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Emerging markets: the silver lining amid a challenging outlook

Executive summary

Emerging markets will power the global economy over the next 10 years, as the economic power shift from west to east continues.

Emerging markets will remain the growth engine of the global economy over the next decade and as part of that, we expect the shift of economic power from west to east to continue. Our projections indicate that together, the emerging economies will account for 60% of global growth in 10 years' time. The seven largest emerging markets will contribute up to 42% of global growth, and China alone 27%. Emerging market growth has moderated in recent years as economies have matured and become more exposed to external cyclical factors. In this context, we expect quality rather than speed of growth to be a differentiating factor among the emerging markets themselves.

Aggregate emerging market growth will outpace that of the advanced economies…

The overall emerging market story remains positive irrespective of growth moderation, in particular relative to the advanced markets. The five-years-ahead expected growth differential between emerging and advanced markets is 3.5%.[1] Current headwinds facing emerging economies include slowdown in many advanced markets, alongside policy normalisation with transition from quantitative easing to tightening in many of those key markets. Trade-related uncertainty and financial volatility further cloud the outlook. In response, we believe emerging markets will engage in more proactive macroeconomic policy management.

…even in the face of cyclical and structural headwinds.

Cyclical macroeconomic developments such as financial volatility and trade tensions have dominated the headlines in recent years, overshadowing some structural challenges that are now surfacing. The latter include rapidly ageing populations in some key markets and stagnating productivity. Given the heterogeneity of emerging markets, some of these challenges will likely affect certain economies more than others. In our view, countries that favour fiscal prudence, economic liberalisation, trade diversification, and those that enact reforms designed to promote productivity will be best prepared to deal with these structural and cyclical headwinds.

Prospects for the insurance industry in emerging markets remain strong.

The outlook for insurance markets in emerging economies remains strong, even as cyclical and structural factors weigh on overall macro growth prospects. The share of global premiums from emerging markets lags their share of world economic output, indicating upside potential for insurance demand. Many key emerging markets (eg, China, Mexico, Brazil, Russia, and Turkey) currently have a level of GDP per capita associated with an elasticity of demand for insurance that is higher than in the advanced markets. This bolstered demand for coverage during the years of economic slowdown after the financial crisis of 2008-09, and will likely continue to do so in the years ahead. Additionally, several industry-specific factors will encourage industry growth in the emerging markets, most notably introduction of best practices in regulation, improvements in market access and the early stages of technology adoption. Ongoing urbanisation and the drive to widen financial inclusion will further support development of insurance business.

Emerging Asia will lead the charge for emerging market premium growth over the next decade.

We expect the emerging market share of global insurance premiums to increase by about 50% over the next 10 years. Our forecasts show that emerging Asia will lead the charge for premium growth, expanding by three times the world average over the next two years, and China becoming the biggest insurance market in 15 years. For the emerging markets as a whole, we expect the non-life sector to maintain its steady performance of recent years with real growth of about 8%, and for life to bounce back to around 9% following a challenging couple of years. This compares to 2% and 1% sector growth in the advanced markets, respectively. Given their GDP per capita levels, we expect countries like Brazil, China, Mexico, Russia and Turkey to be at the forefront of premium growth in the medium term. Diversification by line of business and geography will be important given the heterogeneity of challenges that emerging markets face. Insurance firms that take a longer term view stand to benefit most from the growth opportunities that the emerging markets provide.

[1] According to the International Monetary Fund's *World Economic Outlook database*, October 2018.

Introduction

Emerging markets are maturing and rapid growth is becoming more difficult to achieve.

The economic future of emerging markets has "traditionally" been characterised as filled with optimism.[2] Given their structural comparative advantages – notably, demographics and productivity – per-capita incomes in the emerging markets have been expected to grow faster than those in advanced markets and lead to eventual economic convergence. More recently, however, these structural advantages are fading and adverse cyclical global developments such as trade uncertainty and financial volatility are making rapid growth more difficult to achieve. This requires a reassessment of the now more moderate long-term prospects in the emerging world and an understanding of the implications for the insurance industry.

sigma remains committed to analysis of trends in the emerging world.

sigma first devoted a publication to emerging markets in 1982.[3] As their profile increased with the end of the cold war and the rise of globalisation, so did our research focus on the emerging world. Starting in the year 2000, *sigma* began devoting issues to trends in the emerging markets on a regular basis, with this current issue being the 19th such-themed publication. At a time of global economic uncertainty, and of challenging circumstances for emerging markets, we believe the emerging world will continue to be the main source of growth for the global insurance industry. As such, we see our commitment to the analysis of trends in emerging markets as crucial as ever for the industry.

Cyclical developments have dominated in recent years, masking structural weaknesses.

The current headwinds affecting emerging markets involve both cyclical and structural challenges. Cyclical developments have prevailed in the political economy this past decade and include the contagion from crises in advanced markets, the ever-changing monetary and financial conditions, the steep downturn in commodity prices, and more recently, the rise in trade protectionism. The attention that cyclical challenges have received have partially masked some of the structural underlying weaknesses, like deteriorating demographic gains and stagnating productivity growth. A better understanding of these challenges is important as they ultimately require different strategies from both firms and policy makers.

The outlook for insurers in emerging markets remains favourable in spite of macroeconomic adversity.

In spite of current macro adversity, emerging markets remain in a favourable economic position, especially vis-à-vis advanced markets. Additionally, factors like the adoption of technology, urbanisation and a push for financial inclusion bode well for the insurance industry in emerging markets and will support sustainable growth in the years ahead. There is heterogeneity in the emerging world and therefore a selective approach is warranted. Those markets with stronger commitment to long-term policy making will differentiate themselves with greater economic resilience and stronger insurance market growth. In this vein, in our view while current macroeconomic challenges pose risks, they also create opportunity for insurers.

[2] 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.

[3] *The problems of new and expanding markets*, Swiss Re,1982.

Moderating, but still strong growth

Economic growth in emerging markets has moderated in recent years.

Since the early 1990s, emerging markets have been a key source of growth for the global economy. Aided by a strong performance in developing Asia – most notably China, but also India – the emerging market share of global output has risen steadily. The market's age composition, population size, and lower income contributed to more rapid growth. However, as emerging markets have moved up the production value chain, and the external environment has become increasingly more complex, rapid growth has been difficult to sustain.

Since 1990, there has been three distinctive periods of growth.

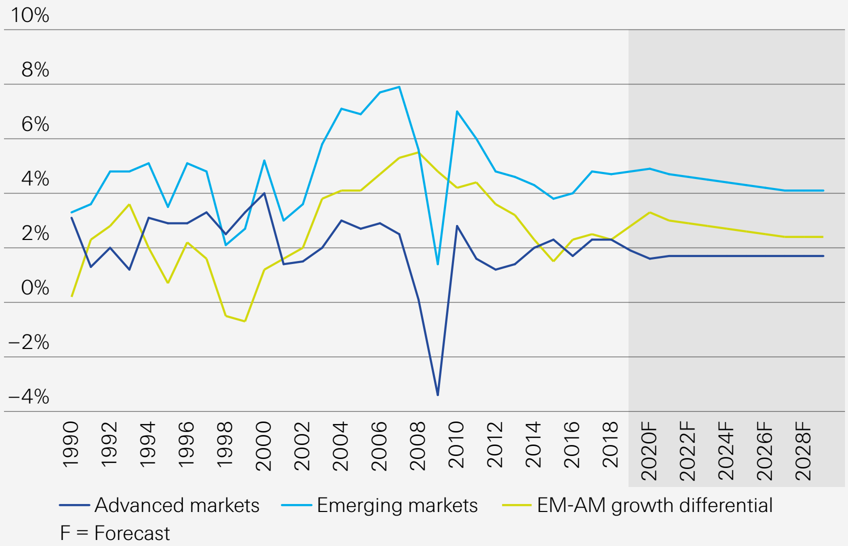
Figure 1 shows three distinct periods of growth for emerging markets together with a 10-year forecast horizon:

1. 1990 to 2002: real GDP growth averaged 4.0%, higher than the 2.5% of advanced markets due to a younger workforce and the early stages of the IT revolution and globalisation;

2. 2003 to 2012: a commodity-led expansion, fuelled by demand from China, led to an average real growth rate of 6.0%, despite the 2007–09 global financial crisis;

3. 2013 to 2018: average real GDP growth dropped to 4.4%, as the tepid post-financial crisis recovery in advanced markets and supply-side disruptions in commodities resulted in economic slowdown across the emerging world.

Figure 1
Real GDP growth in percent year-over-year



Source: Swiss Re Institute

The recent softening in emerging market growth is the result of cyclical factors, but there are structural challenges in play.

Following the financial crisis, the sluggish recovery of advanced markets ignited a debate about how deep the recession actually was, with researchers finding evidence of both cyclical and structural factors at play.[4] It revived the concept of secular stagnation, an economic state of anaemic growth and low interest rates.[5] After the contagion from the advanced markets slowdown (2009–2010) and the abrupt downturn in the commodity price cycle (2014–2016), emerging markets are now facing a similar defining moment. We believe that the most recent softening in emerging market growth was cyclical in nature, but that there are structural deficiencies that are having an impact in the longer run (see next section).

[4] *Economic letter: Structural and cyclical economic factors*. Federal Reserve Bank of San Francisco (FRBSF), June 2012, https://www.frbsf.org/economic-research/publications/economic-letter/2012/june/structural-cyclical-economic-factors/
[5] *Secular Stagnation: Facts, Causes and Cures*. Centre for Economic Policy Research (CEPR), 2014.

Moderating, but still strong growth

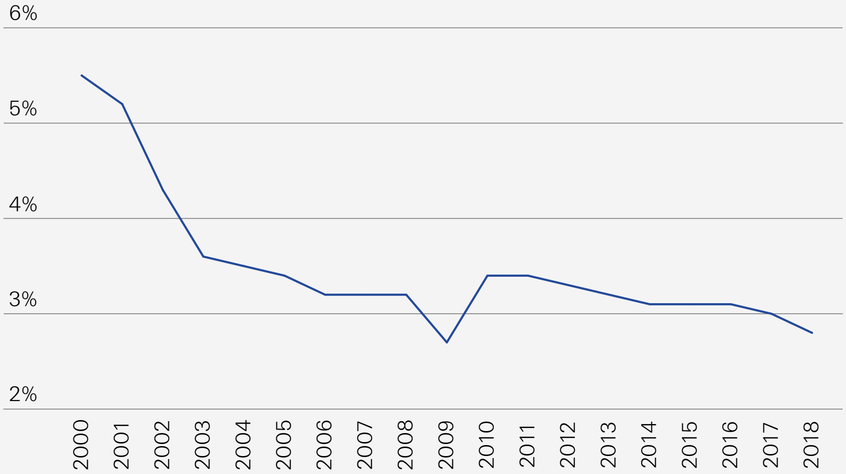
Forecasts for emerging market growth remain higher than for advanced markets.

Already in its 2014 World Economic Outlook (WEO), the International Monetary Fund (IMF) had begun to make downward adjustments to its five-years-ahead real GDP growth forecast for emerging markets, stating that "some of the setbacks appear related to structural factors and are hence likely to be more lasting".[6] In the years following the global financial crisis, the five-years-ahead growth forecast for emerging markets in the WEO was in the vicinity of 6.5–7.0%, but now stands closer to 5.0%. Prior to the crisis, the five-years-ahead expected growth differential between emerging and advanced markets was 4.5%, and is now closer to 3.5%.[7] Changes to the longer-term outlook (5+ years) suggest structural implications, whereas changes to the short-term outlook (1–2 years) are usually tied to cyclical factors. Growth expectations for emerging markets, however, are still significantly higher than those for advanced markets, which are forecast to grow at a 1.5% clip five years from now by the WEO.

We expect a shift from quantity to quality of growth in emerging markets…

The ongoing maturity process suggests – per the beta convergence hypothesis – that as income levels in developing countries catch-up with advanced economies, the speed is naturally set to slow. The silver lining is that the slower growth rates come with a more stable performance evidenced by lower growth volatility (see Figure 2) – and a shift from quantity to quality of growth. China is a primary example of this, with its current transition from an investment-driven model to one of consumption and services. China is transitioning from being a primary resource producer to being a producer in the secondary and tertiary sectors of the economy (see China and the five macroeconomic challenges).

Figure 2
Emerging market average 10-year rolling GDP growth volatility in percent terms



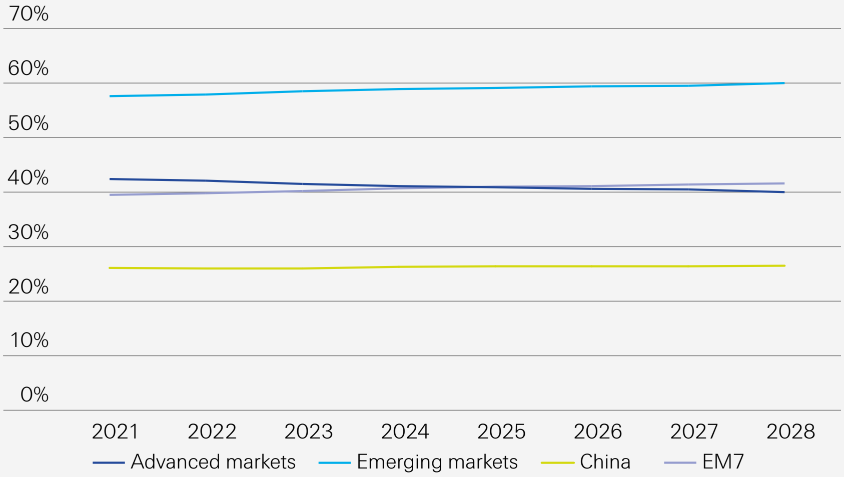
Source: Swiss Re Institute

…which at the same time will continue to power global growth.

Emerging markets, despite their now more moderate long-term outlook, remain the engine for global growth. Our current projections suggest emerging markets will contribute 60% of global economic growth in 2028 (see Figure 3). The seven largest emerging markets (EM7)[8] are forecast to contribute up to 42%, while China alone will account for around 27% of growth. We expect the shift in economic power from the west to east to continue, with emerging Asia becoming increasingly prominent.

[6] *World Economic Outlook: Legacies, Clouds, Uncertainties*, IMF, October 2014.
[7] *World Economic Outlook database*, IMF, October 2018.
[8] A group of emerging markets that include China, India, Brazil, Russia, Mexico, Indonesia and Turkey. Coined by: *How important are spillovers from major emerging markets?* Policy Research Working Paper, World Bank Group. June 2017.

Figure 3
Contribution to global economic growth



Source: Swiss Re Institute

We recommend a selective approach to emerging markets due to their heterogeneity.

When referring to emerging markets, one size does not fit all. They are heterogeneous on the development spectrum, and cannot be clustered by geography or income level.[9] Some have been recently re-labelled as "developed" by some classifications – such as Poland[10] and Argentina[11] – in light of improvements in capital markets infrastructure and market accessibility, while others are considered frontier markets,[12] that is those with faster, but more volatile growth. While there can be a certain degree of intra-regional synchronisation due to similar natural resources and trading partners, there is considerable divergence in cycles due to differences in fiscal and monetary policy, as well as in spreads and currency movements. For this reason, we recommend a selective approach as the prospects of a given market are increasingly driven by idiosyncratic factors and the degree of economic resilience.

[9] Z. Zang and Y. Gao, *Emerging Market Heterogeneity: Insights from Cluster and Taxonomy Analysis*, IMF working paper WP/15/155, 2015.
[10] *Poland: The Journey to Developed Market Status*, FTSE Russell, 2018.
[11] *MSCI Market Classification Framework*, MSCI, June 2018.
[12] See *sigma* 2/2016: Insuring the frontier markets, Swiss Re, for a detailed discussion on this topic.

Five macroeconomic challenges

Firms and governments are likely to have different strategies depending on the nature of the challenges they face.

Firms and governments respond differently depending on whether the challenges they face are cyclical or structural in nature. Firms may choose to be patient in the face of cyclical challenges, but may opt for a diversification strategy if the challenges in a market are structural. Governments, when faced with cyclical challenges, may use monetary and/or fiscal policy to stimulate the economy. If governments determine that the problem is more structural in nature, they may opt for deeper reforms, as cyclical-oriented policies may be inadequate. Firms need to reconsider whether the expected performance of their markets is aligned with their business strategy, while policy makers need to re-evaluate existing economic policies to ensure resiliency and sustainability.

Identifying whether challenges are temporary or permanent can help in the assessment of where risks and opportunities could emerge.

While structural economic factors are slow-moving and easier to predict, cyclical factors can quickly lead to market turbulence, as was the case in 2018. Sometimes this was driven by political developments in distant regions, or by key trading partners making unexpected policy decisions. As a general rule, factors that create transitory disturbances to indicators such as unemployment and output are classified as cyclical, while factors that are more permanent and change the nature of the workforce or productivity are structural. Assessing whether the challenges are temporary or permanent can help actors identify where the risks and opportunities could emerge, and enables them to frame current market distortions more precisely.

We identify five key challenges affecting the emerging market macroeconomic outlook.

We have identified five key challenges currently affecting the outlook for emerging markets. As each market is unique, not all challenges apply to each country equally. The challenges vary with respect to short-, medium- and long-term implications, and with respect to their origin (domestic versus external). Some of them are not necessarily mutually exclusive, and possess both cyclical and structural elements.

Table 1
Macroeconomic challenges scorecard for the EM7 economies

Challenge	Nature	China	Brazil	India	Russia	Mexico	Turkey	Indonesia
Ageing demographics	Structural	🔴	🟡	🟢	🔴	🟢	🟢	🟢
Trade dependence	Cyclical/structural	🟡	🟢	🟢	🟢	🔴	🔴	🟡
Financial volatility	Cyclical	🟢	🟡	🟡	🟡	🔴	🔴	🟡
Productivity growth	Structural	🟡	🟡	🟡	🔴	🟡	🟢	🟡
High indebtedness	Cyclical/structural	🔴	🔴	🟢	🟢	🟢	🔴	🟢

🔴 = current conditions pose an obstacle for growth prospects and require action
🟡 = current conditions are not critical but could benefit from proactive policymaking
🟢 = current conditions do not represent an obstacle for growth

Source: Swiss Re Institute

1. Ageing demographics

Ageing demographics is a global concern including, now, in emerging markets.

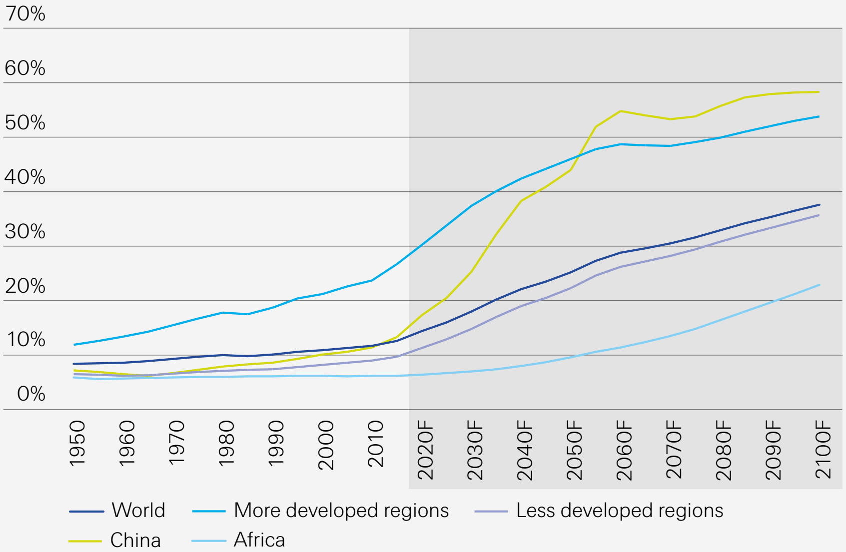
Ageing demographics are an increasing concern for most markets. The decline in fertility rates and the increase in life expectancy are resulting in a shrinking workforce and higher dependency ratios.[13] For a long time, an ageing workforce was perceived as an advanced market issue only. However, the current demographic projections show that ageing in emerging markets is about to accelerate (Figure 4).

[13] Defined as the sum of the population aged 0–14 and 65+, divided by those aged 15–64.

The demographic adjustment in some emerging markets will be more abrupt than in advanced in the past.

The adjustment in some key emerging markets will be more abrupt than it was for advanced markets. The populations in China and Thailand, for example, will age considerably faster in the coming decades than those in Europe and North America once did.[14] Both markets are getting richer and developing, but are at risk of exhausting their demographic dividends. The public policy response will be key. It may be easier to raise the retirement age in China, where policy makers have a long-term policy plan, than in European countries. While China has relaxed its one-child policy, this will not stop the current demographic dynamics from playing out. By 2055, the old-age dependency ratio[15] of China is expected to reach 50%, representing a significant challenge to society. In Africa, the population continues to be considerably young, and its markets will continue to benefit from a growing working age population.

Figure 4
Old-age dependency ratio



Source: *World Population Prospects: The 2017 Revision*, United Nations, Department of Economic and Social Affairs, Population Division, 2017.

Ageing affects the output of an economy primarily through labour supply.

Impact on the economy

An ageing population affects the supply of labour. The output of an economy is vastly determined by the labour input (population aged 15–64) and the productivity of the workers. Fewer workers leads to lower output. Ageing also disrupts the savings and consumption habits of individuals as well as the level of investment. Individuals do most of their saving during their working years, providing a steady supply of investable capital for an economy. Workers' savings and pension contributions are invested in capital markets, which in turn stimulates the real economy and generates returns. So when a larger share of the population is of working age and saving, not only does it generate more output, but the large supply of labour and capital helps to contain wages, inflation and interest rates.

[14] *Pensions at a Glance Asia/Pacific 2018*, OECD, 2008, https://doi.org/10.1787/pension_asia-2018-en
[15] Defined as the share between the population aged 65+ and those aged 15–64.

The policy measures required to address the problem are hard to implement.

An ageing population has structural macroeconomic implications that monetary and fiscal policies alone cannot address. Governments have higher outlays for healthcare and pensions, which puts pressure on public finances and crowds out government spending on other items such as infrastructure and education. As a result, governments are often forced to consider policy measures to mitigate the economic impact that in turn may have an impact on retirement age, long-term care, fertility rates, immigration and incentives to save. Such measures have been difficult to implement in the past due to the politics around them.[16]

2. Trade dependence

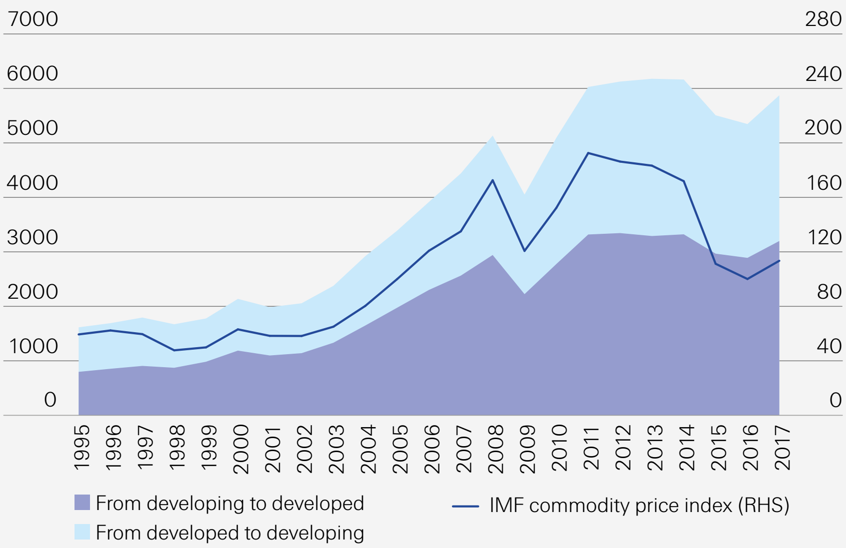
Certain emerging markets have developed dependency on trade.

Since emerging markets moved away from import substitution industrialisation models,[17] globalisation has been one of the key structural economic growth drivers. The increasing trade of goods and services has resulted in technology and knowledge spill-overs, higher levels of foreign direct investment (FDI) and stronger competition, all of which have helped emerging markets achieve higher employment and income levels and to develop faster. However, increased openness has created trade dependency for some markets. It has increased vulnerability to commodity price volatility generated at times by external developments.

Erosion to the terms of trade inflicts significant pain in commodity-exporting markets.

The cyclical component of trade is best reflected by commodity price swings, which are subject to temporary supply and demand shocks. Consider for example the sharp adjustment in commodity prices from 2014 to 2016 that inflicted considerable pain on commodity-exporting countries. This cyclical deterioration in the terms of trade – caused by fears of a hard landing of the Chinese economy and by politically motivated disruptions to oil production – affected income, employment, public finances, financial market stability, FDI and total output.

Figure 5
Trade volume (stacked USD bn) and commodity prices



Source: United Nations Conference on Trade and Development, Swiss Re Institute

[16] W. Kielholz, "Demographie und Zukunftsfaehigkeit – Politische und oekonomische Herausforderungen einer alternden Gesellschaft" *NZZ Libero*, 2017.
[17] Economic model where domestic production is prioritised over foreign imports.

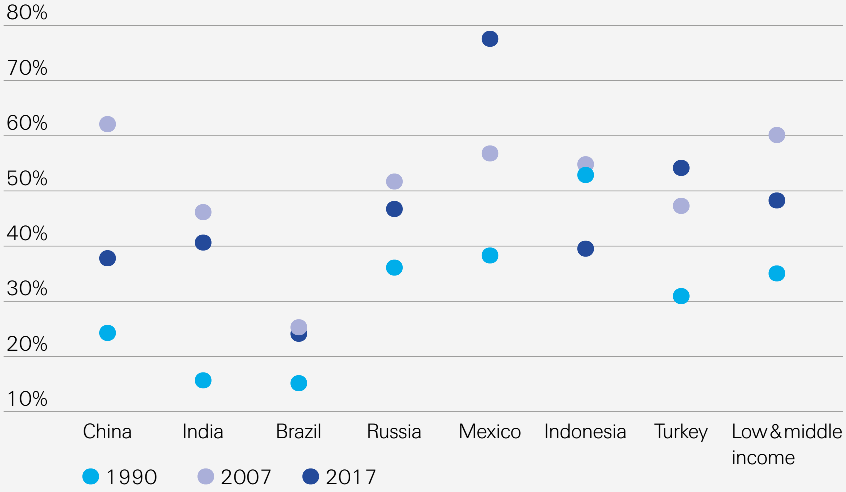
Global trade growth has slowed since the global financial crisis.

On the other hand, the structural component of trade is best exemplified by the slowdown in trade growth since the global financial crisis. Although there was a modest rebound after the crisis, world trade has been growing at a slower pace (about 1:1 with global real GDP) than pre-crisis (2:1). Trade as a share of GDP in the aggregate of low and middle income countries rose from 35% in 1990 to 48% in 2017, after having peaked at 61.5% in 2007. Structural and cyclical factors lie behind the trade outlook and it is difficult to determine their relative importance, but the slower rate of trade growth is highly relevant for emerging market growth.[18]

We expect global trade growth to remain close to current levels.

Although commodity prices have improved since 2016 for commodity-exporting markets, volatility in international prices can never be ruled out for the future. Swiss Re Institute also expects global trade growth to remain close to current levels and that it will not return to twice the rate of GDP growth.[19]

Figure 6
Trade (exports plus imports) as a share of GDP



Source: The World Bank, Swiss Re Institute

Protectionism is on the rise. A reversal of globalisation is a risk for emerging markets.

A rise in nationalist economic policies

In our view, the recent rise in nationalist economic policies is a serious threat to the status quo of globalisation. The Sino-US trade conflict only accelerated a trend towards rising "harmful" measures (mostly non-tariff barriers) that the Global Trade Alert has been documenting since 2009.[20] Slowing (or reversing) globalisation would have negative implications for emerging markets, as many still remain commodity exporters or intermediate goods producers (Figure 6). However, we see encouraging signs in certain areas. Latin America is lobbying for free trade as the region tries to hedge against potential lost trade with the US. In Asia, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTTP) will come into force without the US and China in January 2019, and the EU has proposed 0% tariffs on auto parts in response to US threats of increasing them. However, the rise in bi-lateral/regional trade deals highlights the need to fix the governance of the global trading system, a sign that the World Trade Organisation (WTO) has failed to evolve with the global economy.

[18] See *sigma* 4/2015, World Insurance in 2014, Swiss Re.
[19] Ibid.
[20] See *Global Dynamics* data points from Global Trade Alert, https://www.globaltradealert.org/global_dynamics/day-to_1101/flow_all

Diversification can help cope with the trade-related conflict.

If market-adverse political developments prevail and a full blown trade war materialises, the geopolitical ramifications would be significant.[21] Policies to promote diversification – both in terms of trading partners and products – is a way to cope with the recent political uncertainty and to avoid overexposure to the conflict.

3. Financial volatility

Deeper financial markets support growth, but this also increases exposure to adverse global developments.

Having a deeper financial sector and being more integrated in the global financial system can help emerging economies develop over the long-run. It helps channel savings into the real economy, reduce the cost of capital due to better risk allocation and increases the access to foreign capital. We also believe that financial liberalisation is beneficial for emerging markets in spite of the potential for short-term macroeconomic volatility stemming from the increased exposure to the ebbs and flows of the global financial system.[22] Ultimately, the potential for a full blown financial crisis originating from an external development is usually the result of poor policy management.

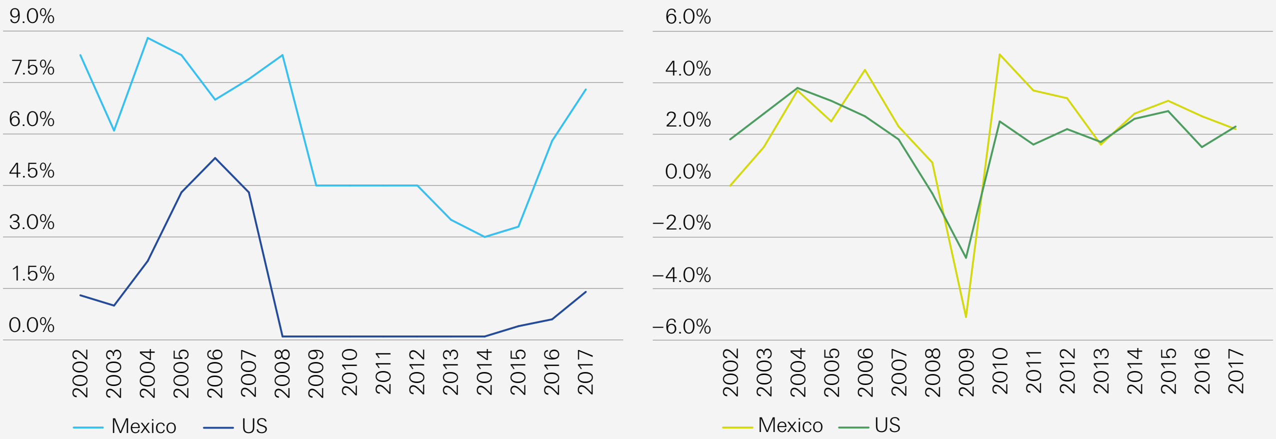
Monetary policy in advanced markets continues to affect emerging markets.

Central bank policy in advanced markets continues to have a significant impact on global financial conditions. The central banks in emerging markets are often forced to make monetary policy adjustments at inconvenient times to counter the effect of decisions taken abroad. For example, in 2018 loose fiscal policy in the US and a tightening of monetary policy by the Federal Reserve resulted in strengthening of the US dollar. The subsequent drop in demand for emerging market assets has had significant implications for their currencies and interest rates. Central banks in emerging markets have had to tighten their policy stance to avoid second-order effects on consumer prices that would put their economies at risk.

Mexico's interconnectedness with the US is a prime example.

A prime example of this is the economic and financial interconnectedness of Mexico with the US. Their cycles have synchronised so much, that when the US central bank increased its policy rate in 2015 for the first time since the global financial crisis, the Mexican central bank followed two days after to ensure an orderly adjustment in the Mexican financial market – albeit with mild success (Figure 7). In several emerging Asian economies, such as Indonesia and the Philippines, policy makers were quite successful in defending their currencies by hiking interest rates.

Figure 7
Central bank policy rates (LHS), real GDP growth (RHS), in percent



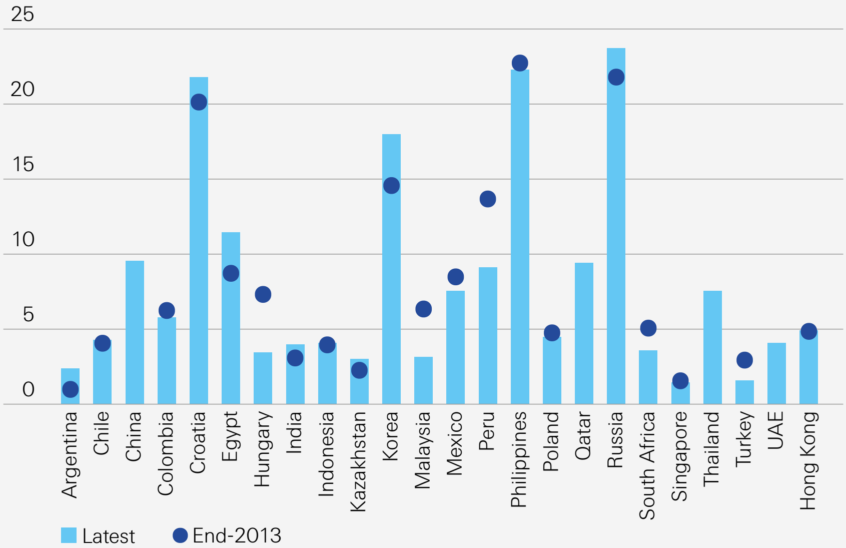
Source: Bank for International Settlements, Swiss Re Institute

[21] See *sigma* 5/2018, Global insurance perspectives 2020, Swiss Re Institute, for a detailed description of our trade war scenarios and the implications for insurance.
[22] Transcript of *IMF Economic Forum: is Financial Globalization Harmful for Developing Countries?* International Monetary Fund, 2003.

As financial conditions tighten, emerging markets with weak external financing positions come under pressure.

In 2019, global quantitative easing is set to turn to tightening, and financial conditions in emerging markets will tighten as for advanced economies, raising questions about their vulnerability to capital flows. In this regard, 2018 seemed to be a turning point in global financial conditions. Argentina and Turkey underwent significant financial turbulence, as their foreign exchange (FX) reserves were too low compared to their external financing positions (see Figure 8). In Turkey's case, political rifts with the US also acted as conflating factors. In the past, when episodes of nominal currency devaluations with similar patterns to that of the lira occurred (there are nine such cases since 1995), real GDP fell sharply in the year of the devaluation before recovering rapidly. Current accounts go from significant deficits to surpluses due to import compression and rising exports.[23] Vulnerability among emerging markets varies: those with floating FX regimes, properly anchored inflation rates, more robust currency reserves, longer-dated external debt maturity and those countries with healthier current account and fiscal deficits often fare better.

Figure 8
Ratio of FX reserves to short-term debt



Source: Short-term debt from JEDH WB/BIS/IMF/OECD, FX reserves from Datastream/IMF, Swiss Re Institute

We expect financial volatility to continue. More developed financial systems and macro prudential frameworks can help.

Although Swiss Re Institute expects emerging markets to continue to be subject to financial volatility, a full-blown systematic EM crisis is unlikely. Rather we see continued differentiation from investors in favour of markets with stronger fundamental underpinnings. Countries with more developed financial systems can prevent financial volatility from turning into macroeconomic volatility as deeper financial systems have been found to serve as shock absorbers in the face of real external shocks.[24] Macro-prudential frameworks are being set up and should be enhanced further to pre-empt a volatility-led crisis.[25]

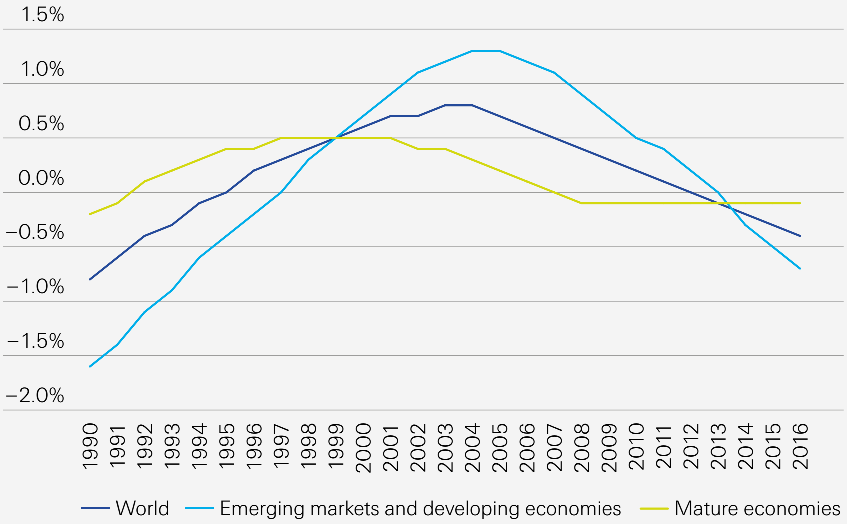
[23] *Global Macro Views – Large Devaluations*, Institute for International Finance, August 2018.
[24] *Revisiting the Link Between Finance and Macroeconomic Volatility*, IMF Working Paper, 2013.
[25] "Moving forward with macroprudential frameworks", in *Annual Economic Report: Promoting global monetary and financial stability*, BIS, June 2018.

Productivity growth in the global economy is slowing, more so in emerging markets.

4. Slowdown in productivity growth

Using a growth accounting framework, data shows that the global economy has been subject to a total factor productivity (TFP) growth slowdown in recent years (Figure 9). The trend is attributable for the most part to emerging markets and the 2014–2016 commodity-related slowdown.[26] During that period, employment levels remained relatively stable, but output decreased, highlighting the relationship between productivity growth and commodity prices in emerging markets. A 2017 study found that the relationship is more evident in the short than in the long run, and an average commodity-exporting emerging economy can expect a drop of between 0.7 and 1.0 percentage points of TFP growth when commodity prices fall by 10%. The study further concludes that commodity prices can only explain part of the recent drop in productivity, making reassessment of other structural factors that are at play essential.[27]

Figure 9
Growth of total factor productivity, trend



Note: trend obtained with a Hodrick-Prescott filter with a λ of 100.
Source: *The Conference Board Total Economy Database* (adjusted version), March 2018.

Changing from investment-dependent to domestic consumption models means a change to lower productivity frameworks.

During the 1990s and early 2000s, emerging markets benefited from a catch-up phase where globalisation, technology adoption and advancements in social and economic reform provided a boost to productivity. This freed resources for other sources of growth. More recently however, many emerging markets – most notably China – are shifting their economies from investment-dependent to domestic consumption models. With this change, productivity is bound to fall as gains in the service sector are slow to materialise.

Traditional infrastructure investments can help – but innovation and technology adoption will be the key drivers of productivity growth.

With growth potential now expected to be lower, innovation and technology adoption (towards information assets) will be a global imperative. In many emerging markets, there is also room to boost productivity via traditional infrastructure investments such as roads, ports and utilities.[28] If the other challenges discussed in this *sigma* hold, governments in emerging markets could face higher borrowing costs to address the existing infrastructure gap. Public-private partnerships can help lessen the burden. For this reason, domestic politics will play an important role.

[26] *Asia Insights – Emerging Markets Are Leading the Global Productivity Slowdown*, The Conference Board, 2016.
[27] *TFP growth and commodity prices in emerging economies*, Banco de Espana, 2017.
[28] *sigma* 2/2018, Constructing the future: recent developments in engineering insurance, Swiss Re Institute.

Business-friendly administrations that encourage greater private sector participation by increasing investor rights' and lowering the barriers for private sector investments will find it easier to narrow the infrastructure gap.[29]

Debt-fuelled stimulus can support growth, but should be accompanied by structural reforms to ensure sustainability.

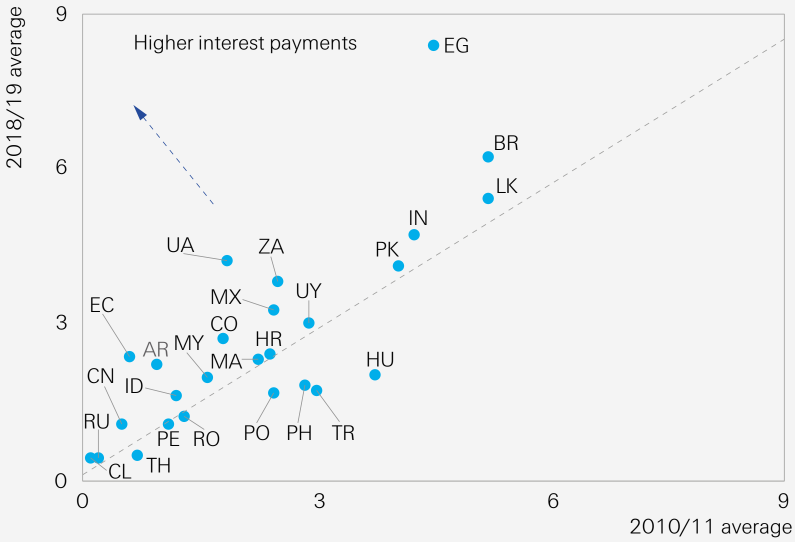
5. High indebtedness

Debt-fuelled growth – whether in domestic or foreign currency – should, at most, be used as a short-term stimulus and be accompanied by structural reforms that ensure the debt issued is sustainable. In our view, debt-fuelled growth is a dangerous strategy. Many emerging markets have failed at it in the past, as it has always been politically challenging to implement fiscal consolidation afterwards. Research suggests that both the trajectory and the level of public debt have implications for growth, and that higher levels of debt are associated with higher levels of output volatility.[30]

Ultra-low interest rates in advanced markets have reduced borrowing costs for emerging markets.

The ultra-low interest rate environment in advanced economies after the global financial crisis decreased the cost of borrowing for emerging markets, which they gladly took on, pushing debt levels to record highs.[31] Emerging markets, and in particular China, have seen their debt burden as a percentage of GDP increase dramatically – 15 and 20 percentage points respectively in the 10 years ending 2017 (see Figure 10). The concern is most acute for countries with systemic current and fiscal deficits, as well as inadequate foreign exchange buffers and foreign-denominated debt.[32]

Figure 10
Interest payments, % of GDP



Source: Institute of International Finance Global Debt Monitor, Swiss Re Institute

[29] *Outperformers: High-growth emerging economies and the companies that propel them*, and *Infrastructure Investing*. McKinsey Global Institute, September 2018, and *It Matters*, Swiss Re and Institute of International Finance, 2014.
[30] A. Pescatori, D. Sandri et. al., *Debt and Growth: is there a magic threshold?* IMF working paper, 2014.
[31] *Annual Economic Report: Promoting global monetary and financial stability*, BIS. June 2018.
[32] Ibid.

Foreign-denominated debt can be especially difficult to repay.

The rapid rise in foreign-denominated debt in emerging markets has become a major concern. Foreign debt is not only an outright obstacle to growth, but many emerging markets are limited in their ability to borrow in their own currency. Access to cheap credit usually happens at a time of economic growth as borrowers are profiled as low-risk. When cycles turn, foreign-currency borrowing quickly becomes a problem in the face of a real FX depreciation as debt becomes more difficult to service (challenge #3 above).[33] Questions around sovereign creditworthiness emerge, which restricts access to credit even further.

Household indebtedness and that of non-financial corporations has also increased.

Indebtedness of households and non-financial corporations in emerging markets has also trended upwards. The higher household indebtedness stems from the low interest rate environment adding to the longer-term trend of demographic changes creating a greater demand for housing; while on the corporate front, the deepening of international debt markets and the higher appetite for risk provided firms with greater incentives to increase leverage.[34]

Good fiscal management is a key differentiator for emerging markets.

For this reason, better fiscal management and the use of macro-prudential policies as a means to contain debt levels will be a key differentiator. In the case of public debt, better tax regimes, improved tax collections, efficient public spending and efforts to address the fiscal burden that corruption can create will all help governments become more efficient and promote growth.

China and the five macroeconomic challenges

China will be uniquely impacted by the five macro challenges.

China has driven emerging market growth over the last 20 years. It is now the world's second largest economy, although still lagging the world average in terms of GDP per capita.[35] When it comes to our five macroeconomic challenges, China's prospects are mixed. It is both a leading and an emerging economy that is transitioning from one development path to another. Although progress has been made, patience has to be exercised when looking at how sustainable growth is.

China's population is rapidly ageing. Reforms have resulted in higher birth rates, but progress has been slow.

Ageing: China is going to age extremely rapidly over the next decade, at four times the speed Europe aged the last century, due to the one-child policy enacted in 1979. To tackle demographic issues, particularly its ageing population and shrinking workforce, the government abandoned the one-child policy in 2015. However, the low birth rate is not easily be reversed. After accelerating in 2016, the highest birth rate this century, both the absolute number of new-borns and the birth rate fell in 2017. Births are expected to decline in 2018 also as the number of women of fertile age continues to shrink. Meanwhile, the younger generation is delaying marriage and having children due to the rising cost of living and concerns about jeopardising their careers. The government responded by further incentivising would-be parents with tax deductions for education, amongst other policies. However, it will take generations to reverse the demographic impact of the one-child policy.[36]

Growth has shifted towards domestic consumption. However, a trade war with its biggest trading partner, the US, is a concern.

Trade dependence: Trade and investment contributed enormously to China's economic development over the past decades. More recently, the government has worked to increase the share of domestic consumption. The contribution of domestic consumption to GDP has accelerated significantly, accounting for almost four-fifths of GDP growth in the third quarter of 2018 (up from half in 2009). Meanwhile, the slowdown in global trade reduced the contribution of trade (down from 34% of GDP in 2007 to 19% in 2017).[37] Looking ahead, the shift towards a consumption-driven

[33] B. Eichgreen, R. Hausmann et. al. *Currency mismatches, debt intolerance, and the original sin: why they are not the same and why it matters*, 2007.
[34] *Economic Outlook*, Issue 2, OECD, 2017.
[35] See IMF Datamapper at: https://www.imf.org/external/datamapper/NGDPDPC@WEO/OEMDC/ADVEC/WEOWORLD/CHN
[36] "China unveils draft measures on individual income tax deductions", *Xinhua*, 20 October 2018 http://www.xinhuanet.com/english/2018-10/20/c_137547189.htm
[37] Data source China's National Bureau of Statistics (NBS)

economy in China will continue, particularly since the middle class in China is still rapidly expanding. The government continues to introduce policies to stimulate domestic consumption – for example, by introducing additional personal income tax reforms in 2018.[38] Additionally, China's role and position in the global supply chain is changing. Chinese companies are increasingly selling products under their own brands, while cost and other considerations are driving both Chinese and multinational companies to relocate production to other overseas locations. Nevertheless, alongside further market liberalisation and the country's further integration into the global economy, China will remain dependent on international trade (both goods and services) in the foreseeable future.

China is promoting innovation and openness in response to slowing productivity growth.

Productivity growth: From a longer term perspective, China's main policy responses to the slowdown in productivity growth have been promoting innovation and openness, while fostering new strategic industries.[39] R&D spending in the economy continues to grow, as do the number of businesses in the national technology incubator and the value of strategic industries as a percent of GDP. Increasing productivity growth is particularly important given the ageing demographic challenge which has resulted in a diminishing labour supply and a need to replace labour with capital. Additionally, the further opening up of the Chinese market to foreign companies and increasing foreign participation in the domestic bond market (Bond Connect)[40] is a positive step, in our view. It will contribute funding for investments in innovation and technology although the main source continues to be a high domestic savings rate.[41]

China has demonstrated financial resilience.

Financial volatility: China and many other emerging markets have been able to shield themselves against external financial volatility over the past years, mainly due to the fact that their financial systems were to varying extents closed to foreign participation. This is changing. China in particular has taken steps to further liberalise its financial sector and embrace market mechanisms in the setting of interest rates and currency values. The renminbi has depreciated by 6% against the US dollar over the course of 2018, alongside increasing market concerns around the US-China trade dispute. Yet, a broader currency basket only depreciated 1.7% during the same period, showing relatively much more stability compared to many other emerging markets, in particular Turkey and Argentina. This was also observed during the 2013 Taper Tantrum, and in early 2016 amid global growth concerns. The PBoC has recently been working to strengthen the effectiveness of monetary policy using a standing-lending facility and open-market operations to guide interest rates rather than setting quantitative targets. The transition towards a new, more flexible, hybrid (quantitative and price-based measures coexist) monetary policy framework however, will need to be gradual, to ensure that it is effective. As China continues to liberalise its financial sector and integrate itself into the global financial system, improving financial resilience will remain one of the top policy issues for regulators.

High levels of public and private debt remain a key challenge.

Indebtedness: Corporate sector debt expanded significantly after the global financial crisis, when the Chinese government injected a substantial amount of credit to support the economy, causing overall debt to rise rapidly. Total non-financial debt-to-GDP sharply increased from less than 150% at year-end 2008 to over 200% by 2013, peaking at about 260% in the first quarter of 2018. Although de-leveraging measures consisting of all-round financial regulation have been tightened since 2016, the issue remains at the top of the government's agenda as efforts to control the debt and de-risk the financial sector are at odds with the Chinese government's

[38] China ranks only 165 in the world for trade openness, just ahead of the US at 173, according to *theglobaleconomy.com*, https://www.theglobaleconomy.com/rankings/trade_openness/
[39] Initiated in 2015, "Made in China 2025" is a multi-stage roadmap to upgrade and consolidate China's manufacturing industry for improvements in total factor productivity over a 10-year period.
[40] Bond Connect is a market access scheme allowing investors from mainland China and overseas to trade in each other's bond markets. See http://www.chinabondconnect.com/en/index.htm
[41] "Foreign institutions pile into Chinese government bonds", *FT.com*, https://www.ft.com/content/f9c8bb9e-f94f-11e8-af46-2022a0b02a6c?segmentId=080b04f5-af92-ae6f-0513-095d44fb3577

desire to maintain stable economic growth. Encouragingly, the ratio of corporate debt-to-GDP had declined for seven consecutive quarters to year-end 2017, though having rebounded to 164.1% in the first quarter of last year as the increasing risk of a growth slowdown required renewed stimulus measures.[42]

The transition of China's economy is ongoing. China remains on course to contribute about 25% of cumulative global growth over the next decade.

The transition of the economy in China has been going on for some time already, and because of inherent difficulties will take much longer still. The government's preferred approach of gradualism entails incremental changes instead of radical transformations, as embodied for example by the 10 year horizon for the Made in China 2025 initiative. Furthermore, the objective to move towards a new economy based on services and innovation is inevitably non-linear and requires adaptation to the economic environment, such as increasing fixed asset investment 2019 to offset some of the slowdown in external demand. The challenges facing China's economy for the next decade are substantial. However, government policies are in place to alleviate the stress. We forecast that China will be contributing over 25% of cumulative global growth over the next decade, and will grow at an annual rate of around 5% over the next decade.[43]

Long-term policymaking can support macroeconomic resilience

Policies that promote long-term sustainability will achieve economic resilience.

Governments that are willing to undertake the right structural reforms to promote long-term sustainability – occasionally at the expense of short-term economic success –can achieve economic resilience. It requires political commitment and long-term planning, which we believe will be a key differentiator amongst emerging markets. The Latin American debt crisis in the early 1980s was an episode that resembled the current emerging market outlook, and can be used as guidance.

Latin America became the epicentre of an international debt crisis in the early 1980s.

Much like in the period preceding the 2014–16 slump, in the 1970s a mix of low interest rates and high commodity prices provided countries in Latin American with cheap foreign capital, leading to robust growth. However, this influx of capital did not necessarily strengthen export industries. Instead, it was used to raise private consumption of foreign-imported goods. The resulting current account deficits and rising debt levels eventually led to a crisis as they conflated with tightening US monetary policy and a fall in global trade. Internally, poor management aimed at currency overvaluation, and fiscal excesses embedded in monetarist/authoritarian regimes were the norm for domestic economic policy.[44] As a result, Latin America became the epicentre of an international debt crisis, requiring aid packages and debt rescheduling from the IMF and other multilateral institutions. Mexico, Brazil and Argentina were the biggest debtors, but several other countries also struggled on account of the crisis, like Venezuela, where 95% of export revenues came from oil, and Chile, which had one of the world's highest per capita debt ratios and faced considerably low copper prices.

Countries with market-friendly reforms have become more resilient.

Since the 1970s, there have been clear-cut differences in the approach that some governments in the region have adopted with respect to economic policies. Countries with market-friendly frameworks, low tariff complexity and fiscal prudence (like the Pacific Alliance[45]) have become more resilient as they allow for a more efficient re-adjustment process of the real economy. Others that have relied on heavy state intervention, high levels of indebtedness and distortive economic policies (like Argentina and Brazil) have struggled to cope with external adversity.

[42] Source of data BIS, updated as of 19 October 2018.
[43] Our long-term forecast is largely in line with consensus on growth potential for China. For example see *Long-term baseline projections,* OECD Economic Outlook No 103, July 2018, or *Long-term forecasts – Asia powers global growth,* Standard Chartered, 8 January 2019.
[44] Pastor, Manuel. "Latin America, the Debt Crisis, and the International Monetary Fund." *Latin American Perspectives,* vol. 16, no. 1, 1989, pp. 79–110. JSTOR, JSTOR, www.jstor.org/stable/2633823.
[45] Includes Chile, Colombia, Mexico and Peru.

Figure 11
Competitiveness scorecard for select countries in Latin America, 2018

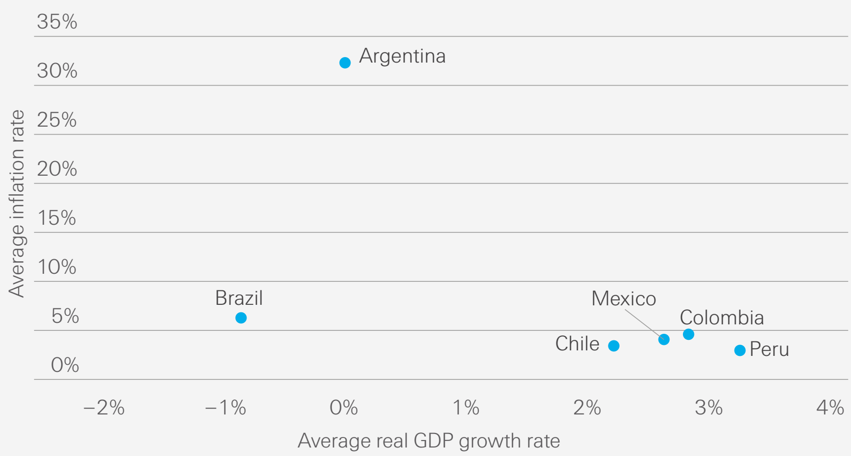
Pillar	Argentina	Brazil	Chile	Colombia	Mexico	Peru
Pillar 1: Institutions	77	93	32	89	105	90
Pillar 2: Infrastructure	68	81	41	83	49	85
Pillar 3: ICT adoption	65	66	49	84	76	94
Pillar 4: Macroeconomic stability	136	122	1	56	35	1
Pillar 5: Health	53	73	30	35	56	32
Pillar 6: Skills	51	94	42	80	86	83
Pillar 7: Product market	120	117	13	85	54	50
Pillar 8: Labour market	116	114	45	80	100	72
Pillar 9: Financial system	97	57	20	53	61	63
Pillar 10: Market size	34	10	46	37	11	49
Pillar 11: Business dynamism	84	108	46	49	41	92
Pillar 12: Innovation capability	54	40	53	73	50	89
Global Competitiveness Index 4.0	**81**	**72**	**33**	**60**	**46**	**63**

Source: *The Global Competitiveness Report*, World Economic Forum, 2018

Members of the Pacific Alliance have all performed positively during the recent challenging stretch.

Over the challenging 2014–2018 period, the countries that are part of the Pacific Alliance have all had average real GDP growth rates higher than 2% and average inflation rates lower than 5%. Meanwhile, Brazil and Argentina have had zero or negative output growth, and in the case of Argentina, a stubbornly high level of inflation. Given the relationship between the overall economy and the insurance industry, this phenomenon is also reflected in premium growth: with the exception of Peru, all of the Pacific Alliance countries show higher real premium growth rates during that time period than Argentina and Brazil.

Figure 12
Average real GDP growth and average inflation rates, 2014–2018



Source: Oxford Economics, Swiss Re Institute

Proactive policies can help countries prepare to face the macro challenges, as these countries are more resilient.

When looking for the likely winners, in our view those emerging markets that favour policies that promote fiscal prudence, monetary policy independence, economic liberalisation, trade diversification and higher productivity will find themselves better prepared to face the structural and cyclical challenges that lie ahead. The challenge is clear, and investors will increasingly favour those economies that are better positioned to demonstrate resilience amidst increasing external adversity.

Near-term outlook: emerging Asia will continue to drive growth

We expect growth to strengthen moderately over the next two years.

With respect to the near-term outlook, we expect growth for emerging markets to strengthen moderately over the next two years as the main external drivers remain moderately supportive. The fate of individual economies will differ based on the factors unique to each market. As such, the focus should turn to recognising which economies are better positioned to address the structural and cyclical perils hindering their growth prospects.

Growth in advanced markets is slowing but still above potential, providing some support for emerging markets.

Economic health of advanced markets. We believe that the fortunes of emerging markets will remain tightly linked to what happens in the advanced. In 2017 and into 2018, advanced markets grew strongly which pushed global aggregate growth above trend. The best is now behind us but our baseline scenario is for moderating global growth in 2019 with output still above potential. In our view, the global economy is inadequately prepared for the next crisis as debt levels, productivity growth and deficit levels all point towards lower buffers than a decade ago.[46] The policy tools available in advanced markets to combat the next shock are limited and the lack of preparedness poses a significant risk for the global economy.[47]

Global trade is yet to show signs of a trade war-related slowdown.

Global trade. The global trade war was the main story of 2018. Progress is being made on the Sino-US trade dispute, with the US postponing its decision to raise tariffs by 90 days, and China resuming imports of US soy amongst other goods. While specific countries suffer from changes to trade policy, other countries in the ASEAN region have benefited from import substitution. The revised trade deal between the US, Mexico and Canada (USMCA) was a step in the right direction that hopefully sets the tone for 2019. We do not expect significant widespread negative contagion to emerging markets stemming from the broader trade-related uncertainty. In fact, the USMCA, CPTPP, RECP, and EUJEPA48 trade deals show that multilateral liberalisation is ongoing. There is a window of opportunity to ultimately achieve more open world trade should China and the US find a compromise.

Stable commodity prices also support emerging market growth.

Commodity prices. Commodity prices are determined in global markets in which emerging markets are mostly price takers. International prices have steadily recovered in recent years as supply and demand conditions have improved. We expect this stabilisation to favour the emerging world. Growth in China, the main destination of emerging market commodities, remains robust and will continue to provide support for the demand side. Disruptions in oil supply due to political developments are always possible, but their current levels should help strengthen the public finances of oil-dependent economies.

[46] *sigma* 5/2018, op. cit.

[47] "Global economy is inadequately prepared for the next crisis", *Economic Insights*, Swiss Re Institute, 15 October 2018, and G20, 2018, "Making the Global Financial System Work for All", *Report of the G20 Eminent Persons Group on Global Financial Governance*, G20, 2018.

[48] RECP is the Regional Comprehensive Economic Partnership, and EUJEPA is the EU-Japan Economic Partnership Agreement.

Global financial conditions are tightening and the pressure on emerging markets to finance deficits is increasing.

Global financial and monetary developments. Widening interest rate differentials with the US should continue to create capital and portfolio outflows from emerging markets. Countries with large fiscal and current account deficits, high shares of US dollar-denominated debt, and poor policy track records could see volatility episodes in 2019 similar to those in Argentina and Turkey in 2018. Most emerging markets are better prepared to face such circumstances, and significant distress is expected to be limited to those countries with weak domestic and external fundamentals.

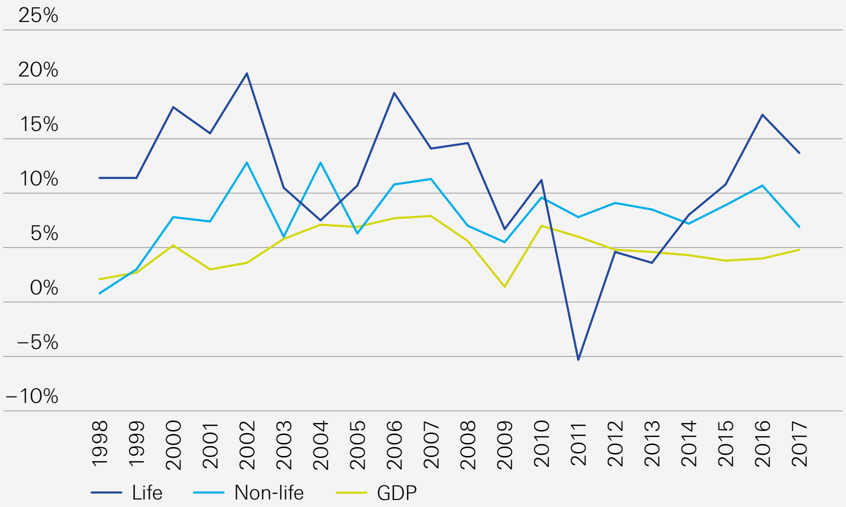
Implications for insurance

Economic growth and insurance demand

Real premium growth in emerging markets has fared relatively well in recent years, despite the economic slowdown.

Insurance demand has a strong positive relationship with economic growth. However, the economic slowdown in emerging markets in recent years has not translated into a proportional slowdown in premium growth. This supports our earlier hypothesis that the recent economic performance was dominated by cyclical factors, while the underlying consumption momentum – in this case, of insurance – was not fundamentally eroded. Another explanation – supported by the S-curve (see next section) – is that many emerging markets currently have a level of income per capita associated with a higher elasticity of demand for insurance, giving premium growth a greater degree of persistence in spite of the broader slowdown.

Figure 13
Real GDP and real premium growth in emerging markets in percent, 1998–2017



Source: Insurance regulators, insurance associations and Swiss Re Institute

Outlook for insurance demand in emerging markets

GDP per capita has been found to be closely linked to insurance penetration.

Research has found GDP per capita to be a key determinant of insurance penetration[49] as it rises along with income. Data shows that different levels of GDP per capita are associated with different penetration rates – as shown in the S-curve[50] (Figure 14). In countries with high GDP per capita, the rise in the insurance penetration rate tends to level off. The rise in the insurance penetration rate in emerging markets with medium levels of GDP per capita is much faster as income and wealth grow. Current challenges that hamper economic growth, such as low productivity and high indebtedness, reduce insurance demand, but the current level of income per capita in the emerging world is favourable for the insurance industry.

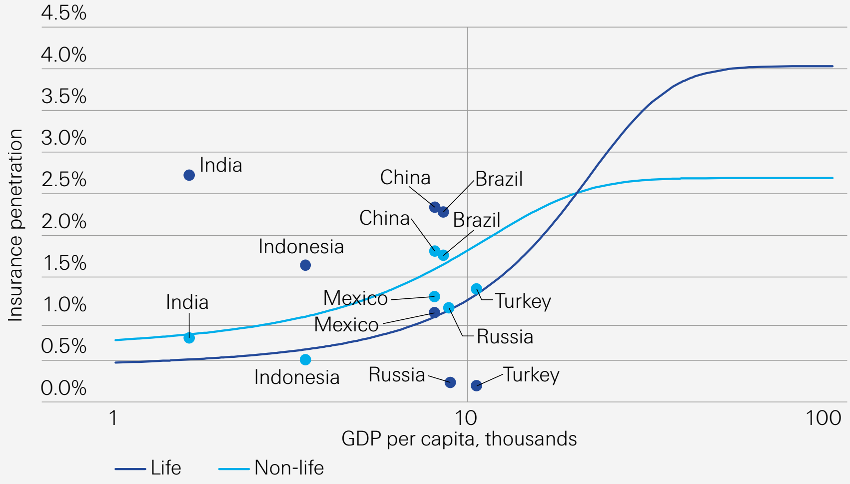
Non-life penetration is higher than life in the early stages of development.

As individuals in the emerging world grow into the economic middle class, their wealth begins to accumulate, and vehicles and homes become their first insurable assets. In markets that are in the early stages of development, and especially those impacted by the rise of urbanisation, the demand for commercial insurance increases as businesses need to comply with regulations that require coverage. For these reasons, non-life insurance tends to have comparatively higher penetration rates in the earlier phases of development, with motor insurance typically being the largest line of business. In the later stages of development, the demand for life insurance picks up when consumers can afford it and as financial planning, security and health become more important in their lives. Life insurance penetration accelerates,

[49] Defined as the ratio between direct premiums written and nominal GDP.
[50] R. Enz, "The S-Curve Relation Between Per-Capita Income and Insurance Penetration.: *The Geneva Papers on Risk and Insurance – issues and Practice*, vol 25 no 3, July 2000.

while personal non-life insurance begins to level off as consumers tend to own a set number of insurable assets. This is why the level and steepness of the life and non-life S-curve differ.

Figure 14
S-curve for 2016, EM7 countries



Source: Insurance regulators, Swiss Re Institute

Country-specific circumstances can help explain country-to-country differences in penetration rates.

Country-to-country deviations from the S-curve can be explained by specific supply and demand conditions that either encourage or discourage insurance purchases. For example, in countries where Islam is the predominant religion, life insurance penetration tends to be below average as the concept of life insurance is incompatible with the Islamic faith.[51] Low life insurance penetration can also be found in countries with historically high levels of inflation (eg, Argentina) where the stability of the currency is uncertain. In Central and Eastern Europe, the lower penetration of life insurance may be explained by historical reliance on state support. In non-life, countries with elevated catastrophe exposure are likely to have higher property insurance penetration (eg, Chile), while motor insurance penetration is higher in countries with high enforceability of compulsory motor insurance schemes.

The S-curve suggests that emerging markets are more attractive than advanced markets for future growth,

Income elasticity of insurance demand still high in emerging markets

Using income levels, the S-curve relation can serve as a benchmarking tool to assess future insurance demand. The relation currently shows that the highest income elasticities for life insurance demand (between 1.75 and 2.1) are found in countries with a GDP per capita between USD 7 700 and USD 26 600. The highest income elasticity for non-life insurance demand lies between 1.40 and 1.63 in countries with income between USD 3 500 and USD 15 000 per capita. As Table 2 shows, 94.4% of the emerging and developing economies sampled in the S-curve are still below or within this optimal level of income for life insurance take-up. For non-life, it is 87.9%. This demonstrates that in terms of premium growth prospects, as with GDP growth, emerging markets remain more attractive than advanced markets.

[51] See *Insurance, bancassurance and Takaful in the Middle East, Turkey and Pakistan*, 2015, Swiss Re.

Table 2
GDP per capita and income elasticities for insurance demand

	Life insurance			Non-life insurance		
Income per capita	Below USD 7 700	Within	Above USD 26 600	Below USD 7 700	Within	Above USD 15 000
Income elasticity for insurance demand	<1.75	1.75–2.1	<1.75	<1.40	1.40–1.63	<1.40
# of advanced markets	**0**	**9**	**27**	**0**	**0**	**36**
# of emerging markets	**86**	**31**	**7**	**53**	**56**	**15**
# of total markets	86	40	34	53	56	51

Source: Swiss Re Institute

Insurance market growth in emerging markets is expected to accelerate in the medium term.

sigma expects growth in insurance markets in Latin America, Central and Eastern Europe, as well as Asia excluding China to accelerate in the coming years. We expect the emerging market share of global premiums to increase by about 50% over the next 10 years. In China, insurance market growth is expected to be roughly unchanged, as growing absolute volumes are making it harder to achieve the rapid growth rates of the past. Still, growth is forecast at about 1.75–2 times real economic growth. Table 3 provides an overview of the non-life and life real premium growth rates. Although growth is slowing in China, it is misleading to talk of a slowdown there. The compounded real growth rate in China was close to 16% in non-life insurance over the last five years, and 17% in life; *sigma* expects this to slow to 10% and 11%, respectively. This is still a substantial growth rate, about 2% faster than the emerging market aggregate. In terms of premium volumes, China will still grow more than the aggregate African market on an annual basis and is set to overtake the US as the largest insurance market at some point in the mid-2030s.

Table 3
Growth outlook by region and line of business

	Total			Emerging markets			China			India		
CAGR (real)	**Past**	**Current**	**Outlook**	**Past**	**Current**	**Outlook**	**Past**	**Current**	**Outlook**	**Past**	**Current**	**Outlook**
Non-life direct premium growth	3%	3%	3%	8%	8%	8%	16%	12%	10%	10%	13%	12%
Life, direct premium growth	2%	2%	3%	10%	1%	9%	17%	–2%	11%	4%	8%	7%

	Emerging Asia excl. China			Latin America			Central & Eastern Europe			Africa		
CAGR (real)	**Past**	**Current**	**Outlook**	**Past**	**Current**	**Outlook**	**Past**	**Current**	**Outlook**	**Past**	**Current**	**Outlook**
Non-life direct premium growth	7%	9%	10%	2%	3%	4%	1%	2%	4%	2%	3%	4%
Life, direct premium growth	6%	9%	9%	5%	–1%	4%	0%	10%	9%	2%	2%	3%

Remarks: past (2013–2017); current (2018); outlook (2019–2020). CAGR = compound average growth rate. Colouring based on deviation from long term trend: < –1.5%; –1.5% to –0.5%; –0.5% to 0.5%; 0.5% to 1.5%; >1.5%

Source: Swiss Re Institute

There may be a shift in the composition of growth of insurance lines.

Insurers have to be conscious about the changes for the demand for both commercial and personal insurance products. For example, on the commercial side, some industries will gain or lose prominence as changes to existing domestic regulation as well as international developments allow or inhibit growth; while on the personal side, the demand for P&C products will eventually become saturated and lead to greater demand for L&H products as the income levels of individuals rise.

The macro challenges: risks and implications

Table 4
Macro challenges, risks and implications

Challenge	Nature	Risks	Implications
Ageing demographics	Structural	Rising longevity	Transition from Defined Benefit to Defined Contribution and private pension schemes, annuity business
Trade dependence	Cyclical/structural	Slowdown in trade growth	Changes to exposures for marine, aviation and transport insurance
Financial volatility	Cyclical	Volatility in asset, credit and financial conditions	Uncertainty around investment returns and underwriting margins
Productivity growth	Structural	Slower economic growth	Lower demand for insurance
High indebtedness	Cyclical/structural		

Source: Swiss Re Institute

Ageing demographics: increasing longevity risk

Ageing demographics is resulting in a higher aggregate longevity risk.

For institutions that provide post-retirement income, individual longevity risks – the risk of an individual living longer than expected – can be managed using economies of scale and diversification. Portfolios with a large number of policies and adequate ratings according to socio-demographic risk factors are essential to ensure sustainability. However, the current global demographic dynamics point to an aggregate longevity risk: the uncertainty of how long an entire population cohort will live. Generally mortality rates – the number of deaths in a standardised population over a particular period – have been declining, reflecting improved living conditions, advances in medicine and innovations in health technology. This has led to experts consistently underestimating life expectancy.[52] The resulting adverse implications for governments which sponsor defined-benefit (DB) schemes are an opportunity for life insurance companies to sell longevity risk coverage with annuities. However, to date such products are not prevalent in emerging markets.

Many markets are moving from defined-benefit to defined-contribution pension schemes.

The ageing demographics and low interest rate environment make traditional DB pension schemes unsustainable. For this reason, many markets are transitioning from DB to defined-contribution (DC) schemes, which in turn creates space for private life insurance industry participation. In DC systems, post-retirement income depends on worker contributions to a retirement savings account and the corresponding investment returns. The move from DB to DC shifts the risk of under-funding from the sponsor to the individual, but the risk can then be mitigated by transferring it to a life insurer via an annuity. By law, some of the existing DC system

[52] For example, in 1975, the life expectancy of a male born in the UK was projected to be 71.0 by 2011, whereas the actual life expectancy in that year turned out to be around 78.7 years. See *sigma* 6/2018, Mortality improvement: understanding the past and framing the future, Swiss Re Institute, for more details. Also C. Shaw, "Fifty years of United Kingdom national population projections: how accurate have they been?" *Population trends*, (128), 2007 and Office for National Statistics, National Life Tables, United Kingdom: 2012–2014, https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/nationallifetablesunitedkingdom/2015-09-23

pension fund administrators are required to buy traditional life insurance on behalf of their affiliates. This not only helps to narrow the existing mortality protection gap but also promotes long-term economic growth.[53]

A gradual adoption of complementary pillars is the most practical solution.

Both DC and DB schemes have their advantages and disadvantages, and a gradual adoption of complementary pillars is likely to be the most practical solution regardless of the existing system in place. In most emerging markets, there remains heavy reliance on government-funded defined benefits. In others, the pressure to transition has been mounting and these are increasingly adopting DC elements and involving life insurers in their pension systems. For example, the pension schemes in Chile and Mexico are predominately DC-based, and these two countries are ahead of the curve in Latin America.[54] India has gradually moved from DB to DC by introducing the National Pension Scheme for central and state government employees (excluding armed forces) in 2004, and extending this to all citizens in the 18–60 age group in 2009.[55] Meanwhile in China, the government has relaxed investment restrictions on the country's pension funds and also encouraged the growth of a private pension system.[56]

With ageing societies, the resources required to maintain DB schemes are bound to become scarce.

With ageing, governments have higher outlays for healthcare and pensions, which puts pressure on public finances and crowds out government spending on other items such as infrastructure and education. Without an increase in productivity or immigration to offset the rise in the old-age dependency ratios, the resources needed to maintain DB schemes in emerging markets will eventually become scarce, causing the burden on the working population to become unsustainable. Otherwise, governments will either have to reduce or default on transfers, or borrow more (see challenge #5 "High levels of debt"), which compounds the problem.

Trade developments will impact MAT and trade credit insurance

Globalisation has made transport-related insurance more important.

Globalisation, along with the resulting vertical specialisation and the deepening of global value chains, has increased the transport intensity of production, resulting in higher values for cargo, ships and airplanes. Transportation-related insurance – such as marine, aviation and transport (MAT) and trade credit – now plays a crucial role in the global economy.[57] The changing nature of trade is impacting these lines.

Rates and exposure growth are the two factors determining transportation premium volume.

Transportation premium volumes are essentially determined by two factors: premium rates and exposure growth. Premium rates in transportation insurance, which are cyclical and reflective of the risk-absorbing capacity of the market, are more important in the short-term. Exposure growth on the other hand is a slower moving driver, and is closely linked to overall economic activity over the long-term – specifically for trade developments. The recent rise in protectionism threatens global commerce directly, and may also indirectly lead to the onshoring of production and the shortening of supply chains. *sigma* finds that a 1% decrease in world trade reduces marine cargo premium growth by 0.89%, and marine hull premiums by 0.80%. For trade credit, a 1% drop in trade would reduce premiums by 0.67%. Controlling for domestic demand and other factors, this declines to 0.32%.[58] Alternative scenarios for the Sino-US trade conflict suggest that if the US and China find a compromise, a global trade-friendly resolution may yet develop.[59]

[53] See "The role of life insurers in the Latin American pension system" in *Pension schemes in Latin America: addressing the challenges of longevity*, 2018, Swiss Re Institute.
[54] *Pension schemes in Latin America: addressing the challenges of longevity*. Swiss Re Institute, 2018.
[55] This DC scheme is compulsory for government employees but voluntary for other citizens
[56] *China Pensions Outlook: Evolution, diversification and convergence*, KPMG, November 2017.
[57] See *sigma* 4/2013, Navigating recent developments in marine and airline insurance, Swiss Re.
[58] Note, rising protectionism, however, could potentially increase demand for political risk protection. See *sigma* 3/2016, World Insurance in 2015, Swiss Re.
[59] See *sigma* 5/2018, "Global insurance perspectives 2020", Swiss Re Institute.

Non-tariff trade barriers are a bigger concern to insurance than tariffs.

Trade tariffs affect demand for insurance, especially marine and trade credit lines. However, non-tariff barriers are a larger concern, in our view. Bilateral trade agreements similar to those that the US is seeking could lead to fragmented regulation and raise insurers' operating costs. In other countries, foreign ownership of insurance companies is restricted and in some cases, local insurers receive preferential treatment. However, there are also examples of markets opening up (see Regulation section).

Financial market volatility: impacting both sides of the balance sheet

Financial conditions have been challenging for insurance profitability.

Global financial and market conditions have proven to be challenging for insurance profitability. While falling interest rates have been difficult for insurance asset managers in advanced markets, currency depreciations have hurt underwriting margins for emerging markets in certain non-life lines of business.

Weaker exchange rates can lead to higher claims, and ultimately lower affordability.

The comparatively low degree of development of certain industries in emerging markets means that many economies rely on imports, especially imports of technologically-advanced goods. When currencies depreciate, insurance underwriting comes under pressure as the cost of servicing certain claims becomes more expensive. This has been the case recently for motor and medical insurance in countries that do not have a developed automotive or pharmaceutical industry.[60] Acquiring spare parts for automobiles and medical supplies abroad at a steeper price in order to serve the local market becomes a cost that ultimately is passed on to consumers – decreasing affordability.

Insurers can hedge against currency fluctuations.

Insurers in emerging markets can benefit from a push towards greater financial development. When financial institutions offer currency forward contracts, consumers – insurers included – can hedge against foreign exchange fluctuations by locking in an exchange rate for the future. Less uncertainty, and consequently better underwriting, make it possible for insurers to pursue more aggressive strategies when writing new business.

Life insurers are exposed to the volatility in interest rates.

On the life side, changes in monetary policy affect investment returns. Savings products in particular are most exposed, since investment income is a key profit driver and the guarantees on the savings policies are based on forecasts of long-term interest rates. Because insurers depend on investment income to match them, volatility in interest rates affect their ability to pay the guarantees. In addition, there is a duration mismatch risk causing insurers to bear the risk of lower returns when they reinvest maturing assets. In order to earn the required returns, insurers are forced to invest in riskier assets. Even for non-savings type life products, asset management returns are considered for pricing purposes, and changes to interest rates can have adverse effects.

Macroeconomic challenges require a proactive approach from insurers

The emerging market outlook is now less volatile and less synchronised.

The moderating outlook has come about with a reduction in volatility of output growth and inflation, and also a lower degree of synchronisation. The stabilisation is a result of maturity and more sophisticated macro policymaking, while the divergence is in part due to recessions in some key markets. Insurers can use this to their advantage and capitalise if they remain open to the idea of diversification in terms of lines of business, investment portfolios and geographical presence.

[60] A prime example is Russia where, during the recent oil price collapse, the value of the rouble plummeted (amplified by sanctions). This resulted in substantial increases in the cost of claims in motor lines. However, due to government caps on premium prices, insurers were not able to pass higher costs to consumers and ended up absorbing them.

Implications for insurance

Insurers can best counter cyclical challenges through product and geographic diversification, as well as reinsurance.

To pre-emptively face a cyclical slowdown, insurers can opt for a diversification strategy that contains exposure to lines of business with various degrees of cyclicality. Insurers may possibly be over-exposed to tighter credit (mortgage-related insurance), consumer sentiment (motor), employment conditions (workers' compensation), or foreign exchange rates (motor, medical insurance). Composite insurers can offset this by increasing their exposure to less sensitive lines such as health and/or certain liability products. For non-composites, the lack of diversification by product may require geographical diversification or the use of reinsurance as a capital management tool.

Structural factors require a more strategic approach, at times accepting short-term pain for long-term gain.

Structural factors on the other hand have a broader impact across most lines of business and are longer-lasting, but may be temporarily masked by cyclical deviations. Firms should weigh short-term cyclical swings against these long-term trends and adapt their strategies accordingly to be in a position to take advantage of the long-run benefits of structural factors. In the case of a multinational firm with regional diversification, perhaps the benefits of holding on and maintaining the relationship with the local clients outweighs the drawback of sustaining losses in the short-term; otherwise, firms should consider pivoting into new markets that are better aligned with their expected returns. In the case of firms that lack an international presence, merging with other institutions could be the solution.

Insurance-specific drivers of growth

Industry-specific factors are positively impacting the outlook for insurers in emerging markets.

The outlook for the insurance industry is not just a function of the economy. Industry-specific factors also affect premium growth and insurers. For the most part, we expect these to have positive impact on the insurance outlook of emerging markets.

Regulation

In many markets, insurance regulation is evolving towards the adoption of international best practices.

Growth-enabling regulation is key to increase insurance penetration. In the quest for less reliance on the public sector, greater financial resilience of households, and the development of certain industries, governments can enact policies that promote insurance take-up. For example, compulsory schemes like motor third-party liability (MTPL) insurance can help drivers manage liability claims for death or injury to individuals. Ultimately, it creates a safety net for society. Also, the creation of agricultural insurance subsidies can make coverage more affordable given the high premium rates of certain crop and livestock products and the existence of systemic risks. Many emerging markets can still capitalise on these opportunities. At the same time, the focus is increasingly turning towards adopting international best practices on solvency to protect consumers, maintain financial stability and build trust in insurance companies. Some markets are progressing faster than others.

Solvency standards in emerging markets are moving towards risk-based capital models to build trust and sustainable long-term growth.

Robust solvency standards, with elements of economic risk-based capital (RBC) models, have been an important tool to ensure sustainable growth in insurance. When an insurance company fails, the entire industry suffers due to loss of trust. Solvency standards ultimately serve to protect policyholders and help improve the stability and trustworthiness of the industry. The adoption of the Solvency Assessment and Management framework (SAM) in South Africa, the new risk-based capital (RBC) requirements in Mexico, or India's push for solvency regulation, are all important steps to ensure that growth in insurance in emerging markets is sustainable in the long-term.[61] At times, regulation can place an excessive burden on companies, in particular smaller insurers, for which the application of new RBC regimes can be overwhelming for capital adequacy. However, compliance ensures quality of growth for the industry and allows insurers to differentiate themselves.

As the insurance industry becomes increasingly digitised, regulators can play role in enabling progress.

Regulation needs to keep up with the increasing digitalisation of the insurance value chain. In many cases, regulation of technology is non-insurance specific and targeted at technology firms. The regulatory response to technical innovation is also having a significant effect on re/insurers.[62] So far, this mainly concerns access to and usability of data. There are insurance-specific initiatives as well. Lawmakers are keenly focused on companies' use of (Big) data that affects consumers, and regulators have begun to examine re/insurers' use of such data. Such initiatives come in addition to traditional insurance regulation. Regulators can play a part in enabling innovation and improving accessibility of insurance by creating regulatory sandboxes, which ease the regulatory burden for firms in the development phase. Also, they can ensure that regulation does not unnecessarily inhibit innovation by adopting a "tech neutral" approach to regulation. Finally, tech-based innovation has raised concerns about the potential risks of specific operational aspects, such as outsourcing and cybersecurity, which need to be considered with care.

[61] "IRDAI in progress to migrate to risk-based capital regime", *The Economic Times,* 11 September 2018, https://economictimes.indiatimes.com/industry/banking/finance/insure/irdai-in-process-to-migrate-to-risk-based-capital-regime/articleshow/65767514.cms

[62] *Pojišťovny svazuje evropská regulace. Lidé by uvítali srozumitelnější pojistné podmínky,"* Česká asociace pojišťoven (ČAP) 25 August 2017, and *IIF Sticky Notes: OPEC+ meeting; Consumer privacy laws; US-China talks; and book recommendations*, IIF, December 2018.

Market access

Trade barriers undermine the efficiency of re/insurance markets.

Trade barriers undermine the efficiency of re/insurance markets and reduce competition, leading to less customer choice, poorer service, and higher re/insurance prices and less capacity over the long-term. Most barriers in emerging markets include restrictions on cross-border business and capital flows, and limits on foreign ownership. Reinsurance in particular is impacted by collateral and asset localisation requirements, prohibition of branches and mandatory cessions to local providers.[63] Protectionism comes in diverse forms and is not limited to emerging markets. It reduces the growth of affordable risk cover, preventing insurance markets from realising their full potential and making it difficult to close protection gaps.[64]

Nationalistic policies are being implemented in select markets, impeding competition and restricting insurance market growth.

An increasing number of protectionist measures have reduced market access in recent years. Measures include limiting foreign ownership of insurance companies – eg, Indonesia has limited foreign ownership to 80%, although it has been difficult to find local partners to provide capital.[65] Malaysia caps foreign ownership of joint-ventures at 70% (most are currently 100% foreign-owned) and new regulation may come soon.[66] UAE failed to lift its restrictions on foreign ownership[67], and is imposing more stringent rules for foreign re/insurers operating in local markets. In India, national reinsurers benefit from a right of first refusal, while Indonesia also stipulates the placement of certain "simple risk" lines of business with domestic players. In Russia, the national reinsurance company has been aggressively increasing market share, crowding out private companies. These protectionist actions will impede competition and increase the cost of re/insurance, while restricting market growth.

Liberalisation and deregulation continue, but regulators are also looking at consumer protection.

Nevertheless, insurance markets are more open today than 10 years ago. Emerging Asian governments, for example, have undertaken additional deregulation and liberalisation measures while seeking to improve consumer protection. Motor insurance de-tariffication is ongoing in China, Thailand and Malaysia. Argentina has recently started to gradually open the reinsurance market to foreign institutions. In China and India, regulation on sales practices and to crack down on "irrational" investment behaviour of insurance portfolios has come into force. In China, the government continues to liberalise, moving to allow outright foreign ownership of life insurance companies within the next three years (in P&C there is no limit).

Technology

InsurTech is revolutionising the entire insurance value chain.

Technology is a key structural factor that is transforming businesses across all industries. In insurance, it can make products more affordable, business more profitable and provide access to new risk pools.[68] The use of technology in insurance was initially centred mostly on digitisation and automation to improve efficiency and productivity. Now, the use of data analytics has become more prominent, and artificial intelligence (AI) and robotics are being integrated in the value chain and with direct customer interaction.[69] Globally, the industry is recognising the potential gains in efficiency from the adoption of InsurTech solutions and is increasingly investing more capital into this space.[70]

[63] The GRF publishes a list of market access barriers: http://www.grf.info/publications/barriers-to-trade
[64] In advanced economies, examples of protectionism include US tax reform and the UK's departure from the EU (Brexit) are resulting in new market access barriers. Also see *The Contribution of Reinsurance Markets to Managing Catastrophe Risk*, OECD, December 2018.
[65] "Foreign investment ceiling in insurers proposed at 80%", Asia Insurance Review, 21 April 2017, http://www3.asiainsurancereview.com/News/View-NewsLetter-Article?id=38904&Type=eDaily#
[66] "Malaysia mulls enforcing cap on foreign insurer ownership", *Bloomberg*, 13 April 2017, https://www.bloomberg.com/news/articles/2017-04-13/malaysia-said-to-mull-enforcing-cap-on-foreign-insurer-ownership
[67] This is in contrast to China and Thailand where phased relaxation of foreign shareholding is permitted in life and non-life insurance companies.
[68] *Harnessing Technology to Narrow the Insurance Protection Gap*, The Geneva Association, 2016 and https://www.dentons.com/en/insights/alerts/2018/november/13/new-foreign-direct-investment-law-for-the-uae
[69] *Insurance 2030 – The impact of AI on the future of insurance*, McKinsey & Company, 2018.
[70] *Tech Review Report*, CB-Insights, 2016.

Emerging markets are better suited for new technology as they tend to lack legacy systems.

The adoption of tech is not uniform across the emerging markets. China is a success story as it has become a major enabler of InsurTech solutions, but adoption has been slower elsewhere. Regulatory barriers remain a key constraint on the supply side, preventing insurers from using tech solutions to transform their business models. Emerging markets are well suited for the adoption of new technology, as they are generally more agile. They do not have the burden of legacy systems compared to insurers in advanced markets, creating opportunities for leapfrog technologies with new and innovative solutions that can be the basis for a more robust outlook.

China is a major enabler of InsurTech solutions. Other emerging markets could soon follow.

Flexible regulation, like the stance taken in China, can give insurers the opportunity to increase their involvement in technology companies.[71] It is a crucial step when trying to cater to the rising influence of millennials – a consumer base that is not only tech savvy, but is also willing to share data. The Chinese insurer Ping An, for example, tops the list of global firms investing in InsurTech start-ups (by number of investments) and is considerably ahead of any other company in the emerging world.[72]

Digitisation: improving operational efficiency and reducing costs

Insurers in emerging markets – particularly in China – have been quick to digitise and build integrated ecosystems.

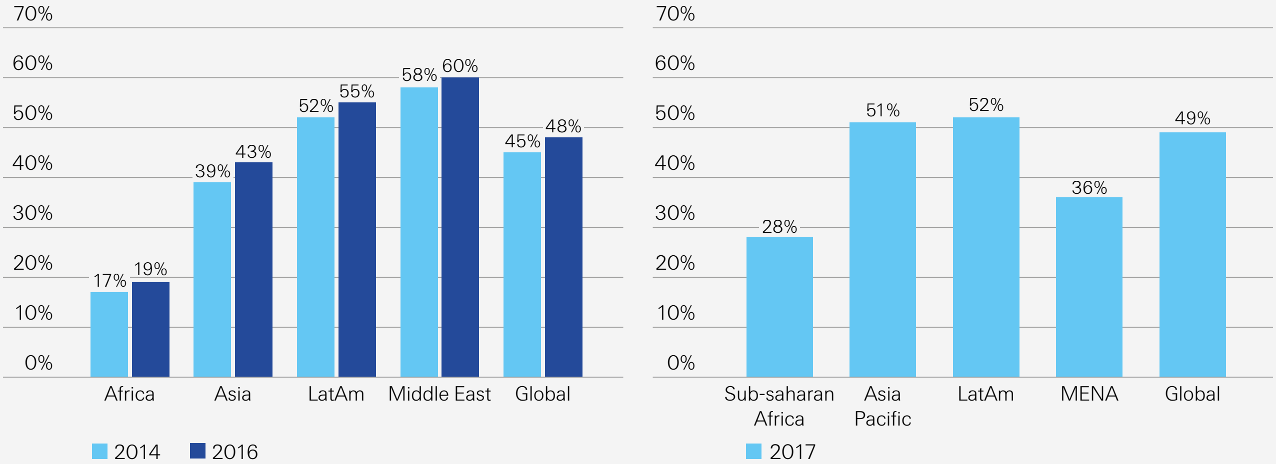
The volume of data exchanged in the insurance value chain, from underwriting to claims, is ever increasing. Some insurance companies are struggling to fully capture the operational efficiency gains internally, and are often unable to meet client expectations for seamless digital integration. Failing to digitise can be costly, with digital laggards amongst the top 100 insurers globally falling behind on premium volume growth. Meanwhile, the most digital firms achieved the highest total return for shareholders, demonstrating the cost and efficiency gains possible.[73] UBS estimates that InsurTech solutions could lead to total cost savings of around USD 300 billion a year for the Asian insurance industry. Overall profits could rise by around USD 55 billion a year by 2025.[74] Insurers in emerging markets, particularly China, have been quick to digitise and build integrated ecosystems, enabling China's ZhongAn, for instance, to underwrite more than 210 million policies per day in 2016.[75] Ultimately, efficiency gains in operations also need to be achieved to counter the shrinking working age population as outlined above. However, this requires a much more fundamental shift in society and within (insurance) companies.

In many markets, customers prefer to interact with insurers on mobile devices.

Insurers in emerging markets – with the help of more modern regulation – can leverage the increasing rise of mobile devices to their advantage.[76] Mobile devices are becoming the most important point of interaction for customers with their insurance providers. Customers interact with insurers on mobile devices more in Brazil and Mexico than in the US; and more in China, Indonesia and Malaysia than in Australia or Singapore.[77] In Asia Pacific, mobile penetration will rise to 75% by 2020 from 66% in 2016, with India, the Philippines and Indonesia experiencing the biggest increases in smartphone adoption.[78] The expansion of the internet and mobile phones is enabling insurers to distribute, underwrite and pay claims online, which in turn helps expand the reach of insurance and close existing protection gaps.

[71] Also see *China and India: Most preferred markets among Asian insurers*, Morgan Stanley, 2018.
[72] *China InsurTech*, Oliver Wyman, 2016.
[73] *Insurance digital maturity study, 2018 Edition*, Acord, June 2018.
[74] *InsurTech shifting Asia*, UBS, September, 2017.
[75] *Insurtech caught on the radar: hype or the next frontier?*, Oliver Wyman, 2017.
[76] *Accelerating affordable smartphone ownership in emerging markets*, GSMA, July 2017.
[77] *Customer Behavior and Loyalty in Insurance: Global Edition 2017*, Bain And Company, 2017.
[78] GSMA, July 2017, op. cit.

Figure 15
Mobile internet penetration (LHS) and subscriber penetration (RHS) by region, as a percentage



Source: © GSMA Intelligence, 2017, 2016, Pew Research Centre, Swiss Re Institute

Improvements in analytical capabilities aided by technology enables insurers to create products to meet specific customer needs.

Improvements in analytical capabilities, aided by technologies such as data mining, cloud computing and artificial intelligence, enable insurers to better understand the needs of different customer segments and provide customised risk protection solutions. New start-ups like Toffee and Digit Insurance in India, are 100% digital insurance companies that keep the buying process simple by making enrolment easy. They remove unnecessary documentation and speed up the claims process, all of which is backed by advanced data analytics and AI.

Urbanisation and infrastructure

Urbanisation transforms emerging markets and creates insurance opportunities.

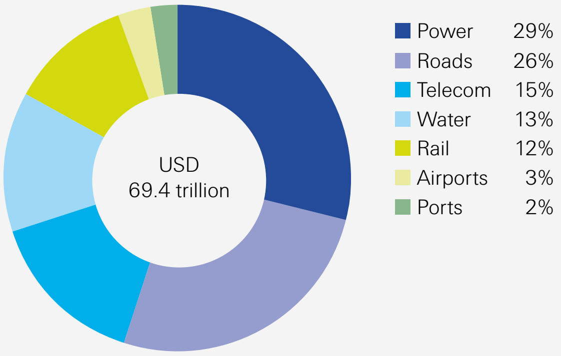
Urbanisation is a key structural element for the economic transformation of emerging markets and creates opportunities for insurers.[79] According to the UN, the global urban population is projected to increase from 4.2 billion in 2018 to 6.7 billion by 2050.[80] Around 90% of this growth will to come from Asia and Africa, with the present day emerging markets accounting for 1.7 billion (or 68% of the increase).

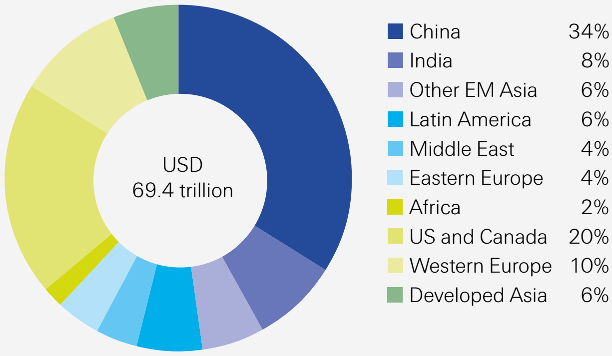
Emerging markets will account for around 63% of global infrastructure spending from 2017 to 2035.

Growing urban populations require substantial investment in infrastructure to enable sustainable development. However, studies show that there is a substantial infrastructure gap, especially in emerging markets. Globally, there is a need to invest USD 69.4 trillion[81] in infrastructure between 2017 and 2035, which amounts to USD 3.7 trillion a year.[82] Approximately USD 43.7 trillion (63% of the global total) is required in emerging markets. China and India alone account for 23.6 trillion (34% of the global total) and 5.6 trillion (8% of the global total), respectively.

[79] *Urbanization and Growth*, World Bank, 2009.
[80] *World Urbanization Prospects: 2018 revision*, UN Department of Economic and Social Affairs, 2018.
[81] *Bridging infrastructure gaps has the world made progress?*, McKinsey Global Institute, October 2017. Values are at constant 2017 prices. Another report by the Global Infrastructure Hub, a G20 initiative, and Oxford Economics estimates that between 2016-2040 the global infrastructure need would be USD 94 trillion (USD 3.8 trillion per year).
[82] This amount will increase further by up to USD 1 trillion a year to meet the United Nations' sustainable development goals.

Figure 16
Infrastructure spending by sector (LHS) and infrastructure spending by region (RHS), 2017–2035





Source: McKinsey Global Institute

Urbanisation stimulates demand for life and non-life insurance.

Urbanisation and the investment in infrastructure will generate substantial insurance opportunities through multiple channels starting from the pre-construction to operational stage.[83] A conservative estimate for a premium rate, applied on the above infrastructure investment needs from 2017–2035, would generate cumulative construction insurance premium volumes of USD 44 billion (in 2017 constant dollars) in emerging markets.[84] Infrastructure spending also leads to higher income levels, which then increases the demand for personal lines.[85] Furthermore, large cities are vulnerable to man-made and natural catastrophe risks due to the high concentration of people and economic assets. However, the cities in emerging markets have little insurance to cover losses arising from disaster events.[86] For the life and health insurance, city living leads to increasing incidences of disease such as diabetes and obesity, as well as illnesses related to air pollution, etc. These diseases require insurance coverage, but recent studies show that there is a significantly large gap for covering health risks.[87]

Urbanisation also creates new challenges that insurers need to monitor.

While urbanisation creates opportunities for the insurance sector, there are also challenges due to the higher concentration of risks, environmental concerns, lack of urban planning etc, which need to be examined carefully. Underwriting risks and exposures need to be monitored on a continuous basis to identify the emerging risks and define contractual terms.

[83] See *sigma* 2/2018 op. cit. The *sigma* notes that on average, engineering premiums tend to grow at least three quarters of the pace of gross construction output.
[84] This *sigma* assumes a conservative premium rate of 0.1%. In *sigma* 5/2013, Urbanisation in emerging markets: boon and bane for insurers, Swiss Re, the weighted average premium rate for construction-led commercial insurance opportunities was estimated at 0.16%.
[85] *Building global infrastructure gap*, McKinsey Global Institute, June 2016, estimates that 1 USD of infrastructure investment can raise GDP by 20 cents in the long run by boosting productivity.
[86] *sigma* 1/2016, Natural catastrophes and man-made disasters in 2015: Asia suffers substantial losses, Swiss Re.
[87] A recent study by Swiss Re Institute found a health protection gap in Asia of USD 1.8 trillion, of which emerging Asia accounted for USD 1.4 trillion. China and India top the list with a protection gap of USD 805 billion and 369 billion, respectively. See *Asia's health protection gap: insights for building greater resilience*, Swiss Re Institute, October 2018.

Can the Belt and Road Initiative lead to structural change?

Total investments in BRI projects is estimated to be around USD 7.4 trillion by 2030.

The Belt & Road Initiative (BRI), has generated considerable interest across the globe. It is intended to strengthen the integration amongst countries in Asia, the Middle East, Africa and Europe via land and maritime trade routes. Estimates suggest the total investments in BRI projects until 2030 will amount to around USD 7.4 trillion, of which more than 80% is expected to be in infrastructure.[88]

The initiative will help participating countries to achieve higher growth.

The BRI is expected to strengthen economic growth by reducing the infrastructure gap in emerging markets, which has been a major obstacle to their development. It is estimated that around USD 5.1 trillion of the total investments will be outside of China, with Chinese involvement as investor or contractor. Apart from infrastructure investment, BRI is set to benefit many industries and countries through increased trade and cooperation in other sectors.

BRI has initiated some of the landmark infrastructure projects in participating countries.

For instance, the China-Pakistan Economic Corridor which includes investment in roads, ports, and power plants will support economic growth in Pakistan by creating jobs, increasing trade, and providing power, which is desperately needed for industrial growth. The Mombasa-Nairobi rail, another major BRI project is the largest infrastructure project in Kenya since the country's independence.

BRI provides premium growth and investment opportunities for the insurance industry.

Substantial investment in infrastructure as part of BRI will boost insurance demand. A Swiss Re Institute study estimates that BRI-associated projects in countries outside of China will generate a cumulative demand for commercial insurance of USD 28 billion by 2030.[89] In addition to the direct premiums generated, there are significant opportunities for insurers to invest in BRI projects themselves.[90]

The large scale nature of the BRI has also raised concerns.

The BRI presents an unprecedented opportunity for development in emerging markets. Although doubts have been raised about the debt taken on by some countries,[91] the BRI has enabled investment in a number of projects that are contributing substantially to the economic growth of respective markets. For instance, in addition to the examples mentioned above, the Thailand-China high-speed railway is the first of its kind in Thailand and could benefit the country considerably once completed.[92] For insurers, most of the demand is centred on engineering and property insurance, followed by marine, liability and trade credit covers. The use of tailor-made solutions is increasingly important as clients require more holistic protection for their investments and trade-related activities.

Financial inclusion

Financial inclusion supports economic growth in emerging markets and presents a promising growth opportunity for insurers.

Financial inclusion is a crucial structural component for medium- to long-term economic growth in emerging and developing countries.[93] It has been identified as an enabler for seven of the 17 UN Sustainable Development Goals. Over 60 governments across the world and the UN have adopted financial inclusion as a key objective to boost economic development. The link between financial inclusion and economic growth has been difficult to establish empirically. A World Bank report established that the marginal benefits for growth wane as both inclusion and depth increase.[94] However, for many developing countries, this point has not yet been

[88] *China's Belt & Road Initiative: the impact on commercial insurance in participating regions*, Swiss Re Institute, March 2017
[89] Ibid.
[90] "Belt & Road Initiative: multi-trillion dollar opportunities for insurers", *Economic Insights*, Swiss Re Institute, November 2018.
[91] "China's Belt and Road Initiative Opens Up Unprecedented Opportunities", *Forbes*, 4 September 2018, https://www.forbes.com/sites/greatspeculations/2018/09/04/chinas-belt-and-road-initiative-opens-up-unprecedented-opportunities/#
[92] *Belt and Road Initiative: Strategies to Deliver the Next Phase*, IMF, 12 April 2018, https://www.imf.org/en/News/Articles/2018/04/11/sp041218-belt-and-road-initiative-strategies-to-deliver-in-the-next-phase
[93] We define financial inclusion as access to and use of formal financial services by households and firms.
[94] L. Klapper, A. Demirguc-Kunt et al. *Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence*, World Bank, 25 April 2017.

reached, and the potential for economic growth from financial inclusion remains substantial. Insurance has traditionally not been at the centre of national financial inclusion strategies, but its relevance is increasing. For insurance companies, financial inclusion of emerging consumers presents a promising growth opportunity.

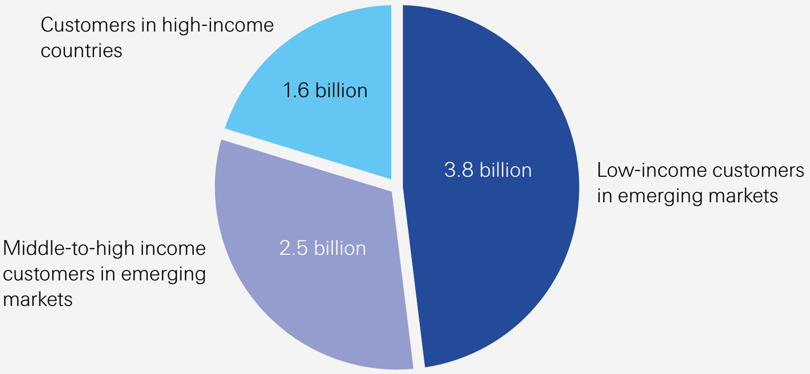
Insurance can be the first step towards financial inclusion and is particularly valuable for people with low incomes.

Insurance can be the first step towards financial inclusion, which has traditionally focused on bringing people into the formal banking system and making financial services affordable.[95] Improving access to insurance is particularly valuable for people with low incomes, who often struggle to manage unforeseen financial shocks. They are particularly vulnerable to shocks due to illness, incapacity to work or the detrimental effects from natural catastrophes and extreme climate events, such as droughts.[96] By some measures, formal risk management is 10 times more efficient than informal protection mechanisms.[97] For insurers, opening up a new risk pool of several billion customers on the cusp of transformative growth is an attractive proposition to embrace inclusive insurance of emerging consumers. It also helps close the protection gap for a large segment of the world's population.[98]

Emerging consumers are fundamentally different from traditional insurance customers.

Emerging consumers, estimated at 3.8 billion people, represent the bottom 60% of income earners in emerging markets.[99] Emerging consumer business is fundamentally different from traditional insurance in advanced markets. It is low-premium high-volume business and requires a fundamentally different approach than traditional insurance products. Insurers have struggled to offer insurance to this segment of the world population due to the high unit cost of production. InsurTech solutions will be crucial in bringing affordable insurance to this consumer segment in order to close their protection gap.

Figure 17
Emerging consumer segmentation



Source: Center for Financial Inclusion at Accion

[95] Traditionally financial inclusion has been almost exclusively about the formal banking system and making financial services affordable. See https://www.worldbank.org/en/topic/financialinclusion/overview
[96] *sigma* 4 /2017, Insurance: adding value to development in emerging markets," Swiss Re Institute, and *Financial inclusion through inclusive insurance,* Giz, https://www.giz.de/en/worldwide/14131.html
[97] *Inclusive Insurance: Closing the Protection Gap for Emerging Customers,* Center for Financial Inclusion at Accion and the Institute of International Finance, January 2018.
[98] Ibid.
[99] World Bank, PovcalNet.

Conclusion

Emerging markets growth, once rapid, is now moderate due to cyclical developments and structural economic factors.

Economic growth in emerging markets has moderated in recent years after decades of rapid growth. Cyclical developments like the downturn in commodity prices and the gradual monetary tightening by the US Federal Reserve have tested the resilience of the emerging world by triggering episodes of macroeconomic and financial volatility. Certain markets have made substantial progress in recent years in their efforts to insulate themselves from external adversity. However, the current outlook suggests structural economic weaknesses – such as an overdependence on trade, high levels of indebtedness and low productivity growth – are coming to the fore and need to be addressed. These factors, in addition to the ageing population, are the basis for downward revisions to emerging market long-term growth forecasts and will require a commitment to long-term policymaking. We believe that countries with the ability to push policies that promote resilience will ultimately differentiate themselves from the broader emerging market group.

The outlook of the insurance industry, however, remains favourable in emerging markets.

The insurance industry in emerging markets will be directly affected by the cyclical and structural macro challenges currently at play. Ageing demographics for example will translate into greater longevity risk – an opportunity for life insurers. Trade-related developments will impact MAT and trade credit insurance, but the directionality and extent are still uncertain, and profitability could suffer if financial volatility intensifies. In spite of these economic headwinds, in our view the outlook for the insurance industry in emerging markets remains favourable. We expect the emerging market share of global premium to increase by about 50% over the next 10 years. The emerging market share of premium lags behind its share of the global economy, presenting upside potential for insurance growth. The growth differential vis-à-vis advanced markets remains positive and large, and the current level of income per capita in emerging markets is consistent with a higher income elasticity for insurance demand. Insurance-specific factors like regulatory developments, technological advances, urbanisation and the push for greater financial inclusion will also support premium growth.

We remain cautiously optimistic about the near-term prospects for the emerging world.

We remain cautiously optimistic about the near-term macroeconomic outlook for emerging markets. The economic health of advanced markets should support external demand and the recent stabilisation of commodity prices should decrease financial volatility. However, the still uncertain global trade outlook and the potential for a further widening of interest rate differentials against the US could prove challenging. Idiosyncratic circumstances are also at play. We hold the view that for the long-run, global growth will continue to be bolstered by emerging markets and that the shift in economic power from the west to the east continues.

We believe emerging markets remain an attractive proposition for insurers, especially relative to advanced markets.

Firms run the risk of having cyclical circumstances mask a more rooted structural trend. Therefore, the current outlook merits close attention as cyclical and structural adversities require different strategies. We believe that in spite of the challenging outlook, emerging markets remain an attractive proposition for insurers, especially relative to advanced markets.

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