers. This was in part due to front-loaded sales in October 2015 before the shortening of long-term fire insurance products from a maximum of 36 to 10 years. In Hong Kong, weakening economic activity led to premiums declining by 1.9% (2015: 5.0%). Singapore and South Korea both reported slowing premium growth of around 3% as a result of price pressures and subdued trade-related business growth. Lower growth of long-term business was another contributing factor in South Korea. Taiwan's non-life premium growth also slowed (3.6% vs 4.7% in 2015): here higher motor premiums from rising car sales were offset by weaker marine lines.

Advanced Asia premiums, 2016

	USD bn	World market share
Life	612	23%
Non-life	209	10%



Sector profitability is estimated to have deteriorated. In Japan underwriting results were adversely affected by high cat losses from the Kumamoto earthquake and also higher losses in motor. The magnitude 7.0 earthquake that struck Kumamoto on 16 April 2016 resulted in economic loses of USD 25 billion-30 billion of which only USD 4.9 billion were insured, indicating a significant protection gap. Underwriting results in Hong Kong have remained stable compared to a year earlier while in Taiwan, losses increased in the marine and property fire lines. In particular, the earthquake in Kaohsiung, Taiwan on 6 February 2016 resulted in extensive damage and casualties (no figures on insured losses are available yet).

Forward-looking indicators point to improving economic growth in the advanced Asian markets, which should support non-life premiums. However, pressures on rates are likely to remain and, at the same time, insurers have to deal with impending regulatory changes. These include implementation of, or revisions to, risk-based capital regimes in Hong Kong and Singapore, and a reduction in compulsory automobile liability insurance (CALI) premium rates in Japan (by an average of 6.9% from 1 April 2017). Overall, the pace of premium growth in 2017 is expected to be much the same as in 2016.

Oceania: life premiums decline while non-life improve

Life insurance

Life premiums in Oceania declined in 2016 due to continued weakness in saving products.

Life premiums in Oceania contracted by a further 13% in 2016 after falling 7.7% in 2015. This was due to a 14%-contraction in Australia reflecting continued weakness in saving products, as low investment returns have rendered investment-linked and annuity products less attractive. In terms of profitability, Australian life insurers' net profit after tax fell sharply, mostly due to lower profits in risk business. Poor claims experience of disability income (DI) products remained the main drag on profits, despite aggressive repricing. In New Zealand, life premiums growth eased to 3.4% in 2016 (2015: 4.2%). Trauma and income protection-type products reported sound premium growth, but this was partly offset by a decline in sales of whole life, endowment and unbundled traditional products.

Life premiums are forecast to grow moderately in 2017.

Life premiums are expected to register moderate growth in 2017, supported by savings products as yields have improved slightly. In Australia, life insurers are likely to further increase premium rates of DI products, and some have made substantial revisions to their claims assumptions. In the group market, some superannuation funds are tightening up the definition of total and permanent disability. In New Zealand, trauma and income protection-type products will continue to drive premium growth. Meanwhile, regulations are increasingly focused on consumer protection. In Australia, the life industry's first mandatory code of practice is due to come into full effect on 1 July 2017.[44] The code sets out time frames for insurers to respond to claims, complaints and consumers' information requests.[45]

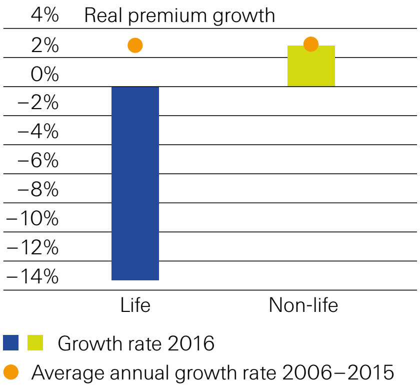
Non-life insurance

Non-life premium growth was primarily driven by personal lines.

Non-life premiums in Oceania increased by 2.8% in 2016, up from 1.5% in 2015. In Australia, premiums grew by 2.3% (2015: 2.0%), supported by solid business in personal lines, but partially offset by a decline in commercial line premiums. Australian non-life insurers' profitability improved in 2016 from lower property claims and large reserve releases in long-tail business, leading to a 27%-increase in sector after-tax net profits to AUD 2.9 billion (USD 2.2 billion). In recent months, some insurers and insurance brokers have turned more positive and are expecting moderate rate increases in commercial lines. In New Zealand, non-life insurance premiums are estimated to have grown by 5.1% after a weak 2015 (– 1.1%). Nevertheless, the November 2016 Kaikoura earthquake affected results. According to data provided by the Insurance Council of New Zealand, the event-related losses exceeded NZD 900 million (USD 622 million). Most of the losses will be absorbed by the reinsurers, which may result in higher reinsurance costs.

Oceania premiums, 2016

	USD bn	World market share
Life	40	1.5%
Non-life	53	2.5%



Non-life premium growth is expected to remain low in 2017. The outlook for personal lines is more positive and commercial lines remain soft. Meanwhile, regulators are increasing their focus on technology-driven needs/risks. In Australia, more states passed ride-sharing legislation. Following legalisation of ride-sharing, the NSW authorities are reviewing compulsory third-party insurance for point-to-point vehicles, including ride-sharing drivers. New Zealand is also reviewing its transport regulation to allow a cost-sharing rate to facilitate carpooling. On cyber security, the Australian Prudential Regulation Authority (APRA) undertook a survey that showed that 75% of the superannuation funds, as well as 46% of the non-life and life insurers, had experienced material cyber incidents in the past 12 months.[46] The Australian Parliament passed an amendment to the privacy law in February 2017 requiring mandatory breach notification. In May 2014, New Zealand announced plans to introduce a two-tier mandatory data breach notification scheme, but this has yet to make it through Parliament.

[44] This text of the report was finalised before 1 July 2017.
[45] See *Code of Practice*, Financial Service Council, https://www.fsc.org.au/policy/life-insurance/code-of-practice/ https://www.fsc.org.au/policy/life-insurance/code-of-practice/
[46] *Information Paper – 2015/16 Cyber Security Survey Results*, APRA, September 2016, http://www.apra.gov.au/AboutAPRA/Documents/Information-Paper-Cyber-Security-2016-v4.pdf

Emerging markets

Insurance market expansion advances

Premium growth in the emerging markets improved in 2016.

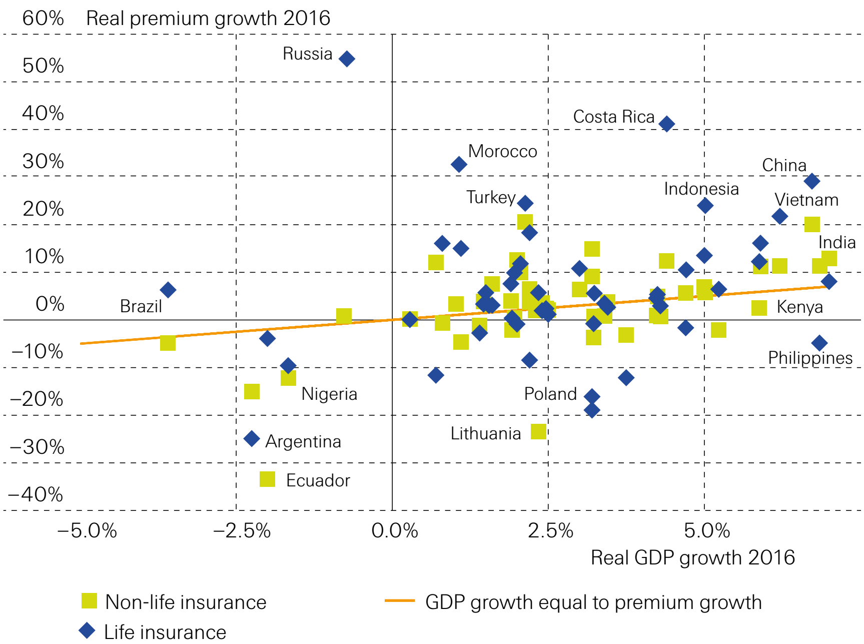
Total real insurance premiums written in the emerging markets increased by a robust 14% in 2016, up from 9.8% growth in the previous year. In nominal USD terms, however, premiums increased by 9.6% to USD 934 billion, given exchange rate depreciations against the USD in some emerging markets, most prominently in Latin America. The global share of emerging market premiums grew by 1.2 ppt to 19.7% in 2016.

Life insurance

Life insurance penetration continued to increase in 2016.

Life premiums in the emerging markets grew by 17% in 2016, higher than the 12% growth of 2015 and well above economic growth of 3.8%. Premium growth was higher than economic growth in 30 of the 50 markets for which data are available. In Figure 23, the blue dots above the grey line represent those markets where premium growth exceeded GDP growth last year (ie, where insurance penetration increased).

Figure 23
Life and non-life premium growth versus GDP growth in emerging markets, 2016



Source: Swiss Re Institute.

Non-life

Non-life premium growth improved, but less so than in life.

Non-life premiums in the emerging markets overall grew by 9.6% in 2016, more than the 7.9% growth in 2015 and above economic growth. At the country level, insurance penetration increased in 29 of the 51 markets for which data are available.

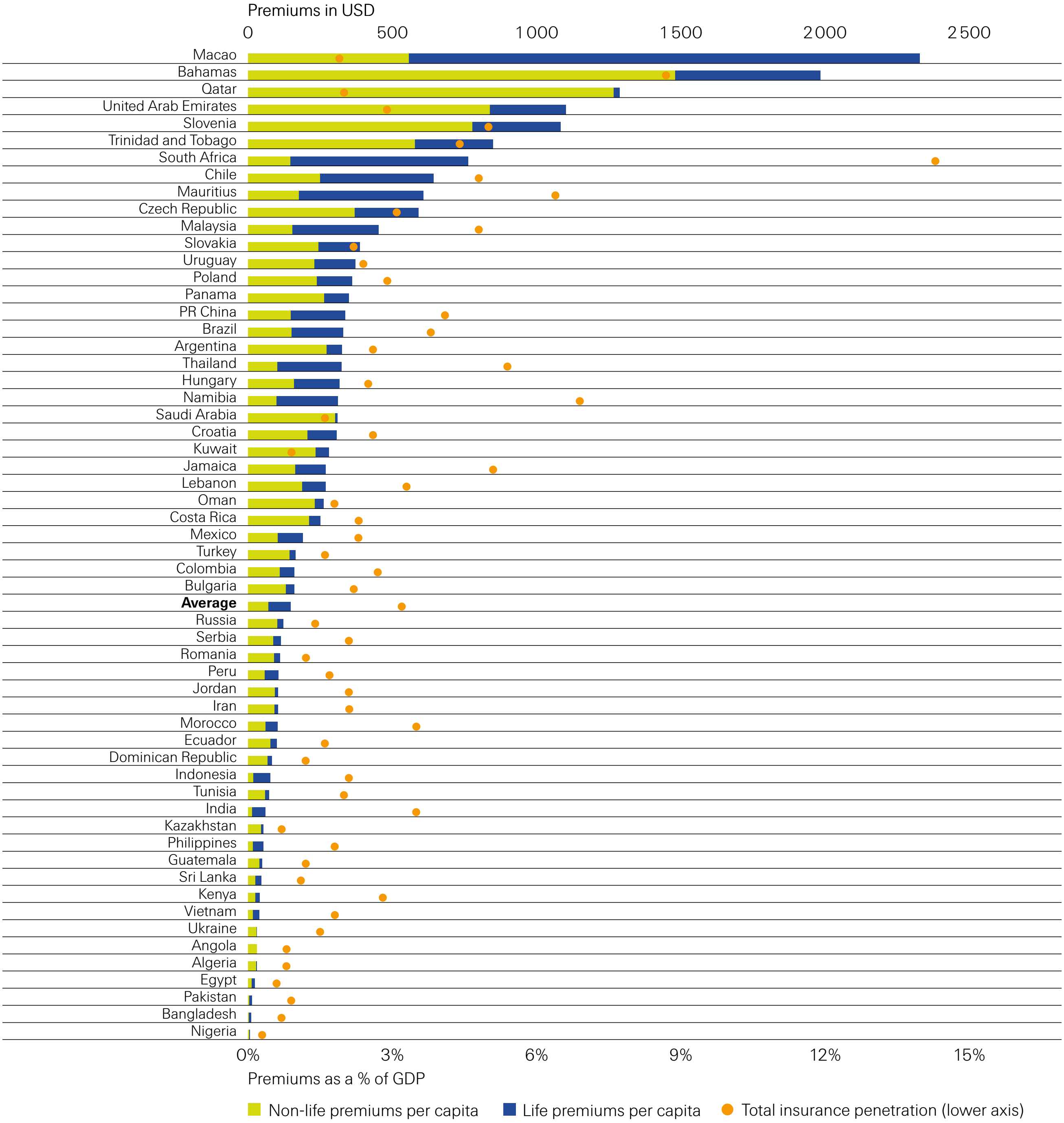
Per capita spending on insurance and insurance penetration increased in the emerging markets in 2016.

Insurance penetration and density

Average per capita spending on insurance in emerging markets increased by 9.5% to USD 149 in 2016, of which USD 80 went to life insurance and USD 69 to non-life. The average insurance penetration in emerging markets increased to 3.2% in 2016 from 2.9% in 2015, as premium growth continued to outpace GDP growth.

Figure 24

Insurance density and penetration in emerging markets, 2016



Source: Swiss Re Institute.

Emerging Asia: both life and non-life premiums grew faster

Life premiums in emerging Asia grew rapidly in 2016, with a solid contribution from China.

Life insurance

Life insurance premiums in emerging Asia increased by 23% in 2016 (2015: 16%) against a backdrop of stabilising economic growth. China, which accounts for around 70% of the region's life market, was the main driving force with a healthy 29%-gain in premiums (2015: 20%), supported by higher growth in traditional life and health lines. Sales also benefitted from further liberalisation of interest rates and government efforts to encourage growth of protection products. In India, life premiums grew by 8% due to surging demand for immediate annuity plans, this in part driven by demonetisation.[47] Growth was also robust in Indonesia (24%) and Vietnam (22%), based on rising insurance awareness and continued expansion of the bancassurance channel. In the Philippines, premiums contracted by an estimated 4.9% in 2016 due to lower sales of single-premium products from very high levels in 2015 (18%). The slump in the stock markets hurt interest in these products. Overall sector profitability in emerging Asia deteriorated as China reported lower net profits in 2016 given weakness in investment performance.

Premium growth will likely remain strong in 2017.

Premiums are expected to increase by double digits this year and next. The rise of digital distribution channels, the expansion of bancassurance and the promotion of protection products will be key growth drivers. In China, premium growth is expected to slow from the exceptionally high level in 2016 due to increased regulatory pressure to curtail the sales of short-term wealth management-type products. Aggregate profitability will continue to be affected by low interest rates, as most central banks in the region maintain loose monetary policy to support economic growth.

Non-life premium growth improved in 2016 …

Non-life insurance

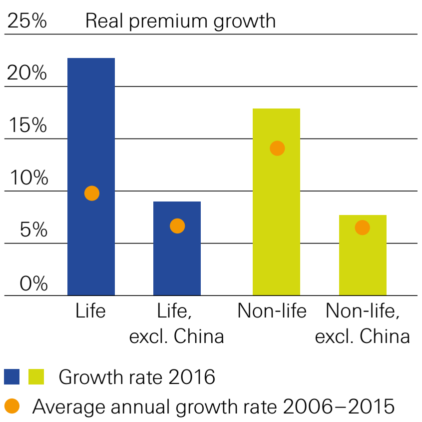
Non-life insurance premiums continued to grow in emerging Asia, up 18% in 2016 after a 15%-gain in 2015 and 14% in 2014. This was partly due to sustained healthy growth in China (20%) which accounts for more than 80% of the region's non-life premiums. Demand for health insurance in China surged due to increasing consumer awareness and the introduction of tax incentives. Despite tariff liberalisation,[48] a rebound in car sales resulting from government incentives supported demand for motor cover in China. Non-life premium growth in India was also robust at 13%, supported by the health, agriculture and motor lines. Performance in Southeast Asia was mixed, with the Philippines and Vietnam registering robust premium growth, but Malaysia and Thailand still stagnating as a result of weakness in transport lines.

… and is expected to be stable in 2017.

Non-life premium growth in emerging Asia is expected to remain stable in 2017. Fiscal expansion and solid foreign direct investment should boost infrastructure and construction-related lines in Southeast Asia. Initiatives by the Chinese and Indian governments to develop speciality lines will support agriculture, liability and credit insurance, and rising household disposable income will likely boost demand for personal lines. The profitability of the non-life sector declined in most markets in 2016 due to price competition. In China and Malaysia, price competition was made more acute by de-tariffication. The floods along China's Yangtze River basin in July resulted in estimated economic losses of USD 22 billion but due to low penetration, insured losses were just USD 0.4 billion. In Malaysia, the Philippines and Vietnam, high claims inflation in medical insurance is rapidly becoming a concern.

Emerging Asia premiums, 2016

	USD bn	World market share
Life	375	14%
Non-life	244	12%



[47] Due to demonetisation, real estate and gold became unattractive destinations for investing savings in India. Therefore, people started investing heavily in financial products including insurance and mutual funds. From December 2016, Life Insurance Corporation (LIC) of India lowered yields on a popular immediate annuity plan (Jeevan Akshay), which resulted in front-loading of demand in earlier months.

[48] Sales of passenger cars picked up in 2016 mainly due to government incentives to encourage purchases of electric motor vehicles. The trial deregulation of commercial motor insurance pricing began in June 2015 and has expanded to more provinces and cities since January 2016.

Latin America: slowdown in demand mirrors the economy

Life insurance

Life insurance premiums in Latin America slowed in 2016, mirroring the regional economic downturn.

Life insurance premiums in Latin America and the Caribbean grew by 5% in 2016, down from 7.6% in 2015 and well below the 8.9% average annual growth rate of the last decade. The slowdown mirrors the economic slowdown in the region. On average, the macroeconomic resilience of the Pacific Alliance countries gave them an edge over Mercosur members.[49] Life premiums in Mexico surged by 12% in 2016 but with some statistical noise given recent changes in accounting records under the new Solvency II-type law. Argentinian life premiums grew 5.8% in nominal terms, but due to a spike in inflation from adjustments to FX and price controls, contracted by 25% in real terms. In Brazil, premiums grew by 6.3%, with growth in Vida Gerador de Benefícios Livres (VGBL) contributions continuing. Ordinary life products performed better in Mexico and Argentina, while savings products grew more in Colombia, Chile and Brazil.

Ongoing structural reforms will help lessen economic volatility and preserve the value of savings products.

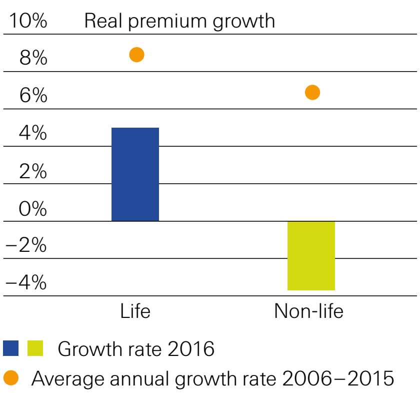
Life premium growth in the region is expected to remain moderate in an environment of fragile economic recovery. However, ongoing structural reforms in several countries bode well for the long-term. Mexico recently introduced the fiscal incentives for long-term savings and in Argentina, the new forward-looking monetary policy framework is expected to tame inflation and preserve the peso. Further, a majority of pension systems in the region have healthy defined benefits components which, with the projected changes in the demographic composition, could put public finances under pressure. This could open opportunities for life insurers. In Brazil, a pension reform bill to limit costly retirement benefits will be put up for a vote in the Senate in the second half of 2017. Countries going for pension reform try to replicate the Chilean system, where it is mandatory for pension fund administrators to buy life insurance on behalf of their affiliates.

Non-life insurance

Lower premiums of cyclical lines led to a contraction in non-life premiums.

Latin America premiums, 2016

	USD bn	World market share
Life	69	2.6%
Non-life	79	3.7%



Non-life premiums in Latin America and the Caribbean contracted by 3.7% in 2016, compared to 2.8% growth in 2015. Cyclically-sensitive lines (such as motor, marine and workers comp) suffered in most markets as they are more closely intertwined with the economic cycle. Growth patterns varied widely among the major markets. Premiums accelerated sharply in Mexico (10%) with solid growth in motor premiums, but contracted steeply in Ecuador (–33%) following the 16 April earthquake that eroded economic activity, and were relatively unchanged in Colombia (0.3%). Certain lines of business that depend on imports (such as motor and medical expenses) suffered setbacks in profitability following the strong depreciation of domestic currencies over the last two years.

Improved long-term prospects and a return to positive growth for the Argentine and Brazilian economies should foster demand for non-life insurance in the region. However, short-term growth is expected to remain below trend. The easing of inflation pressures and lower interest rates (except in Mexico) should help restore purchasing power and support consumption. Trade and foreign direct investment (FDI) levels remain a big unknown in the region, and a negative shock could hinder demand in specialty lines such as marine and engineering. Meanwhile, the recovery in commodity prices should increase the insured values in crops and livestock and anchor a higher volume of agricultural premiums. Floods and intense mudslides in Peru, Ecuador and Colombia in early 2017 are likely to lower insurers' profitability due to higher claims.

[49] Pacific Alliance and Mercosur are two large Latin American trade blocs. The members of the Pacific Alliance are Chile, Colombia, Mexico and Peru, while Mercosur includes Argentina, Brazil, Paraguay, Uruguay and Venezuela. Venezuela was suspended in December 2016

Central and Eastern Europe: diverging growth trends

Life premiums continued to decline in CEE in 2016, driven by Poland and the Czech Republic. Russia became the region's second largest market.

Life insurance

The decline in life insurance premiums in CEE continued for the fourth year in a row, albeit at a much slower pace, with premiums shrinking by 0.5% in 2016. In Poland, the largest market in the region, premiums fell by 16%. The decline came from both ordinary life and unit-linked products, as continued low interest rates reduced the demand for life insurance products, while increased regulatory requirements to inform consumers about services also adversely affected sales. After the consecutive annual declines, real life premiums in Poland in 2016 were less than half their 2008 peak. Russia took over from the Czech Republic as the second largest life market in CEE in 2016, with a robust 55%-increase in premiums driven by bancassurance sales. In the Czech Republic, premiums fell 8.5%, with traditional life insurance premiums declining by close to a third. Once again fewer new contracts were concluded in 2016 than in 2015. In the challenging CEE markets, life insurers continue to suffer volatile sales of single premium savings products and struggle to convince customers of their value proposition.

Premiums are expected to stagnate in 2017, as financial conditions continue to make products unattractive.

Life insurance premiums in the CEE EU-member countries are unlikely to rebound this year. The environment for life savings products remains unattractive as interest rates stay at record lows, particularly in Poland, the Czech Republic and Slovakia. As rising inflation puts pressure on household real disposable incomes, the Polish life market will likely continue to contract, despite a growing economy and solid labour market, particularly as the National Bank of Poland is not expected to raise interest rates. In the Czech Republic and Slovakia, life insurance premiums will also continue to decline, although at a slower rate, as the low interest rates discourage savings. However, in Hungary premiums may return to growth in 2017, supported by changes to fee regulations designed to build trust and enhance transparency of unit-linked policies. In Russia, premiums are expected to continue to grow at a rapid pace as interest rates remain at attractive levels and the economy returns to growth on the back of the recovery of oil prices.

Non-life premiums rebounded in Russia, and expanded at a rapid pace in Poland in 2016.

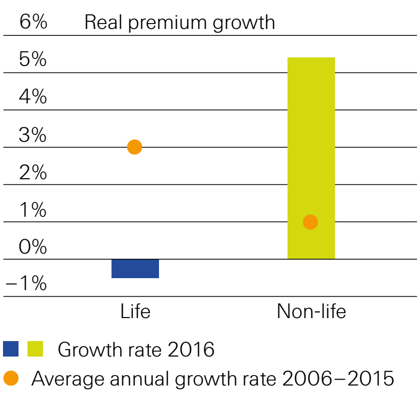
Non-life insurance

Non-life premiums in CEE rebounded by 5.4% in 2016 (2015: –4.7%), supported by robust economic growth and labour markets. Premiums in Poland surged by 15%, driven by double-digit premium rate increases in motor insurance in an attempt by insurers to improve the underwriting profitability in this still loss-making line. An increase in insurance contracts also contributed to the gain. Meanwhile in Russia, the largest non-life market in CEE, premiums returned to growth in 2016, up 0.8%, as the economic contraction slowed. In the rest of the region, non-life premiums expanded at a solid pace. Motor premiums helped boost real growth rates in markets like Hungary (13%), the Czech Republic (3.8%) and Slovakia (9.1%), Bulgaria (6.3%) and Slovenia (3.6%). The increase came from a mix of higher prices as well as a higher number of contracts. In Ukraine, non-life premiums stabilised, declining by only 0.7% in 2016 after a 25% decline in 2015.

In line with healthy economic growth in CEE in 2017, and as Russia is projected to return to growth, non-life insurance premiums are expected to continue to grow. Labour market strength and consumption growth should support this, although rising inflation may weigh on real incomes and purchasing power. Despite ongoing political volatility in eastern Ukraine, insurance premiums are expected to return to growth in Ukraine as the economy has stabilised, despite the ongoing challenges stemming from the unresolved situation in the east. Non-life premiums in other Commonwealth of Independent States (CIS) countries will benefit from the recovery in oil prices which will help to stabilise their economies.

Central and Eastern Europe premiums, 2016

	USD bn	World market share
Life	15	0.6%
Non-life	39	1.8%



The Middle East, Central Asia, Turkey: robust growth in life, non-life[50]

Life insurance

Life premium growth remained robust at 7.0% in the Middle East, Central Asia and Turkey in 2016.

Life insurance premium growth remained robust in the Middle East, Central Asia and Turkey, up 7.0 % in 2016 (2015: 7.2%), mainly driven by the rapid increase in Turkey (24%). Excluding Turkey, life premiums grew by 3.8%, down from 9.9% in 2015. In UAE, the region's biggest market, premiums increased by 2.4% (2015: 5.5%), driven by continued demand from the expatriate population and a growing middle class. In Saudi Arabia, however, premiums declined by 2.8% due to weak economic conditions, after a rebound in the previous two years. In Oman, premium growth slowed markedly to 3.0% in 2016 after a formidable 27% increase in 2015, as redundancies in the construction industry led to lower life insurance requirements for employees. Meanwhile, premiums in Bahrain are estimated to have contracted in 2016 amid economic slowdown. In Jordan, premiums continued to grow but the market was held back by lack of competition. Meanwhile, ongoing war and strife in Syria, Yemen and Libya continued to restrain growth in those market.

The long-term outlook is positive given low penetration, rising risk awareness and favourable demographics.

The projected economic slowdown in the GCC will drag on life insurance premium growth in the short to medium term. However, the overall outlook for the life sector in the Middle East and Pakistan region remains positive. Low penetration rates and increasing awareness of insurance, coupled with structural factors such as smaller families and growth of private-sector employment, should increase demand. A large working age population will push demand for savings, protection and retirement products. The increasing acceptance and penetration of sharia-compliant products like Family Takaful will also support sector growth.

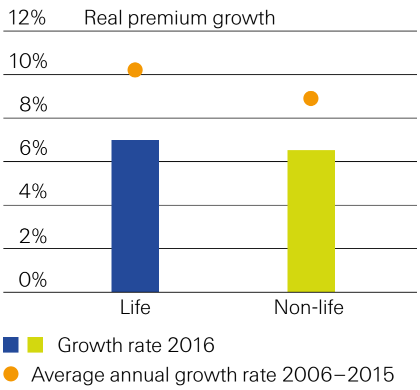
Non-life insurance

In 2016, non-life premiums expanded by 6.5%, driven by a sharp acceleration in Turkey.

Non-life insurance premiums in the Middle East, Central Asia and Turkey grew by 6.5% in 2016 (2015: 7.5%). In Turkey, premiums were up 21%, driven by a sharp growth in motor liability, as a regulatory change led to higher rates in motor liability. Excluding Turkey, non-life premiums grew by 2.9% (2015: 5.6%). In Saudi Arabia, non-life premiums fell for the first time since 2000. Premiums are estimated to have declined by 1.2% in 2016 after having grown by 17% in 2015, due to lower health and general insurance premiums, owing to a slowing economy and reduced employment. On the other hand, premiums in UAE grew by an estimated 2.3%, mainly driven by strong growth in medical insurance, the fastest growing line of business there. Iran's non-life real premiums are estimated to have rebounded by 4.9% in 2016 after a decline of 3.5% in 2015. Non-life profitability in the region remained under pressure, with price competition eroding underwriting results and investment yields slipping further.

Middle East, Central Asia, and Turkey premiums, 2016

	USD bn	World market share
Life	7	0.3%
Non-life	45	2.1%



The outlook for non-life insurers is mixed. With public budgets and subsidies being cut, demand is expected to slow in the short-term. Health insurance, however, is expected to continue to expand as governments enact laws requiring and/or extending compulsory health coverage. Competition is likely to remain intense, applying pressure on rates and profitability. Moreover, a range of regulatory reform in the region has started hurting the capital levels of insurers and increased the cost of compliance.[51] This will likely encourage M&A activity, particularly among small and medium-sized insurers. In the longer term, these developments will likely yield improved profitability and lower the volatility of risk-adjusted capitalisation of insurers. Recent incidences of cyber breaches in the GCC region have led to increased interest in cyber insurance.

[50] The figures in this section exclude Israel, which falls under advanced countries.
[51] UAE has introduced a risk-based capital model approach that takes into account all classes of business and addresses the asset side of an insurer's balance sheet in addition to its underwriting activity.

Africa: weaker premium growth as key economies struggle

Life insurance premiums in Africa (excluding South Africa, the largest market in the region, but also a stagnating market), grew by 11%.

Life insurance

Life insurance premium growth remained subdued in Africa in 2016, up 1.2%, little changed from the previous year. Excluding South Africa, premiums grew by 11%. In nominal USD terms, premium volumes contracted by 5.6% due to widespread currency depreciations. In South Africa, premiums stagnated for another year due to lower growth in savings and investment-type products, against a backdrop of further economic slowdown. The South African share of the region's life market declined steadily from 93% in 2006 to 84% in 2016. While this reflects weak economic growth and currency depreciation in South Africa in recent years, it is also a sign of the hearty growth of the life sector in the rest of Africa. In 2016 a number of markets registered double-digit growth rates in premiums, eg, Morocco (33%), Kenya (12%), Zimbabwe (14%) and Uganda (26%). The Ugandan market is growing from a very small base, and in Kenya and Morocco, saving policies were the main source of growth. The economic environment in Zimbabwe remains very challenging. Yet there was strong growth in savings business and funeral covers, in 2016. In Egypt, life premiums grew by 2.9%, while in Nigeria and Mozambique premiums were down 9.6% and 7.7% respectively. This reflects the recession in Nigeria and an acute shortage of USD there.

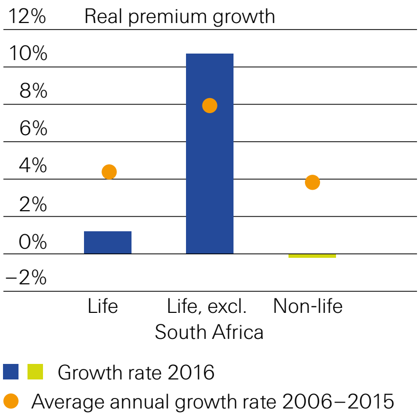
The economic environment remains challenging for commodity-exporting countries, but developments provide an opportunity in microinsurance.

With the difficult economic environment likely to persist in South Africa and the other commodity-intensive countries, premium growth will probably be muted. However, regulators are increasingly setting up frameworks for microinsurance operators. An innovative insurance sector leveraging mobile technologies is a positive sign for the future and should help turn the emerging middle class into insurance buyers.

Non-life premium stagnated in 2016.

Africa premiums, 2016

	USD bn	World market share
Life	41	1.6%
Non-life	20	1.0%



Non-life insurance

Non-life premiums in Africa stagnated in 2016 (–0.2%) after increasing by 3.3% in 2015. Premiums were flat in South Africa (0.2% in 2016; 6.2% in 2015), reflecting near stagnation of the economy. High levels of household debt, weak consumer and business sentiment and rising inflation have crimped demand for insurance in South Africa, for both personal and commercial lines. At the same time, the claims environment remains challenging. According to provisional regulatory data, the aggregate combined ratio for typical insurers rose to 87% in the year to September 2016, up from 85% in the same period of 2015. And heavy storms in the final few months of 2016 are likely to have led to a further squeeze on underwriting margins. Due to delays in the parliamentary process, the Solvency Assessment and Management (SAM), the new risk-based capital regulation in South Africa, has once again been pushed back and an introduction before 2018 is becoming increasingly unlikely. In many major non-life markets, premium growth remained fairly solid, eg, in Morocco (3.3%), Kenya (2.5%) and Tanzania (6.2%). In Kenya and Morocco, medical insurance was the growth driver, while core P&C lines were relatively solid. In Nigeria, premiums continued to contract (–12% in 2016 and –8.3% in 2015). This reflects the worst recession in decades due to low oil prices, failure to implement economic reforms and also to adjust the exchange rate regime to the new normal of low oil prices.

The commodity price recovery should support economic activity and premiums in Africa's commodity-exporting economies, including the three largest (Angola, Nigeria and South Africa). However, the pace of recovery is likely to be relatively slow. Political upheaval and ongoing industrial tensions will hold back near-term growth in some countries (eg, South Africa). Nevertheless, low penetration levels, urbanisation and population growth will provide growth opportunities, especially in agriculture lines and/or micro insurance. In Kenya, enforcement of the localisation of marine insurance will boost premium growth. Insurers in many non-commodity intensive countries will benefit from strengthening economic growth.

Methodology and data

This study looks at insurance premium volumes data from 147 countries.

This *sigma* study is based on the direct premium volumes of insurance companies, regardless of whether they are privately or state owned. Premiums paid to state social insurers are not included. Life and non-life premium volume in 147 countries is examined. Detailed information on the largest 88 countries in terms of total insurance premium volume can be found in the statistical appendix. Where not indicated, figures and chart information in this report are all sourced from Swiss Re Institute.

All quoted growth rates are in real terms.

All premium growth rates quoted in the text are in real terms, ie adjusted for inflation (measured using local consumer price indices), unless otherwise stated.

Country classifications generally follow IMF conventions.

The designation of the economies in this sigma as "advanced" or "emerging" is generally in keeping with the conventions of the International Monetary Fund (IMF). Advanced economies include the US, Canada, Western Europe (excluding Turkey), Israel, Oceania, Japan and the other advanced Asian economies (Hong Kong, Singapore, South Korea and Taiwan). All other countries are classified as "emerging" and generally correspond to the IMF's "emerging and developing" economies[52].

Data sources

The insurance data and estimates contained in the study originate primarily from national supervisory authorities and, in some cases, from insurance associations. Macroeconomic data was sourced from the International Financial Statistics of the IMF, Oxford Economics and IHS Global Insights.

Data revisions

Figures for past years are adjusted as new information becomes available. Since the publication of last years' sigma, global premium volume for 2015 has been revised up by 1% overall. Life insurance premium volume was revised up 0.5% while non-life premiums were revised up by 1.5%.

Definition of premium income

This report is based on information concerning the premiums written for direct business by all registered insurers. This means:

1. Direct insurance premiums, including commissions and other charges, are considered prior to cession to a reinsurance company.

2. Domestic insurers – regardless of their ownership – and domestic branches of foreign insurers are regarded as domestically domiciled business units. By contrast, business undertaken by the foreign branches of domestic insurers is not regarded as domestic business.

3. Business that has been written in the domestic market includes premiums for cover of domestic risks as well as those covering foreign risks, as long as they are written by domestic insurers (cross-border business).

Health insurance is allocated to non-life business.

Life and non-life business areas in this *sigma* study are categorised according to standard EU and OECD conventions: health insurance is allocated to non-life insurance, even if it is classified differently in the individual countries.

Density and penetration do not include cross-border business.

Only premium income from domestic risks is used to calculate insurance penetration and density. Cross-border business is not included. This has a significant effect in Luxembourg, Italy and Ireland.

[52] The only exceptions are the Czech Republic, Estonia, Slovenia and Slovakia.

Growth rates in local currency are adjusted for inflation.

Unless otherwise stated, premium growth rates indicate changes in real terms. These real growth rates are calculated using premiums in local currencies and adjusted for inflation using the consumer price index for each country. The statistical appendix also provides the nominal change in growth for each country. Regional aggregated growth rates are calculated using the previous year's premium volumes and converted into US dollars at market exchange rates. The same procedure applies to the economic aggregates of Table X, where the previous year's nominal GDP figures in US dollars are used as weights.

Figures are converted into US dollars to facilitate international comparisons.

Using the average exchange rate for the financial year, premium volumes are converted into US dollars to facilitate comparisons between markets and regions.[53] Where no premium data is available (indicated by "na." for the local currency value in the tables), the premium income in US dollars is estimated assuming a constant ratio of insurance premiums to GDP. Regional growth rates are calculated using a weighted average of the real growth rates of the individual countries. The weighting is based on the relevant premiums of the previous year in USD.

Statistical appendix

The statistical appendix contains additional calculations and the macroeconomic data used for currency conversions.

Acknowledgements

The *sigma* editorial team would like to thank the supervisory authorities, associations and companies that helped with data compilation.

[53] In Egypt, India, Iran, Japan, South Korea and Malaysia, the financial year is not the same as the calendar year. Precise details about the differences in dates are given in the notes to the statistical appendix.

Statistical appendix

1 Excluding cross-border business
2 Excludes advanced countries in South and East Asia (Hong Kong, Singapore, South Korea, Taiwan)
3 Insurance penetration (premiums as a percentage of GDP) and density (premiums per capita) include cross-border business
4 North America, Western Europe (excluding Turkey), Japan, Hong Kong, Singapore, South Korea, Taiwan (counted as an emerging market in earlier editions), Oceania, Israel
5 Latin America, Central and Eastern Europe, South and East Asia, the Middle East (excluding Israel) and Central Asia, Turkey, Africa
6 34 member countries
7 The US, Canada, the UK, Germany, France, Italy, Japan
8 The US, Canada, Mexico
9 Singapore, Malaysia, Thailand, Indonesia, the Philippines, Vietnam. The four remaining member countries – Brunei, Cambodia, Laos and Myanmar – are not included.
10 Life insurance: premiums are supplemented by estimated premiums for group pension business, which has not been included in the statistics for some regions since 2001. Non-life insurance includes state funds.
11 Life insurance: net premiums
12 Non-life insurance: gross premiums, including reinsurance premiums
13 Financial year 1 April 2016 – 31 March 2017
14 Financial year 21 March 2016 – 20 March 2017
15 Financial year 1 July 2015 – 30 June 2016
16 Financial year 1 July 2015 – 30 June 2016.
Australia: until 2012, supervisory data included premiums written by public insurers. However, this is not available in 2013 thus contributing to the significant decline in annual comparison.
17 Inflation-adjusted premium growth rates in local currency, see Tables II, IV and VI
18 Including the remaining countries
19 Effective Inflation used for calculating real growth rates are estimated by the Institute for International Finance. These are twice the official figures.
20 Supervisory authority data for 2013 does no longer report premiums written by public insurers. Retrospectively starting 2003, public surer data has been removed from the sigma data set and the data has been changed to calendar year data. Prior 2003 financial year is from 1 July – 30 June, ie 2002 stands for data from 1 July 2002 – 30 June 2003

+ provisional
* estimated
** estimated USD value assuming constant insurance penetration

Table I: **Premium volume by region and organisation in 2016**

		Premium volume (in millions of USD)		Change (in %) inflation-adjusted		Share of world market (in %)	Premiums[1] as a % of GDP	Premiums[1] per capita (in USD)
Total business		**2016**	**2015**	**2016**	**2015**	**2016**	**2016**	**2016**
America		**1 615 407**	**1 593 791**	**1.2**	**3.7**	**34.1**	**6.5**	**1 636**
North America		1 466 908	1 432 905	1.4	3.6	31.0	7.3	4 072
Latin America and Caribbean		148 500	160 886	0.2	4.8	3.1	3.2	257
Europe		**1 470 021**	**1 491 430**	**1.3**	**2.7**	**31.1**	**6.7**	**1 620**
Western Europe		1 416 219	1 438 254	1.2	3.0	29.9	7.5	2 541
Central and Eastern Europe		53 802	53 176	3.7	−4.4	1.1	1.9	169
Asia		**1 493 527**	**1 351 566**	**7.9**	**8.0**	**31.6**	**5.6**	**343**
Advanced Asian markets		821 080	775 072	−0.5	3.8	17.4	11.0	3 846
Emerging Asia	2	618 558	524 593	20.8	15.4	13.1	3.7	164
Middle East and Central Asia		53 889	51 902	3.2	6.8	1.1	2.0	150
Africa		**60 709**	**63 942**	**0.8**	**1.7**	**1.3**	**2.8**	**50**
Oceania		**92 524**	**96 951**	**−4.8**	**−3.0**	**2.0**	**6.3**	**2 343**
World	**3**	**4 732 188**	**4 597 680**	**3.1**	**4.3**	**100.0**	**6.3**	**638**
Advanced markets	4	3 798 652	3 746 168	0.7	3.2	80.3	8.0	3 505
Emerging markets	5	933 536	851 512	13.5	9.8	19.7	3.2	149
Emerging Markets excl China		467 405	465 012	3.8	4.2	9.9	2.6	97
OECD	6	3 687 723	3 651 629	0.4	3.1	77.9	7.5	2 757
G7 (7)		2 857 458	2 830 639	0.1	3.4	60.4	7.9	3 665
Eurozone		956 726	951 719	0.6	2.1	20.2	7.3	2 528
EU		1 354 218	1 375 113	1.2	3.0	28.6	7.4	2 383
EU, 15 countries		1 316 098	1 337 055	1.2	3.0	27.8	7.9	2 911
NAFTA	8	1 491 311	1 458 130	1.5	3.6	31.5	7.1	3 049
ASEAN	9	86 515	80 478	8.0	9.2	1.8	3.4	136
Life business								
America		**678 034**	**670 797**	**0.3**	**4.6**	**25.9**	**2.7**	**680**
North America		608 823	604 340	−0.2	4.2	23.3	3.0	1 690
Latin America and Caribbean		69 212	66 458	5.0	7.6	2.6	1.3	109
Europe		**858 607**	**883 374**	**0.1**	**2.5**	**32.8**	**4.0**	**962**
Western Europe		843 610	867 959	0.2	2.6	32.2	4.6	1 543
Central and Eastern Europe		14 996	15 416	−0.5	−3.6	0.6	0.5	47
Asia		**1 000 268**	**904 337**	**7.4**	**7.5**	**38.2**	**3.7**	**229**
Advanced Asian markets		612 212	579 438	−0.7	3.6	23.4	8.2	2 861
Emerging Asia	2	374 981	312 333	22.7	15.9	14.3	2.3	99
Middle East and Central Asia		13 075	12 566	3.8	9.9	0.5	0.5	36
Africa		**40 571**	**42 987**	**1.2**	**1.0**	**1.6**	**1.8**	**34**
Oceania		**39 537**	**45 445**	**−13.3**	**−7.7**	**1.5**	**2.7**	**1 001**
World	**3**	**2 617 016**	**2 546 941**	**2.5**	**4.4**	**100.0**	**3.5**	**353**
Advanced markets	4	2 110 534	2 103 394	−0.5	3.1	80.6	4.5	1 954
Emerging markets	5	506 482	443 547	16.9	11.7	19.4	1.7	80
Emerging Markets excl China		243 866	232 784	5.7	5.8	9.3	1.3	49
OECD	6	1 982 370	1 993 401	−1.3	2.8	75.7	4.0	1 487
G7	7	1 532 160	1 541 713	−1.6	3.4	58.5	4.3	1 995
Eurozone		553 969	555 596	−0.2	1.6	21.2	4.1	1 430
EU		808 564	831 892	0.2	2.6	30.9	4.5	1 451
EU, 15 countries		795 465	817 298	0.3	2.7	30.4	4.8	1 793
NAFTA	8	620 012	615 802	0.0	4.3	23.7	2.9	1 268
ASEAN	9	63 098	57 691	9.8	10.7	2.4	2.4	97
Non-life business								
America		**937 373**	**922 994**	**1.9**	**3.1**	**44.3**	**3.8**	**955**
North America		858 085	828 565	2.5	3.1	40.6	4.3	2 382
Latin America and Caribbean		79 288	94 429	−3.7	2.8	3.7	1.8	148
Europe		**611 414**	**608 056**	**3.0**	**3.1**	**28.9**	**2.7**	**658**
Western Europe		572 608	570 295	2.8	3.7	27.1	3.0	999
Central and Eastern Europe		38 806	37 760	5.4	−4.7	1.8	1.4	122
Asia		**493 260**	**447 229**	**8.9**	**9.0**	**23.3**	**1.9**	**114**
Advanced Asian markets		208 868	195 633	0.3	4.2	9.9	2.8	985
Emerging Asia	2	243 577	212 260	17.9	14.8	11.5	1.5	64
Middle East and Central Asia		40 814	39 336	2.9	5.6	1.9	1.5	114
Africa		**20 138**	**20 955**	**−0.2**	**3.3**	**1.0**	**0.9**	**17**
Oceania		**52 987**	**51 506**	**2.8**	**1.5**	**2.5**	**3.6**	**1 342**
World	**3**	**2 115 172**	**2 050 739**	**3.7**	**4.2**	**100.0**	**2.8**	**285**
Advanced markets	4	1 688 119	1 642 774	2.3	3.3	79.8	3.6	1 550
Emerging markets	5	427 054	407 966	9.6	7.9	20.2	1.5	69
Emerging Markets excl China		223 539	232 228	1.7	2.7	10.6	1.3	48
OECD	6	1 705 352	1 658 228	2.5	3.4	80.6	3.5	1 271
G7	7	1 325 298	1 288 926	2.3	3.5	62.7	3.6	1 670
Eurozone		402 757	396 123	1.6	3.0	19.0	3.2	1 098
EU		545 654	543 220	2.8	3.7	25.8	2.9	933
EU, 15 countries		520 633	519 756	2.6	3.5	24.6	3.0	1 118
NAFTA	8	871 299	842 328	2.7	3.2	41.2	4.1	1 782
ASEAN	9	23 418	22 787	3.5	5.7	1.1	1.0	39

Table II: **Total premium volume in local currency in 2016**

Region	Country		Currency	Premium volume (in millions of local currency) 2016	2015	2014	Change (in %) nominal 2016	2015	Change (in %) inflation-adjusted 2016	2015
North America	United States	10	USD	1 352 385 *	1 318 485	1 270 708	2.6	3.8	1.3	3.6
	Canada	11	CAD	151 812	146 320	140 350	3.8	4.3	2.3	3.1
	Total								**1.4**	**3.6**
Latin America and Caribbean	Brazil		BRL	253 143 *	230 180	206 663	10.0	11.4	1.1	2.2
	Mexico		MXN	456 063	400 344	366 307	13.9	9.3	10.8	6.4
	Argentina	19	ARS	211 027	179 911	128 744	17.3	39.7	−16.8	9.9
	Chile		CLP	7 907 841 *	7 408 342	6 223 280	6.7	19.0	3.5	15.2
	Colombia		COP	23 849 420	21 507 230	19 036 170	10.9	13.0	3.1	7.6
	Peru		PEN	11 256	11 744	10 154	−4.2	15.7	−7.5	11.7
	Ecuador		USD	1 618	2 232	2 255	−27.5	−1.0	−28.7	-4.8
	Panama		PAB	1 396 +	1 389	1 343	0.5	3.4	−0.2	3.3
	Uruguay		UYU	38 531	34 478	30 285	11.8	13.8	2.0	4.8
	Costa Rica		CRC	654 715	564 060	622 592	16.1	-9.4	16.1	−10.1
	Trinidad and Tobago		TTD	na.	7 325	6 531	na.	12.2	na.	7.2
	Dominican Republic		DOP	40 589	35 628	33 207	13.9	7.3	12.0	6.4
	Guatemala		GTQ	6 313	5 966	5 639	5.8	5.8	1.3	3.3
	Bahamas		BSD	na.	769	759	na.	1.3	na.	−0.5
	Jamaica		JMD	na.	84 995	77 375	na.	9.8	na.	6.0
	Cayman Islands		KYD	na.	633	596	na.	6.2	na.	6.0
	Total								**0.2**	**4.8**
Europe	United Kingdom		GBP	224 515	215 167	204 684	4.3	5.1	3.7	5.1
	France		EUR	214 766	214 505	203 328	0.1	5.5	−0.1	5.5
	Germany		EUR	194 321 *	193 310	191 962	0.5	0.7	0.0	0.5
	Italy		EUR	146 751 *	151 170	146 526	−2.9	3.2	−2.8	3.1
	Netherlands		EUR	72 416 *	71 840	73 347	0.8	−2.1	0.5	−2.6
	Spain		EUR	61 995 *	55 047	53 769	12.6	2.4	12.8	2.9
	Ireland		EUR	53 587 *	50 211 *	45 757 *	6.7	9.7	6.9	9.8
	Switzerland		CHF	57 500 +	59 162	58 845	−2.8	0.5	−2.4	1.7
	Belgium		EUR	30 580 *	29 979	30 538	2.0	−1.8	0.0	−2.4
	Sweden		SEK	288 157	300 336	265 879	−4.1	13.0	−5.0	13.0
	Denmark		DKK	215 023 *	208 861	200 952	3.0	3.9	2.7	3.5
	Finland		EUR	25 195	24 129	23 376	4.4	3.2	4.0	3.5
	Luxembourg		EUR	23 688	24 384	26 422	−2.9	−7.7	−2.9	−7.8
	Norway		NOK	163 914 *	158 993	158 263	3.1	0.5	−0.4	−1.7
	Austria		EUR	17 017 *	17 446	17 145	−2.5	1.8	−3.3	0.8
	Russia		RUB	1 180 632	1 023 819	987 773	15.3	3.6	7.7	−10.3
	Poland		PLN	54 066	53 351	54 357	1.3	−1.9	2.0	−0.9
	Turkey		TRY	39 496	30 286	25 357	30.4	19.4	21.0	10.9
	Portugal		EUR	10 981 *	12 789 *	14 406 *	−14.1	−11.2	−14.7	-11.7
	Czech Republic		CZK	152 631 *	153 450	157 918	−0.5	−2.8	−1.2	−3.2
	Malta		EUR	4 092 *	3 845	2 818	6.4	36.5	5.5	34.9
	Greece		EUR	3 890	3 725	3 966	4.5	−6.1	5.3	−4.4
	Liechtenstein		CHF	na.	3 282	3 410	na.	−3.8	na.	−2.6
	Hungary		HUF	876 403	828 055	815 247	5.8	1.6	5.4	1.6
	Slovenia		EUR	2 033	1 975	1 938	2.9	2.0	3.1	2.5
	Romania		RON	8 899 *	8 679	8 086	2.5	7.3	4.2	8.0
	Slovakia		EUR	1 903 +	1 981	2 077	−3.9	−4.7	−3.4	−4.3
	Ukraine		UAH	34 040 *	29 736	26 767	14.5	11.1	0.5	−25.3
	Croatia		HRK	8 761	8 709	8 561	0.6	1.7	1.7	2.2
	Bulgaria		BGN	2 014	1 895	1 732	6.3	9.4	7.1	9.5
	Cyprus		EUR	na.	706	722	na.	−2.2	na.	−0.6
	Serbia		RSD	89 313 *	80 926	69 405	10.4	16.6	9.1	15.0
	Total								**1.3**	**2.7**
Asia	Japan	13	JPY	51 120 220 *	53 855 750	52 473 500	−5.1	2.6	−5.1	2.4
	PR China		CNY	3 095 911 +	2 428 252	2 023 482	27.5	20.0	25.0	18.3
	South Korea	13	KRW	196 519 900 *	190 830 400	180 778 800	3.0	5.6	1.7	4.8
	Taiwan		TWD	3 279 226	3 062 796	2 903 350	7.1	5.5	5.6	5.8
	India	13	INR	5 338 652 *	4 662 762	4 152 526	14.5	12.3	9.1	7.0
	Hong Kong		HKD	438 149 +	354 651	318 008	23.5	11.5	20.6	8.3
	Thailand		THB	778 078	746 788	704 863	4.2	5.9	4.0	6.9
	Singapore		SGD	29 052	27 133	25 014	7.1	8.5	7.6	9.0
	Indonesia		IDR	266 582 500	216 174 500	174 710 200	23.3	23.7	19.1	16.3
	Israel		ILS	57 635	54 869	51 400	5.0	6.7	5.6	7.4
	Malaysia	13	MYR	58 674	55 669	53 050	5.4	4.9	3.3	2.1
	United Arab Emirates	12	AED	37 596 *	36 095	32 751	4.2	10.2	2.3	5.9
	Saudi Arabia		SAR	37 252 *	36 496	30 482	2.1	19.7	−1.3	17.2
	Iran	14	IRR	260 851 700 *	228 428 000	208 633 000	14.2	9.5	5.0	−2.2
	Philippines		PHP	256 770	253 301	214 752	1.4	18.0	−0.4	16.3
	Vietnam		VND	80 959 500	67 407 150	55 660 540	20.1	21.1	17.0	20.3
	Qatar		QAR	na.	na.	na.	na.	na.	na.	na.
	Pakistan		PKR	263 990 *	233 280	199 400	13.2	17.0	9.0	14.1
	Bangladesh		BDT	na.	na.	101 994 *	na.	na.	na.	na.
	Lebanon		LBP	2 372 387 *	2 299 660	2 223 484	3.2	3.4	4.0	7.5
	Macao		MOP	na.	na.	8 747	na.	na.	na.	na.
	Oman		OMR	460 *	442	397	4.0	11.5	2.8	11.4
	Kwait		KWD	337 *	315 *	302	6.9	4.5	3.6	1.2
	Sri Lanka		LKR	137 458 *	119 373	102 563	15.1	16.4	9.9	15.3
	Kazakhstan		KZT	323 176	263 308	236 411	22.7	11.4	7.1	4.4
	Jordan		JOD	570 *	550	526	3.6	4.7	4.4	5.6
	Total								**7.9**	**8.0**
Africa	South Africa		ZAR	617 332	580 019	547 794	6.4	5.9	0.1	1.3
	Morocco		MAD	34 920 +	30 212	28 421	15.6	6.3	13.8	4.7
	Egypt	15	EGP	17 334	15 457	13 701	12.1	12.8	1.8	1.6
	Kenya		KES	194 384 +	172 540	155 758	12.7	10.8	6.0	3.9
	Algeria		DZD	132 187	128 685 *	126 509	2.7	1.7	−3.5	−2.9
	Nigeria		NGN	296 410 *	289 342 +	284 203	2.4	1.8	−11.4	−6.6
	Tunisia		TND	na.	1 663	1 540	na.	8.0	na.	3.0
	Angola		KZR	na.	na.	na.	na.	na.	na.	na.
	Namibia		NAD	11 514 *	10 844	10 772	6.2	0.7	−0.5	−3.9
	Mauritius		MUR	na.	26 220 *	23 717	na.	10.6	na.	9.2
	Total								**0.8**	**1.7**
Oceania	Australia	20	AUD	110 501	115 840	118 055	−4.6	−1.9	−5.8	−3.3
	New Zealand	16	NZD	14 382 *	13 633	13 627	5.5	0.0	4.8	−0.2
	Total								**−4.8**	**−3.0**
World	**World**								**3.1**	**4.3**

Table III: **Total premium volume in USD in 2016**

	Ranking	Country		Premium volume (in millions of USD) 2016	2015	Change (in %) 2016 nominal (in USD)	inflation-adjusted[17]	Share of world market 2016 (in %)
North America	1	United States	10	1 352 385 *	1 318 485	2.6	1.3	28.58
	9	Canada	11	114 523 **	114 420	0.1	2.3	2.42
		Total		**1 466 908**	**1 432 905**	**2.4**	**1.4**	**31.00**
Latin America and Caribbean	14	Brazil		72 646 *	69 078	5.2	1.1	1.54
	25	Mexico		24 403	25 225	–3.3	10.8	0.52
	33	Argentina	19	14 291	19 486	–26.7	–16.8	0.30
	38	Chile		11 682 *	11 326	3.1	3.5	0.25
	43	Colombia		7 809	7 844	–0.4	3.1	0.17
	51	Peru		3 330	3 688	–9.7	–7.5	0.07
	61	Ecuador		1 618	2 232	–27.5	–28.7	0.03
	63	Panama		1 396 +	1 389	0.5	–0.2	0.03
	67	Uruguay		1 281	1 262	1.6	2.0	0.03
	68	Costa Rica		1 216	1 055	15.2	16.1	0.03
	72	Trinidad and Tobago		1 158 **	1 149	0.8	na.	0.02
	77	Dominican Republic		879	791	11.2	12.0	0.02
	79	Guatemala		808	779	3.6	1.3	0.02
	85	Bahamas		779 **	769	1.2	na.	0.02
	87	Jamaica		755 **	727	3.8	na.	0.02
	88	Cayman Islands		739 **	760	–2.7	na.	0.02
		Other countries		3 710	13 326			0.08
		Total		**148 500**	**160 886**	**–7.7**	**0.2**	**3.14**
Europe	4	United Kingdom		304 208 **	328 883	–7.5	3.7	6.43
	5	France		237 644 **	238 011	–0.2	–0.1	5.02
	6	Germany		215 021 *	214 494	0.2	0.0	4.54
	8	Italy		162 383 *	167 736	–3.2	–2.8	3.43
	12	Netherlands		80 130 *	79 712	0.5	0.5	1.69
	15	Spain		68 599 *	61 080	12.3	12.8	1.45
	16	Ireland		59 295 *	55 713 *	6.4	6.9	1.25
	17	Switzerland		58 369 +	61 477	–5.1	–2.4	1.23
	20	Belgium		33 838 *	33 264	1.7	0.0	0.72
	21	Sweden		33 667	35 608	–5.5	–5.0	0.71
	22	Denmark		31 939 *	31 046	2.9	2.7	0.67
	23	Finland		27 879 **	26 773	4.1	4.0	0.59
	24	Luxembourg		26 212 **	27 055	–3.1	–2.9	0.55
	29	Norway		19 511 *	19 713	–1.0	–0.4	0.41
	30	Austria		18 830 *	19 357	–2.7	–3.3	0.40
	31	Russia		17 607	16 801	4.8	7.7	0.37
	35	Poland		13 702	14 144	–3.1	2.0	0.29
	36	Turkey		13 085	11 140	17.5	21.0	0.28
	37	Portugal		12 151 *	14 191 *	–14.4	–14.7	0.26
	44	Czech Republic		6 245 *	6 238	0.1	–1.2	0.13
	46	Malta		4 528 *	4 266	6.2	5.5	0.10
	47	Greece		4 305 **	4 133	4.2	5.3	0.09
	50	Liechtenstein		3 339 **	3 410	–2.1	na.	0.07
	52	Hungary		3 113 **	2 964	5.0	5.4	0.07
	55	Slovenia		2 251	2 192	2.7	3.1	0.05
	56	Romania		2 192 *	2 167	1.2	4.2	0.05
	58	Slovakia		2 106 +	2 198	–4.2	–3.4	0.04
	65	Ukraine		1 332 *	1 361	–2.1	0.5	0.03
	66	Croatia		1 287	1 270	1.4	1.7	0.03
	73	Bulgaria		1 139	1 074	6.0	7.1	0.02
	80	Cyprus		805 **	783	2.8	na.	0.02
	82	Serbia		803 *	744	7.9	9.1	0.02
		Other countries		2 509	2 434			0.05
		Total		**1 470 021**	**1 491 430**	**–1.4**	**1.3**	**31.06**
Asia	2	Japan	13	471 295 *	448 611	5.1	–5.1	9.96
	3	PR China		466 131 +	386 500	20.6	25.0	9.85
	7	South Korea	13	170 862 *	164 997	3.6	1.7	3.61
	10	Taiwan		101 445	95 979	5.7	5.6	2.14
	13	India	13	79 311 *	71 229	11.3	9.1	1.68
	18	Hong Kong		56 448 +	45 748	23.4	20.6	1.19
	26	Thailand		22 044 **	21 805 **	1.1	4.0	0.47
	27	Singapore		21 029 **	19 736 **	6.6	7.6	0.44
	28	Indonesia		20 038 **	16 140 **	24.2	19.1	0.42
	32	Israel		15 007 **	14 127	6.2	5.6	0.32
	34	Malaysia	13	13 930 **	13 740 **	1.4	3.3	0.29
	39	United Arab Emirates	12	10 237 *	9 828	4.2	2.3	0.22
	41	Saudi Arabia		9 934 *	9 732	2.1	–1.3	0.21
	42	Iran	14	8 298 *	7 705	7.7	5.0	0.18
	45	Philippines		5 407 **	5 567 **	–2.9	–0.4	0.11
	48	Vietnam		3 622 **	3 077 **	17.7	17.0	0.08
	53	Qatar		2 935 **	2 813 **	4.3	na.	0.06
	54	Pakistan		2 520 *	2 270	11.0	9.0	0.05
	60	Bangladesh		1 668 **	1 496 **	11.5	na.	0.04
	62	Lebanon		1 574 *	1 525	3.2	4.0	0.03
	64	Macao		1 390 **	1 237 **	12.3	na.	0.03
	70	Oman		1 196 *	1 150	4.0	2.8	0.03
	74	Kuwait		1 115 *	1 048 *	6.5	3.6	0.02
	75	Sri Lanka		949 *	879	8.0	9.9	0.02
	76	Kazakhstan		945	1 188	–20.5	7.1	0.02
	81	Jordan		803 *	775	3.6	4.4	0.02
		Other countries		3 396	2 663			0.07
		Total		**1 493 527**	**1 351 566**	**10.5**	**7.9**	**31.56**
Africa	19	South Africa		41 962 **	45 491	–7.8	0.1	0.89
	49	Morocco		3 561 +	3 104	14.7	13.8	0.08
	57	Egypt	15	2 130	2 104	1.2	1.8	0.05
	59	Kenya		1 915 +	1 757	9.0	6.0	0.04
	69	Algeria		1 209 **	1 278 *	–5.4	–3.5	0.03
	71	Nigeria		1 159 *	1 504 +	–22.9	–11.4	0.02
	78	Tunisia		824 **	848 **	–2.8	na.	0.02
	83	Angola		788 **	831 **	–5.1	na.	0.02
	84	Namibia		783 *	850	–7.9	–0.5	0.02
	86	Mauritius		776 **	748 *	3.8	na.	0.02
		Other countries		5 602	5 428			0.12
		Total		**60 709**	**63 942**	**–5.1**	**0.8**	**1.28**
Oceania	11	Australia	20	82 159	86 997	–5.6	–5.8	1.74
	40	New Zealand	16	10 015 *	9 509	5.3	4.8	0.21
		Other countries		350	444			0.01
		Total		**92 524**	**96 951**	**–4.6**	**–4.8**	**1.96**
World		**World**		**4 732 188**	**4 597 680**	**2.9**	**3.1**	**100.00**

Table IV: **Life insurance premium volume in local currency in 2016**

	Country		Currency	Premium volume (in millions of local currency) 2016	2015	2014	Change (in %) nominal 2016	2015	Change (in %) inflation-adjusted 2016	2015
North America	United States	10	USD	558847 *	554731	531090	0.7	4.5	–0.5	4.3
	Canada	11	CAD	66248 *	63439	60640	4.4	4.6	3.0	3.4
	Total								**–0.2**	**4.2**
Latin America and Caribbean	Brazil		BRL	142887	123619	106306	15.6	16.3	6.3	6.7
	Mexico		MXN	209111	181918	169178	14.9	7.5	11.8	4.7
	Chile		CLP	4838696 *	4543239	3651067	6.5	24.4	3.3	20.5
	Colombia		COP	7509037	6357441	5727219	18.1	11.0	9.9	5.7
	Argentina	19	ARS	34596	32694	24358	5.8	34.2	–25.0	5.6
	Peru		PEN	5113	5618	4929	–9.0	14.0	–12.1	10.1
	Uruguay		UYU	14707	11672	8937	26.0	30.6	15.0	20.2
	Trinidad and Tobago		TTD	na.	2331	2072	na.	12.5	na.	7.5
	Ecuador		USD	347	355	325	–2.3	9.2	–3.9	5.0
	Panama		PAB	346 +	323	312	7.2	3.7	6.4	3.6
	Jamaica		JMD	na.	33696	30246	na.	11.4	na.	7.5
	Bahamas		BSD	na.	195	183	na.	6.7	na.	4.7
	Costa Rica		CRC	101881	72182	76621	41.1	–5.8	41.1	–6.5
	Guatemala		GTQ	1271	1176	1187	8.1	–1.0	3.5	–3.3
	Dominican Republic		DOP	7453	6314	5326	18.0	18.5	16.1	17.6
	Cayman Islands		KYD	na.	31	24	na.	27.5	na.	27.3
	Total								**5.0**	**7.6**
Europe	United Kingdom		GBP	147140	142855	136906	3.0	4.3	2.3	4.3
	France		EUR	138106 *	138978	131938	–0.6	5.3	–0.8	5.3
	Italy		EUR	110651 *	114951	109323	–3.7	5.1	–3.7	5.1
	Germany		EUR	85548 *	86859	89205	–1.5	–2.6	–2.0	–2.8
	Ireland		EUR	46301 *	43272	39097	7.0	10.7	7.2	10.7
	Spain		EUR	31141 *	25567	24839	21.8	2.9	22.1	3.4
	Switzerland		CHF	30687 +	32640	32640	–6.0	0.0	–5.6	1.2
	Sweden		SEK	207815	222393	193298	–6.6	15.1	–7.5	15.1
	Finland		EUR	20443	19491	18664	4.9	4.4	4.5	4.7
	Luxembourg		EUR	20372	21183	23508	–3.8	–9.9	–3.9	–9.9
	Denmark		DKK	143576 *	138324	130275	3.8	6.2	3.5	5.7
	Belgium		EUR	15513 *	15325	16265	1.2	–5.8	–0.7	–6.3
	Netherlands		EUR	14807 *	14688	17576	0.8	–16.4	0.5	–16.9
	Norway		NOK	94071 *	90785	92050	3.6	–1.4	0.1	–3.5
	Portugal		EUR	6729 *	8741 *	10505 *	–23.0	–16.8	–23.5	–17.2
	Austria		EUR	6103 *	6768	6754	–9.8	0.2	–10.6	–0.7
	Poland		PLN	18404	22093	23451	–16.7	–5.8	–16.2	–4.9
	Russia		RUB	215740	129715	108531	66.3	19.5	55.4	3.4
	Czech Republic		CZK	57519 *	62415	71182	–7.8	–12.3	–8.5	–12.6
	Liechtenstein		CHF	na.	2275	2350	na.	-3.2	na.	–2.1
	Greece		EUR	1781	1679	1781	6.1	–5.7	7.0	–4.1
	Turkey		TRY	4963	3700	3228	34.1	14.6	24.5	6.5
	Hungary		HUF	437087	439404	454151	–0.5	–3.2	–0.9	–3.2
	Malta		EUR	1339 *	1275	1131	5.0	12.8	4.1	11.5
	Slovakia		EUR	712 +	883	986	–19.4	–10.5	–18.9	–10.2
	Slovenia		EUR	576	566	535	1.8	5.7	1.9	6.3
	Croatia		HRK	2918	2919	2638	0.0	10.6	1.1	11.2
	Romania		RON	1686 *	1742	1561	–3.2	11.5	–1.7	12.2
	Cyprus		EUR	na.	281	299	na.	–5.8	na.	–4.3
	Bulgaria		BGN	363	330	289	9.9	14.4	10.8	14.6
	Serbia		RSD	21720 *	18156	14896	19.6	21.9	18.3	20.2
	Ukraine		UAH	2890 *	2187	2160	32.2	1.2	16.1	–31.9
	Total								**0.1**	**2.5**
Asia	Japan	13	JPY	38403200 *	40923600	40085200	–6.2	2.1	–6.2	1.9
	PR China		CNY	1744222 +	1324152	1090169	31.7	21.5	29.1	19.7
	South Korea	13	KRW	119811300 *	117213700	110575300	2.2	6.0	1.0	5.2
	Taiwan		TWD	2731257	2540987	2403400	7.5	5.7	6.0	6.0
	India	13	INR	4161136 *	3669432	3281012	13.4	11.8	8.0	6.6
	Hong Kong		HKD	403159 +	319813	285804	26.1	11.9	23.1	8.6
	Singapore		SGD	24255	22440	20521	8.1	9.4	8.7	9.9
	Indonesia		IDR	203527900	158581100	126643900	28.3	25.2	24.0	17.7
	Thailand		THB	534071	504981	470060	5.8	7.4	5.6	8.4
	Malaysia	13	MYR	38706	36281	34203	6.7	6.1	4.5	3.2
	Israel		ILS	30711	29417	26571	4.4	10.7	5.0	11.4
	Philippines		PHP	177702	183501	153611	–3.2	19.5	–4.9	17.8
	United Arab Emirates	12	AED	8990 *	8630	7863	4.2	9.8	2.4	5.5
	Vietnam		VND	45896560	36717250	28353090	25.0	29.5	21.7	28.7
	Pakistan		PKR	185709 *	161940	131000	14.7	23.6	10.5	20.6
	Bangladesh		BDT	na.	na.	74950 *	na.	na.	na.	na.
	Macao		MOP	na.	na.	6657	na.	na.	na.	na.
	Iran (14)		IRR	31574640 *	27552000	22598000	14.6	21.9	5.3	8.9
	Lebanon		LBP	726399 *	692683	642531	4.9	7.8	5.7	12.0
	Sri Lanka		LKR	63715 *	53575	44596	18.9	20.1	13.5	19.0
	Saudi Arabia		SAR	1041 *	1036	904	0.5	14.5	–2.8	12.1
	Kuwait		KWD	55 *	52 *	50	5.9	4.6	2.6	1.3
	Kazakhstan		KZT	55735	55040	46984	1.3	17.1	–11.6	9.8
	Oman		OMR	55 *	53	42	4.2	27.1	3.0	27.0
	Jordan		JOD	65 *	61	53	6.7	15.0	7.6	16.0
	Qatar		QAR	na.	na.	na.	na.	na.	na.	na.
	Total								**7.4**	**7.5**
Africa	South Africa		ZAR	498585 *	468595	447442	6.4	4.7	0.1	0.1
	Morocco		MAD	14294 +	10561	9399	35.4	12.4	33.2	10.6
	Egypt	15	EGP	8325	7339	6155	13.4	19.3	2.9	7.4
	Kenya		KES	74024 +	62065	56581	19.3	9.7	12.2	2.9
	Mauritius		MUR	na.	18650 *	16307	na.	14.4	na.	12.9
	Namibia		NAD	7867 *	7350	7433	7.0	–1.1	0.3	–5.6
	Nigeria		NGN	95045 *	90952 +	85656	4.5	6.2	–9.6	–2.6
	Tunisia		TND	na.	302	270	na.	11.7	na.	6.5
	Algeria		DZD	11168	10583 *	8601	5.5	23.0	–0.8	17.4
	Angola		AOA	na.	na. +	na.	na.	na.	na.	na.
	Total								**1.2**	**1.0**
Oceania	Australia	20	AUD	50695	58140	62327	–12.8	–6.7	–13.9	–8.1
	New Zealand	16	NZD	2459 *	2362	2259	4.1	4.6	3.4	4.2
	Total								**–13.3**	**–7.7**
World	**World**								**2.5**	**4.4**

Table V: **Life premium volume in USD in 2016**

	Ranking	Country		Premium volume (in millions of USD) 2016	2015	Change (in %) 2016 nominal (in USD)	inflation-adjusted[17]	Share of total business 2016 (in %)	Share of world market 2016 (in %)
North America	1	United States	10	558 847 *	554 731	0.7	–0.5	41.3	21.35
	13	Canada	11	49 976 *	49 609	0.7	3.0	43.6	1.91
		Total		**608 823**	**604 340**	**0.7**	**–0.2**	**41.5**	**23.26**
Latin America and Caribbean	14	Brazil		41 005	37 098	10.5	6.3	56.4	1.57
	29	Mexico		11 189	11 462	–2.4	11.8	45.9	0.43
	33	Chile		7 148 *	6 946	2.9	3.3	61.2	0.27
	38	Colombia		2 459	2 319	6.0	9.9	31.5	0.09
	41	Argentina	19	2 343	3 541	–33.8	–25.0	16.4	0.09
	49	Peru		1 513	1 764	–14.3	–12.1	45.4	0.06
	61	Uruguay		489	427	14.5	15.0	38.2	0.02
	67	Trinidad and Tobago		368 **	366	0.8	na.	31.8	0.01
	68	Ecuador		347	355	–2.3	–3.9	21.4	0.01
	69	Panama		346 +	323	7.2	6.4	24.8	0.01
	71	Jamaica		299 **	288	3.8	na.	39.6	0.01
	74	Bahamas		198 **	195	1.2	na.	25.4	0.01
	76	Costa Rica		189	135	40.1	41.1	15.6	0.01
	79	Guatemala		163	154	5.8	3.5	20.1	0.01
	80	Dominican Republic		161	140	15.2	16.1	18.4	0.01
	87	Cayman Islands		36 **	37	–2.7	na.	4.9	0.00
		Other countries		959	907			25.8	0.04
		Total		**69 212**	**66 458**	**4.1**	**5.0**	**46.6**	**2.64**
Europe	4	United Kingdom		199 369 **	218 353	–8.7	2.3	65.5	7.62
	5	France		152 817 *	154 207	–0.9	–0.8	64.3	5.84
	6	Italy		122 438 *	127 548	–4.0	–3.7	75.4	4.68
	8	Germany		94 661 *	96 378	–1.8	–2.0	44.0	3.62
	12	Ireland		51 233 *	48 014	6.7	7.2	86.4	1.96
	16	Spain		34 459 *	28 368	21.5	22.1	50.2	1.32
	18	Switzerland		31 151 +	33 917	–8.2	–5.6	53.4	1.19
	19	Sweden		24 280	26 367	–7.9	–7.5	72.1	0.93
	20	Finland		22 620 **	21 627	4.6	4.5	81.1	0.86
	21	Luxembourg		22 542 **	23 503	–4.1	–3.9	86.0	0.86
	22	Denmark		21 327 *	20 561	3.7	3.5	66.8	0.81
	24	Belgium		17 166 *	17 005	0.9	–0.7	50.7	0.66
	25	Netherlands		16 385 *	16 298	0.5	0.5	20.4	0.63
	28	Norway		11 197 *	11 256	–0.5	0.1	57.4	0.43
	32	Portugal		7 446 *	9 699 *	–23.2	–23.5	61.3	0.28
	34	Austria		6 754 *	7 509	–10.1	–10.6	35.9	0.26
	35	Poland		4 664	5 857	–20.4	–16.2	34.0	0.18
	37	Russia		3 217	2 129	51.1	55.4	18.3	0.12
	40	Czech Republic		2 353 *	2 537	–7.2	–8.5	37.7	0.09
	42	Liechtenstein		2 314 **	2 364	–2.1	na.	69.3	0.09
	44	Greece		1 971 **	1 863	5.8	7.0	45.8	0.08
	47	Turkey		1 644	1 361	20.8	24.5	12.6	0.06
	48	Hungary		1 553 **	1 573	–1.3	–0.9	49.9	0.06
	50	Malta		1 482 *	1 415	4.7	4.1	32.7	0.06
	56	Slovakia		788 +	980	–19.6	–18.9	37.4	0.03
	58	Slovenia		638	628	1.5	1.9	28.3	0.02
	64	Croatia		429	426	0.8	1.1	33.3	0.02
	65	Romania		415 *	435	–4.5	–1.7	18.9	0.02
	70	Cyprus		316 **	312	1.3	na.	39.2	0.01
	73	Bulgaria		205	187	9.7	10.8	18.0	0.01
	75	Serbia		195 *	167	17.0	18.3	24.3	0.01
	83	Ukraine		113 *	100	13.0	16.1	8.5	0.00
		Other countries		466	432			18.6	0.02
		Total		**858 607**	**883 374**	**–2.8**	**0.1**	**58.4**	**32.81**
Asia	2	Japan	13	354 053 *	340 888	3.9	–6.2	75.1	13.53
	3	PR China		262 616 +	210 763	24.6	29.1	56.3	10.03
	7	South Korea	13	104 169 *	101 346	2.8	1.0	61.0	3.98
	9	Taiwan		84 493	79 627	6.1	6.0	83.3	3.23
	10	India	13	61 817 *	56 055	10.3	8.0	77.9	2.36
	11	Hong Kong		51 940 +	41 255	25.9	23.1	92.0	1.98
	23	Singapore		17 557 **	16 322 **	7.6	8.7	83.5	0.67
	26	Indonesia		15 299 **	11 840 **	29.2	24.0	76.3	0.58
	27	Thailand		15 131 **	14 745 **	2.6	5.6	68.6	0.58
	30	Malaysia	13	9 189 **	8 955 **	2.6	4.5	66.0	0.35
	31	Israel		7 997 **	7 574	5.6	5.0	53.3	0.31
	36	Philippines		3 742 **	4 033 **	–7.2	–4.9	69.2	0.14
	39	United Arab Emirates	12	2 448 *	2 350	4.2	2.4	23.9	0.09
	43	Vietnam		2 053 **	1 676 **	22.5	21.7	56.7	0.08
	45	Pakistan		1 773 *	1 576	12.5	10.5	70.3	0.07
	52	Bangladesh		1 226 **	1 099 **	11.5	na.	73.5	0.05
	53	Macao		1 058 **	942 **	12.3	na.	76.1	0.04
	55	Iran	14	1 004 *	929	8.1	5.3	12.1	0.04
	62	Lebanon		482 *	459	4.9	5.7	30.6	0.02
	63	Sri Lanka		440 *	394	11.6	13.5	46.4	0.02
	72	Saudi Arabia		278 *	276	0.5	–2.8	2.8	0.01
	77	Kuwait		183 *	174 *	5.5	2.6	16.4	0.01
	78	Kazakhstan		163	248	–34.4	–11.6	17.2	0.01
	82	Oman		144 *	138	4.2	3.0	12.0	0.01
	85	Jordan		92 *	86	6.7	7.6	11.4	0.00
	86	Qatar		47 **	52 **	–10.7	na.	1.6	0.00
		Other countries		877	536			25.8	0.03
		Total		**1 000 268**	**904 337**	**10.6**	**7.4**	**67.0**	**38.22**
Africa	17	South Africa		33 890 *	36 752	–7.8	0.1	80.8	1.29
	51	Morocco		1 457 +	1 085	34.3	33.2	40.9	0.06
	54	Egypt	15	1 023	999	2.4	2.9	48.0	0.04
	57	Kenya		729 +	632	15.4	12.2	38.1	0.03
	59	Mauritius		552 **	532 *	3.8	na.	71.1	0.02
	60	Namibia		535 *	576	–7.2	0.3	68.3	0.02
	66	Nigeria		372 *	473 +	–21.4	–9.6	32.1	0.01
	81	Tunisia		150 **	154 **	–2.8	na.	18.2	0.01
	84	Algeria		102 **	105 *	–2.8	–0.8	8.4	0.00
	88	Angola		13 **	14 +	–5.1	na.	1.7	0.00
		Other countries		1 747	1 665			31.2	0.07
		Total		**40 571**	**42 987**	**–5.6**	**1.2**	**66.8**	**1.55**
Oceania	15	Australia	20	37 692	43 663	–13.7	–13.9	45.9	1.44
	46	New Zealand	16	1 712 *	1 648	3.9	3.4	17.1	0.07
		Other countries		132	134			37.8	0.01
		Total		**39 537**	**45 445**	**–13.0**	**–13.3**	**42.7**	**1.51**
World		**World**		**2 617 016**	**2 546 941**	**2.8**	**2.5**	**55.3**	**100.00**

Table VI: **Non-life insurance premium volume in local currency in 2016**

	Country		Currency	Premium volume (in millions of local currency) 2016	2015	2014	Change (in %) nominal 2016	2015	Change (in %) inflation-adjusted 2016	2015
North America	United States	10	USD	793 538 *	763 754	739 619	3.9	3.3	2.6	3.1
	Canada	11	CAD	85 564	82 881	79 710	3.2	4.0	1.8	2.8
	Total								**2.5**	**3.1**
Latin America and Caribbean	Brazil		BRL	110 256 *	106 561	100 357	3.5	6.2	–4.9	–2.6
	Mexico		MXN	246 952	218 426	197 129	13.1	10.8	10.0	7.9
	Argentina	19	ARS	176 431	147 217	104 385	19.8	41.0	–15.0	10.9
	Colombia		COP	16 340 380	15 149 790	13 308 950	7.9	13.8	0.3	8.4
	Chile		CLP	3 069 145 *	2 865 103	2 572 213	7.1	11.4	3.9	7.8
	Peru		PEN	6 143	6 126	5 225	0.3	17.2	–3.2	13.2
	Ecuador		USD	1 271	1 878	1 930	–32.3	–2.7	–33.4	–6.4
	Panama		PAB	1 050 +	1 066	1 032	–1.5	3.3	–2.2	3.2
	Costa Rica		CRC	552 835	491 878	545 972	12.4	–9.9	12.4	–10.6
	Uruguay		UYU	23 824	22 807	21 347	4.5	6.8	–4.7	–1.7
	Trinidad and Tobago		TTD	na.	4 994	4 459	na.	12.0	na.	7.0
	Dominican Republic		DOP	33 136	29 315	27 881	13.0	5.1	11.1	4.3
	Cayman Islands		KYD	na.	602	572	na.	5.2	na.	5.1
	Guatemala		GTQ	5 042	4 790	4 452	5.3	7.6	0.8	5.1
	Bahamas		BSD	na.	574	576	na.	–0.4	na.	–2.2
	Jamaica		JMD	na.	51 299	47 129	na.	8.8	na.	5.0
	Total								**–3.7**	**2.8**
Europe	Germany		EUR	108 773 +	106 451	102 757	2.2	3.6	1.7	3.4
	United Kingdom		GBP	77 374 *	72 312	67 779	7.0	6.7	6.3	6.6
	France		EUR	76 660	75 527	71 390	1.5	5.8	1.3	5.8
	Netherlands		EUR	57 609 *	57 152	55 771	0.8	2.5	0.5	1.9
	Italy		EUR	36 100 *	36 219	37 203	–0.3	–2.6	–0.2	–2.7
	Spain		EUR	30 853 *	29 481	28 929	4.7	1.9	4.9	2.4
	Switzerland		CHF	26 813 +	26 522	26 205	1.1	1.2	1.5	2.4
	Belgium		EUR	15 067 *	14 654	14 273	2.8	2.7	0.8	2.1
	Russia		RUB	964 891	894 105	879 242	7.9	1.7	0.8	–12.0
	Austria		EUR	10 914 *	10 678	10 391	2.2	2.8	1.3	1.8
	Turkey		TRY	34 533	26 586	22 129	29.9	20.1	20.5	11.6
	Denmark		DKK	71 447 +	70 537	70 676	1.3	–0.2	1.0	–0.6
	Sweden		SEK	80 342	77 943	72 581	3.1	7.4	2.1	7.4
	Poland		PLN	35 662	31 258	30 906	14.1	1.1	14.8	2.1
	Norway		NOK	69 843	68 208	66 212	2.4	3.0	–1.1	0.8
	Ireland		EUR	7 286 *	6 939 *	6 659 *	5.0	4.2	5.2	4.2
	Finland		EUR	4 752	4 638	4 712	2.5	–1.6	2.1	–1.3
	Portugal		EUR	4 252 *	4 049 *	3 901 *	5.0	3.8	4.4	3.3
	Czech Republic		CZK	95 111 *	91 034	86 736	4.5	5.0	3.8	4.6
	Luxembourg		EUR	3 316 +	3 201	2 914	3.6	9.8	3.6	9.8
	Malta		EUR	2 753 *	2 569	1 687	7.2	52.3	6.2	50.6
	Greece		EUR	2 109	2 046	2 185	3.1	–6.4	4.0	–4.7
	Romania		RON	7 213 *	6 937	6 524	4.0	6.3	5.6	7.0
	Slovenia		EUR	1 457	1 409	1 402	3.4	0.5	3.6	1.0
	Hungary		HUF	439 316 *	388 651	361 096	13.0	7.6	12.6	7.7
	Slovakia		EUR	1 191 +	1 098	1 091	8.5	0.6	9.1	0.9
	Ukraine		UAH	31 149 *	27 549	24 608	13.1	12.0	–0.7	–24.7
	Liechtenstein		CHF	na.	1 007	1 060	na.	–5.0	na.	–3.9
	Bulgaria		BGN	1 651	1 565	1 443	5.5	8.4	6.3	8.5
	Croatia		HRK	5 843	5 790	5 924	0.9	–2.3	2.1	–1.8
	Serbia		RSD	67 592 *	62 770	54 509	7.7	15.2	6.5	13.6
	Cyprus		EUR	442	425	423	4.0	0.4	5.3	2.0
	Total								**3.0**	**3.1**
Asia	PR China		CNY	1 351 689 +	1 104 100	933 313	22.4	18.3	20.0	16.6
	Japan	13	JPY	12 717 020 *	12 932 160	12 388 300	–1.7	4.4	–1.7	4.2
	South Korea	13	KRW	76 708 620 *	73 616 720	70 203 560	4.2	4.9	2.9	4.1
	India	13	INR	1 177 515 *	993 329	871 514	18.5	14.0	12.9	8.6
	Taiwan		TWD	547 969	521 809	499 950	5.0	4.4	3.6	4.7
	Saudi Arabia		SAR	36 211 *	35 460	29 578	2.1	19.9	–1.2	17.4
	United Arab Emirates	12	AED	28 606 *	27 465	24 888	4.2	10.4	2.3	6.0
	Iran	14	IRR	229 277 100 *	200 876 000	186 035 000	14.1	8.0	4.9	–3.5
	Israel		ILS	26 923 *	25 452	24 830	5.8	2.5	6.4	3.1
	Thailand		THB	244 007	241 808	234 803	0.9	3.0	0.7	3.9
	Malaysia	13	MYR	19 968	19 389	18 847	3.0	2.9	0.9	0.1
	Indonesia		IDR	63 054 650	57 593 380	48 066 340	9.5	19.8	5.8	12.7
	Hong Kong		HKD	34 989 +	34 838	32 203	0.4	8.2	–1.9	5.0
	Singapore		SGD	4 797	4 693	4 492	2.2	4.5	2.8	5.0
	Qatar		QAR	10 515 *	10 050 *	9 498	4.6	5.8	1.9	3.9
	Philippines		PHP	79 067	69 800	61 141	13.3	14.2	11.3	12.6
	Vietnam		VND	35 062 940	30 689 900	27 307 450	14.2	12.4	11.3	11.7
	Lebanon		LBP	1 645 988 *	1 606 977	1 580 953	2.4	1.6	3.3	5.6
	Oman		OMR	405 *	389	355	4.0	9.6	2.8	9.6
	Kuwait		KWD	282 *	263 *	252	7.1	4.5	3.8	1.2
	Kazakhstan		KZT	267 441	208 269	189 427	28.4	9.9	12.1	3.0
	Pakistan		PKR	78 281 *	71 340	68 400	9.7	4.3	5.7	1.7
	Jordan		JOD	505 *	489	473	3.2	3.5	4.0	4.5
	Sri Lanka		LKR	73 743 *	65 798	57 967	12.1	13.5	7.0	12.5
	Bangladesh		BDT	na.	na.	27 045 *	na.	na.	na.	na.
	Macao		MOP	na.	na.	2 090	na.	na.	na.	na.
	Total								**8.9**	**9.0**
Africa	South Africa		ZAR	118 747	111 424	100 352	6.6	11.0	0.2	6.2
	Morocco		MAD	20 626 +	19 651	19 022	5.0	3.3	3.3	1.7
	Kenya		KES	120 360 +	110 475	99 176	8.9	11.4	2.5	4.5
	Egypt	15	EGP	9 009	8 118	7 547	11.0	7.6	0.7	–3.1
	Algeria		DZD	121 019 *	118 102	117 908	2.5	0.2	–3.7	–4.4
	Nigeria		NGN	201 365 *	198 389 +	198 547	1.5	–0.1	–12.2	–8.3
	Angola		AOA	na.	na.	na.	na.	na.	na.	na.
	Tunisia		TND	na.	1 361	1 270	na.	7.2	na.	2.2
	Namibia		NAD	3 647 *	3 493	3 338	4.4	4.6	–2.2	–0.1
	Mauritius		MUR	na.	7 570 *	7 410	na.	2.2	na.	0.9
	Total								**–0.2**	**3.3**
Oceania	Australia	20	AUD	59 807	57 701	55 728	3.7	3.5	2.3	2.0
	New Zealand	16	NZD	11 923 *	11 271	11 368	5.8	–0.9	5.1	–1.1
	Total								**2.8**	**1.5**
World	**World**								**3.7**	**4.2**

Table VII: **Non-life premium volume in USD in 2016**

	Ranking	Country		Premium volume (in millions of USD) 2016	2015	Change (in %) 2016 nominal (in USD)	inflation-adjusted [17]	Share of total business 2016 (in %)	Share of world market 2016 (in %)
North America	1	United States	10	793538 *	763754	3.9	2.6	58.7	37.52
	8	Canada	11	64547 **	64812	−0.4	1.8	56.4	3.05
		Total		858085	828565	3.6	2.5	58.5	40.57
Latin America and Caribbean	13	Brazil		31641 *	31979	−1.1	−4.9	43.6	1.50
	19	Mexico		13214	13763	−4.0	10.0	54.1	0.62
	21	Argentina	19	11948	15945	−25.1	−15.0	83.6	0.56
	35	Colombia		5350	5525	−3.2	0.3	68.5	0.25
	40	Chile		4534 *	4380	3.5	3.9	38.8	0.21
	49	Peru		1818	1924	−5.5	−3.2	54.6	0.09
	56	Ecuador		1271	1878	−32.3	−33.4	78.6	0.06
	63	Panama		1050 +	1066	−1.5	−2.2	75.2	0.05
	64	Costa Rica		1027	920	11.6	12.4	84.4	0.05
	69	Uruguay		792	835	−5.1	−4.7	61.8	0.04
	70	Trinidad and Tobago		789 **	783	0.8	na.	68.2	0.04
	75	Dominican Republic		718	651	10.3	11.1	81.6	0.03
	77	Cayman Islands		703 **	723	−2.7	na.	95.1	0.03
	79	Guatemala		645	626	3.1	0.8	79.9	0.03
	81	Bahamas		581 **	574	1.2	na.	74.6	0.03
	84	Jamaica		456 **	439	3.8	na.	60.4	0.02
		Other countries		2752	12419			74.2	0.13
		Total		**79288**	**94429**	**−16.0**	**−3.7**	**53.4**	**3.75**
Europe	3	Germany		120360 +	118116	1.9	1.7	56.0	5.69
	5	United Kingdom		104839 *	110529	−5.1	6.3	34.5	4.96
	6	France		84826 **	83804	1.2	1.3	35.7	4.01
	9	Netherlands		63746 *	63415	0.5	0.5	79.6	3.01
	11	Italy		39945 *	40189	−0.6	−0.2	24.6	1.89
	12	Spain		34140 *	32711	4.4	4.9	49.8	1.61
	14	Switzerland		27219 +	27559	−1.2	1.5	46.6	1.29
	17	Belgium		16672 *	16259	2.5	0.8	49.3	0.79
	18	Russia		14390	14672	−1.9	0.8	81.7	0.68
	20	Austria		12076 *	11848	1.9	1.3	64.1	0.57
	22	Turkey		11440	9779	17.0	20.5	87.4	0.54
	23	Denmark		10613 +	10485	1.2	1.0	33.2	0.50
	25	Sweden		9387	9241	1.6	2.1	27.9	0.44
	26	Poland		9038	8287	9.1	14.8	66.0	0.43
	27	Norway		8314	8457	−1.7	−1.1	42.6	0.39
	30	Ireland		8062 *	7699 *	4.7	5.2	13.6	0.38
	36	Finland		5258 **	5146	2.2	2.1	18.9	0.25
	39	Portugal		4705 *	4492 *	4.7	4.4	38.7	0.22
	42	Czech Republic		3892 *	3701	5.2	3.8	62.3	0.18
	43	Luxembourg		3669 +	3551	3.3	3.6	14.0	0.17
	45	Malta		3046 *	2851	6.9	6.2	67.3	0.14
	47	Greece		2334 **	2270	2.8	4.0	54.2	0.11
	50	Romania		1777 *	1732	2.6	5.6	81.1	0.08
	52	Slovenia		1613	1564	3.2	3.6	71.7	0.08
	54	Hungary		1560 *	1391	12.2	12.6	50.1	0.07
	55	Slovakia		1318 +	1218	8.2	9.1	62.6	0.06
	57	Ukraine		1219 *	1261	−3.3	−0.7	91.5	0.06
	65	Liechtenstein		1024 **	1046	−2.1	na.	30.7	0.05
	66	Bulgaria		934	887	5.3	6.3	82.0	0.04
	68	Croatia		858	844	1.7	2.1	66.7	0.04
	80	Serbia		607 *	577	5.3	6.5	75.7	0.03
	83	Cyprus		489 **	471	3.7	5.3	60.8	0.02
		Other countries		2043	2002			81.4	0.10
		Total		**611414**	**608056**	**0.6**	**3.0**	**41.6**	**28.91**
Asia	2	PR China		203515 +	175737	15.8	20.0	43.7	9.62
	4	Japan	13	117243 *	107723	8.8	−1.7	24.9	5.54
	7	South Korea	13	66694 *	63651	4.8	2.9	39.0	3.15
	15	India	13	17493 *	15174	15.3	12.9	22.1	0.83
	16	Taiwan		16952	16352	3.7	3.6	16.7	0.80
	24	Saudi Arabia		9656 *	9456	2.1	−1.2	97.2	0.46
	31	United Arab Emirates	12	7789 *	7479	4.2	2.3	76.1	0.37
	32	Iran	14	7293 *	6776	7.6	4.9	87.9	0.34
	33	Israel		7010 *	6553	7.0	6.4	46.7	0.33
	34	Thailand		6913 **	7061 **	−2.1	0.7	31.4	0.33
	37	Malaysia	13	4741 **	4785 **	−0.9	0.9	34.0	0.22
	38	Indonesia		4740 **	4300 **	10.2	5.8	23.7	0.22
	41	Hong Kong		4508 +	4494	0.3	−1.9	8.0	0.21
	44	Singapore		3472 **	3413 **	1.7	2.8	16.5	0.16
	46	Qatar		2889 *	2761 *	4.6	1.9	98.4	0.14
	51	Philippines		1665 **	1534 **	8.5	11.3	30.8	0.08
	53	Vietnam		1568 **	1401 **	12.0	11.3	43.3	0.07
	61	Lebanon		1092 *	1066	2.4	3.3	69.4	0.05
	62	Oman		1052 *	1012	4.0	2.8	88.0	0.05
	67	Kuwait		932 *	874 *	6.6	3.8	83.6	0.04
	72	Kazakhstan		782	939	−16.8	12.1	82.8	0.04
	74	Pakistan		747 *	694	7.7	5.7	29.7	0.04
	76	Jordan		711 *	689	3.2	4.0	88.6	0.03
	82	Sri Lanka		509 *	484	5.2	7.0	53.6	0.02
	85	Bangladesh		442 **	397 **	11.5	na.	26.5	0.02
	86	Macao		332 **	296 **	12.3	na.	23.9	0.02
		Other countries		2520	2128			74.2	0.12
		Total		**493260**	**447229**	**10.3**	**8.9**	**33.0**	**23.32**
Africa	29	South Africa		8072 **	8739	−7.6	0.2	19.2	0.38
	48	Morocco		2103 +	2019	4.2	3.3	59.1	0.10
	58	Kenya		1186 +	1125	5.4	2.5	61.9	0.06
	59	Egypt	15	1107	1105	0.2	0.7	52.0	0.05
	60	Algeria		1107 *	1173	−5.6	−3.7	91.6	0.05
	71	Nigeria		787 *	1031 +	−23.6	−12.2	67.9	0.04
	73	Angola		775 **	817 **	−5.1	na.	98.3	0.04
	78	Tunisia		674 **	694	−2.8	na.	81.8	0.03
	87	Namibia		248 *	274	−9.5	−2.2	31.7	0.01
	88	Mauritius		224 **	216 *	3.8	na.	28.9	0.01
		Other countries		3854	3762			68.8	0.18
		Total		**20138**	**20955**	**−3.9**	**−0.2**	**33.2**	**0.95**
Oceania	10	Australia	20	44467	43334	2.6	2.3	54.1	2.10
	28	New Zealand	16	8303 *	7862	5.6	5.1	82.9	0.39
		Other countries		218	310			62.2	0.01
		Total		**52987**	**51506**	**2.9**	**2.8**	**57.3**	**2.51**
World		**World**		**2115172**	**2050739**	**3.1**	**3.7**	**44.7**	**100.00**

Table VIII: **Insurance density: premiums[1] per capita in USD in 2016**

	Ranking	Country		Total business	Life business	Non-life business
North America	10	United States	10	4174.1 *	1724.9 *	2449.2 *
	19	Canada	11	3161.1 **	1379.4 *	1781.6 **
		Total		**4072.2**	**1690.1**	**2382.1**
Latin America and Caribbean	1	Cayman Islands		12160.3 **	595.7 **	11564.6 **
	26	Bahamas		1984.1 **	503.3 **	1480.8 **
	35	Trinidad and Tobago		848.8 **	270.1 **	578.7 **
	37	Chile		643.5 *	393.7 *	249.7 *
	43	Uruguay		372.0	142.0	230.0
	45	Panama		350.0 +	86.8 +	263.2 +
	46	Brazil		346.3 *	195.5	150.8 *
	48	Argentina		325.5	53.4	272.2
	55	Jamaica		269.4 **	106.8 **	162.6 **
	58	Costa Rica		250.4	39.0	211.5
	59	Mexico		189.4	86.9	102.6
	61	Colombia		160.6	50.6	110.0
	66	Peru		104.8	47.6	57.2
	70	Ecuador		98.8	21.2	77.6
	71	Dominican Republic		82.6	15.2	67.5
	77	Guatemala		48.4	9.7	38.7
		Total		**256.9**	**108.7**	**148.1**
Europe	3	Switzerland		6933.5 +	3700.3 +	3233.2 +
	4	Denmark		5158.7 *	3742.4 *	1416.3 +
	5	Finland		5060.7 **	4106.1 **	954.5 **
	6	Netherlands		4716.9 *	964.5 *	3752.4 *
	7	Luxembourg	1	4589.3 **	2631.3 **	1958.1 +
	8	Ireland	1	4408.4 *	3639.8 *	768.6 *
	11	United Kingdom	1	4063.6 **	3033.2 **	1030.5 *
	14	Sweden		3410.3	2459.4	950.8
	15	Norway	1	3398.7 *	2132.9 *	1265.8
	17	France	1	3395.3 **	2227.7 *	1167.5 **
	20	Belgium	1	2613.3 *	1528.4 *	1084.9 *
	21	Germany	1	2547.6 *	1150.6 *	1397.1 +
	22	Italy	1	2499.0 *	1890.3 *	608.8 *
	25	Austria		2176.8 *	780.7 *	1396.1 *
	28	Spain		1481.7 *	744.3 *	737.4 *
	30	Portugal		1161.1 *	712.2 *	448.9 *
	31	Malta		1117.3 *	785.6 *	331.7 *
	33	Slovenia		1084.3	307.1	777.1
	34	Cyprus		916.9 **	359.8 **	557.1 **
	39	Czech Republic		591.5 *	222.9 *	368.6 *
	41	Greece		397.9 **	182.2 **	215.7 **
	42	Slovakia		388.3 +	145.3 +	243.0 +
	44	Poland		360.4	122.7	237.7
	50	Hungary		316.7 **	157.9 **	158.7 *
	53	Croatia		307.2	102.3	204.9
	60	Turkey		164.2	20.6	143.6
	62	Bulgaria		160.1	28.9	131.2
	63	Russia		122.8	22.4	100.3
	64	Serbia		114.5 *	27.8 *	86.7 *
	65	Romania		110.7 *	21.0 *	89.7 *
	81	Ukraine		31.1 *	2.6 *	28.5 *
	88	Liechtenstein		**	**	**
		Total		**1620.0**	**961.9**	**658.1**
Asia	2	Hong Kong		7678.8 +	7065.6 +	613.2 +
	9	Taiwan		4320.7	3598.7	722.0
	12	Singapore	1	3776.8 **	2894.5 **	882.4 **
	13	Japan	13	3731.7 *	2803.4 *	928.3 *
	18	South Korea	13	3361.9 *	2049.6 *	1312.3 *
	23	Macao		2328.5 **	1772.2 **	556.4 **
	27	Israel		1831.2 **	975.8 **	855.4 *
	29	Qatar		1288.3 **	20.5 **	1267.8 *
	32	United Arab Emirates	12	1102.0 *	263.5 *	838.5 *
	40	Malaysia	13	452.2 **	298.3 **	153.9 **
	47	PR China		337.1 +	189.9 +	147.2 +
	49	Thailand		323.4 **	222.0 **	101.4 **
	52	Saudi Arabia		309.4 *	8.6 *	300.8 *
	54	Kuwait		280.4 *	46.1 *	234.3 *
	56	Lebanon		268.6 *	82.2 *	186.4 *
	57	Oman		262.4 *	31.5 *	230.9 *
	67	Jordan		104.1 *	11.9 *	92.2 *
	68	Iran	14	103.8 *	12.6 *	91.2 *
	72	Indonesia		76.8 **	58.6 **	18.2 **
	74	India	13	59.7 *	46.5 *	13.2 *
	75	Kazakhstan		53.0	9.1	43.9
	76	Philippines		52.8 **	36.5 **	16.3 **
	78	Sri Lanka		45.6 *	21.2 *	24.5 *
	80	Vietnam		38.4 **	21.8 **	16.6 **
	85	Pakistan		13.1 *	9.2 *	3.9 *
	86	Bangladesh		10.2 **	7.5 **	2.7 **
		Total		**343.1**	**229.5**	**113.6**
Africa	36	South Africa		762.5 **	615.8 *	146.7 **
	38	Mauritius		608.1 **	432.5 **	175.5 **
	51	Namibia		311.4 *	212.8 *	98.6 *
	69	Morocco		102.3 +	41.9 +	60.4 +
	73	Tunisia		72.5 **	13.2 **	59.3 **
	79	Kenya		40.5 +	15.4 +	25.1 +
	82	Angola		30.5 **	0.5 **	30.0 **
	83	Algeria		30.0 **	2.5 **	27.4 *
	84	Egypt	15	22.8	11.0	11.9
	87	Nigeria		6.2 *	2.0 *	4.2 *
		Total		**50.5**	**33.7**	**16.7**
Oceania	16	Australia		3397.1	1558.5	1838.6
	24	New Zealand		2190.7 *	374.5 *	1816.1 *
		Total		**2342.8**	**1001.1**	**1341.7**
World		**World**	**3**	**638.3**	**353.0**	**285.3**

Table IX: **Insurance penetration: premiums[1] as a % of GDP in 2016**

	Ranking	Country		Total business	Life business	Non-life business
North America	15	Canada	11	7.49 **	3.27 *	4.22 **
	16	United States	10	7.31 *	3.02 *	4.29 *
		Total		**7.32**	**3.04**	**4.28**
Latin America and Caribbean	1	Cayman Islands		22.60 **	1.11 **	21.49 **
	13	Bahamas		8.69 **	2.20 **	6.48 **
	29	Jamaica		5.10 **	2.02 **	3.08 **
	34	Chile		4.77 *	2.92 *	1.85 *
	38	Trinidad and Tobago		4.43 **	1.41 **	3.02 **
	41	Brazil		4.04 *	2.28	1.76 *
	49	Colombia		2.72	0.86	1.86
	50	Argentina		2.60	0.43	2.18
	52	Panama		2.53 +	0.63 +	1.90 +
	54	Uruguay		2.42	0.92	1.50
	55	Mexico		2.34	1.07	1.27
	56	Costa Rica		2.27	0.35	1.92
	70	Peru		1.71	0.78	0.93
	71	Ecuador		1.62	0.35	1.27
	77	Dominican Republic		1.22	0.22	1.00
	78	Guatemala		1.21	0.24	0.97
		Total		**3.18**	**1.35**	**1.84**
Europe	6	Finland		11.75 **	9.53 **	2.22 **
	7	Netherlands		10.39 *	2.13 *	8.27 *
	8	United Kingdom	1	10.16 **	7.58 **	2.58 *
	9	Denmark		9.58 *	6.95 *	2.63 +
	11	France	1	9.23 **	6.06 *	3.17 **
	12	Switzerland		8.85 +	4.72 +	4.12 +
	14	Italy	1	8.24 *	6.23 *	2.01 *
	17	Ireland	1	7.21 *	5.96 *	1.26 *
	20	Sweden		6.61	4.76	1.84
	23	Belgium	1	6.36 *	3.72 *	2.64 *
	24	Germany	1	6.08 *	2.75 *	3.33 +
	25	Portugal		5.85 *	3.59 *	2.26 *
	26	Spain		5.57 *	2.80 *	2.77 *
	30	Slovenia		5.00	1.42	3.58
	31	Austria		4.87 *	1.75 *	3.12 *
	32	Norway	1	4.79 *	3.01 *	1.79
	36	Luxembourg	1	4.53 **	2.60 **	1.93 +
	37	Malta		4.52 *	3.18 *	1.34 *
	40	Cyprus		4.06 **	1.59 **	2.47 **
	45	Czech Republic		3.13 *	1.18 *	1.95 *
	46	Poland		2.91	0.99	1.92
	51	Croatia		2.57	0.86	1.71
	53	Hungary		2.52 **	1.26 **	1.27 *
	57	Slovakia		2.23 +	0.83 +	1.39 +
	58	Greece		2.22 **	1.01 **	1.20 **
	59	Bulgaria		2.18	0.39	1.78
	61	Serbia		2.13 *	0.52 *	1.61 *
	73	Turkey		1.55	0.19	1.36
	74	Ukraine		1.49 *	0.13 *	1.36 *
	75	Russia		1.38	0.25	1.13
	76	Romania		1.23 *	0.23 *	1.00 *
	88	Liechtenstein		**	**	**
		Total		**6.73**	**3.99**	**2.73**
Asia	2	Taiwan		19.99	16.65	3.34
	3	Hong Kong		17.60 +	16.20 +	1.41 +
	5	South Korea	13	12.08 *	7.37 *	4.72 *
	10	Japan	13	9.51 *	7.15 *	2.37 *
	18	Singapore	1	7.15 **	5.48 **	1.67 **
	28	Thailand		5.42 **	3.72 **	1.70 **
	33	Malaysia	13	4.77 **	3.15 **	1.62 **
	35	Israel		4.71 **	2.51 **	2.20 *
	39	PR China		4.15 +	2.34 +	1.81 +
	42	India	13	3.49 *	2.72 *	0.77 *
	44	Lebanon		3.32 *	1.02 *	2.30 *
	47	United Arab Emirates	12	2.87 *	0.69 *	2.18 *
	60	Indonesia		2.15 **	1.64 **	0.51 **
	62	Iran	14	2.07 *	0.25 *	1.82 *
	63	Jordan		2.05 *	0.23 *	1.82 *
	64	Qatar		2.00 **	0.03 **	1.96 *
	66	Macao		1.86 **	1.42 **	0.45 **
	67	Oman		1.83 *	0.22 *	1.61 *
	68	Philippines		1.78 **	1.23 **	0.55 **
	69	Vietnam		1.77 **	1.00 **	0.77 **
	72	Saudi Arabia		1.55 *	0.04 *	1.51 *
	79	Sri Lanka		1.12 *	0.52 *	0.60 *
	80	Pakistan		0.89 *	0.63 *	0.26 *
	81	Kuwait		0.89 *	0.15 *	0.74 *
	84	Kazakhstan		0.67	0.12	0.56
	85	Bangladesh		0.67 **	0.49 **	0.18 **
		Total		**5.59**	**3.74**	**1.85**
Africa	4	South Africa		14.27 **	11.52 *	2.74 **
	19	Namibia		6.87 *	4.69 *	2.18 *
	22	Mauritius		6.40 **	4.55 **	1.85 **
	43	Morocco		3.48 +	1.42 +	2.05 +
	48	Kenya		2.80 +	1.07 +	1.73 +
	65	Tunisia		1.97 **	0.36 **	1.61 **
	82	Angola		0.81 **	0.01 **	0.80 **
	83	Algeria		0.80 **	0.07 **	0.73 *
	86	Egypt	15	0.64	0.31	0.33
	87	Nigeria		0.27 *	0.09 *	0.19 *
		Total		**2.77**	**1.85**	**0.92**
Oceania	21	Australia		6.52	2.99	3.53
	27	New Zealand		5.52 *	0.94 *	4.58 *
		Total		**6.30**	**2.69**	**3.61**
World		**World**	**3**	**6.28**	**3.47**	**2.81**

Table X: **Macroeconomic indicators in 2016**

	Ranking by GDP	Country		Population (millions) 2016	USDbn 2016	Gross domestic product Real change (in%) 2016	2015	Inflation rate (in %) 2016	2015	Exchange rate local currency per USD 2016	2015	Change (in %)
North America	1	United States		324.0	18 502.8	1.6	2.6	1.3	0.1	1.00	1.00	0.0
	10	Canada		36.2	1 529.0	1.4	0.9	1.4	1.1	1.33	1.28	3.7
		Total		**360.2**	**20 031.8**	**1.6**	**2.4**					
Latin America and Caribbean	9	Brazil		209.8	1 798.4	−3.6	−3.8	8.8	9.0	3.48	3.33	4.6
	15	Mexico		128.8	1 044.2	2.1	2.6	2.8	2.7	18.69	15.87	17.8
	21	Argentina	19	43.9	549.2	−2.3	2.6	41.0	27.1	14.77	9.23	59.9
	40	Colombia		48.6	287.4	2.0	3.1	7.5	5.0	3054.12	2741.88	11.4
	44	Chile		18.2	245.0	1.5	2.3	3.1	3.3	676.94	654.07	3.5
	49	Peru		31.8	194.5	3.7	3.2	3.6	3.6	3.38	3.18	6.1
	59	Ecuador		16.4	99.9	−2.0	0.2	1.7	4.0	1.00	1.00	0.0
	65	Dominican Republic		10.6	72.0	5.9	6.9	1.7	0.8	46.15	45.05	2.4
	67	Guatemala		16.7	66.7	3.4	3.8	4.5	2.4	7.82	7.65	2.1
	70	Panama		4.0	55.2	5.2	5.8	0.7	0.1	1.00	1.00	0.0
	71	Costa Rica		4.9	53.6	4.4	2.8	0.0	0.8	538.43	534.57	0.7
	72	Uruguay		3.4	53.0	1.1	1.0	9.6	8.7	30.07	27.33	10.0
	80	Trinidad and Tobago		1.4	26.1	1.2	0.2	4.8	4.7	6.66	6.38	4.5
	82	Jamaica		2.8	14.8	1.7	1.4	5.5	3.7	117.82	116.90	0.8
	86	Bahamas		0.4	9.0	0.3	−1.6	1.0	1.9	1.00	1.00	0.0
	88	Cayman Islands		0.1	3.3	−2.2	−2.0	1.3	0.1	0.83	0.83	0.0
		Total	**18**	**636.6**	**5 134.6**	**−1.0**	**−0.2**					
Europe	4	Germany		82.6	3 460.4	1.8	1.5	0.5	0.2	0.90	0.90	0.3
	5	United Kingdom		65.7	2 628.9	1.8	2.2	0.6	0.1	0.74	0.65	12.8
	6	France		66.9	2 460.6	1.1	1.2	0.2	0.0	0.90	0.90	0.3
	8	Italy		61.0	1 851.5	1.0	0.7	−0.1	0.0	0.90	0.90	0.3
	12	Russia		143.4	1 274.4	−0.8	−3.7	7.0	15.5	67.06	60.94	10.0
	14	Spain		46.3	1 232.5	3.2	3.2	−0.2	−0.5	0.90	0.90	0.3
	17	Turkey		79.7	844.0	2.1	6.0	7.8	7.7	3.02	2.72	11.0
	18	Netherlands		17.0	770.9	2.1	2.0	0.3	0.6	0.90	0.90	0.3
	19	Switzerland		8.4	659.9	1.3	0.8	−0.4	−1.1	0.99	0.96	2.4
	22	Sweden		9.9	509.7	3.1	3.8	1.0	0.0	8.56	8.43	1.5
	24	Poland		38.0	471.4	3.2	3.5	−0.7	−0.9	3.95	3.77	4.6
	25	Belgium		11.3	466.4	1.2	1.5	2.0	0.6	0.90	0.90	0.3
	29	Austria		8.7	386.6	1.5	0.8	0.9	0.9	0.90	0.90	0.3
	30	Norway		5.2	372.3	0.9	1.6	3.6	2.2	8.40	8.07	4.2
	35	Denmark		5.7	306.7	1.1	1.6	0.2	0.5	6.73	6.73	0.1
	41	Ireland		4.7	287.3	4.1	26.3	−0.2	0.0	0.90	0.90	0.3
	45	Finland		5.5	237.3	1.6	0.3	0.4	−0.2	0.90	0.90	0.3
	46	Portugal		10.3	205.0	1.3	1.6	0.6	0.5	0.90	0.90	0.3
	48	Czech Republic		10.6	199.7	2.2	3.9	0.7	0.3	24.44	24.60	-0.6
	50	Greece		10.8	194.2	0.0	−0.3	−0.8	−1.7	0.90	0.90	0.3
	52	Romania		19.8	177.6	4.7	3.4	−1.6	−0.6	4.06	4.01	1.3
	57	Hungary		9.8	123.3	2.0	2.9	0.4	−0.1	281.52	279.33	0.8
	61	Slovakia		5.4	94.6	3.2	3.2	−0.5	−0.3	0.90	0.90	0.3
	62	Ukraine		42.8	89.6	0.8	−11.5	13.9	48.7	25.55	21.84	17.0
	69	Luxembourg		0.6	58.1	3.7	3.5	0.0	0.1	0.90	0.90	0.3
	73	Bulgaria		7.1	52.3	3.0	2.3	−0.8	−0.1	1.77	1.76	0.2
	74	Croatia		4.2	50.1	2.5	0.7	−1.1	−0.5	6.81	6.86	-0.8
	76	Slovenia		2.1	45.1	2.4	2.7	−0.2	−0.5	0.90	0.90	0.2
	79	Serbia		7.0	37.7	2.2	0.1	1.1	1.4	111.28	108.81	2.3
	81	Cyprus		0.9	19.8	2.8	1.7	−1.2	−1.5	0.90	0.90	0.3
	85	Malta		0.4	10.7	3.5	7.4	0.9	1.2	0.90	0.90	0.3
	87	Liechtenstein		0.0	5.4	1.0	0.2	−0.4	−1.1	0.99	0.96	2.4
		Total	**18**	**820.9**	**19 768.0**	**1.6**	**1.6**					
Asia	2	PR China		1 382.9	11 233.9	6.7	6.9	2.0	1.4	6.64	6.28	5.7
	3	Japan		126.3	4 953.7	1.0	1.2	0.0	0.2	108.47	120.05	-9.6
	7	India		1 328.8	2 272.2	7.0	7.6	5.0	4.9	67.31	65.46	2.8
	11	South Korea		50.8	1 414.3	2.7	2.6	1.2	0.7	1150.17	1156.57	-0.6
	16	Indonesia		260.9	932.6	5.0	4.9	3.5	6.4	13303.68	13393.75	-0.7
	20	Saudi Arabia		32.1	639.6	1.4	4.1	3.4	2.2	3.75	3.75	0.0
	23	Taiwan		23.5	507.5	1.4	0.7	1.4	−0.3	32.33	31.91	1.3
	27	Thailand		68.2	406.9	3.2	2.9	0.2	−0.9	35.30	34.25	3.1
	28	Iran		80.0	400.5	4.3	0.7	8.8	11.9	31437.36	29645.48	6.0
	31	United Arab Emirates		9.3	357.0	2.5	3.8	1.8	4.1	3.67	3.67	0.0
	33	Hong Kong		7.4	320.7	1.9	2.4	2.4	3.0	7.76	7.75	0.1
	34	Israel		8.2	318.3	3.7	2.5	−0.5	−0.6	3.84	3.88	-1.1
	36	Philippines		102.4	304.3	6.8	5.9	1.8	1.4	47.49	45.50	4.4
	37	Singapore		5.6	297.0	2.0	1.9	−0.5	−0.5	1.38	1.37	0.5
	39	Malaysia		30.8	291.9	4.2	5.0	2.1	2.8	4.21	4.05	4.0
	42	Pakistan		192.8	282.5	4.7	4.0	3.8	2.5	104.76	102.78	1.9
	43	Bangladesh		162.9	247.9	6.9	7.1	5.7	6.2	79.00	77.95	1.4
	47	Vietnam		94.4	204.7	6.2	6.7	2.7	0.6	22354.58	21908.50	2.0
	54	Qatar		2.3	147.1	2.3	3.6	2.7	1.9	3.64	3.64	0.0
	55	Kazakhstan		17.8	140.3	0.7	1.0	14.6	6.7	342.16	221.73	54.3
	56	Kuwait		4.0	125.6	3.5	1.8	3.2	3.3	0.30	0.30	0.4
	63	Sri Lanka		20.8	85.0	5.0	4.8	4.8	0.9	144.80	135.86	6.6
	64	Macao		0.6	74.5	−2.1	−21.5	2.4	4.6	8.00	7.99	0.1
	68	Oman		4.6	65.3	1.5	5.7	1.1	0.1	0.38	0.38	0.0
	75	Lebanon		5.9	47.4	1.5	1.3	−0.8	−3.8	1507.50	1507.50	0.0
	78	Jordan		7.7	39.1	1.9	2.4	−0.8	−0.9	0.71	0.71	0.0
		Total	**18**	**4 353.7**	**26 736.8**	**4.6**	**4.6**					
Africa	26	Nigeria		187.1	424.5	−1.7	2.7	15.6	9.0	255.72	192.44	32.9
	32	Egypt		93.3	332.8	4.3	4.4	10.2	11.1	8.14	7.35	10.8
	38	South Africa		55.0	294.2	0.3	1.3	6.3	4.6	14.71	12.75	15.4
	53	Algeria		40.3	152.0	3.2	3.8	6.4	4.8	109.33	100.69	8.6
	58	Morocco		34.8	102.4	1.0	4.4	1.6	1.6	9.81	9.73	0.8
	60	Angola		25.9	97.4	−0.1	3.0	32.1	10.3	162.80	120.06	35.6
	66	Kenya		47.3	68.4	5.9	5.6	6.3	6.6	101.50	98.18	3.4
	77	Tunisia		11.4	41.8	1.2	1.0	3.7	4.9	2.14	1.96	9.3
	83	Mauritius		1.3	12.1	3.7	3.5	1.0	1.3	35.37	35.06	0.9
	84	Namibia		2.5	11.4	1.9	5.3	6.7	4.8	14.71	12.76	15.3
		Total	**18**	**1 203.3**	**2 194.0**	**1.8**	**3.2**					
Oceania	13	Australia		24.2	1 260.1	2.5	2.4	1.3	1.5	1.34	1.33	1.0
	51	New Zealand		4.6	181.5	4.3	3.1	0.7	0.3	1.44	1.43	0.2
		Total	**18**	**39.5**	**1 469.7**	**2.7**	**2.5**					
World		**World**		**7 414.2**	**75 334.9**	**2.5**	**2.7**					

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Swiss Re Management Ltd
Swiss Re Institute
P.O. Box
8022 Zurich
Switzerland

Telephone +41 43 285 2551
Fax +41 43 282 0075
E-Mail: sigma@swissre.com

Armonk Office
175 King Street
Armonk, NY 10504

Telephone +1 914 828 8000

Hong Kong Office
18 Harbour Road, Wanchai
Central Plaza, 61st Floor
Hong Kong, SAR

Telephone + 852 25 82 5644

Authors:
Daniel Staib
Telephone +41 43 285 8136

Darren Pain
Telephone +41 43 285 2504

Dr. Mahesh H. Puttaiah
Telephone +44 80 4900 2127

***sigma* editor:**
Paul Ronke
Telephone +41 43 285 2660

Editor in chief
Kurt Karl,
Swiss Re Chief Economist
is responsible for the *sigma* series.

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Swiss Re Management Ltd
Swiss Re Institute
Mythenquai 50/60
P.O. Box
8022 Zurich
Switzerland

Telephone + 41 43 285 2551
Fax +41 43 282 0075
sigma@swissre.com
institute.swissre.com