

## Addressing Obstacles to Life Insurance Demand



April 2020

#### The Geneva Association

The Geneva Association was created in 1973 and is the only global association of insurance companies; our members are insurance and reinsurance Chief Executive Officers (CEOs). Based on rigorous research conducted in collaboration with our members, academic institutions and multilateral organisations, our mission is to identify and investigate key trends that are likely to shape or impact the insurance industry in the future, highlighting what is at stake for the industry; develop recommendations for the industry and for policymakers; provide a platform to our members, policymakers, academics, multilateral and non-governmental organisations to discuss these trends and recommendations; reach out to global opinion leaders and influential organisations to highlight the positive contributions of insurance to better understanding risks and to building resilient and prosperous economies and societies, and thus a more sustainable world.

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# Addressing Obstacles to Life Insurance Demand

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### Foreword



The relevance of life insurance in many mature markets has experienced a worrying decline in recent decades. For all OECD countries combined, life insurance premiums as a share of GDP have fallen from 5.4% to 3.8% since the start of the 21<sup>st</sup> century. Yet, populations in many mature economies are ageing rapidly. We have already seen the opioid crisis in the U.S. reverse mortality improvements there, while threats like antimicrobial resistance and pandemics threaten to do so on a global scale. Life-style related ailments such as diabetes and obesity are causing structural shifts in disease patterns. The list of societal challenges goes on.

Against this backdrop, the decreasing relevance of the life insurance industry is a worrying trend for society at large, given the sector's historical contributions to funding for retirement and mitigating biometric risks. The devastating COVID-19 pandemic only adds to this concern.

The purpose of this research report is twofold. First, based on the Geneva Association Customer Survey, it sheds light on the drivers behind falling life insurance penetration levels, such as ultra-loose monetary policies, behavioural patterns and perceived product shortcomings. Second, we offer recommendations to stimulate life insurance demand.

Life insurers have already started to respond to society's rapidly evolving needs but they have to keep pace with these dynamics. Not all the levers for meeting this challenge are within the domain of the life insurance industry. However, those that are need to be integrated in corporate decision-making in order for life insurers to rise to the occasion.

**Jad Ariss** Managing Director The Geneva Association



# 1. Executive summary

In a number of mature economies, life insurance penetration, defined as the share of premiums in GDP, has been declining since the beginning of this century, a trend that has accelerated in the wake of the global financial crisis. Using this measure of penetration as an indicator for insurance uptake, the life insurance industry in the U.S. and Japan has fallen back to levels of relevance last seen almost 35 years ago. In the U.K., Germany and Switzerland, they are at levels last seen 20-25 years ago. The bursting of the dotcom bubble in 2001 can be viewed as a turning point, with stock markets plunging, monetary policies loosening and interest rates continuing a downward trend, further accelerated by the global financial crisis and – more recently – the response to COVID-19.

These patterns illustrate the correlation between macroeconomic factors and life insurance demand, in particular for savings-type and longevity-protection products such as endowments and annuities, which account for almost 90% of global life insurance premiums. The relatively small but robustly growing market for biometric risk covers, such as term life insurance, has been unable to offset the eroding popularity of savings products.

In order to better understand these developments, The Geneva Association commissioned a survey of 7,000 customers in seven mature insurance markets to identify the main barriers to purchasing (life) insurance.

An in-depth analysis of the drivers of customers' *life* insurance buying decisions reveals three major determinants: behavioural biases, economic constraints or considerations and a lack of knowledge.

The survey reveals a striking lack of insurance awareness among respondents. Key industry products such as wealth accumulation (endowment and unit-linked) and longevity protection (retirement annuities) are unknown to more than 50% of those polled. Further, the level of preparedness among insurance customers appears to be perilously low, with only 7% owning critical illness or retirement annuity insurance.

Survey participants who decided to delay insurance purchases cite 'other priorities', affordability and a perceived lack of knowledge, for both annuity and term life products, as their main reasons. Those who rule out buying insurance at any point in the future perceive insurance as unaffordable and insufficiently understood.

Based on these findings we can formulate a number of recommendations for insurers, designed to promote the role of life insurance and improve individual, family and societal preparedness for ageing, new disease patterns and mortality threats.

First, insurers must accelerate ongoing efforts to rethink existing products and develop new, more customerfriendly offerings. For life insurers to respond to the new realities it will be crucial to adapt traditional savings products and design attractive solutions that are less dependent on interest rates. In a number of markets, these enhancements are already well under way. European life insurers, for example, have expanded their portfolios with hybrids of unit-linked and traditional products and offer innovative investment-linked products that provide sub-100% paid premium protection while giving the policyholder access to riskier assets with a higher potential upside. In addition, the Geneva Association Customer Survey highlights scope for product innovation taking into account findings from behavioral economics. Examples include annuities framed as protection, rather than investment products, and addressing customers' loss aversion by offering guarantees that limit asset losses in the event of early death, for example.

Second, insurers can reduce price sensitivity through value enhancements, such as accelerated underwriting on the back of advanced analytics, that would reduce frictional costs for purchasing life insurance. Also, improved customer segmentation, marketing and transparency enabled by new technologies and data could address a tendency to overestimate the cost of life insurance. In general, more innovative and comprehensive product propositions that promote loss prevention and enhance customer preparedness, would add to the perceived value of life insurance and reduce price sensitivity.

Third, life insurance has the potential to become more cost-competitive. Life insurers have yet to fully address operating costs at a structural level. Adding value to product offerings should, therefore, be accompanied by measures that address customer concerns about price and affordability.

Fourth, life insurers should address low levels of insurance awareness and education. The Geneva Association Customer Survey unearths major deficits in awareness, especially for endowment and annuity retirement products. In order to tackle this issue, insurers and their associations could team up with public authorities, agencies and consumer associations. Insurers could also advocate the integration of basic insurance and protection knowledge in schools.



### 2. Life insurance penetration in mature economies

Insurance penetration, defined as the share of premiums in GDP, is the most common measurement of the role of insurance in the economy. One of its key advantages is the availability of internationally comparable data. That said, penetration has its shortcomings. It fails to take into consideration country-specific factors such as public health and pension insurance schemes, wealth transfer norms and degrees of litigiousness. Furthermore, using GDP as a proxy for risk assumes a constant relation between economic activities and exposure that may not reflect underlying trends, such as the shift towards intangible assets in the digital economy (The Geneva Association 2014).

Figure 1 shows the long-term development of life insurance penetration for the seven mature economies covered by the Geneva Association Customer Survey. With the notable exceptions of France and Italy, the findings paint a sobering picture: in the U.S. and Japan, penetration has fallen back to levels last seen about 35 years ago. In the U.K., Germany and Switzerland, the setbacks amount to 20-25 years. For a long time, life insurance sales in France were more robust. However, since the global financial crisis, life insurance penetration in the country has receded to levels last seen at the beginning of the century. Life insurance in Italy has proven resilient, with a massive increase in life insurance penetration over the past four decades. Experts attribute this phenomenon to insurers' greater resilience to the financial crisis compared to the banking sector, as well as sharp declines in historically elevated inflation rates.

In the U.S., Switzerland and most notably the U.K., life insurance penetration increased markedly until the turn of the century. Reasons for the rise include the defeat of global inflation during the 1980s and the booming stock and bond markets of the 1990s. However, the bursting of the dotcom bubble in 2001 was a turning point, with stock markets plunging, monetary policies loosening and interest rates accelerating their downward trend. The pattern of life insurance purchasing in Japan reflects a combination of factors such as the rupture of the country's asset bubble in the early 1990s, a stagnant economy, highly expansionary monetary policies and a rapidly ageing population.

Generally speaking, the impact of the financial crisis and the subsequent severe economic recession is visible for a number of countries, especially the U.S. and the U.K. As a result of the rapid decline in interest rates after 2008, annuity sales, for example, contracted, as higher premiums were required to maintain benefits at the same level (Swiss Re 2012).

In conclusion, these patterns illustrate the close correlation between macroeconomic factors and life insurance demand, in particular for savings-type and longevity protection products such as endowments and annuities that account for almost 90% of global life insurance premiums (McKinsey & Company 2017 and Swiss Re 2019). Traditional savings products, in particular those with fixed guarantees, are under severe pressure (Allianz 2019) from near-zero interest rates, which discourage people from making long-term savings decisions, while the shift to riskbased solvency frameworks and regulatory interventions are tightening sales of life and retirement products. For example, in advanced European markets life insurance premiums have declined by 1.1% annually over the past 10 years. The relatively small, yet growing, market for biometric risk insurance was unable to offset eroding demand for savings products (Swiss Re 2019). In addition to macroeconomic factors, socio-demographic changes also play a major role in eroding life insurance sales. For example, the dwindling size of the middle class impacts demand because low-income segments of the population can't afford coverage whereas the wealthy can self-insure. Another driver is that people are now less likely to marry – and stay married – and to have children. Both trends shrink the life insurance market (see Hartley 2017 for a U.S. perspective).





Source: Compiled from the Swiss Re sigma database



### 3. Obstacles to life insurance demand

In addition to macroeconomic and regulatory headwinds, there are other factors contributing to insufficient demand for life insurance, i.e. why actual take-up falls short of what economic theory would suggest is needed by individuals and society at large. There is ample evidence that significant protection gaps exist in the field of life insurance (see, for example, WEF 2019 for the pension savings gap and Swiss Re 2018 for the mortality protection gap).

This report analyses the root causes of insufficient demand from two angles. First, it analyses the life insurance-related findings from the recent Geneva Association Customer Survey. The poll was designed to identify the main obstacles to insurance demand, based on the public's opinions of insurance and associated behaviours. In addition, the research was intended to reveal the reasoning behind these opinions and behaviours as well as explore customer suggestions to help improve perceptions, experiences and engagement. The geographical scope of the survey included the mature insurance markets of the U.S., U.K., France, Germany, Italy, Japan and Switzerland. The first phase of the survey involved analysis of online conversations related to the insurance industry, as well as four specific products (including term life and annuity insurance). The second phase was a deep dive based on more in-depth interviews with seven individuals per market.

The main purpose of phases one and two was to inform the online questionnaire underlying phase three. This crucial phase focused on the quantitative measurement of perceptions and reasons behind purchasing behaviours, the results of which are presented and discussed in the following sections. Seven thousand respondents (1,000 per country) took part in an online survey, yielding a wealth of insights and statistics.

Second, armed with these empirical findings, the report reviews key pieces of academic and non-academic literature based on The Geneva Association 'Pentagon' of determinants of insurance demand (The Geneva Association 2019; see Figure 12). This publication focuses on behaviour and perceptions, as well as economic factors specifically, holding back demand for life insurance.

#### 3.1. Findings from the Geneva Association Customer Survey

Figure 2 highlights a lack of awareness and knowledge as a root cause of underinsurance in the life sector. Looking at the average across all seven mature markets covered by the survey, the lowest levels of awareness relate to endowment and unit-linked insurance. Well over half (60%) of respondents were not aware of these products, which, unlike term life insurance, accumulate cash and pay a lump sum to beneficiaries upon the insured's death or back to the living policyholder when the policy's term matures.

The second least-known product is annuity insurance, which in some countries are virtually non-existent. Just over half (53%) of respondents are unaware of

these financial products, which pay out a fixed stream of payments to an individual, typically during retirement.

Awareness is also low for critical illness cover, that makes a lump-sum payment if the policyholder is diagnosed with an illnesses specified on a predetermined list. Almost half (47%) of survey respondents have never heard about critical illness insurance.

Term life insurance stands out in terms of awareness. Two thirds of respondents have heard of these products, which offer guaranteed death benefits but, as opposed to endowment, unit-linked or whole life products, do not have a savings component.

The second best known product is whole life insurance. Only 42% of respondents are unfamiliar with these policies, which are similar to endowment products in accumulating cash value but are designed to last for the insured's whole life.

### Figure 2: Share of respondents who are not aware of the product



Source: Geneva Association Customer Survey

As Figure 3 reveals, term life and whole life insurance are not only the best known but also the most popular life insurance products, currently held by 16% and 13% of all respondents respectively.

Penetration rates in critical illness, retirement annuity and endowment/unit-linked savings insurance remain much lower, at single-digit levels.

### *Figure 3: Share of respondents who currently hold an insurance policy*





When asked about their motives for purchasing term life insurance, the desire to protect one's family stands out. Interestingly, trust in insurers and the cost-benefit characteristics of the product only play a secondary role (Figure 4). The same question about retirement annuity insurance reveals that investment considerations take centre stage when buying annuities whereas specific concerns about the adequacy of retirement savings were less frequently mentioned (Figure 5).<sup>1</sup>

1 The Annex provides a more granular country-specific perspective on the determinants of purchasing decisions, unearthing a significant degree of heterogeneity.

### *Figure 4: Reasons for buying voluntary term life insurance*



Source: Geneva Association Customer Survey

### Figure 6: Reasons for the intention to buy term life insurance at some point in the future



Source: Geneva Association Customer Survey

Figure 6 shows the motives of respondents who have not yet purchased term life insurance but intend to do so in the future. The pattern is similar to Figure 4: the need for protection is more relevant than trust in the insurer and the economics of the product. Figure 7 shows the rationale behind planned purchases of retirement annuity policies. As opposed to Figure 5 (which describes the behaviour of those who already own annuities) prospective buyers are primarily motivated by the need to be prepared and concerns about the adequacy of retirement savings, whereas investment aspects rank lower.

### *Figure 5: Reasons for buying voluntary retirement annuity insurance*



Source: Geneva Association Customer Survey

### *Figure 7: Reasons for the intention to buy retirement annuity insurance at some point in the future*



Source: Geneva Association Customer Survey

Figures 8 and 9 describe the motivations of those who do not rule out buying life insurance at a later stage. The results are remarkably similar for both term life and annuity insurance. Both products do not count among individuals' current priorities. In addition, there are concerns about affordability. A lack of awareness is also mentioned as a relevant barrier to purchasing life insurance.



### *Figure 8: Reasons for delaying term life insurance purchases to some point in the future*



Source: Geneva Association Customer Survey

### Figure 10: Reasons for not considering buying term life insurance in the future



Source: Geneva Association Customer Survey

Figures 10 and 11 shed light on the behaviour of those who have no intention whatsoever to buy life insurance in the future. For term life insurance, affordability is the most relevant perceived barrier, followed by a lack of knowledge. For retirement annuity insurance, a lack of awareness is mentioned as the most important road block, followed by concerns about affordability.

### *Figure 9: Reasons for delaying retirement annuity insurance purchases to some point in the future*



Source: Geneva Association Customer Survey

### *Figure 11: Reasons for not considering buying retirement annuity insurance in the future*



Source: Geneva Association Customer Survey

There is a wealth of theoretical and empirical analyses that we can interpret alongside the Geneva Association Customer Survey findings to derive meaningful conclusions for insurers. Figure 12 encapsulates the 'pentagon of insurance demand', developed by The Geneva Association in 2019. This research concentrates on various behavioural determinants of life insurance demand and applies these to the survey findings presented above. In addition, it revisits some well-established economic drivers such as affordability, 'value for money' and product appeal, as well as sheds light on socio-demographic factors, like financial literacy and education.

#### Figure 12: The pentagon of insurance demand



Source: The Geneva Association 2019a

#### 3.2. The theory of behavioural insurance

Until recently, our understanding of decision making was based on the so-called 'homo oeconomicus', or economic human, whereby the figurative human being is characterised by the infinite ability to make rational decisions. However, the 'homo oeconomicus' model increasingly contradicts people's actual behavioral patterns. In order to explain these anomalies, the field of behavioral economics incorporates insights from psychology. Figure 13 presents a number of observed behavioural patterns and discusses their relevance for understanding and predicting insurance purchasing decisions. Analyses suggest that dealing with risk and insurance products comes with complex decision-making processes that can only be thoroughly understood on the basis of behavioural science.

#### Figure 13: The octagon of behavioural insurance



Source: The Geneva Association

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#### Framing

The term 'framing' refers to the idea that customer decisions are strongly influenced by how choices are presented to them. It was originally introduced by Tversky and Kahneman (1981). In the context of insurance, framing is often discussed when it comes to the presentation of insurance products by financial advisers or in product information materials. Goedde-Menke et al. (2014) and Schelling (2018) show that, for example, retirement annuity products are more attractive when framed as a way to secure a desired standard of living in old age, i.e. expressed through consumption rather than pure investment. If not framed, annuities are generally considered a pure investment with an uncertain return (returns are seen as high for a long life but low in the case of an early death). The role of annuities in securing a desired standard of living, irrespective of longevity, is frequently ignored (Brown et al. 2008). This hypothesis is corroborated by the Geneva Association Customer Survey findings (see Figures 5 and 9).

Also, Glenzer et al. (2014) show that that there is a greater willingness to take investment risks if potential gains are stated as actual amounts, rather than effective returns.

The importance of insurers considering framing effects early in the product design phase was demonstrated by Johnson et al (1993), who found that insurance policies offering a higher premium, combined with a discount if there are no claims, are significantly more popular than economically identical products that carry deductibles in the event of a claim.

#### Anchoring

The anchoring effect describes an individual's unconscious use of arbitrary and irrelevant information in making decisions. For example, if people are asked to estimate their own life expectancy, they frequently use the life expectancy of their parents and grandparents as an anchor. In light of generally increasing life expectancy, this anchoring effect results in a massive underestimation of life expectancy and, hence, the funding requirements for old age (Bucher-Koenen and Kluth 2012). Coe and Belbase (2015) more generally highlight individuals' difficulty in calculating the amount of life insurance coverage they need. As a result, they rely on anchors such as their employer's default recommendations or specific agent advice as a basis for making decisions. Therefore, anchoring can translate into suboptimal decisions in financial retirement planning.

#### Default effect

People are increasingly exposed to information overload and an expanding spectrum of options. As a result, many people tend to simply maintain the status quo. This so-called default effect can be observed in old-age provision, for example, leading people to make essential decisions too late. One way to counteract this behavior is to use standard options for retirement savings in order to reduce the risk of old-age poverty. For instance, in the U.S. employers use automatic enrollment for 401(k) plans, with a default investment and savings rate. Only if the employee explicitly opts out is the enrollment cancelled or the defaults changed. As a result, a significantly larger proportion of (younger and low-wage) employees register in a deferred retirement savings plan (Choi et al 2004).

Another example of a default option aimed at reducing complexity and overcoming procrastination is the Pan-European Personal Pension product (PEPP). Berardi et al (2018) explore whether the PEPP should offer a default investment option with a financial guarantee, or whether the default option should be based on a lifecycling technique that reduces the proportion of risky assets in the PEPP portfolio as retirement approaches. The authors conclude that, from a risk-return perspective over a long investment horizon, including life-cycle investment strategies as the default option in the PEPP is economically preferable for consumers.

Figures 8 and 9 illustrate the relevance of procrastination among the Geneva Association Customer Survey participants, with around one fifth mentioning it as a reason for delaying life insurance purchases.

#### Mental accounting

The concept of mental accounting was introduced by Thaler (1999). He defines it as "the set of cognitive operations used by individuals and households to organise, evaluate, and keep track of financial activities." Mental accounting occurs when people do not treat money as fungible, i.e. as the same regardless of its origins or intended use. As a result, irrational decisions can be taken, depending, for instance, on whether people allocate money to a budget account (e.g. everyday living expenses), a discretionary spending account or a wealth account (e.g. for savings and investments).

Mental accounts can also be used to explain annuitisation decisions. If, at the end of the savings phase, customers have the option to choose between the payout of the accumulated savings or a guaranteed lifelong monthly annuity, the vast majority decide in favour of the lump sum payment (Brown et al 2008). This finding is in contradiction to economic theory: Yaari (1965) showed that in most cases an annuity would be the optimal choice. An explanation for this 'annuity puzzle' (Benartzi et al 2011) is the fact that many people do not view annuities as protecting lifelong consumption, but rather as taking a chance on a long life, driven by a mental account called 'gamble'.

That said, Ameriks et al (2008) offer a 'rationale' explanation for people's preference for lump-sum

payments. Bequest objectives, for example, have to do with the desire to transfer assets to one's heirs. Precautionary motives may also explain people's reluctance to annuitise. There is a desire to avoid being simultaneously bankrupt and in need of long-term care (LTC), or what the authors coin 'Medicaid aversion'.

#### Loss aversion

For individuals who are loss averse, the pain of a loss exceeds the joy from a gain of the same amount. As the core role of insurance is to limit losses, loss aversion is an important determinant of decisions about particular forms of insurance and the acceptable price for them. Again, old-age provision is a case in point. Loss aversion can help explain the popularity of products that guarantee at least the sum of all savings premiums. Customers consider all final payments below this amount as a loss, reducing the attractiveness of the product. Despite the very long investment horizon of most old-age products, losses from one year to the next can have a negative effect on the perception of the product. As a result, products with annual guarantees excluding short-term losses are particularly popular for retirement provision, although these guarantees can sharply reduce the upside potential, especially in a low interest rate environment (Russ and Schelling 2018).

As already mentioned, loss aversion in combination with mental accounting and framing can explain the limited popularity of annuities from an investment perspective, as potential losses in case of an early death are weighted higher than potential gains in case of a long life (Hu and Scott 2007).

#### Subjectivity in risk assessment

Frequently, people indulge in wishful thinking or exaggerated optimism. Such behavioral biases can lead to the underestimation of existential risks such as occupational disability (see Figures 8 and 9 for the relevance of those biases for the Geneva Association Customer Survey participants). Hence, related insurance policies are deemed unnecessary or too expensive (Zhou-Richter et al 2010). Shortcomings in individual risk assessment underline the importance for insurers, and possibly the public sector too, to raise awareness of such risks as well as the tools available for their mitigation.

#### Overconfidence

Excessive self-confidence can result in serious misjudgments, especially if combined with difficulties in correctly assessing and evaluating probabilities, as described above. In the context of insurance, people who overestimate their own knowledge and abilities often underestimate their need for advice and insurance. Another important factor is the overestimation of one's own health, which leads many people not to take out occupational disability insurance, for example, with potentially negative consequences. Overconfidence can be addressed through insurance and government-led information campaigns, facilitated by new technologies such as fitness and health trackers.

#### Hyperbolic discounting

Numerous experiments demonstrate people's clear preference for the present. Individuals typically favour a certain amount of money now over a larger amount in the future, frequently far beyond what can be explained by the usual discounting effect (Frederick et al 2002). This so-called hyperbolic discounting can result in decisions that are later regretted. It is also a possible explanation for the above-mentioned annuity puzzle, i.e. why relatively few people annuitise their saved money. At the end of the savings phase, most people prefer to take the money immediately rather than potentially receive more at a later stage, spread over small installments (Hu and Scott 2007).

### 3.3. Economic determinants of insurance demand

#### Affordability

According to standard economic theory, the demand for a good or service is inversely related to its price. Evidence from the U.S. market for term life insurance (Pauly et al. 2003 and Viswanathan et al. 2007) shows a price elasticity of demand of 0.4 to 0.66 (i.e. if the price increases by 10%, demand for term life insurance will decline by 4 to 6.6%). An early investigation into U.S. whole life insurance suggests an even higher price elasticity of up to 0.92 (Babbel 1985). Further adding to the importance of price, Accenture (2017) found that competitive pricing is the top loyalty driver for 38% of all life insurance customers. Aegon (2019) discusses affordability as one of the biggest roadblocks for retirement savings.

One of the most frequently quoted references in the discussion of price as an obstacle to life insurance buying is the annual LIMRA Insurance Barometer Study covering the U.S. Sixty-three percent of respondents say that they did not buy life insurance because it was too expensive. To some extent this claim seems to be based on misperceptions: the same survey respondents exhibited a lack of understanding and knowledge of life insurance products, with the vast majority believing that life insurance is three times more expensive (at an estimated annual premium of USD 500 for a USD 250,000 term life policy for a healthy 30-year-old) than it actually is (as little as USD 160) (LIMRA 2019). Sixty-one percent said they have other financial priorities and 52% that they have sufficient cover (ibid), even though the U.S. mortality protection gap widened by 25% between 2001 and 2016

to around USD 25 trillion (Swiss Re 2018). These responses point to some of the behavioural biases discussed above.

In the context of the Geneva Association Customer Survey, Figures 8-11 clearly demonstrate the prominent role of perceived unaffordability, and that the true cost of term life insurance is likely to be overestimated.

#### 'Value for money'

The cost of providing insurance is an important determinant of its economic appeal. It is one of the most intensely debated industry topics, not least in light of technological innovation and the prospect of disruption by more cost-efficient ways of providing insurance cover (The Geneva Association 2016).

The decline of interest rates over the last three decades and the virtual disappearance of risk-free returns in the aftermath of the global financial crisis have led to a stagnation of life insurers traditional business model. Guaranteed yield insurance products that provide simple retirement income have become unsustainable, both economically and – especially in the European Union – from a regulatory point of view. Faced with having to invest in a low-yield, high-volatility environment many customers are forced to take on the longevity risk themselves (The Geneva Association 2017).

Bain (2018) argues that 'insurers have been slow to adjust to these new realities'. Despite their efforts to trim expenses, many are still suffering from elevated costs. In the U.S., for example, operating expense ratios, which exclude commission expenses as a percentage of direct revenue, have deteriorated at leading life insurers over the past five years. The same is true for distribution costs (ibid). This performance falls short of the structural cost reductions that have been achieved in other industries, such as banking.

Against this backdrop, some customers perceive life insurance products as increasingly unattractive from a cost-benefit perspective. This perception feeds back into affordability issues as price is often only an issue in the absence of value. For participants in the Geneva Association Customer Survey, Figure 10 reveals that affordability and unconvincing cost-benefit characteristics feature among the top reasons for deliberately foregoing life insurance.

#### Appeal and quality of the product and service

The perceived quality and appeal of the insurance offering is an important determinant of purchasing decisions. For example, Costa and Garcia (2003) show that the quality of care is an important determinant of health insurance demand in mature markets. More generally, surveys suggest that ease of purchase also matters greatly to insurance buying behaviour. According to EY (2014), experiential factors, such as 'easy to understand, clear communications' and 'being easy to deal with', are among the most relevant drivers of insurance purchasing decisions, believed to be almost as important as price and scope of coverage.

In this context, Capgemini/Efma (2018) reveals that customers across all demographic segments report a lower positive experience with their insurer as compared with their bank. The superior performance of banks is likely to be driven by their higher number of customer touchpoints than insurers and, possibly, their broader adoption of new technologies that enable improvements in customer experience. For insurers, closing this gap will be a prerequisite to reaching uninsured or underinsured segments of the population on the back of a new quality of customer engagement. Creating more customer touchpoints can expand the scope of insurance through value-added services that can be embedded in customers' day-to-day lives. It would ultimately reshape the perceived value of insurance and address fundamental biases such as consumer indifference (The Geneva Association 2019a).

### 3.4. Socio-demographics: The role of financial literacy and education

Empirical evidence on mature markets (for example Cappelletti et al. 2013) suggests a positive relationship between financial literacy and insurance demand. Lin et al (2017) further substantiate this hypothesis for the mature life insurance market of Taiwan. Lusardi and Mitchell (2009) conclude that, by every measure and in every sample they have examined, financial literacy is a key determinant of retirement planning. They also find that financial literacy is higher when consumers have been exposed to economics in school and in employersponsored programs.

Li et al (2007) show the same positive relationship between education and insurance demand. The level of education can be a proxied by the percentage of the labour force with higher education (usually tertiary education) relative to the population. Higher levels of education may lead to a greater degree of risk aversion and more awareness of the need for protection through insurance.



### 4. Recommendations: How to promote life insurance penetration

Based on our findings, we can formulate a number of recommendations for insurers (and some of their stakeholders), designed to stimulate demand for life insurance and improve the level of individual, family and societal preparedness. The potential for increased life insurance penetration in mature economies is real. This is reinforced, for example, by LIMRA (2018) which found that more than half of the people without life insurance in the U.S. would actually be willing to buy it if they could be convinced of the need for and the value of protection. Similarly, about a quarter of those who already own a life insurance policy would be willing to buy more cover. With that in mind, insurers are encouraged to embrace the following recommendations:

### 1. Accelerate efforts to rethink existing and launch new products

The prolonged period of low interest rates, perpetuated by policy responses to the global financial crisis and – more recently – the COVID-19 pandemic, has dented the attractiveness of life insurance products and contributed to generally declining levels of insurance penetration. In light of the unrelenting ageing of mature market populations, the eroding importance of life insurance is alarming. With decreasing long-term savings efforts facilitated by life insurance, younger generations will be 'much more dependent on private reserves in their old age than the current generation of pensioners' (Allianz 2019). For life insurers to respond to the new realities, it will be crucial to adapt traditional savings products and design attractive solutions that are less dependent on interest rates and more resilient to heightened solvency capital requirements, such as under Solvency II (ibid). In a number of markets, these enhancements are well under way. European life insurers, for example, have expanded their portfolios with hybrids of unit-linked and traditional products and offer innovative investment-linked products that provide a lower than 100% paid premium protection while giving the policyholder access to riskier assets with a higher potential upside (Milliman 2016). Such products need to address a broader range of specific individual time horizons, levels of risk appetite, liquidity profiles and investment objectives (McKinsey 2019).

More generally speaking, insurers' focus should shift from products to solutions such as more holistic and attractive propositions, with protection features complemented by contributions to enhanced prevention and preparedness, not just in response to close-to-zero interest rates but also in light of massive demographic shifts (Swiss Re 2017). Such approaches would require insurers to be able and willing to join broader ecosystems, e.g. in healthcare (see case study for a few product examples).

#### Case study: Japan's experience in tackling its ageing society

While ageing is a global phenomenon, perhaps no other country has experienced ageing to such a degree as Japan. As of 2019, 35.9 million people, or more than 28% of the entire population, are aged 65 and above. Average life expectancy has increased to 81.09 years for men and 87.26 years for women. Coupled with a stagnant birth rate, Japanese insurers are faced with the unprecedented challenge of addressing the rapid change in demography throughout their entire value chain, from product development and marketing to post-sales services and claim settlement.

Against this backdrop, the Japanese government set 'Ageing and its policy implications' as one of its priorities for the G20 Finance Track during its G20 presidency last year. Accordingly, in June 2019, the Global Partnership for Financial Inclusion (GPFI) worked together with the OECD to develop and deliver the 'G20 Fukuoka Policy Priorities on Aging and Financial Inclusion' (OECD 2019). Among its eight priorities, 'Strengthen digital and financial literacy' and 'Customize – address the diverse needs of older people' were highlighted as guiding principles for policy makers and financial service providers.

The Japanese life insurance industry has been actively tackling the challenge of societal ageing both collectively and at the individual company level. In the context of Japan's G20 presidency, the Life Insurance Association of Japan (LIAJ) held a high-profile international stakeholder conference, Insurance Forum Japan 2019 (LIAJ 2019).

Japanese life insurers have responded to the changing demands of ageing customers by launching new products with more focus on longevity risk and prevention-oriented offerings to promote healthy lifestyles of customers; other insurers are utilising the latest technology to provide more effective support to the elderly. The table below offers some examples:

Product (Company)	Category	Main features
GranAge (Nissay Longevity Annuity) (Nippon Life)	Product development	<ul> <li>Whole life annuity product with tontine factor and low surrender cash value</li> <li>Aimed at accumulating higher survival benefits to prepare for retirement</li> <li>Sold to customers aged 50 years and above since April 2016</li> </ul>
Kenshin-Wari (Health Check-up Discount) (Dai-ichi Life)	Product development	<ul> <li>Incentivises customers to submit their health check-up results in order to get discounts when they apply for life/health insurance</li> <li>An additional discount is applied when certain values are within a healthy range</li> </ul>
Dementia Care MCI (Mild Cognitive Impairment) Plus (Meiji Yasuda Life)	Product development Customer service enhancement	<ul> <li>The dementia insurance product provides coverage upon Mild Cognitive Impairment in addition to dementia in order to support customers in preventing dementia from developing</li> <li>Customers can use a mobile app to check their cognitive functions, and their annual 'My Wellness Activity Report' contains personalised health information and advice based on an analysis of their health checkup results and using big data</li> </ul>
Nissay Memory Training for Amazon Alexa app (Nippon Life)	Customer service enhancement	<ul> <li>The first of its kind app in the industry, combining AI sound system with contents developed under the supervision of a renowned professor on dementia</li> <li>Can be used by anyone free of charge</li> <li>Features includes a '3-minute quiz' and 'lifestyle advice'</li> </ul>
Dementia insurance with preventative services (Dai-ichi Life)	Product development Customer service enhancement	<ul> <li>The dementia insurance product pays a lump sum benefit upon diagnosis of dementia.</li> <li>Customers additionally have access to a mobile app that offers a cognitive test to raise awareness of an individual's memory health as well as a program to promote walking, cognitive training and a healthy diet.</li> </ul>

Source: Nippon Life (Hiroki Hayashi) and Dai-ichi Life (Noriyoshi Hosokawa), members of The Geneva Association's Health & Ageing Working Group

Besides socio-economic drivers of product innovation, specific conclusions can be drawn from applying behavioral economics to insurance. For example, with annuity products people often overestimate the small probability of early death and, accordingly, overweight the likelihood of a 'near total loss' of their assets in this case. This insight can be used to make retirement solutions more attractive for customers, for example by offering guarantees that limit asset losses in the event of early death or by educating customers about realistic life expectancies and survival probabilities. Similarly, these behavioural patterns can help explain why annuities with some death benefits in case of early death are preferred to purely life contingent annuities (Knoller 2016).

### 2. Reduce price sensitivity through value enhancements

Many customers perceive life insurance as complex, opaque and difficult to purchase. Therefore, a general case for simplifying products, including product features and terms and conditions, can be made. More specifically, accelerated underwriting on the back of advanced analytics could reduce frictional costs and improve the process of purchasing life insurance, which should translate into higher life insurance demand. As a case in point, LIMRA (2018) found that more than 50% of respondents would be more likely to buy life insurance if they were spared a physical exam.

As already mentioned, more innovative product offerings such as protection and savings elements combined with prevention and risk advisory propositions could stimulate insurance demand. Similarly, improved customer segmentation, marketing and transparency – enabled by new digital technologies, data and predictive analytics – could address consumers' tendency to overestimate the cost of life insurance and to underestimate the role of life insurance in accompanying key life events, such as marriage, having a child or buying a home (Aegon 2019). These elements that enhance customer experience add to the perceived value of life insurance and reduce its price sensitivity (Scanlon 2018).

### 3. Capture potential for enhanced cost-competitiveness

McKinsey (2018) argues that 'compared with other industries, insurance has not yet addressed its operating costs at a structural level, especially in distribution'. A poll among senior insurance executives revealed that the industry needs to reduce its costs by one third in the medium term if it is to sustainably respond to the changed operating environment (ibid). This suggests that just adding value to product offerings in order to dispel customer concerns about price and affordability may not be sufficient to increase demand.

Achieving structural cost savings will not be easy, as customers (including millennials) continue to cherish the agency channel as a key element of their preferred distribution mix. Except for relatively simple covers, such as term life insurance, the potential for online distribution appears to be limited. That said, digital channels and tools can contribute significantly to reducing frictional costs incurred through acquisitions, administration and claims processes (The Geneva Association 2019a).

### 4. Promoting insurance awareness and education

The Geneva Association Customer Survey highlights major deficits in insurance awareness (Figure 2), especially for endowment and annuity retirement products. In order to tackle this long-standing issue insurers and their associations could team up with public authorities such as various ministries (financial, economic, education), agencies (supervisory and regulatory authorities, ombudsman, chambers of commerce, etc.) as well as consumer associations. Insurers could also encourage the integration of basic insurance education into schools and curricula. The results of the Geneva Association Customer Survey show there is significant potential for insurers to educate customers and stimulate demand through enhancing product awareness and understanding: only four out of 10 respondents claim to be financially literate and regret this state of affairs (The Geneva Association 2019a).

For the life insurance industry, embracing these recommendations is not just a critical business challenge. With society facing a multitude of challenges, ranging from an ageing population to new disease patterns, life insurers worldwide must rise to the occasion.

# C\

# Annex: Life insurance demand patterns by country

The Geneva Association Customer Survey reveals a significant degree of country-specific heterogeneity as far as life insurance purchasing motives, determinants and barriers are concerned. These findings suggest interesting conclusions concerning the political, economic, sociological and legal and regulatory peculiarities (such as taxation and distribution regulation) of the seven mature economies surveyed.

It is beyond the scope of this report to discuss countryspecific factors in detail but one example is the U.K. where there have been significant changes in pension savings with the introduction in 2012 of compulsory workplace pensions and Individual Savings Accounts (ISAs). Pension provision often has a life protection element attached so people may not see the need, when working, to take out additional insurance. The following charts display the five most frequently mentioned reasons for buying or not buying term life and retirement annuity insurance in each of the seven countries covered by the Geneva Association Customer Survey.

Figures 14 and 15 shed light on the motives of those respondents who have voluntarily purchased either term life insurance or retirement annuity insurance before. In virtually all markets, the desire to protect families and to be prepared are dominant factors. In the U.S. and the U.K., economic considerations (cost versus benefit) also play an important role. For retirement annuities the picture is more diverse, for example, in terms of investment considerations (very prominent in the U.S., the U.K., Italy and Switzerland). France is notable as the market where the adequacy of future retirement income is the main concern.



#### Figure 14: Reasons for purchasing voluntary term life insurance



#### Figure 15: Reasons for voluntarily purchasing retirement annuity insurance

Source: Geneva Association Customer Survey

Figures 16 and 17 show the reasoning behind customers' expressed intention to buy term life or annuity insurance in the future. For term life insurance the cross-country pattern is similar to Figures 14 and 15. Preparedness ranks highest as a buying motive for one or both products in Japan, the U.S., the U.K. and France.



#### Figure 16: Reasons behind the intention to buy term life insurance at some point in the future



#### Figure 17: Reasons behind the intention to buy retirement annuity insurance at some point in the future

Source: Geneva Association Customer Survey

Figures 18 and 19 reveal the reasoning of those respondents who decided to delay insurance purchases. The U.S. is the only market where the affordability of term life insurance takes centre stage. Swiss customers most frequently indicate 'other priorities'. Their Japanese counterparts cite a lack of knowledge as the key consideration. For retirement annuities, U.S., Japanese and Swiss customers mention affordability as the single most relevant obstacle. In France, the lack of knowledge is noteworthy.







#### Figure 19: Reasons for delaying retirement annuity insurance purchases to some point in the future

Source: Geneva Association Customer Survey

Figures 20 and 21 show the reasoning of those who ruled out buying insurance at any point in the future. In all term life insurance markets, except for the U.K. and France, affordability is the single biggest roadblock. In France and Switzerland, 'other priorities' are a particularly relevant factor. In France, a lack of knowledge matters heavily for retirement annuities. Respondents from the U.S. and the U.K. show a relatively strong level of confidence in alternative sources of retirement income.



#### Figure 20: Reasons for deciding not to buy term life insurance at any point in the future



#### Figure 21: Reasons for deciding not buy retirement annuity insurance at any point in the future

### References

Aegon. 2019. Retirement readiness survey.

Allianz. 2019. Global insurance markets at a crossroads.

Ameriks, J., Caplin, A., Laufer, S. and S. Van Nieuwerburgh. 2008. Annuity valuation, long-term care, and bequest motives. *Recalibrating Retirement Spending and Saving*. Oxford University Press.

Babbel, D. F. 1985. The price elasticity of demand for wholelife insurance. *Journal of Finance*. 40(1): 225-239.

Bain & Company. 2018. How to breathe new life into life insurance.

Benartzi, S., Previtero, A. and R. H. Thaler. 2011. Annuitization puzzles. *The Journal of Economic Perspectives*. 25(4): 143–164.

Berardi, A., Tebaldi, C. and F. Trojani. 2018. Consumer protection and the design of the default option of a pan-European pension product. SDA Bocconi School of Management.

Brown, J. B., Kling, J.R., Mullainathan, S. and M. V. Wrobel. 2008. Why don't people insure late-life consumption? A framing explanation of the under-annuitization puzzle. *American Economic Review*. 98(2): 304–309.

Bucher-Koenen, T. and S. Kluth. 2012. Subjective life expectancy and private pensions. MEA Discussion Papers, No. 14-2012.

Capgemini/Efma. 2018. World Insurance Report 2018.

Cappelletti, G., Guazzarotti, G. and P. Tommasino. 2013. What Determines Annuity Demand at Retirement? *The Geneva Papers on Risk and Insurance - Issues and Practice*. 38(4): 777-802. Coe, N. B. and A. Belbase. 2015. How do people decide on life insurance and long-term disability coverage? Center for Retirement Research at Boston College.

Choi, J. J., Laibson, D., Madrian, B.C. and A. Metrick. 2004. For better or for worse: Default effects and 401 (k) savings behavior. *Perspectives on the Economics of Aging*. 81–126.

Costa, J., and J. Garcia. 2003. Demand for private health insurance: How important is the quality gap? *Health Economics*. 12(7): 587–599.

EY. 2014. Reimagining customer relationships Key findings from the EY Global Consumer Insurance Survey 2014.

Frederick, S., Loewenstein, G. and T. O'Donoghue. 2002. Time discounting and time preference: A critical review. *Journal of Economic Literature*. 40(2): 351–401.

Glenzer, F., Gründl, H. and C. Wilde. 2014. And lead us not into temptation: Presentation formats and the choice of risky alternatives. https://ssrn.com/abstract=2455861

Goedde-Menke, M., Lehmensiek-Starke, M. and S. Nolte. 2014. An empirical test of competing hypotheses for the annuity puzzle. *Journal of Economic Psychology*. 43: 75–91.

Hartley, D., Paulson, A. and K. Powers. 2017. What Explains the Decline in Life Insurance Ownership? Economic Perspectives (Federal Reserve Bank of Chicago). Vol. 41, No. 8, 2017.

Hu, W. Y. and J. S. Scott. 2007. Behavioral obstacles in the annuity market. *Financial Analysts Journal*. 63(6): 71–82.

Johnson, E. J., Hershey, J., Meszaros, J. and H. Kunreuther. 1993. Framing, probability distortions, and insurance decisions. *Journal of Risk and Uncertainty*. 7(1): 35–51.

Knoller, C. 2016. Multiple reference points and the demand for principal-protected life annuities: An experimental analysis. *Journal of Risk and Insurance*. 83(1): 217–255.

Life Insurance Association of Japan (LIAJ). 2019. https://www.seiho.or.jp/english/information/event/20190111.html

Life Insurance Marketing Research Association. LIMRA. 2019. Insurance Barometer 2019.

Life Insurance Marketing Research Association. LIMRA. 2018. Insurance Barometer 2018.

Li, D., Moshirian, F., Nguyen, P. and T. Wee. 2007. The demand for life insurance in OECD countries. *Journal of Risk and Insurance*. 74(3): 637–652.

Lin, C., Hsiao, Y.J. and C.Y. Yeh. 2017. Financial literacy, financial advisors, and information sources on demand for life insurance. *Pacific-Basin Finance Journal*. 43. 10.1016/j. pacfin.2017.04.002

Lusardi, A. and O. Mitchell. 2009. How ordinary consumers make complex decisions: Financial literacy and retirement readiness. NBER Working Paper series 15350. http://www. nber.org/papers/w15350

McKinsey & Company. 2017. *Global insurance industry insights – An in-depth perspective*.

McKinsey & Company. 2018. *Life insurance and annuities state of the industry 2018: The growth imperative*.

McKinsey & Company. 2019. Renewing the life insurance proposition in a low interest rate environment. https:// www.mckinsey.com/industries/financial-services/ourinsights/insurance-blog/renewing-the-life-insuranceproposition-in-a-low-interest-rate-environment

Milliman. 2016. Capital efficient products in the European life insurance market.

OECD. 2019. *G20 Fukuoka Policy Priorities on Aging and Financial Inclusion – 8 Key Steps to Design a Better Future*. https://www.oecd.org/g20/summits/osaka/G20-Fukuoka-Policy-Priorities-on-Aging.pdf Pauly, M.V., Withers, K. H., Viswanathan, K.S., Lemaire, J., Hershey, J., Armstrong, K. and D. Asch. 2003. Price elasticity of demand for term life insurance and adverse selection. NBER Working Paper No. w9925. https://ssrn.com/ abstract=437494

Russ, J. and S. Schelling. 2018. Multi cumulative prospect theory and the demand for cliquet-style guarantees. *Journal of Risk and Insurance*. 85(4): 1103–1125.

Scanlon. J.T. 2018. Unsticking the stuck shopper. http://digitaleditions.sheridan. com/publication/?i=472053&article\_ id=2998972&view=articleBrowser#{"issue\_ id":472053,"view":"articleBrowser","publication\_ id":"24109","article\_id":"2998972"}

Thaler, R. 1999. Mental accounting matters. *Journal of Behavioral Decision Making*. 12: 183-206.

The Geneva Association. 2014. *The Global Insurance Protection Gap – Assessment and Recommendations*. Editors: Kai-Uwe Schanz and Shaun Wang.

The Geneva Association. 2016. *Harnessing Technology to Narrow the Protection Gap*. Authors: Kai-Uwe Schanz and Fabian Sommerrock.

The Geneva Association. 2017. *The 'Low for Long' Challenge – Socio-economic Implications and the Life Insurance Industry's Response*. Author: Daniel Hofmann. November.

The Geneva Association. 2019a. *Underinsurance in Mature Economies – Reasons and Remedies*. Author: Kai-Uwe Schanz. June.

The Geneva Association. 2019b. *The Role of Trust in Narrowing Protection Gaps*. Author: Kai-Uwe Schanz. November.

Schelling, S. 2018. *When and How Framing Makes Annuitization Appealing: A Model-Based Analysis*. Working paper. Ulm University, Department of Mathematics and Economics.

Smit, H., Rinehart-Smit, K. and L. Schlemmer. 2019. Behavioural interventions for insurance. insight2impact.

Swiss Re. 2012. Facing the interest rate challenge. sigma no. 4/2012.

Swiss Re. 2017. Who are the ageing?

Swiss Re. 2018. Life underinsurance in the US – Bridging the USD 25 trillion mortality protection gap.

Swiss Re. 2019. World insurance: The great pivot east continues. sigma no.3/2019.

Tversky, A. and D. Kahneman. 1981. The framing of decisions and the psychology of choice. *Science*. 211(4481): 453–458.

Viswanathan, K., Lemaire, J., Withers, K., Armstrong, K., Baumritter, A., Hershey, J., Pauly, M. and D. Asch. 2007. Adverse selection in term life insurance purchasing due to the BRCA1/2 genetic test and elastic demand. *Journal of Risk and Insurance*. 74: 65-86.

World Economic Forum. 2019. http://www3.weforum.org/ docs/WEF\_Investing\_in\_our\_Future\_report\_2019.pdf

Yaari, M. 1965. Uncertain lifetime, life insurance, and the theory of the consumer. *Review of Economic Studies*. 32(2): 137–150.

Zhou-Richter, T., Browne, M.J. and H. Gründl. 2010. Don't they care? Or, are they just unaware? Risk perception and the demand for long-term care insurance. *Journal of Risk and Insurance*. 77(4): 715–747.

The relevance of life insurance in many mature markets has experienced an unambiguous decline in recent decades. It is a worrying trend for society at large, given the historical contributions of life insurers to funding for retirement and mitigating biometric risks. Based on the Geneva Association Customer Survey, this report sheds light on the drivers behind declining levels of life insurance penetration, such as ultra-loose monetary policies, behavioural patterns and perceived product shortcomings. Finally, the report offers a set of recommendations for insurers and their stakeholders to stimulate life insurance demand.

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