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ALLIANZ RESEARCH

ALLIANZ INSURANCE REPORT 2021

BRUISED BUT NOT BROKEN

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EXECUTIVE SUMMARY



Michaela Grimm, Senior Economist
michaela.grimm@allianz.com



Arne Holzhausen, Head of Insurance, Trends
and ESG Research
arne.holzhausen@allianz.com



Patricia Pelayo Romero, Expert, Insurance
patricia.pelayo-romero@allianz.com



Markus Zimmer, Senior Expert, ESG
markus.zimmer@allianz.com

The insurance industry got off relatively lightly during the Covid-19 crisis: In 2020, global premium income fell by only -2.1%. Property insurance even recorded a small increase of +1.1%, while the Life business slumped by -4.1%. As a result, total premium income was around EUR 80 bn lower than before the crisis, adding up to EUR3,730bn (Life: EUR2,267bn, P&C: EUR1,463bn).

The risk landscape post Covid-19 will look different, not because the big trends have changed but because there has been a fundamental change in the awareness and behavior of economic actors. The crisis has massively increased the demands of the industry's stakeholders, not least with regard to customer engagement. For the industry, this means a profound transformation away from a pure product logic and toward a holistic service approach, focusing on the management and prevention of risks.

Mirroring the global economic development, strong growth is expected for the insurance sector in 2021: Total global premiums will rise by +5.1%. Unsurprisingly, the US (+5.3%) and China (+13.4%) are likely to be the two growth engines. However, like the pandemic-related slump, the recovery will be very uneven. While some regions, especially Asia, will almost seamlessly resume their pre-crisis development as early as 2021, the recovery elsewhere will be much more uncertain. Western Europe will be the laggard, with total premium income up by only +1.2%.

2021 is the opening shot for a strong decade. Globally, average growth of over +5% over the next 10 years appears possible, driven by higher risk awareness, the pivot to sustainability and the further rise of Emerging Markets. Thus, the premium pool will reach EUR6,500bn in 2031, with Life accounting for EUR4,100bn and Non-Life for EUR2,400bn. Alongside this process, the center of gravity of the global insurance business is set to shift further toward Asia: The region will be setting the pace for the global insurance industry in the 2020s, contributing as much as 50% of global premium growth; China alone will be responsible for 31%. The shares of North America and Western Europe will be significantly lower, amounting to 24% and 15%, respectively.

The political turn towards sustainability gives the industry a new purpose and opportunity to grow. At the same time, however, it raises the bar in terms of disclosing and measuring the impact of insurance products and services in advancing sustainability. The last chapter of this report outlines an approach that further extends the Sustainable Development Goals' (SDGs) impact assessment to the sphere of insurance products.



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+5.1%

**Total rise in global premiums
in the insurance sector in 2021**

LOOKING BACK: AN 'ANNUS HORRIBILIS' CLOSES A DISMAL DECADE

2020 was the year of the virus: Covid-19 destroyed countless lives and economic livelihoods; the global economy plunged into its worst recession since World War II. And the insurance industry was also caught in this downward spiral.

In 2020, global gross written premiums in Life (excluding Health) and P&C declined by -2.1%, or around EUR80bn, to EUR3.730bn. This was almost double the rate of decline seen after the Great Financial Crisis (GFC) in 2009 – but it was also less severe than feared. At this point a year ago, we had expected a decline of just under -4%. The fact that things did not turn out quite so badly in the end was largely due to the P&C business, which even recorded a small increase in premium income of +1.1% last year. In the Life business, on the other hand (-4.1%), the decline was more or less in line with expectations (see Figure 1, opposite).

In retrospect, there is one factor in particular that contributed to the resilience of the Non-Life business: digitalization. The rapid and smooth transition to digital processes in both sales and operations largely avoided

a standstill in new business, which threatened to result from the many contact and mobility restrictions implemented to contain the pandemic. Naturally, this worked less well in the Life business, with its more complex and advice-intensive products. Added to this is the (understandable) reluctance of most customers to enter into major or long-term financial commitments during the worst economic crisis of their lives. Therefore, against this backdrop, even the slump in the Life business seems almost benign.

However, the range of outcomes in this line of business is very wide, which is generally a feature of the past year: The differences in performance between different business lines and markets have rarely been as great as in 2020. Of course, in many cases, this reflects the varying degrees of success in dealing with the pandemic itself, for example between China and the US (+4.2% vs -2.5%) or between Asia (ex Japan) and Western Europe (+2.9% vs -5.1%). But the differences within the regions are also large. While Germany, for example, still grew (slightly) in 2020, France, Spain and Switzerland recorded double-digit declines in premium income. A similar picture can even be

observed in Asia, where most markets got to grips with the pandemic relatively quickly. Nevertheless, premiums in Taiwan, for example, fell by almost -10%, while they grew by double digits in neighboring Singapore. In most cases, these discrepancies are due to a catastrophic (or dazzling) performance in Life (see Figure 2, opposite).

Figure 1: Gross written premium¹ growth, 2020 by region (in %)

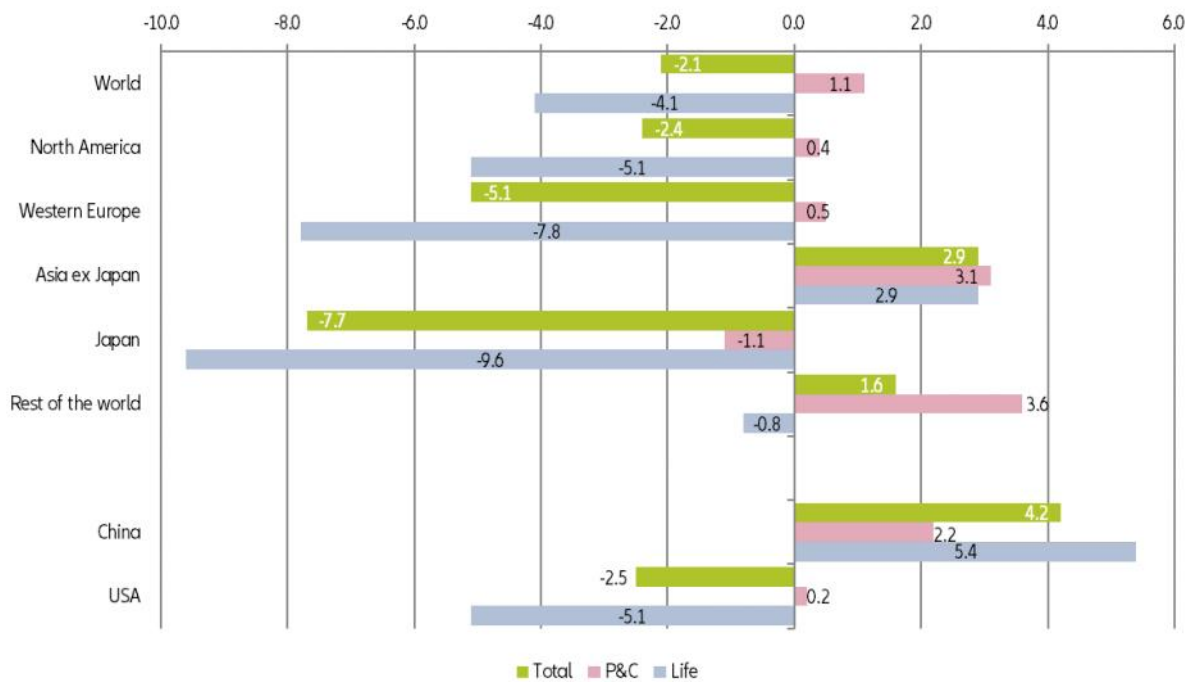
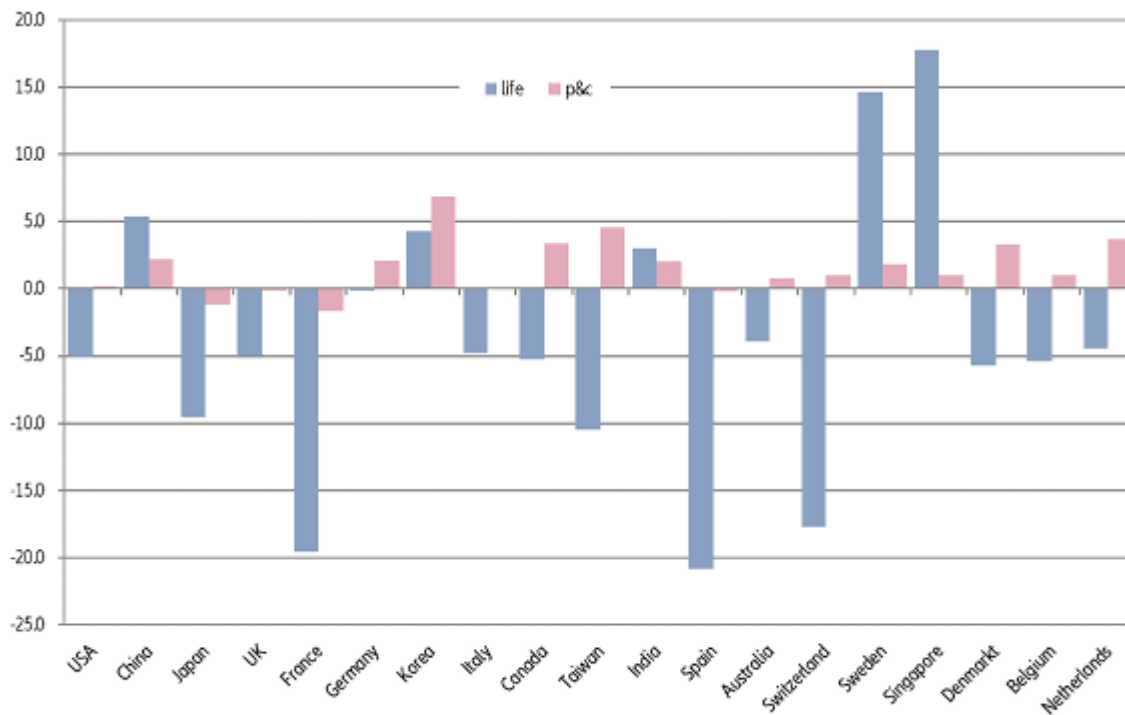


Figure 2: Gross written premium¹ growth, 2020 by the 20 biggest markets (in %)



Sources for Figures 1 + 2: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

1. Without health; the conversion into EUR is based on 2020 exchange rates.

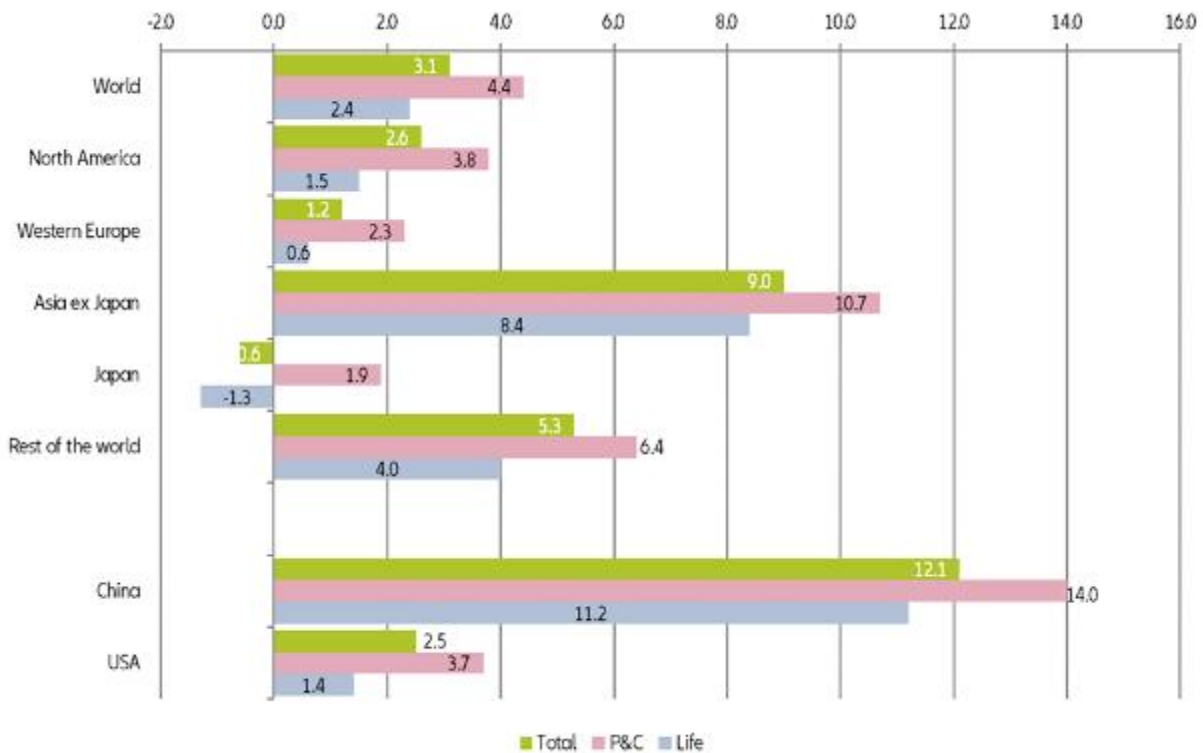
As extraordinary as 2020 was, in two respects it was a “fitting” conclusion, so to speak, to the 2010s: As in the decade before, premium income in the Life segment lagged behind that of the P&C segment, and total premium income, in turn, did not grow faster than nominal economic output.

Globally, Life premiums grew by only +2.4% in the last decade, half as fast as in the previous decade. The growth gap between Life and Non-Life was thus 2pp, and it can be observed in all regions. There is no need to speculate at length about the cause: The record low interest rates in the aftermath of the GFC were a (too) heavy burden for the Life business. Many providers struggled to adapt their traditional product portfolios, geared to interest rate guarantees, to the new reality.

This was particularly evident in Western Europe, the largest Life market, whose global market share was still over 40% before the GFC, but where premiums grew by a meager +0.6% per year in the 2010s. As a result, its share of global Life premiums fell to 30%. Yet even in the US, the second largest market, the development over the last 10 years has been very disappointing. While low interest rates were the decisive factor in these two markets, in other regions and markets additional obstacles prevailed, namely regulatory and political interventions that slowed growth permanently (Eastern Europe) or temporarily (China). In contrast, the development in the Non-Life business at +4.4% per year was rock solid and corresponds exactly to the development in the 2000s (see Figure 3).

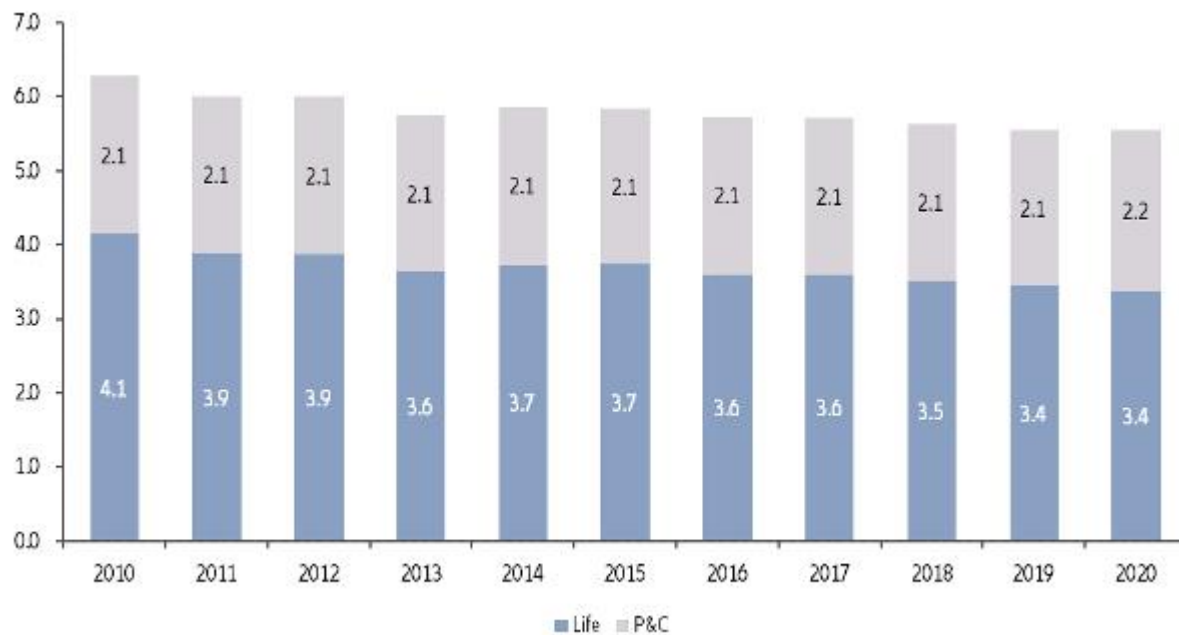
The decline of the Life business – which still accounted for a good 60% of global premium income (excluding Health) in 2020 – is also evident from another perspective, namely penetration (premiums as a percentage of GDP) and density (premiums per capita). While the former has fallen steadily in the life segment over the last 10 years, from 4.1% to 3.4%, the Non-life segment has held its own – and even gained 0.1pp in 2020, thanks to its resilience. The picture is similar for density: Whereas in 2010 policyholders on average spent almost twice as much money on life insurance as on property insurance, this lead has now shrunk to just over 50% (see Figure 4, opposite).

Figure 3: Gross written premium² growth, CAGR 2010 -2020 by region (in %)



Sources: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

2. Without health; the conversion into EUR is based on 2020 exchange rates.

Figure 4a: Global gross written premiums as a % of GDP³**Figure 4b:** Global gross written premiums per capita (in 2020 EUR)³

Sources for Figures 4 a/b: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

3. Without health; the conversion into EUR is based on 2020 exchange rates.

The weak performance of the Life business has meant that growth in global premium income exceeded nominal growth in global economic activity in only one year (2014) during the decade of the 2010s (see Figure 5).

On average, then, households and companies have been spending an increasingly smaller share of their income on risk protection. Given an economic environment aptly described by the acronym "VUCA" (volatile, uncertain, complex, ambiguous) amid increasing natural disasters and health risks – Covid-19 was by no means the

first pandemic in this still young millennium, this reluctance is surprising to say the least. It points to growing protection gaps, which became abundantly clear in the pandemic. It may well be that the Covid-19 crisis will mark a turning point in this respect, leading to a new awareness of risks (see also page 16 ff).

To conclude this review of developments over the past decade, let us take a brief look at the premium world map, i.e. the distribution of premiums by region (see Figure 6, opposite).

It immediately becomes clear which region is the big loser of the last 10 years: Western Europe. Its share of the global premium pie has fallen by 5pp. The big winners, on the other hand, are Asia and China, whose market share doubled in the 2010s. Nevertheless, the undisputed leader is still the North America region – i.e. the US, which accounts for just under 93% of regional premium income – whose market share fell by only 1pp, mainly due to the strong US property business.

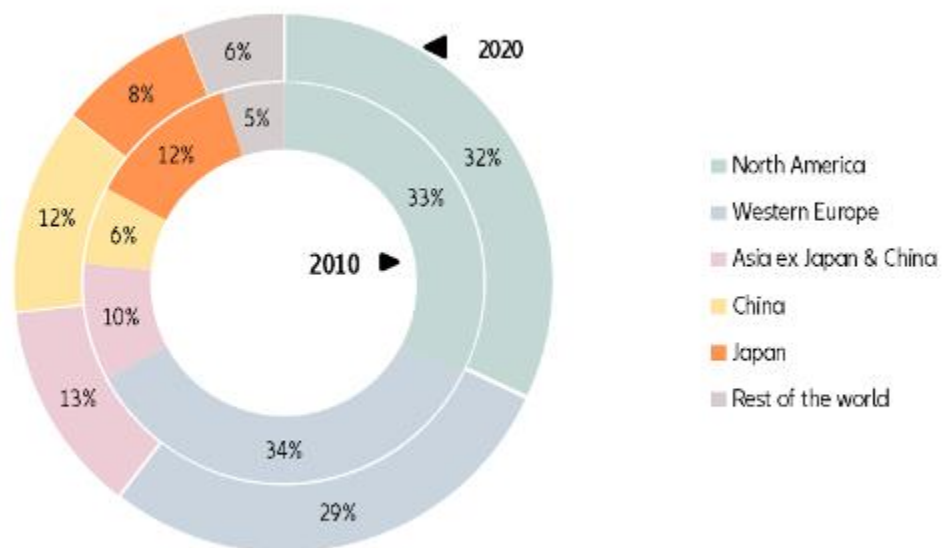
Figure 5: Nominal global gross written premium and GDP growth⁴ (y/y, in %)



Sources: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

4. Without health; the conversion into EUR is based on 2020 exchange rates.

Figure 6: Total gross written premiums, by region in %⁵ (2010 vs 2020)



Sources: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

5. Without health; the conversion into EUR is based on 2020 exchange rates.



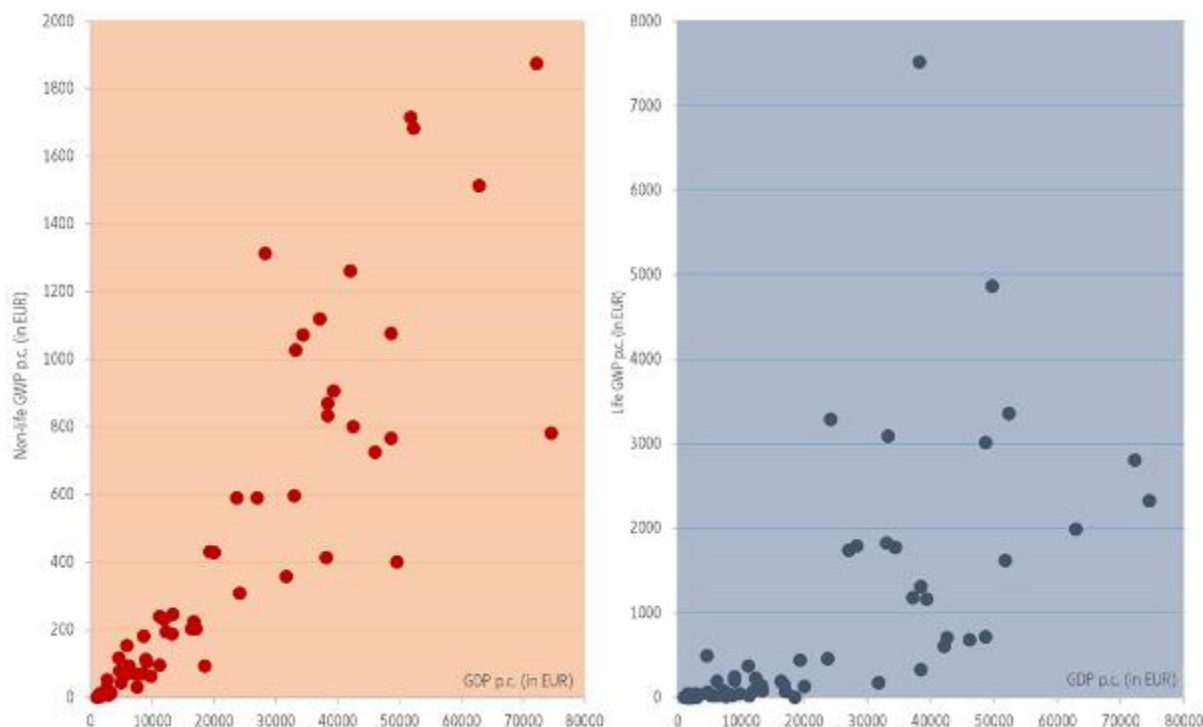
Box: Drivers of insurance demand

In general, insurance demand and the overall income level are positively correlated: The higher the GDP per capita, the higher the insurance density, i.e., gross written premiums per capita. However, there are differences between the business lines: The correlation between economic activity and insurance demand is stronger in property and casualty than in life insurance, since in most countries the latter is not only influenced by the overall income level, but also by taxation regimes and last but not least the design of the public pension system (see Figure 7).

Against the background of the increasing importance of new technologies and distribution channels, changing customer behavior and demographic change, the question arises whether this correlation in property and casualty insurance remains strong and whether there are other explanatory variables that might have replaced GDP as the decisive factor for property and casualty insurance market growth in recent years.

In order to answer this question, we run single linear regression models with various exogenous factors for the total gross written Property and Casualty premium income on a global⁶ and country level, as well as for motor insurance and Property business in 10 countries. However, our analysis of potential influencing factors beyond GDP had to be confined to measurable explanatory variables for which time series data for at least 20 years were available. As additional exogenous factors we chose the MSCI World index, the respective national stock market benchmark indices and 10-year benchmark bonds, as well as consumption expenditures and the disposable income of private households. With respect to the development of

Figure 7: Insurance density and GDP per capita



Sources: National supervisory authorities and insurance associations, IMF, Refinitiv and Allianz Research.

6. We took into account the nominal GDP and gross written premiums of the following 61 countries: Argentina, Australia, Austria, Bahrain, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Ireland, Italy, Japan, Kazakhstan, Kenya, Laos, Lebanon, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Romania, Russia, Saudi Arabia, Singapore, Slovakia, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Taiwan, Thailand, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States of America and Vietnam based on 2019 EUR exchange rates. The full analysis can be found here:

Box: Drivers of insurance demand (continued)

motor insurance premiums, we took also the number of new car registrations, the total number of vehicles and in one case the number of mileage per year into account⁷. Furthermore, we analyzed not only the development over the whole time period since the turn of the century but also split it into two sub-periods: the first 10 years up to the financial crisis from 2000 to 2009 and the second decade between 2009 and 2019.

In fact, for the development of total Property and Casualty premium income, our single linear regression models show that at the global level the explanatory strength of nominal GDP is significantly stronger for the second decade of this century than for the years between 2000 and 2009. Nominal GDP growth explains more than 60% of global Property and Casualty insurance premium development since 2009, while the correlation is close to zero in the first decade due to the burst of the tech bubble on the stock markets and the opposite impact of the attacks of September 11, 2001 on insurance premiums and GDP growth.

However, at the country level, the results are less obvious: In 31 of the 61 analyzed countries, among them 10 of the biggest insurance markets worldwide such as the US, China, Germany and Spain, we observed the same development pattern as at the global level, while in the other 30 countries the correlation was stronger in the first decade. The maturity level of an insurance market, measured in gross written premiums as a percentage of GDP, had no influence on the explanatory strength of nominal GDP growth.

The same holds true when choosing capital market developments as the exogenous variable. The development of the Dow Jones index explains 64% and that of the MSCI Global Index around 40% of the global premium development since 2009, albeit with a time lag of one year, while the correlations in the first decade are close to zero. Choosing the MSCI Global Index as the exogenous variable, we found the same pattern in 33 of the 61 countries. However, the overall explanatory strength of the MSCI Global Index and the national benchmark indices is on average lower than that of nominal GDP.

The results of our analysis of the main influencing factors for motor and property insurance premium growth in 10 of the biggest insurance markets worldwide⁸ are mixed: We found no decisive exogenous factor for the development of motor insurance premium income. Even the number of motor vehicles was in most cases not the best indicator for motor insurance premium growth. Property premium growth since 2000 was in half of the countries influenced by national stock market developments, but the explanatory strength of this exogenous factor was rather low in all countries, namely between 9% and 34%. The split in the two time periods showed that in the first decade private consumption expenditures were the dominating explanatory variable, while we could not identify a decisive exogenous factor for the development in the second decade.

Thus, the results of our analysis and the latest insurance market developments suggest that nominal GDP development is still a decisive influencing factor of property and casualty insurance market growth. Though new technologies and distribution channels have changed markedly the way of accessing customers, the overall income level remains decisive for their insurance demand.

7. *Of course, factors like financial literacy and the access to financial services, changes in legislation or the occurrence of natural disasters are important for insurance demand, while market regulation, competition and last but not least interest rate and capital market developments influence insurance prices and supply. But very slow changes or one-time events can hardly be modeled or forecast, while data about price developments is not available in most countries.*
8. *The 10 countries are Australia, Brazil, China, France, Germany, Italy, Japan, Spain, UK and the US. The total premium income of these 10 countries accounted for more than 75% of the global P&C gross written insurance premiums in 2019. Property and motor insurance business lines combined make up 70% of the total premium income of the ten markets, with the shares in the single countries ranging from 59% in France to more than 70% in Australia, Japan and the US.*

COVID-19 AND ITS CONSEQUENCES: VACCINOMICS: THE ECONOMIC ENVIRONMENT

While China was the growth engine of the world economy in 2020 (i.e. the only big economy that grew at all), the US will take over this role in 2021. Global GDP is expected to rebound by +5.1% in 2021, with more than one fourth of the recovery being driven by the US (see Table 1, opposite).

In 2022, world GDP growth should reach ca. +4%. The over-expansionary stance of the global policy mix explains this rebound in 2021 and 2022, compared with the contraction of -3.6% in 2020. However, execution risks will remain a key differentiator between countries, with the pace of vaccination campaigns driving a multi-speed recovery and keeping divergence at high levels⁹.

In the US, President Biden's stimulus packages are set to propel domestic demand. Adding to this the successful vaccination campaign and the healthy progression of housing prices, consumer confidence is set to increase significantly. On the back of this confidence boost, accompanying steady progress on the job front, we expect a big chunk of excess savings to be unleashed, generating a strong impetus for consumption, the main driver of the US economy. All in all, we expect the US economy to grow by +5.3% y/y in 2021 and +3.8% y/y in 2022. Fiscal policy, however, could turbo-charge growth even further. On top of the first USD1.9trn stimulus package, the US government wants to add another round of stimulus with a

USD2.3trn infrastructure program to renovate roads and bridges and develop new types of green and digital infrastructure, while continuing to invest in health and education to reduce inequalities. Should the second leg of the plan be implemented in full, it has the potential to boost growth significantly above +6% y/y in 2021 and +4% y/y in 2022.

Europe remains the recovery laggard compared to other economic heavyweights. In 2021, we expect the European economy to race at a rapid pace through the entire economic cycle, from a double-dip recession at the start of the year – due to renewed lockdowns – to a consumption-led catch-up growth spurt in the second half of the year when progress on the vaccination front should allow for an economic re-opening. Thankfully, strong export demand – driven by the ongoing Chinese recovery and super-charged, stimulus-induced US GDP growth – will extend a helping hand to European economies in 2021, in turn exacerbating the divergence between manufacturing and services. At the same time, policymakers will continue to do "whatever it takes" to safeguard the recovery and shore up public support ahead of key elections in Germany (Sept. 2021) and France (April 2022). All in all, we expect Eurozone GDP to expand by +4.0% in both 2021 and 2022. That means that the Eurozone economy is set to recover to pre-crisis GDP levels only in H1 2022, almost a full year after the US.

In China, the post-Covid-19 recovery is well underway, and 2021 will focus on policy normalization. The 2020 rebound was mostly a story of policy-driven areas such as the real estate and infrastructure sectors. In 2021, household consumption and business investment could become the growth drivers. The external environment will continue to be supportive as many of China's trading partners are still battling the pandemic and their policies are in full easing mode. We expect the Chinese economy to grow by +8.2% in 2021 (after +2.3% in 2020) and +5.4% in 2022. This means that the official target of "above 6%" will be relatively easy to achieve, allowing policymakers to shift their focus away from short-term stimulus to financial vulnerabilities and asset price bubbles (in real estate and capital markets). The normalization, however, will be done in a flexible and gradual manner: fiscal measures, for example, will boost the economy by "only" 4.6% of GDP in 2021, after 7.1% in 2020, but 2.9% on average in 2018-2019.

9. Our detailed economic and market look can be found here: [2021_04_01_ScenarioQ1_SevenObstacles.pdf \(allianz.com\)](#)

Table 1: Real GDP, change y/y in %

	2019	2020	2021	2022
World GDP growth	2.4	-3.6	5.1	4.0
United States	2.2	-3.5	5.3	3.8
Latin America	0.2	-7.1	3.9	2.9
Brazil	1.4	-4.4	2.8	2.3
United Kingdom	1.4	-9.9	3.7	5.9
Eurozone members	1.3	-6.6	4.0	4.0
Germany	0.6	-5.3	3.4	3.8
France	1.5	-8.2	5.4	3.6
Italy	0.3	-8.9	4.1	4.0
Spain	2.0	-11.0	4.8	5.7
Russia	2.0	-3.1	2.5	3.0
Turkey	0.9	1.8	6.6	4.1
Asia-Pacific	4.1	-1.1	6.6	4.7
China	6.0	2.3	8.2	5.4
Japan	0.3	-4.9	2.8	1.9
India	4.1	-7.5	10.7	6.4
Middle East	0.1	-5.2	2.8	2.2
Saudi Arabia	0.3	-4.1	2.5	2.3
Africa	1.7	-3.2	2.4	3.4
South Africa	0.3	-7.1	1.9	2.1

Sources: National Statistical Offices, Allianz Research.

Turning to monetary policies, most central banks will continue with their expansionary measures in 2021, with the notable exception of China, where the policy stance already started to tighten in Q4 2020. In the US and Europe, on the other hand, policy normalization will proceed at a very gradual pace. The US Federal Reserve might kick off with a first tapering step in H2 2022, while the European Central Bank will clearly lag as growth and inflation trail behind. The first interest rate hikes in the Eurozone may have to wait for late 2023 or 2024.

Nonetheless, against the backdrop of stronger confidence in the global recovery and rising inflationary pressure, yields have risen since the beginning of the year. 10y US Treasuries, for example, jumped by a whopping

70bp to 1.6%; at this level, expectations for a strong recovery already seem to be priced in. Accordingly, we expect 10y US Treasuries not to exceed current yield levels at the end of the year, though higher volatility is very likely. A similar development is expected in Europe (but at a lower level): yields of the 10y German Bund will remain broadly unchanged over the year and only rise moderately in 2022.

In this context, we expect equity markets to close the year with timid single digit returns but to accelerate in 2022 on the back of a palpable economic recovery and still accommodative monetary policy. European risky assets could even find themselves in a favorable position, offering more upside potential than their US counterparts due to the delayed recovery.

All in all, the economic environment should provide the insurance industry with some tailwinds in the next few years. While capital markets remain challenging as the long yield winter is likely to continue and volatility stays elevated, income and investment are growing, building the bedrock for rising demand for insurance.

COVID-19 AND ITS CONSEQUENCES: INSURANCE AND INFLATION

There is, however, one drag: Inflationary pressures will continue to increase in 2021 for several reasons: first, the recent input cost bonanza, driven above all by strained supply chains and the oil price recovery; second, higher services inflation along with the economic reopening in H2 and third, strong pandemic-related roller coaster base effects. Although the likelihood that inflation embarks on a structural upside trend remains low, even a temporary return of inflation, after years of hibernation, might pose some challenges for the insurance industry.

There are basically four channels through which inflation can impact insurance profitability, the claims channel being the most prominent: inflation leads to higher claims costs, eroding profitability. The more sudden the inflation surge, the more severe the impact as premiums cannot be adjusted. The other three channels are expenses, investment income and the balance sheet. Among these three, however, only expenses are a clear negative, in particular if rising wages are not matched by rising productivity. Investment income, on the other hand, could even be positively influenced if inflation leads to higher interest rates. In addition, the impact on the balance sheet hinges on how interest rates and spreads react on inflation, as well as on the maturity (mis)match between assets and liabilities.

Given the importance of the claims channel, it is not surprising that the P&C business is first and foremost to suffer from an inflation shock. In particular, Casualty and other long-tail businesses are on the hook as they are characterized by long settlement periods: in general liability, for example, after three years of occurrence only half of all claims are settled; as a consequence, loss reserves have to be increased markedly in times of rising inflation.

However, note that claims inflation is only partially driven by general inflation. The other drivers are exposure growth (e.g. higher economic activity), social inflation (e.g. significant increases in jury awards and defense costs), new technologies (particularly in Health) and rising natural catastrophes (particularly in Property). In Germany, for example, general inflation has historically accounted for only around 40% of claims inflation on average. In certain lines of business, however, it is much less; this applies not only to Health, with its huge strides in advancing medical treatments, but also to less obvious candidates such as Motor: Over the last seven years, thanks to new materials and technologies (e.g. sensors), prices for car repairs increased by +4.1% p.a. against general inflation of +1.1% p.a. The impact of inflation may be further diluted if it leads to a recession (stagflation scenario) and thus lower exposure growth.

The impact on the balance sheet is rather small in P&C if inflation and interest rates move in sync. On the liability side, nominal reserves are adjusted upwards (for inflation) and discounted downwards (higher interest rate) at the same time; on the asset side, the impact is negative but not big due to a generally shorter duration of assets and liabilities – and will be offset by higher investment income.

In general, the Life business is a long-tail business as some policies (e.g. pensions) can even last for many decades. Nonetheless, the impact of inflation is diluted for a simple reason: most Life products come with benefits fixed in nominal terms. But there are some exceptions – e.g. business lines like long-term care or disability – in which benefits increase in line with rising costs of living over a long time period.

But all in all, the indirect impact of inflation on the Life business looms larger: With an inflation surge, lapse rates are likely to increase and demand for policies to decrease as rising inflation and interest rates erode the value proposition of fixed benefits and render guaranteed rates of return inadequate. The demand for savings products in particular might decline if the inflation increase is prolonged and other products (i.e. bank deposits) adjust faster. In the long run, however, higher interest rates are a positive for the Life business. The impact on the balance sheet of Life insurers is nil – if assets and liabilities are perfectly matched. But if liabilities have a longer maturity, the impact can even be positive because of the higher discount rate for future liabilities.

A forward-looking strategy to limit the negative impact of inflation on the liability side includes the indexation of premiums and deductibles, as well as the introduction of fixed payouts, limits and sunset clauses. However, on the asset side, ad-hoc mitigation strategies are possible, such as investing in inflation-linked assets or assets that generally benefit from higher inflation, such as certain equities: The resulting higher investment income would help to attenuate the negative impact of inflation on claims. However, the easiest way to restore profitability would be a quick reversion of inflation rates to the mean. So if the overshoot of inflation rates remains an episode, the impact on the bottom line should also be limited and short-lived.



COVID-19 AND ITS CONSEQUENCES: THE NEW RISK LANDSCAPE POST COVID-19

Inflation might turn out to be a rather short-term consequence of the Covid-19 crisis. But other consequences will without doubt cause long-term changes, the risk landscape after Covid-19 will look very different.

However, this applies less to the major, long-term trends: Digitalization, the pivot to sustainability and the increasing polarization in politics, society and the economy – the most important keywords here are de-globalization and inequality – were already shaping developments before Covid-19. However, the crisis has given them a boost, in some cases a dramatic one. This is true not only for digitalization, where the push is most obvious: working, shopping and entertainment from home are now a matter of course for most people. But the crisis is also acting as an accelerator for the other trends. The shift in emphasis from efficiency to resilience, for example, has been accompanied by a reconfiguration of global supply chains that will lead, if not to de-globalization, then to a significant slowdown in the global division of labor. Covid-19 has also further increased social inequality as job losses have primarily affected the service sector, where young, female and foreign workers are disproportionately represented. On the other hand, the even greater focus on sustainability in the course of Covid-19 can certainly be assessed more positively. This applies in particular to climate protection: The decarbonization of all economic activities is at the heart of the major infrastructure programs aimed at stimulating economies post Covid-19.

Yet, the decisive change brought about by the pandemic took place and continues to take place at another level: There has been a fundamental change in the awareness and self-image and thus behavior of economic actors. This affects the state, companies and households alike.

For a long time – at least in developed countries – an (unspoken) leitmotif of social policy was to shift responsibility for financial risks from illness, job loss or longevity from the state and companies to individuals, at least partially. Covid-19 has led to a paradigm shift here. The state has clearly acknowledged its role as “risk taker of last resort” and has assumed the financial losses of the crisis for households (and companies) without compromise. Looking at the post-Covid-19 measures already taken and planned, not least in the US, it is easy to conclude that these aid measures are not a one-off, exceptional rescue operation; rather they point to a permanently changed self-image. The measures mark the return of the strong state, which uses its resources – (borrowed) money and (legal) interventions – to actively shape the economy and society according to its ideas and concepts. Social and economic outcomes are no longer to be accepted merely as the result of market activities. Of course, other developments, such as the increasing systemic competition with China and the rise of populism, have also contributed to the resurgence of the strong state but Covid-19 was the decisive impetus to make this policy mainstream. And once in the mainstream, it is not expected to disappear quickly.

What does this mean for insurers? For one, quite mundanely, more intrusive regulation is to be expected. The new regulatory approach is no longer “just” about transparency, information and risk management, but about conduct and “value for money”: Do the products and services meet customers' expectations and needs? However, the industry should see these new requirements not as a chore, but an opportunity for real cultural change, which will pay off in the medium term: better products, stronger reputation, higher customer loyalty, thanks to true customer centricity, which runs through the entire company, from bottom to top.

On a fundamental level, however, the return of the strong state could become a threat to the insurance industry. The pandemic in particular has drastically demonstrated the limits of (private) insurability. How the industry deals with this will be crucial to its future significance. This is not just about insuring pandemics; risks from natural catastrophes and cybercrime can also quickly reach systemic dimensions.

The industry must resist the temptation to shirk its responsibility by restricting cover and tightening wording. Instead, it should actively work on viable solutions which, in the case of risks of this magnitude, will result in private-public partnerships. It is essential for its role in society that the insurance industry actively contributes to the efficiency and effectiveness of such insurance regimes for systemic risks. Otherwise, its "license to operate" could increasingly be called into question.

Corporate thinking has also changed in the pandemic. The keywords here are "purpose-driven" or "stakeholder capitalism". Today's companies serve a broader range of interests beyond maximizing shareholder returns; ideally, they are guided by a purpose, contributing to societal well-being by providing solutions to the societal problems facing their customers. This automatically leads to a stronger politicization of companies, as can be seen, for example, in their involvement in the "Black Lives Matter" movement.

This shift in emphasis in the self-image of companies also has an impact on their demand for risk protection. Questions of reputation and brand are gaining great importance and new explosiveness, requiring not only new insurance solutions, but also joint strategies for managing and preventing risks. What is required is a holistic approach consisting of consulting and financial protection. In the context of accelerated digitization, data integrity issues naturally also play a major role, from the handling and use of private data to protection against cyber-attacks. New solutions are needed here, particularly with regard to working from home, not least in the area of worker compensation.

From the insurance industry's point of view, however, the greatest changes are to be observed among households, i.e. retail clients. The often traumatic experiences during the pandemic have led to an appreciation of central insurance concepts such as protection and safety, resilience and wellness.

This has been accompanied by increased demand for risk solutions, not least in the area of health.

However, this is by no means synonymous with a run on traditional insurance policies by customers. Rather, the opposite is likely to be the case. Because in the pandemic, even the last analog customers have had a crash course in digitization and have learned to appreciate and love the innovative, fast, and personalized offerings of digital providers – standards that they now also apply to their insurance. This means that insurers face no less a task than redefining customer engagement and experience, areas in which they have traditionally not exactly shone. One way to do this is to build eco-systems that offer not only insurance products but also related services, such as data-based services in mobility or consultations, prescriptions and self-management tool related to health.



For this, cross-industry cooperation might become necessary. In this way, the value proposition of insurers would be enhanced, from pure financial compensation to risk management and holistic service offerings to prevent and mitigate risks. This would enable them to catch up with the established digital providers, which have been achieving a high level of customer engagement for years and are thus also in a position to create new products and services with customer-centric data ("value co-creation").

Covid-19 was a hard blow for insurers. The post-Covid-19 risk landscape, on the other hand, offers great opportunities – but not for free. The demands on the industry have increased dramati-

cally. This affects both the government that regulates the industry and the clients who buy its products and services. In both cases, it is about building and expanding partnership-oriented relational business models; this would need to be accompanied by a shift from a pure product logic to a more service-oriented business model. The next few years will show whether the insurance industry as a whole is up to this challenge. Yet, it will not have much time for transformation. It may not necessarily lose its role as a risk carrier but it will lose the competition for customers to big tech companies or new competitors.



Photo by Daniel Salcius on Unsplash

Box: The example of crop insurance

New business models combined with new digital technologies can change many insurance markets for the better. The century-old market for crop insurance is no exception. In fact, it is a good example of how purpose-driven insurance can meet the needs of the post-Covid-19 risk landscape.

The pandemic stopped much of economic activity around the world, yet something that remains unstoppable even by a pandemic is climate change. In 2020, economic losses from natural disasters were estimated at EUR223bn; only EUR81bn of those losses were insured¹⁰. The difference between the uncovered and insured losses is called a protection gap: in total, EUR121bn worth of assets was lost in 2020.

One of the sectors most vulnerable to climate change and weather events is the farming industry. Around 400mn farmers around the globe are dependent on rainfall for their crops and their living. Yet only 15mn farmers worldwide¹¹ are insured against adverse weather events. A bad farming season can have long-lasting effects on farmers' financial situations as it could leave them unable to purchase inputs for the following season.

There is a plethora of reasons why it is important to protect the small farmers in developing countries, not only because they literally feed the world, but also because in many cases supporting the farming industry can help ameliorate the economic and financial situation of vulnerable households. In Latin America, during the commodity boom of 2000-2014, the farming industry and commodity prices drove poverty and inequality down. As prices for commodities rose, and due to the labor intensiveness of farming, demand for labor rose and so did the labor costs (wages). As the advances in reducing inequality have been endangered by Covid-19, it is increasingly crucial to build farmers' resilience and income stability.

Remote weather monitoring, mobile phones, big data analysis and smart contracts have made it possible for insurtech projects to tap into this underserved segment of the economically active population. With remote weather monitoring, insurance companies can reduce the cost of in-person assessments and monitoring in favor of cheap and precise weather data. Mobile phones also provide the possibility of connecting farmers with financial services and trigger payments to their phones in the event of crop loss due to a weather event. Furthermore, big data can improve underwriting practices and provide relevant advice to both farmers and insurance companies.

The beauty of crop insurance in the digital age is that farmers do not need to file claims or go through the painful process of requesting payment from their insurance company. Crop insurance is indexed to weather events or the stock market, in the event of unfavorable price fluctuations in commodities or in case of droughts, floods or fires, the insurance companies program triggers a release of payments for the farmers.

Through crop insurance, farmers, private insurance companies and governments share the risk of crop loss and commodity price fluctuation. In addition, farmers are included in the financial system and have the possibility of access to loans, which remains limited in Emerging Markets. Crop insurance could be the "commodity boom" that provides a safety net for those households and prevents them from falling into poverty. It could elevate the farming practice and mitigate risk for those vulnerable to climate change.

10. Global Weather Catastrophe and Natural Disaster Costs: Climate Change Annual Report 2020 (AON).

11. According to OKO Crop Assurance.

LOOKING AHEAD: 2021, OPENING SHOT FOR THE GOLDEN 2020s

Strong growth is expected for the insurance industry in 2021, mirroring the expected global economic development. Overall, global premiums are expected to rise by +5.1%. Unsurprisingly, both the US (+5.3%) and China (+13.4%) are likely to be the two main growth engines. After the sharp decline in the previous year, the recovery in the Life segment (+5.7%) will be somewhat stronger than in the Property segment (+4.2%), (see Figure 8, opposite).

However, like the pandemic-related slump, the recovery will be very uneven. While some regions, especially Asia, will almost seamlessly resume their pre-crisis development as early as 2021, the recovery elsewhere will be much more uncertain. In addition to Japan, this applies above all to Western Europe. This is partly due to the handling of the Covid-19 crisis itself – continued lockdowns due to high case numbers, delayed vaccination campaigns due to supply bottlenecks – but it also partly reflects late effects of the pandemic. Low claims expenses in the previous year, especially in motor insurance, are leading to lower premium momentum this year; the practice of retrospective pricing based on turnovers is having a similar effect in some industrial insurance lines. In life insurance, the conditions are significantly more favorable – many households have high additional savings – but here, too, it remains questionable whether a dramatic turnaround can be expected as early as this year following the deep slump in 2020 and

the continuing uncertainty about the progress of the pandemic. Against this backdrop, growth of only +1.2% is expected in Western Europe in 2021 (Life: +1.3%, P&C: +1.1%). As a consequence, while global premium levels are likely to return to pre-crisis levels as early as the end of 2021, this figure will probably not be reached in Europe until 2023.

Globally, the strong growth should continue in subsequent years. There are several reasons for this: better growth prospects, thanks to the pandemic-related innovation boost and more (public) investment as a result of the pivot to sustainability; heightened risk awareness after the pandemic; accelerated demographic change and the further rise of Emerging Markets. Globally, average growth of more than +5.0% seems possible over the next 10 years, with life insurance (+5.6%) growing slightly faster than property insurance (+4.6%). Overall, premium volume should increase to EUR6,500bn in 2031, with Life accounting for EUR4,100bn and Non-Life for EUR2,400bn (see Figure 9, opposite).

The pace of growth in the next decade is thus likely to be significantly higher than in the 2010s (+3.1%). This applies in particular to life insurance, where the growth rate should more than double (from +2.4% to +5.6%). This development will be driven by the developed markets, where the Life business should

return to normal after the “leaden 2010s” with their permanent low interest rates. This is because, on the one hand, providers have now fully adapted their products to the changed environment and, on the other, Life risk protection and provision for old age has lost none of its urgency. In fact, the aging of societies will accelerate in the coming years and the exploding national debt argues for more rather than less individual provision. In combination with higher growth, it should therefore once again be possible to achieve growth figures in Western Europe (+3.1%) and North America (+4.8%) that are more reminiscent of the beginning of the millennium. After the lost decade, these are almost golden prospects for the beleaguered sector.

But the prospects for Emerging Markets – where, with the exception of Eastern Europe, there has been no slump in the Life business in recent years – are not bad either: here, the strong development of recent years is simply likely to continue. In view of the still rudimentary nature of some social security systems and progressive social and demographic change, individual retirement provision is becoming increasingly important in these markets as well.

Figure 8: Gross written premium¹² growth, 2021 by region (in %)

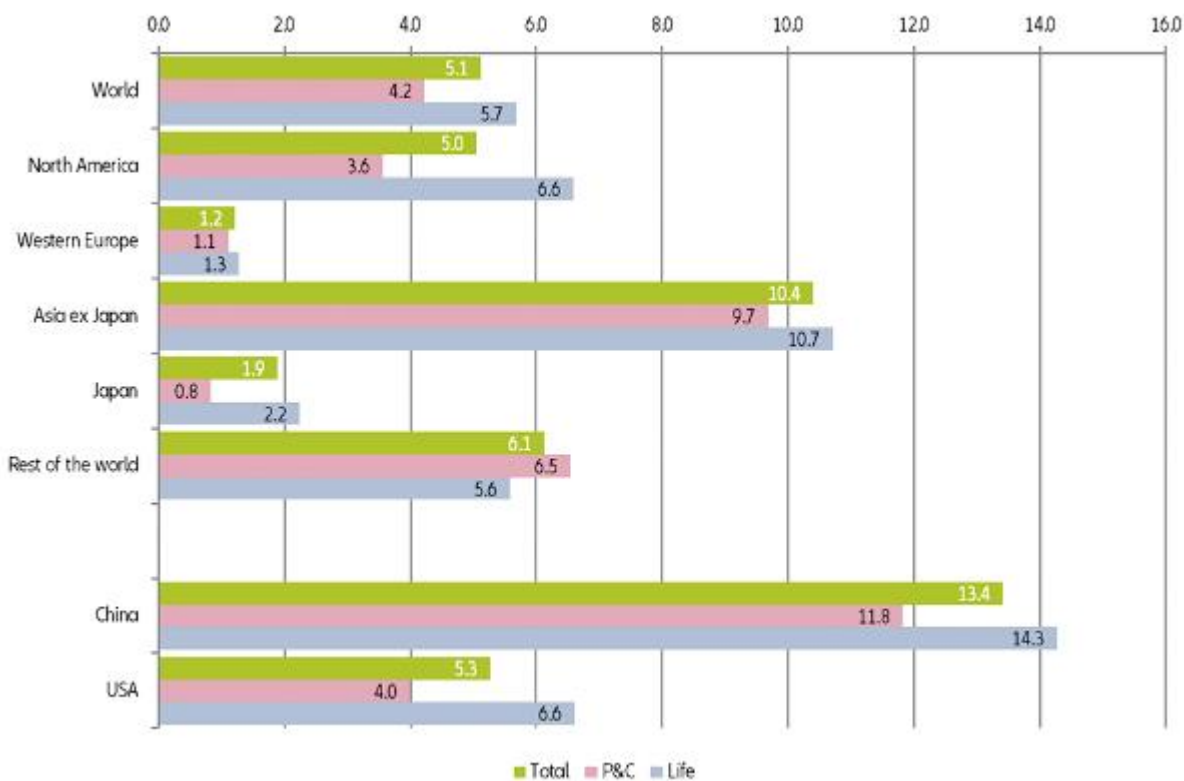
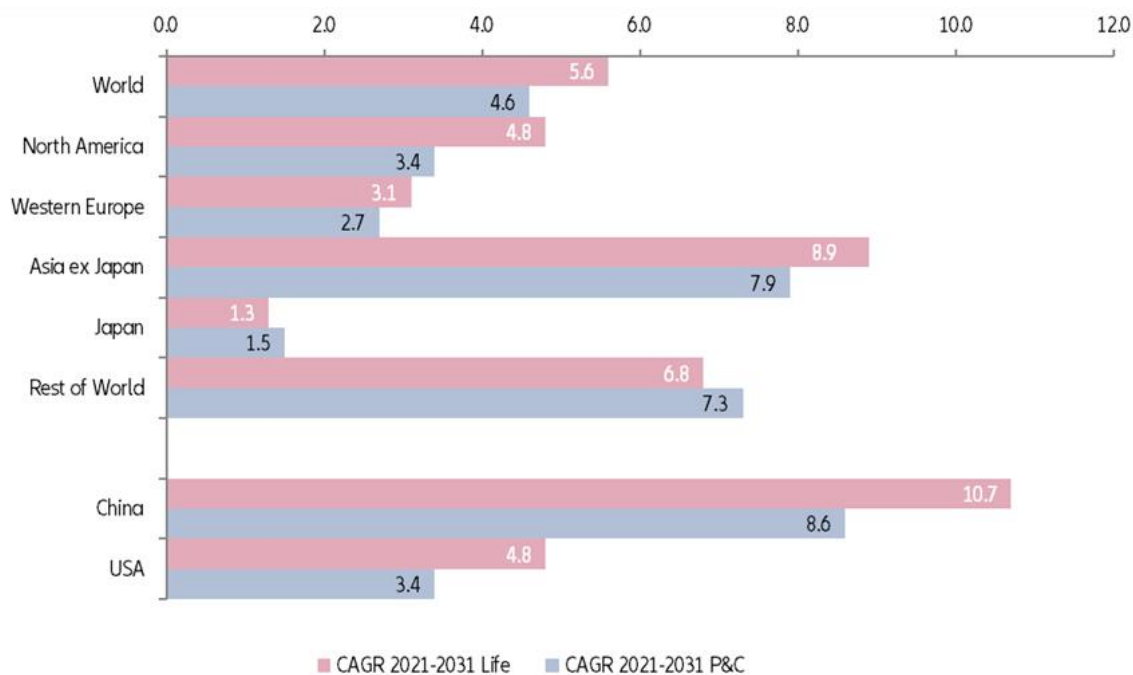


Figure 9: Gross written premium¹² growth, CAGR 2021 -2031 by region in %



Sources for Figures 8 + 9: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

12. Without health; the conversion into EUR is based on 2020 exchange rates.

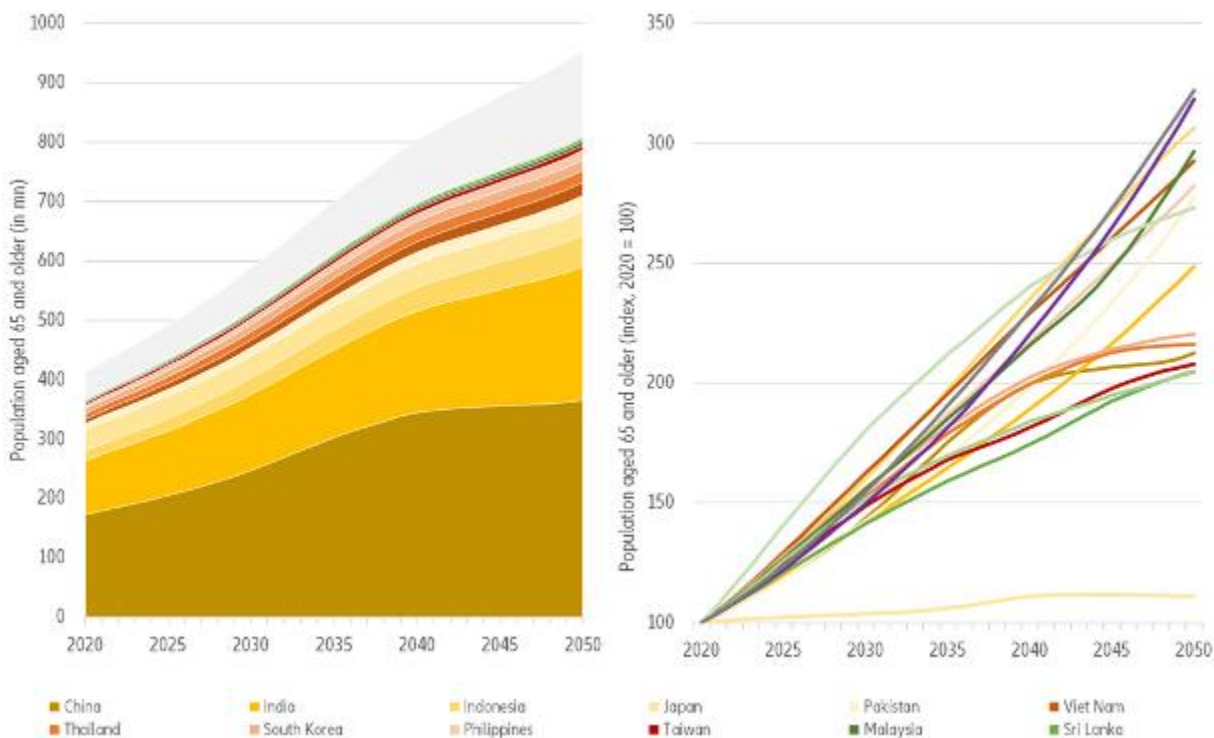
Box: Demographics and social security in Asia

While the Covid-19 pandemic has ruthlessly exposed the deficits of many Asian healthcare systems, the looming pension crisis has taken a back seat, despite the fact that depleted state finances and rapidly aging populations require urgent pension reforms. The pace of aging leaves many Asian countries only a short window of time to build demography-proof pension systems or adapt existing ones.

The pandemic has not altered the underlying demographic trends: The populations of many Asian countries are expected to age rapidly due to increases in life expectancy and declining fertility rates within the next decades. According to the latest available UN data¹³, the number of people aged 65 years and older in Asia is set to more than double from around 428mn today to 955mn in 2050 (see Figure 10).

However, it is not only the pace of change in absolute figures that gives reason for concern, but also the rapid increase of the share of the elderly in the total population. In many Asian countries, this is set to more than double within the next 30 years. Today, around 9% of Asia's total population is aged 65 or older; in 2050, their share will be 18%, though with a broad range reaching from 8% in Pakistan to 38% in Japan and South Korea (see Figure 11, opposite).

Figure 10: The number of people aged 65 and older is set to reach 955mn



Source: UN, Department of Economic and Social Affairs, Population Division (2019).

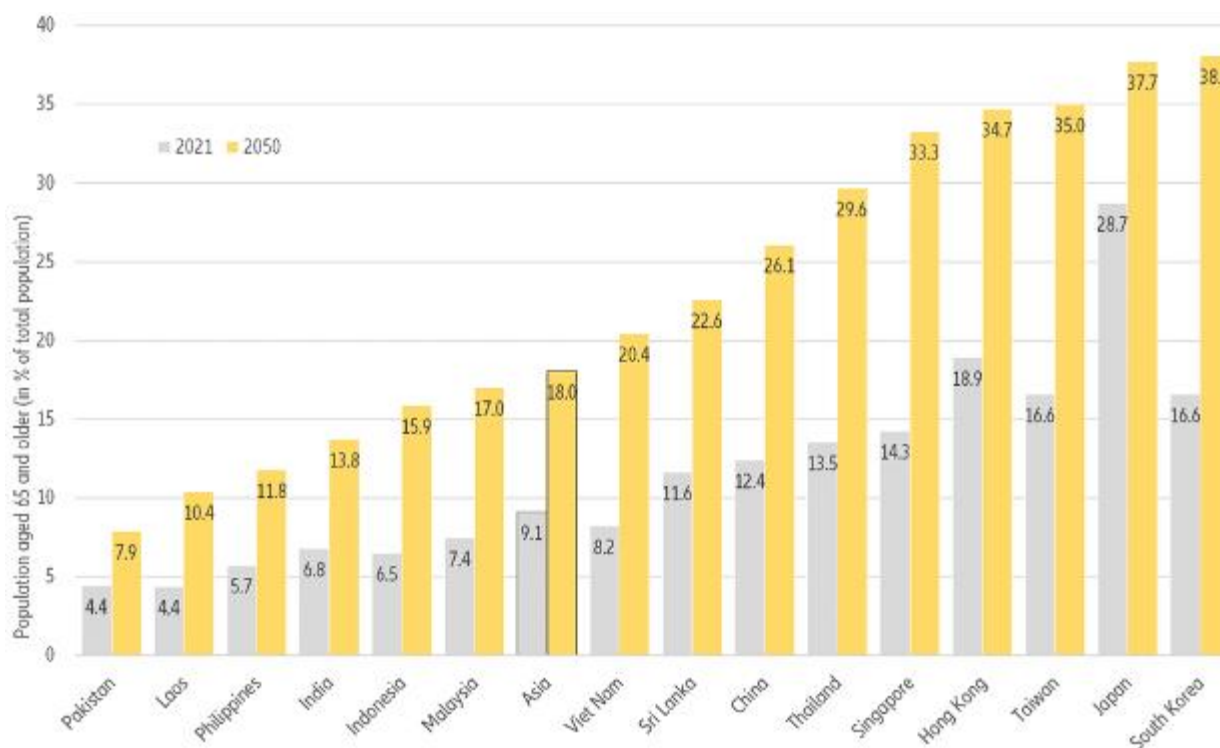
13. See UN, Department of Economic and Social Affairs, Population Division (2019). In the UN's constant-mortality scenario, the number of people aged 65 and their share in total population are expected to increase to 826.4mn and 16.3%, respectively.

Box: Demographics and social security in Asia (continued)

Against this backdrop, there is an urgent need to increase the coverage of the public pension system. In many Asian countries, it is mainly public sector employees who are covered by pension systems, while workers, who are often employed in the informal sector, have no access to the public pension system. According to the latest available data, in the emerging Asian markets, less than 50% of the population aged 15 and older was covered by the public pension system. The share of people aged 65 and older receiving a pension is also below 50%, with the notable exception of Thailand. In the advanced Asian markets, the picture is naturally better but still far from perfect. In Taiwan, for example, only 68% of those aged 65+ receive a public pension (see Figure 12, page 24).

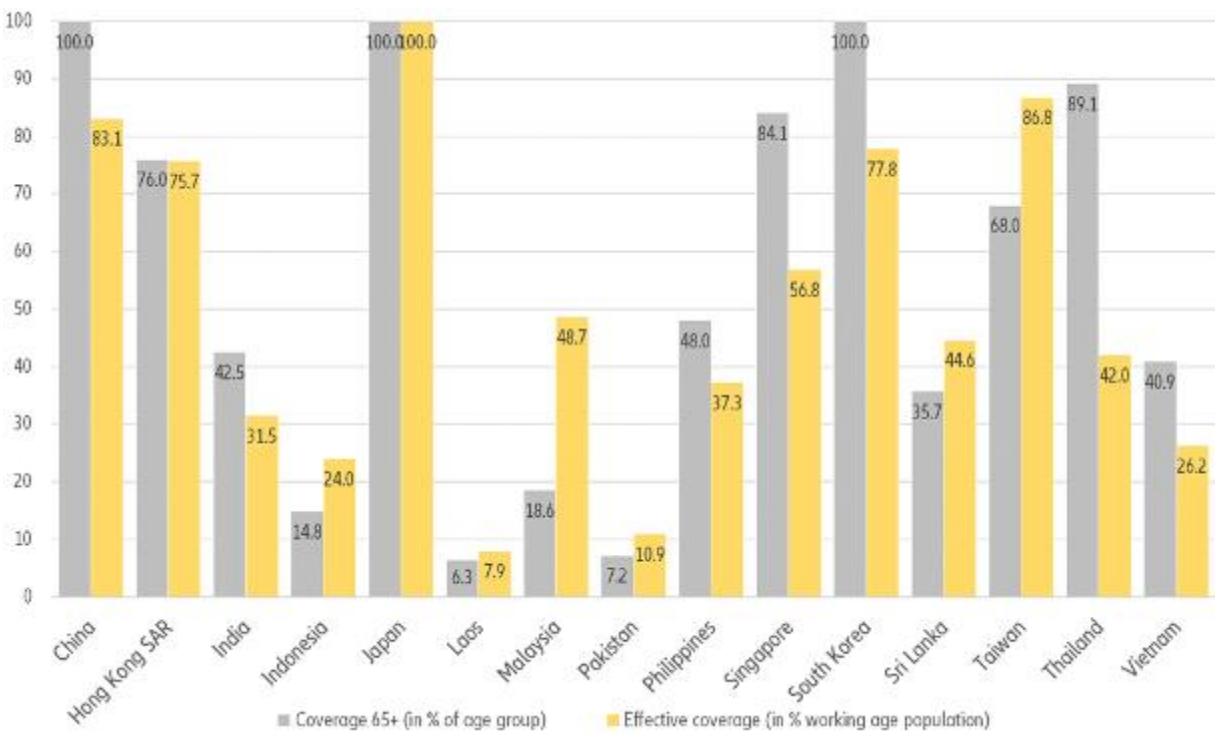
In addition, in some of the markets with low pension coverage, a great part of the population still lacks access to the financial system, which hampers private old-age pension provision. In Laos, the Philippines and Vietnam, for example, less than a third of the population aged 15 and older had an account at a financial institution. Furthermore, there is also still a lack of awareness of the need for pension provision, which becomes evident in the responses to the question about the savings motive in the World Bank's Global Findex Database. This applies in particular to those markets with younger populations – such as India, Indonesia or Vietnam – where old age played only a minor role as a savings motive. In this context, there is not only an urgent need for pension reforms, but also for continuing efforts to improve the access to financial services and financial literacy in order to make old-age provision possible for a larger part of aging Asian societies.

Figure 11: In 2050, one in five Asians will be 65 or older



Source: UN, Department of Economic and Social Affairs, Population Division (2019).

Figure 12: Gaps in pension coverage



Source: ILO



Photo by Jordan Faux on Unsplash

In the Non-Life business, the increase in growth compared with the previous period will be significantly lower: +0.2pp. In other words, the property insurance markets will largely continue their growth of recent years, and this applies to all regions. Nevertheless, the 2020s promise to be far from boring; beneath the surface of relatively stable growth figures, far-reaching changes are taking place.

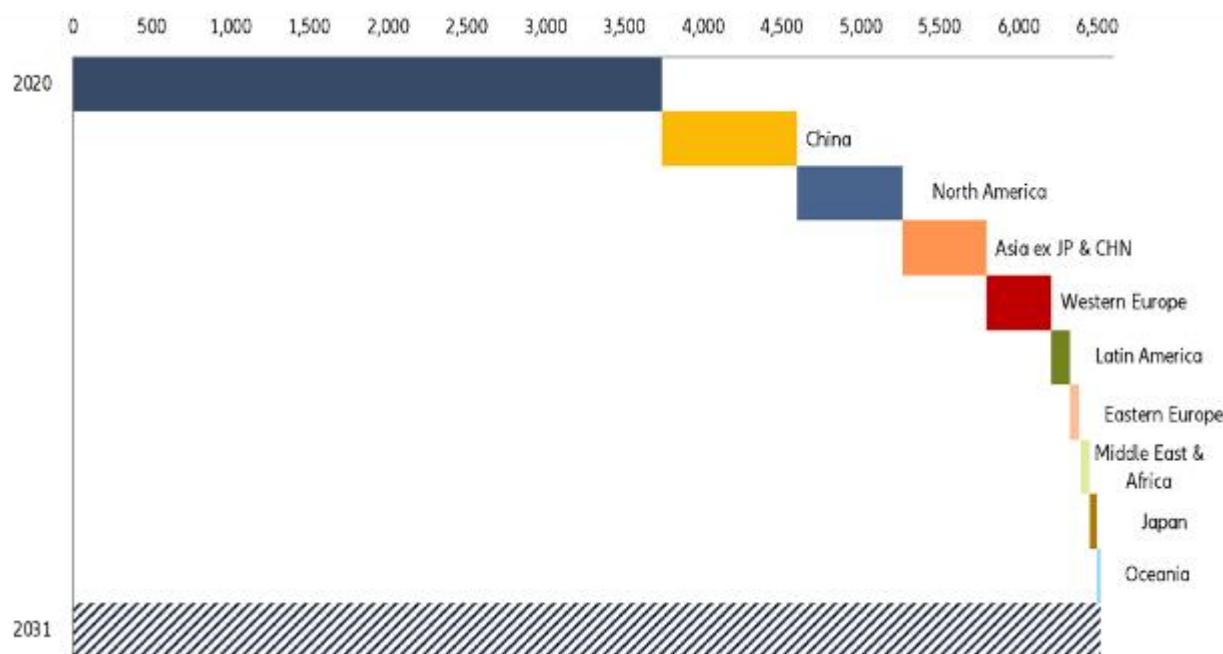
On the one hand, covering risks in a VUCA (volatile, uncertain, complex, ambiguous) world will become increasingly important. Covid-19 has once again brought this brutally to mind. In addition, there are relatively new and fast-growing business areas such as cyber risks and transition risks of the green transformation. So there will be little shortage of demand for insurance. On the other hand, supply will change radically. The industry is on the verge of a major productivity boost, thanks to

extensive digitalization and automation. At the same time, new technologies are revolutionizing not only the operations and sales processes of insurance companies, but also the assessment and prediction of risks. Prevention and loss mitigation will play an increasingly important role. All these developments will have an impact on the pricing of risks – and thus on the development of premium income. There is also another factor: More and more risks have a systemic character, and this applies not just to pandemics; “thanks” to increasing connectivity and intensified climate change, it also applies to cyber risks and natural catastrophe risks. In the future, this is increasingly likely to lead to the formation of public-private partnerships, i.e. insurance schemes in which a (large) portion of the risks is assumed by the state. This, too, will not be without consequences for the revenues (and profitability) of insur-

ance companies. So the bottom line is that the prospects are more golden for policyholders – simpler and more comprehensive products, additional services, transparent and fair prices – than for the insurance industry itself, which faces the task of profound change in the coming years.

Alongside these transformative changes, however, there are also quite mundane ones, including the further shift of the global center of gravity in the insurance business toward Asia. The region will be setting the pace for the global insurance industry in the 2020s. The numbers are simply breathtaking: Over the next decade, the region will contribute 50% of global premium growth; China alone will be responsible for 31%. The shares of North America and Western Europe will be significantly lower, amounting to 24% and 15%, respectively (see Figure 13).

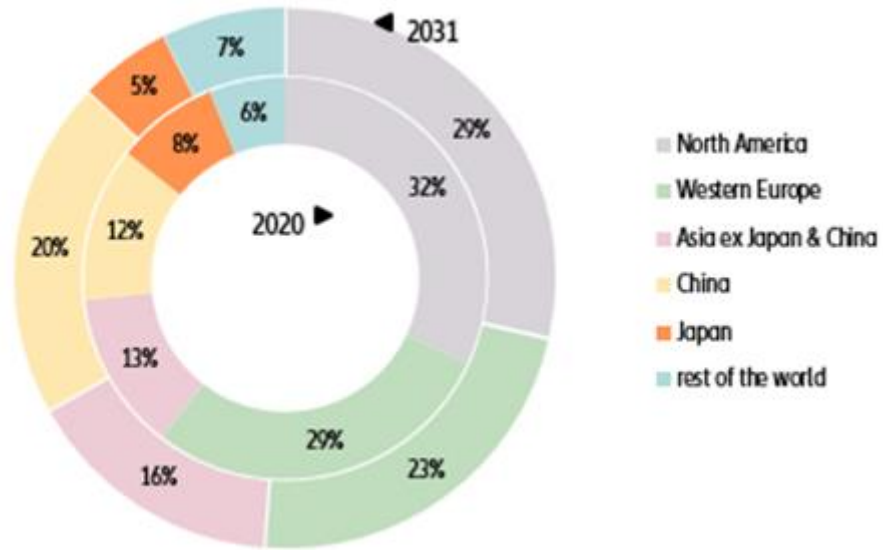
Figure 13: Gross written premium¹⁴ growth, by region in EUR



Sources: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

14. Without health; the conversion into EUR is based on 2020 exchange rates.

Figure 14: Total gross written premium¹⁵, by region in %¹ (2010 vs 2020)



Sources: National financial supervisory authorities, insurance associations and statistical offices, Thomson Reuters, Allianz Research.

15. Without health; the conversion into EUR is based on 2020 exchange rates.



Box: High hopes for the future of insurance

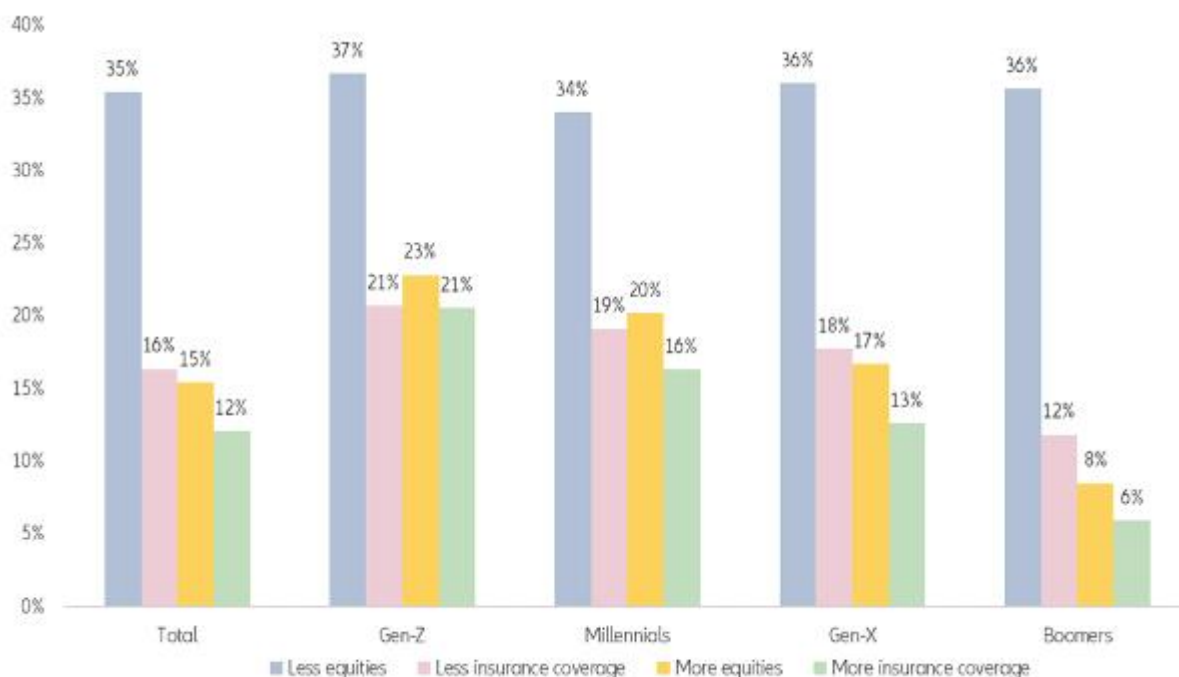
Aging is one of the defining trends in insurance. Silver agers are its biggest customer group. For its own future, however, the industry should not lose contact with the younger generations, though this is easier said than done. Out of all the financial assets available in the market, insurance is not typically associated with the youth. It is hard for insurance to be attractive for the young, especially when the official tagline is "It's better to have it and not need it than to need it and not have it." The allure and the excitement of seeing your money grow and the adrenaline that comes with possibility of losing it is non-existent. If youth is all about excitement and adrenaline, can they be made to care about insurance?

Of course! The Greta generation has proven to be more forward-looking and conscious of the fragility of the future than the generations before: They care about conscious consumption, they care about climate change, they care about policy-making and they care about the prospect of a prosperous retirement. We ran a survey in November 2020 in seven countries and, amongst other questions, we asked our respondents about their interest in both equities and insurance. We expected both millennials and Gen-Z to express more interest in equities than in insurance, which turned out to be true. However, a surprising finding was that those age cohorts expressed more interest in increasing their insurance coverage than their elder peers. 21% of our Gen-Z respondents reported being interested in acquiring more coverage and 16% of Millennials in our sample reported the same. In contrast, only 13% of the Gen-X and 6% of Baby Boomers expressed interest in more insurance coverage.

Digital savviness and very low interest rates are the only true differences between the younger and the older cohorts. The protection needs are the same at the core. While the parents of Millennials started saving for retirement in their 30s, in order to retire comfortably, Millennials and Gen-Z need to start saving earlier on to ensure a decent standard of living when they reach old age. Due to the precariousness of their economic situation, the younger cohorts need to more protection irregardless of how much or little they have. Insurance is now more relevant than ever before. It is meant to protect you at your most vulnerable and as a global community we have never been more in need of protection.

Figure 15: What a year! Please insure my future...

Questions: Regarding my investments in equities, I want to invest... / Regarding my insurance coverage, I want to acquire...



Sources: Allianz Research, Qualtrics.

16. Representative survey of almost 7,000 respondents in Germany, France, Italy, Switzerland, Spain, Austria and the USA.

LOOKING AHEAD: SUSTAINABILITY IMPACT OF INSURANCE

The pivot to sustainability has been accelerated by Covid-19 and is a strong tailwind for the insurance industry, creating new opportunities. On the one hand, the green transformation increases demand for protection and mitigation; on the other hand, it offers new investment opportunities with more stable returns. The political turn towards sustainability gives the industry a new purpose and opportunity to grow. At the same time, however, it raises the bar in terms of disclosing and measuring the impact of products and services in strengthening sustainability. How can this be done?

The United Nations Sustainable Development Goals (SDGs) provide a foundation and orientation for achieving sustainability in a broad global context. They demand an end to poverty, protection of the planet and improving global political and economic stability through 169 targets grouped in 17 topics or goals that drive global action across social, environmental and economic development issues. The SDGs enjoy a wide popularity for assessing environment, social and governance (ESG) related topics as they are based on a long-term political and societal consensus process and provide a continuously improving science-based methodological framework and accompanying data.

This report outlines an approach that further extends the SDG impact assessment to the sphere of insurance products. As a top-down approach, it is particularly useful to form expectations on the average potential positive

impact that specific ESG-oriented insurance product groups will have in different countries. In many instances, a bottom-up approach that evaluates the impact of every single product in every market separately would be overly time-consuming or require unavailable data. Even for a top-down evaluation, the existing data can hardly be called satisfactory but at least it allow us to generate valuable insights beyond a proof of concept. Even if a bottom-up approach is feasible, it is not generally preferable but complementary and the concrete best choice for one or the other will depend on the specific use case.

The basic structure for determining the SDG impact is laid out opposite (see Figure 16).

As for a concrete insurance product portfolio, it consists of three steps. First, the relative importance of each product in each market has to be determined. This can i.e. be approximated by the share of the revenue stream that a product generates in a country relative to the total revenue of all products in all countries. Second, the products need to be evaluated according to their “SDG positive alignment”, which specifies the positive impact that a product has on each SDG. This is typically approached through heat maps that indicate the product’s relative contributions to different SDGs. While this specifies the potential impact a product could have, the actual impact also depends on the necessity or urgent need for such a product in a country, which is indicated

by “SDG additionality”. Third, the SDG additionality approximates the state of progress for each SDG, i.e. through a country-specific index value. Low progress in a SDG would be interpreted as a high necessity for products that have a positive impact on the respective SDG. This procedure allows to indicate the typical impact that an ESG-related insurance product generates. As we do not evaluate a concrete product portfolio, we only employ the second and third step for approximating the representative impacts by country (see Figure 16, opposite).

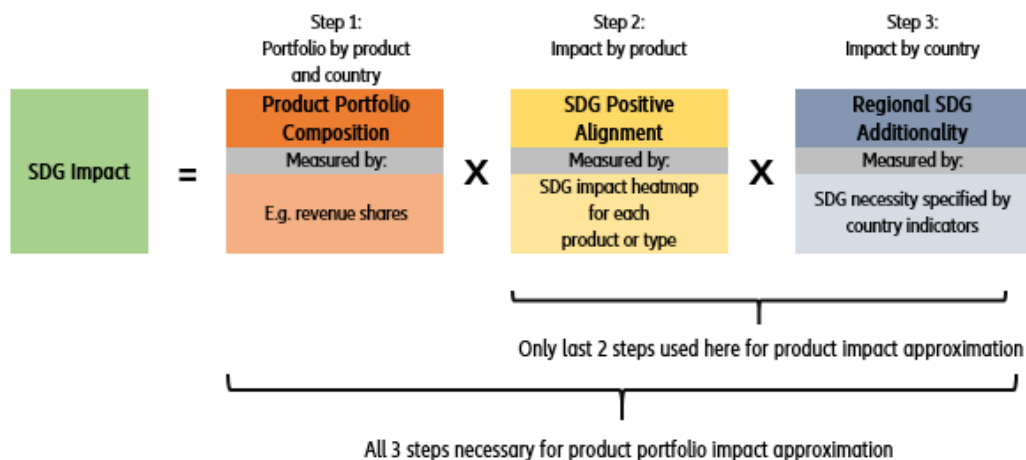
Figure 16: Insurance product SDG impact assessment approach

Table 2 (see page 30) displays the heat map employed in our study. As we only assess explicit ESG positive labeled products here, negative impacts are ruled out by definition, as significantly harmful impacts contradict a positive labeling. The heat map has been simplified in three ways: it groups the ESG insurance products into eight product categories, it only indicates the top four SDGs for which the highest impact is expected and it puts equal weights on those four. The product categories and top SDGs have been identified in a previous report through screening of SDG labels attached to existing products as well as an internal expert survey¹⁷. Clearly, a broader stakeholder involvement leading to a consensus process steered by an independent institution should result in a more sophisticated and appropriate heat map, particularly with regard to differentiated SDG impact weights. Nevertheless, experience suggests, that for the displayed aggregation level this approximation should yield rather similar results.

As a country's SDG progress indicator, we use the ratings from the Sustainable Development Report (Sachs et al. (2020): The Sustainable Development Goals and Covid-19. Sustainable

Development Report 2020. Cambridge: Cambridge University Press). The report addresses the challenges resulting from the availability and timeliness of data at the highest available standards. As it measures general SDG progress, the used indicator components do not necessarily provide an obvious good fit to insurance-related impacts. This is a standard issue in the construction of such indices and it is a typical assumption that the available indicators provide a sufficient correlation with the omitted indicators. Still, a further exploration and provision of insurance-specific SDG progress indicators remains a worthwhile endeavor in extending the SDG framework. Figure 17 exemplarily displays the indicator's SDG scores for SDG 2: "Zero hunger". The report provides scores for all 17 SDGs, with scores being normalized between 0 and 100. (For our evaluation we use the inverse score of 100 minus the index score as a lower score indicates a higher necessity and thus a higher additionality), (see Figure 17, page 31).

Figure 18 and 19 display the results of our impact assessment for the eight different product groups. The impact is in principle limited to values between 0 and 100, but by construction the

upper limit here is determined by the average of the additionality of the top four SDGs addressed. The analysis reveals sound impact variations but also surprising results that deserve a deeper future assessment. Ecosystem-related products have the broadest impact, only being of low relevance in Europe. Products focused on emerging customers and regions unsurprisingly have the largest effect in Africa and South-West Asia. Products focused on real estate and sustainable lifestyle as well as on digitization and sector coupling show an unexpected weight in Africa as the employed methodology focuses on non-insurance-specific SDG indicators for the countries. As such, it neglects, for instance, insurance gaps. Explicitly and adequately including these would likely change the picture for renewable energy-related insurance products as well. Independent of the details of our methodology, the main message from our analysis on how to increase impact remains clear: first, shift a larger share of your portfolio to ESG-aligned products and second, ensure additionality by matching the regional product portfolio to the SDG necessities and urgent issues that need to be addressed locally (see Figure 18 / 19, p. 32 ff).

17. Cf. our previous publication: [Impact underwriting: Sustainable insurance as an opportunity for society and business \(allianz.com\)](https://www.allianz.com/insights/publications/impact-underwriting)

Table 2: Insurance product positive SDG impact alignment heat map

Simple approach with equally weighted top-4 SDG impacts per product category

Impact category	Insurance product category	Climate change & weather extremes	Renewable energy investments	Alternative mobility	Real estate & sustainable lifestyle	Corporate citizenship	Digitization & sector coupling	Emerging customers & regions	Ecosystem
SDG 1: No poverty									
SDG 2: Zero hunger									
SDG 3: Good health & well-being									
SDG 4: Quality education									
SDG 5: Gender equality									
SDG 6: Clean water & sanitation									
SDG 7: Affordable & clean energy									
SDG 8: Decent work & economic growth									
SDG 9: Industry, innovation & infrastructure									
SDG 10: Reduced inequalities									
SDG 11: Sustainable cities & communities									
SDG 12: Responsible consumption & production									
SDG 13: Climate action									
SDG 14: Life below water									
SDG 15: Life on land									
SDG 16: Peace, justice & strong institutions									
SDG 17: Partnerships for the goals									

Figure 17: Example of an indicator determining the country's necessity for products that have a positive impact on SDG 2

SDG 2: 'Zero hunger'

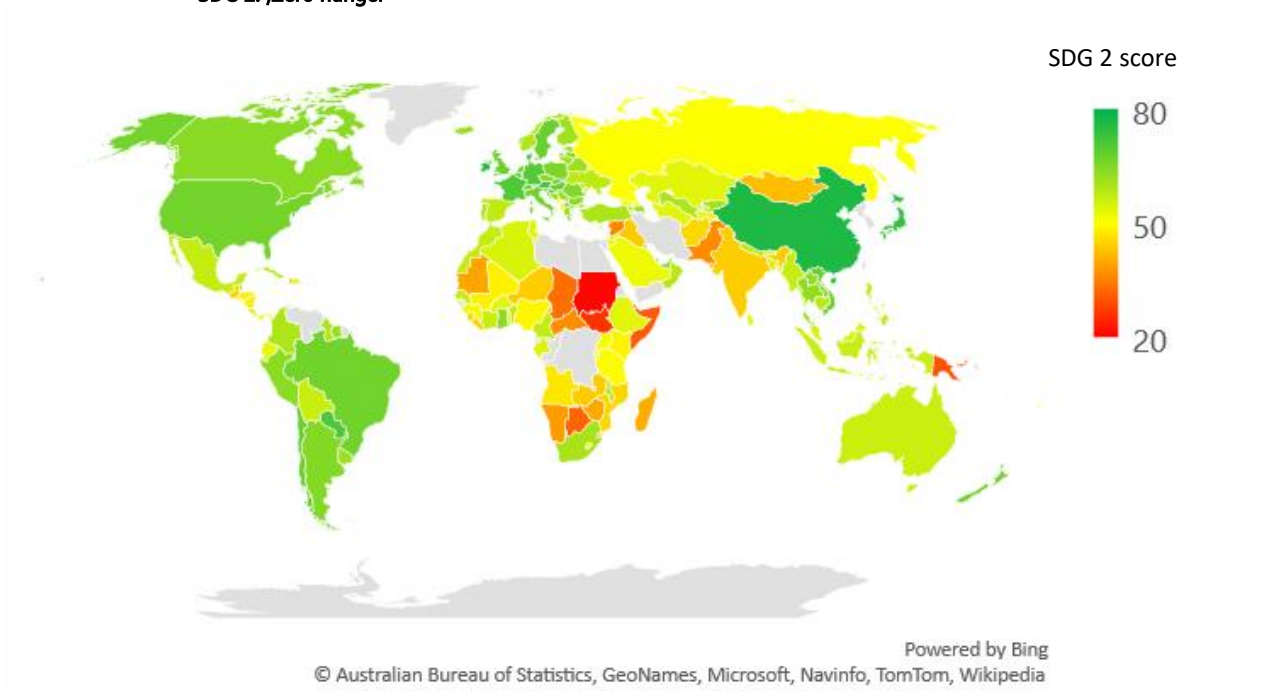


Figure 18a: Impact of SDG aligned insurance products in different countries

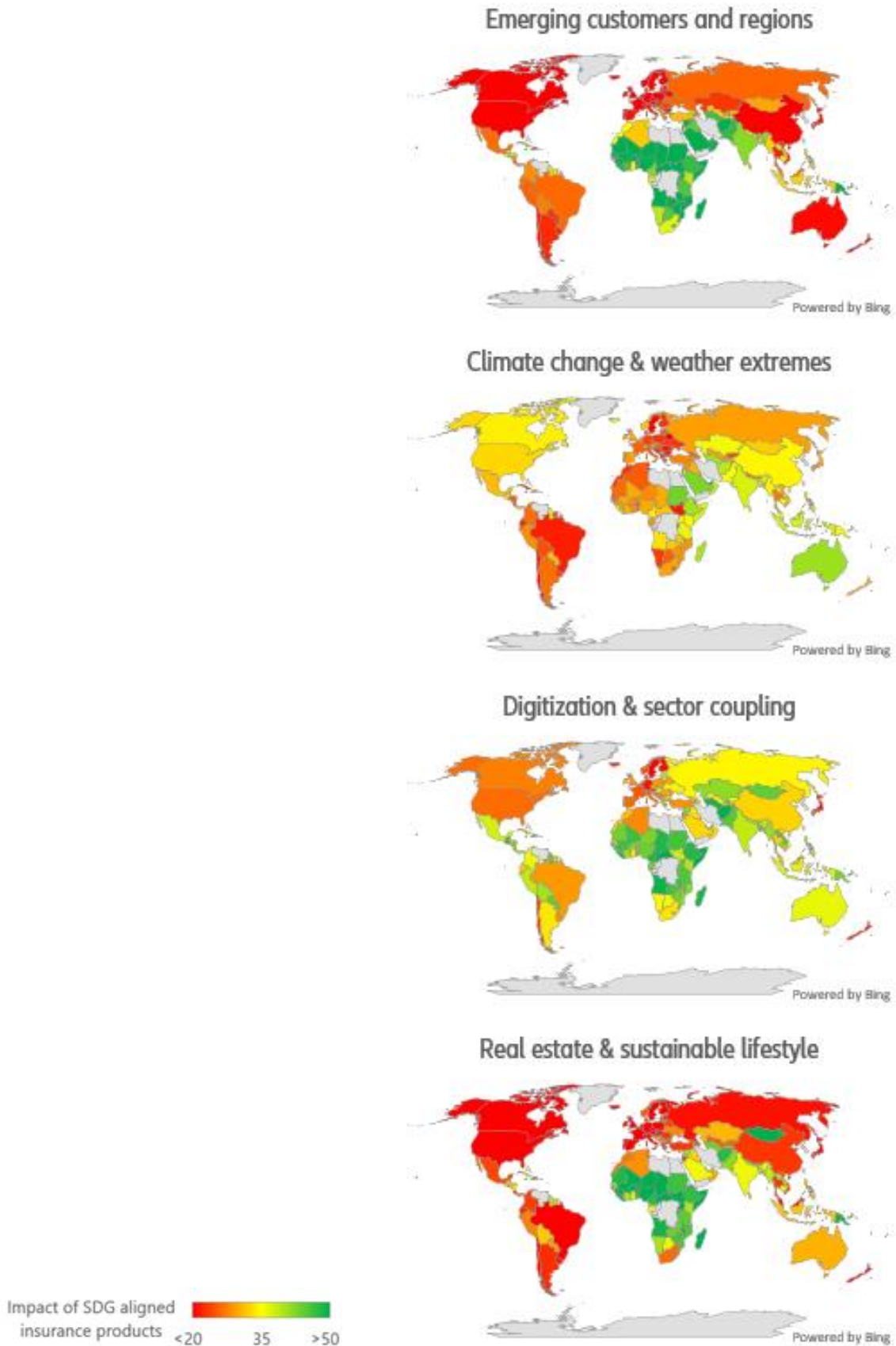
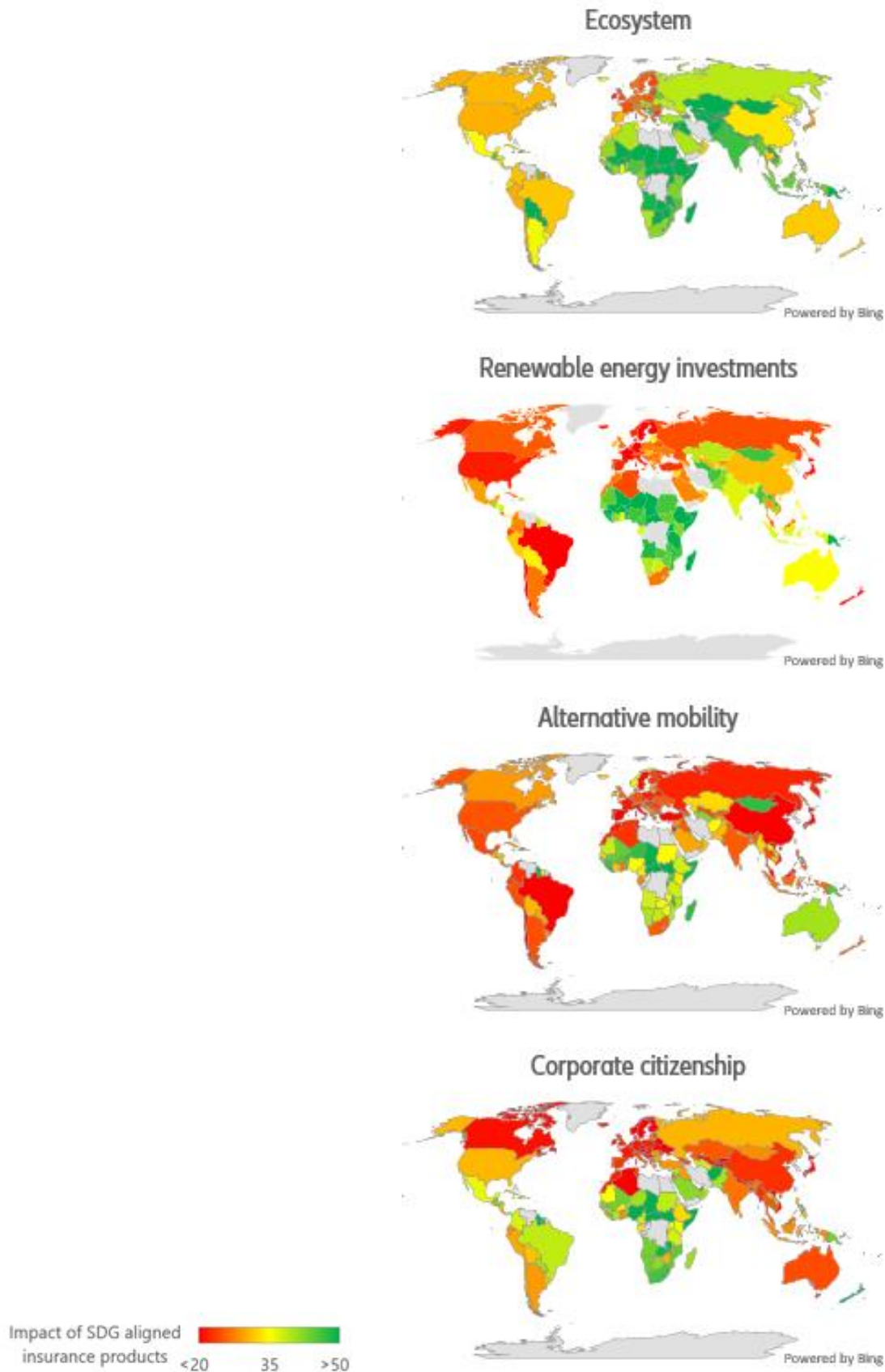


Figure 19 Impact of SDG aligned insurance products in different countries



Appendix A: 2020 KPIs	P&C insurance market				Life insurance market*			
	Total in EUR bn	2020, yoy in %	EUR per capita	as a % of GDP	Total in EUR bn	2020, yoy in %	EUR per capita	as a % of GDP
Argentina	7.0	56.4	155	2.7	1.0	46.2	23	0.4
Australia	28	0.8	1 079	2.2	18	-3.9	719	1.5
Austria	10	2.6	1 137	2.7	5.5	1.4	610	1.5
Bahrain	0.3	5.2	204	1.2	0.1	-8.2	79	0.5
Belgium	10	1.0	871	2.3	15	-5.4	1 317	3.4
Brazil	14	3.3	64	1.2	5.9	10.8	28	0.5
Bulgaria	1.3	1.9	182	2.1	0.2	-7.1	23	0.3
Canada	42	3.4	1 120	3.0	45	-5.2	1 189	3.2
Chile	3.7	4.0	195	1.6	4.5	-26.1	233	1.9
China	164	2.2	114	1.3	300	5.4	208	2.3
Colombia	4.0	2.1	79	1.7	3.4	-4.4	67	1.4
Croatia	1.0	5.6	232	2.0	0.4	-13.7	85	0.7
Czech Republic	4.3	4.1	404	2.0	1.7	-5.4	160	0.8
Denmark	10	3.3	1 684	3.2	19	-5.7	3 367	6.4
Egypt	0.9	3.9	8	0.3	1.0	0.0	10	0.3
Finland	4.4	2.9	802	1.9	4.0	-14.4	716	1.7
France	70	-1.7	1 074	3.1	116	-19.5	1 780	5.2
Germany	76	2.1	908	2.3	98	-0.1	1 170	3.0
Greece	2.1	-0.9	205	1.3	2.1	-5.2	200	1.2
Hong Kong	3.1	5.8	415	1.1	56	4.9	7 523	19.7
Hungary	1.8	4.4	188	1.4	1.4	2.4	148	1.1
India	17	2.0	12	0.8	66	3.0	48	3.0
Indonesia	3.7	-7.5	14	0.4	9.3	-8.0	34	1.0
Ireland	3.9	2.7	784	1.1	12	-9.5	2 332	3.1
Italy	36	0.0	592	2.2	106	-4.8	1 746	6.5
Japan	76	-1.1	597	1.8	231	-9.6	1 829	5.6
Kazakhstan	0.6	7.5	32	0.4	0.3	32.5	18	0.2
Kenya	0.7	-0.1	12	0.8	0.8	5.1	14	1.0
Laos	0.1	22.4	9	0.4	0.0	30.4	1	0.0
Lebanon	0.4	-9.0	65	0.7	0.3	-12.6	49	0.5
Malaysia	3.4	-1.0	105	1.2	8.1	7.6	249	2.8
Mexico	9.1	-7.0	71	1.0	11	0.8	86	1.2
Morocco	2.0	4.2	54	2.0	1.9	-0.2	51	1.9
Netherlands	12	3.7	728	1.6	12	-4.5	690	1.5
Nigeria	0.7	9.3	3	0.2	0.5	8.0	2	0.1
New Zealand	4.0	2.3	834	2.2	1.6	3.0	337	0.9
Norway	8.2	-3.0	1 514	2.4	11	4.2	1 994	3.2
Pakistan	0.4	-0.8	2	0.2	1.2	4.9	5	0.5
Peru	1.5	1.4	44	0.9	1.4	-4.1	43	0.9
Philippines	1.4	-11.3	13	0.4	4.0	1.0	37	1.3
Poland	9.3	-1.4	247	1.9	3.1	-4.0	83	0.6
Portugal	4.4	1.9	433	2.3	4.6	-34.8	447	2.3
Romania	1.9	6.5	97	0.9	0.4	-2.0	22	0.2
Russia	10	-1.1	71	0.8	4.9	8.1	34	0.4
Saudi Arabia	3.3	6.3	95	0.5	0.3	20.4	9	0.0
Singapore	2.4	1.0	402	0.8	29	17.7	4 872	9.8
Slovakia	1.2	2.4	225	1.4	0.8	-10.1	153	0.9
Slovenia	1.2	1.2	558	2.6	0.8	-0.4	361	1.7
South Africa	7.0	-0.1	117	2.6	30	0.8	501	11.0
South Korea	67	6.9	1 315	4.7	92	4.3	1 794	6.4
Spain	28	-0.2	592	2.5	22	-20.8	466	2.0
Sri Lanka	0.4	-7.1	17	0.6	0.4	3.8	19	0.6
Sweden	7.7	1.8	767	1.6	31	14.6	3 022	6.2
Switzerland	16	1.0	1 877	2.6	24	-17.7	2 815	3.9
Taiwan	7.4	4.5	309	1.3	78	-10.5	3 294	13.7
Thailand	6.6	1.5	94	1.5	13	-3.3	193	3.1
Turkey	6.2	13.5	73	1.1	2.0	59.3	24	0.4
Ukraine	1.2	-3.8	27	1.0	0.2	16.3	4	0.1
UAE	3.5	2.2	358	1.1	1.8	-11.6	180	0.6
UK	70	-0.1	1 029	3.1	210	-5.0	3 100	9.3
USA	568	0.2	1 717	3.3	538	-5.1	1 626	3.1
Vietnam	1.3	-0.6	13	0.4	4.2	12.4	44	1.5

*w/o Health

Appendix B:	P&C insurance market			Life insurance market*		
	CAGR 2010-2020	CAGR 2021-2031	Total premiums	CAGR 2010-2020	CAGR 2021-2031	Total premiums
	in %	in %	in 2031 in EUR bn**	in %	in %	in 2031 in EUR bn**
Argentina	36.0	19.1	48	31.4	17.2	5.9
Australia	4.2	4.2	43	-2.9	2.0	23
Austria	2.9	3.1	16	-2.6	3.2	7.8
Bahrain	2.9	5.4	0.6	0.7	3.7	0.2
Belgium	1.9	2.2	13	-1.7	4.2	24
Brazil	8.0	6.3	26	11.9	9.7	16
Bulgaria	4.9	4.1	2.0	4.2	6.1	0.3
Canada	5.4	3.6	62	2.8	5.1	77
Chile	9.0	7.3	8.1	5.8	8.7	11
China	14.0	8.6	406	11.2	10.7	914
Colombia	7.7	5.9	7.5	9.6	8.4	8.3
Croatia	0.7	4.7	1.6	0.6	4.2	0.6
Czech Republic	2.8	4.5	7.0	-2.6	2.0	2.1
Denmark	2.8	2.3	13	4.9	6.0	37
Egypt	13.1	10.3	2.6	13.7	6.9	2.2
Finland	3.5	2.4	5.8	2.4	4.3	6.3
France	2.6	2.9	96	-1.5	2.5	152
Germany	2.4	2.6	101	1.7	2.8	133
Greece	-2.9	3.8	3.2	-1.4	4.4	3.3
Hong Kong	5.1	4.5	5.0	12.0	5.9	106
Hungary	4.4	4.7	3.0	2.0	3.1	2.0
India	16.6	13.1	64	7.5	11.2	212
Indonesia	9.5	8.1	8.8	9.8	11.0	29
Ireland	2.0	2.1	4.9	1.7	3.4	17
Italy	0.3	2.9	49	2.4	2.7	142
Japan	1.9	1.5	89	-1.3	1.3	266
Kazakhstan	11.3	9.5	1.6	30.6	13.8	1.4
Kenya	7.5	6.6	1.3	14.2	11.4	2.5
Laos	15.6	10.9	0.2	26.5	26.3	0.1
Lebanon	1.4	3.3	0.6	3.0	3.1	0.5
Malaysia	3.5	6.1	6.5	5.6	8.0	19
Mexico	7.1	7.6	20	9.2	8.6	28
Morocco	5.6	5.5	3.6	10.7	7.5	4.1
Netherlands	-1.2	2.7	17	-4.9	2.9	16
Nigeria	6.6	11.5	2.2	17.9	17.5	2.9
New Zealand	6.3	2.7	5.4	5.2	4.1	2.5
Norway	3.5	3.0	11	5.2	2.8	15
Pakistan	6.1	11.9	1.5	16.9	10.4	3.5
Peru	7.6	7.1	3.1	11.5	11.4	4.6
Philippines	6.3	7.3	3.0	13.8	10.1	12
Poland	5.3	3.2	13	-5.2	3.6	4.7
Portugal	1.8	3.0	6.1	-7.2	4.4	7.3
Romania	2.1	4.3	3.0	2.1	5.7	0.8
Russia	6.5	6.1	20	32.3	6.1	9.4
Saudi Arabia	8.3	7.0	7.0	2.8	4.7	0.5
Singapore	2.7	4.9	4.0	10.3	6.9	59
Slovakia	2.3	2.8	1.7	-1.9	4.4	1.3
Slovenia	1.1	3.1	1.6	1.7	3.8	1.1
South Africa	5.6	6.6	14	5.6	6.1	57
South Korea	6.9	5.1	117	4.3	4.4	148
Spain	0.7	3.1	39	-2.3	4.5	35
Sri Lanka	8.8	11.0	1.2	13.0	14.9	1.9
Sweden	3.7	2.2	10	4.3	3.2	43
Switzerland	1.1	2.0	20	-1.0	2.2	31
Taiwan	4.3	4.2	12	4.1	5.5	142
Thailand	6.7	4.8	11	7.6	5.6	24
Turkey	18.1	13.7	25	23.3	12.9	7.6
Ukraine	7.0	6.9	2.4	18.6	10.8	0.5
UAE	2.1	2.6	4.7	8.5	8.7	4.4
UK	5.1	2.7	93	1.4	3.4	302
USA	3.7	3.4	822	1.4	4.8	899
Vietnam	10.6	11.0	4.0	23.9	14.0	18

*w/o Health

**in 2020 exchange rates

OUR TEAM

Chief Economist of Allianz and Euler Hermes



Ludovic Subran
Chief Economist
ludovic.subran@allianz.com

Head of Economic Research, Euler Hermes



Alexis Garatti
alexis.garatti@eulerhermes.com

Head of Capital Markets Research



Eric Barthalon
eric.barthalon@allianz.com

Head of Insurance, Wealth and Trend Research



Arne Holzhausen
arne.holzhausen@allianz.com

Macroeconomic Research



Ana Boata
Head of Macroeconomic
Research
ana.boata@eulerhermes.com



Katharina Utermöhl
Senior Economist for Europe
katharina.uterhoehl@allianz.com



Selin Ozyurt
Senior Economist for
France and Africa
selin.ozyurt@eulerhermes.com



Françoise Huang
Senior Economist for APAC
francoise.huang@eulerhermes.com



Manfred Stamer
Senior Economist for
Middle East and Emerging Europe
manfred.stamer@eulerhermes.com



Dan North
Senior Economist for
North America
dan.north@eulerhermes.com

Capital Markets Research



Jordi Basco Carrera
Fixed Income Strategist
jordi.basco_carrera@allianz.com



Michaela Grimm
Senior Expert, Demographics
michaela.grimm@allianz.com



Lina Manthey
Equities Strategist
lina.manthey@allianz.com



Patricia Pelayo Romero
Expert, Insurance
patricia.pelayo-romero@allianz.com



Patrick Krizan
Senior Economist for
Italy and Greece, Fixed Income
patrick.krizan@allianz.com



Markus Zimmer
Senior Expert, ESG
markus.zimmer@allianz.com



Pablo Espinosa Uriel
Capital Markets Research Analyst
pablo.espinosa-uriel@allianz.com

Sector Research



Maxime Lemerle
Head of Sector Research
maxime.lemerle@eulerhermes.com



Aurélien Duthoit
Sector Advisor for Retail, Technology
and Household Equipment
aurelien.duthoit@eulerhermes.com



Marc Livinec
Sector Advisor for Chemicals,
Pharmaceuticals, Transportation,
Agrifood and Transport Equipment
marc.livinec@eulerhermes.com



Anu Kuhanathan
Sector Advisor and Data Scientist
anu.kuhanathan@eulerhermes.com

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Director of Publications: Ludovic Subran, Chief Economist
 Allianz and Euler Hermes
 Phone +49 89 3800 7859

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Königinstraße 28 | 80802 Munich |
 Germany
allianz.research@allianz.com



allianz



@allianz

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1 Place des Saisons | 92048 Paris-La-Défense
 Cedex | France
research@eulerhermes.com



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