

Underinsurance in Mature Economies

Reasons and remedies

June 2019

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 understand risks and to build resilient and prosperous economies and societies, and thus a more sustainable world.

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Underinsurance in Mature Economies

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The Geneva Association

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Foreword



Protection gaps are well documented. Contrary to general belief, they are not limited to developing and emerging countries but are also common in advanced economies. Across various protection needs people use less insurance than economically beneficial—even after taking into account that insureds should retain some risks according to their personal risk appetite, risk bearing capability and cost-efficiency considerations. Societies are faced with significant protection gaps, and practitioners, academics and policymakers alike are struggling to come up with plausible explanations which could inform corporate and public decision-making.

Against this backdrop, The Geneva Association recently commissioned a comprehensive customer survey on the reasons and potential remedies for underinsurance, focusing on 7 mature insurance markets and including a total of 7,000 interviewees. The results, encouragingly, reveal that the fundamental notion of insurance and its vital role in the economy and society are widely understood. However, this is not true for the industry's products and inner workings. The resultant 'black box perception' translates into a generally negative opinion of insurance, with adverse implications for insurance demand.

The survey offers a resounding corroboration of the role of behavioural economics and finance in understanding obstacles and identifying potential stimulants to insurance demand. Importantly, the report also confirms that many of these behavioural factors are not immutable exogenous factors but can actually be influenced or even reshaped by the insurance industry's actions.

The following report, with a particular emphasis on property and health insurance, not only provides an in-depth analysis of the survey results but also highlights commonalities with and differences from previous academic and non-academic studies and polls. As such, this publication aims to make an original contribution to the global protection gap and underinsurance debate—an aspiration which is perfectly aligned with the core mission of The Geneva Association to promote insurance for a better world.

Jad Ariss
Managing Director
The Geneva Association



1. Management summary

Based on an extensive review of available academic and non-academic references, this paper proposes a 'pentagon' of factors underlying underinsurance, namely behaviour and perceptions, economics, institutions, sociodemographics and culture.

Behavioural factors relate to irrational and inconsistent patterns of human behaviour which can be explained either through biases that affect the perception of the value of insurance or through more general information processing problems that consumers face in making decisions. Applying behavioural economics to insurance suggests that only in a 'model world' of complete information and no transaction costs can actuarially priced insurance always be a beneficial product for rational, risk-averse consumers. In this behavioural context the perceived appeal of the insurance offering is an important determinant of purchasing decisions. It also includes soft notions such as trust in insurers' ability and willingness to honour their obligations as well as their commitment to data protection.

Economic determinants include affordability, the distribution of wealth and the (perceived) cost-benefit characteristics of insurance. Price-driven buying behaviour is particularly common in residential property and motor insurance. However, a number of recent studies show that price sensitivity is declining with the rise of new dimensions of customer engagement and value-added real-time interactions related to policyholders' health and security, for example.

Institutional factors, such as the rule of law, the quality of insurance supervision and the role of governments as ultimate absorbers of risk, can have major effects on how individuals and organisations view the value of insurance which, in turn, shapes insurance demand.

Sociodemographic determinants include age, life expectancy, financial literacy and urbanisation. Various papers discuss their implications for the overall demand for insurance and its composition.

And, last but not least, *cultural aspects*, including religious affiliations, have been the subject of a number of insurance research efforts, with an emphasis on their relevance for risk aversion.

Against this background, The Geneva Association commissioned a global customer survey designed to identify the main obstacles to insurance purchases. The geographical scope included the mature insurance markets of the United States, the United Kingdom, France, Germany, Italy, Japan and Switzerland, with a particular product focus on residential property insurance, voluntary private health insurance, term life insurance and retirement annuities.

The survey revealed a remarkable discrepancy in terms of customer knowledge and perceptions: on the one hand, the basic function and potential utility of insurance for the economy and society at large are well understood by the 7,000 survey participants. On the other hand, there is little knowledge about the insurance *industry* and its inner workings. Owing to a perceived lack of transparency, negative opinions of the industry abound, adversely impacting insurance demand. Globally, less than a quarter of respondents report a good knowledge and a positive opinion of the industry. U.S.-based survey participants express the most favourable opinion (with a 'positive' share of 29%) whereas Japan ranks last (20%). From a demographic point of view, it is interesting and maybe surprising to note that the millennials are least negative about the insurance industry.

Of all respondents 53% report a 'bad experience with insurance'. The top 3 customer 'pain points' include onerous claims filing and settlement, product complexity and unsatisfactory value for money, i.e. the economics of cover.

For those interviewees who have never bought insurance before, unaffordability and a lack of knowledge are the two most relevant obstacles to purchases, with the latter believed to influence (the perception of) the former. One out of three says insurance is unaffordable and one out of five stated not knowing enough about insurance.

Among all respondents, two thirds consider insurance products as 'complicated and difficult to understand' and three quarters even as 'expensive', based on cost-benefit considerations.

As far as voluntary private health insurance and residential property insurance (the two non-life segments in focus) are concerned, the importance of being prepared and the limits to self-financing losses rank highest among buying motives. In terms of the reasons why people have not yet purchased cover (but would consider doing so in the

future) 'unaffordability' and 'other priorities' were most frequently mentioned for health insurance and a 'lack of necessity' for residential property insurance. Among those who have no intention whatsoever of purchasing any insurance products in the future, 'unaffordability' is the most frequently mentioned deterrent for both private health and residential property insurance.

Looking ahead, building trust (primarily in insurers' willingness and ability to pay) and communicating more clearly and transparently are the key identified requirements for the insurance industry to overcome the disconnect between customers' fundamental appreciation of the role of insurance versus their unwillingness to purchase it. Also, as only 4 out of 10 respondents claim to be financially literate (something which they regret), there is further opportunity for insurers to educate customers and stimulate demand through enhancing product awareness and understanding.

Interestingly, and in contrast to some other polls, the sheer ease and simplicity of buying and transacting insurance (e.g. through smart phone apps) is not a relevant factor which, on its own, would encourage additional insurance demand. Just 15% of those interviewed on behalf of The Geneva Association would buy more insurance simply on the back of an improved ease of use. At a share of 20%, the millennials are no exception.

And, last but not least, the survey suggests that the future of insurance distribution will remain omnichannel. Agency networks are here to stay, as 55% of the interviewees name them as their preferred channel. Somewhat surprisingly, 50% of the millennials share this view.

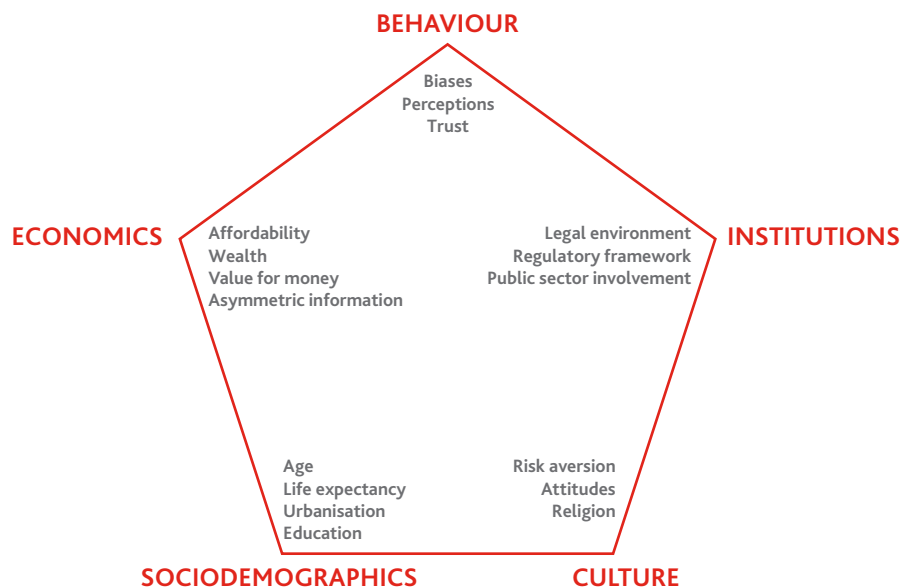


2. The current state of the art in explaining non-life underinsurance—a pentagon of root causes

It is important to distinguish between risk protection gaps (or 'protection gaps') and insurance risk protection gaps (or 'underinsurance'). The former measure the share of uninsured losses in total economic losses. The latter describe the portion of the risk protection gap that, from an economic perspective, should be insured. Why actual purchases of insurance fall short of the economic optimum is the main question to be explored by this study. The reasons for such insurance protection gaps or instances of underinsurance lie with both demand- and supply-side factors (see Eling *et al.* (2014)). In addition, they vary for various stages of per capita income and economic development (see The Geneva Association (2018a)).

Based on an extensive review of available academic and non-academic references, the following chapter focuses on the determinants of underinsurance in advanced economies, with a focus on non-life insurance. We propose a 'pentagon' of factors covering (1) behaviour and perceptions, (2) economics, (3) institutions, (4) sociodemographics and (5) culture (see Figure 1).

Figure 1: The 'pentagon' of insurance demand



Source: The Geneva Association

2.1. Behaviour and perceptions

Behavioural biases

With the rise of behavioural economics, irrational and inconsistent patterns of human behaviour are increasingly under the microscope as possible explanations of why individuals, households and firms buy less insurance than is economically beneficial to them (see The Geneva Association (2018a)).

According to insurance theory, people benefit from incurring a small cost (the premium) to obtain protection against an event that could cause a severe financial loss but that has a low probability of occurrence. If insurance can be provided with relatively low transaction costs at a reasonable price, a risk-averse individual should prefer a smaller but certain premium expense over taking the chance of suffering a potentially devastating loss. If properly designed and priced, insurance policies also offer incentives through discounts on premiums for those who mitigate their risk (Kunreuther and Pauly (2013)).

Having said this, researchers (e.g. Cutler and Zeckhauser (2004)) have long noted that consumer behaviour in insurance is inconsistent with the predictions of standard economic theory. They have found numerous 'anomalies'. According to economic theory, consumers should highly value insurance particularly against large but infrequent catastrophes (earthquakes, floods) and annuities (longevity insurance). At the same time, they should demand less or even no extended warranty insurance for consumer products (Baker and Siegelman (2013)). In reality, however, customers defy what would make economic sense. Also, consumers regularly purchase insurance policies with deductibles that are too low from a cost-benefit perspective (Kunreuther and Pauly (2013)).

Kunreuther and Pauly (2013) have developed a widely used taxonomy of 'demand side anomalies'¹ in the insurance market. Some behavioural biases lead to 'too much' insurance being purchased, while others lead to too little (see Baker and Siegelman (2013) for examples and for more specific references):

- People choose low deductibles and overpay to provide protection against losses that are not worth insuring against, based on plausible levels of risk aversion.
- People buy insurance that protects exclusively against losses that are small in relation to their wealth, sometimes even when the price for that insurance is quite high in relation to its expected value. An

example is extended warranty cover for consumer durables such as TV sets.

- People are more willing to insure emotionally treasured objects compared to other objects of equal financial value.
- Insurance against 'named events' (critical illness insurance, for example) is sometimes more attractive than the more objectively valuable general insurance.
- People do not buy more objectively valuable insurance against other low frequency, high severity events (Camerer and Kunreuther (1989)).
- People are more likely to buy disaster insurance after a disaster, even when they (wrongly) believe that this disaster has reduced the probability of the next one (Kunreuther et al. 1985).

From the angle of behavioural economics, these anomalies can be explained either through biases that affect the perception of the value of insurance in a way that conflicts with economic theory or through more general information processing problems that consumers face in making decisions.

Some of the biases falling into the former category may translate into insufficient demand. Examples include

- Excessive discounting, i.e. an irrationally high preference for money today over money tomorrow
- Over-optimism, i.e. the belief that calamity is unlikely to occur to one's self.

Other biases tend to increase the perceived value of insurance and may therefore result in excessive demand, for example:

- Loss aversion, i.e. the marginal disutility of 'loss' (the premium payment) exceeds the marginal utility of 'gain' (the potential indemnification)
- Emotional attachment to people or objects.

Still other biases could have either effect on demand, such as

- Risks that are easier to remember are assumed to be more likely to occur than they actually are
- Regret aversion which could lead individuals to 'hedge their bets' by purchasing more insurance for small

¹ It is important to stress that, from an insurance perspective, some of these anomalies are not exogenous factors but can be addressed and corrected by specific industry actions such as enhancing the clarity of policies, reshaping the customer experience and closing knowledge gaps among consumers.

losses and less insurance for large losses than would be optimal from an expected utility perspective

- Overconfidence (also called 'control illusion'). This bias reduces the perceived probability of events one can control (e.g. a car crash) and increases the perceived likelihood of uncontrollable events such as a plane crash, making people less likely to buy car insurance and more likely to buy flight insurance (see also Swiss Re (2018) for a discussion of consumer biases concerning health status in the population health distribution).

A second set of explanations for demand side anomalies focuses on more general information processing problems that consumers face in making decisions. These behavioural patterns do not directly affect the perceived value of insurance but they do reduce the capacity to make a decision. Examples include:

- Hyperbolic discounting or the myopia bias (valuations fall rapidly for small delays but more slowly for longer delays or, in different words, people overweight immediate reward or cost at the expense of longer-term benefit) which can lead to procrastination in decision-making (Voyer (2015) discusses this so-called intention–action gap in the context of managing and preventing chronic diseases)
- Complexity aversion, i.e. the avoidance of options that are complicated to evaluate
- Aversion to contemplating certain topics (death or disability, for example).

These information processing problems can lead consumers to make the default 'decision' not to buy insurance.

The conclusion from exploring these anomalies is clear: only in a world of complete information and no transactions costs will actuarially fair insurance always be a beneficial product for rational, risk-averse consumers. In the real world, however, this question depends on individual preferences, the frequency and severity of losses, the cost loadings that insurers impose, the prevalence of adverse selection and the availability of alternative ways to manage risk. Against this backdrop, behavioural-decision research suggests that consumers are unlikely to make optimal insurance purchasing decisions.

Perceived appeal and quality of the product, service and communication

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. According to their analysis, in Spain, for example, the quality of service (e.g. long waiting lists) explains the low take-up of public healthcare.

J.D. Power (2018a) shows that for property and casualty insurance customers in the U.S. the quality of communication is the most relevant factor for client satisfaction and loyalty, i.e. lower insurance shopping rates. A superior approach to managing customer expectations can even offset negative effects on satisfaction arising from an above-average time-to-claim settlement or upcoming premium increases (see also J.D. Power (2018b)).

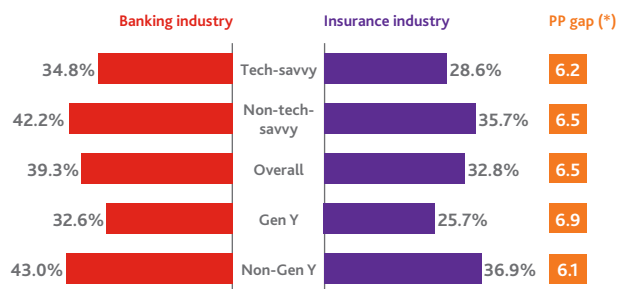
More generally, surveys suggest that ease of purchase also matters greatly for insurance buying behaviour. According to EY (2014), experiential factors, such as 'easy to understand, clear communications' and 'being easy to deal with', are among the most relevant drivers of insurance purchasing decisions, believed to be almost as important as price and scope of coverage.

The fact that offering a superior customer experience is not among the traditional strengths of insurers is widely believed to be a major obstacle to higher levels of insurance penetration (as confirmed by The Geneva Association survey, see Chapter 3 of this report).

Based on Capgemini/Efma research, Figure 2 reveals that customers across all demographic segments report a lower positive experience with their insurer than with their bank. The satisfaction gap is biggest among Gen Y customers ('Millennials') and does not depend on whether customers rate themselves as tech-savvy or not.

The superior performance of banks is likely to be driven by the fact that they have many more customer touchpoints than insurers and, possibly, by their broader adoption of new technologies that enable improvements in customer experience. For insurers, closing this gap will be a prerequisite to reaching the 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' daily lives. It would ultimately reshape the perceived value of insurance and address fundamental biases such as consumer indifference.

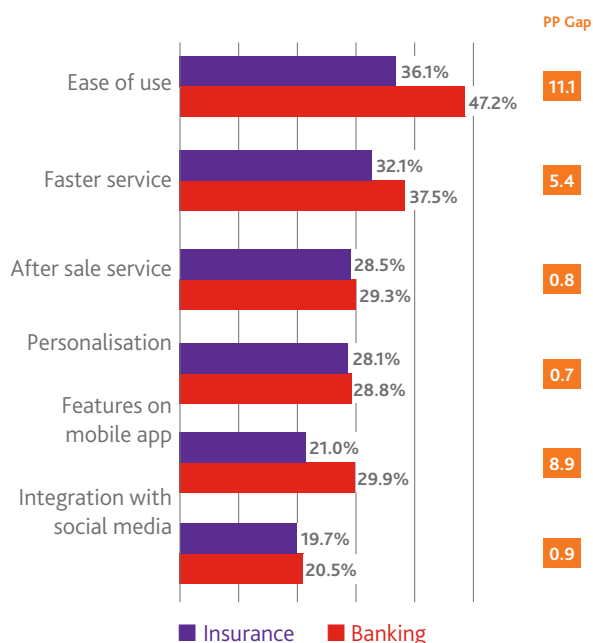
Figure 2: Customers with positive experience, by industry and demographic segment (in %, 2018)



Source: Capgemini/Efma (2018), based on a poll of more than 10,000 personal lines customers in 20 mature and emerging economies; (*) Difference between banks and insurers in percentage points (PP)

Figure 3 suggests that ‘ease of use’ is the single most important customer satisfaction gap between insurers and banks. Again, for insurers a broader and faster adoption of technology may be the most promising remedy.

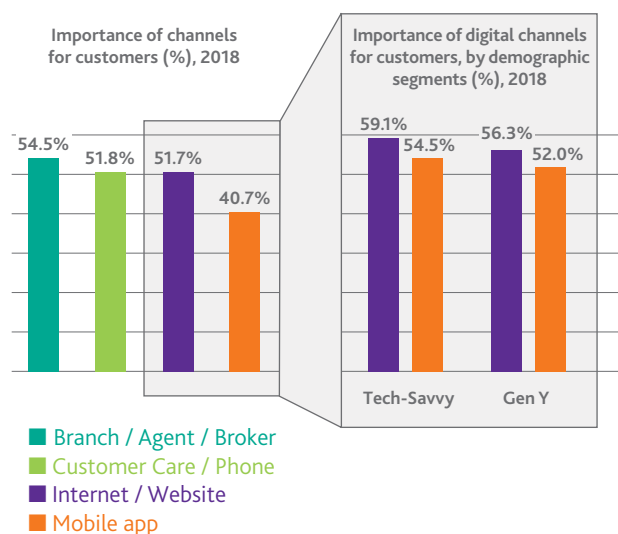
Figure 3: Customer satisfaction, by industry and service parameter (in %, 2018)



Source: Capgemini/Efma (2018), based on a poll of more than 10,000 personal lines customers in 20 mature and emerging economies

According to Figure 4 and in line with the findings of The Geneva Association survey, traditional channels such as branches, agents and brokers are among the preferred channels of all customer segments. Even tech-savvy and Gen Y customers seek an omnichannel experience, and insurers need to provide such an experience in order to increase market penetration.

Figure 4: Importance of channels for customers (in %, 2018)



Source: Capgemini/Efma (2018), based on a poll of more than 10,000 personal lines customers in 20 mature and emerging economies

In the digital age, customer experience will gain dramatically in importance for insurance customer behaviour, retention and loyalty. Whereas consumers across markets expect high-touch, personalised service, insurance, by its very nature, remains a low-touch industry (Bain (2017)). Therefore, one of the key trends identified by Bain (2017) is the growth of ecosystem services which allow insurers to explore ‘new ways to build loyalty by offering their customers an interconnected array of services that extend beyond insurance’ and, possibly, ‘break the Gordian knot of commoditisation and consumer indifference that is stymying their efforts to generate and sustain consumer loyalty’.

In the future, insurers that command a strong customer interface at the core of relevant ecosystems will be in the best position to tackle underinsurance. Their superior access to data will enable them to provide tailored insurance solutions that come with value-added services in the areas of health and safety. Customers who are offered such propositions will be much more inclined to take up insurance, not necessarily as a stand-alone product but bundled with other (more appealing) services. In addition, such customers are expected to be much less price sensitive. As a result, the long-standing insurance buying ‘intention–action gap’ bedevilling traditional insurance might finally narrow.

Trust

In the context of this report, trust is most adequately defined as a policyholder’s bet on an insurer’s future contingent actions, not limited to paying claims but also related to new areas such as protecting personal data as

part of fiduciary rules and obligations. Insurers are in the 'business of trust'. They sell contingent promises to pay, more often than not at a distant and unspecified point in the future. The policyholder cannot assess an insurer's willingness and ability to fulfil these promises until a claim has been filed and settled. The insurer's performance is only incompletely observable at the time of signing an insurance policy. Therefore, trust is an indispensable ingredient of the insurance business (Lev (2005a, b) and Schanz (2009)). The ultimate relevance of trust in insurance obviously also depends on the trustworthiness of key stakeholders such as sales agents and supervisory authorities.

There is empirical evidence that limited trust can be a relevant barrier to the adoption and spread of financial contracts. Guiso et al. (2008), for the first time ever, showed the empirical link between trust and insurance (see Chapter 3 for further evidence).

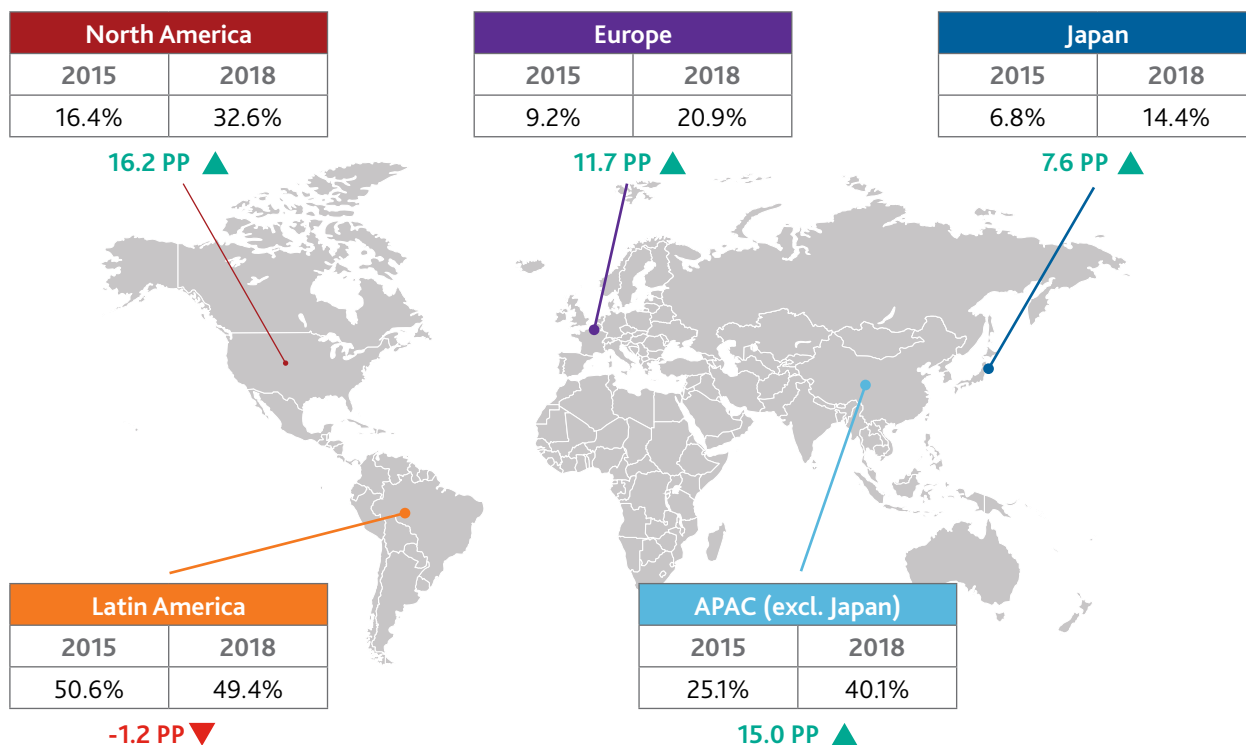
In the digital age the role of trust is changing. In a business environment where customer data will be an increasingly important source of competitive advantage, gaining and maintaining customers' trust will be crucial. Even though the provision of disclosures in end-user licensing agreements or terms and conditions of data use at sign-up are important, these are not sufficient to foster trust in the digital age. Businesses must also educate customers about their personal data and build credibility beyond a mere compliance approach (see Morey et al. (2015)). Insurers

that are considered untrustworthy will find it difficult to collect certain types of data, regardless of the value offered in exchange, whereas firms with credible trust credentials will find customers more willing to share data, based on their confidence that data will be kept safely (see Morey et al. (2015)). Against this backdrop, Mäder et al. (2018) conclude: "Trust is regarded as the non plus ultra of any interpersonal relationship. We are convinced that, in the digital age, trust is the number one success factor—in every respect".

As shown by Figure 5, insurers are likely to face more direct competition from tech firms such as Google, Amazon, Facebook, Apple, and Alibaba (see also The Geneva Association (2018b)). In Asia-Pacific, excluding Japan and North America, 40% and 33% of customers, respectively, would be willing to purchase insurance from such firms. European and Japanese customers are more reluctant to do so. However, the share of those insurance customers willing to consider purchases from tech firms has more or less doubled within the narrow span of just 4 years.

This trend is highly relevant to the discussion of the role of trust in insurance. According to Capgemini/Efma (2018), 58% and 48%, respectively, of polled insurance customers express privacy/security concerns and a lack of trust as key obstacles to buying cover from tech firms. Therefore, insurers' performance in these two areas will determine their future competitive position vis-à-vis potential challengers from the tech space.

Figure 5: Customers' willingness to purchase insurance from big technology firms (in %, 2018)



Source: Capgemini/Efma (2018), based on a poll of more than 10,000 personal lines customers in 20 mature and emerging economies

2.2. Economics

Affordability and wealth

According to standard economic theory, the demand for a good or service is inversely related to its price. Evidence from mature markets (Marquis et al. (2004)) shows a price elasticity of demand for insurance of 0.2 to 0.4 (i.e. if the price increases by 10 %, demand will decline by 2 to 4 %). Also, disposable income (and the income elasticity of insurance demand) is a major demand-side factor for explaining insurance purchases (see, for example, Millo (2014)). In this context, the wealth distribution structure matters too, as a broader middle class is set to have a positive effect on insurance demand (Feyen et al. (2011)).

Based on a global customer survey, Accenture (2017) found that competitive pricing is the top loyalty driver for auto and home insurance customers globally, with 52% and 50%, respectively, of respondents agreeing. This proportion falls to 38% for life insurance customers. However, the study also reveals that strong consumer appetite for insurers to add value to their daily lives through real-time interactions related to health and security provides an opportunity to increase sales, achieve differentiation and build trust and engagement (see box).

Distinguishing customer personas: nomads, hunters and quality seekers

Accenture (2017) discusses the findings from an insurance customer survey, including more than 32,000 respondents in 18 markets (Australia, Benelux, Brazil, Canada, Chile, China (Hong Kong), France, Germany, Indonesia, Ireland, Italy, Japan, Nordics (Finland, Norway, Sweden), Singapore, Spain, Thailand, the United Kingdom and the United States). This research produced 3 distinct customer personas, differentiated by attitudes towards competitive pricing and low cost, and the level of interest in high-quality, responsive service. Two important additional determinants of insurance purchasing behaviour are trust (which increasingly refers to the insurer's ability to protect personal data) and openness to innovative digital models, as measured by customers' willingness to buy insurance from an online platform.

Nomads belong to a digitally active group that is ready for new delivery models. They are willing to share their personal data in exchange for tailored services. Nomads are comfortable with computer-generated support and with receiving services from non-traditional providers. They make up 39% of survey participants. They are ready to transition to a new digital (only) model, reluctant to involve

agents early in the buying process, expect flexible and personalised solutions, expect their insurers to offer more than indemnification and are likely to migrate to non-insurance firms.

Hunters search for the best price. They want to buy financial services from traditional providers, and while they operate well in a digital environment, they also place value on one-to-one engagement. They make up 17% of insurance respondents. Hunters are primarily driven by value for money, prefer to use specialist insurers, consider human advice vital at all stages of the purchasing process and find value-added services based on their personal data appealing.

Quality seekers are loyal customers who value brand integrity and service excellence, and will work with providers who put customer interests first. Price is less important than data protection and responsive service. They make up 44% of insurance respondents and are driven by service and trust, share data on their own terms and are open to computer-generated advice if it enhances their insurance buying experience.

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 which covers the United States. 63% of respondents to the 2018 study said 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 showed a lack of understanding of life insurance products, with a vast majority believing that life insurance is three times more expensive than it actually is (LIMRA (2018)).

Some recent studies show that price sensitivity decreases markedly with increasing levels of customer satisfaction (see, for example, J.D. Power (2018b) for an analysis of customer behaviour and preferences in U.S. auto insurance).

McKinsey (2016) found that the role of 'price' as the top influence for U.S. health insurance purchasers is eroding: just 24% of the surveyed policyholders indicated 'price' as their top consideration in 2016, down from 40% in 2015 and 60% in 2014. Being able to access certain doctors is almost as important as price when selecting a health insurance plan. Similarly, Deloitte (2016) show that personalisation of service matters more to U.S. healthcare consumers than the mere economics of the coverage. Having said this, it is important to emphasise that, in general, U.S. health insurance products are more about managing access to physicians and less about financial indemnity.

According to the Insurance Information Institute (III, 2017), cost is also becoming less of a concern for homeowners insurance in the U.S.: only 31% of Americans consider homeowners insurance a financial burden, a significant drop from the 49% recorded in 2009 when the survey was initiated.

Besides affordability the level of wealth is another relevant economic metric when examining insurance demand. Some researchers consider wealth and income as proxies for loss potential: higher wealth and/or income means greater potential loss and, as a result, greater demand for insurance. Outreville (2013) shows that higher levels of national income are associated with higher insurance penetration rates.

Insurance demand is not only driven by the level of wealth but also influenced by its distribution. Various studies suggest that aggregate insurance demand should be smaller as the wealth inequality within a country (as measured by the Gini coefficient) increases (see Nakata and Sawada (2007)). This finding is intuitively plausible, as the middle-class population both has a need for insurance and the ability to afford it.

Cost-benefit characteristics and value for money

The cost of producing insurance is an important determinant of its economic appeal. It is one of the most intensely debated industry topics, not least in the light of technological innovation and the prospect of disruption by more cost-efficient ways of providing insurance cover (The Geneva Association (2016)). In non-life insurance, for example, about 30 cents of each premium dollar are generally eaten up by distribution and administrative expenses. Even though it reflects its complexity, this fact dents the economic appeal of insurance. As early as 1965 Lees and Rice (1965) noted: "In practice, insurance is not costless: sellers incur administrative, selling, and other expenses; buyers incur costs of time and trouble and expense for advice (...). Specifically, the transaction cost to the individual of completing and filling application and claims forms, paying premiums, keeping records, etc., as well as possible costs of obtaining information, may be of sufficient magnitude to make insurance policies against certain losses not worthwhile."

Transaction costs can adversely impact (perceived) affordability. For example, Baicker et al. (2012) discuss low take-up rates of public health insurance in the U.S. in the context of transaction costs.

Imperfect information

Imperfect information is a prominent feature of today's insurance markets and, from the angle of economic theory, may explain underinsurance as a result of both demand and supply anomalies (see the seminal work of Rothschild and Stiglitz (1976) on the economics of imperfect information in insurance). Insurers and policyholders operate in a space where the characteristics of the services exchanged are not fully known to at least one of the parties. Under such conditions and in the absence of differentiated pricing, high-risk individuals tend to buy more insurance than low-risk customers who, as a result, could remain underinsured. This is a particular challenge in health insurance, and even more so in light of medical advancements based on technology (e.g. increasingly inexpensive genetic tests; see The Geneva Association (2018a)).

2.3. Institutions

Sound legal environment

In some jurisdictions the legal environment (e.g. a proper contract law) is weak and rules are frequently not enforceable, adding to underinsurance. The more developed the rule of law, the higher the willingness of contracting parties to initiate business relationships—and the higher the utility of insurance in protecting assets and/or the need to protect against legal liabilities. This reasoning is of particular relevance to developing and emerging insurance markets.

Effective regulatory framework

In addition to an effective legal framework, a sound regulatory framework is required to enable a stable insurance market and protect policyholders (The Geneva Association (2018a)). Key ingredients include appropriate minimum capital requirements and a cohesive and transparent system of supervision (The Geneva Association (2014)).

Risk absorption by the public sector

A general reliance on government aid as a substitute for insurance is another explanation for underinsurance. Under such circumstances, private-sector risk transfer solutions face a crowding out. In the context of the National Flood Insurance Program in the U.S., Kousky et al. (2013) find that an increase in average aid grants reduces average insurance coverage by more than the amount of aid.

By providing protection against health, disability and mortality risks, social security is expected to have a negative impact on insurance demand (Outreville (2013)). One example is the provision of long-term care (LTC) by the Japanese government which almost completely crowds out private LTC insurance (The Geneva Association (2018a)).

However, Swiss Re (2018) shows that consumers in emerging Asia, even with the high level of state involvement in healthcare, are considering private health insurance based on their perception of potential gaps in care. In this context, Zhang et al. (2017) discuss China's social health insurance system and prove that "(...) while low- and medium-income individuals are the main beneficiaries with reduced out-of-pocket expenditure, those faced with very high medical bills are still at risk, owing to limited and shallow coverage in certain aspects."

2.4. Sociodemographics

Age and population structure

Age is an important determinant of insurance demand, especially in life insurance. The probability of holding a life insurance policy falls with age. One would expect, other things being equal, that fewer life insurance purchases would be made as the age of the insured increases because life insurance premiums rise with age. In addition, older age generally implies a lower need for (mortality) insurance protection. On the other hand, the age dependency ratio (defined as the ratio of people under 15 and above 65 years of age to the total population aged 15 to 64) is considered to have a positive effect on life insurance demand, assuming that wage earners buy life insurance primarily to protect their dependents against their own mortality risk (Outreville (2013)). Therefore, the structure of the population is a major factor in analysing and forecasting insurance demand, for example the split between protection and savings business in life insurance.

However, the relationship between life expectancy and life insurance demand is ambiguous. Within the life cycle hypothesis, a high mortality rate (a low life expectancy) should result in higher life insurance demand—but most empirical studies show that life expectancy is actually positively related to life insurance demand (even though at low levels of statistical significance; see Feyen et al. (2011)). One of the possible reasons for this is that even though people with longer life expectancy have less perceived need for mortality coverage, they may need to buy more savings-type life insurance products, also driven by estate planning motives.

Urbanisation

Urbanisation is expected to encourage higher levels of insurance consumption as it simplifies distribution (Hwang and Greenford (2005)). Also, in non-life insurance the frequency of losses is greater in areas with higher rates of urbanisation, and this encourages insurance purchases (Esho et al. (2004)).

Financial literacy and education

The existing empirical evidence on mature markets (for example, Cappelletti et al. (2013)) suggests a positive relationship between financial literacy and insurance demand. Similarly, for developing markets, Cole et al. (2013) find that insurance demand is higher among households with higher levels of financial literacy. More generally, Batsaikhan and Demertzis (2018) examine the role of financial literacy in the European Union and argue that the cost associated with financial literacy gaps is set to increase further as governments shift more and more

responsibility for major financial decisions to the individual (e.g. due to the pressure on public pension schemes and the resulting growth of occupational and personal insurance systems).

Li et al. (2007) show the same positive relationship between education and insurance demand. The level of education can be 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. (This may help explain why millennials exhibit above-average levels of insurance awareness—see Chapter 3.) Outreville (2013) references further empirical papers which have verified a strong positive and significant relationship.

Risk awareness

Besides deficits in financial literacy and general education, specific gaps in risk awareness play an important role in explaining underinsurance. This is particularly relevant for low-probability events. For example, research on individual behaviour during Hurricane Sandy in 2012 revealed that only 37% of homeowners in New York who already owned removable storm shutters actually put them up, and only 54% of New York residents whose homes were less than a block away from the coastline indicated that they had flood insurance cover (see Meyer et al. (2014) from a U.S. perspective).

2.5. Culture

Risk aversion

From the perspective of economic theory, decision-makers are usually assumed to be risk-averse. The degree of risk aversion is hypothesised to be positively correlated with insurance demand. Measuring attitudes to risk, however, is close to impossible (Outreville (2014)). Therefore, most empirical studies have used education to proxy risk aversion: a higher level of education is believed to result in a greater degree of risk aversion and greater awareness of the necessity of insurance (Browne and Kim (1993)).

Determinants of risk attitudes have long been in the spotlight of researchers and have gained further attention recently from the growing camp of behavioural economists who explore the role of individual attributes—psychological or otherwise—that determine financial and investment practices and decisions.

Other cultural factors

The demand for insurance (and particularly life insurance) in a country may be affected by its unique culture and its effect on the population's risk aversion. For example, countries with large Islamic populations have a reduced demand for life insurance consumption as verified by various empirical papers (Outreville (2013)). In this context, Mahi et al. (2017) explore the robust development in the Takaful (Islamic insurance) sector and the relationship between religiosity and demand for Takaful. They demonstrate the importance of religiosity in influencing the demand for this Takaful insurance product.



3. General findings from the 2018 Geneva Association global customer survey

3.1. Background and methodology

In order to further validate the theoretical and empirical findings explored in the previous section, in 2018 The Geneva Association commissioned Edelman Intelligence to conduct a global customer survey. The poll was designed to identify the main obstacles to insurance purchases, based on the general public's opinions of insurance and the behaviours associated with these. In addition, the research was expected to unearth the deep reasoning behind these opinions and associated behaviours as well as to explore customer suggestions to help improve perceptions, experiences and engagement.

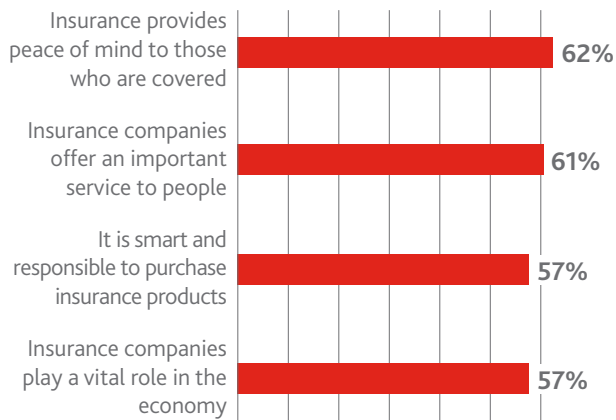
The geographical scope included the mature insurance markets of France, Germany, Italy, Japan, the U.K., the U.S. and Switzerland, with a particular product focus on residential property insurance, private health insurance, term life insurance and retirement annuities.

The first phase of the survey delivered a thorough analysis of online conversations related to the insurance industry at large and the four products in focus more specifically. The second phase encompassed a 'deep dive', based on in-depth qualitative interviews with 7 individuals in each market. The main purpose of phases 1 and 2 was to inform the online questionnaire underlying phase 3, which focused on the quantitative measurement of perceptions and reasons behind purchasing behaviours. The results are presented and discussed in the following sections. Seven thousand respondents (1,000 per country) took part in a 15-minute online survey, yielding a wealth of insights and statistics.

3.2. Relevant customer perceptions

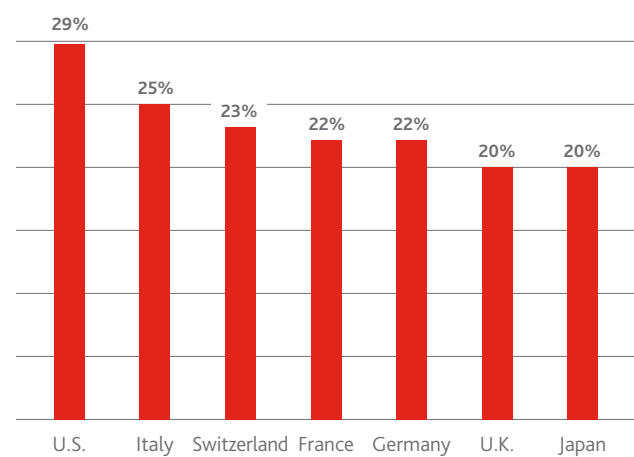
The online survey revealed a remarkable discrepancy in terms of customer knowledge and perceptions. Whereas the basic function and potential utility of insurance is well understood (see Figure 6), respondents show a very low level of understanding as far as the insurance industry and its inner workings are concerned (Figure 7). This 'black box' perception of insurers leads customers to adopt a generally negative opinion of insurance and to question the industry's trustworthiness, transparency and motives, negatively impacting their purchasing behaviour. In addition, even for the majority of those respondents who actually bought insurance, this fact does not make any difference in terms of their peace of mind or feeling of preparation for life's milestones such as marriage, starting a family, buying a home or retiring, or for uncontrollable events such as natural disasters, critical illness or loss of a job. This sobering assessment is largely attributable to poor customer experience.

Figure 6: The insurance industry's fundamental role is understood and recognised (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

Figure 8: How the insurance industry is perceived (share of those with a 'good opinion', all respondents, by country, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

Figure 7: Poor overall image, knowledge and customer experience ratings (all respondents, percentage of those agreeing)

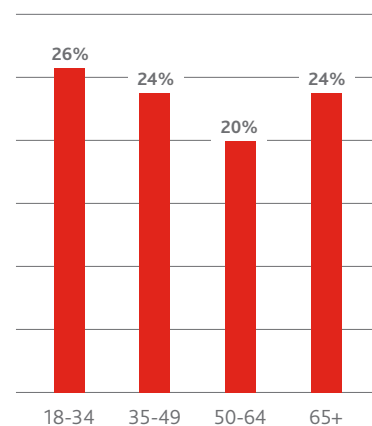


*Based on those who have bought at least one insurance product

[1] Only the pharmaceutical industry is less understood (19%) than insurance whereas food and beverages, telecommunications and banking score significantly higher at 42%, 32% and 29%, respectively (source: Edelman Intelligence).

Source: Edelman Intelligence and The Geneva Association

Figure 9: How the insurance industry is perceived (share of those with a 'good opinion', all respondents, by age group, percentage of those agreeing)

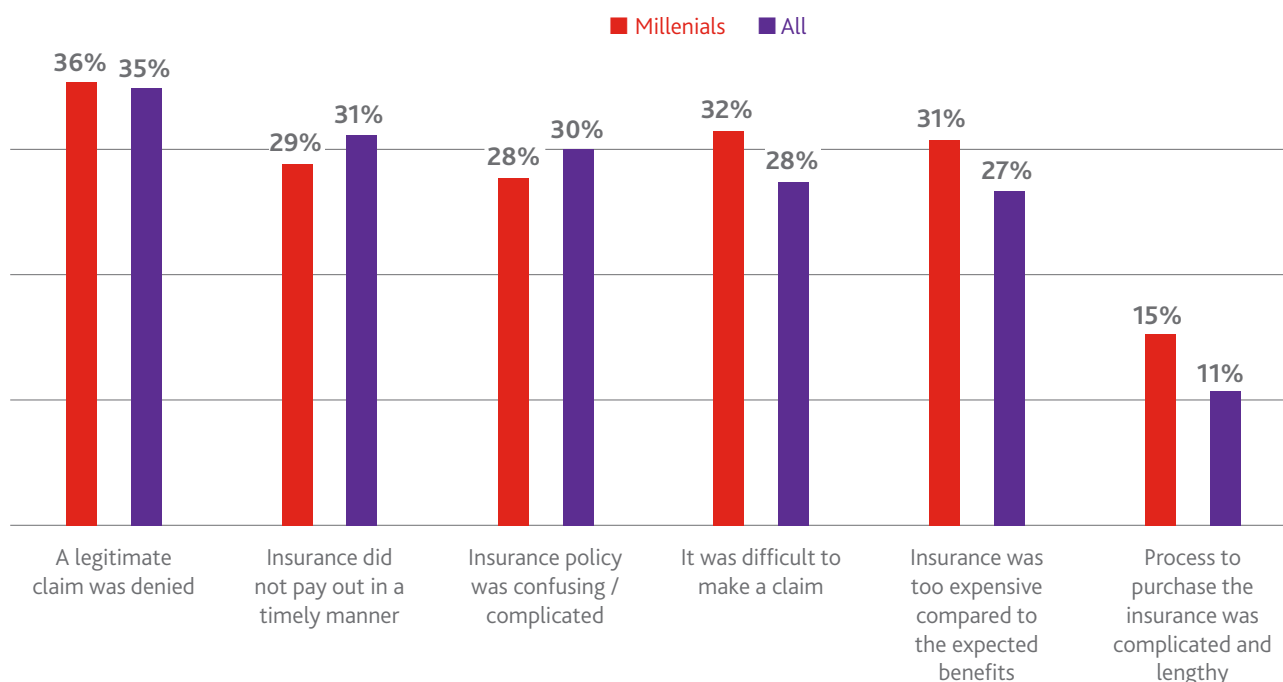


Source: Edelman Intelligence and The Geneva Association

U.S.-based survey participants express the most favourable opinion about the industry (with a share of 29%) whereas Japan ranks last (20%) [Figure 8]. From a demographic point of view, it is interesting and maybe surprising to note that the millennials are most positive about the insurance industry (Figure 9). This outcome may reflect the fact that millennials are more financially literate than members of earlier generations (see Kurz et al. (2018)).

As revealed by Figure 7, 53% of all respondents report a 'bad experience with insurance'. Figure 10 highlights the specific deficits in customer experience. The top 3 customer pain points relate to claims, complexity and value for money. Deficits in ease of use, however, do not rank among the top customer concerns, with shares of 11% and 15% among all respondents and the millennial segment, respectively.

Figure 10: Specific deficits in customer experience (based on all respondents, percentage of those agreeing)

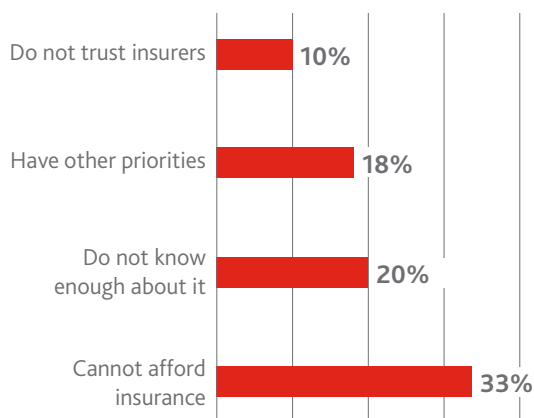


Source: Edelman Intelligence and The Geneva Association

3.3. Reasons for underinsurance

Figure 11 suggests that for those who have not (yet) bought insurance, unaffordability and a lack of knowledge are the two most relevant obstacles to purchases, with the latter likely to influence the perception of the former.² One out of 3 says insurance is unaffordable and 1 out of 5 states that they do not know enough about insurance.

Figure 11: Obstacles to insurance purchasing centre around unaffordability and a lack of understanding (non-purchasers only, percentage of those agreeing)



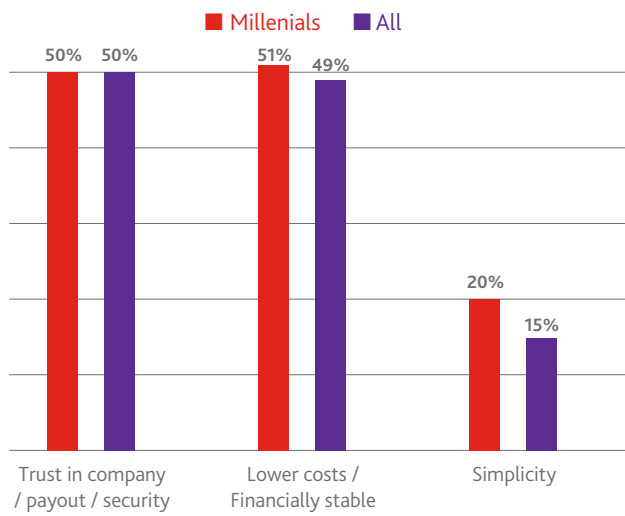
Source: Edelman Intelligence and The Geneva Association

3.4. Remedies for underinsurance

According to the survey, building trust (primarily in insurers' willingness and ability to pay) is the key requirement for the insurance industry to overcome the disconnect between customers' fundamental appreciation of the role of insurance versus their unwillingness to purchase cover (Figure 13). In order to address deficits in trust, the survey encourages insurers to be more caring and transparent (both in terms of intentions and product characteristics) towards their customers. Insurers also need to think about the robustness of this trust, and what it takes to insulate it from isolated 'black sheep' cases of non-payment of legitimate claims or mis-selling, for example. In addition, not surprisingly, a lower cost of coverage has emerged as a factor which would stimulate insurance demand. Interestingly, and in contrast to other polls, the sheer ease and simplicity of buying and transacting insurance (e.g. through smart phone apps) does not appear to be a relevant factor which would encourage additional insurance purchases. Just 15% of those interviewed on behalf of The Geneva Association would buy more insurance on the back of an improved ease of use alone. At a share of 20%, the millennials are no exception. As shown above, the more 'traditional' issues in customer experience matter most—onerous claims processes as well as a perception of insurance being complex and expensive (Figure 12).

² In an unpublished survey Swiss Re asked non-purchasers about the price they would be willing to pay for certain insurance products. Interestingly, even though they claimed insurance is not affordable, most of these potential consumers were willing to pay more than the average market premium.

Figure 12: Trust and cost as crucial levers to pull in order to encourage more demand for insurance (based on all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

Just 42% of respondents consider themselves financially literate (and an even higher share regrets deficits in financial literacy (Figure 13)). This perception points to the potential of additional financial education and awareness building measures which, as shown in Chapter 2, are likely to spur demand for insurance.

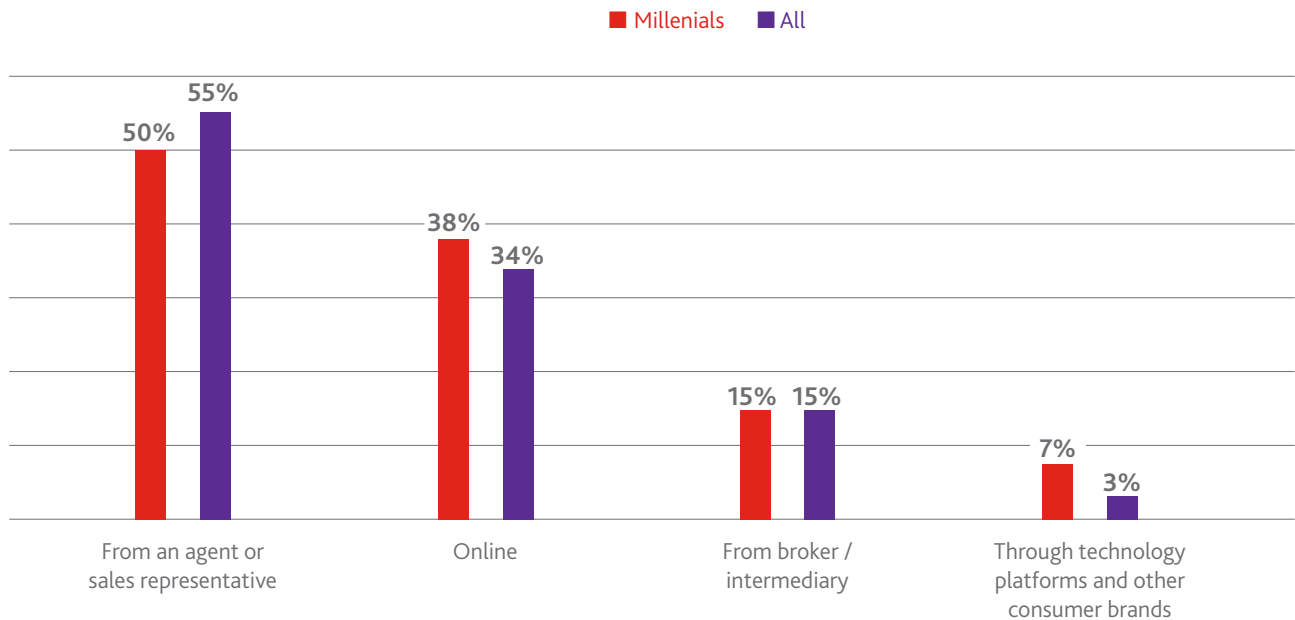
Figure 13: Scope for insurers to educate customers (based on all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

Based on the customer preferences reflected in Figure 14, 55% of the interviewees prefer to purchase insurance through agencies. The future of insurance distribution is omnichannel; agencies are here to stay.

Figure 14: Preferred channel of distribution (in per cent, based on all respondents)



Source: Edelman Intelligence and The Geneva Association

Interestingly, even 50% of the millennials interviewed prefer to buy insurance through an agent. The online channel ranks second, with no material difference across the age groups. It is also noteworthy that only 3% of interviewees prefer to buy insurance through consumer brands and platforms. At 7%, the millennial share is equally insignificant. This outcome invites a

comparison with Figure 5 according to which up to one third of insurance customers in mature markets would consider buying insurance through technology platforms. Obviously, there is a massive gap between the stated willingness to consider new avenues on the one hand and actual preferences on the other.

Innovative ways of addressing underinsurance in the digital economy

On-demand insurance, also referred to as **usage-based Insurance (UBI)**, is a cover/pricing methodology that is increasingly been used in the non-life sector. The ability of the insured to pay only for insurance when required can substantially reduce the cost of the insurance to the end customer. Examples include policy holders only being charged when their vehicle is actually being used and for the distance it travels, rather than a premium which makes assumptions about its use. Connected technology makes it relatively easy to provide such insurance. Policy holders can turn the insurance on and off according to their needs. For example, household theft insurance could be turned on only when the house is empty. Connected insurance and the use of big data is also likely to make purchasing insurance much easier, allowing the concept of 'hyper convenience' and 'one-click purchasing' (the data normally collected at the quotation stage will now be available from external data sources, with the customer's permission). But, as shown by The Geneva Association customer survey, 'hyper convenience' alone is not expected to boost insurance demand.

Driven by technological innovation, there is potential for an increasing number of risks being defined by regulators as requiring 'mandatory insurance' (as

in third-party liability for motor insurance). This is necessary for governments to reduce the likely societal costs related to underinsurance or non-insurance. Examples could be drone insurance or cyber insurance where the costs to individuals (first party and third party) could be substantial but where there is significant underinsurance.

The increasing use of **digital, mobile and connected claims reporting** and settlement solutions is likely to reduce the concern expressed by survey participants in relation to 'onerous claims processes'. In the future many claims will be settled quickly and easily utilising apps which take pictures of the damaged item and use big data to complete the rest of the claims process. The use of robotics and chat bots will also reduce the time required to complete a claim. Indeed, the use of parametric insurance, which makes a claims payment automatically on the occurrence of a specific external trigger, makes the claims process completely redundant. For example, parametric earthquake products will automatically pay a sum of money to the insured's bank account if the occurrence is in excess of a certain magnitude on the Richter scale.

Source: Input from The Geneva Association's Protection Gap Working Group

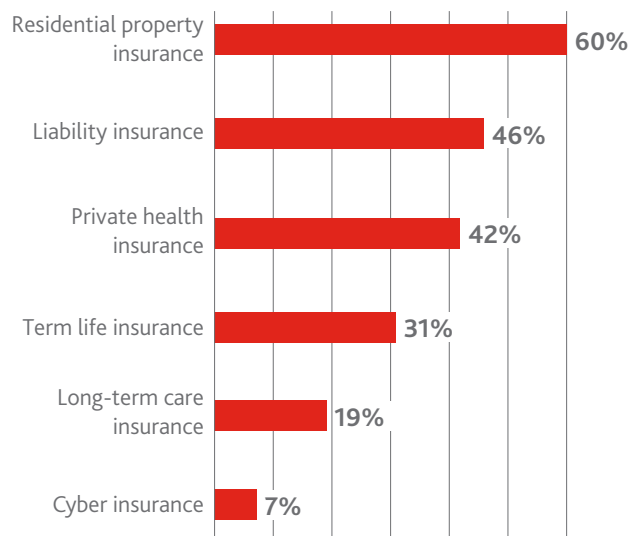


4. Deep dive on non-life insurance

A particular focus of this publication is on the two specific non-life products covered by The Geneva Association survey: voluntary private health insurance and residential property insurance.

Both types of insurance rank favourably in terms of the respondents' understanding and knowledge. Residential cover in particular is perceived as relatively easy to understand, compared with life and health insurance and emerging solutions such as cyber insurance (Figure 15).

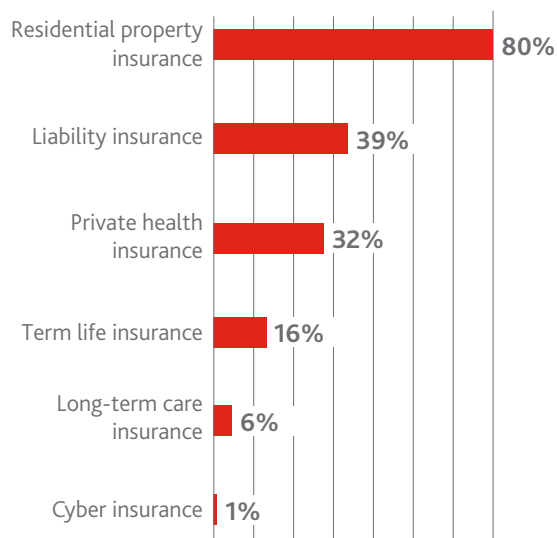
Figure 15: Share of those saying they understand the product well (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

In terms of market penetration, residential property insurance is the undisputed number one product among all classes covered by the survey (Figure 16) and has been purchased voluntarily by 80% of the respondents. At 32% private health insurance take-up is significantly lower for reasons that are explored below. In addition, one has to bear in mind that, in contrast to property insurance, private health cover tends to be complementary to public health insurance schemes.

Figure 16: Share of those saying they currently own an insurance policy (all respondents, percentage of those agreeing)



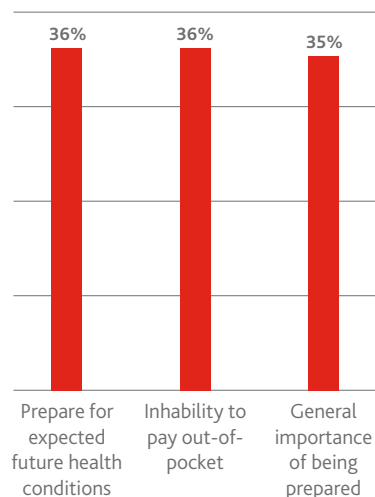
Source: Edelman Intelligence and The Geneva Association

4.1. Private health insurance

Let us first delve deeper into why respondents have purchased private health insurance, or have so far refrained from doing so.

Figure 17 shows the 3 main purchasing motives which rank almost equally. People want to prepare for adversity in future health conditions, mitigate the risk of financially stressful or even catastrophic out-of-pocket spending and, more generally, acknowledge the importance of being prepared.

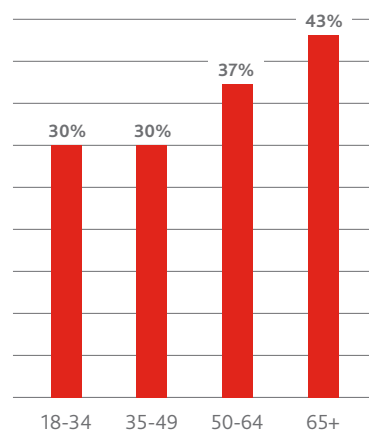
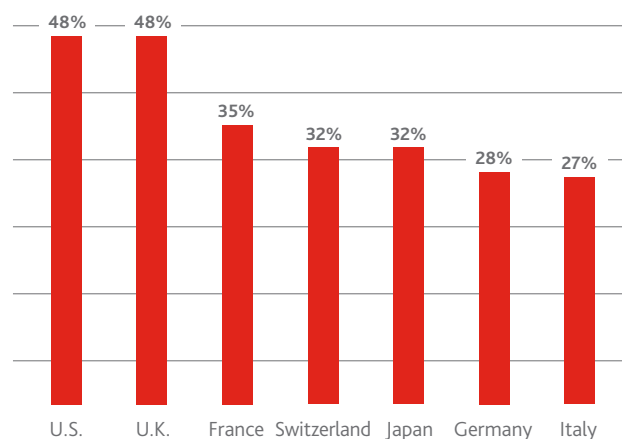
Figure 17: Top 3 reasons why respondents have purchased private health insurance (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

Figure 18 offers a country and demographic view of the main purchasing motives in health insurance. The desire to prepare for expected future health conditions is most pronounced in the U.S. and the U.K. but less so in continental Europe and Japan. Also, preparedness matters more to the older age groups.

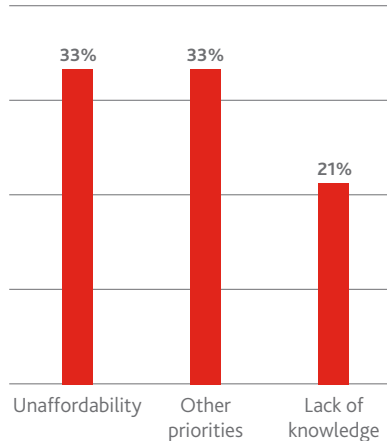
Figure 18: Preparing for expected future health conditions: the country and age group view



Source: Edelman Intelligence and The Geneva Association

Figure 19 provides the main reasons why people have not yet purchased private health insurance (but would consider doing so in the future). The most relevant obstacles are unaffordability and 'other priorities' which might reflect the 'over-optimism bias' discussed above in the context of behavioural economics.

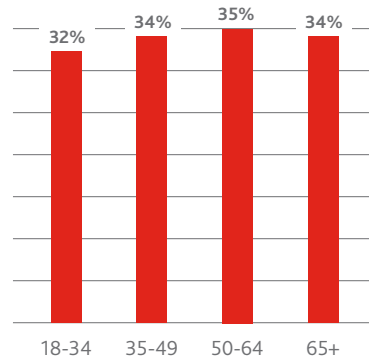
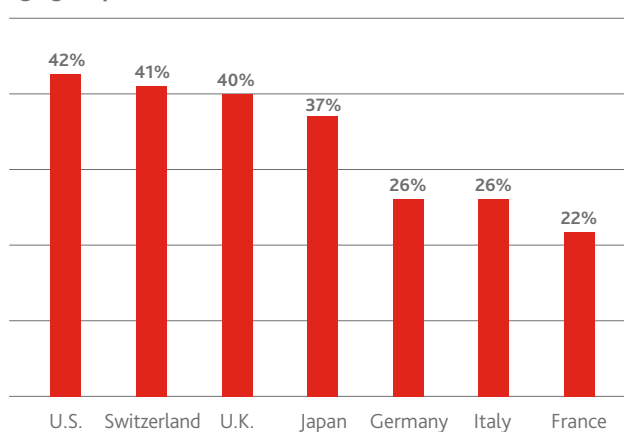
Figure 19: Top 3 reasons why future purchasers have not yet purchased insurance (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

Figure 20 reveals that unaffordability is most relevant as an obstacle to future health insurance purchases in the U.S., Switzerland and the U.K. It is significantly less important in France, Italy and Germany where social security schemes play a major role. By contrast, the demographic pattern is remarkably consistent.

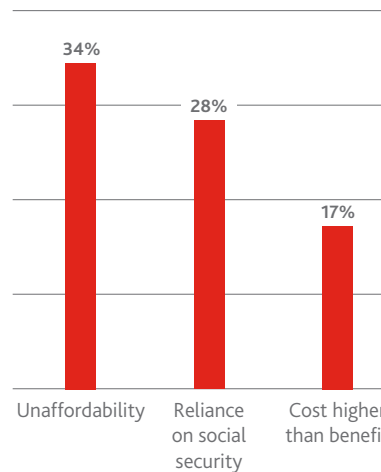
Figure 20: Unaffordability as a reason why people have not yet bought private health insurance: the country and age group view



Source: Edelman Intelligence and The Geneva Association

And finally, there are those respondents who have no intention whatsoever of purchasing any insurance products in the future. Unaffordability, followed by a reliance on public schemes, are the most frequently mentioned deterrents (Figure 21).

Figure 21: Top 3 reasons why non-purchasers say they will not purchase private health insurance products (all respondents, percentage of those agreeing)

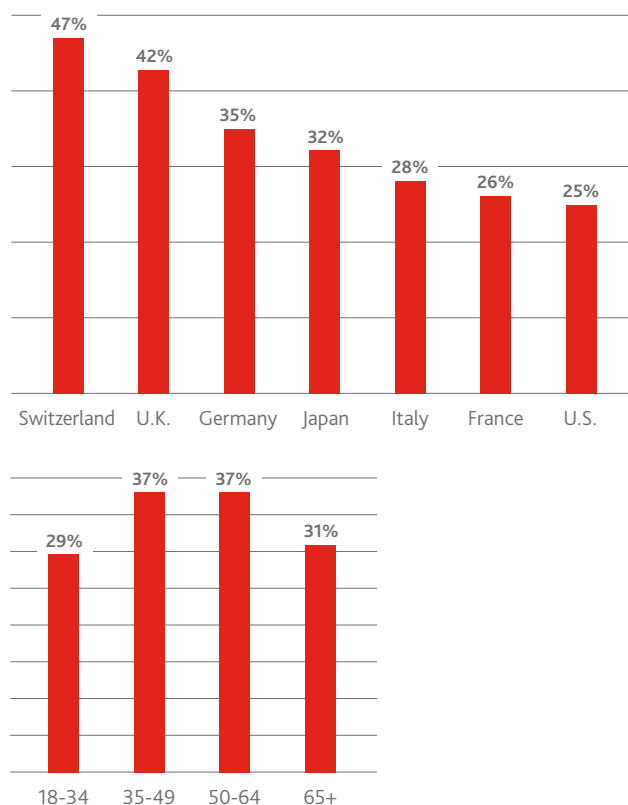


Source: Edelman Intelligence and The Geneva Association

For 'categorical' non-purchasers of private health insurance in Switzerland and the U.K., unaffordability is the single most important factor. For the middle-aged, unaffordability is a particularly relevant impediment (Figure 22).³

³ As mentioned before, 'unaffordability' also needs to be analysed in the context of behavioural economics (see Chapter 2.1) for an explanation of apparent 'anomalies'.

Figure 22: Unaffordability as a reason why people do not intend to buy health insurance at any time: the country and age group view

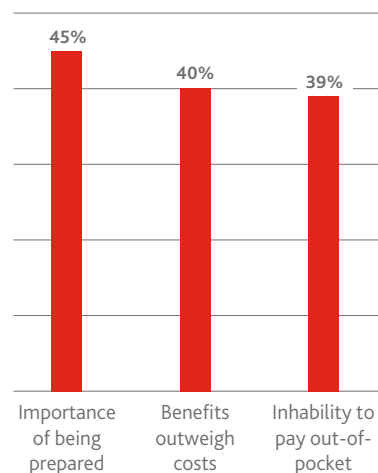


Source: Edelman Intelligence and The Geneva Association

4.2. Residential property insurance

Figure 23 reveals the top 3 reasons for purchasing residential property insurance. The importance of being prepared ranks highest, followed by perceived favourable economics of the product and concerns over the inability to self-retain residential property risk.

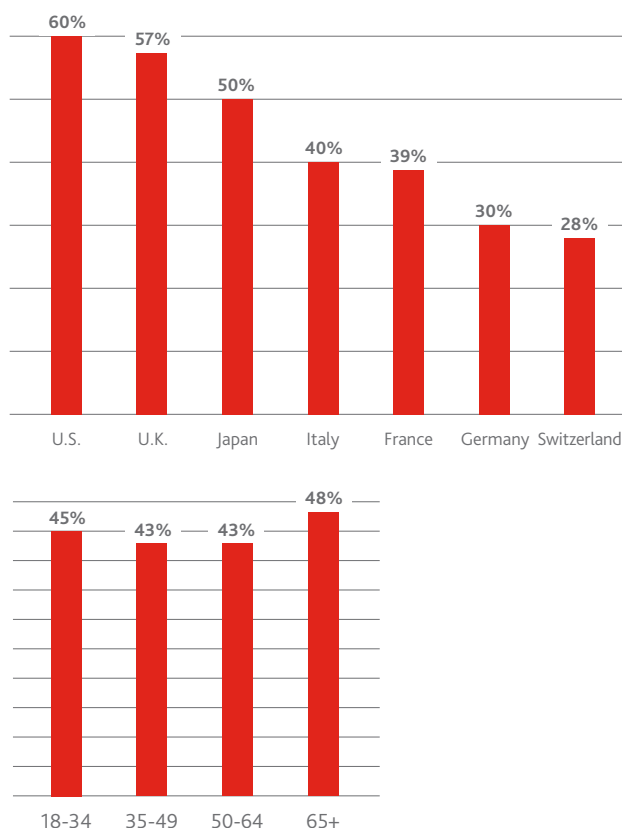
Figure 23: Top 3 reasons why respondents have purchased residential property insurance (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

As a motivation to buy, preparedness through property insurance is most relevant in the U.S. and the U.K. and least relevant in Switzerland and Germany. There are no major differences across age groups (Figure 24).

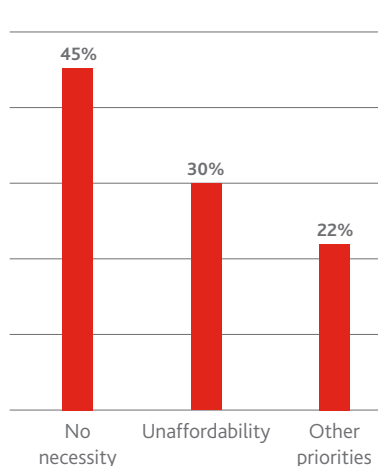
Figure 24: The importance of being prepared through property insurance: the country and age group view



Source: Edelman Intelligence and The Geneva Association

A lack of necessity ranks highest as a hurdle to residential property insurance purchases. For renters in particular this product falls under 'discretionary items' (Figure 25).

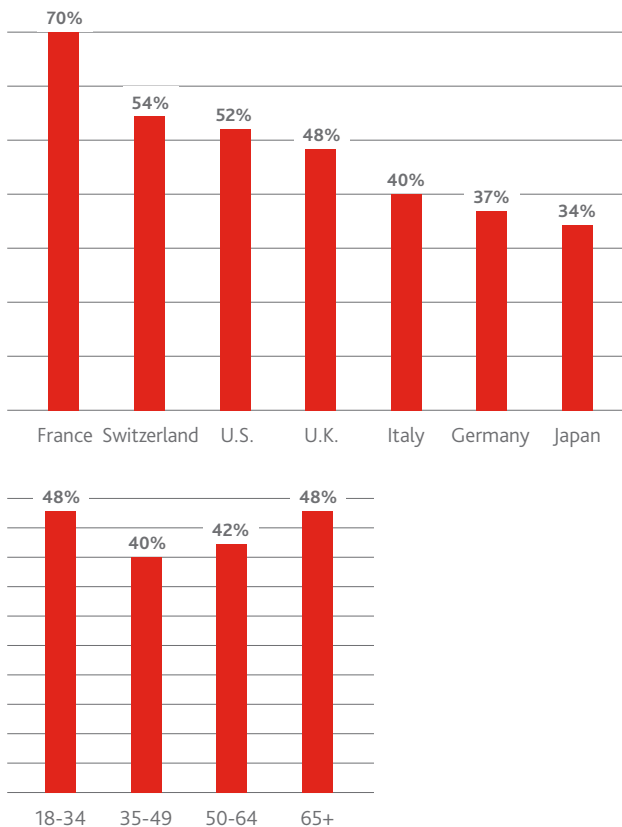
Figure 25: Top 3 reasons why future purchasers have not yet purchased insurance (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

In France the vast majority of respondents do not see any necessity for property insurance. In Japan, however, this is true for one third of interviewees only. From a demographic perspective, the middle-aged are more sceptical about the need for property insurance than the millennials and the elderly (Figure 26).

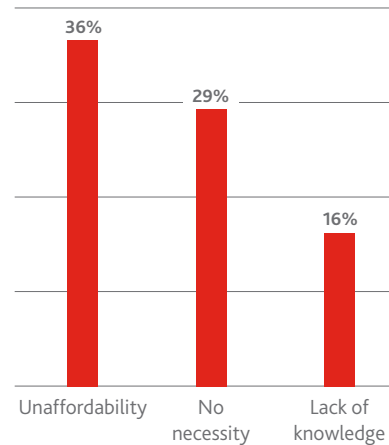
Figure 26: 'No necessity' as a reason why people have not yet bought property insurance: the country and age group view



Source: Edelman Intelligence and The Geneva Association

Figure 27 shows the motives of those who declare themselves unwilling to buy property insurance at any point in the future. Unaffordability and a perceived lack of necessity rank highest. Again, behavioural sciences may help explain for this outcome in light of the relatively low cost of property insurance and the potentially devastating effects from calamities such as fire or severe storms.

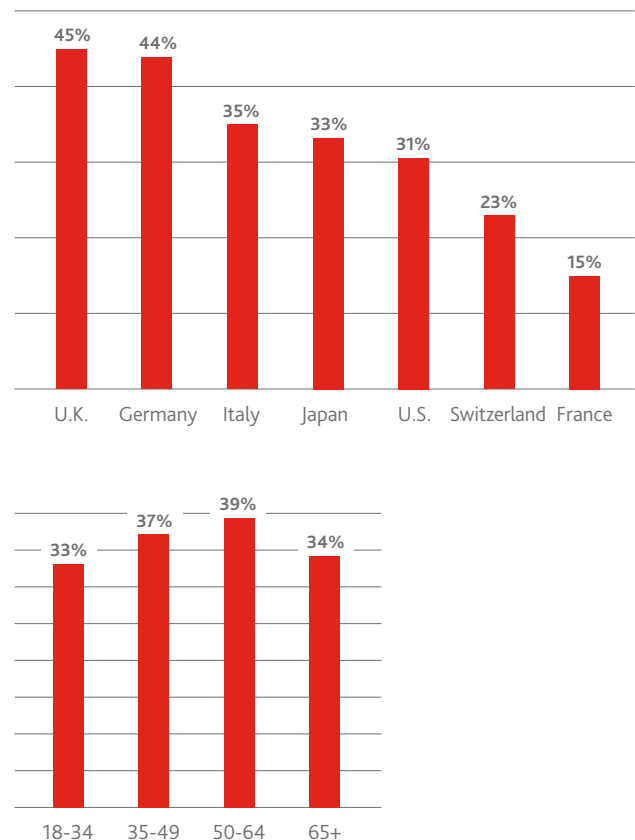
Figure 27: Top 3 reasons why non-purchasers say they will not purchase key products (all respondents, percentage of those agreeing)



Source: Edelman Intelligence and The Geneva Association

In the U.S. and Germany unaffordability prompts almost half of the respondents to rule out any future property insurance purchases. In France, on the other hand, at just 15%, unaffordability is of marginal relevance. The age group analysis does not reveal any major discrepancies even though unaffordability, as with health insurance, is more of a concern to the middle-aged (Figure 28).

Figure 28: 'Unaffordability' as a reason why people do not intend to buy property insurance at any time: the country and age group view



Source: Edelman Intelligence and The Geneva Association



5. Recommendations for insurers

Based on the findings from The Geneva Association global customer survey, our recommendations to insurers can be summarised as follows:

Revamp traditional approach to product communication

People do understand the fundamental role and benefits of insurance, which can be considered the necessary condition for increasing insurance penetration. This basic understanding, however, does not translate into an economically beneficial level of insurance utilisation. A major reason is the perceived lack of clarity and transparency as far as insurers' products and the inner workings of the industry are concerned. The survey suggests that a less technical and more regular and pro-active approach to communication would effectively remedy this situation.

Enhance customer experience at the 'moment of truth'

Insurers' claims processes are the single most important customer pain point. About a third of all survey participants complain about the denial of legitimate claims, delays in receiving payouts and the complexity of filing a claim. Addressing these shortcomings would go a long way towards overcoming underinsurance.

Build an omnichannel proposition for distribution

The survey reveals that the agency channel continues to be the most popular option for buying insurance. This holds true for all age groups, including the millennials. Therefore, the digitalisation of the agency force is arguably the core of any future-proof distribution strategy. Insurers need to build an omnichannel proposition to meet today's and tomorrow's customer buying preferences.

Respond to customers' need for financial education

The survey clearly suggests that insurers should place more emphasis on promoting their customers' financial literacy. Customers are both very realistic and also regretful about existing gaps. Against this backdrop, they are likely to welcome support from insurers in reducing knowledge deficits which, as corroborated by a number of previous studies, is set to translate into higher demand for insurance.

In summary, the identified root causes of underinsurance are not immutable exogenous factors but can be effectively addressed through specific measures taken by insurers. This also applies to those reasons which behavioural scientists attribute to irrational or inconsistent patterns of human behaviour.

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Contrary to general belief, protection gaps are not limited to developing and emerging countries but are also common in advanced economies. A customer survey of The Geneva Association in 7 mature economies revealed that people widely understand the fundamental notion of insurance and its vital role in the economy and society. However, the research also revealed major deficits in how people perceive the insurance industry and its products. Addressing this mismatch will be vital to encouraging a wider adoption of insurance in mature economies.

