



# sigma

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## Life insurance: focusing on the consumer

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# Executive summary

Conventional wisdom has it that buying risk protection through insurance increases individual and societal welfare.

It has become apparent that people around the world are under- and even uninsured against a wide range of risks, be that disability, health, longevity, mortality or other. Conventional thinking presumes that the purchase of risk protection through insurance products increases individual and societal welfare. A simplistic inference is that individuals, as rational beings, buy insurance to meet an implicit need for protection and following in this vein, that life insurers have an easy task selling their products.

Yet the reality is that many people do not buy life insurance.

Yet mortality protection gap data<sup>1</sup> tell a very different story, revealing instead substantial inadequacy in life insurance coverage across societies at large. Contrary to it being an easy task, this report shows that in the real world, the buying and selling of life insurance is a challenging process for both sides of the transaction.

There are common themes across different regions why people don't buy life insurance.

Data from consumer surveys from the US, Latin America, Europe and Asia reveal some common themes as to why consumers do not buy life insurance, including price, affordability and value for money. Other key themes are a perceived lack of need, limited product knowledge, product complexity and lack of trust in the insurance industry. Interestingly, surveys indicate that while individuals are often aware that having insurance would be beneficial, they still don't buy it. This discrepancy hints to the inadequacies of traditional economic theory in explaining consumers' buying behaviour.

Behavioural economics offers further insights into consumer decision making.

Behavioural economics has gained more attention in recent years and is a rapidly growing field of research. The discipline is still developing and sometimes offers differing views on consumer behaviour but does nonetheless provide useful insights. Combining behavioural economics with an understanding of the institutional, legal, regulatory, ethnic and socio-economic factors affecting consumer decisions, helps shed some light on consumer buying decisions with respect to life insurance.

Life insurers have a compelling value proposition, but to be successful they need to better understand consumer needs and preferences.

As managers of risk, life insurers have a compelling value proposition to help consumers reduce exposure to uninsured risks. Risk protection is the core of life insurance, and life insurers are well positioned to help societies reduce the mortality protection gap by doing more to reach out to consumers. To do so successfully, however, better understanding of consumer behaviour and preferences is a pre-requisite.

The modern consumer wants to be empowered in his or her buying decision.

Another core theme to emerge is that the modern consumer wants to be able to research options and make choices based on objective information as well as from peer group experience. The consumer does not want to be 'sold to'. Rather, the consumer expects to be empowered in his or her buying decision.

This report offers some pointers to help life insurers adapt to changing consumer decision-making dynamics.

This *sigma* offers some pointers as to how life insurers can improve product design and the sales process to respond to this important dynamic. It emphasizes the need to invest more in consumer research and to close life insurers' own knowledge gap in order to reach those who currently do not buy or do not even consider buying life insurance. It also discusses the need to build long-term relationships with existing customers, improve communication and educate consumers on the importance of life insurance and how to assess their risk mitigation needs.

<sup>1</sup> The mortality protection gap is calculated as the difference between the resources needed and the resources available to maintain dependents' living standards after the death of the primary breadwinner. For methodology details see *sigma* 4/2004 *Mortality protection: the core of life*.

# Life insurance – valuable but often insufficient

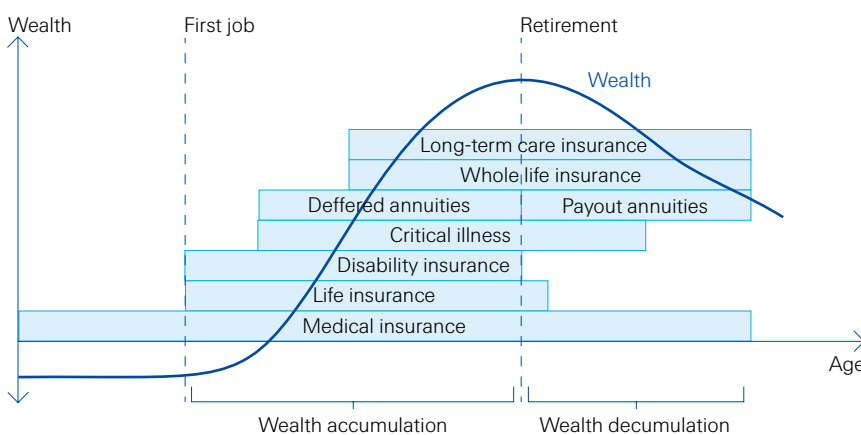
Life insurance provides protection against a wide range of unfavourable events which are difficult to predict.

Life insurance needs evolve over the lifecycle.

Consumers buy life insurance products to alleviate the uncertainties around and potential adverse consequences of future events that are difficult to predict or prevent. With life insurance, individuals and their families are able to mitigate the financial burden and maintain their standard of living should they lose the physical ability to earn income (disability insurance), face substantial medical expenses (medical, critical illness, long-term care insurance), risk outliving means during retirement (payout annuities), or early death (mortality insurance).

For individual consumers and families, the demand for risk protection evolves over the lifecycle, with different protection needs coming into play. At younger ages, when people are finishing education, getting jobs, getting married, buying houses and having children, the focus is on income protection. As people get older, the focus shifts to accumulation of retirement funds and securing returns on investments. Into old age and retirement years, the need is more for protection against outliving one's savings, the financing of long-term care needs and the ability to transfer wealth to the next generation (see Figure 1).

Figure 1  
**Need for life insurance protection along the lifecycle**



Source: Swiss Re Economic Research & Consulting

Milestones such as marriage, the birth of a child, a new job or the purchase of a home can prompt the decision to purchase life insurance.

Milestone events often trigger a decision to purchase a particular form of life insurance. For instance, protection against the loss of income in the event of the death of a primary breadwinner may not be at the forefront of most peoples' minds. Many consumers do not actually evaluate this need. Those who do and do end up buying some form of insurance are usually prompted by triggers such as marriage, the birth of a child, a new job or the purchase of a new home. A recent study that looked at life insurance demand by the same households over time found strong positive correlation between the birth of a child and the purchase of, and amount of, term life insurance.<sup>2</sup> The same study also found that the start of a new job makes families more likely to initiate purchase of term insurance.

<sup>2</sup> See Liebenberg, A., J. Carson and R. Dumm (2012), *A Dynamic Analysis of the Demand for Life Insurance*, Journal of Risk and Insurance. The study finds that new parents are 40% more likely to initiate term insurance coverage than other households and that they purchase two-thirds more cover than other households do.

Various other interactions can trigger the purchase of life insurance also.

Personality traits such as risk averseness and accountability are important in the understanding of insurance demand.

Other factors like recommendation from financial advisors, marketing and advertising of life insurance via mail or media channels, or – last but not least – advice from family and friends, can also trigger a purchase. Similarly, work-related experiences such as the offer to purchase life insurance as part of an employee's benefits package, the loss of group life coverage, or starting a new business may prompt a decision to buy life insurance. Consideration of one's own mortality after experiencing the death of a family member or friend, or witnessing accidents or events such as 9/11 in New York are other variables that can trigger consumers to purchase life insurance.

Besides socio-economic factors, such as education, income, marital status and employment (see box on Socio-economic indicators and the likelihood of having life insurance), empirical studies have also highlighted the importance of consumer personality traits, such as risk attitudes and accountability in understanding insurance demand. People who are lifestyle-wise generally risk averse (eg. those who do not indulge in what are commonly considered risky behaviours such as smoking, drinking, and those who do not participate in dangerous hobbies), and who take preventive measures to reduce risk (healthy eating, exercise, wearing a seat belt etc) are systematically more likely to hold all types of life insurance products.<sup>3</sup> Accountability is another important personality feature. People with strong sense of personal responsibility to protect those who depend on them are most likely to feel vulnerable to the risks of serious illness or injury and have the highest intent to purchase life and/or disability insurance.<sup>4</sup>

Data from the European Insurance Report 2012 helps identify the effects of socio-economic indicators on life insurance ownership.

The likelihood of having life insurance is positively related to age, marital and family status, income and social grade.

### Socio-economic indicators and the likelihood of having life insurance

To examine the influence of different socio-economic indicators on life insurance demand, data gathered in the Swiss Re-commissioned *European Insurance Report 2012, Customers for Life* was analysed. This survey collected data from 8510 individuals in eight European countries, with 40.6% of respondents reporting that they have insurance which would pay in the event of their death.

The regression analysis shows that all things being equal, men would be 3 percentage points (ppt) more likely to have life insurance, and that the likelihood of owning life insurance increases up to the age of 59 (see Appendix, Table 4 for details).<sup>5</sup> Married people are 8.9 ppt more likely to have life insurance, while having children increases the probability by 4.8 ppt. Not surprisingly, people with mortgages are more likely (8 ppt) to buy life insurance than those without. Additionally, higher income people are significantly more likely to have life insurance, again consistent with expectations.<sup>6</sup> A person of lower social grade and employment is significantly less likely to buy life insurance, even after controlling for income and age.

Respondents were also asked who they most trust for advice. Those who trust financial institutions have a significantly higher probability of having life insurance (10.5 ppt compared to the reference group, who mostly trust family and friends). Those who do not trust any of the options presented, or who say they don't know who to trust have significantly lower probability of owning life insurance.

<sup>3</sup> See Cutler, D.M., A. Finkelstein and K. McGarry (2008), *Preference Heterogeneity and Insurance Markets: Explaining a Puzzle of Insurance*, American Economic Review: Papers and Proceedings. Since people who undertake more preventive activities have lower mortality, the differential risk tolerance helps explain the advantageous selection in mortality insurance - ie, people with lower mortality rates have more insurance. Similarly, it helps explain the adverse selection observed for annuity products - ie, people with higher longevity have more annuities.

<sup>4</sup> Swiss Re proprietary study *Solving the Protection Gap*, Swiss Re, 2013.

<sup>5</sup> The reference group consists of women aged 21 to 29 years old from France, upper middle class, single and never married, no children, no mortgage, fully employed with an annual income up to EUR 30 000.

<sup>6</sup> Similar relationships showing that life insurance ownership increases with age (for the pre-retirement population) and income are observed in other markets. For ownership trends in the US, for example, see LIMRA's reports on *Household Trends in US Life Insurance Ownership*, 2010.

The probability of having life insurance ranges from 14% to 79% for different socio-economic groups.

The statistical model predicts that an upper-middle class married man aged 50–59 with a full time job, annual income of more than EUR 80 000, mortgage, children, who is the insurance decision maker of the household and who also trusts the advice of financial industry professionals has an almost 80% probability of having life insurance (see Table 1). On the other hand, a female student aged 21–29, with no children, no mortgage, and an income of up to EUR 30 000 is estimated to be around only 14% likely to have life insurance.

Table 1  
The probability of having life insurance for select classes of consumers

Gender	Marital status	Age	Insurance decision maker*	Kids	Social grade	Mortgage	Income EUR	Employment	Response to query on most trusted source for advice	Probability having life insurance
man	married	50–59	yes	yes	UMC	yes	more than 80k	full time	financial industry	79%
woman	married	50–59	no	yes	UMC	yes	more than 80k	full time	friends & family	64%
man	married	30–39	yes	yes	UMC	no	more than 80k	full time	no trusted source	49%
man	single	30–39	yes	no	UMC	no	31–80k	full time	media	47%
woman	married	30–39	no	no	UMC	no	31–80k	part time	friends & family	37%
man	divorced	30–39	yes	no	SWC	no	31–80k	full time	friends & family	45%
woman	divorced	30–39	yes	yes	SWC	no	less than 30k	part time	media	39%
man	single	21–29	no	no	SWC	no	less than 30k	part time	friends & family	32%
woman	single	21–29	no	no	SWC	no	less than 30k	student	don't know	14%

Legend: UMC = upper middle class; SWC = skilled working class

\* In the survey participants were asked "are you the person who makes the financial and insurance buying decisions in your household?"  
No means a participant delegated these decisions to their spouse, parents, friends etc.

Source: Swiss Re Economic Research & Consulting, based on *European Insurance Report 2012, Customers for Life*

Individuals could improve their welfare by buying insurance and yet consumers remain exposed to huge uninsured risks ...

Life insurance products cover risks that are often in part borne by social security and employer-sponsored schemes. However, governments and employers are increasingly shifting responsibility for the shouldering of these risks to individuals.<sup>7</sup> Economic theory suggests individuals can improve their welfare by buying insurance to eliminate substantial risks to their own and their families' standard of living.

<sup>7</sup> This is the case for retirement funding (protection against the risk of outliving one's assets), but also life and health insurance.

... amounting to around USD 86 trillion globally.

Yet the reality is that people do not buy life insurance. Indeed, the mortality protection gap – the extent to which families are insufficiently covered in the event of the death of the primary breadwinner – illustrates the far-reaching need for additional protection across societies at large.<sup>8</sup> According to Swiss Re estimates, the gap amounts to around USD 86 trillion globally.<sup>9</sup>

Figure 2  
**The mortality protection gap by region**



Source: Swiss Re estimates

This *sigma* study attempts to improve understanding of consumer behaviour in life insurance.

This *sigma* continues with an examination of why people don't buy life insurance, including a look at behavioural economics to generate better understanding of the consumer decision-making process. The study also comments on the experience of buying life insurance and offers pointers for life insurers to better engage consumers.

<sup>8</sup> For methodology details on mortality gap protection see sigma 4/2004, *Mortality protection: the core of life*.

<sup>9</sup> For more detail on mortality protection gap estimates by region see Swiss Re's publications *The Mortality Protection Gap in the US*, *Mortality Protection Gap: Asia-Pacific 2011*, *Customers for Life – European Insurance Report 2010*, *Term & Health Watch 2012*, and *The Mortality Protection Gap in Latin America 2013*.

# Why do consumers not buy life insurance?

Researchers have struggled to explain why people do not buy enough life insurance, despite its substantial value.

Rational demand limitations...

... and psychological and behavioural biases help explain low insurance take up,...

... while market failures are highly unlikely for term insurance.

Surveys provide useful insights about consumer attitudes and preferences, but must be interpreted with care.

For a long time, economists have struggled to explain why individuals do not purchase enough life insurance, despite the substantial value that mortality protection and other insurance products provide. Plausible explanations include rational demand limitations, psychological and behavioural biases, and market failures:

1. *Rational demand limitations* can occur if social security and government programs crowd out demand for private insurance solutions. In addition, life insurance may not stack up high in the hierarchy of consumer needs, and budget constraints from stagnant or declining real disposable income may limit demand. Moreover, complicated and lengthy application and underwriting processes create transaction costs that – when added to premium payments – may exceed the perceived value of insurance, making it rational not to buy.<sup>10</sup>
2. *Psychological and behavioural biases* including time-inconsistent preferences, lack of financial literacy, overconfidence, or information and choice overload may deter people from buying insurance. Perceived lack of priority due to weaknesses in financial literacy or the consumer tendency to delay making challenging decisions (procrastination) offer other explanations.<sup>11</sup> The next chapter on consumer decision making discusses these psychological biases in detail.
3. *Market failures* may occur if asymmetric information and adverse selection problems exist.<sup>12</sup> In cases where adverse selection is suspected, insurers may need to charge higher prices to make up for the potential crowding out of demand from healthy individuals. For products like term insurance, this is highly unlikely in well-developed markets because term products are simple and homogeneous, and markets are competitive and transparent.<sup>13</sup> However, for other products such as long-term care insurance, frictions between the cost and expected benefit on the part of the consumer may dampen demand.<sup>14</sup>

It is difficult to directly observe consumer actions, and research into buying behaviour is often based on survey evidence. It is important to remember that the preferences and attitudes consumers demonstrate in survey responses may deviate from actual behaviours. The way survey questions are framed may influence how people answer, people may respond in a way they think the questioner wants them to answer (response bias), they may express protest or they may answer strategically. Nonetheless, consumer surveys and market experiments provide useful information and insight that can help life insurers fashion and improve their approach to consumers.

<sup>10</sup> For other bequest motives, liquidity concerns and desire for flexibility may further reduce demand for types of life insurance such as annuity products.

<sup>11</sup> A LIMRA survey found that four out of five households in the US have other financial priorities that trump life insurance. See, *Household Trends in U.S. Life Insurance Ownership*, LIMRA, 2010. A Deloitte survey similarly concluded that life insurance is the top financial priority for only a small minority of respondents (10% of buyers and 4% of non-buyers). See *The Voice of the Life Insurance Consumer, What Makes Prospects Tick?* Deloitte, 2011.

<sup>12</sup> Asymmetric information occurs when one party has more or better information than the other, creating an imbalance of power and undesirable market outcomes. Adverse selection is a consequence of information asymmetries. In insurance, adverse selection problems occur when higher-risk people tend to buy more insurance but the insurer is unable or not allowed to account for this in the price.

<sup>13</sup> For trends in term life prices in US market, see *Have Term Life Prices Risen Enough*, Swiss Re, 2010.

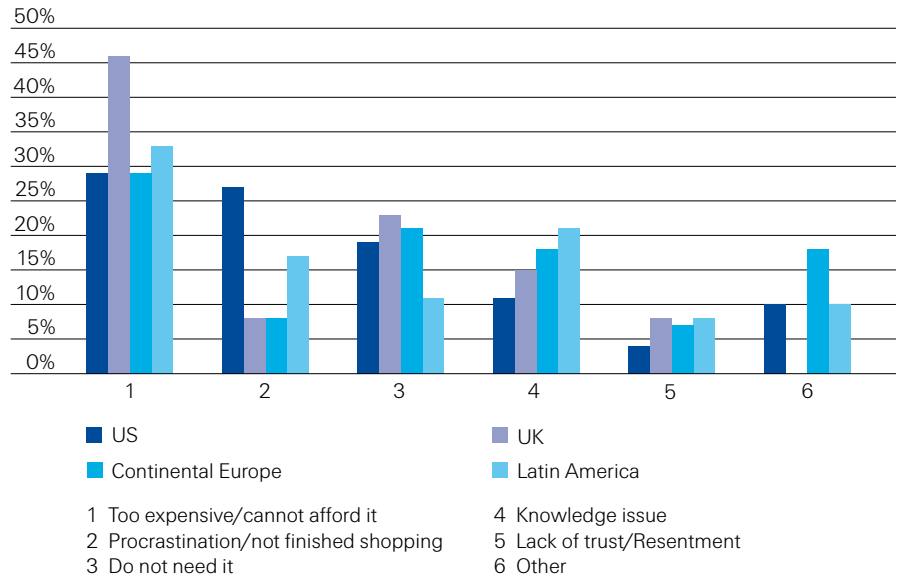
<sup>14</sup> Brown and Finkelstein find some evidence for an imbalance between premium payments and expected benefits of long-term care insurance. However, they conclude this alone cannot explain the low LTCI coverage and that there must also be demand side effects preventing wider uptake of LTCI. See Brown, J. R. and A. Finkelstein (2007), *Why is the market for long-term care insurance so small?* Journal of Public Economics, 91(10): 1967–91.



In the US, Europe and Latin America price and affordability are the main reasons people cite for not buying life insurance.

Figure 3  
**Main reasons why consumers do not buy life insurance**

In several surveys of consumers across the globe, price and affordability are main reasons people cite for not buying life insurance (see Figure 3). Another key rationale cited is a perceived lack of need for (additional) life insurance. Procrastination, limited knowledge, complexity of life products and a lack of trust in or resentment against the insurance industry are also offered as explanations for the decision to not buy insurance.



Sources: US: *Buyers and Non-Buyers*, LIMRA, 2012; Continental Europe: *European Insurance Report: Customers for Life*, Swiss Re, 2012; UK: *The Insurance Report, Facing Life's Responsibilities*, Swiss Re, 2011; Latin America: *Latin America Insurance Report 2013*, Swiss Re, forthcoming.

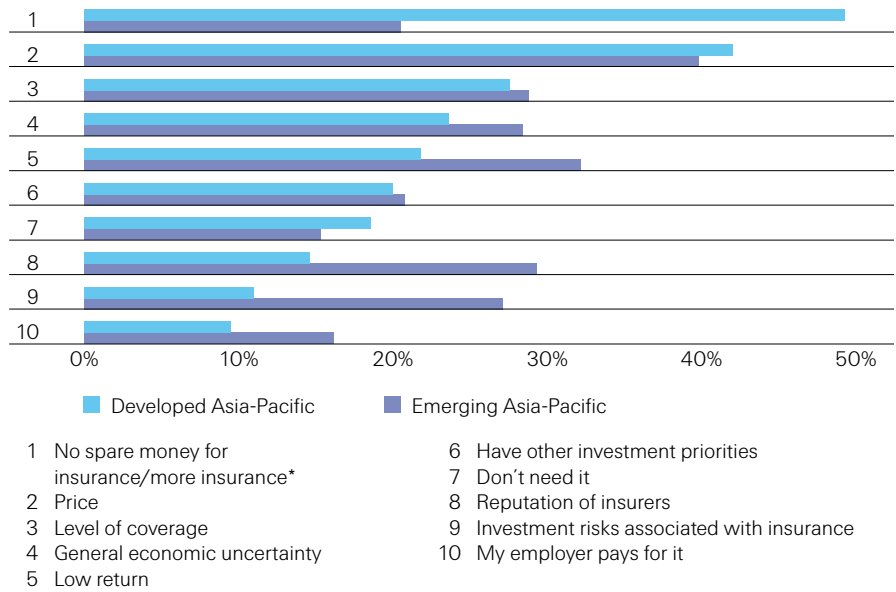
In Asia-Pacific, value-for-money concerns are identified as the main reason to not buy life insurance.

Similarly, a large-scale Swiss Re commissioned survey in Asia-Pacific found the most often cited reasons for not buying insurance to be concerns about affordability and value for money.<sup>15</sup> In emerging markets, low returns and insurers' reputation and financial strength were also mentioned (see Figure 4).

<sup>15</sup> The survey covered 13,800 consumers between the ages of 20 and 40 in developed and emerging markets. Developed markets comprise Australia, Hong Kong, Singapore, Japan, Taiwan, South Korea; Emerging markets comprise Malaysia, China, Indonesia, Vietnam and India.

Why do consumers not buy life insurance?

Figure 4  
**Key factors respondents mention for not purchasing life insurance (Asia-Pacific, in %, multiple responses allowed)**



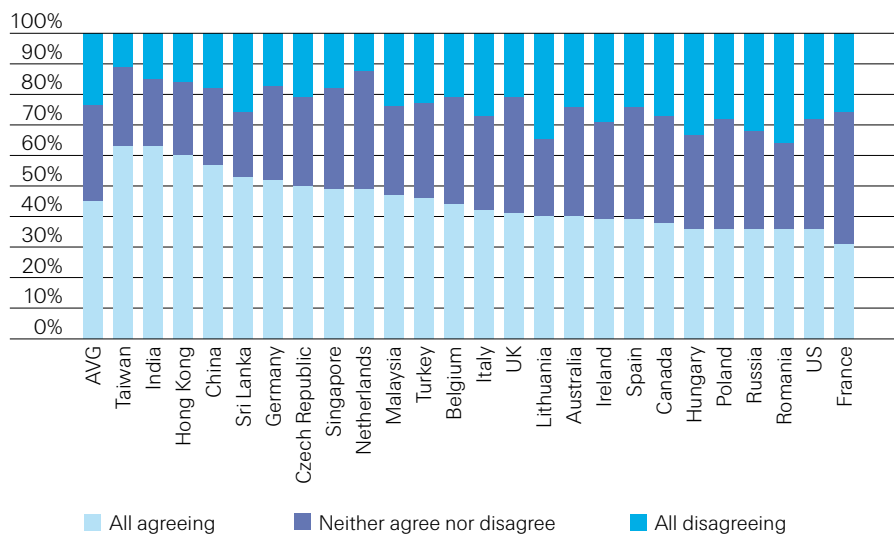
\*It is surprising that more people in developed than in emerging Asia cite "no spare money" as the reason to not purchase life insurance.

Source: *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*, Swiss Re, 2011

People have a poor understanding of life insurance and related products.

It is probably fair to say that not many consumers understand how pooling and risk sharing allow insurers to offer mortality, morbidity or longevity protection. According to LIMRA, consumers in the US have only basic knowledge of life insurance products.<sup>16</sup> That situation is unlikely to be much better in other countries.<sup>17</sup> However, consumers' lack of confidence in making decisions related to financial matters is much broader than limited understanding of life insurance. According to a 2008 survey by AVIVA, less than half of consumers globally felt that they had all the information they needed to make sound decisions about financial matters in general (see Figure 5).

Figure 5  
**"I have all information I need to make well informed decisions about my personal finances"**



Source: *Understanding Consumer Attitudes to Saving*, AVIVA, 2008

<sup>16</sup> See *What Do They Know, Anyway – Consumer Understanding of Life Insurance*, LIMRA, 2012.

<sup>17</sup> According to a survey done by the Dutch Association of Insurers, 23% of life policyholder did not know what kind of life insurance policy they had. See *CVS Consumentenmonitor 2012*.

Consumers frequently do not know what insurance products and how much insurance they need.

In addition, many underinsured households find it challenging to determine what type of life insurance to buy and how much life insurance they need.<sup>18</sup> Families may purchase policies relatively early in life and then fail to adjust their level of protection appropriately as needs change, or they may purchase little or no life insurance at all. A US-based study found a stark mismatch between insurance cover and underlying financial vulnerabilities. For many households with the greatest vulnerability, the amounts purchased were surprisingly small and for many with the smallest vulnerability, purchase amounts were surprisingly large.<sup>19</sup>

Communication failures and a cumbersome selling process create more barriers for consumers.

Beyond the lack of understanding how insurance works and how to evaluate the need for life insurance, communication failures and the often long and cumbersome selling process create additional barriers to purchasing life insurance. Insurers continue to use terminology in their promotion and contract literature which is archaic and hard to comprehend, often leading to incorrect or confusing associations. For example, a study showed that young consumers are more likely to associate the word 'agent' with the FBI, 'protection' with birth control, and 'policy' with general rules than with insurance.<sup>20</sup>

Moreover, the complexity of underwriting requirements may dissuade some consumers.

Moreover, the request for insurance and underwriting process involved may take a long time, including a health assessment with possibly invasive medical action (eg, drawing of blood, EKG). This can dissuade some consumers. By way of illustration, consumers with a strong sense of responsibility to protect others dependent on them are also the most likely to say their expectations of the assessment process makes them less likely to purchase life insurance.<sup>21</sup>

People often refrain from buying adequate insurance due to value for money concerns and poor understanding of the benefits relative to their needs.

The common themes of all the surveys are consumer concerns about value for money, product pricing, affordability and a cumbersome buying process. Moreover, consumers often do not understand the insurance concepts and some of the products on offer, and the complexity of the underwriting requirements is non-transparent and also difficult to comprehend. Such concerns are inter-related: poor understanding of products and a complicated buying process lead both to a perception of low value for money and of lack of need for insurance, which chokes consumers' ability to engage in one swoop. This is true for any good or service, but experience suggests that life insurance is particularly exposed to the risk that consumers turn away simply because they do not fully understand the benefits and are put off by the convoluted buying process involved.

Insurers can increase life insurance ownership by demonstrating the benefits of their products and by simplifying the purchasing process.

These challenges show how important it is for life insurers to be able to reach consumers. They need to be able to effectively demonstrate the benefits of insurance products and how these meet the needs of consumers. In particular, improving perceptions among non-buyers of life insurance, who far outnumber buyers, could boost insurance sales substantially.

<sup>18</sup> In the US, 44% of underinsured households report having difficulty deciding how much coverage is appropriate. See *Trillion Dollar Baby – Growing Up*, LIMRA, 2011, Table 5.

<sup>19</sup> See Bernheim, B. D., L. Forni, J. Gokhale and L. J. Kotlikoff (2003), *The Mismatch Between Life Insurance Holdings and Financial Vulnerabilities: Evidence from the Health and Retirement Study*, *The American Economic Review*, 93(1): 354-365.

<sup>20</sup> Maddock Douglas, *You Talkin' To Me? How Gen Y Hears 'Insurance'*, August, 2010.

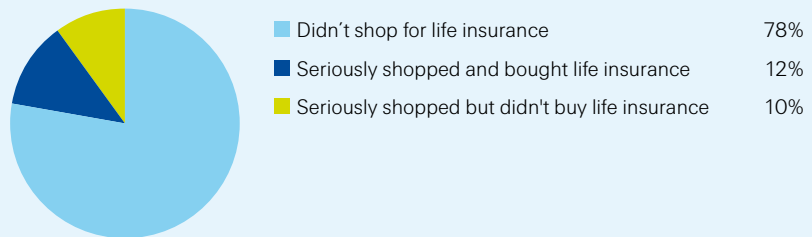
<sup>21</sup> Swiss Re, 2013 proprietary study *Solving the Protection Gap*.

A promising market segment is those who do not seek life insurance out of their own volition.

Figure 6  
**Buyers and non-buyers of life insurance, US households (%), 2011**

### The non-shoppers: life insurance still needs to reach a large part of the population

Given the large protection gap and large portion of un- or underinsured US households, the finding that only a small percentage of households – 22% in 2011 – go shopping for life insurance<sup>22</sup> may not come as a surprise. As the old saying goes, *life insurance is sold not bought*: most people do not seek life insurance. They do not consider buying life insurance unless they are approached by financial advisors, insurers or agents.



Source: *To Buy or Not to Buy Life Insurance*, LIMRA, 2011

Those insurers who are able to tap the large population group of non-shoppers could well increase sales significantly, even if success rates are lower than for the serious shoppers (of whom about 54% eventually buy). Further, with social media and the internet, reaching out to consumers can be done at much lower cost, making the non-shopper segment increasingly attractive for life insurance companies. This theme is continued in the chapter on *Understanding the consumer buying experience*.

<sup>22</sup> See *U.S. Life Insurance Buyer-Nonbuyer*, LIMRA, 2011.

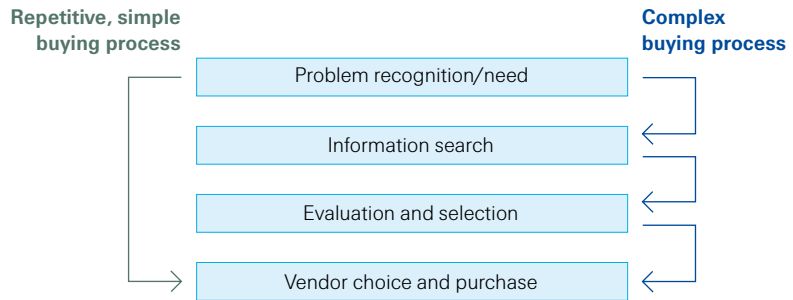
# Consumer decision making

Any buying decision is a multi-staged process, but experience allows us to take short cuts.

## The decision-making process

For everyday purchases (eg, breakfast cereals), buying decisions are routine, based on past experience and made quickly. However, for goods and services that are first-time buys or bought infrequently, that are very expensive, or entail complex purchasing processes, the decision-making time for the consumer can be lengthy. Information must be collected and processed, and various alternatives evaluated before a choice can be made (see Figure 7).

Figure 7  
The decision-making process



Source: Swiss Re Economic Research & Consulting

Buying life insurance is complex and demanding.

Buying life insurance is a demanding process. It starts with problem recognition and a needs analysis which, even for the financially literate, can be challenging. The needs analysis requires a whole range of often unpleasant contingency thinking, for example: “what if I die, lose my job, get sick or become disabled?”, and knowledge of workplace and social security safety nets. Once the needs assessment is complete, many hurdles remain, including choosing the most relevant product and navigating lengthy product descriptions written in hard-to-understand technical language. Moreover, consumers have to go through an often time-consuming and non-transparent underwriting process.

### Behavioural decision making

*“Utility maximization is neither a necessary nor sufficient condition for deducing who will buy insurance.”<sup>23</sup> Nobel Laureate Herbert Simon*

In their behaviour, many individuals do not maximize long-term utility.

Individuals’ real world decision making often reveals behaviour inconsistent with maximizing expected utility. In experiments, researchers have found ample evidence of behaviour that systematically violates the theoretical framework and the underlying assumptions of rational decision making.<sup>24</sup> In these instances, traditional economics has turned out to be a poor predictor of consumer decision making.<sup>25</sup>

<sup>23</sup> Simon, H. A. (1982), *Models of Bounded Rationality: Empirically Grounded Economic Reason*, Vol. 3, MIT Press.

<sup>24</sup> See Kahneman, D., and A. Tversky (1979), *Prospect Theory: An Analysis of Decision under Risk*, *Econometrica*, 47(2): 263–91.

<sup>25</sup> This does not imply that traditional economics is obsolete. For example, in the insurance context, traditional economics is a valuable concept to derive normative policy goals such as to reduce the protection gap. However, behavioural economics may provide insights and guidance on how to help consumers act in a way that assures the policy goal can be achieved. Traditional and behavioural economics are complementary, not substitutes.

### Rational decision making

In traditional economics individuals are assumed to be rational agents.

In traditional economics individuals are rational agents, often referred to as homo economicus and assumed to maximize their long-term well-being using all available information. If rational agents have a choice between various solutions, they will choose the one that gives them the highest utility.<sup>26</sup>

In situations with uncertain outcomes, rational agents are assumed to maximize their probability weighted utility. For example, if people can choose between a 10% chance winning 1000 (in any currency) and a 50% chance of winning 500, they will prefer the 50% option (expected value of  $250 = 50\% \cdot 500$ , instead of  $100 = 10\% \cdot 1000$ ).

Moreover, people are assumed to be risk averse. Presented a choice of receiving 80 with 100% certainty, and a 50% chance of winning 200, most would take the 80 even though the 50% lottery has higher expected value. In other words, individuals are willing to sacrifice an uncertain higher gain for a certain lower outcome. Being risk averse, rational agents are willing to pay to avoid risk and uncertainty, which leads to the assumption that they are also willing to buy insurance.

Behavioural economics strives to provide a framework that describes and improves predictions about decision making.

This shortcoming of traditional economics has given rise to the study of behavioural economics, which stresses the limits to rationality, and that emotions, concerns about fairness and cognitive biases play an important role in human decision making. It is a positive (as opposed to normative) evidence-based approach to understanding consumer choice. One of its important pillars is prospect theory and another is cognitive biases.

### Prospect theory

Prospect theory seeks to explain consumer decisions when outcomes and information are uncertain.

Prospect theory is widely viewed as the best available description of how people evaluate risk and make decisions under uncertainty, and is an important means of analysing consumers' decision making about insurance.<sup>27</sup> The main postulates of prospect theory are reference dependence, loss aversion, diminishing sensitivity, and probability weighting:

#### *Reference dependence*

In reality, individuals do not optimize based on the long-term final state (traditional economics view), but rather on short-term deviations from the status quo.

Prospect theory argues that individuals make decisions based on gains or losses relative to a reference point, often the status quo (see Figure 8). In reality, humans act in a short-sighted or 'narrow-framed' manner based on deviations from their current utility/wealth, rather than maximizing long-term outcomes as assumed in traditional economics.

<sup>26</sup> This does not necessarily mean that rational agents are purely selfish. Traditional economics may also take utility of other individuals (eg, spouse, children, or neighborhood) into account. It is worth mentioning that already Adam Smith, the grandfather of modern economics, best known for the concept of the "invisible hand" and *The Wealth of Nations*, laid out the psychological principles of individual decision making (see *The Theory of Moral Sentiments*). Jeremy Bentham, whose utility concept formed the foundation of neoclassical economics, wrote extensively about the psychological underpinnings of utility

<sup>27</sup> A nice overview of prospect theory and its applications can be found in Barberis, N. C. (2013), *Thirty Years of Prospect Theory in Economics: A Review and Assessment*, *Journal of Economic Perspectives*, 27(1): 173–96.

A loss hurts individuals more than an equal gain in wealth or utility.

People prefer small sure gains over large but unlikely gains.

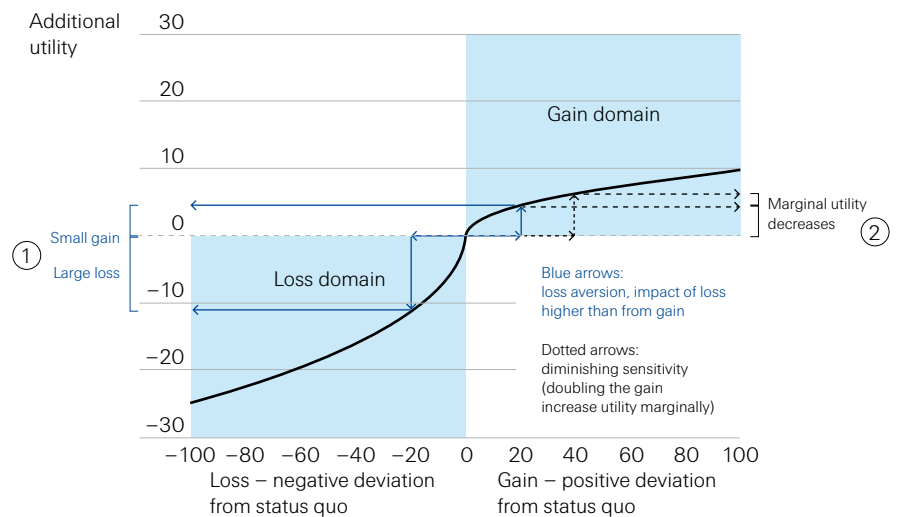
**Loss aversion**

Individuals' utility is more sensitive to losses than gains in wealth of an equal amount (see ① in Figure 8).<sup>28</sup> Loss aversion can be seen as an innate survival tactic, a built-in human behavioural backstop that has helped mankind during the course of evolution. Loss aversion prevents humans from gambling with what they possess in order to survive. Losing a stock of nutrition for a potential gain of even double the amount of food did not make sense in ancient times (or for animals).

**Diminishing sensitivity with regards to gains and losses**

Utility increases with gains, but every additional gain has a smaller, though still positive, impact on utility (the utility function is concave in the gain domain – see ② in Figure 8). Likewise a loss decreases utility, and with every additional loss utility further decreases, but again at slower pace (utility function is convex in the loss domain). An implication of diminishing sensitivity is that individuals are risk averse in the gain domain: they prefer a sure gain over a larger uncertain gain. However, in the loss domain, when faced with losses people tend to be risk seeking in that they are prone to gamble a certain loss at the risk of incurring an even bigger loss.<sup>29</sup>

Figure 8  
**The Prospect Theory Value Function**



Note: The graph plots the value function proposed by Tversky and Kahneman (1992) as part of cumulative prospect theory, namely  $v(x) = x^\alpha$  for  $x \geq 0$  and  $v(x) = -\lambda(-x)^\alpha$  for  $x < 0$ , where  $x$  is a dollar gain or loss. The authors estimate  $\alpha = 0.88$  and  $\lambda = 2.25$  from experimental data. The plot uses  $\alpha = 0.5$  and  $\lambda = 2.5$  so as to make loss aversion and diminishing sensitivity easier to see.

Source: Barberis (2013) op. cit.

<sup>28</sup> Losses hurt at about factor 2 to 2.5 compared to gains, see Kahneman, D., J. Knetsch and R. Thaler (1991), *The Endowment Effect, Loss Aversion, and Status Quo Bias: Anomalies*. Journal of Economic Perspectives, 5(1): 193–206.

<sup>29</sup> In contrast, expected utility theory assumes increasing sensitivity with regards to losses.

Because people are limited in their ability to evaluate extreme probabilities, they tend to overweight (underweight) low (high) probability events.

Prospect theory provides interesting insights on human behaviours, but does not offer a comprehensive explanation of insurance buying.

People may stay uninsured to avoid the certain loss of paying premiums, or because they ignore small-probability events.

People have certain biases which affect their decisions, making some decisions appear irrational.

People tend to delay making unpleasant, demanding decisions and buying insurance presents many opportunities to procrastinate.

### *Probability weighting*

In prospect theory, people do not weigh outcomes by objective probabilities but rather by transformed probabilities or decision weights. As people are limited in their ability to evaluate extreme probabilities, when it comes to dealing with tail risk, highly unlikely events are overweighted while highly likely events are underweighted.

According to prospect theory, people's attitudes toward risk are determined jointly through reference dependence, loss aversion, diminishing sensitivity and probability weighting. Prospect theory has been developed, parameterized and tested in an experimental environment and provides interesting insights on human behaviour. However, it does not provide a comprehensive explanation of insurance buying decisions as observed in real world,<sup>30</sup> and there are only a few well-known and broadly accepted applications of prospect theory in economics.<sup>31</sup>

A general interpretation of prospect theory is that buying insurance is a loss-domain decision, namely individuals consider the trade-off between a certain premium payment against an uncertain claim event. Within certain risk probability limits, individuals prefer to remain uninsured, so avoiding the premium payment and accepting the risk of potentially a large financial hit should an uncertain loss-inducing event occur.

### **Cognitive biases**

While the implications of prospect theory for buying insurance are not completely clear, cognitive biases<sup>32</sup> have been shown to hinder rational decision making (see Table 2 for an overview of selected cognitive biases). Understanding how these biases influence decision making may help insurers improve their products as well as the buying experience for consumers. Some of the key cognitive biases pertaining to insurance buying are discussed below.<sup>33/34</sup>

#### *Procrastination and status quo bias<sup>35</sup>*

People often postpone making tough decisions because for many this involves unpleasant discussion and/or thoughts. Procrastination may also be linked to loss aversion in the sense that people sometimes delay making a decision in order to avoid the emotional stress and responsibility of making a wrong decision. Procrastination is in fact a severe hurdle to buying insurance. It stems from the buying process not being fully understood by the consumer, the involvement of many difficult tasks and the need for substantial knowledge. In addition, the buying process is often lengthy, particularly when it involves medical underwriting, and there are plenty of opportunities to procrastinate.

<sup>30</sup> Kahneman, D., and A. Tversky (1979), op. cit. p 286.

<sup>31</sup> See Barberis (2013), op. cit. p. 173.

<sup>32</sup> "Cognitive biases are systematic deviations from a standard of rationality or good judgment, often confirmed by research in psychology and behavioural economics." This definition as well as a list of more than 90 cognitive biases can be found at [http://en.wikipedia.org/wiki/List\\_of\\_cognitive\\_biases](http://en.wikipedia.org/wiki/List_of_cognitive_biases), 20 June 2013.

<sup>33</sup> A comprehensive overview of behavioural economics in the financial context is given in Dolan, P., Elliott, A., Metcalfe, R. and Vlaev, I. (2012), *Influencing Financial Behaviour: from Changing Minds to Changing Contexts*, Journal of Behavioural Finance, 13(2): 126-142.

<sup>34</sup> How cognitive biases and anomalies can be integrated in traditional economics is presented in Kunreuther, H. and Pauly, M. (2006), *Insurance Decision-Making and Market Behaviour*, Foundations and Trends® in Microeconomics, 1(2): 63–127.

<sup>35</sup> Procrastination: "to voluntarily delay an intended course of action despite expecting to be worse off for the delay." Steel, P. (2007), *The Nature of Procrastination: A Meta-analytic and Theoretical Review of Quintessential Self-regulatory Failure*, Psychological Bulletin, 133 (1): 65–94.



People often reveal time inconsistent preferences and make short-sighted decisions they may later regret, ...

...but this can also be used to the benefit of consumers.

Framing refers to how and by whom choices are presented.

A positive framing of an option influences the likelihood that people choose the option and vice versa.

Default options are powerful frames that can help individuals make better choices.

### *Time-inconsistent preferences*

In experimental research, individuals often reveal time-inconsistent preferences.<sup>36</sup> When questioned with the likes of: "Would you prefer a dollar today or three dollars tomorrow?" or "Would you prefer a dollar in one year or three dollars in one year and one day?" for a certain range of offerings, a significant proportion of respondents prefer the lesser amount today, but will wait one extra day in a year to receive the higher amount instead. In short, individuals apply 'hyperbolic discounting' in which perceived value falls very rapidly for small-delay periods and slowly for longer delay periods.<sup>37</sup>

This particular cognitive bias can be exploited to the benefit of consumers. In 2004, Thaler and Benartzi proposed '*Save More Tomorrow*',<sup>38</sup> a program in which employees commit in advance to allocating a portion of their future salary increases toward retirement savings. The program has had a large and lasting effect on savings rates. Similar self-commitments could be implemented in life insurance.

### *Framing*

Individuals are influenced by their decision environment and how a choice is presented.<sup>39</sup> Framing is a powerful concept that can be leveraged for sales purposes. There are always many ways to present, explain or describe something. The art is to choose the most appealing option.

For example, in experiments Agnew et al. (2008)<sup>40</sup> as well as Brown et al. (2008)<sup>41</sup> found strong evidence for framing effects on the attractiveness of annuities. Both a negative framing of annuities, and a framing of annuities as an investment rather than insurance product, had negative impact on the perceived attractiveness of annuities.

Default options can also be very strong frames. Doing nothing is easier than analyzing various options and then making a decision (this is also related to information overload and procrastination). This results in a strong bias towards status quo. In this context, for example, by setting a clever default and allowing individuals to opt out, participation in insurance could be improved.<sup>42</sup>

<sup>36</sup> Thaler, R. H. (1981), *Some Empirical Evidence on Dynamic Inconsistency*, *Economic Letters* 8(3): 201–207.

<sup>37</sup> In one example, in a military downsizing program army personnel were given a choice between receiving a lump sum and a fixed number of payments over time. Half of the officers and 92% of the enlisted personnel chose the lump sum option over multiple payments, even though the discount rate used in the conversion was almost 20%. See Warner, J., T. and S. Pleeter (2001), *The Personal Discount Rate: Evidence from Military Downsizing Programs*, *American Economic Review*, 91(1): 33–53.

<sup>38</sup> Thaler, R. H. and s. Benartzi (2004), *Save More Tomorrow: Using Behavioural Economics to Increase Employee Saving*, *Journal of Political Economy*, 112(1): 164–187.

<sup>39</sup> The standard example of framing, the Asian disease problem, is illustrated in section *Experimental demonstration* on [http://en.wikipedia.org/wiki/Framing\\_\(social\\_sciences\)](http://en.wikipedia.org/wiki/Framing_(social_sciences)), 21 June 2013.

<sup>40</sup> Agnew, J. R., L. R. Anderson, J. R. Gerlach and L. R. Szykman (2008), *Who Chooses Annuities? An Experimental Investigation of the Role of Gender, Framing, and Defaults*, *American Economic Review: Papers & Proceedings* 2008, 98(2): 418–422.

<sup>41</sup> Brown, J. R., J. R. Kling, S. Mullainathan and M. V. Wrobel (2008), *Why Don't People Insure Late-Life Consumption? A Framing Explanation of the Under-Annuity Puzzle*, *American Economic Review*, 98(2): 304–09.

<sup>42</sup> A good example of such a program is the auto enrollment default for 401(k) retirement plans in the US (implemented with the Pension Protection Act in 2006).

Table 2

**Selected cognitive biases**

<b>Bias</b>	<b>Description</b>
Procrastination	Refers to the act of replacing more urgent actions with tasks less urgent, or doing something from which one derives enjoyment, and thus putting off impending tasks to a later time.
Status quo bias	Tendency to like things to stay relatively the same.
Time-inconsistent preferences (hyperbolic discounting, myopia)	Tendency for people to have a stronger preference for more immediate payoffs relative to later payoffs, where the tendency increases the closer to the present both payoffs are.
Framing	Drawing different conclusions from the same information, depending on how or by whom that information is presented.
Mental accounting	People implicitly allocate money to different 'mental accounts', and do not worry too much about spending money within that bucket.
Narrow framing	Occurs if someone makes decisions without considering it in the context of his total wealth and/or by only taking the short-term consequences into account. In many experiments and real world observations, people forego good opportunities due to risk aversion caused by narrow framing.
Overconfidence	Tendency to be over-optimistic, overestimating favourable and pleasing outcomes.
Risk perception	Once the probability for an event is below a certain limit, people behave as if it could not happen at all.
Availability bias/salience	Tendency to overestimate the likelihood of events with greater availability in memory, which can be influenced by how recent the memories are or how unusual or emotionally charged they may be. People review their risk assessment once certain events occur. For example people tend to buy more property insurance after an earthquake.
Herding and social norms	Tendency to deal with complexity and search costs in making decisions by imitating what other people/peers do. It is reasoning along the lines of "if it makes sense for them, it will be good for me too." Can be efficient and rational under specific circumstances.
Heuristics	Individuals often depend on experience-based techniques for problem solving, such as using a rule of thumb or common sense, especially if decision making is complex. Heuristics are often operationally rational, although they may result in systematically inferior decisions.

Source: See [http://en.wikipedia.org/wiki/List\\_of\\_cognitive\\_biases](http://en.wikipedia.org/wiki/List_of_cognitive_biases); and Swiss Re Economic Research & Consulting

People often overestimate their abilities, thereby crowding out the perceived need for insurance.

#### *Overconfidence and risk perception*

Overconfidence is a well-established bias in which an individual's subjective confidence in his or her abilities is greater than their objective accuracy. For example, 93% of US drivers rate themselves as better drivers than the median.<sup>43</sup> In the same vein, some people think 'good' things are more likely to happen to them than to others and 'bad' events less likely than to others. Overconfidence can lead to poor decisions about the usefulness of insurance in mitigating risk. It is particularly difficult for people to deal with very small probabilities. In many peoples' minds, the risk of dying at a young age is simply ignored. They assume it could never happen and do not buy the insurance that could be of substantial benefit to those around them in the event of their early death.

Recent experiences play an important role in risk perception bias.

On the other hand, recent experiences also play an important role for risk perception bias. People assess their risks once certain events occur and tend to overestimate small risks that recently became salient (availability bias). For example, people tend to buy more property insurance after an earthquake, or life insurance after events like 9/11.

<sup>43</sup> Svenson, O. (1981), *Are We Less Risky and More Skillful than Our Fellow Drivers?*, *Acta Psychologica* 47: 143–151.

When presented with too much information and choices, consumers often fail to act, or make poor decisions.

Heuristics, herding and social norms are strategies to avoid information and choice overload.

Sales staff and regulation can contribute to the information overload.

Behavioural economics provides many insights that can be used to help people make better decisions.

Behavioural economics is important to policymakers in designing strategies to achieve desirable policy goals.

#### *Information overload*

Information overload refers to the quantity and complexity of information. Contrary to popular belief, more information does not necessarily help consumers make better decisions. Empirical evidence shows that too much information makes it hard for people to evaluate choices. To process an abundance of information without being swayed and/or put off by irrelevant detail can be too large a task for the human brain. When presented with too many and/or complex choices, people simply fail to act. There is plenty of empirical evidence to show that a person's willingness to participate in a market (eg, to buy a good or service) is lower when it involves making a choice from a large set of available options.<sup>44</sup>

Alternatively, people take short cuts. They rely on heuristics<sup>45</sup> to make decisions, or reveal herding (ie, copy the behaviour of peers due to a desire to conform). Decision making based on herding and social norms can be rational if individuals assume their peers have similar preferences and better information, or fear that the few deviating from a social norm will not be supported by the larger community constituting a social norm. Well-established social norms can steer behaviour. In the case of life insurance, consumers will be more likely to consider buying it if their friends, family and co-workers own life insurance and share positive experiences.

Life insurers, their sales staff and financial advisors often add to the cognitive information overload by using complex technical terminology. Legislators and regulators introduce complexity too. In many countries consumers are meant to read reams of pages on product description and related risks, and in signing, have to confirm that they fully understand the details of an insurance contract.

Behavioural economics is still evolving as a discipline but it nonetheless contributes to understanding consumer behaviour. One basic insight is that changing the context in which decisions are made and how information is presented has a big impact on consumer actions. For example, it has been shown that details which may be considered as relatively minor, such as how a letter is formatted and structured, can have a significant impact on consumer response.<sup>46</sup> These are interesting and relevant insights, but also confirm that many aspects of behavioural economics are very context-specific and cannot be generalized. There is clearly a lot to be gained from more testing and studies directly related to insurance.

Behavioural economics is also important for policymakers. Insights have already been used to guide consumers towards beneficial solutions for both individuals and society. Some examples include increased saving for retirement by setting participation as the default option in savings programs, increased pooling through mandatory vehicle insurance, and programs that boost healthier lifestyle behaviours (eg, warning labels on cigarette boxes, nutritional information on packaged food products). In the life insurance context, the policy goal is to reduce the protection gap to increase both individual and societal welfare. With regard to implementing a strategy in support of this goal, behavioural economics provides important insights into how to help consumers overcome biases and make better choices in managing their exposure to risk events.

<sup>44</sup> For example, a study found that participation rates in the US 401(k) pension plan decline as the number of fund options increases. See Iyengar, S. and E. Kamenica (2007), *Choice Overload and Simplicity Seeking*, Columbia University mimeo.

<sup>45</sup> In this context, a heuristic is a decision-making shortcut (rule of thumb) that allows people to solve problems and make judgments quickly and efficiently. Heuristics are helpful in many situations, but they can also lead to inferior outcomes.

<sup>46</sup> Adams, P., and S. Hunt (2013), *Encouraging Consumers to Claim Redress: Evidence from a Field Trial*, Financial Conduct Authority, Occasional Paper No 2.

# Understanding the consumer buying experience

This chapter sheds some light on the consumer buying experience to provide insights into how life insurers can better engage consumers.

## Where do consumers seek information?

Traditionally, consumers have depended on information from financial advisors, but the implied principal-agent relationship can be a source of mistrust.

Consumers need clear, relevant, coherent and user-friendly information when buying insurance. Given the complexity of the process from needs assessment through to purchase, guidance and support is also very valuable. The traditional approach to buying insurance has been and still is to get advice from a sales person or advisor. However in many cases, this has proven sub-optimal. There can be an element of mistrust involved since consumers know that advisors are motivated not just by a desire to best service the needs of the customers, but also by financial incentives. For the consumer who ultimately depends on the advisor for accurate information about the right product, what level of coverage to buy and for how long, this creates an asymmetric information situation and a principal-agent problem<sup>47</sup> which can derail a decision to purchase, even if the consumers know he/she would benefit from having life insurance.

The internet and social media bring increased transparency which has changed consumer behaviour in many markets.

Meanwhile, the rapid development of information technology has made information cheaper and more accessible for consumers than ever before. Increasingly consumers compare prices and products online to secure the best value, carefully weigh options, review content, and share opinions about products, price, quality and buying experience. Information on prices and quality are pooled and published on comparison websites, often fed with information from customers. Consumer goods manufacturers, airlines, restaurants and tourist operators were among the first to adapt to these trends, a necessity in order to survive in more transparent, competitive markets. Life insurers have been relatively sheltered from the online revolution so far, but this will change.

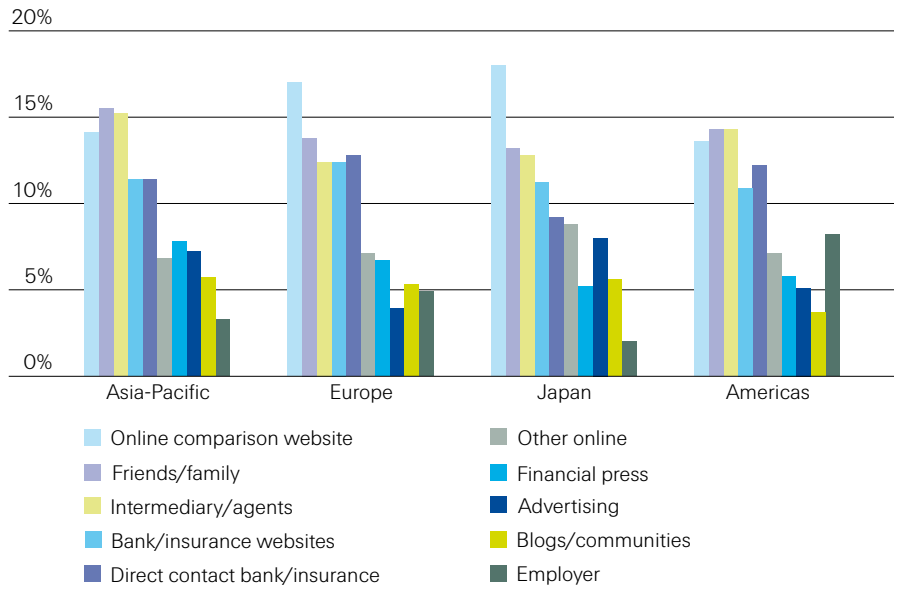
Online comparison sites will likely play an important role for life insurance sales in the future.

An Ernst&Young insurance survey conducted in 2011<sup>48</sup> asked people which sources of information they would use to research a new life insurance policy. Respondents across the globe said that online comparison sites would be the favoured source of information (see Figure 9). In Asia-Pacific and the Americas, friends and families as well as intermediaries and agents were likewise identified as playing a leading role. Very similar results were gathered in the Swiss Re *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*.

<sup>47</sup> The principal-agent problem in economics concerns the difficulties in motivating one party (the agent), to act in the best interests of another (the "principal") rather than in his or her own interests. In the case of insurance, sales agents may not act in the best interest of consumers since they are paid by the insurer.

<sup>48</sup> *Global Overview: Voice of the Customer - Time for Insurers to Rethink their Relationships, Global Consumer Insurance Survey*, Ernst&Young, 2012.

Figure 9  
**Which source of information would you use to research a new policy?**

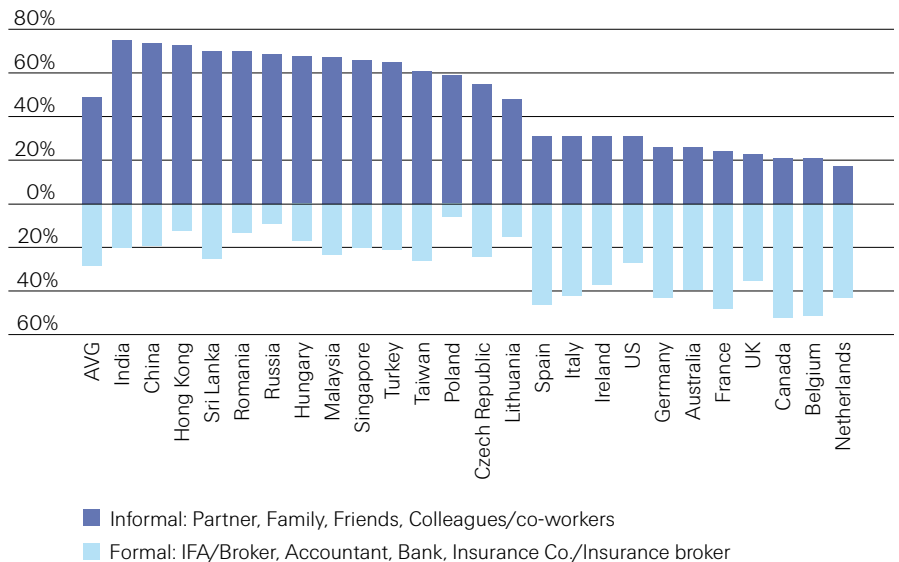


Source: *Voice of the Customer - Time for Insurers to Rethink their Relationships, Global Consumer Insurance Survey, Ernst&Young, 2012*

Informal networks and advice from family, friends and colleagues play an important role in purchasing decisions.

According to a survey by AVIVA, there are regional differences when it comes to preferred sources for financial advice. In Western Europe and Anglo-Saxon markets, consumers rely mostly on professional advice. In contrast, in Asian and Central and Eastern European markets, people are more likely to use informal sources of information. In these regions, nearly half of the survey respondents said they rely most on informal networks for information on financial matters rather than advice from professionals.

Figure 10  
**"Who do you most rely on for advice on financial services?"**



Source: *Understanding Consumer Attitudes to Saving, AVIVA, 2008*

Young consumers tend to trust the internet and friends more, while the older prefer to rely on advice from insurance companies and financial advisors.

People trust the online content generated by their peers.

Today life insurance sales are still mostly made face-to-face.

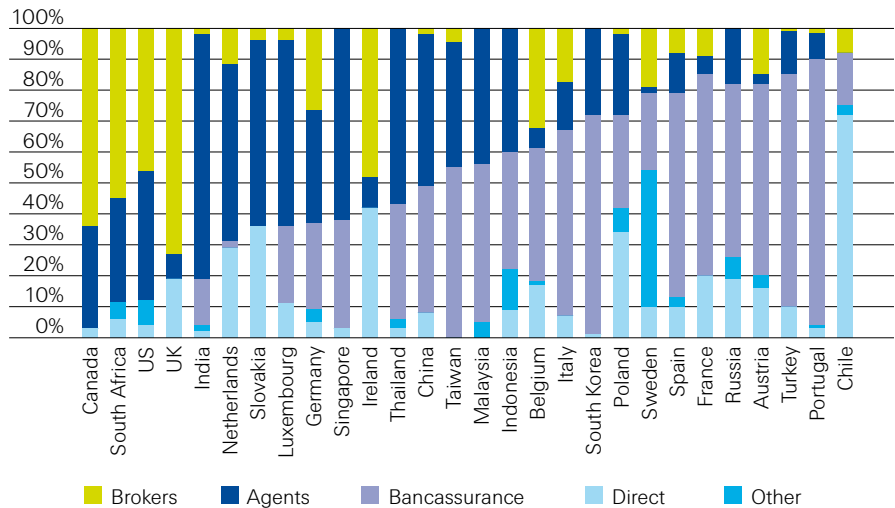
Interesting age patterns have been observed as in the Swiss Re's *European Insurance Report 2012* and *Latin America Insurance Report 2013*. In both regions, young people tend to rely on information found online and from friends, while older age groups trust insurance companies and financial advisors more. To the degree that this is a cohort-specific pattern (as opposed to an age effect), one would expect that in the future the internet and social environment will gradually gain importance as the source of information on financial matters. More so as today's older generations are catching up with web technology and are also increasingly going online to gather information.<sup>49</sup>

This will contribute to the rise in importance of the online world for life insurance also. As more trusted comparison sites with unbiased information on prices and products come online, and with social media allowing consumers to share private information with peers and friends, transparency and eventually trust in the life insurance industry overall should increase. In general consumers have high confidence in online content generated by their peers, and the positive and negative experiences shared online are seen as valuable tools in making better purchasing choices.<sup>50</sup>

### Where do consumers buy?

For many products and services, consumers today have a range of purchasing options, from buying face-to-face to making a purchase over the phone or online. These choices have contributed to improved consumer shopping experience in terms of convenience, efficiency and satisfaction according to personal preferences. Today, buying life insurance face-to-face through affiliated and independent agents or brokers – and bancassurance in Latin America and some Asian markets – still accounts for the bulk of sales (see Figure 11).

Figure 11  
Distribution channels in life insurance



Note: Based on gross written premiums unless indicated otherwise. Canada, Germany, Singapore, and US: annual premium equivalents, new business; India, France, South Africa, South Korea, Sweden, Taiwan, United Kingdom: new business premiums; Chile, India, US: individual business only; Luxembourg: domestic business only.

Sources: Supervisory authorities, insurance associations, LIMRA, CEA, Towers Watson, Swiss Re Economic Research & Consulting

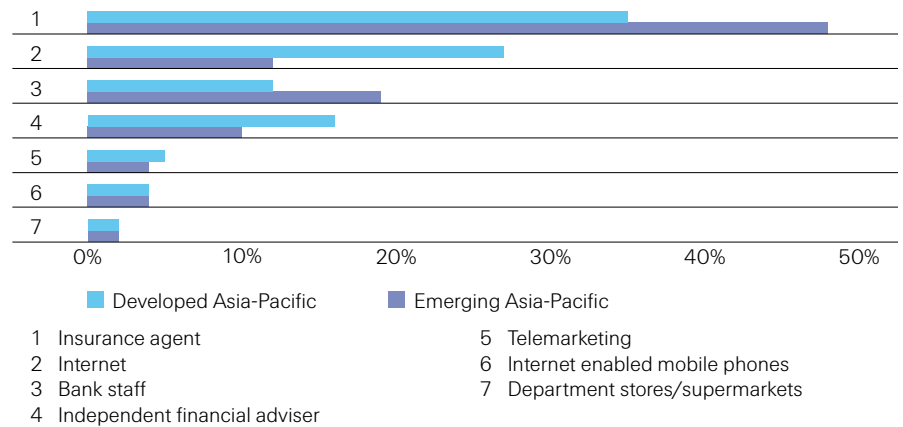
<sup>49</sup> *Silver Surfers – The Importance of Older Generations for the Internet*, Banking & Technology Snapshot Demography, Deutsche Bank Research, 2013.

<sup>50</sup> See *The New Consumer Study*, Euro RSCG Worldwide, 2009.

In developed Asia-Pacific, the internet is the second most popular channel for 20-to-40 year olds.

Younger consumers are more likely to go online to buy insurance, because they are more comfortable with technology, but also because their needs are simpler and easy to cater for with products that can be sold online. Among the 20-to-40 year olds, affiliate insurance agents still play a prominent role, but the internet is the second most popular sales channel in developed Asia-Pacific markets.<sup>51</sup> They not only rely on the internet when seeking information (see Figure 9 on page 19), but also buy online (see Figure 12). In emerging markets where access to the internet is often only available through mobile phones, insurance is bought via internet-enabled cell phones. In the US, a much larger portion of the younger generation use the internet to purchase life insurance than older consumers (the Baby Boomers).<sup>52</sup>

Figure 12  
**Relative importance of channels used to buy insurance products in Asia-Pacific (in %)**



Source: *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*, Swiss Re, 2011

There are significant differences in distribution channels across products.

There are significant differences in buying patterns across insurance products, both between non-life and life insurance, but also within life insurance. Evidence shows that customers are more willing to research and purchase non-life insurance products online. This is understandable given the short duration of policies and the ability to switch providers.<sup>53</sup> In the same vein, more simple and transparent life insurance products such as term insurance can be more readily sold online. Indeed, in Germany 21% of term insurance is sold via direct channels (see Figure 13).<sup>54</sup> More complex savings, pension, disability, and unit-linked products are still mainly sold through traditional tied agents, brokers and independents. For such products, the 'research online, purchase offline' notion will become increasingly important.

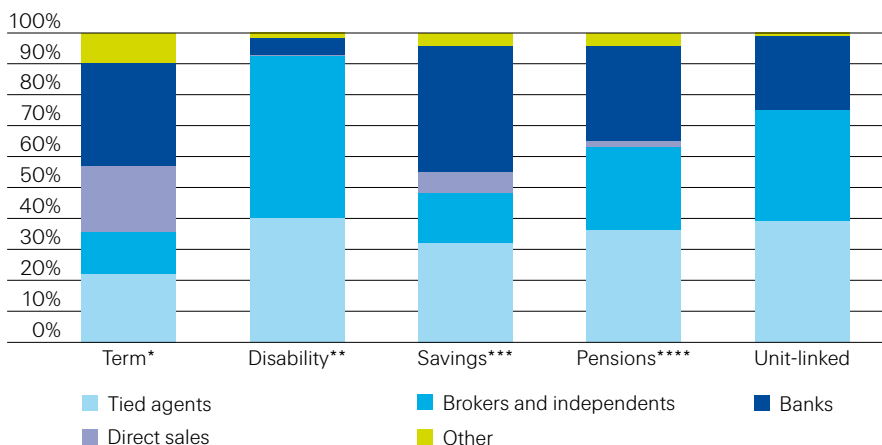
<sup>51</sup> *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*, Swiss Re. Developed markets comprise Australia, Hong Kong, Singapore, Japan, Taiwan, South Korea; Emerging markets comprise Malaysia, China, Indonesia, Vietnam and India.

<sup>52</sup> See *The Insurance Purchase Process: The Role of the Internet in the United States*, LIMRA, 2012.

<sup>53</sup> See *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*, Swiss Re, or Allianz, *Wie verhalten sich Kunden mit Neugeschäft im Internet?* 2010.

<sup>54</sup> Direct channels are those in which the distribution of insurance is direct to consumers without any intermediaries (agents, brokers, banks). Direct channels comprise the internet, telesales, mailing etc., but also sales through the insurers' own sales force. In Germany, banks also play an important role (see first bar in Figure 13), but they primarily sell single-premium credit life insurance.

Figure 13  
**Share of new business by channel for life insurance products in Germany, 2011, based on annual premium equivalents**



\* Incl. credit life which is group business written through banks, \*\* Stand-alone disability insurance only, \*\*\* Traditional endowments, \*\*\*\* excl. state-subsidized pensions (Riester-Rente and Rürup-Rente)

Source: Vertriebswege-Survey 2011/12, Towers Watson

Simple and transparent products can be more readily sold through direct channels (eg. online).

These figures – as well as those from start-ups of pure online insurers specializing in term insurance – confirm that simpler and more transparent products can be sold successfully through direct channels. This is evidence for a leaner consumer buying experience in line with the shopping norms seen in other industries today. Given the preferences of younger consumers, this channel will likely grow in the future.

### What do consumers expect from life insurers?

Surveys reveal what consumers expect from life insurance products and from insurers.

Life insurance products vary considerably across countries, reflecting the different needs of consumers and purposes of life insurance. For this reason it is hard to make general statements about what consumers expect from life insurers. Nonetheless, global consumer surveys reveal recurring themes that shed light on consumer attitudes and the perceived key positive and negative attributes of products, processes and insurers.

Customers want products they can understand,...

Based on the global survey conducted by Ernst&Young about life and non-life insurance referred to previously,<sup>55</sup> consumers' main concerns revolve around simplicity, transparency, trust and loyalty.

... a long-term relationship with insurance providers that is based on trust, ...

... and to have their loyalty recognized.

- Customers want *products and purchasing processes* to be *simple and transparent*. They want to understand what they are buying. In most sectors, information is available and customers can compare products, prices and obtain independent opinions before purchasing. The insurance sector is a laggard in this regard.
- Customers *want to build long-term relationships* with insurance providers based on trust, and to have confidence that the products they are buying meet their needs. It's noteworthy therefore that customers perceive *life companies as making very little effort to retain them* at the point of policy lapse.
- A key area where insurers can encourage longer-term relationships is through *rewarding loyalty*. Consumers perceive the life (and non-life) insurance sectors as lagging other consumer industries on this measure. There is a strong sense among consumers that insurers could do more to earn their trust and loyalty, and to reward them for participating in long-term relationships.

<sup>55</sup> Global Overview: Voice of the Customer – Time for Insurers to Rethink their Relationships, Global Consumer Insurance Survey, Ernst&Young, 2012.



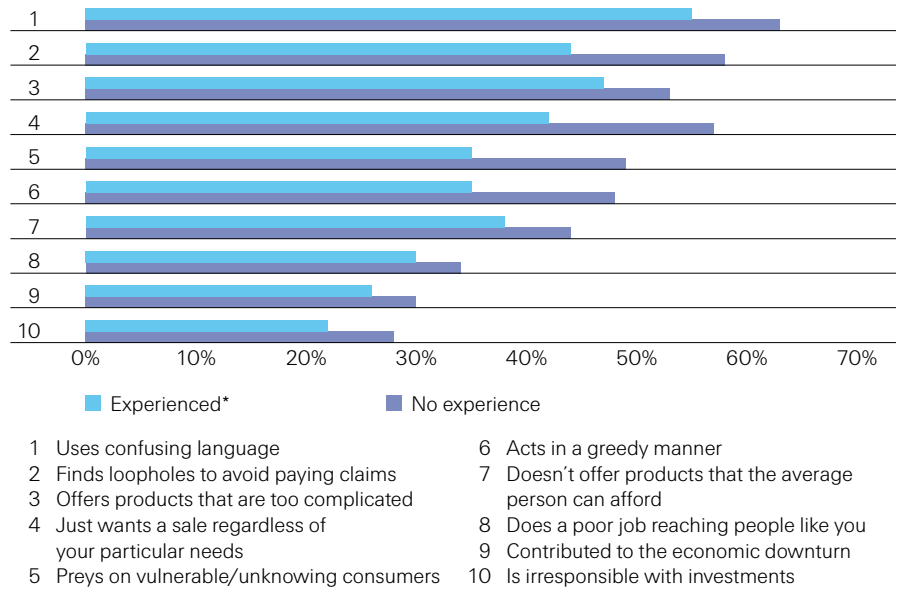
Interestingly, people often have a negative view of the insurance industry, but are content with their insurer.

Some surveys indicate that life insurance companies are not seen as consumer centric.

A Boston Consulting Group<sup>56</sup> survey found an ‘insurance paradox’ highlighting that while a vast majority of consumers are content with their insurer, they have a neutral or even negative view of the industry and its products as a whole. Many consumers are confused and find the products on offer complex and opaque, and difficult to compare with others because of the fine print embedded in product descriptions. For instance, a Bain & Company survey found that the insurance industry in Germany has a lower net promoter score than other industries. At the same time, 50% of survey respondents said they thought there were no better offers available from other insurers.<sup>57</sup>

Surveys indicate significant shortcomings in consumer centricity. Indeed, according to a LIMRA survey,<sup>58</sup> life insurers are not seen as consumer centric. Respondents report that life companies often use confusing language, try to find loopholes to avoid making claim payouts, offer products that are too complicated and are just after the consumers’ money regardless of need. While the survey paints a scathing picture of the US life industry, at least those who have seen life insurance make a difference after the death of an insured did express a more favorable view of life insurance (see Figure 14).

Figure 14  
Based on experience, with which of these statements about life insurance companies do you agree? (US)



Note: \*experienced = has seen life insurance “make a positive difference” following a death

Source: *Consumer Confidence in Life Insurance Companies*, LIMRA, 2012

<sup>56</sup> *Leveraging Consumer Insight in Insurance*, Boston Consulting Group, 2010.

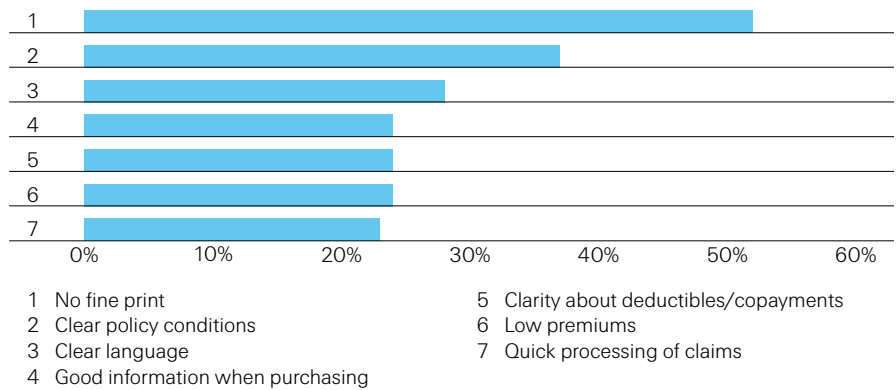
<sup>57</sup> *Marktstudie Versicherungen 2012*, Bain & Company, 2012.

<sup>58</sup> *Consumer Confidence in Life Insurance Companies*, LIMRA, 2012.

In the Netherlands customers do not want to see fine print; instead they want more transparency and clear language.

A 2012 customer survey in the Netherlands yielded similar findings (see Figure 15). When asked how insurers can improve, consumers said they would most appreciate a scrapping of fine print. Additionally, respondents said they want clarity on policy conditions, expressed in clear language. Other important changes could be availability of good product information at the point of purchase, and clear information on deductibles and co-payments. Lower premiums rank only sixth in the list of things that insurers could do better.

Figure 15  
**What characteristics should insurers change to improve your view? (the Netherlands)**

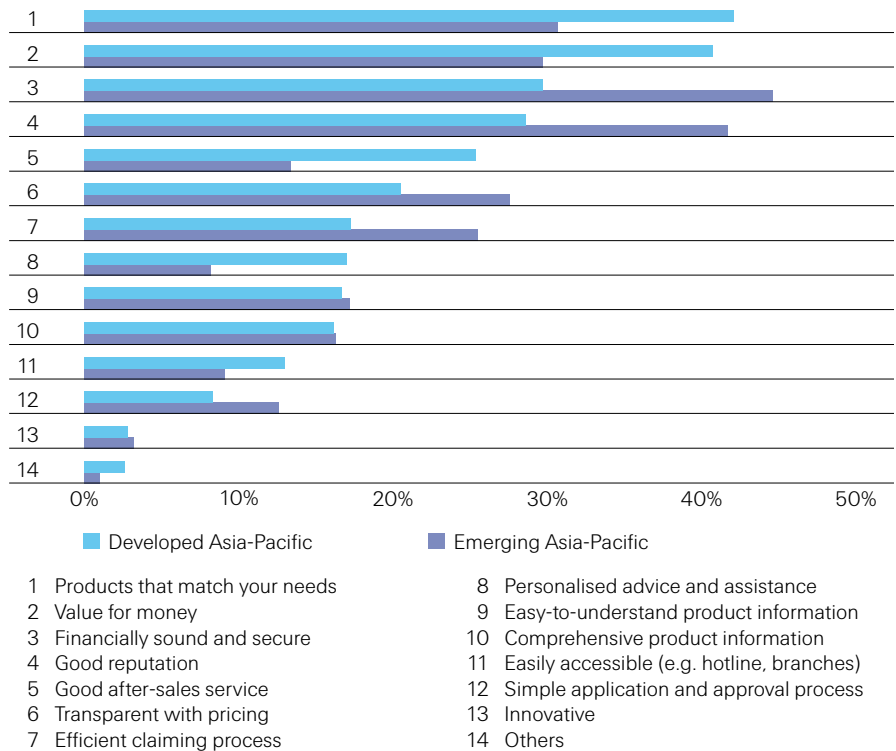


Source: CVS Consumentenmonitor 2012, Dutch Association of Insurers

In developed Asia-Pacific, product relevance and value for money are most important; in emerging markets insurers' financial strength and reputation are key.

In developed Asia-Pacific countries, the most important criterion in choosing a life insurer is that the company's products match customer needs and offer good value. In emerging Asia-Pacific, the company rather than the products are the focus: financial strength and reputation are the most important criteria when selecting an insurer.

Figure 16  
**Main criteria for choosing which insurance company to buy life/health insurance from (Asia-Pacific)**



Source: Survey of Risk Appetite and Insurance: Asia-Pacific 2011, Swiss Re, 2011

Life insurers can do many things to improve customer centricity.

The overarching message from the surveys is that consumers often are confronted with confusing language, opaque products and fine print. Along with an element of mistrust in the industry, these factors erode confidence and consumers' propensity to buy. The messages for life insurers are manifold. Life insurers should be more customer centric by improving: 1) the simplicity and transparency of products, and of the application underwriting and sales processes; 2) how they communicate with customers; and 3) long-term customer relationships, including recognition of loyalty. Insurers who manage to address these issues will stand to improve their trustworthiness and reputation, and create an environment in which consumers feel confident buying insurance.

Understanding consumers' WTP will become increasingly important in a world with growing product transparency.

### What are customers willing to pay for insurance?

Another important attribute consumers are concerned about is value for money, as many see budget issues and affordability as one of the main impediments to buying insurance.<sup>59</sup> Increasing competition and the abundance of information provided online allow customers to compare products and prices, and obtain independent opinions before purchasing. It is therefore crucial that insurers understand how potential customers value products and their specific features. This knowledge will enable insurers to improve and tailor services and products to various customer segments, and ultimately help customers meet their insurance needs.

Those who do buy life insurance reveal a WTP above the market price, ...

Customers will only buy insurance if the price at least matches what they are willing to pay. Those who do buy life insurance reveal a willingness to pay (WTP) above the market price.<sup>60</sup>

...but non-buyers' WTP is not necessarily below the market price for insurance either!

An important question – the answer to which will open the door to a large untapped market segment – is whether non-buyers' WTP is below the price of insurance. If it is, it is rational for them not to buy insurance at the price offered. The only way to sell them insurance would be to lower the price or increase the benefit.<sup>61</sup> However, given all the challenges and issues in the consumer buying experience, it would be a fallacy to assume that WTP for non-buyers must be below the price of insurance.

The *European Insurance Report* surveyed consumers' WTP across eight countries, and found that...

In the Swiss Re *European Insurance Report: Customers for Life*, consumers were asked to indicate how much they would be willing to pay for EUR 100 000 of life insurance cover. In total statements from 6 657 consumers from eight countries have been analyzed. A statistical analysis of their answers reveals the drivers of WTP.

...higher income is the main driver for WTP, after controlling for other socio-economic factors.

First, higher income groups tend to be willing to pay more for life insurance (see Appendix, Table 4 for details). WTP increases with age and the oldest consumer group in the sample has the highest WTP, while holding below average life insurance. This may indicate that the premium rates in this age band exceed even the high WTP to such an extent that life insurance at age 60–70 becomes unaffordable for many. Alternatively it may be that this age group's life policies expire at around retirement age. They no longer need mortality protection but nonetheless with hindsight are happy to have had life insurance and see great value in these products, as expressed through their high WTP.

<sup>59</sup> See chapter *Why do consumers not buy life insurance?*

<sup>60</sup> Individuals' willingness to pay (WTP) is determined by a number of factors: (1) risk tolerance (the wealthier a person, the better can the negative consequences be absorbed); (2) frequency of the risk event (the higher the probability of an event, the higher WTP); (3) severity of the risk event (the higher the looming loss, the higher WTP); and (4) risk aversion (more risk averse persons have a higher WTP, people that do not like risks pay more to avoid risk, but often they not only insure, they also adapt their lifestyle to avoid risks).

<sup>61</sup> There are ways insurers can improve the cost-benefit relationship for their customers. For example, in competitive markets, insurers have started to offer enhanced/impaired annuities. These products take into account the poor health of customers buying annuities and offer higher payouts, aligning WTP and the price of the annuity.

Individuals who trust the financial industry when seeking advice are estimated to have a higher WTP.

Those who most rely on finance industry experts when seeking advice have a higher WTP for insurance, while those who do not rely on advice or do not know who to trust have a significantly lower WTP. Moreover, WTP is negatively related to lower social status. Since WTP is controlled for income and working status, this may indicate lower financial literacy in these groups and point to a lack of understanding of the benefits of life insurance. Respondents with negative views on insurance – those who said they cannot afford life insurance, do not trust life insurance or indicated they have no need for life insurance – had a significantly lower WTP.

Many in Asia-Pacific are willing to buy term life insurance.

In the Swiss Re *Survey of Risk Appetite and Insurance: Asia-Pacific 2011* 13800 survey respondents between the ages of 20 and 40 were asked to state their WTP for 20-year term insurance.<sup>62</sup> Respondents had to choose between six price ranges centred around a competitive premium rate.

Income has a higher impact on WTP in emerging compared to developed markets.

In general, the proportion of respondents who said they were willing to buy term at market prices was higher in developed Asia-Pacific countries than in emerging markets. One reason for this may be that in emerging markets, the coverage could be beyond needs and unaffordable for many. This is supported by the finding that income has a much higher impact on WTP in emerging compared to developed markets (see 'high income' column in Table 3).

Table 3  
Willingness to pay for term insurance

	% of respondents with WTP above market rate						
	women	married	with children	high income	better education		
Singapore	66	61	64	62	59		
Korea	56	59	60	55	55		
Hong Kong	58	58	61	57	51		
Japan	48	48	47	58	45		
Taiwan	39	36	38	37	37		
Australia	34	36	41	44	37		
Developed Asia-Pacific	50	50	52	52	47		
India	61	63	65	65	70		
Malaysia	42	42	43	53	44		
China	29	33	34	37	33		
Vietnam	23	23	22	30	27		
Indonesia	14	15	15	27	25		
Emerging Asia-Pacific	37	38	39	44	41		
Subgroup with above country average WTP				Subgroup with below country average WTP			

Source: Swiss Re Economic Research & Consulting based on *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*, Swiss Re, 2011

<sup>62</sup> Sum assured was adjusted according to income levels in the various countries. In developed Asia-Pacific countries sums assured were USD 100 000, in emerging Asia-Pacific countries between USD 20 000 and 50 000.

In developed Asia-Pacific countries, WTP is linked to marital status, children and income.

The report found that in developed Asia-Pacific markets, women have a higher WTP than men, families with children would pay more for insurance than those without, and married and higher income persons are also willing to pay more for insurance.

In emerging Asia-Pacific countries, WTP is driven by income and education.

In emerging markets in Asia-Pacific, the drivers of WTP are quite different. Income and education positively impact WTP for term insurance. Interestingly, however, marital status and children do not seem to be linked to WTP, and men are inclined to pay more for term insurance than women. This may point to more traditional family forms where intra-family support is more common and men feel responsible for financial matters.

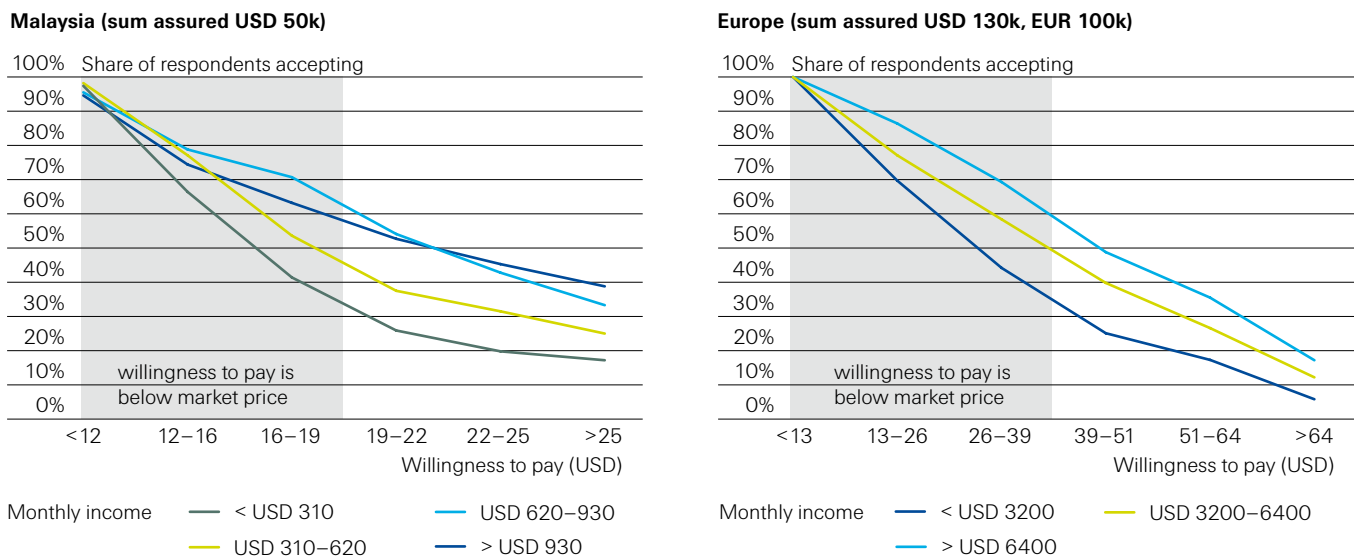
Marketing strategies must be country specific.

Since WTP drivers differ between socio-economic groups in emerging and developed Asia-Pacific countries, it stands to reason that a one-size-fits all approach will not work and that sales strategies need to be specifically tailored to both emerging and developed Asia-Pacific market consumers.

According to the stated WTP, many respondents would be willing to pay significantly higher premiums than the competitive market rate.

Of particular interest for insurers is to analyze the WTP for various socio-economic subgroups. In the case of Malaysia for instance, the share of respondents willing to pay at least the USD 20 per month (a competitive premium rate) ranges from 30% for the lowest income group to 60% for the upper income groups (see left panel of Figure 17). In addition, in all groups there are respondents who indicate they would be willing to pay a higher price. For example, in the highest income group, around 40% would be willing to pay 25% more than the market price (USD 25 instead of USD 20). Similar conclusions can be drawn for Europe (see right panel of Figure 17).

Figure 17  
Percent willing to pay for term life insurance, by monthly premium rates



Source: Swiss Re Economic Research & Consulting based on *Survey of Risk Appetite and Insurance: Asia-Pacific 2011*, Swiss Re

A high WTP for some products could provide an opportunity for insurers to create more segmented products.

That some individuals are willing to pay more than the market price is an indication that many people see great value in insurance products. This should inspire life companies to think about how to differentiate themselves and their products from their competitors, through services, additional options or brand value. It is also a valid statement when communicating the benefit of life insurance with policymakers and regulators.

Knowing consumers' WTP for specific product features can be a key competitive advantage for life insurers.

A very promising area of research is to elicit WTP for various product features which have not yet been deeply researched. Even term insurance (the simplest form of life insurance) has various features such as the term of the policy, type of premium payment, yearly renewable premiums, and constant or decreasing/increasing coverage. Often there are also embedded options such as the right to increase coverage at certain life events, to extend the term of the policy without underwriting, or riders that pay a certain amount after diagnosis of a terminal illness. Insurers who understand which product features and options create value for their customers can gain a competitive advantage with improved product design and pricing.

# How insurers can respond

Life insurance needs to become 'bought, not sold'.

Life insurance products are said to be 'sold, not bought.' This saying has its roots back in the 20th century. However, in today's world consumers are empowered by easy access to information, which makes them more proactive and independent in their buying decisions. The modern customer does not want to be 'sold to' but prefers to research options and make choices based on objective information from unbiased sources and shared experiences from trusted peers. In this environment, the question for life insurers is how to change their approach so that their products and services are 'bought, not sold.'

There are many ways in which insurers can become more customer-centric...

Consumer surveys and behavioural economics give many pointers as to how life insurers can become more consumer centric. While respondents in many countries are content with their particular insurer, they often have a negative view of the industry and feel insurers have a long way to go to become more client focused. This applies to product design, matching product features to consumer needs and wants, paying more attention to the client-insurer relationship and to making the buying experience easier. Interestingly, consumers who have benefited from life insurance have started to advocate its value in online testimonials with the aim of helping others to make better financial decisions.<sup>63</sup> This could help establish a social norm that encourages the purchase of life insurance.

...such as in product design, underwriting, distribution and communication.

Areas needing attention include product design, underwriting, distribution and communication. In addition, life insurers can do more to improve their knowledge of consumers through data mining and research. Some specific ideas are outlined here.

Life insurers should provide simple, transparent products for every lifecycle state and re-think product features.

### *Simplify and innovate product design*

Product simplicity and transparency are key desirables for consumers. As such, life insurers should consider providing a suite of simple and transparent products, tailored to customers' needs in every stage of the lifecycle. Simplification is also necessary to automate the application process and to make life insurance available online. Life insurers should also re-think what product features customers really want. Products are often loaded with various options from the outset without the insurer having first ascertained whether customers are willing to bear the associated costs, or even that consumers see any value in the different options.

Return of premium policies may be preferred even though they are often less economically attractive.

Often people are reluctant to pay insurance premiums because the quid pro quo – the elimination of risk – is a highly intangible asset. For this reason, it is often easier to sell life insurance with a cash value, so that there is a payment (the cash value) at the end of the contract or when the policy is allowed to lapse. Insurers have started to sell return of premium policies (ie, term, disability and critical illness policies) that return all or at least a proportion of the premiums paid after a set number of years or at the term of the policy.<sup>64</sup> Often these policies are less attractive from an economic point of view but people may prefer them because they convey a sense of not having "paid money for nothing". However, insurers should make a point in explaining to consumers the mutuality of life insurance – ie, an individual may not get his or her money back because someone else who suffered an adverse life event did so instead.

<sup>63</sup> See <http://www.nytimes.com/2013/01/12/your-money/estate-planning/shell-tell-you-its-time-to-think-ahead.html>

<sup>64</sup> The risk premium and costs are financed out of the investment return.

Default participation with opt-out may help drive people to get appropriate insurance.

An area where behavioural economics has been useful is in the setting of defaults (opt-out instead of opt-in). If employees need to opt-in to a saving or insurance plan, they often fail to do so because of status quo bias. Smart defaults in the US have helped increase participation in retirement plans because newly hired employees by default become participants and need to take conscious action to opt-out. Default participation could be used by employers for life insurance products too, provided that this is allowed.

Insurance contracts could be designed that at certain life events, protection automatically kicks in or is increased.

Most people would probably agree that having life insurance is important once certain life events such as the birth of a child, purchase of a house or a job move happen. And still consumers too often do not buy insurance, simply because in that very moment there are more pressing things to do. In analogy to Save More Tomorrow,<sup>65</sup> 'Insure Tomorrow' could be a long-term contract offered by insurance companies in which consumers commit to buy or increase life insurance at a pre-defined amount once certain life events occur. Insurance coverage would immediately kick in or be increased without any need for additional underwriting, paperwork or decision making. This is not only convenient for consumers. It also addresses major behavioural issues that are well known to be show-stoppers in buying insurance (eg, narrow framing, hyperbolic discounting and procrastination).

The buying process can be shortened through simplified underwriting.

#### *Streamline the underwriting process*

There have traditionally been many obstacles in the insurance buying process. Often during the process potential buyers reconsider their intentions, are distracted by other pressing matters or simply get annoyed. Making simple, clear and unbiased analytical tools available for consumers to assess their life insurance needs can add significant value and facilitate the initial steps toward an ultimate purchase. The buying process could also be significantly shortened through simplified underwriting. Today's technology makes it possible to buy insurance with a few clicks online. For the vast majority of customers, underwriting can be done with highly sophisticated software embedded in webpages. Only those with impaired health conditions or sums assured above a certain level would need to go through a medical underwriting process.

More can be done to address certain psychological barriers consumers face.

Even those customers who have gone through the whole process – especially the traditional way – sometimes fail to take the final step to purchase. The long-term commitment, potential regrets and the thought of the first premium payment can become a high psychological barrier. This can be addressed by allowing consumers to revoke a contract within a specified time frame should they have second thoughts, which is already done in some markets.

Predictive analytics can be used to facilitate the buying process.

The use of data mining techniques and predictive analytics also offers potential to bring down the cost and time of underwriting. Predictive models, which use consumer information to predict the probability of an outcome or future behaviour, are commonly used in other industries to improve business processes. For example, predictive modeling is widely used in the underwriting and pricing of personal auto insurance. While in life insurance the use of predictive techniques is still in its infancy, well-constructed predictive models may facilitate better customer segmentation and targeting and lead to improvements in pricing, underwriting and marketing.<sup>66</sup>

<sup>65</sup> In analogy to 'Save More Tomorrow', see Thaler, R. H. and S. Benartzi (2004), op. cit., highlighted in the chapter on Consumer decision making.

<sup>66</sup> For more details, see *Predictive Modeling in Insurance in Canada*, Swiss Re, 2013.



More consumer-friendly language would help potential buyers understand the products and build trust.

Consumer education programs may help address some of the cognitive biases by improving financial literacy.

'Research online, purchase offline' will likely dominate future purchases.

Educated consumers will increasingly challenge insurance sales staff and multi-channel distribution models will gain in importance.

Competitors will develop products that are online compatible and seek to gain market share.

#### *Improve communication and consumer education*

Another way to help potential customers is to use simple language in contracts rather than industry terminology that can be difficult to understand. This would improve transparency, build trust and, importantly, facilitate the decision-making process. Additionally, it is crucial to describe and communicate the benefits of life insurance as a positive means to protect the insured's and his or her family's welfare. Only a small fraction of customers will file a claim, which is good for all parties involved. However, since the benefits of having life insurance are experienced by few and shared knowledge is limited, life insurers should provide potential buyers with examples of how they have helped customers avoid hardship during times of sorrow.<sup>67</sup>

In addition, there is a need for collective and coordinated communication and education programs to inform people on the role and importance of financial planning, life insurance, and risk awareness and mitigation. These programs could help address some of the cognitive biases such as overconfidence and risk perception, and may alleviate issues related to information overload. Education in schools and at the workplace could improve financial literacy and thereby empower individuals in their decision making with respect to life events.

#### *Innovation with distribution platforms*

With the growth of the internet and mobile technology, the buying process will likely become increasingly two-staged. First consumers will gather information about products, prices and brands from online comparison websites and their peers.<sup>68</sup> Then they will make the purchase face-to-face with a sales representative of an insurance company, a broker or a bank. This approach ('research online, purchase offline') will greatly reduce the asymmetric information problem consumers traditionally face when dealing with a financial advisor alone. Simple products, such as term insurance, will increasingly be purchased online.

Consumers' open access to information will likely have many implications for insurers. Since sales staff will face much more educated customers, the traditional top-down approach of giving advice will be challenged. Moreover, life companies will be benchmarked against their competitors in social media and on comparison sites. This will increase competition and put companies with large sales divisions or expensive remuneration agreements with brokers under pressure. As a result, sales staff will increasingly be challenged to justify their value added. At the same time, the multi-channel distribution model will gain in importance.

Finally, nimble life insurers as well as competitors outside of the industry will take advantage of the opportunity to develop new, simplified and standardized products that are online compatible and will likely gain market share at the expense of more traditional models. These changes will likely be gradual, but established insurers certainly need to be aware of the threat and be able to adapt their sales and distribution strategies accordingly.

<sup>67</sup> See *The Moment of Truth: Individual Life Insurance Claimant Satisfaction*, LIMRA, 2013.

<sup>68</sup> See *World Insurance Report 2013*, Capgemini, and *Insurance Barometer Study*, LIMRA, 2013.

Rewarding loyalty would be a win-win.

*Improve long-term relationships*

Given the importance of long-term relationships for clients, life insurers may consider appropriate ways to reward their long-term customers, as is the norm in other industries. Besides sending the positive signal to customers that they are valued, this would also benefit insurers because the risks of the various policies on the same pool of retained consumers (eg, mortality and longevity) would – at least to some degree – diversify. One way to sustain long-term relationships is to engage existing customers at relevant lifecycle trigger points and create value by offering cross- and up-selling opportunities to meet their evolving needs.

Trust and loyalty will benefit from a streamlined selling process and providing value beyond policy issuance.

Trust and loyalty will also benefit from a more streamlined purchasing process that delivers a positive buying experience to the customer. After the point of sale, insurers can partner with policyholders to deliver value that goes beyond providing a policy in return for a premium. In addition, there is plenty of room for product innovation that fosters loyalty. Creating more flexible products focused on customer needs rather than assuming the policyholder will lapse and walk away will lead to win-win situations that improve consumer satisfaction and help companies maintain a broader customer base.

Social media will play a role in improving long-term relationships.

Finally, social media will likely play an important role in improving the long-term relationships because consumers are very receptive to information provided by their peers. Good ratings and many 'likes' not only help to attract new consumers, they also help to retain existing clients.

Consumer research is important to reduce insurers' knowledge gap.

*Close the consumer knowledge gap*

More consumer research is important for deeper understanding of existing and future customers, their behaviour and their needs. This can help insurers reach the largest untapped market of consumers, those who currently do not even consider buying life insurance. Insurers anticipating global expansion need to understand regional and cultural differences in consumer behaviour. Sophisticated research approaches and experiments that deliver valid and reliable insights on consumer behaviour and preferences can provide valuable input for product design and pricing. For example, the application of more behavioural economics empirical research in examining the insurance purchasing process could prove very beneficial in helping insurers identify and eliminate some key obstacles in the buying process.

Willingness-to-pay analysis could improve product design and pricing.

More research is also needed to understand consumer willingness to pay for insurance and its various features and attributes. This will enable insurers to make products more appealing for consumers, avoid unnecessary product features that ultimately raise the price of insurance above the price consumers are willing to pay.

Data mining customer databases allows insurers to pre-empt future consumer needs.

Finally, insurers have rich customer databases which they can use to identify life stage triggers and analyze patterns in insurance buying. The same is true for group business, which also offers many touch-points and allows insurers to cross-sell individual policies that complement group insurance. This will allow life insurers to foresee the upcoming needs of their customers and proactively market products for those demands.

# Conclusion

Promoting greater understanding of the nature of risk and the role of insurance for societies remains important.

Today, large portions of the population lack adequate insurance coverage even though many are aware of the usefulness of life insurance. The extent of un- and under- insurance is large and implies unnecessary financial hardship for families facing an unexpected loss. Underinsurance can also place an additional burden on society to provide for people thrown into poverty as a result of the loss of an uninsured life, or any other unprotected risk. There is a need for collective and coordinated communication programs to educate people on the role and importance of life insurance and risk mitigation. This is especially true in the age of shrinking social security benefits and cut backs in corporate pension and health schemes.

While more information and transparency is necessary, it will not be sufficient to reduce underinsurance on a broad scale.

While educating people about the value of insurance is important, more information and education will not be enough to reduce underinsurance on a broad scale. Information and choice overload are often detrimental to consumer decision making. Thus, understanding consumers and how they make decisions will enable insurers to improve their approach. Behavioural economics helps explain why so many people fail to buy life insurance, even though it would improve their welfare. It also provides insights into product design and how to help consumers overcome existing psychological biases by framing choices in a positive manner, reducing information overload and improving the buying experience.

Life insurers must also simplify products, improve the consumer buying experience, adapt distribution strategies to the digital age, and foster long-term relationships.

Technological developments and the spread of the internet and social media affect all facets of life, including consumer preferences and buying behaviour. In a rapidly changing environment, life insurers must meet the challenge of the higher expectations of the modern proactive consumer who no longer wants to be 'sold to'. Life insurers need to simplify products where possible and improve the consumer buying experience by advancing underwriting and selling procedures. Life insurers must also adapt their distribution strategies to the digital age, communicate more effectively and foster long-term relationships with their customers. More consumer research is needed to close the knowledge gap and reach those who currently do not consider buying life insurance. There is a long way to go in overcoming these challenges, but the potential rewards for society and life insurers from doing so are tremendous.

# Appendix

In 2012, Swiss Re commissioned a large consumer survey for the *European Insurance Report 2012: Customers for Life*. In total 15 734 consumers from 14 countries were interviewed. After stripping out incomplete data records and data from non-Eurozone countries, data from 8510 consumers in Austria, Belgium, Finland, France, Germany, Italy, the Netherlands and Spain was analyzed.

The advantage of the statistical analysis presented here – in contrast to descriptive statistics – is that the effects of various socio-economic and personal indicators/traits on the likelihood of people having life insurance or on willingness to pay for insurance can be isolated. For example, the 2012 survey found that on average 37% of women and 43% of men had life insurance cover. Generally speaking, men tend to have higher income than women. Higher income can mean greater likelihood of insurance ownership, but the 37% and 43% averages do not shed any light on whether the higher penetration among men is gender or income related. With regression analysis, the relationship between a dependent variable and one or more independent variables can be identified and to bring more clarity around such influencing factors.<sup>69</sup>

With respect to the variables listed in Table 4, while most are straight forward, some require explanation.

- **Social grade:** refers to the National Readership Survey classification<sup>70</sup> where:
  - *upper class* = higher managerial, administrative or professional;
  - *middle class* = intermediate managerial, administrative or professional;
  - *lower middle class* = supervisory or clerical and junior managerial, administrative or professional;
  - *skilled working class* = skilled manual workers;
  - *working class* = semi and unskilled manual workers;
  - *non-working class* = casual or lowest grade workers, pensioners, and others who depend on the welfare state for their income.
- **Most trusted sources:** respondents were asked “*which one source would you trust the most to give you advice on life and protection insurance?*” The 13 possible answers were grouped into: *trusts friends and family*; *trusts media and internet*; *trusts the financial industry*; *trusts no one*; *don’t know who to trust*; and *other*.
- **Reasons for not buying life insurance:** respondents without insurance were asked “*What is the main reason why you have not bought life insurance?*” The 14 possible answers were grouped into: *complex/time consuming application process*; *affordability concerns*; *no need for insurance*; *lack of trust in insurers*; *lack of awareness/priority*; *other*; and *prefer not to say*.
- **Willingness to pay (WTP – dependent variable in Model 2):** Respondents were asked to state how much they are willing to pay for life insurance and to choose a monthly amount of EUR 0–10, EUR 11–20, EUR 21–30, EUR 31–40, EUR 41–50, and above EUR 50.

<sup>69</sup> For an introduction to regression analysis see Greene, W. H. (2007), *Econometric Analysis*, Prentice Hall; 7 edition (February 13, 2011), or Kennedy, P. (2008), *A Guide to Econometrics*, Wiley-Blackwell; 6 edition. For more information about the analysis in this report, please reach out to the authors of this *sigma* study, contact details on the inside cover of the report.

<sup>70</sup> See <http://www.nrs.co.uk/lifestyle-data/> for more information on the classification of social grades as according to the National Reader Survey.

*Explaining life insurance ownership (Model 1):* Since the dependent variable is binary (respondents have or don't have life insurance), a probit regression model has been estimated. The model correctly predicts 67% of cases (79% of those without life insurance are correctly predicted to have no insurance, while 49% of those with insurance are correctly predicted to have insurance). The pseudo r-square is 11.3%. The results for Model 1 in Table 4 refer to marginal effects (dy/dx), ie, the impact of a change in the explanatory variable on the probability of having life insurance.

*Explaining willingness to pay for life insurance (Model 2):* Since in the survey the WTP is stated in brackets, an interval regression model has been estimated. The coefficients are denominated in EUR values. For example, respondents in the highest income bracket would be willing to pay EUR 10 more per month for life insurance compared to respondents from the lowest income group.

Table 4

**Results from the statistical analysis of the European Insurance Report 2012, Customers for Life**

Dependent variable	Model (1)	Model (2)
	probit regression <sup>+</sup> has life insurance yes/no	interval regression 6 willingness to pay intervals (EUR 0–10, 11–20, 21–30, 31–40, 41–50, 50+)
Gender (default= women)		
Male	3.0 ***	0.93 **
Age (default= age 20–29)		
Age 30–39	4.7 ***	-1.28 **
Age 40–49	5.1 ***	0.24
Age 50–59	7.1 ***	2.08 ***
Age 60–70	-1.7	5.75 ***
Marital status (default = single)		
Married/living as a couple	8.9 ***	-0.03
Separated/Divorced	1.4	0.72
Widowed	6.2	-0.62
Prefer not to say marital status	-9.4	0.62
Children (default = no children)		
Has children	4.8 ***	0.65
Mortgage (default = no mortgage)		
Has mortgage	8.0 ***	-2.50 ***
Breadwinner (default = not breadwinner)		
Is breadwinner	1.0	0.75
Financial decision maker (default = not decision maker)		
Household CFO	6.4 ***	-1.38 **
Reasons for not buying life insurance		
Complex/time consuming application process		-1.18
Affordability concerns		-6.91 ***
No need for insurance		-2.15 ***
Lack of trust in insurers		-5.76 ***
Lack of awareness/priority		-1.58 **
Other		-1.10
Prefer not to say		-5.14 ***

Table 4 continues on page 36

Dependent variable	Model (1)	Model (2)
	probit regression <sup>+</sup>	interval regression
	has life insurance yes/no	6 willingness to pay intervals (EUR 0–10, 11–20, 21–30, 31–40, 41–50, 50+)
Most trusted sources (default = trusts most family and friends)		
Trusts most financial industry	10.5 ***	2.48 ***
Trusts most press and internet	0.1	-0.52
Trusts no one	-15.1 ***	-4.95 ***
Trusts don't know	-8.8 ***	-4.82 ***
Trusts other	7.8	-4.15
Income (default= EUR 0–30k income)		
Income 31–80k	7.1 ***	4.47 ***
Income 80k+	12.3 ***	10.26 ***
Income refused-unknown	-0.0	0.80
Social grade (default = upper class)		
Middle class	-1.3	-2.43 ***
Lower middle class	-3.6 *	-3.64 ***
Skilled working class	-4.1 *	-4.22 ***
Working class	-9.9 ***	-4.32 ***
Non-working class	-9.0 ***	-4.35 ***
Employment status (default = full time employed)		
Employed part time	-3.8 **	-1.14
Homemaker	-9.1 ***	-2.76 ***
Not employed, but looking for work	-9.7 ***	-3.28 ***
Other	-10.7 *	-1.10
Retired	-6.4 ***	-2.04 **
Self-employed/Independent professional/Contractor	0.0	1.20
Student	-8.2 ***	0.13
Country (default = France)		
Austria	12.5 ***	4.10 ***
Belgium	-3.1	3.34 ***
Finland	-4.9 **	-5.68 ***
Germany	-2.0	2.97 ***
Italy	-16.7 ***	5.77 ***
Netherlands	-2.9	-4.01 ***
Spain	-3.6 *	-4.75 ***
Constant		29.93 ***
Observations	8,510	6,657
R-square	0.113	0.162
Correctly predicted	67%	
Sensitivity	49%	
Specificity	79%	

Significance level: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

<sup>+</sup> For model 1 marginal effects are shown instead of estimation coefficients, i.e. the impact of a change in the explanatory variable on the probability of having life insurance (dy/dx).

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