

Generali Group

## EMERGING AND SUSTAINABILITY RISKS BOOKLET

2024 UPDATE GROUP RISK MANAGEMENT



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### **FOREWORD**

Our risk manager's role requires us to analyse **emerging and sustainability risks** that are becoming increasingly dynamic and complex. In fact, we observe changes that are more rapid compared to the past and that make us pose many questions, necessitating the analysis of possible scenarios and depicting plausible implications for each of them on society, economy, and the insurance business.

In the past months we observed an increasingly fragmented geopolitical landscape, military conflicts with humanitarian crises, trade tensions and a concerning number of severe natural catastrophes in Europe and across the globe, but also a very fast spread of digital game changers, such as AI and its generative features. Also, many elections are still on the agenda at the time of writing.

In this context, risk managers are called to support strategic and business decisions through forward-looking analyses that take into account not only the current and future risks insurers are exposed to, but also their social role borne in providing protection to the society.

The Generali Emerging and Sustainability Risks Booklet collects the inputs of many professionals from different business functions and countries around the Group, that help us in analysing the risks and depicting them in a clear frame with strategic and sustainability topics. Concrete examples of potential risks for the insurance business are hence provided together with strategic implications.

Finally, similarly to last year, the most concerning **emerging and sustainability risks** are Climate change and natural disasters, Geopolitical instability, Digitalisation, Demographics and social changes. Despite the changing geopolitical and evolving risk landscape, these risks are confirmed as the main vulnerabilities to which insurers, such as Generali, should look at.

I wish this Booklet can be an interesting read for our stakeholders and the community as a whole.

Carlo Ferraresi Generali Group Chief Risk Officer

## BEFORE THE STORY BEGINS

One year has passed since the publication of the last Generali Emerging and Sustainability Risks Booklet.

An unstable geopolitical landscape and its macroeconomic consequences are still to be considered as the main events that have characterized the past months. The persisting war between Russia and Ukraine, the escalation of the Israeli-Palestinian conflict, the extension of the tensions in the Middle East and the related consequences on the commercial routes in the Red Sea. show how fragile the current geopolitical balance is. In addition, the numerous elections scheduled throughout 2024, have the potential to reshape the global equilibrium, including international trade and financial flows. The main challenge has shown to be the balancing of multiple necessities: managing inflation against preventing recession, avoiding economic burden on citizens against putting under control public debt, tackling the energy crisis against meeting carbon reduction targets. Other geopolitical dynamics, such as the US-China tensions and the NATO-Russia strained relationship, have the potential to add further turbulence to the global geopolitical and economic stability. The world is therefore entering a new era, with political orientations towards trade regionalisation, protectionism and extreme movements putting the current globalised world under discussion.

At the same time, the awareness around the **threats faced by our planet** is increasing as the fear of passing the point of no return arises with estimates of more than €13.4 billion weather- and

climate-related economic losses in 2023 only in Europe. In addition to climate change commitments to limit global warming, such as the COP 28 agreement to speed up the transition away from fossil fuels, actions at international and national level are under development also on other nature-related matters, as proven by the UN Biodiversity Conference, which could be considered as a first coordinated step for the preservation and restoration of nature and ecosystems. Together with institutions, regulators and the general public are also increasing their attention towards a green and nature-positive transition. This is a call for action that all financial players, including insurers, are urged to fulfil promptly and properly. The stakeholders' eyes are therefore all fixed not only on the companies' climate-related commitments, but also on how they do business, disclose their actions and drive the change. This is proven by the number of regulations disclosed in the recent years, such as, for example, the Directive on corporate sustainability reporting (CSRD), requiring companies to report both on the impact of corporate activities on the environment and society as well as on sustainability-related risks and opportunities for companies, or the ones aimed at limiting buildings' emissions or protecting customers from greenwashing. With increasing commitments and reporting also new risks could emerge, such as, for example, litigation risks, with new laws and regulations aiming at ruling green claims.

Within this context, social changes are also occurring, such as the **ageing** of the people in developed countries, squeezing the working age population, together with **migration flows**, leading

#### INTRODUCTION

to necessary changes in communities' priorities. In parallel, a more flexible but less stable working environment, together with the above-mentioned political and economic uncertainties, lead populations to higher **stress** levels, which can even develop into **mental health** issues.

Last but not least, more and more innovative technologies are entering every facet of society. From the development of applications based on Artificial Intelligence to the expected adoption of the Metaverse, these improvements are opening the gates to new opportunities and benefits for all sectors, but are also posing increasing and still unknown concerns. Clear examples are the rising discussions on the ethical, sustainable and existential implications of the advancements in Artificial Intelligence (AI), as this technology is turning into a powerful tool that can be used also for malicious purposes, including appropriation of confidential data and identity theft. The main challenges already felt today and expected to be even more relevant in the future will therefore relate to data privacy protection and the responsible deployment of Artificial Intelligence and generative AI.

In this changing environment, awareness and preparedness are key. For this reason, insurers shall turn their gaze towards the future, looking beyond current events and scanning the external context to anticipate those risks that may not be evident today but might significantly affect tomorrow. These risks are characterised by:

- a **long term horizon**, since some risks materialize with a slow progression but also with tipping points and accelerations;
- a **cross-cutting nature**, since many risks imply a number of interdependencies with other risks;

- a **twofold perspective**, that requires not only impacts on the Group to be observed, but also impacts generated through business activities.

In fact, insurers' engagement shall also consider **sustainability matters**. Increasingly entering in the priority list of all stakeholders, such as regulators, customers and employees, the new challenge for insurers is to deeply embed **sustainability risks** in their culture, strategy and processes, creating positive impact for clients and wider society.

The underlying analyses and the results described within this Booklet provide risk-based inputs for the **Group Materiality Assessment** update supporting the definition of the Group sustainable priorities.

Compared to last year, the Booklet includes:

- 1. confirmed level of concern assessment and, for few risks, revised level of risk perception reflecting the analyses performed within the Group ORSA process concluded at the beginning of 2024 (i.e. with a particular focus on "Climate Change and natural disasters" risk and an increased perception of "Mental Health" risk);
- 2. updated descriptions to best depict the evolving landscape.

A brief overview of all risks is provided in the next page. Afterwards, each risk is described in detail in a dedicated page.

#### **GROUP EMERGING RISKS YE2023**

Level of concern

HIGH CONCERN

Climate change and natural disasters

Earth's trip to tomorrow

Risk



Geopolitical instability A vulnerable world

Risk



PESTLE dimensions

Digitalisation A digital rethinking



**PESTLE** dimensions

Demographics and social changes Young at heart in an ageing world





Pandemics & Antimicrobial resistance Not only Covid





**Autonomous machines** and new mobility Are humans still in the driver's seat?





Artificial Intelligence (AI) & Automation Machine almighty











New market players from other markets Guess who's coming to play?





Change in healthcare To be well or not to be well













Work different, think different









SOS from life forms







Mental health The invisible enemy





HIGH CONCERN ACTIVE CONCERN The level of concern for Generali Group is based on expert judgement, relying on a number of risk professionals within the Group, main Business Functions and a set of external references

#### **PESTLE** dimensions













## HOW TO READ THE BOOKLET

Details on each risk are presented in a dedicated page through the dimensions explained in the following table

Description of what the risk means

Data sources are provided in Bibliography

### Link with materiality assessment

- Related material megatrends identified through the materiality assessment on which to focus our strategies and actions to protect the Group's ability to create lasting value
- Related sustainability factor as of Del. Reg. (EU) 2021/1256
   (environmental matters, social matters, employee matters, respect for human rights matters, anti-corruption and anti-bribery matters)

#### Assessment

The level of concern of the risk for Generali Group, based on the perceived (i) vulnerability and (ii) timeframe, are distinguished in:

HIGH CONCERN

ACTIVE CONCERN

INITIAL CONCERN

It is based on expert judgement, relying on risk professionals within the Group, main Business Functions and a set of external references including the Global Risks Report of the World Economic Forum and the ERI Risk Radar of the European CRO Forum.

The trend in respect to previous year assessment is also provided

#### Examples of risk implications

Selected non exhaustive examples of risk implications for the insurance market

#### Relevant strategic objectives



- Strategic pillars and levers based on Generali "Lifetime Partner 24: Driving Growth" Group Strategy
- Strategic pillars in bold and the listed levers represent the ones related to the specific risk analysed

#### Strategic management actions



Actions, part of the Generali "Lifetime Partner 24: Driving Growth" Group Strategy, that could be put in place to manage the risk

## CLIMATE CHANGE AND NATURAL DISASTERS



## EARTH'S TRIP TO TOMORROW

Climate change trend is observed since the industrial revolution with human activities and specifically **increase in greenhouse gases (GHG) emissions** in the atmosphere causing global warming. According to the United Nations, these are warming the world faster than at any time in at least the last two thousand years<sup>1</sup>.

More in general, natural disasters refer to violent, sudden and destructive catastrophic natural hazardous events, with atmospheric, geological, and hydrological origin, that have a disastrous effect on society or community. These include droughts, floods, hurricanes, tornados, tsunamis, etc., but also non-weather-related events such as earthquakes.

The impacts of climate change lead to losses caused by changes in frequency and severity of climate-related natural events also referred to as **physical risk**, and the losses caused by variation in costs and revenues deriving from the transition to a green economy also referred to as **transition risk**. Finally, the cost for legal cases and controversies in case of environmental damages and of improper or missing corporate disclosure on environmental standards constitutes **litigation risk**.

The effects of climate change include global warming, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity. Recent facts are the following:

- the second warmest year on record experienced in Europe in 2023, with land temperatures above average for 11 months of the year and a record number of days with extreme heat, as reported by the World Meteorological Organization (WMO)<sup>2</sup>:
- one third of European rivers exceeded the high flood threshold (5-year return period) and 16% the severe flood threshold (20-year return period), with record or nearrecord flows seen in the major river basins, during 2023, due to a series of storms between October and December, as reported by the WMO<sup>2</sup>, which also estimates more than €13.4 billion weather- and climate-related economic losses in 2023;
- 2023 has also been one of the worst years in terms of natural catastrophes and insurance losses in southern Europe, with Slovenia, Greece and Italy registering record-high events. In Italy insured losses of \$5.5 billion due to severe convective
- storm events with hailstones up to 19 cm set a new record in Europe<sup>3</sup>;

#### CLIMATE CHANGE AND NATURAL DISASTERS

- the sea level rise between 2013 and 2022 increased at double the pace of the preceding ten year period, according to the World Economic Forum<sup>4</sup>.

In general, the evolution of natural catastrophe events, with the inclusion of secondary perils, is gaining attention from European regulators. To face the economic losses deriving from natural catastrophe events, also some governments are approaching the insurance gap issue, as for example in Italy where the Leage di bilancio introduces compulsory natural catastrophe cover for entities.

These and other phenomena are requiring governments, businesses and communities globally to commit towards tighter policies with the objective of reducing global GHG emissions, such as the Sustainable Development Goals, the UN Framework Convention on Climate Change, the Paris Agreement and the COP28 agreement to speed up the transition away from fossil fuels<sup>5</sup> confirmed during the April 2024 G7 meeting with Climate, Energy and Environment Ministers in Turin<sup>6</sup>. Also a shift in consumer preferences is being observed with more attention towards climate-related topics, leading to the birth of movements (e.g. Fridays for future) and communities, both of people and industries, aimed at creating awareness and taking action for the transition towards a greener and more sustainable future. Within this context, the insurance business is moving towards a customer-centric culture where insurers are increasinally called to provide tailored products and expert advice on how to prevent or reduce risks, or manage claims should they occur.

Notwithstanding the several international agreements and awareness campaians from both public and private entities, according to the latest report from the Intergovernmental Panel on Climate Change, the adaptation planning and implementation is not sufficient in some sectors and regions (e.g. developing countries) showing gaps that if not managed in a timely manner will lead to irreversible consequences and tipping points. Therefore, the risk of irreversible climate change still persists, especially when challenges impact upon political priorities such as Russia's invasion of Ukraine which has led to an energetic crisis which required the temporary return to fossil fuel consumption. Efforts have been made to balance both short and long-term necessities, with plans aiming at reducing the European natural ags imports also through the production of **clean energy.** To support the just transition and the energy security, European governments are working on regulations that, for example, aim at limiting the sale of petrol and diesel cars, or the buildings' emissions. Insurance companies will need to plan, together with governments, the next steps, possibly towards public-private partnerships to face the future changes and needs of customers and, in general, of the population with the objective of enhancing the insurance penetration.

From a regulatory point of view, to ensure the alignment of companies' strategies to the declared commitments, governments are paying growing attention to protect customers from **greenwashing**. In January 2024 the European Parliament approved the Directive on Empowering Consumers for the Green Transition, complemented by the Green claims directive and other upcoming legislations<sup>8</sup>.

For further details on climate change risk and the specific risk management framework defined by the Generali Group please refer to the Group Annual Integrated Report and Consolidated Financial Statements 2023 pp. 26-32 (https:// www.generali.com/investors/reports-and-presentations/report-archive#2023).

#### Link with materiality assessment

- Climate change
- Pandemics and extreme events











Assessment

HIGH CONCERN

Confirmed from last year, perception increased

#### **Examples of risk** implications

- Decreased value or stranded assets not meeting transition requirements (e.g., coal, oil, and other CO2 intensive sectors)
- Increased physical damage to own and insured assets, due to higher frequency and severity of climate events (e.g. floods, windstorms)
- Increased cost for reinsurance for vulnerable assets due to climate
- Decreased value of buildings in coastal areas and generally for assets highly exposed to physical risks
- Reputational risk deriving from business relationship with carbon intensive companies
- Litigation risk due to accusations of greenwashing

#### Relevant strategic objectives



Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-inclass technical margins)
- Enhance Earnings Profile (Improve Life business profile and profitability)
- Lead Innovation

#### Strategic management actions



- Expand proposition of dedicated solutions
- Enhance strategic asset allocation, integrate ESG and leverage real asset platform to improve returns
- Leverage new data capabilities to improve technical leadership and offer value-added services through digital ecosystems
- Integrate ESG and climate risks in asset selection
- 2050 net-zero investment portfolio with an interim goal of 25% carbon footprint reduction, by 2024
- 2050 net-zero insurance portfolio
- Develop powerful and sustainable innovation engine to support future growth

## GEOPOLITICAL INSTABILITY



## A VULNERABLE WORLD

Geopolitical instability depicts a global landscape characterised by different dynamics that are harmful for the stability between and within countries: protectionism, populism, social inequalities, violent unrests, terrorist attacks, and, at extreme levels, wars with the deployment of weapons, including nuclear ones.

Geopolitical instability is perceived as a key concern, much more so than in the past decades. In recent years the world has witnessed not only the **perpetuating consequences of Russia's invasion of Ukraine**, but also the sudden **escalation of the Israeli-Palestinian conflict**, affecting the Gaza Strip, complicated by a broader **tension in the Middle East**, including countries such as Iran, Lebanon, etc., and the Houthi attacks on shipping in the Red Sea. Other tensions arise from the ongoing instabilities and conflicts in **Africa**, such as in **Sudan**, **Libya** and in the **Sahel region**.

Further turbulence can arise from other instabilities around the world, such as the tension between **United States and China**, as well as the strained relationship between **NATO and Russia**. In addition, **de-risking measures** in the economic relations with China may contribute to a shift towards greater regionalisation of international trade.

The **numerous elections** scheduled throughout 2024, with over half of the world's population called to vote in more than 70 countries, such as the European elections and those in the United States, as well as the vote in India, Russia, and South Africa, have also the potential to significantly reshuffle global balances, including international trade and the volume of financial flows.

Uncertainties arising from the above-mentioned global disorders, shifting economics, and numerous important elections are contributing to a **more fragmented and** 

#### GEOPOLITICAL INSTABILITY

multipolar world. Additionally, other sources of challenges, linked to the multipolar world, relate to the increasing fragmentation in policies and multi-national collaboration potentially leading to higher costs for businesses, impact on the EU companies' competitiveness (including for example privacy regulation, sustainability commitments, etc.) and on societal goals, such as the green transition. On this topic, a potential slowdown in the ESG agenda is also a growing concern.

Humanitarian crises (including deaths, injuries and severe shortages of essential goods such as food and water), together with implications on global trade, supply chains and energy security are some of the main consequences of these instabilities. As reported by the United Nations in June 2024, the tension in the Gaza Strip generated a humanitarian crisis, with an estimated 37,000 people killed since 7 October 2023, ca. 60% of assessed water-related infrastructure destroyed or damaged and 1,1 million of people projected to face catastrophic level of food insecurity<sup>9</sup>. The global trade has been also particularly impacted by geopolitical instabilities with restrictions, including export bans, and economic sanctions set at European and worldwide level. Further disruptions also derive from Houthi attacks in the Red Sea on commercial shipping and on energy supplies (e.g. oil). The consequent rise in shipping prices and potential supply chain bottlenecks have increased the risk of business interruptions for enterprises. This has led to the shift from efficiency-oriented objectives (cost savings) to the target of increased flexibility and resilience of the supply chains (leading to regionalisation and friend-shoring movements). As a counteract to the energy shortfall, countries have fostered the diversification of energy suppliers and the use of alternative sources whilst encouraging lower consumption. Managing these challenges could also represent a critical point for meeting climate commitments, as achieving emission reduction targets could not be felt as a short-term priority. The increased energy and commodity prices consequent to these worldwide tensions pushed the post-pandemic economy to an inflationary environment and increased uncertainty on financial markets. Countries which are not energy independent have been particularly affected, especially in Europe.

Geopolitical tensions combined with market instability also contribute to maintaining a high risk of cyber attacks that, being more frequent and sophisticated, represent a significant threat to both national security and enterprises. An increase in the risk of terrorist attacks and the migratory pressures together with a rise in social unrest have been also observed in the current landscape.

The conclusion that can be drawn is that geopolitical balances appear extremely fragile. In light of an increasing fear of future conflicts and even of a global war, countries tend to reprioritise their military spendings, as proven by the Stockholm International Peace Research Institute data, reporting an increase in the military expenditure of 16% from 2022 to 2023 at European level<sup>10</sup>. In parallel, countries tend to lean towards export restrictions and trade regionalisation to counteract the risk of supply chain failures.

As international cooperation and globalisation are at risk, vulnerabilities appear on the horizon for the economic and financial systems, with inevitable impacts for the insurance sector.

#### Link with materiality assessment

- Geopolitical and financial instability













#### Assessment

Confirmed from last year, perception increased

#### **Examples of risk** implications

- Increased market turmoil and financial market volatility
- Pressure on energy and supply chain, inflation
- Harm to global stabilities and trade flows, such as between US and China
- Risk of business interruption due to supply chain bottlenecks
- Lower global outputs and economic growth due to critical supply chain interruptions
- Increased social crises and migration
- Loss of business in war areas, trade restrictions, nationalizations
- Risk of cyber attacks
- Strategic risk of not strengthening technical discipline in policy terms and conditions to manage inflation and avoid underinsurance

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

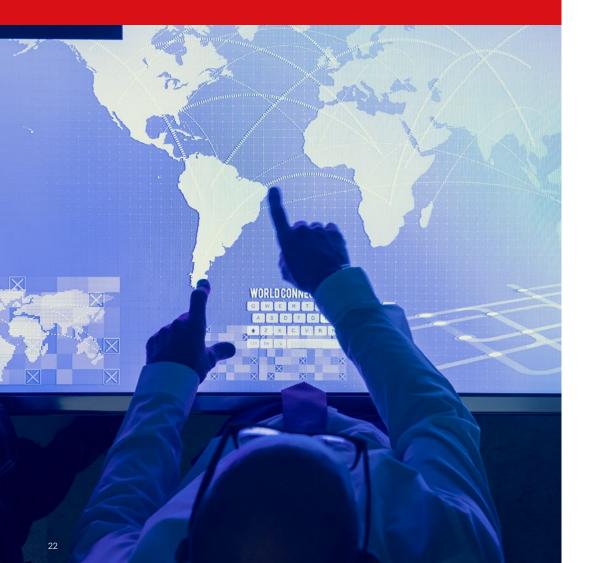
- Drive Sustainable Growth (Boost P&C revenues and maintain bestin-class technical margins; Grow capital light business, technical profits and ESG product range; Underpin growth with effective cost management)
- Enhance Earnings Profile (Improve Life business profile and profitability; Redeploy capital to profitable growth initiatives; Develop Asset Management franchise further)
- Lead Innovation

#### Strategic management actions



- Drive Unit Linked business volumes and further internalize margins
- Boost protection as a de-risking tool for investment solutions
- Reinforce leadership in Europe and strengthen presence in selected Asian markets
- Invest in selected Asset Management capabilities and build scale to accelerate 3rd party growth
- Enhance strategic asset allocation, integrate ESG and leverage real asset platform to improve returns
- Expand proposition of dedicated solutions
- The Human Safety Net A social innovation hub powered by Generali's skills, networks and solutions to create social impact, supporting the most vulnerable groups in unlocking their potential

## DIGITALISATION



## A DIGITAL RETHINKING

Digitalisation is the process of converting information from analog into a digital format which is pervasive with the increasing reliance on digital data and platforms.

The massive use of **big data** and **cloud storage**, and the spread of **innovative technologies** such as Artificial Intelligence have disruptive positive effects in all economic sectors. Together with several benefits for businesses and society as a whole, technological advancements pose new challenges.

The main risk linked with digitalization is **cyber attack** aimed at financial gain, espionage or sabotage. This threat can disrupt the confidentiality, reliability, integrity and availability of Information and Communication Technology (ICT) systems even resulting in cyber terrorism or cyber war. During the Covid-19 pandemic years, the reliance on digital tools has grown notably with the number of cyberattacks tripled compared to the previous decade, according to EIOPA<sup>11</sup>, and with experts foreseeing a catastrophic cyber event before 2025, according to the World Economic Forum<sup>12</sup>.

The digital acceleration also exacerbates the already observed **digital gap** affecting the more vulnerable part of the population - citizens with a low socioeconomic status, disconnected geographical locations, and workers that need to be **upskilled and reskilled**. One of the core objectives of the EU's digital transformation program is to empower 80% of the working population with at least basic digital skills by 2030<sup>13</sup>.

#### **DIGITALISATION**

More digital solutions in people's everyday life can manifest in the use of **Internet of Things** in terms, for example, of domotics, autonomous and smart machines, and adoption of medical devices, posing questions on data ownership, liability and broader health and social implications. Further developments are expected, even through innovative platforms like the **Metaverse** - where users will be able to enter a virtual reality and use cryptocurrencies and non-fungible tokens (NFTs) - estimated to become an \$800 billion market by 2024, according to the World Economic Forum<sup>14</sup>.

The increasing use of technological devices in everyday life and jobs, together with their related energy consumption, is leading to concerns in terms of costs and impact on the planet, requiring an ongoing monitoring of risks and potential future impacts. In particular, the fast development of generative AI, driven by complex algorithms and increasing computational demands, is directly responsible for carbon emissions from electricity produced by non-renewable sources and the consumption of millions of liters of fresh water to cool the equipment in the data centers. Indirectly, it also increases the impacts on the territory from the construction and maintenance of energy power plants.

Digitalisation may lead to **operational**, **legal and reputational risks**, as well as **strategic** ones related to not adopting advanced technologies and of not capturing the opportunities to big data, for example in pricing, underwriting and new products' development.

## Link with materiality assessment

- Digital revolution and cybersecurity
- Changing nature of work
- Urbanization
- Unmediated access to information











Environmental matters







Anti-corruption and anti-bribery matters

#### Assessment

#### HIGH CONCERI

#### Confirmed from last year

#### Examples of risk implications

- Risk of sensitive data theft due to cyber attacks
- Risk of IT systems breakdown and connection interruption
- Risk of not leveraging on new technologies and not being aligned with the evolutions in underwriting practices
- Risk of not identifying new insurable risks in a digitalised environment and not developing new products
- Risk of not offering to "non digital friendly" people (customers and employees) added value and digital skills
- Risk of reputational damage and energy consumption costs deriving from the increasing use of energy intensive Al
- Risk of losses on investments in generative AI and a need to redefine the strategy due to growing public and regulatory pressure deriving from unsustainable exploitation of natural resources and related increased energy consumption

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain bestin-class technical margins; Underpin growth with effective cost management)
- Enhance Earnings Profile
- Lead Innovation (Increase customer value through Lifetime Partner advisory model; Accelerate innovation as a data-driven company; Achieve additional operating efficiency by scaling automation and technology)

#### Strategic management actions



#### - Increase customer value by scaling digitally-enabled advisory model

- Leverage new data capabilities to improve technical leadership and offer value-added services through digital ecosystems
- Reduce costs through digitization, core process automation and shared platforms
- Develop powerful and sustainable innovation engine to support future growth
- Ensure Group security through cyber and infrastructure harmonization
- Invest in digital and strategic skills placing people at the heart of our transformation
- Unleash the power of data capturing opportunities from IoT, 5G and AI

# YOUNG AT HEART IN AN AGEING WORLD

Demography studies how the population changes due to births, deaths and migration trends over time. Although traditionally considered a well understood actuarial science, it poses challenges within the evolving social landscape.

A reshaping of the population pyramid towards an **ageing population**, characterised by specific needs including the desire for a healthy and wealthy life, has been observed for a long period of time. The population of individuals aged over 65 in the World Health Organization European Region is expected to outnumber those under 15 by 2024<sup>15</sup>, posing social, economic and healthcare issues. This demographic shift, supported also by rising levels of life expectancy, is exacerbated by the expected decline in global fertility, which the United Nations foresees to decrease from 2.3 births per woman in 2021 to 2.1 in 2050<sup>16</sup>.

As reported by the World Economic Forum, the longer lifespans and later retirement will lead to a shift towards a **more age-diverse workforce** with potential implications for workplace dynamics since a greater number of generations will be present in the same workplace simultaneously with different needs in terms of skills development, health and well being<sup>17</sup>.

While on one hand society can benefit from a spending silver economy, on the other this trend can lead to growing social and economic divides with an increased **pressure** on the current workforce, squeezed between work and care for both elderly and children. This is a heavy burden for the younger generations, already struggling to gain financial security and to achieve lifetime milestones like buying their own house and creating a family, especially with reduced spending capacities.



## DEMOGRAPHICS AND SOCIAL CHANGES

#### DEMOGRAPHICS AND SOCIAL CHANGES

Moreover, young people have different priorities compared to their parents and grandparents, being more conscious of environmental and social matters may lead to protests in the name of worthy causes, like the planet's wellbeing and the respect for human rights. This generational gap shows how societal cohesion is eroding. Divides can also be boosted by different ideologies and cultures, threatening today's societal integrity, especially when fuelled by misinformation.

Geopolitical instabilities and extreme weather events can play a crucial role in accelerating implications on demographic and social changes, with impacts not only in terms of people lives but also of large-scale migration and of macroeconomic dynamics. For example, food insecurity and water scarcity lead not only to scarcity, social disorders and rivalries between countries, as already witnessed in the past decades, but also to migration.

The main challenge for insurers is to adequately meet these evolving and different needs. For example, as the ageing population puts pressure on public budgets, long-term care programs, healthcare and pension propositions need to be rethought. At the same time, attractive products should be developed for younger customers in line with their priorities, offering also digital solutions. Lastly, protection gaps pose risks that are especially significant for the most vulnerable segments of population.

#### Link with materiality assessment

- Ageing and new welfare
- Increasing inequalities
- Migrations and new households
- Urbanisation
- Women and minorities inclusion













#### Assessment

Confirmed from last year

#### **Examples of risk** implications

- Underwriting risk, for example in terms of annuities' pricing, due to an underestimate of longevity risk
- Increased health costs due to rising demand from an ageing population
- Risks related to healthy ageing and long-term care products
- Risk of not having attractive products for young customers
- Risk of decline of some relevant geographies' earnings growth in the mid-term due to negative demographic trends
- Risk of not capturing demographic and social needs due to missing redefinition of geographical presence and inadequate portfolio balancing

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-inclass technical margins; Grow capital light business, technical profits and ESG product range)
- Enhance Earnings Profile (Improve Life business profile and profitability; Redeploy capital to profitable growth initiatives)
- Lead Innovation (Increase customer value through Lifetime Partner advisory model)

#### Strategic management actions



- Seize growth opportunities offered by health protection gap thanks to our leadership in core markets
- Expand proposition of dedicated solutions
- Increase customer value by scaling digitally-enabled advisory model
- Personalized value propositions enriched with service ecosystem to prevent and assist
- The Human Safety Net A social innovation hub powered by Generali's skills, networks and solutions to create social impact, supporting the most vulnerable groups in unlocking their potential

## NOT ONLY COVID

Pandemics, defined as globally spread infectious diseases, and antimicrobial resistance, making medicine less effective, are growing concerns in a fast and connected world.

Although the World Health Organization officially declared the end of the state of emergency linked to the Covid-19 pandemics, Long Covid consequences still affect more than 36 million people in the European Union (EU) where there is a lack of approved medicines for its treatment or prevention, as highlighted by Nature Medicine<sup>18</sup>.

Scientific evidences suggest that **future pandemics** will be **more frequent**, **spread more rapidly** and be **more deadly**, as reported by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)<sup>19</sup>. This Platform also highlights that most emerging diseases like Ebola, Zika and Avian Influenza are zoonoses, which means they are caused by microbes of animal origin that transmit to humans. **Climate and land use change** are considered the main drivers of the transmission and emergence of infectious diseases as the changed environmental conditions could contribute to the spread of disease vectors, such as mosquitos and ticks. In particular, **vector-borne diseases** mainly affect tropical and subtropical regions and disproportionately impact the poorest population with over 700,000 deaths annually, as reported by the World Health Organization<sup>20</sup>. The spread of new diseases is facilitated by increased mobility, evolving natural environment and changes in lifestyle, such as drug abuse and higher stress levels.



# PANDEMICS & ANTIMICROBIAL RESISTANCE



#### PANDEMICS & ANTIMICROBIAL RESISTANCE

As learnt from the Covid-19 experience, pandemics can have a devastating impact on economies, specific business sectors and society as a whole. To counteract these consequences, a rapid response is required through medical innovations, changes in the healthcare system as well as people and authorities' preparedness, notwithstanding the spread of scepticism and mistrust towards health experts and institutional bodies observed in the last years. Moreover, pandemics can lead to other second-order effects. These can include a rise in mental disorders, with a subsequent broader consumption of pharmaceuticals. especially anxiolytics, as well as delays of medical screening, leading to a higher number of late diagnoses and, consequently, to long-term illnesses.

Antimicrobials' overuse and misuse to prevent and treat infectious diseases also lead to the development of drug-resistant pathogens that make antibiotics and other antimicrobial medicines ineffective. As reported by the United Nations Environment Programme, antimicrobial resistance poses significant threats to global health, economy and development, with predictions of up to 10 million deaths annually by 2050 and a potential reduction of \$3.4 trillion in GDP annually with the risk to push 24 million more people into extreme poverty in the next ten years<sup>21</sup>. Moreover, global economy could be affected by higher healthcare costs and reduced productivity. Preventing infections, ensuring access and appropriate treatment of diseases, innovation and research for novel vaccines, diagnostics and medicine are therefore considered key priorities for a coordinated approach to face this trend.

In this context, insurers are called to provide coverage and assistance, keeping up to date with evolving customer protection demand, and, as in case of Covid-19, addressing operational and financial implications related to emergencies.

#### Link with materiality assessment

- Pandemics and extreme events
- Change in healthcare
- Geopolitical & Financial instability











#### Assessment

Confirmed from last year

#### **Examples of risk** implications

- Increased claims costs and operational challenges with rising illness and mortality
- Increased health products' costs, especially in areas which are more exposed to pandemic risk with lower level of health services
- Risks related to business continuity, employees' relations and workplace safety

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain bestin-class technical margins; Grow capital light business, technical profits and ESG product range; Underpin growth with effective cost management)
- Enhance Earnings Profile (Improve Life business profile and profitability, Develop asset management franchise further)
- Lead Innovation (Increase customer value through Lifetime Partner advisory model)

#### Strategic management actions



- Seize growth opportunities offered by health protection gap thanks to our leadership in core markets
- Reward healthy customer behaviour, countering key drivers of major diseases
- Evolve traditional telemedicine into "doctor in your hands" service
- Expand proposition of dedicated solutions

## AUTONOMOUS MACHINES AND NEW MOBILITY



## ARE HUMANS STILL IN THE DRIVER'S SEAT?

Autonomous machines, represented by a variety of self-operating devices - from driverless cars with Advanced Driver Assistance Systems (ADAS) to robots - that operate without human interventions, are penetrating in the new mobility models using connected, shared, electric, and self-driving means of transport but also in other facet of our lives, from domotics to healthcare systems.

The adoption of ADAS and automated vehicles is increasing, as proven by the decrease in newly registered cars with no level of automation at global level, going from 51% in 2015 to 14% in 2020 according to the World Economic Forum<sup>22</sup>, contributing to lower claims frequency, by reducing the human factor behind claims (e.g. distraction from usage of digital devices). With the aim of achieving, through the automated mobility, no road fatalities in Europe by 2050, the European Commission revised the General Safety Regulation in 2022 by establishing the legal framework for the approval of automated and fully driverless vehicles in the EU<sup>23</sup>. In the meantime, outside the European Union, the implementation of laws on automated vehicles is still quite fragmented: UK has been a precursor by allowing, since 2013, the testing of automated cars on public roads; in the US, more than half the States have approved laws related to autonomous vehicles; also some Asian countries (e.g. Japan, China) have approved legislations on intelligent or autonomous vehicles. The main concern refers to accountability questions in case of accidents that some countries, like Germany and Japan, have already tried to manage through specific legislation.

Other **mobility solutions** are developing, to support the elderly and more fragile population, but also to decarbonize transportation (e.g. electric bicycles and scooters). To this end, the shift to alternative fuel vehicles, powered for example

#### AUTONOMOUS MACHINES AND NEW MOBILITY

by biofuel or hydrogen, and shared transportation rise are changing traditional mobility. The International Energy Agency for example estimated that, together with public transport, car-sharing schemes could reduce car ownership by more than 30% in  $2050^{24}$ .

Besides transportation, autonomous machines can be used in other sectors, from healthcare and robot surgery to military equipment, this latter representing a severe threat to populations in case of conflict. Even **human workforce** is being substituted with machines especially for activities linked to logistics or heavy tasks like those in the mining or farming industry. This also requires specialised personnel able to manage emerging threats like coding errors. According to the World Economic Forum, automation is rising at a pace slower than expected, with 34% of all business-related tasks performed by machines, increasing only by 1% in the last two years<sup>25</sup>.

Together with vehicles and production systems, also houses and cities are increasingly connected through **domotics and computers**, thanks to a greater product offering, characterized by higher autonomy levels and automation.

Although wide-ranging benefits arise from the use of autonomous machines, new threats and vulnerabilities may arise as well, for example the ones from **cyber attacks**. These not only impact the way single machines operate, but also the systems through which they are interconnected (e.g. roadside sensor networks, electricity infrastructure or traffic control features).

For insurers, this phenomenon has the potential to affect the motor insurance given potential changes in demand volume and type, moving for example Motor Third Party Liability (MTPL) demand from the driver to the producer (B2B business) and changing the average cost of claims (more technology leads to higher costs). In the period of the transition to autonomous vehicles also sensors-based devices are expected to be used and risks may arise from the simultaneous presence of autonomous and traditional vehicles and their different behaviour on the roads. Also, reparation costs could be higher with increasing levels of vehicles' sophistication. Other than MTPL insurance, other Liability coverages are evolving, in relation to the new means of transport, both in terms of exposure but also of types of claims (e.g. increase in fire risk deriving from electric vehicles' batteries).

### Link with materiality assessment

- Digital revolution and cybersecurity
- Resource scarcity and sharing economy











Assessment

ACTIVE CONCERN

Confirmed from last year

#### Examples of risk implications

- Shift from B2C to B2B2C liability insurance
- Potential higher claims and reparation costs for electric vehicles
- Cyber and cyber terrorism risk on autonomous vehicles
- Decreased demand for motor insurance following lower number of vehicles
- Risk of not developing new operating models for insurance loss detection

#### Relevant strategic objectives



Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-inclass technical margins)
- Enhance Earnings Profile
- Lead Innovation (Increase customer value through Lifetime Partner advisory model; Accelerate innovation as a data-driven company)

#### Strategic management actions



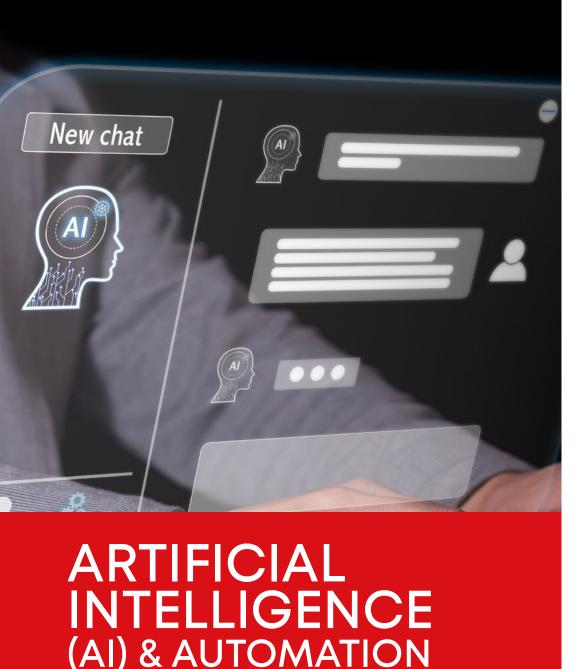
- Develop powerful and sustainable innovation engine to support future arowth
- Invest in digital and strategic skills placing people at the heart of our transformation
- Reduce costs through digitization, core process automation and shared platforms
- Leverage new data capabilities to improve technical leadership and offer value-added services through digital ecosystems
- Establish seamless omni-channel approach across distribution channels

## MACHINE ALMIGHTY

Artificial Intelligence (AI), the ability of a machine to perform tasks normally associated with human capabilities, and automation, technologies that reduce human intervention in processes, have already entered into **most facets of society**.

Artificial Intelligence has wide-ranging applications: for healthcare purposes, financial services provision and management of legal practices. One of the main AI subfields is Machine Learning, where technological devices are able to promptly analyse huge data sets and, on that basis, provide solutions and forecasts, for instance useful in designing tailored insurance propositions based on the customers' information. Examples of Machine Learning are visible every day: websites' pop-ups, recommended articles on social media, spam filters on email accounts and so on. There is still wide room for growth of this technology.

The discussion on the benefits and threats deriving from technologies under the AI umbrella has escalated in recent years. For example, applications leveraging on **generative AI**, such as ChatGPT, can create easy-to-use and realistic text, sound or image based on input data. This ability has the potential to change how businesses are conducted, for instance by personalising interactions with customers or managing unstructured data for a better understanding. As reported by the Europol Innovation lab, by 2026 as much as 90% of online content could be generated or modified through AI, mostly for beneficial purposes like services' improvement, but in some cases also with malicious intents<sup>26</sup>, potentially leading to concerns of different nature, such as economic, ethical and existential. Examples include the creation of hardly identifiable fake news, phishing mails or other materials to gather personal information and



#### ARTIFICIAL INTELLIGENCE (AI) & AUTOMATION

undermine data privacy. In extreme cases, they can be even used for identity theft, exacerbating legal and reputational implications. In addition, generative Al raises new legal questions about the use of data within Al models and how the output content will be regulated. With regard to this, the Artificial Intelligence Act (Al Act) has been approved by the EU Parliament in March 2024, with the aim of ensuring AI systems are safe, transparent, traceable, non-discriminatory and environmentally friendly.

In parallel, automation and the use of robots are increasingly spreading in some industries with the purpose to reduce labour and production costs, posing at the same time an increasing concern on unemployment and related social implications. Notwithstanding the cost efficiency, further risks may also arise from replicated errors or inadequate use of data, therefore it is crucial to implement appropriate human oversight on the processes. Ethical implications can derive not only from increasing unemployment caused by the replacement of human employees with robots and machines but also from data protection, which carry significant reputational risks, particularly in the management of sensitive data.

Despite all mentioned challenges, insurance companies not keeping up with these innovations by investing time and money to upgrade their operations, the workers' digital skills and establish adequate legal and control systems, may become less competitive in an ever-changing market.

#### Link with materiality assessment

- Digital revolution and cybersecurity
- Changing nature of work













#### Assessment

#### Confirmed from last year

#### **Examples of risk** implications

- Strategic risk deriving from insufficient use of big data and AI in asset management or underwriting processes
- Strategic risk related to new customers' expectations from robot advice and assistance
- Increased payments of claims as a consequence of cyber attacks
- Reputational risk deriving from potential cyber attacks with consequent loss of sensitive data
- Increased operational challenges due to rising malicious attacks and potential IT systems breakdowns
- Reputational risk related to human resources being at risk of unemployment
- Compliance risk related to the use of data and the AI system generated output

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain bestin-class technical margins; Underpin growth with effective cost management)
- Enhance Earnings Profile (Develop asset management franchise further)
- Lead Innovation (Increase customer value through Lifetime Partner advisory model; Accelerate innovation as a data-driven company; Achieve additional operating efficiency by scaling automation and technology)

#### Strategic management actions

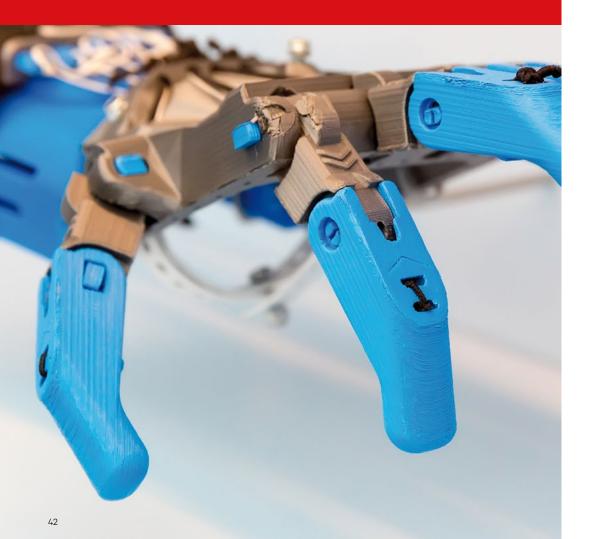


#### - Develop powerful and sustainable innovation engine to support future

- Optimize further claims management using Artificial Intelligence
- Reduce costs through digitization, core process automation and sharedplatforms
- Invest in digital and strategic skills placing people at the heart of our transformation
- Ensure Group security through cyber and infrastructure harmonization
- Improve operational efficiencies & minimize customer effort at every step
- Unleash the power of data capturing opportunities from IoT, 5G and AI

#### LIFESTYLE DEVELOPMENTS & MEDICAL ADVANCES

# LIFESTYLE DEVELOPMENTS & MEDICAL ADVANCES



## HEALTHIER, STRESSED OR ADDICTED

Lifestyle developments refer to activities and habits that may impact physical, mental and spiritual fitness, with potential implications on people's health.

According to the World Economic Forum, physical inactivity, poor diet, excess alcohol consumption and smoking constitute the four lifestyle behaviours impacting mostly the global health, causing ca. 70% of deaths worldwide<sup>27</sup>.

Although the awareness campaigns fostered in the past years, also other **unhealthy behaviours** such as excessive technologies use, drugs' abuse, and lack of sleep can contribute to diseases like obesity, metabolic syndrome -being the combination of three or more of the following conditions: obesity, hypertension, diabetes, low levels of high-density lipoprotein (HDL) cholesterol and high levels of triglyceride -, and mental illness. Moreover, these unhealthy behaviours can be strictly interconnected, triggering more than just one disease simultaneously. In addition, a connection between the increased obesity rates among children aged 7 to 9 and Covid-19 pandemic has been highlighted by the World Health Organization due to more screen time and sedentary lifestyle<sup>28</sup>. Tackling childhood obesity is considered a priority as it has the potential to further impact their lifestyles and behaviours. A comprehensive approach that promotes healthy diets and physical activity across the life course is deemed crucial for the future, also for the overall beneficial impacts on the healthcare.

Among the drugs' abuse, a critical role is recognized to the non-medical use, misuse and use without medical supervision of **opioids** - such as morphine, codeine, fentanyl - whose overdose can lead to death due to their effect on the part of the brain which regulates breathing. According to the U.S. Centers

#### LIFESTYLE DEVELOPMENTS & MEDICAL ADVANCES

for Disease Control and Prevention, more than 75% of the ca. 107,000 deaths due to drug overdose in 2022 involved the use of an opioid<sup>29</sup>. In particular, the drugs' overdose deaths involving synthetic opioid, including fentanyl, increased in the recent years mainly for its growing misuse in the illicit drugs' market, as it is mixed with other drugs.

On the other side, the **importance of wellness**, in terms of both physical and psychological health, is increasingly gaining momentum, especially for a growing and even older population, longing for healthy ageing. To this aim, new medical devices are under development to foster wellbeing and raise awareness on the consequences that may derive from specific lifestyle and habits.

**Medicine** is indeed rapidly evolving, leveraging on both research and technologies like robots, nanotechnology, telemedicine and Artificial Intelligence. The latter, for example, can help detect, dignose and treat diseases at an early stage. It is worth noting that there are still some health hazards to be fully understood, such as the side effects of weight loss drugs, and the consequences on human body of exposure to small particles and dangerous chemicals, for example microplastics and endocrine disruptors.

Insurers can play an important role in contributing to people's lifestyle by **offering products aimed at promoting healthy behaviours**, for example by encouraging sport, improving diet monitoring and reducing alcohol consumption and smoking habits. Moreover, it is crucial that life products are updated, both in terms of services offered and coverages, taking into account the improvements in medicine together with the **new risks deriving from evolving medical practices**. When approaching these trends, management of sensitive data also has to be carefully addressed.

### Link with materiality assessment

- Change in healthcare
- Polarization of lifestyles











Assessment

ACTIVE CONCER

Confirmed from last year

#### Examples of risk implications

- Risks related to data protection due to evolving technologies
- Risk of not developing insurance products focused enough on promoting health, wellbeing and quality of life
- Risk of not using reliable consumers' data for product pricing
- Reputational risk deriving from insurability and ethical implications linked to innovative health solutions

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-inclass technical margins; Grow capital light business, technical profits and ESG product range)
- Enhance Earnings Profile (Improve Life business profile and profitability)
- Lead Innovation (Increase customer value through Lifetime Partner advisory model; Accelerate innovation as a data-driven company)

#### Strategic management actions



- Increase customer value by scaling digitally-enabled advisory model
- Establish seamless omni-channel approach across distribution channels
- Develop powerful and sustainable innovation engine to support future growth
- Leverage new data capabilities to improve technical leadership and offer value-added services through digital ecosystems
- Reward healthy customer behaviour, countering key drivers of major diseases
- Evolve traditional telemedicine into "doctor in your hands" service
- Expand proposition of dedicated solutions

## NEW MARKET PLAYERS FROM OTHER MARKETS



# GUESS WHO'S COMING TO PLAY?

New market players from other markets include potential competitors which aim to explore new insurance opportunities by reshaping the traditional business model in an increasingly digital insurance ecosystem leveraging on a more specific focus on customer needs.

FinTech and InsurTech companies, already benefitting from a consolidated client base, massive data sets and profound technological and communication skills, can leverage on the above-mentioned advantages to also sell digitalised insurance products. These traits allow them to meet customer needs, achieve higher efficiency and optimise the offerings, jeopardising the traditional customer relationship model. In 2022, Insurtech market reached \$8 billion investments, slightly decreased compared to 2021's best result ever, due to the recent global socio-economic uncertainty<sup>30</sup>. In 2023 and early 2024 a tougher environment for new challengers can be seen, especially for the ones relying on less solid business models, partially due to the higher interest rates environment affecting the availability of large amount of low cost investment capital.

The impact for insurers has not been as disruptive as expected so far, also given the challenging regulatory requirements and the specific skills needed to operate in this sector. Nevertheless, more innovative companies could gain market share, with potential negative implications for the traditional insurers that do not update their data collection, storage and management and therefore are not able to meet new customer's expectations for more digital and user-friendly products. In terms of expectation, the insurance business is also moving towards a customer-centric culture, redefining the relationship between insurers and customers. In perspective, insurers are increasingly representing

#### NEW MARKET PLAYERS FROM OTHER MARKETS

the role of partners in customers' lives by providing tailored products and expert advice on, for example, how to prevent or reduce risks, or manage claims should they occur.

To maintain and further increase their competitiveness, insurers could also consider developing **partnerships** with different players. This would allow them to benefit from technologies like Machine Learning and Artificial Intelligence for several activities such as product design, claims management and pricing models.

### Link with materiality assessment

- Digital revolution and cybersecurity
- Changing nature of work











#### Assessment

ACTIVE CONCERN

Confirmed from last year, perception decreased

#### Examples of risk implications

- Risk of not leveraging on technological and communication skills to best position in the market
- Risk of market share loss and profitability over a long-term period in case of failure to compete with new market players or to develop partnership with platform companies

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain bestin-class technical margins)
- Enhance Earnings Profile (Redeploy capital to profitable growth initiatives)
- Lead Innovation (Increase customer value through Lifetime Partner advisory model; Accelerate innovation as a data-driven company)

#### Strategic management actions



#### - Establish seamless omni-channel approach across distribution channels

- Leverage new data capabilities to improve technical leadership and offer value-added services through digital ecosystems
- Reduce costs through digitization, core process automation and shared platforms
- Collect, analyze and extract value from customers data delivering value added services
- Proactively deepening relationships with our existing clients
- Evolving our customer relationship model based on personalized advice and digitally-enabled interaction
- Develop powerful and sustainable innovation engine to support future growth
- Gain share of European digital profit pool by scaling direct operations

# TO BE WELL OR NOT TO BE WELL

Changes in healthcare are related to new healthcare systems, so called integrated ecosystem, based on innovative coordination of different specialists and technologies, aiming at responding to more complex and demanding needs.

As population ages and lives longer, **healthcare systems** are increasingly called to face a higher number of elderly people's requests, as they are more likely hit by multimorbidity and chronic illnesses while also being more fragile during health emergencies.

**Digital solutions**, together with skilled resources and suitable infrastructures, represent the key elements for a **more sustainable and resilient environment**. The potential use of **technology** is wide-ranging: precision medicine allows the use of molecular information for better preventing and treating critical diseases, Artificial Intelligence may speed up research, hyper-connected devices empower innovative approaches such as telehealth. Some of these solutions are already growing, as proven by the EU4Health Programme 2021-2027, in which the digital transformation of healthcare is a core area of intervention<sup>31</sup>. In parallel though, as **generative AI** takes space in helping health workers to save time on paperwork or on simple diagnoses, **concerns** rise both on the data usage, for example as there is the risk of amplifying biases already existing in healthcare, and on the protection of patients' data<sup>32</sup>.

As socio-economic turmoil persists, healthcare systems are likely to face **financial pressure**, with lower budgets and increased expenses, also exacerbated by other dynamics, like litigations for medical malpractices and lack of healthcare



## CHANGE IN HEALTHCARE

#### CHANGE IN HEALTHCARE

professionals. This context may also lead people to buy additional coverages, resulting in a **shift in the demand from public to private** as well as in the need for a higher **collaboration between public and private care systems** leading to healthcare public-private partnerships (PPPs) implemented globally.

To meet the evolving customers' needs, the **review** and the **development of insurance products and services** leveraging on innovative technologies will be crucial for insurers. A clear example is the so-called **digital health insurance** which allows insurers to benefit from the use of diagnostic devices, gathering clients' information and customising the insurance proposition and benefits.

Link with materiality assessment

- Change in healthcare











Assessment

ACTIVE CONCER

Confirmed from last year

#### Examples of risk implications

- Risk of not adjusting business model and product/service offering in order to maintain market share
- Increased health costs due to the adoption of new technologies
- Risk of not capturing the increasing need for private healthcare coverages
- Risks related to data protection and use (e.g. cyber risk)

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-in-class technical margins; Grow capital light business, technical profits and ESG product range)
- Enhance Earnings Profile (Improve Life business profile and profitability)
- **Lead Innovation** (Increase customer value through Lifetime Partner advisory model)

#### Strategic management actions



- Seize growth opportunities offered by health protection gap thanks to our leadership in core markets
- Reward healthy customer behaviour, countering key drivers of major diseases
- Facilitate care access and pertinence, reducing time/cost of services
- Vertically integrated value chain to serve specific targets through cost-efficient business models
- Establish seamless omni-channel approach across distribution channels
- The Human Safety Net A social innovation hub powered by Generali's skills, networks and solutions to create social impact, supporting the most vulnerable groups in unlocking their potential
- Expand proposition of dedicated solutions

## NO SUPPLY, NO BUSINESS

Critical infrastructures and supply chain failures include the **blackout of key systems** for governments, businesses and individuals as well as the **logistic challenges** arising from supply chain disruptions, both potentially leading to **business interruptions** (BI).

**Critical infrastructures** are not only physical, such as transportation systems and power plants, but also digital, like communication networks and data centers, vulnerable to cyber attacks. When damaged, society and businesses can negatively suffer from the socio-economic implications, including shortages and interruptions.

In the current context of geopolitical instability, the **global supply chain** continues to appear extremely fragile, since raw materials, technologies and production are often concentrated in specific areas, and trade wars and tariffs can easily end up in supply bottlenecks. Above all, the persisting Russia-Ukraine war, the tensions between the United States and China, and the conflict in the Middle East suggest that global commercial lines may be increasingly challenged with delays or even interruptions by the introduction of sanctions and trade restrictions. This is particularly relevant for sensitive sectors, such as food, by considering Ukraine grain, as well as strategic areas, like the **Taiwan strait** which is one of the busiest shipping routes on earth and crucial for the supply of semiconductors and electronic equipment<sup>33</sup>. As reported by the Economist, Taiwan produces more than 60% of the world's semiconductors and over 90% of the most advanced ones<sup>34</sup>. Further, Houti militia attacks in the Red Sea cause shortages of components, hitting sectors such as the manufacturing one (e.g. automobile), thus threatening the global supply chain. According to the World



# CRITICAL INFRASTRUCTURES AND SUPPLY CHAIN FAILURES

#### CRITICAL INFRASTRUCTURES AND SUPPLY CHAIN FAILURES

Economic Forum, 90% of traded goods are transported by  $sea^{35}$ , highlighting a crucial role of ocean trade routes in the worldwide economy, and 11% of the global trade passes through the Red  $Sea^{36}$ .

Critical infrastructures and supply chain failures might also be triggered by other external causes such as natural catastrophic events, as well as by the lack of investments to improve the resilience and secure infrastructure networks.

Given the crucial role of critical infrastructures for EU, supporting its internal market and security, a Directive for protection and resilience of critical entities has been issued by the EU commission. Nevertheless, the ever-growing interconnectivity of infrastructures and the high dependency on digital systems require EU economies to make an additional step further in making its strategic industries more resilient.

The main threats for insurance companies are the increase of claims for BI insurance, as well as credit risk related to specific businesses at risk.

## Link with materiality assessment

- Digital revolution and cybersecurity
- Urbanization











Assessment

ACTIVE CONCER

Confirmed from last year

#### Examples of risk implications

- Risk of critical infrastructure failures due to geopolitical instabilities, tensions and conflicts
- Higher-than-expected insured losses due to supply chain disruptions
- Increased claims due to business interruption
- Increased blackouts due to energy supply interruption
- Increased payments of claims as a consequence of cyber attacks
- Credit risks of specific businesses under pressure due to supply chain bottlenecks

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-in-class technical margins; Underpin growth with effective cost management)
- Enhance Earnings Profile
- Lead Innovation (Accelerate innovation as a data-driven company; Achieve additional operating efficiency by scaling automation and technology)

#### Strategic management actions



#### - Develop powerful and sustainable innovation engine to support future growth

- Reduce costs through digitization, core process automation and shared platforms
- Optimize further claims management using Artificial Intelligence
- € 3.5 billion Investment plan by 2025 to support the EU Recovery
- Ensure Group security through cyber and infrastructure harmonization

## BIODIVERSITY LOSS



## SOS FROM LIFE FORMS

Biodiversity loss refers to the decline or disappearance of biological diversity within species, ecosystems and geographical areas. The causes are linked to **human actions** which, through pollution, natural resources' exploitation and change in land and sea use, lead to global warming and invasive species spreading beyond their original habitat. This is a global threat as the loss of species we are seeing today is between 1,000 and 10,000 times higher than the natural extinction rate, as reported by the World Economic Forum<sup>37</sup>.

**Biodiversity and climate change are inextricably linked.** On one side, the degradation of ecosystems alters nature's ability to manage greenhouse gas emissions and harms the natural barriers against extreme weather events. On the other side, climate-related events affecting ecological complexes can alter species' diversity and habitats, for example the excess of carbon dioxide absorbed by oceans, increasing their temperature and acidity, has negative impacts on fish stocks.

One of the most concerning phenomena is the **decline of pollinators**: in Europe one in ten bee and butterfly species, and one in three hoverfly species are at risk of extinction according to the European Red List<sup>38</sup>. Pollinators are crucial for the functioning of the overall ecosystem, for medicines and global food availability. The decline of pollinators together with climate change would further amplify the **food insecurity** and **water scarcity**, issues perceived as key concerns in a world with growing population. According to the World Economic Forum, ca. 75% of crops' production somehow depends on pollinators<sup>39</sup> and, as reported by the United Nations, only 0.5% of Earth's water is accessible and suitable for use as freshwater<sup>40</sup>.

#### **BIODIVERSITY LOSS**

Implications are huge for the whole society, especially for economic sectors such as utilities, energy, food & beverage, as well as manufacturing (mainly pharmaceuticals and automobiles) which are **dependent on natural resources**, in particular water, and **impact biodiversity** mainly through raw materials' exploitation and release of pollutants. Further implications on **human health and well-being** can be also observed if ecosystem goods and services are no longer adequate to meet human and social needs, including for instance clean air, freshwater, food and nutrition security, development of medicines and pharmaceuticals.

The rising awareness around nature-related risks in civil society, institutions, market and regulators is increasing the **efforts towards a nature-positive future**, with consequent political, technological, legal and social developments. For example, to limit damages on nature and to reduce health risks, several policies are promoting organic agriculture, reducing the use of pesticides and other environmental pollutants, as well as of long-lasting chemicals, such as PFAS (per- and polyfluoroalkyl substances) as they potentially affect humans, animals and environment.

The wide spectrum of matters related to biodiversity loss makes it difficult to identify a unique indicator to measure nature-related risks, contrasting with climate change where  $CO_2$  equivalent is used. Long-term plans are being developed to protect nature and reverse the degradation of ecosystems, such as the EU Biodiversity strategy for 2030, which expects countries to submit National Restoration Plans showing how they will deliver on the targets. This requires the development of **new regulations** which will challenge mostly the industries with major impacts on nature.

Implications on insurance business, notwithstanding the **uncertainties and complexity of biodiversity**, are expected on underwriting business, due to potentially higher nature-related claims, or through investments exposed to biodiversity loss risks.

## Link with materiality assessment

- Resource scarcity and sharing economy
- Biodiversity degradation













Assessment

INITIAL CONCER

Confirmed from last year

#### Examples of risk implications

- Reputational damage deriving from investments/underwriting counterparties not committed to a nature-positive transition
- Decreasing value of companies operating in sectors highly dependent on ecosystem services, such as utilities
- Decreasing value of investments, increasing insurance claims and possible macroeconomic consequences due to natural resources' scarcity
- Increased claims and costs in the life and health business due to unavailability of food and medicines
- Direct risks for insurers of damage to properties located in areas vulnerable to soil erosion

#### Relevant strategic objectives



Strategic Pillars (and Levers):

- Drive Sustainable Growth (Grow capital light business, technical profits and ESG product range)
- Enhance Earnings Profile
- Lead Innovation

#### Strategic management actions



- Expand proposition of dedicated solutions

# WORK DIFFERENT, THINK DIFFERENT

Business structure developments are driven by the changes in the way people approach work, through new digital technologies, hyper-connectivity and widespread use of social media, as well as with an increasing attention towards sustainability matters.

The **digitalisation** trend has boosted the adoption of **new ways of working**, such as remote working, and the use of platforms and social media. On the one hand, these phenomena are creating several advantages, such as greater flexibility either in terms of time, space and costs' reduction, but on the other hand there are also some disadvantages, such as lack of a clear boundary between work and personal spaces and greater isolation, as well as risks related to data protection and cyber attacks. In a more digital environment, also an increase of e-commerce and digital sales has been observed: the proportion of EU e-shoppers, within individuals using the internet, moved from 57% in 2013 to 75% in 2023, with a growth of almost 20% in a decade, as reported by Eurostat<sup>41</sup>.

For insurers, these technology-driven changes lead to **rethink the underwriting offering**, considering the rising number of digital companies among clients and the evolving customers' needs towards innovative product design and propositions. This means developing **new skills** and **digital competencies**, raising awareness on cyber-related risks and, finally, collecting statistical data related to new businesses, which is still limited given the fast evolution of new technologies.

Finally, businesses are increasingly **embedding sustainability topics** in their strategies, core businesses and processes with the aim to deliver a positive



## BUSINESS STRUCTURE DEVELOPMENT

#### BUSINESS STRUCTURE DEVELOPMENT

social and environmental impact on stakeholders and support the transition to a more sustainable economy and society. In particular, valuing environmental and social matters is becoming essential for both employees' and customers' attraction and retention: according to a PwC survey involving people from a set of countries including US, UK and Germany, more than 80% of employees would rather work for companies that stand up for ESG matters and clients are increasingly embedding sustainability considerations in their choices<sup>42</sup>. Therefore, similarly to other businesses, the challenge for insurers is to adequately meet the needs of more and more sustainability-oriented stakeholders.

#### Link with materiality assessment

- Changing nature of work
- Transparency and purpose-driven businesses
- Digital revolution and cybersecurity











Assessment

INITIAL CONCERI

Confirmed from last year

#### Examples of risk implications

- Risks related to selection and pricing of new corporate risks in a hyper-connected environment
- Risk related to data protection issues and cyber threats due to new ways of working
- Risk of not adequately adapting the product/service offering in order to meet the growing number of digital companies among clients
- Strategic implications linked to not properly underwriting risks connected to new technologies (e.g. cyber) and of not suggesting the right mitigation actions to our clients to increase their resilience
- Risk of failing to adapt to new technologies
- Risk of not properly involving employees who are reluctant to adapt to new technological enhancements
- Strategic risk of not capturing the shift in employees' and customers' preferences towards sustainable business models

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- **Drive Sustainable Growth** (Boost P&C revenues and maintain best-in-class technical marains: Underpin growth with effective cost management)
- Enhance Earnings Profile (Redeploy capital to profitable growth initiatives)
- Lead Innovation (Increase customer value through Lifetime Partner advisory model; Accelerate innovation as a data-driven company; Achieve additional operating efficiency by scaling automation and technology

#### Strategic management actions



- Develop powerful and sustainable innovation engine to support future growth
- Reduce costs through digitization, core process automation and shared platforms
- Establish seamless omni-channel approach across distribution channels
- Enable an efficient and agile organization embracing a sustainable hybrid work model rooted on digital
- Sustainability within all people processes, enabled by a People Strategy focused on culture, diversity, competence upskilling and new way of working

## THE INVISIBLE **ENEMY**

Mental health is a state of wellbeing that significantly affects how a person feels, thinks, behaves, and interacts with other people. It can be undermined by a wide spectrum of biological, psychological and socioeconomic factors, often interconnected.

The feeling of loneliness and isolation, also called "loneliness epidemic", is a very common phenomenon in society nowadays representing a new mental health concern. Choosing digital instead of eye-to-eye communication, for example, can increase the perception of being lonely, driving mental health issues especially among younger generations whose level of happiness is in decline worldwide. As reported by the World Economic Forum, several factors contribute to this decline such as social, economic, technological and ecological pressures<sup>43</sup> requiring a prioritization of global mental health support for young people in schools and communities, activities that promote social interaction and sense of belonging, as well as the implementation of regulations and policies that limit the spread of negativity and misinformation.

Mental disorders have been exacerbated by the wide-ranging financial and social challenges, from job insecurity to feeling isolated. Negative impacts on mental wellbeing together with other long-term effects also arise as a consequence of war traumas. As recently reported by the World Economic Forum, mental disorders and anxiety increase during periods of wars and conflicts, even by the population not directly involved in conflicts themselves<sup>44</sup>. Furthermore, the rise of the so-called eco-anxiety, linked to extreme weather events (such as acute heatwaves, droughts, floods, fire) and the chronic fear of



### MENTAL HEALTH

#### MENTAL HEALTH

environmental doom fuelled by climate change, is becoming severe enough to cause emotional distress and trauma with effects on mental health worldwide.

Also, the United States and Europe are experiencing an increase in opioids' misuse (e.g. fentanyl), which are highly addictive and cause severe respiratory complications and not last, deaths.

Considering the above-mentioned concerns and the digital boost in private and professional life, awareness around mental health is being promoted by public and private entities. Nevertheless, as reported by the World Health Organization, despite the availability of effective treatments also at relatively low cost, health systems for treating mental disorders continue to be significantly underresourced leading to wide treatment gaps all over the world<sup>45</sup>.

The potential implications for the insurance industry can be relevant, considering the expected higher demand for insurance coverage and related costs in the years to come. Challenges also derive from the complexity of assessing mental health conditions and risks in the underwriting and claims settlement phase. Finally, as for other businesses, insurers could be vulnerable to operational losses linked to employee-related matters, like lower productivity, absenteeism and increased risk of mistakes.

#### Link with materiality assessment

- Change in healthcare
- Polarisation of lifestyles













#### Assessment

Confirmed from last year, perception increased

#### **Examples of risk** implications

- Increased disability claims related to work inability or life settlements in case of early life termination
- Increased medical expenses related to mental health matters
- Risk of not developing new health products (e.g., telehealth)
- Underwriting risk in terms of rise in number of non-insurable individuals if affected by mental issues
- Increased operational challenges related to work inability due to mental health issues

#### Relevant strategic objectives



#### Strategic Pillars (and Levers):

- Drive Sustainable Growth (Boost P&C revenues and maintain best-inclass technical margins: Grow capital light business, technical profits and ESG product range)
- Enhance Earnings Profile (Improve Life business profile and profitability)
- Lead Innovation

#### Strategic management actions



- Seize growth opportunities offered by health protection gap thanks to our leadership in core markets
- Personalized value propositions enriched with service ecosystem to prevent and assist
- Facilitate care access and pertinence, reducing time/cost of services
- Enable an efficient and agile organization embracing a sustainable hybrid work model rooted on digital
- The Human Safety Net A social innovation hub powered by Generali's skills, networks and solutions to create social impact, supporting the most vulnerable groups in unlocking their potential

## GENERALI'S APPROACH TO EMERGING AND SUSTAINABILITY RISKS



#### WHAT WE DO AND WHY WE DO IT

- 1. Scanning of the external environment to identify and assess:
  - emerging risks that could significantly impact the Group over a longer time period
  - sustainability risks the Group is most exposed to, considering them in terms of both outside-in and inside-out perspective
- 2. Raising awareness on the evolving risks context and sharing know-how to grant preparedness to take actions if they should materialise



#### WHO IS INVOLVED

Generali has structured an integrated Group risk identification process, steered by the Group Risk Management Function, involving:

- all Group Business Units
- main Group Business Functions



#### HOW WE DO IT

All inputs from Group Business Units and Group Business Functions are gathered through a qualitative approach.

For each emerging risk:

- a level of concern high, active, initial is assigned, based on perceived vulnerability, in terms of expected impacts, and timeframe, in terms of time horizon in which they are most likely to materialise
- main related sustainability factor as of Del. Reg. (EU) 2021/1256 and the topics identified as significant through the materiality assessment are pointed out with the support of Group Chief Sustainability Officer
- related strategic actions, part of the Generali Group Strategy "Lifetime Partner 24: Driving Growth", are identified for the emerging risks' management, with the support of Group Strategy
- relevant market studies, such as the World Economic Forum publications and the discussions held within the CRO Forum - Emerging Risk Initiative, are taken into account

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