

Risk Insights®



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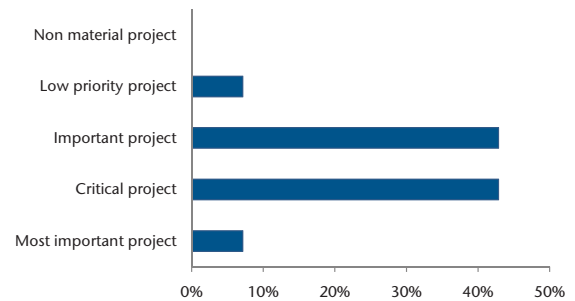
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Hitting the Customer Sweet Spot for Life – Part I

No business can survive without a loyal customer base. Life insurance, and other businesses that offer services rather than tangible goods, face additional challenges in customer loyalty management. Policy owners endure delayed gratification of their purchases since the benefits lie in the distant future and are contingent on mortality or morbidity, both events having lower probabilities of occurring over a customer's lifetime than events covered by general insurance. Also, infrequent customer life insurance purchases mean fewer opportunities to increase share-of-wallet by adding new products and services or cross-selling, than exist in other industries. Despite this, switching behaviour is rare due to the relatively high cost involved. Insurers rely on long-standing relationships with policyholders to recoup high acquisition costs and make a profit. The first part of this article discusses the meaning of customer loyalty, differences between loyal and retained customers and the antecedents of customer loyalty.

The Gen Re Australia/New Zealand Life Insurance Retention Survey 2010¹ asked nine Australian and five New Zealand life insurers about their customer retention strategies across various dimensions, including staff and financial resources, product features, incentives, customer marketing and communication, customer satisfaction measurement, policy replacement activity and remedial action. Half of the responding organisations viewed customer retention as their most important or one of the critical projects to running their business, with only 43% rating it as important and 7% giving it low priority (Figure 1). Yet only 36% of respondents have a formal and well-defined customer retention program in place.

Figure 1 – The importance of customer retention to business



Source: Gen Re Australia/New Zealand Life Insurance Retention Survey, 2010.

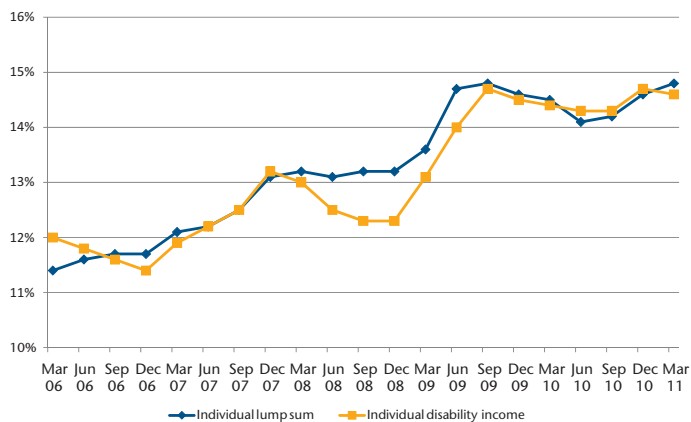
Four-fifths of respondents allocated funds in 2010 to managing retention, with budgets ranging between 2% and 7.5% of annual sales (median 3% and average 3.5%). Meanwhile, 72% of respondents have dedicated staff who spend more than three-quarters of their time managing customer retention issues, and half of these comprise teams of more than five people.

Rising policy lapses

In Australia, there has been a trend of deteriorating persistency (retention) of life risk business. Figure 2 plots industry annual discontinuance rates, weighted by premium, for each quarter over the past five years separately for individually underwritten lump sum and disability income covers. Discontinuance rates have risen from 11% - 12% to 14% - 15%.

Lapse (discontinuance) experience can fluctuate over time in response to many factors, some of which insurers have little or no control over and others they do, including the macro-economic environment, tax law, product design, competition, sales practices and incentives.

Figure 2 – Australia individual life risk annual discontinuance rates



Terminations = (Inforce Annual Premiums at start of period) – (Inforce Annual Premiums at end of period) + (New Annual Premiums over period)
 Termination Rates = Terminations / (Average Inforce Annual Premium over the period)

Source: Plan For Life

Early policy termination results in life insurers being unable to recoup high business acquisition expenses. Life insurance product commissions traditionally are front-end loaded; in Oceania they are more than 100% of first year premium and 5% - 12% of renewal premiums. High upfront sales commissions, coupled with short responsibility periods, may induce advisers to persuade policyholders to terminate existing contracts to earn more commissions. Differences in lapse rates may also occur between insurers due to differences in customer demographic profile and distribution models. Retention rates of customers of a Dutch financial services provider, which were observed over a one-year time horizon, were highest when acquired by worksite channels across automobile insurance, housing insurance, health insurance and loans. Special premium discounts offered to employers and associations for enrolling employees and members meant switching costs were high for worksite channels. Loyalty was low for direct mail, TV and radio channels, while website sales promoted customer loyalty except for automobile insurance. Cross-sell rates were poor for direct mail but good for outbound telephone sales and company magazines. Website customers did not consistently show high cross-buy rates perhaps because they self-initiate purchases and are unlikely to be influenced by marketing efforts.² A study of retail banking customers in New Zealand showed that a propensity to stay with current financial providers increased with the age of customers, and those who were more highly educated tended to have greater expectations and were most likely to switch.³

Benefits of customer loyalty

Customer loyalty is a central objective of relationship marketing. Best-selling author Fred Reichheld asserts that loyal customers spend more, are less price sensitive, refer others and cost less to serve.⁴ Companies that are leaders in customer loyalty grow, on average, more than twice as fast as the industry average across a wide variety of industries. According to Reichheld, cultivating customer loyalty produces outstanding financial results: a 5% increase in customer retention increases profits by 25% - 95%. Customer loyalty and retention therefore will flow into insurance company profit and growth.

What makes customers loyal?

Past research conceptualises loyalty as comprising two dimensions: attitudinal and behavioural loyalty.⁵ Behavioural loyalty is observable and expressed as repeat patronage of a service. The existence of a signed contract for services is tangible evidence of customer behavioural loyalty and indicates the start of a relationship between a customer and service provider. Attitudinal loyalty is difficult to observe and refers to a customer's psychological attachment or disposition to a particular service provider. If the customer feels positively about being in the relationship with the service provider, then the attitude is said to be positive. Attitudinally loyal customers may express advocacy of the brand through word of mouth recommendation, encouraging others to use the service, are not dissuaded by negative feedback about the service provider, and have a strong level of commitment to the service provider. Customer attitudes are commonly considered to precede customer behaviour; that is to say, attitudes are antecedents of behaviour.

Loyal customers spend more, retain business with, recommend to others and consider as first choice their current provider. All loyal customers do not necessarily demonstrate all these behaviours, which can be driven by inertia, customer experience and switching costs.

Loyal customers matter more than retention

There is an important distinction between customers who are merely retained and the more desirable outcome of customers who are loyal. As discussed above, loyalty means much more than repurchasing behaviour. Length of relationship with the service provider is a necessary indicator of both retention and loyalty.

Customer retention can occur without customers being attitudinally loyal, i.e., attached or committed long-term to the organisation. In contrast, behaviourally loyal customers may continue doing business with the current organisation until they find better alternatives in the marketplace or are trapped by too high switching costs. Truly loyal customers must have both positive attitudinal and behavioural elements. Customer retention indicates the length of the customer relationship, while cross-selling is an indicator of the breadth of the relationship.



Antecedents of service loyalty

A customer's loyalty status is not static and may indeed change over time because of changes in either his or her behaviour or attitudes, or both. What factors underpinning loyalty cause these changes? Economic drivers such as the costs and benefits of staying loyal and psychological drivers such as satisfaction and commitment may be at work.⁶ In short, customers may want to or have to stay loyal. Such factors promoting dedication and constraints in the customer relationship must be understood.

Affective commitment refers to the emotional attachment to the service provider resulting from the individual identifying with the service provider's norms, values, reliability, integrity and culture, so that the customer places trust in the service provider. Consumers have little involvement with their life insurance providers; their interest levels are low and they are unlikely to recommend their providers to others. Customer satisfaction, loyalty, advocacy and purchase intention are generally lower for life insurance than other industries, according to the Accenture Global Consumer Survey 2010.⁷

Customer satisfaction

Customer satisfaction was once assumed the prerequisite or a sufficient condition for customer loyalty. Defection rates were lower among highly satisfied customers than among the less satisfied. In many industries, companies use customer satisfaction surveys hoping to identify which customers are satisfied, assuming those are less likely to switch service providers and those who are not satisfied assumed at risk to defect. Customer satisfaction metrics are still widely used because they are easy to measure, understand and communicate. Much empirical research has demonstrated that increasing customer satisfaction does not necessarily guarantee increased customer loyalty or customer retention. This is particularly true for organisations selling services vis-à-vis physical goods. Many "satisfied" or "very satisfied" customers still defect.⁸

One school of thought says customer loyalty begins only after some level of customer satisfaction has been achieved, ruling out a simple linear relationship. Dissatisfied customers may

defect to competitors once the gap between service perceptions and expectations becomes intolerable.⁹

Expectations are set at two levels (adequate and desired). Any significant gap between perceived and desired service performance has an adverse impact on customer satisfaction and loyalty. Applying this theory to the Singapore life insurance industry indicated that levels of perceived service were inferior to desired service but fairly close to adequate service expectations, implying life insurers could do much more to lift their game.¹⁰

A rather popular metric resonating with corporate managers today is the Net Promoter Score (NPS), in which customer word of mouth recommendation (i.e., customer intention) is believed all powerful because, according to Reichheld, companies with high NPS have significantly higher growth rates. NPS for life, health, property/casualty insurers in the U.S. averaged 14% in 2010, meaning they did not have many more promoters than detractors compared to all industries where the average NPS was 23%.¹¹

Switching costs

Some seemingly loyal customers are actually dissatisfied but do not defect because they perceive the benefits of remaining in the current relationship exceed the benefits of switching to an alternative service provider; this is also known as a calculative commitment. Apart from financial costs, switching costs may relate also to the opportunity cost of time and psychological effort. Switching costs discourage customers from changing service providers because of the inordinate time, money and effort involved.

Consider common switching costs for underwritten term life insurance:

- Set up costs – consultation fees paid to financial advisers
- Search and evaluation costs – time and effort in finding new insurers and insurance advisers, evaluating policy terms and conditions such as total disablement and critical illness definitions, assessing cover exclusions, evaluating premium rates, undergoing medical testing and examination
- Learning costs – time and effort in learning and adapting to new procedures and routines post-switching relating to insurer or adviser
- Uncertainty costs – customers face non-trivial uncertainty about the outcomes of undergoing underwriting; unhealthy lives may receive more stringent terms after undergoing medical or financial underwriting by the new insurer or at worse be declined cover; the performance of the new insurer may be unknown in terms of claims paying, future premium rate increases and financial strength
- Financial costs – loss of access to the insurer's rewards or loyalty program; loss of discounted premiums (no-claim or loyalty bonus)

Perceived switching costs have fallen over time as life insurers have raised non-medical limits, offered generous policy takeover terms and used technology to enable customers to apply for cover more easily and quickly.

Inertia

General customer apathy, inertia and force of habit may also convince customers to stay with the current life insurer. When asked to rate the relative importance of seven different strategies to achieving their financial goals, Australian respondents to a Lifebroker¹² survey rated financial protection second last. The complex nature of life insurance requires customers to have a reasonably high level of knowledge and understanding to be able to compare alternatives. If it were not for the financial adviser's approach and recommendation, there would be no first-time purchase, top-up in cover or switching life insurers.

The second part of this article, to be published in the next issue of *Risk Insights*, will apply customer loyalty theory and discuss strategies life insurers may wish to consider, or are currently using, to grow customer loyalty and improve the whole customer experience.

Endnotes

- 1 Gen Re (2010). "Life insurance retention survey: Australia/New Zealand". Sydney, Australia.
- 2 Verhoef, P.C. and Donkers, B. (2005) "The effect of acquisition channels on customer loyalty and cross-buying". *Journal of Interactive Marketing* 2005;19(2):31-43.
- 3 Cohen, D., Gan, C., Yong, H. and Chong, E. (2007). "Customer retention by banks in New Zealand". *Banks and Bank Systems* 2007;2(1):40-55.
- 4 Reichheld, F.F. (1996). "The loyalty effect". Boston: Harvard Business School Press.
- 5 Dick, A.S. and Basu, K. (1994) "Customer loyalty: toward an integrated conceptual framework.". *Journal of the Academy of Marketing Science* 1994;22(2):99-113.
- 6 Bendapudi, N. and Berry, L. (1997). "Customers' motivations for maintaining relationships with service providers". *Journal of Retailing*; 73(1):15-37.
- 7 Accenture (2010). "The life insurance challenge: battling customer indifference while increasing customer satisfaction".
- 8 Op cit Reichheld (1996).
- 9 Parasuraman, A., Zeithaml, V. and Berry, L.L. (1985). "A conceptual model of service quality and its implications for future research". *Journal of Marketing* 1985;49(4):41-50.
- 10 Durvasula, S., Lobo, A.C., Lysonski, S. and Mehta, S. (2006) "Finding the sweet spot: a two industry study using the zone of tolerance to identify determinant service quality attributes". *Journal of Financial Services Marketing* 2006;10(3).
- 11 Picoult, J. (2010). "Why do customers tune out insurers?" (http://www.watermarkconsult.net/images/Why_Customers_Tune_Out_National_Underwriter_.pdf). Accessed November 2011.
- 12 Lifebroker Australia (2010), "Life insurance report 2010". (<http://www.lifebroker.com.au/life-insurance/report-2010>). Accessed November 2011.

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Projecting Mortality Trends – Part I

Separating the Past from the Future

Best estimates of both life expectancies and mortality trends have come into the spotlight recently, as ages at death appear to be increasing at alarming rates in certain populations and as pension liabilities burgeon. Especially in an economic environment where lower capital yields no longer compensate for the higher cost due to increased life expectancy, it is crucial to allow for appropriate future mortality trends in pricing and reserving for long-term insurance risks. Making the right assumptions on future life expectancy and mortality trends is probably one of the most difficult tasks for demographers and actuaries. Population projections have frequently underestimated life expectancy in retrospect.¹

Although they can only be a proxy, population mortality trends generally form the basis of insured lives' future trend assumptions. Understanding what factors may have driven past trends, and thoroughly researching the environment and societal context, are pivotal in setting assumptions around what will drive future trends. This article deals with using past experience to project mortality trends for insured lives and highlights a few challenges in this extrapolation process. This is the first of a two-part series on projecting mortality trends; Part 2 in a future issue of *Risk Insights* will focus more on theories in long-term projections, and assessing the volatility around life expectancy.

Dominant projection approaches

There are multiple schools of thought on best projection techniques. Some favour a P-spline model (a type of regression model), while others favour a Lee-Carter projection model (essentially a time series model and more rigid in accommodating volatile mortality improvements). Academic and actuarial publishing has recently focused more on adapting the Lee-Carter approach, and has been tailored for a benchmark model by the U.S. Census Bureau, among others. Both techniques, however, appear to have pitfalls in fitting to certain populations, and in any case all versions of these two popular models are dependent on improvements within past data.

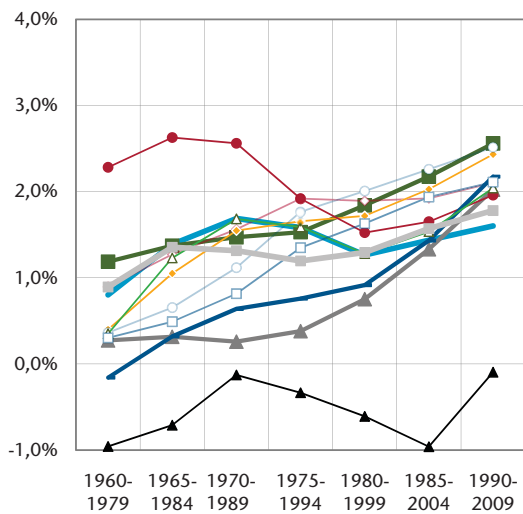
Often, observed historical trends may not be applicable to the future, yet ultimately most actuaries tweak medium-term experience only slightly and assume for the future, both in insurance pricing and industry published tables.² In fact, it is standard practice for economists and finance professionals to roll past trends forward for projections, adjusting for known or “predictable” changes; demographers commonly do the same in census projections.³ The trouble, of course, is pinpointing and then quantifying those changes or aberrations from past experience. The recent array of research published on mortality trends and demographic and socioeconomic patterns has amounted to an increasing body of academic knowledge speculating on the applicability of historical mortality experience. Most of this surrounds population mortality and comes short of equipping actuaries and risk professionals with an estimate of mortality trend applicable to a particular risk block.

While most mortality projections involve an element of extrapolating from experience, there are alternative techniques: epidemiological (cause-of-death specific or disease-based) models, which can be very complex and the aggregation of causes can be subjective; predictive models, which take into account the relationship between such risk factors as smoking and its mortality implication; or relational or targeting methods, where a reference population is selected but also relies significantly on judgment. These techniques can be leveraged to better inform decisions on projection parameters and other adjustments to the past, but the foundation for measuring future risk is still almost always past experience.

Twin challenges – selecting the time period to study and teasing out one-time occurrences from continuing patterns

So, given that we are stuck in the past, how can we best interpret this past mortality experience to get “back” to the future? Based on population mortality tables from the Human Mortality Database (HMD), we calculated the average mortality improvements

Figure 1a – Moving 20-year trend MALES, from HMD



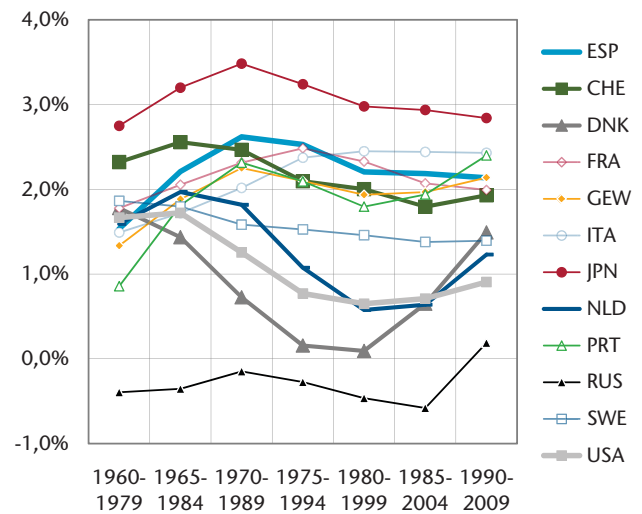
for the age group 60-89 for a selection of countries. The moving 20-year trend from 1960 to 2009 reveals different patterns for males (Figure 1a) than females (Figure 1b).

Male mortality trends show a quite similar pattern for most of the countries analysed. Since 1960, we observe more or less steadily increasing mortality improvements. Japan experienced a trend damping between 1965 and 1980, but after the turnaround in the 20-year period 1980 - 1999 mortality improvements are steady again and are now in line with the other countries. A few countries, such as Portugal and Denmark, show sharp increases in the last five years; this may be attributable to lower improvement rates in earlier decades, making up for “lost time”.

Russian trends are outliers, with male mortality deteriorating in each observation period, though a sharp improvement (or lessening of deterioration) was observed for both sexes in Russia in the last five years. This may also be attributable to compensating for lost time; research shows mortality crises in both 1992 and 1998,⁴ which would lower the base of the last period shown. In any case, one must consider the reasons for suppressed life expectancy – whether these challenges have been addressed to allow life expectancies to soar in the coming decades, or whether zero to negative mortality trends should be carried forward. Frequently cited reasons for the poor experience in Russia are the social determinants – for example, stress from economic reforms, violence, alcoholism, suicide and tuberculosis. Putting this in the context of the unique political reforms in the 1990s, one might assume that the levels of deterioration from 1985 - 2004 will not be repeated. While it is difficult to say in this instance whether the outlying trends observed in Russia will continue, it is essential to consider the context and drivers as opposed to applying blind averages and statistics.

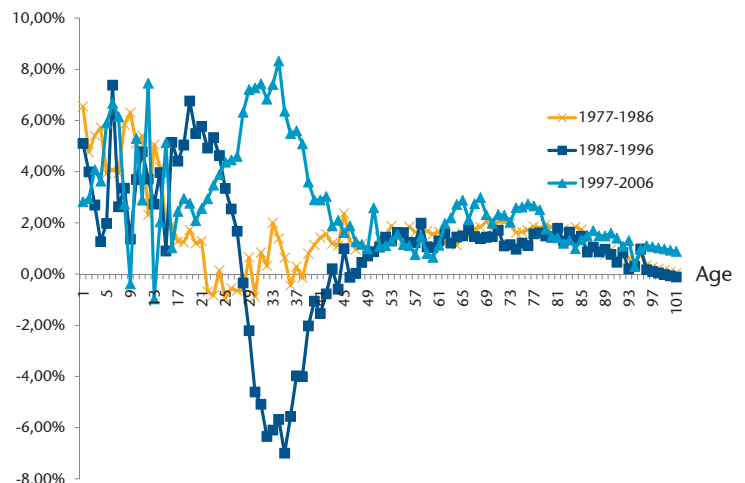
To better understand historical trends, a dive into the age shape can also be fruitful. Spain, with significant traffic fatalities in the 1980s, is a good example of needed investigations before assuming recurring improvement or before running with a certain short-term time period. We see, with Figure 2, a probable accident hump in male population mortality trends, primarily affecting men in their 20s and 30s.⁵

Figure 1b – Moving 20-year trend FEMALES, from HMD



In the 1990s and into the 2000s, traffic fatalities declined precipitously as the Spanish government offered incentives to purchase newer and safer cars; traffic laws were tightened, and road infrastructure was improved, among other positive effects.⁶ In addition, the improvements in preventive medicine and healthcare delivery since reforms in the late 1980s and 1990s, coupled with economic improvements in the 1990s, may produce a spike in short-term mortality improvements in older ages, making the 1997 - 2006 period anomalous.⁷ With reforms and economic improvements came an investment in infrastructure for hospitals, better access to care, and more frequent use of primary care, with annual checkups and cancer screening. These improvements to delivery and access were a collaboration of the government and private insurers, and while many of the preventive care improvements were not offered to the general public, better infrastructure eventually benefits the wider population, and mortality improvements were observed during the last period depicted in Figure 2. While infrastructure improvements can provide long-term improvements, access to primary care as well as traffic law improvements, and any reversal of HIV/AIDS-related mortality trends in the 1980s, may be closer to one-time improvements in mortality rates. It would be a misstep to assume 1997 - 2006 trend levels for best-estimate projections.

Figure 2 – HMD 10-year male mortality improvements in Spain by decade



An additional consideration in projecting population mortality trends is smoker prevalence and intensity. Female smoker prevalence in Spain has been under 30% and about average in Europe for some time. Male smoker prevalence has fallen in recent years, from its former position as the highest in Western Europe, to under 40% as of 2008 and below average for continental Europe. However, from 1970 until 2000, average cigarettes per capita and impact on mortality steadily increased, leaving considerable room for improvement.⁸ This means that older males may see some additional mortality gains as a result of lower tobacco use. Perhaps related, a downward trend in mortality from the lung cancer epidemic was seen in the late 1990s,⁹ and shrinking smoker prevalence will likely continue this trend. Said another way, mortality deterioration in the 65+ population in the 1980s and early 1990s has been partially attributed to male respiratory cancer.¹⁰ Mortality deterioration from lung cancer appears to have reversed beginning in the late 1990s, and because of continued falling smoking prevalence rates, this positive trend may continue into the next decade.

Trend implications from changes in smoker prevalence are important to consider in Spain, but they pale in comparison to those of certain countries with far higher smoker prevalence and “further to fall.” For instance, the majority of Chinese male adults smoke, and the epidemic spans across nearly all socioeconomic groups. Russian male smoker prevalence is perhaps even higher at 61%, and tobacco is among the top three risk factors for premature death in Russia. Though there is much potential for improvement and significant trend implications in both Russia and China, it is difficult to estimate when and whether to price for future improvements due to tobacco cessation. Both countries have looming indoor smoking bans, but enforcement is in question as smoking is culturally engrained in both societies, and both Russian (33%) and Chinese (40%) tobacco taxes are less than half those of most European countries, in terms of percent of retail price.¹¹ Even if smoking initiatives are implemented, there will be considerable time lag before the promised mortality improvements are realised. In both countries, younger generations have more to benefit from anti-smoking initiatives than older groups, where smoking prevalence is high but where decades of cigarette pack-years lower the potential for mortality improvement.

Timing and age-specific effect of government initiatives, reforms and lifestyle shifts discussed here should be considered before carrying a certain time period’s trend forward in projections.

Challenge – population versus insured lives data

In considering these past and future lifestyle shifts, much revolves around socioeconomic differences, access to healthcare and the awareness and affordability of healthy lifestyle decisions. Most of the insurance industry’s sums are associated with the higher socioeconomic classes, so actuaries frequently look at socioeconomic mortality disparities as a proxy for population versus insured differences when considering trend. Other actuaries have access to insured data or social security data extracts, which they use to supplement and adjust the baseline population trend assumptions.

Taking “differences of differences” or “ratios of ratios” is usually dangerous with numbers, yet this is common practice in tailoring population trend to project blocks of insured lives’ trends. The ratio of a pension or other insured block’s mortality trend to population trend is commonly applied in multiple markets. Occasionally, actuaries pinpoint a potential phenomenon and then wish to quantify and reflect it in an assumption. Sometimes, however, less can be more, and care should be taken before varying considerably from population trends. Are the drivers behind the disparity between pensioners’ and population’s trends expected to continue?

A Society of Actuaries (SOA) experience study, for example, assumed higher individual annuitants’ and individual life insureds’ trends than U.S. population trends.¹² The main basis for the difference in trends was derived from differences between socioeconomic levels. Much of the difference is due to improvement in HIV, smoking and obesity prevalence and implications. We believe, however, that some of the improvement would not affect an insured portfolio’s baseline mortality as it has typically been underwritten either off the insured books (in the instance of HIV), or placed into distinct risk classes with known mortality factors. Rather than improvement of mortality in any group, we might expect a change in distribution between smoker/non-smoker groups, or in BMI range.

When a credible amount of insured lives data *is* available for trend analysis, care should still be taken. For instance, changes in select mortality may have more to do with distribution channels and changes in underwriting criteria and market shifts than with true underlying mortality of the insured population.¹³ A recent Asian insured lives experience study showed that more stringent underwriting resulted in lower mortality improvements; therefore, it may not be a good default to assume higher insured trends than population trends.¹⁴

Challenge – causes versus correlation factors

Considering such factors as smoking prevalence, obesity rates and other emerging lifestyle factors that can drive changes to life expectancy can be a more tangible way of projecting future changes to mortality than a purely statistical approach. However, many experience studies delve into correlations, pointing out geographic or socioeconomic disparities. Care must be taken in considering causation versus correlation; for instance, the northeastern U.S. has exhibited higher mortality improvements than the southeast, and at the same time, socioeconomic status in the northeast has steadily been higher than that of the southeast. However, this does not alone prove that higher education and income drive mortality improvements, and it would be a further misstep to apply these previous disparities to disaggregate insured versus population-projected trends.

The SOA experience study showed white males aged 25 - 64 with 16+ years of education exhibiting from 1993 to 2001 twice the mortality improvements as the population at large.¹⁵ A popular argument is that education causes self-awareness and healthier lifestyles. Indeed, this education statistic from the experience study may reflect causality and not correlation, but

there is the potential for significant time lag in effects of education; perhaps the mortality benefit from education is already “saturated” in society, and in any case the education statistic has disputable bearing on 2012+ mortality projections. Even if education is causative, the underwriting risk assessment remains in play. If the causal mechanism in white males is improved sexual hygiene and reduction in HIV, on the other hand, improvements still would not flow through to HIV-negative insurance applicants unless they acquire the virus during the policy duration.

Stepping up to the challenges

While there is no silver bullet for any of these potential challenges when predicting the unpredictable, the more we consider the context of the data and the societal influences, the better. Here is a list of suggested considerations when adjusting population trends to project an insured portfolio’s trend:

1. How grave are the socioeconomic disparities, and what effect does this have on disparities in mortality *improvements*? Initial indicators may be unemployment rates, wage disparities and the Gini index,¹⁶ but further consideration must be given to timing of social reforms and effect of disparities on mortality.
 - Do we believe convergence or divergence of mortality rates will develop in the future between socioeconomic classes? One theory is the “social cascade theory”, where improvements occur first in educated and middle classes, and later in lower economic classes. This relates to how health education and information is disseminated, and existing awareness of disease, screening and prevention, health habits, etc.
2. What is the locus of the block of business (urban or rural)? Is access to healthcare changing in the country?
3. What are the differences in smoker prevalence and severity? What effect do we believe smoking bans or voluntary cessation will have on an aggregate mortality table in the population versus on insured lives?
4. What about other prominent lifestyle themes, such as increasing alcoholism in certain demographic cohorts?
5. Should we consider development of disease? AIDS has certainly affected certain countries’ short-term and medium-term mortality trends. Is cancer incidence changing? Tuberculosis, cardiovascular disease, prevalence of obesity?
6. Do the changes affecting population trend apply to an insured population, or is the baseline suppressor eliminated through underwriting?

The goal in extrapolating from past population data is to quantify these questions and apply only what we believe will be true of future insured lives. Part 2 of this article, to be published in the next issue of *Risk Insights*, will hone in on volatility around mortality projections and offer some guidelines and boundaries around this risk.

Endnotes

- 1 Oeppen J, Vaupel JW. Broken Limits to Life Expectancy. *Science* 10 May 2002: Vol 296 No 5570 pp1029-1031.
- 2 Global Mortality Improvement Experience and Projection Techniques. Society of Actuaries, Jun 2011. www.soa.org/files/pdf/research-global-mortality-improve-report.pdf. Accessed 11.11.11.
- 3 <http://www.census.gov/population/www/projections/methodstatement.html>. Accessed 08.11.11.
- 4 <http://longevity-science.org/GavriloVA-PAA-2003.pdf>. Accessed 11.11.11
- 5 Lardelli Claret P, de Dios Luna del Castillo J, et al. Age and sex differences in the risk of causing vehicle collisions in Spain, 1990 -1999.
- 6 Ruiz del Moral JZ. Improvements to Traffic Accident Mortality in Spain. *Risk Insights*, Vol 14 No 3. Gen Re, Sep 2010.
- 7 Villacorta Hernandez MA, Cabezas Ares A. Reformas Sanidad Española. Centro de Estudios Superiores Felipe II, pp5-6. www.ucm.es/info/ec/jec9/pdf/A10%20-%20Villacorta,%20Miguel%20C1ngel%20y%20Cabezas,%20Alfredo.pdf. Accessed 05.07.11.
- 8 Spain Smoking Prevalence and Tobacco Economy, pp368-9. <http://www.who.int/tobacco/media/en/Spain.pdf>. Accessed 05.07.11.
- 9 Franco J, Pérez-Hoyos S, Plaza P. Changes in lung-cancer mortality trends in Spain. *Int J Cancer*, Jan 2002.
- 10 Chenet L, McKee M, et al. What happened to life expectancy in Spain in the 1980s? *J Epidemiol Community Health* 1997. <http://jech.bmj.com/content/51/5/510.abstract>. Accessed 05.07.11.
- 11 www.tobaccofreecenter.org/files/pdfs/en/Russia_tobacco_taxes_summary_en.pdf and www.tobaccofreecenter.org/files/pdfs/en/China_tobacco_taxes_summary_en.pdf. Both accessed 08.11.11.
- 12 Global Mortality Improvement Experience and Projection Techniques. Society of Actuaries. Op cit.
- 13 Purushotham MC. Mortality Improvements. Society of Actuaries. *Actuary* Aug/Sep 2011, Vol 8 Issue 4.
- 14 Xu L. Comparison of Mortality Experience for Some Asian Countries. Society of Actuaries, *International News*, Aug 2011, Table 3.3.
- 15 Purushotham MC. Mortality Improvements. Op cit.
- 16 An index to measure how distribution of income among individuals deviates from perfectly equal distribution. <http://data.worldbank.org/indicator/SI.POV.GINI>. Accessed 24.11.11.

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Rate Increase Strategy and Anti-Selective Lapses in the U.S. Medicare Supplement Market – A Case Study

Medicare Supplement insurance (known as Med Supp or Medigap) in the United States is a USD 20 billion business. More than 100 insurance companies actively sell the product, and almost 10 million people are covered. Given the demographics of the U.S. population, specifically an aging population creating thousands of new seniors (age 65 and older) each day, Med Supp is viewed as a growth market. Many carriers and distributors are interested in entering this line of business to take advantage of this demographic trend.

Product and market overview

Medicare Supplement insurance is a private (i.e., non-government) health insurance product designed to supplement coverage under the U.S. Medicare program. To understand Med Supp, you must first know a bit about Medicare.

Medicare is a government run health insurance program that covers people age 65 or older, or people under 65 with certain long-term disabilities. Medicare Part A is Hospital Insurance, covering inpatient hospital care, skilled nursing facilities, hospice care and home health care. Medicare Part B is Medical Insurance, which covers doctors' services, hospital outpatient care and some preventive services. Medicare Part C is a program for independent insurance companies to cover Parts A, B and D as a Private Fee for Service or a Health Maintenance Organization (HMO) offering health care services to its members, which is funded by small premiums and government subsidies. Prescription drugs are covered under Medicare Part D, which is not covered under Med Supp policies.

Med Supp has standard plan provisions and benefits set by the federal government. Depending on the plan design, Med Supp covers the Part A and Part B deductibles (i.e., the amount a person pays annually before the HMO begins to pay any part of the cost

of services) as well as Part B co-pays and hospital costs not covered by Medicare. There is also coverage to some degree for hospice care, skilled nursing and preventative care. There are a variety of plans, A to N (see Table 1), but each is government specified. Individuals can choose between the plans (Plan F is the most comprehensive and therefore by far the most popular), but those plans will all be identical between carriers. Therefore, sales in this market are driven primarily by price. Upon turning 65, individuals have a six month open enrollment period to enroll in a Med Supp plan, after which they must satisfy underwriting requirements.¹

Case study – ABC Insurance Company

Over the past several years, Gen Re has been reinsuring a mid-sized Med Supp carrier (referred to as ABC Company for the purposes of this article) that is actively engaged in writing new business in 35 U.S. states. The way that this deal was structured and has developed over time, and the way we have managed it (both positively and negatively), has provided us with critical learning points and insight into this market. We believe this insight will improve our overall Med Supp underwriting result and that it can be applicable to other life/health products.

Gen Re entered into a reinsurance agreement for new business with ABC that became effective on January 1, 2007. The deal was structured as a quota share with Gen Re taking the majority of the risk. The insurance sold by ABC was individual, guaranteed renewable coverage. During the first two years of this deal, ABC wrote a significant amount of new Med Supp business, exceeding our expectations. As the business came onto the books we noted that the loss ratios were also running higher than expected. At the end of the second year of new business we made the decision to seek large (i.e., higher than medical expense trend) rate increases to offset the expected worsening of future loss

ratios. In some states we requested, and were granted, rate increases of 20% or more. These increases were justified by our claims experience, and the state regulatory environment was more favorable in 2009. After placing these rate increases, we started to see an increase in lapses, which we expected, but alarmingly, the loss ratios did not come down after the rate increases were implemented.

In 2010 we continued our strategy of requesting and placing large rate increases. States were willing to grant additional rate increases, but the environment was becoming more difficult and several states would only approve part of what we requested. As our rates went higher, our lapses continued to increase, with still higher loss ratios. It was becoming clear that our rates were now above the market and that this was resulting in lapses of healthier insured lives while we retained the less healthy ones. These anti-selective lapses would only compound our loss ratio issues. ABC's Med Supp sales started to grind to a halt, as the market went elsewhere in search of lower prices.

In 2011 we decided to adjust our strategy. In place of requesting the largest possible rate increase, with the concomitant and undesired effect of driving healthy insured lives off the books, we started to request smaller rate increases. While keeping a close watch on lapse behavior we started to analyze millions of individual premium and claim records looking for the relationship between claim costs, lapse rates and premium levels.

By completing this analysis, we discovered that there is a rate increase threshold above which persistency decreases sharply. Based on the most recent six-months of claims experience, we divided insureds into three claim cost segments: high, medium, and low. We then looked at the data by state and by rate increase level. Increases of 10% or lower resulted in low

lapse rates for all three segments. Increases between 10% and 15% produced a similar result, but differences started to emerge between the segments. Increases greater than 15% produced higher lapse rates in the low and medium claim cost segments, but continued low lapse rates in the high claim cost segment. Presumably, many individuals with low and medium claim costs are still able to satisfy underwriting, and choose to move to a lower cost provider, or else they are simply canceling coverage due to relative cost versus perceived value. We did not observe higher lapses in all three segments until rate increases reached at least 25%.

The results of our analysis confirmed our "gut feel" that 15% was the persistency inflection point.

Key lessons

As we continue to refine our analysis and implement improvements in our strategy, several key lessons have emerged:

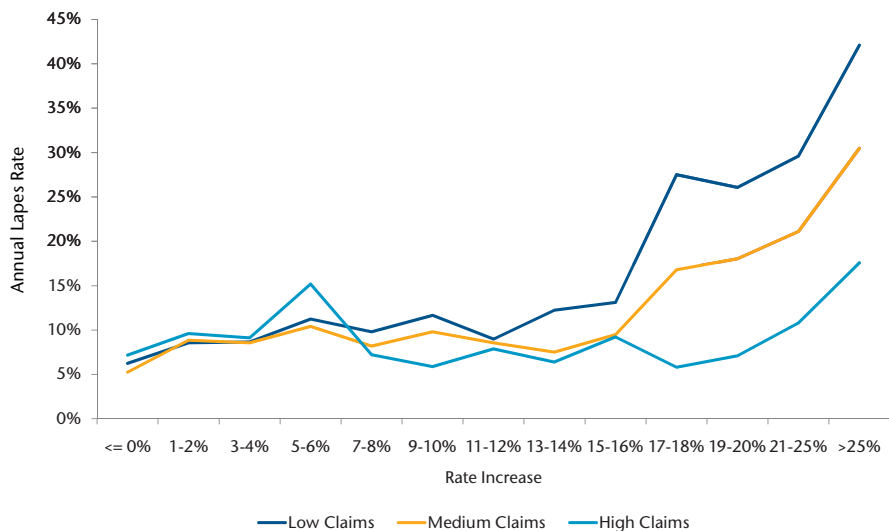
- **Understand where your rates are in the market** – It sounds elementary in hindsight, but it became clear that our initial market rates were too low compared to that of our competitors. This put us at a disadvantage even before we could request our first rate increases. We now regularly look at market pricing data before we set new business rates.
- **Do not delay your response** – We had two years of new business on the books before we realized that both sales and loss ratios were higher than we expected. Once we saw what was happening, there was an increased urgency to respond in a significant way to make up for lost time. Large rate increases were the "hammer" used to solve a problem perceived as a "nail". But the problem was more complicated, and this strategy contributed to the anti-selective lapses we experienced later.

Table 1 – Medicare Supplement Insurance plan coverage²

Benefits	Medicare Supplement Insurance Plans (Medigap)									
	A	B	C	D	F	G	K	L	M	N
Medicare Part A Coinsurance and Hospital Costs (up to an additional 365 days after Medicare benefits are used)	X	X	X	X	X	X	X	X	X	X
Medicare Part B Coinsurance or Copayment	X	X	X	X	X	X	50%	75%	X	X
Blood (first 3 pints)	X	X	X	X	X	X	50%	75%	X	X
Part A Hospice Care Coinsurance or Copayment	X	X	X	X	X	X	50%	75%	X	X
Skilled Nursing Facility Care Coinsurance			X	X	X	X	50%	75%	X	X
Medicare Part A Deductible		X	X	X	X	X	50%	75%	X	X
Medicare Part B Deductible			X	X	X					
Medicare Part B Excess Charges					X	X				
Foreign Travel Emergency (up to plan limits)			X	X	X	X			X	X
								Out-of-Pocket Limit		
								\$4,640	\$2,320	

Source: www.medicare.gov/Publications/Pubs/pdf/10050.pdf

Figure 1 – Lapse rate and claim level



- There is an “inflection point” in the relationship between rate increases, loss ratio and lapse rates; find it and use it to your advantage – It is all about balance and not putting yourself in a position where you over react and make the situation worse. Dig into the data and use “game theory”³ principles to develop specific scenarios for testing and potential implementation.
- Your rates have to be correct by state – You cannot be right “on average” because sales will follow the lower/incorrect rates and you will find yourself in trouble again.
- Exorbitant rate increases, even if justified by experience, hurt your business – Requesting large rate increases year after year creates anti-selective lapse activity, relationship and reputation issues with state regulators and hardships for customers, who may be unable to replace the coverage without going through underwriting at an older age.

Using the lessons learned from this case study, we are now developing a model based on how Med Supp insureds’ health changes over time. Using Monte Carlo simulations⁴, we can run scenarios to test lapse rates in certain rate increase bands to find the right balance between claim costs, lapse rates, and

profitability. We can use this predictive modeling capability for both new business and for existing blocks. We are also applying it to other health products such as Critical Illness insurance. Even if your business model or block characteristics are different from ours, the analysis and methodology should be similar and well worth the time and effort.

Endnotes

- 1 Readers interested in more background about Medicare and Med Supp can do so at <http://www.medicare.com>.
- 2 Centres for Medicare and Medicaid Services, Medicare and You. U.S. Department of Health and Human Services. www.medicare.gov.
- 3 Game theory is a mathematical and analytical tool that plots what a person’s best action might be in any circumstance in relation to their expectation about what other players will do and vice versa. <http://plato.stanford.edu/entries/game-theory/>. Accessed November 2011.
- 4 A computerized mathematical technique that allows people to account for risk in quantitative analysis and decision making. http://www.palisade.com/risk/monte_carlo_simulation.asp. Accessed November 2011.

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Commission-Based Versus Fee-for-Advice Systems



Bernhard Wolters
Vice President
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Traditional commission-based systems have two main shortcomings:

1. The commission received bears no direct relation to the effort made by the financial advisor.
2. Financial advisors have an incentive to recommend products with high commissions rather than the products or solutions that are best suited to customers' needs (creating a commission bias).

These problems are removed in a fee-for-advice system. There should also be the advantage of driving up advice quality as customers demand value for money. Despite these advantages, a fee-for-advice system does have its problems. Customers may seek less advice when they are required to pay the whole fee as a single lump, particularly when the value of the advice is not clear to them. In a commission-based system, the first-year commission is spread across the duration of the policy and advice is apparently free at the point of delivery.

This article explores these pros and cons of the two systems, providing models to assess their respective claims.

The nature of advice

Advice given to customers can take on two distinct forms. Named for the oracle of Delphi from whom the ancient Greeks sought advice and prophecy, Delphian advice seems obscure and mysterious to the recipient and is often only understood in hindsight. By contrast, Socratic advice enables well-informed and autonomous decision making. The name comes from the Greek philosopher Socrates who claimed to have no knowledge himself but helped an individual's knowledge emerge through a process of questioning; much as a midwife assists at a birth.¹ Customers are free to choose between these two forms of advice.

Theoretically, there is no mis-selling in a Socratic world because customers are drawn to make autonomous decisions. They alone must take responsibility for the consequences of their decisions. Customers can still make errors and so mis-buying remains possible. When Delphian advice is sought mis-selling is possible because customers are reluctant to invest the time and effort to understand the products. It is arguable that customers remain responsible for their decisions as they have chosen to rely fully on the advice of the financial intermediary.

Mis-selling scandals not only damage confidence in financial institutions but indicate that we live in a Delphian world. In it, financial intermediaries have adverse incentives to make profits at the expense of their clients. At the same time, the "victims" of such mis-selling are viewed as having impaired contractual capability in these matters and being in need of legal and supervisory protection. What constitutes mis-selling when advice is Delphian is a difficult question. Merely losing money is not a sufficient criterion (most would be happy to be mis-sold products that made them money).

It is widely believed that in a Delphian world a fee-for-advice system leads to greater customer benefits than a commission-based system because it helps eliminate adverse incentives.² As a result, the introduction of fee-based regimes has been under consideration by many insurance regulators and responsible government agencies for some time.³

The demand for advice – more for f(r)ee?

In a perfect, deterministic world in which all economic agents possess the same complete and certain knowledge, advice does not carry any value. The need for advice arises from information asymmetry between economic agents. The general public has to assume that financial advisers know more about the world of finance and insurance than they do and will be able to lead them to the best outcome for their investments.

The customer has three options:

Option 1: Seek advice and possibly buy a policy

Option 2: Buy a policy without seeking advice

Option 3: No policy and no advice

Clearly, for options 2 and 3 it makes no difference if a commission-based or fee-for-advice system is operating. There is, however, a difference in the net benefit in the two systems for option 1. In this scenario, the commission-based system comes out better because clients are required to pay a fee for the advice even if the policy turns out to be of no value to them.

We shall demonstrate each example further with the models below.

Commission-based advice

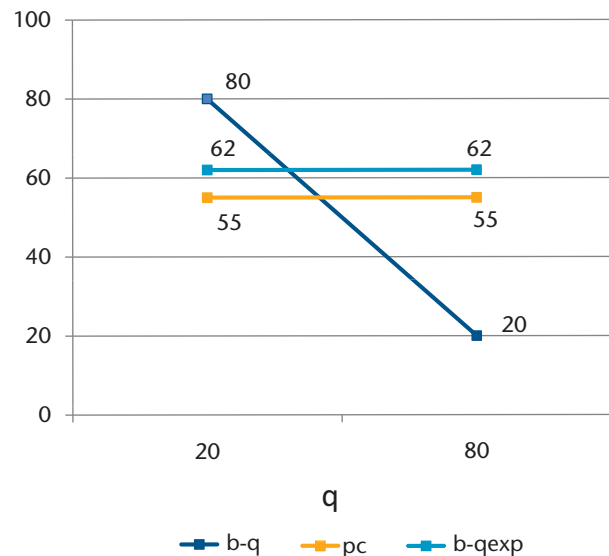
A customer (C) knows that he can gain a gross benefit b from insurance. However, b is reduced by the specific circumstances q of C's situation (e.g., profession, family status, state and corporate benefits). Suppose that the mismatch parameter q can assume two values: q_1 and q_2 with probabilities $P(q_1)$ of 70% and $P(q_2)$ of 30%.⁴ C knows the distribution of q (and its expected value q_{exp}) but not the specific values q_1 and q_2 that correspond to his situation. Only a financial advisor can reveal q_1 and q_2 to him. Under a commission system, the customer pays a single premium p_c that includes a commission of 5. Under a fee-based system, or in case of a direct purchase of insurance, the customer has to pay a single premium p_n net of commission. The fee for advice is denoted by a .

Let us assume the following values for the above parameters:

$b = 100$; $q_1 = 20$; $q_2 = 80$; $q_{exp} = 38$; $p_c = 55$; $p_n = 50$; $a = 5$

Figure 1 illustrates the customer's decision making situation under a commission system.

Figure 1



Option 1: Seek advice and possibly buy a policy

If the customer seeks advice, he will find out his specific individual benefit of taking out a policy. It can be either $80 (b - q_1)$ or $20 (b - q_2)$. In the first case, the policy would generate a net benefit of $25 (b - q_1 - p_c)$. In the latter case, the customer would choose not to take out a policy as this would result in a net loss of $35 (b - q_2 - p_c)$. His net benefit would thus be nil. The expected net benefit therefore amounts to $17.5 (P(q_1) \times 25 + P(q_2) \times 0)$.

Option 2: Buy a policy without seeking advice

Without advice he can expect a net benefit from the policy of $12 (b - q_{exp} - p_n)$.

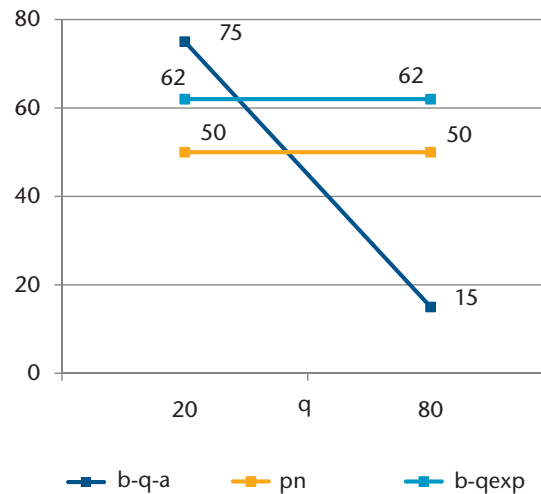
Option 3: No policy and no advice

If the customer neither seeks advice nor takes out a policy, his benefit will be nil.

Fee-for-advice

Figure 2 illustrates the customer's decision making situation under a fee system.

Figure 2



Option 1 would lead to the same net benefit of 25 in case of q_1 but to a loss of 5 (the amount of the fee the customer has to pay) in case of q_2 . The expected net benefit would thus amount to $16 (P(q_1) \times 25 + P(q_2) \times (-5))$. It is smaller than the commission-based result because the customer will have to pay the fee of 5 anyway, even if, as a result of the advice, insurance turns out to be of no use for him. Option 2 and option 3 are identical to the situation under a commission-based system.

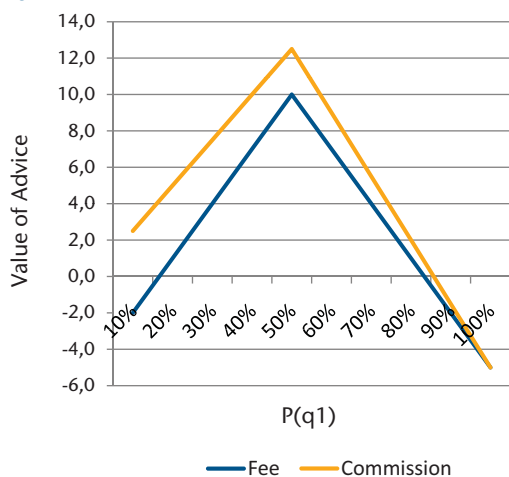
The value of advice

In these models the value of advice under the commission-based system amounts to 5.5. It is equal to the difference between the expected net benefit under option 1 (17.5) and the expected net benefit under option 2 (12). Correspondingly, under the fee-based system the value of advice is equal to 4 (16 minus 12).

The value of advice is invariably greater in the commission-based system than the fee-for-advice system, but the extent depends very much on the specific circumstances for the individual. Where the choices are very straightforward, there is little difference between the two systems (but advice in general is not of much value either). As debate between options increases, the commission-based system proves to be a better value. This is because in a fee-based system you always have to pay, even for bad advice.

Figure 3 depicts how the value of advice to the customer depends on the distribution of q . If q is uniformly distributed, with q_1 and q_2 having a probability of 50% each, financial advice generates the highest value. This is intuitively clear because the assignment of equal probabilities to q_1 and q_2 will only make sense if no information is available. Any initial probability assessment in favour of either q_1 or q_2 will only be rational if relevant information is available *a priori*. As a result, subsequent advice will be less beneficial. In the extreme case of $P(q_1) = 100\%$, the customer knows that his situation corresponds to q_1 . Therefore, any advice would be superfluous and the amount of money paid for it would be wasted.

Figure 3



Another observation we gain from figure 3 is the growing divergence of the red and the blue lines parallel to the decrease of $P(q_1)$. Obviously, the higher the probability in the eyes of the customer that he does not need insurance (q_2), the higher the impact of the fee he has to pay for “nothing” as compared to the free advice (in case of q_2) under a commission-based system.

The impact of fees is greatest for those who are pretty sure that they do not need an insurance product. Advice coming “free” in the commission-based system would look much more attractive. In view of this, it seems highly likely that the overall demand for financial advice will be lower when fees are charged than is the case for built-in commissions.

Value for money – what value?

So far it has been assumed in the above models that the customer can easily assess the quality of advice delivered by the financial intermediary. This may not be a valid assumption in a predominantly Delphian world. Financial decisions have

long feedback times with uncertain outcomes. The quality of the advice given only becomes clear many years after the decision has been taken. The introduction of a fee-based system would create a separate market for advice that does not exist under a commission-based system. Customers would have, at best, an idea of the average quality of advice prevailing in the market, thanks to information published by industry sources or consumer protection organisations. They will be unlikely to pay for high-quality advice when they are unable to tell the difference from cheaper, average-quality advice. The effect of this would be to drive those providing high-quality but costly advice to reduce costs, and hence reduce quality or leave the market. In this dynamic system, the concept of average is driven ever downwards, further compromising the quality of the advice on offer, as shown in the following model.

Suppose that the quality of advice q was uniformly distributed over its possible levels 0, 1, 2, 3 and 4, where 4 may stand for “outstanding”, 0 for “unacceptable” and 1 to 3 may represent intermediate assessments, e.g., “below average”, “average” and “above average” respectively. To make things as simple as possible, we assume that the expenses, which financial advisers must incur in order to be able to achieve one of the above quality levels, are equal to the corresponding figures above. An adviser providing a quality level of 4 (q_4), for example, will thus incur expenses (including a profit margin) of 4. In a competitive market for advice, the fee equals expenses. As customers are only aware of the average quality of advice in the market (q_{av}), they will not be prepared to pay a fee exceeding q_{av} , which in our example is equal to 2. Financial advisers initially providing quality levels 3 and 4 will therefore be faced with the alternative to either leave the market or reduce their expenses and quality levels. At a fee of 2, however, the market is not in equilibrium either, because the disappearance of financial advisors providing q_3 and q_4 has led to a decline of q_{av} to 1. Again, there will be downward pressure on fees, and the process only comes to an end when all advisors still operating in the market provide the lowest quality q_0 .⁵

The problem faced by customers in their fee-based contractual relationship with financial advisors is twofold: how to measure the advisors’ input and how to assess the quality of their output. In economic theory, this is formally described as a principal-agent relationship, where the customer is the principal and the advisor is the agent. As one expert suggests, “The central concern is how the principal can best motivate the agent to perform as the principal would prefer, taking into account the difficulties in monitoring the agent’s activities.”⁶ Principal-agent theory provides a wide range of possible solutions to this incentive problem, the treatment of which is outside the scope of this article.⁷ It is sufficient to note that under a commission-based system the role of the principal is assumed by the insurance company rather than the customer. When regulators aim at replacing commission-based systems by fee-based remuneration, they will effectively transfer the principal-agent problem from the insurance companies to their customers. Unless accompanied by regulatory measures in order to channel advisors’ incentives in a proper way, this change may not be in the best interests of customers.

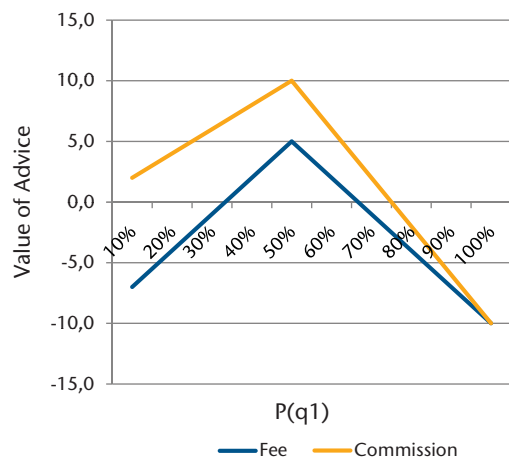
Conclusion

For proponents of a fee-based system, the lack of commission bias and better quality of advice appear to be the key advantages.⁸ But this system cannot be relied upon to deliver better quality advice as it is prone to market failure. Quality assurance will fall to the regulators and is therefore likely to be expensive and onerous for the advisors. This risks commission bias being replaced by “knowledge bias” as unqualified advisors only recommend the few financial solutions they know rather than the solutions customers really need.

The major challenge for proponents of an exclusively fee-based system remains the danger of insufficient demand for advice, resulting in significant welfare loss. The Association of British Insurers predicts that comprehensive review and advice is expected to take seven to eight hours and to cost GBP 670. This would only be affordable by a minority of customers.⁹

This can also be illustrated in our above setting. Figure 4 depicts the value of advice based on a fee of 10 instead of 5 as in figure 3.

Figure 4



Increasing the fees means that advice is of value to a reduced number of people, namely those with less prior information and knowledge. They may just be the ones who can least afford the cost of advice. The development of financial literacy and the availability of good quality advice to those who can least afford it is therefore a significant challenge to the state and to the industry as a whole.

Endnotes

- 1 For the philosophically minded, consider the relevant quote from Plato's dialogue "Theaetetus": "For I have this in common with the midwives: I am sterile in point of wisdom...but those who associate with me ...have never learned anything from me, but ... have found in themselves many fair things and have brought them forth." <http://praxeology.net/theaetetus.htm>. Accessed November 2011.
- 2 In this article, the focus is on first-year commissions. Under a commission-based system, the financial advisor will be remunerated by the insurer if he manages to sell a policy. Under a fee regime, he is paid directly by the customer no matter whether or not the latter takes out a policy.
- 3 In the Netherlands, the finance ministry has announced plans to introduce a fee-based remuneration in 2013. Similarly, preparations are under way in the UK to abolish commissions paid on savings and investment plans sold by independent financial advisors by the end of 2012.
- 4 The idea of a mismatch parameter q originates from a paper by Hugh Gravelle: "Remunerating Information Providers: Commissions versus Fees in Life Insurance", *The Journal of Risk and Insurance*, 1994, Vol. 61, No. 3, pp. 425-457.
- 5 This type of market failure was first examined in a paper by George Akerlof: "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism", *The Quarterly Journal of Economics*, 1970, Vol. 84, No. 3, pp. 488-500. This problem has also been highlighted in a recent study by the Dutch economic think tank SEO, commissioned by the Dutch Minister of Finance. SEO reviewed the impact of four-year-old remuneration guidelines for financial intermediaries on the latter's client focus. See Evaluatie provisieregels complexe producten, SEO, Sept. 2010, p.8. <http://www.seo.nl/pagina/article/evaluatie-provisieregels-complexe-producten/>. Accessed November 2011.
- 6 David Sappington: "Incentives in Principal-Agent Relationships," *Journal of Economic Perspectives*, 1991, Vol. 5, No. 2, p. 45.
- 7 Sappington (see endnote 6) provides a useful overview.
- 8 See for instance FSA, Policy Statement 10/6, A1: 9: "...the main benefits...would be an improvement in the quality of advice, and a reduction in the incidence of mis-selling..." <http://www.fsa.gov.uk/Pages/Library/Policy/Policy/2010/index.shtml> or a study from 2008 commissioned by the German Federal Ministry of Food, Agriculture and Consumer Protection in which similar assertions with regard to the advantages of fee-based advice are made. <http://www.bmelv.de/SharedDocs/Standardartikel/Verbraucherschutz/Finanzen-Versicherungen/StudieFinanzvermittler.html>. Accessed November 2011.
- 9 Association of British Insurers, Increasing Consumer Access to Advice, May 2010. http://www.abi.org.uk/Publications/ABI_Publications_Increasing_Consumer_Access_to_Advice_a58.aspx.

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Inside Gen Re

Client Seminars

International

- > **Gen Re, Taipei**, organised a seminar with the Insurance Institute on June 10, 2011. Dr. Wolfgang Droste, Chief Executive Officer, Asia Pacific, presented “Public and Private Partnership for LTC: Who Are the Winners?”. The seminar was attended by over 120 industry representatives.
- > **Gen Re, United Kingdom**, hosted a seminar in London on July 7, 2011 entitled “Simple” to focus on how simple product propositions could encourage more people to take out protection insurance. The event was attended by 60 delegates. Jules Constantinou, Head of Marketing, presented “What Is the Opportunity?”; Joan Coverson, Regional Chief Actuary, presented “Predictive Modelling”; Robert Kerr, Senior Account Executive, presented “What Is the Product?”; Dave Nicholas, Chief Underwriter, presented “What Is the Proposition?”; Maggie Craig, Director of Life and Savings, Association of British Insurers, presented “Simple Products”; Dr. Michelle Harrison, Chief Executive Officer, TNS-BMRB, presented “Who Is the Customer?”; and Barry Clark, Account Director, Financial Services, Future Foundation, presented “Pushing the Boundaries”. The seminar theme was linked in with the current UK Treasury-led consultation on simple financial products.
- > **Gen Re, Australia**, hosted annual seminars in Sydney, Melbourne, Auckland and Wellington, attracting over 400 delegates with themes on reconceiving products and refining productivity. Michael Molesworth, Managing Director, presented “What Keeps CEOs Awake at Night” with Peter Temple, Managing Director, Gen Re UK & South Africa. Adrian Mak, Account Executive, presented “Why Do We Undersell Insurance?”; Dr. Wolfgang Droste presented “Preliminary Results From Gen Re’s 2004-2008 Dread Disease Claims Survey”; Matthew Ramjan, Chief Underwriter, Gen Re Australia, presented “Underwriting Global Directions”; Carol Smit, Claims Consulting Manager, and Rob Frank, Claims Advisor, discussed claims innovation in Group business. Eddy Fabrizio, Chief Actuary presented “Can Medical Science Cure Lifestyle?”
- > **Gen Re, Taipei**, hosted a seminar discussing “Identification for Pathological Report” and “Insurance Litigation for Case Studies” at the Insurance Association on August 10, 2011. The seminar was attended by 76 industry representatives.
- > **Gen Re, Mexico and Spain**, ran a training course in Panama from September 4 - 9, 2011. There were 27 delegates from 20 companies in attendance. Gen Re speakers included Luis Enrique Garcia, Al’Nair Escalante, Rita Hernandez, Janice Mina, Gloria Palma, Alberto Zazo, Claudia Gevers and Carmelo Galante. Topics included risk management, group business, health insurance, reinsurance, medical, non-medical and financial underwriting, new products and distribution channels.



Public and Private Partnership for LTC, Taipei



At the Insurance Association in Taipei



Training Course, Mexico/Spain



Training Course, Mexico/Spain

Inside Gen Re

Client Seminars (cont'd)



10th Anniversary of Seoul Branch

- > **Gen Re, Seoul**, hosted a seminar on October 7, 2011 to celebrate the 10th anniversary of the opening of the Seoul branch. Forty-one people from 19 insurance companies attended. Dr. Wolfgang Droste presented “Preliminary Results From Gen Re’s 2004 - 2008 Dread Disease Claims Survey” and Dr. Dirk Nieder, Vice President and Regional Chief Actuary, presented “Impact of Radiation on Mortality/Morbidity”.
- > **Gen Re, United Kingdom**, ran a training course in Bristol on November 8, 2011. There were 50 delegates from 10 companies in attendance. The presentations were as follows: Adele Groyer, Actuary, “Alcohol Trends in the UK”; Dr. Ian Cox, Chief Medical Officer, “Alcohol and Health”; Lynn Baillie, Senior Underwriting Specialist and Claire Henshall, Head of Claims, “Do We Know What We Drink?”. Two external speakers from support groups Alcoholics Anonymous and Al-Anon presented their personal experiences with alcohol.

North America

- > **Gen Re, North America**, hosted the Group Life Rate & Risk Management Survey Roundtable Meeting in Stamford on November 15, 2011. The meeting reviewed the results of the 2011 *Group Life Rate & Risk Management Survey*. There were 30 attendees representing 19 of 21 participating companies.



Roundtable Meeting, Stamford

Inside Gen Re

Industry Meetings

- > **The Academy of Insurance Medicine of Asia** (AIMA VIII) conference was held in Shanghai from October 16 - 19, 2011 with 466 delegates from 140 companies in Asia, Europe and Oceania in attendance.
- > **Dr. Detloff Rump**, Regional Chief Underwriter, Gen Re Hong Kong presented “Disorders of Early Childhood and the Selection of Life Risk”. **Andres Webersinke**, Head of Research & Development, Gen Re Germany, presented “An Update of Evidence-Based Underwriting; Dyslipidaemia”. **Jane Dorter**, Head Client Services, Gen Re Australia presented “Tele-Claims: Creating Claims Efficiencies on Behalf of Your Customer”, **Colin Bradford**, Insurance Operations Consultant, Asia presented “Asking the Right Questions – An Aid to Effective Claims Communication”. **John Ferguson**, Regional Chief Actuary, Greater China and **Janice Lu**, Chief Representative, Beijing Representative Office presented “Preliminary Results From Gen Re’s 2004 - 2008 Dread Disease Claims Survey”. Significant contribution to the overall success of the meeting stemmed from the work of **Dr. Jenny Zhou** as Chairman of the Organising Committee and **Dr. Fajah Peshi** as President of AIMA.
- > **Dr. Chris Ball**, Consultant Medical Officer, Gen Re UK, presented “Growing Old Is Mandatory; Growing Up Is Optional” at the Geneva Association: 8th Health and Ageing Conference on Insurance and Dementia, Toronto, November 14 - 15, 2011.
- > **Joseph Atamaniuk**, Vice President, Marketing and Account Management, facilitated “Strategic Issues, Future of Traditional Reinsurance Market, Growth Opportunities, Non-Life Reinsurance and Global Initiatives” at the annual LIMRA reinsurance study group during the 2011 SOA Annual meeting in Chicago.
- > **James Greenwood**, Senior Vice President, Individual Products Division, hosted a seminar for actuaries who were part of U.S. Study Tour of The Institute of Actuaries of Japan (IAJ). The program was held after the SOA Annual meeting at The Westin Michigan Avenue, Chicago. **Dr. Thomas Ashley**, Vice President and Chief Medical Director presented “Predictive Modeling” and **Catherine Bierschbach**, Vice President, Chief Pricing Actuary, Individual Products Division presented “What Is STOLI?”.
- > **Pat Bailer**, Vice President of Claims and Vendor Management, North America, **Diane Ferreira**, Senior Claims Management Consultant, and **Neal Jones**, Senior Claim Examiner attended the International Claims Conference in Las Vegas, Nevada, September 29 - October 6, 2011.
- > **Anthony Forte**, Vice President, Chief Underwriter, **Gene Dean**, Vice President, Chief Facultative Underwriter and **Kye Dmuchowski**, Assistant Vice President, presented a case study entitled “Financial Case Clinic – Does It Make Sense?” on October 11, 2011, at a meeting sponsored by the Academy of Life Underwriting.



AIMA Conference, Shanghai

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Industry Meetings (cont'd)

- > **Peter Sauer**, Second Vice President Underwriting, presented “How to Recycle Your Underwriters: Cross-training Life, Disability Income & Medical Underwriters to Underwrite Critical Illness” at the Critical Illness Insurance Forum conference sponsored by LIMRA/ LOMA/NACII and SOA.
- > **Dr. Adela de Loizaga Carney**, Second Vice President, Medical Director, presented “Do You Hear What I See?” on Heart Basics and Echocardiography 101 and Application to Aortic Valve Disorders. **Michael Clift**, Second Vice President, Underwriting Manager, presented “Driving Criticism and Motor Vehicle Records: Trends, Technology and Terminology” at the Northeast Home Office Underwriters Association (NEHOUA) 28th Annual Meeting, October 13, 2011.
- > **Stephen Rowley**, Vice President, delivered a Risk Management presentation on Combination Products to 24 companies via webinar on November 1, 2011 examining the pros and cons of three common living benefit riders in use today – Long-Term Care, Disability Income and Critical Illness – and exploring the unique characteristics and associated risks inherent to each model.
- > **Jennifer Daigle**, Vice President, Group Risk Management, facilitated a session at the Claim Analytics Annual User Group Meeting in Chicago on November 8, 2011.
- > **Michael Clift**, Second Vice President, Senior Account Executive, Underwriting Manager, presented “Driving Criticism and Motor Vehicle Records: Trends, Technology and Terminology” on November 17, 2011 to the Hartford Springfield Underwriters Association (HSUA) in South Windsor, Connecticut.
- > **Steve Woods**, Vice President, Senior Account Executive, chaired the 2011 LIMRA DI/LTC conference.
- > **Stacy Varney**, Vice President, Marketing & Account Management, made an educational presentation on Consumer Buying Behavior via webinar on December 6, 2011. Contact your Gen Re representative if you have interest in the presentation materials.

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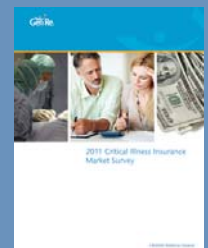
Our Publications

International

- > **Risk Matters**
 - September – Guaranteed Benefits for Income Protection**
This issue looks at the implications of a new form of IP product emerging in the UK where the insured benefit is the exact amount policyholders will receive when they claim.
 - November – Long Term Care Quarterly, Summer 2011**
This issue discusses the future of UK adult social care following the Dilnot Commission report, the ongoing debate about how best to fund the future needs of individuals, and considers the next step for insurance providers.
- > **Risk Matters Oceania**
 - September** – discusses the 10-Hour Policy Rule in Income Protection and Bonuses and Employee Share Schemes, Updates and Improvements in Evidence-Based Underwriting and COMET 2011 Diary.
 - October** – considers screening for Chronic Kidney Disease using the eGFR test.
 - December** – describes the impact of highly sensitive Troponin on the diagnosis of heart attack and how knowing specific work duties is essential to disability claims management.
- > **Underwriting Focus**
This issue includes Innovative Diagnostic Procedures in Cardiology, Cardiological Diagnostics, Fingerprints and Fraud, All-Terrain Boarding, Occupation: Comic Strip Artist and our international training dates.

North America

- > **Gen Re** and the **National Association for Critical Illness Insurance (NACII)** released the 2011 survey results to participants and NACII Board Members on November 11, 2011. The survey goes beyond the sales results for 2010 and provides information on plan design, administration, underwriting, claims, product performance and companies' future plans. Also, in cooperation with LIMRA, the survey reported sales results for 40 companies estimated as representing over 90% of the U.S. CI market.
- > **2011 Group Life Rate & Risk Management Survey** was published in November. This survey focuses on underwriting and rating, claim management, sales, product and marketing practices for both traditional Group Life and Voluntary Life. (The full report is available to participating carriers only).
- > **Group Disability and Group Life Mid-Year Market Survey** tracks sales and earned premium for the first six months of the year providing participants data to track their results with their peers. (The summary report is provided on www.genre.com).
- > **ProducerConnect** survey compares how brokers rate carriers in terms of ease of doing business, competitiveness of price, flexibility of product offerings, sales representative knowledge and responsiveness. (The full report is available to participating carriers only).



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Our Professionals

North America

- > **Stephen F. Rowley**, Vice President, joined the Individual Products Division Sales and Marketing team as Senior Account Executive. Steve has been involved in the LTC and CII markets as team leader and marketer and most recently was head of the automatic underwriting team. He has been an active member of numerous industry committees, is a frequent speaker at industry events, a past President and Board Member of the Long Term Care International Forum, a current member of AHIP's Product Leadership Committee, and author of *The Consumers' Guide to Long Term Care Insurance*. Prior to joining Gen Re in 1997, Steve was an Underwriting Consultant for The Paul Revere Insurance Company and managed their Employee Benefits Client Services Department.
- > **Pat Bailer** has assumed the role of Vice President of Claims and Vendor Management for all North American Life & Health products, including Individual & Group Disability, Individual & Group Life and AD&D, Long Term Care, Critical Illness and Medicare Supplement.
- > **Mike Fullerton**, Vice President, Senior Account Executive, recently joined the Group & Specialty division responsible for client account management and new business development. Before joining Gen Re, Mike was most recently National Accounts Practice Leader at Sun Life Financial. Previously, he has worked at Standard, Unum and Duncanson & Holt in a variety of management positions in marketing and operations.
- > **Steve Woods**, Vice President, Senior Account Executive, recently joined the Group & Specialty Division responsible for client account management and new business development. Steve was most recently at MetLife where he was Director, Distribution Strategy & Management for their Individual Disability division. Prior to this he has also worked for Paul Revere, MassMutual and MIB. Steve was the chair of the 2011 LIMRA DI/LTC conference and represented MetLife on the Council for Disability Awareness.
- > **Jeremy Starr**, Vice President, Client Solutions, has been named Chair of the American Academy of Actuaries' Reinsurance Committee.





The difference is...the quality of the promise.

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