

sigma

Mutual insurance in the 21st century: back to the future?

- 01 Executive summary
- 02 Introduction
- 05 Recent market
developments in
mutual insurance
- 12 Capital strategies for
mutual insurers
- 24 Upgrading corporate
governance practices
- 30 Digital disruption
and Mutualism 2.0
- 40 Conclusion

Executive summary

Mutuals are experiencing something of a revival following significant retrenchment in the late 20th century.

At their core, all mutuals operate for the benefit of their members rather than outside shareholders. Following retrenchment towards the end of the 20th century, mutual insurers are experiencing a modest revival. Over the past few years, cumulative premiums written by mutual insurers have outpaced that of the wider insurance market, with much of the outperformance concentrated during the height of the financial crisis. As a result, mutuals' share of the world insurance market increased from around 24% in 2007 to just over 26% in 2014. This, however, is still much lower than in the late 1980s and early 1990s, before a wave of demutualisations in a number of developed countries.

New risk-based regulatory capital standards could put some mutuals at a competitive disadvantage, ...

Despite their strong showing during the global financial crisis, mutual insurers face challenges in adapting to the changing business environment. Most obviously, new risk-based regulatory capital standards could put some firms at a competitive disadvantage compared with better-diversified insurers. This has prompted a renewed focus on the range of capital solutions available to mutuals including, in some countries, new legislation for the issuance of mutual-specific capital instruments.

... but at the same time, a widening set of capital solutions will offer mutuals increased financial flexibility.

Reinsurance and alternative risk transfer mechanisms such as insurance-linked securities can also provide mutuals with increased financial flexibility to cope with unexpected losses, grow their business and compete with other types of insurers. Customised solutions, including innovations to allow collective access to reinsurance or other forms of risk-absorbing capital, are developing. This will widen access to risk transfer solutions for mutuals, which hitherto may have been deterred by cost or limited market interest in small-value transactions.

Changing corporate governance arrangements may also disrupt the operations of smaller mutuals.

Alongside enhanced solvency regulation, tougher corporate governance arrangements could challenge some aspects of the mutual business model. Small mutual insurers in particular are concerned that compliance with new measures could create a financial, administrative and operational burden that impairs their ability to survive. Regulators appear alert to the possible unintended consequences and emphasise proportionality in implementing the new prudential and governance regimes, but there is still considerable uncertainty attached to what that means in practice.

Digital technology could present the biggest game changer for mutuals and the wider insurance market.

Digital technology could present the biggest game changer for mutuals and the wider insurance market. It is not only disrupting all aspects of the insurance value chain but is fundamentally re-configuring the competitive landscape in which all insurers operate. Existing mutual insurers recognise the need to innovate and some are in the vanguard of change, promoting digitalisation in all areas of their operations. Some of the smaller, more traditional mutuals, however, remain in the digital slow lane, and run the risk of being left behind if they do not upgrade their business practices.

By leveraging new technologies, existing mutuals can continue to build on their recent renaissance.

This is especially true given the growing development of peer-to-peer (P2P) insurance platforms, which enable individuals to share risks among themselves in much the same way that affinity-based mutual insurers do. These P2P arrangements are small and focus on selected risks, but new technology such as Blockchain could ultimately increase their scalability. Exploiting social media and smart analytics to better understand the needs and preferences of customers should be a natural fit for mutuals given their *raison d'être* is to serve the interests of their members. By leveraging the benefits of the new technologies, mutuals can continue to build on their recent renaissance and potentially launch a new era of mutualism.

Introduction

The key feature of a mutual is that it is run for the benefit of member-owners, not outside investors.

There are many types of mutual that differ in legal structure, size, membership rights and scope of activity.

Some mutuals are part of the wider network of organisations that support societal well-being.

Mutual insurers have often been set up to cover insurance needs not met by traditional insurance companies.

The mutual sector has gone through past episodes of demutualisation and remutualisation, largely in response to changing external conditions.

What is a mutual?

A mutual is an autonomous association/organisation of legal entities or persons operating in (and sometimes across) different sectors, including healthcare, banking, insurance and many others. The primary purpose of the mutual is to satisfy its members' common needs, rather than to make profits or provide a return on capital.¹ Mutual organisations are run for the benefit of its member-owners, as opposed to being owned and controlled by outside investors.

The above definition includes many types of organisations. A European Commission study identified around 40 types of mutual-like organisations in Europe alone.² The diversity of the sector is not just a function of legal structure but also includes differences in size, membership rights and scope of activity. For example, in some jurisdictions mutuals are restricted to insurance or certain lines of insurance. In others, mutuals are excluded from insurance but can engage in areas such as healthcare, social services or the provision of credit. In some countries mutuals are not legally recognised at all, regardless of the activities they might wish to provide.³

The nature of services provided by mutuals also differs widely, even those that operate in broadly the same sector. For instance, there are mutuals that lie outside the formal insurance sector but nonetheless provide insurance-like services. These not-for-profit enterprises often form part of the wider social enterprise sector which aims to promote societal well-being. They commonly provide supplementary healthcare and social support services, and sometimes operate under principles closer to solidarity than pure mutuality.⁴ For example in France, *mutuelles* generally offer open enrollment, lifetime health insurance cover and may charge premiums based on a percentage of income or on a community-wide risk rating, rather than using individual risk-rating or risk-selection strategies.⁵

History and characteristics of mutual insurers

Mutual insurance organisations operate in most regions of the world, but especially in Europe and North America.⁶ They also have a long pedigree: some existing mutuals date back to the late 17th century. In many cases, mutual insurers were originally set up by specific socio-economic groups (such as farmers, fishermen and teachers) in the absence of suitable protection or savings solutions from the mainstream insurance sector. Where there is a great deal of ambiguity about the distribution of possible insured losses, risks may become uninsurable for commercial insurers or protection might become prohibitively expensive. Mutuals can often insure their member-owners at affordable premiums.

The mutual insurance sector has gone through various episodes where new mutuals have started up, existing ones have demutualised or folded, and stock-based insurers have chosen to convert to mutuals status, typically in response to changing external circumstances. For example, a wave of mutualisations occurred in Canada in the mid-20th century, as several large life insurance companies sought protection from foreign takeover.⁷ By the same token, financial sector liberalisation starting in the mid-1980s prompted significant demutualisations in a number of advanced insurance markets including the US, Australia, the UK and Canada.

¹ *The role of mutual societies in the 21st century*, European Parliament, 2011.

² *Study on the current situation and prospects of mutuals in Europe*, European Commission, 2012.

³ This is for instance the case in Estonia, Lithuania and Czech Republic. See EC (2012) op. cit.

⁴ The solidarity principle is similar to mutuality in the sense that risks are shared and members are indemnified against losses they incur. The key difference is that premiums are not based on individuals' risk profiles (ie, the likelihood that they make a claim on the common pool) but according to their ability to pay, or just equal for everyone. See A. D. Wilkie, "Mutuality and solidarity: assessing risks and sharing losses", *British Actuarial Journal*, vol. 3, no. 5, December 1997, pp 985-996.

⁵ See T. Buchmueller & A. Couffinhal, "Private Health Insurance in France", *OECD Health Working Papers*, No. 12, OECD, 2004.

⁶ *Global Mutual Market Share 2014*, International Cooperative and Mutual Insurance Federation (ICMIF), 2014.

⁷ *sigma* 4/1999: Are mutual insurers an endangered species?, Swiss Re.

The mutual form of ownership can reduce some agency costs but remains vulnerable to other moral hazard issues.

The organisational form will ultimately reflect the trade-offs between owner-customer-manager agency problems.

This *sigma* defines mutual insurance widely but explicitly excludes some member-based financial organisations.

By combining ownership and policyholder roles, a mutual structure can align incentives between customer and insurer and so reduce the potential for adverse selection or moral hazard.⁸ Mutuals may also enjoy an “efficiency advantage” in the provision of insurance services if, for example, they are better-able than commercial insurers to screen and identify the risk characteristics of their members (who often have some occupational or geographical affinity). However, the lack of scrutiny by external investors means mutuals can be vulnerable to managers who are driven by self interest rather than the goal of promoting the benefit of members. Similarly, while members of mutuals are entitled to vote on corporate governance issues, in reality the degree of control exercised by policyholders may be limited.⁹

Ultimately the choice of organisational form for an insurer will depend on how changes in the market environment affect the trade-offs between frictional costs arising from these owner-customer-manager agency problems and the prevailing competitive conditions. Changes in laws and regulations, shifts in preferences regarding optimal risk sharing and the degree of private information can all interact to affect the type of corporate form that arises in particular markets.¹⁰

Institutional scope of this report

For the purposes of this *sigma*, mutual insurers are defined widely to include those privately-run entities that are owned by their members, underwrite insurance risks (both non-life and life), are governed by insurance principles and laws, and are regulated accordingly. Mutual insurance companies and their subsidiaries, fraternal/friendly societies, risk retention groups and mutual holding companies are included. So too are mutual benefit societies or co-operatives that offer insurance services, even if they are not formally insurers.¹¹ But mutual-type organisations that are part of the public or quasi-public welfare system are excluded, for example, the Krankenkasse (sickness funds) in Germany. Similarly, US private non-profit health insurers (Consumer Operated and Oriented Plan, or “CO-OPs”) funded by low-cost state loans are not considered part of the sector. Also excluded are those entities which operate with very distinct business models. Thus Protection & Indemnity (P&I) clubs with a specialist role in marine insurance, and Takaful (Shari’a-compliant) insurance operations are excluded. Likewise member-owned collective savings vehicles such as Australian superannuation plans are excluded on the grounds that any surplus is linked to members’ investment portfolios, not to their patronage in the fund. Figure 1 summarises those institutions that are in- and out-of-scope.

⁸ For a fuller discussion of the agency considerations relating to mutual insurers, see R. MacMinn and Y. Ren, “Mutual versus Stock Insurers: A Synthesis of the Theoretical and Empirical Research”, *Journal of Insurance Issues*, vol 34, no 2, 2011, pp 101-111.

⁹ M. Greene and R. Johnson, “Stock vs Mutuals: Who Controls?”, *Journal of Risk and Insurance*, vol 47, no 1, 1980, pp 165–174, found that compared with holders of publicly traded shares, members of mutuals in their sample were less aware of their voting rights and appeared to exercise less control.

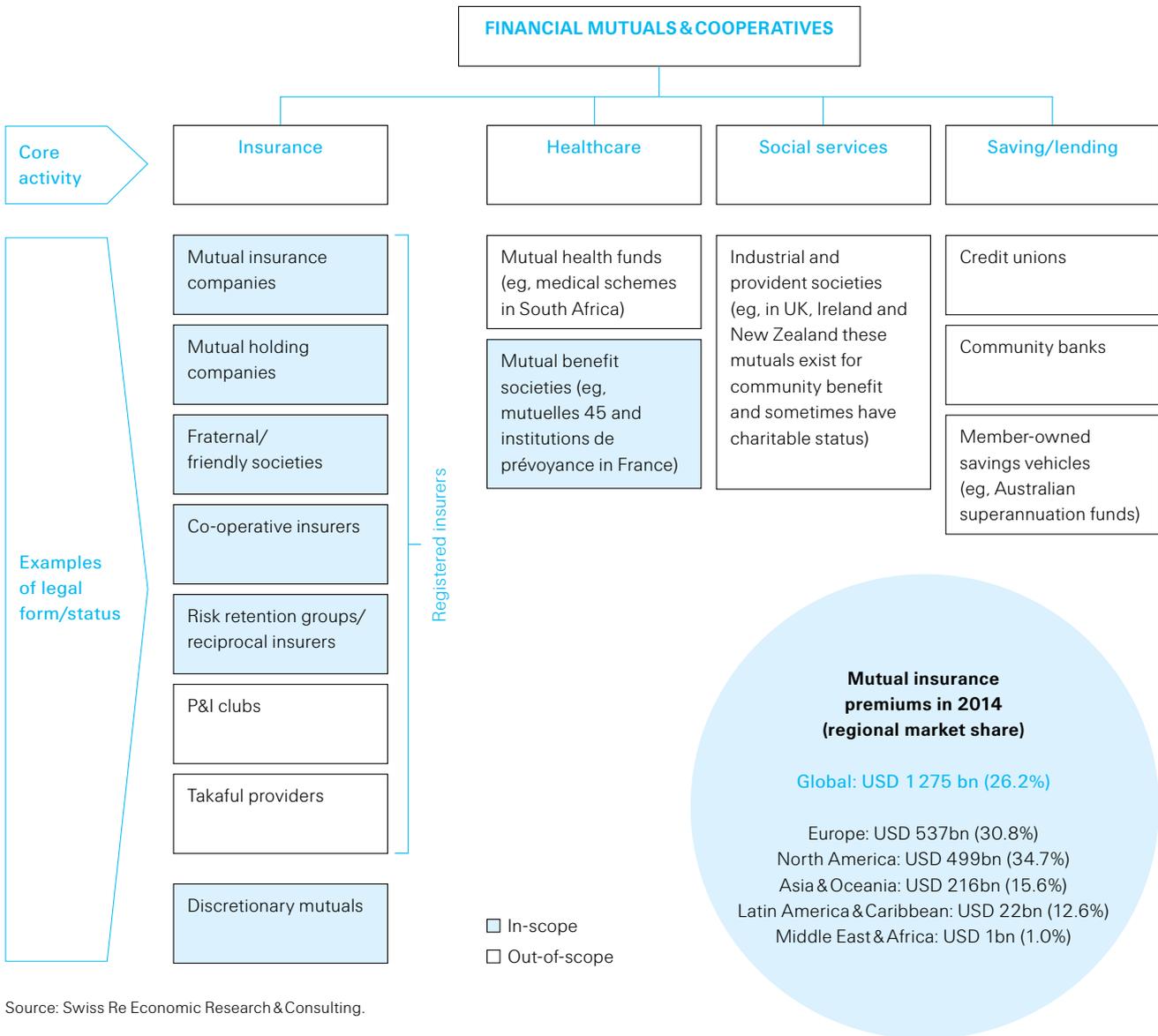
¹⁰ Formally, the nature of insurance contracts issued and therefore the corporate form arise endogenously and may change in response to shifts in the underlying market environment. See for example, P. Picard, “Participating Insurance Contracts and the Rothschild-Stiglitz Equilibrium Puzzle”, *The Geneva Risk and Insurance Review*, vol 39, September 2014, pp 153–175.

¹¹ For example, in France certain mutual benefit organisations (mutuelles 45 and institutions de prévoyance) specialise in health/social/cultural activities and operate under a separate regulatory code to that applied to insurers. Similarly, in the UK (and some other countries such as Australia) discretionary mutuals exist which, while not strictly offering insurance, allow members to apply for a grant of assistance to cover losses arising from a qualifying risk or contingency. The Board of the mutual has discretion to accept or refuse assistance in whole or in part.

Introduction

Figure 1

In-scope/out-of-scope mutuals in this report



This report discusses how mutual insurers can manage their capital positions, respond to new corporate governance rules and adapt to the digital age.

This *sigma* reviews recent developments in the mutual insurance sector. Given their heterogenous nature, the analysis compares developments among different groups of mutual institutions to gain insight into the anatomy of the sector and how that has changed over the recent past. The study then discusses current challenges and opportunities for mutual insurers. In particular, it considers the ways that mutuals can increase their capital flexibility, the hurdles the sector must overcome in meeting new corporate governance rules, and how mutuals are adapting to the digital age.

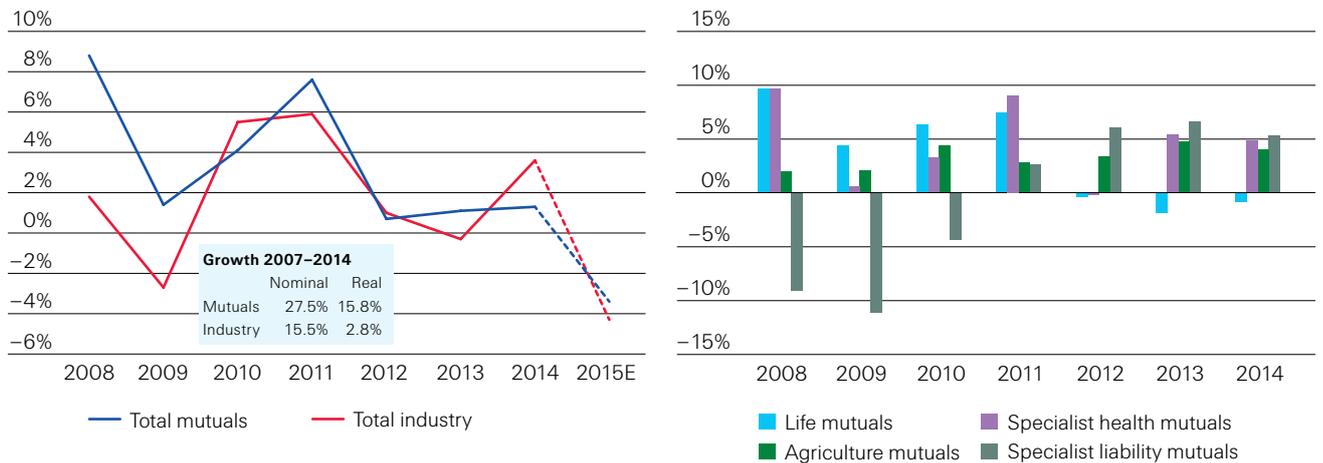
Recent market developments in mutual insurance

At the height of the financial crisis, mutuals' premiums outpaced the wider insurance market and have since grown broadly in line.

Premium growth during and since the financial crisis

Mutual insurers weathered the financial crisis better than other insurers.¹² During 2008 and 2009, aggregate premiums written by mutual insurers rose much faster than those written by other types of insurer (see Figure 2). This was the case in both non-life and life insurance, and across most geographical regions. Since 2010, however, mutuals' premiums have generally grown in line with the wider insurance market. Both mutual and global aggregate nominal premiums fell in 2015, although in large part that reflects the sharp appreciation of the US dollar. In local currency terms, premiums written by mutual insurers in major advanced economies rose by around 4.5% compared with 2.9% for the insurance industry as a whole in the same countries.¹³ The cumulative outperformance of mutuals' premiums over recent years is also evident after adjusting for inflation.¹⁴

Figure 2
Annual nominal growth in mutual and world insurance premiums, aggregate and by type of insurer/mutual



Note: (1) In the left-hand chart, the observation for growth in mutual premiums in 2015 is based on publicly available information on the largest 50 mutuals by premium, which collectively account for over 60% of the full mutual insurance sector. (2) For the right-hand chart, the categorisation is based on the assumed main line of business for the included mutuals. Collectively, they represent around two thirds of the whole mutuals sector. E = estimates.

Source: International Cooperative and Mutual Insurance Federation (ICMIF), Swiss Re Economic Research & Consulting.

¹² Most of the underlying data reported in this chapter have been provided by the ICMIF. For selected countries, the data were complemented with additional country and firm-level profit & loss and balance sheet indicators sourced from national regulators and/or insurance associations. Industry-wide data are based on global insurance premiums as reported in *sigma* 3/2016 – World Insurance in 2015: steady growth amid regional disparities, Swiss Re. Due to differences in institutional coverage, the total industry and mutual premium figures are not strictly comparable.

¹³ Based on estimated annual nominal growth in local currency premiums in 2015 for the largest 50 mutual insurers and the overall insurance sectors in their home countries, weighted by the corresponding relative share of US dollar premiums in 2014.

¹⁴ World real growth rates are calculated by adjusting premiums in local currencies for inflation using the consumer price index for each country, and weighting the individual country real growth rates using the relevant premiums of the previous year in US dollars.

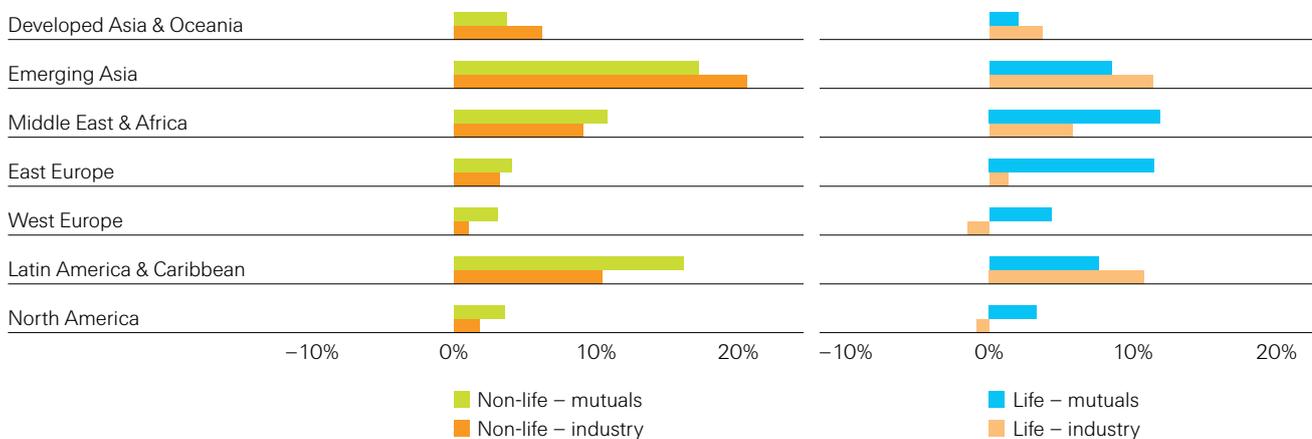
Recent market developments in mutual insurance

“Flight-to-quality” may have helped drive the mutuals’ outperformance.

The mutuals’ stronger premium growth at the height of the crisis could in part reflect individuals and firms turning away from shareholder-owned insurance companies. A number of commentators noted a “flight-to-quality” within the insurance industry, most notably in life and investment-related products, with customers seeking to invest their premiums in a “safe” and “trusted” place.¹⁵ This could explain why life, health and agriculture mutuals with local community links recorded stronger and more stable premium growth than other insurers. In contrast, specialist liability mutuals’ revenues shrank significantly between 2008 and 2010, before outperforming the wider market and other mutuals more recently.

Figure 3

Nominal growth in mutual and industry premiums, by region, by major line of business (2007 to 2014, CAGR)



Source: ICMIF, Swiss Re Economic Research & Consulting.

Several mutual insurers from advanced markets have acquired or set up operations overseas.

As Figure 3 shows, in certain regions mutuals outperformed other types of insurers over the whole 2007 to 2014 period, most notably in Eastern Europe, the Middle East and Africa for life, and in Latin America and the Caribbean for non-life insurance. Since 2007, a number of mutual insurers from advanced markets have increased their international footprint and, in particular, expanded in developing insurance markets either organically or through acquisitions (see Table 1). Premiums written by international mutual groups account for around half of the 27.5% growth in the mutual sector between 2007 and 2014, around a third of which reflected business in overseas markets. More generally, 20% of respondents to a 2013 survey of mutual insurers’ CEOs said they were looking at overseas opportunities to support sustainable revenue growth.¹⁶

¹⁵ *Global 500*, ICMIF, 2013.

¹⁶ *Chief Executive Insights: perspectives on leadership in the fastest-going part of the insurance sector*, ICMIF, 2013.

Table 1

Overseas expansion by selected mutual insurers (2007 to 2015)

Mutual insurer	Main home market	Market entry through acquisition or start-up (approximate date)
Achmea	Netherlands	Bulgaria (2008), Russia (2008)
FM Global	US/Canada	Hong Kong (2007), Mexico (2009)
Groupama	France	Bulgaria (2008), Greece (2007), Hungary (2009), Italy (2007), Romania (2008), Turkey (2008)
HDI/Talanx	Germany	Argentina (2011), Chile (2008), Mexico (2009), Singapore (2012), Ukraine (2008), Canada (2010), Poland (2012)
Liberty	US/Canada	Ecuador (2012), Ireland (2011), Poland (2007), Turkey (2007)
Mapfre	Spain	Turkey (2007), US (2008)
Meiji Yasuda Life	Japan	Germany (2010), Indonesia (2010), China (2010), Poland (2012), Thailand (2013), US (2016)
Nippon Life	Japan	China (2009), Indonesia (2014), Australia (2015), India (2015), Thailand (2015)
Sumitomo Life	Japan	Vietnam (2012), Indonesia (2013)
Uniq	Austria	Romania (2008), Russia (2009)
VIG	Austria	Bulgaria (2007), Croatia (2008), Estonia (2007), Latvia (2007), Lithuania (2008), Poland (2012), Romania (2008), Turkey (2007)

Source: Swiss Re Economic Research & Consulting, based on information on insurers' websites.

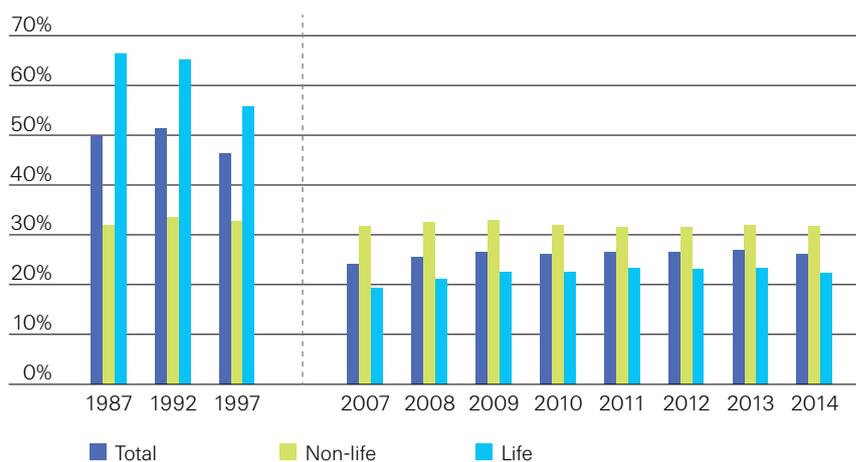
Mutuals have increased their share of the global insurance market modestly since 2007, after a big drop related to earlier demutualisations.

Mutuals' market share

The mutual sector's share of the global insurance market has increased modestly since 2007, arresting the decline experienced in earlier decades (see Figure 4). Mutuals accounted for close to 30% of non-life premiums in 2014, broadly the same as in 2007. But mutuals share of the life sector increased by 3 percentage points to just under 23% over the same period. Even so, the market share of life mutuals is still well below the two-thirds of the late 1980s and early 1990s, before a wave of demutualisations of life insurers in a number of developed countries.

Figure 4

Mutual insurers' share of global market premiums, by major line of business



Note: observations for years prior to 2007 are based on market share estimates for the five largest mutual insurance markets as reported in *sigma* 4/1999. The figures have been adjusted to reflect known differences in the population of firms included in the US, French and Japanese mutual sectors in later years. For observations after 2007, adjustments have also been made to the market share calculations in the US, Canada, Japan and Australia, to reflect differences in institutional coverage and sector definitions. But given their different construction, the pre- and post-2007 market share figures are not strictly comparable. Source: ICMIF, Swiss Re Economic Research & Consulting calculations.

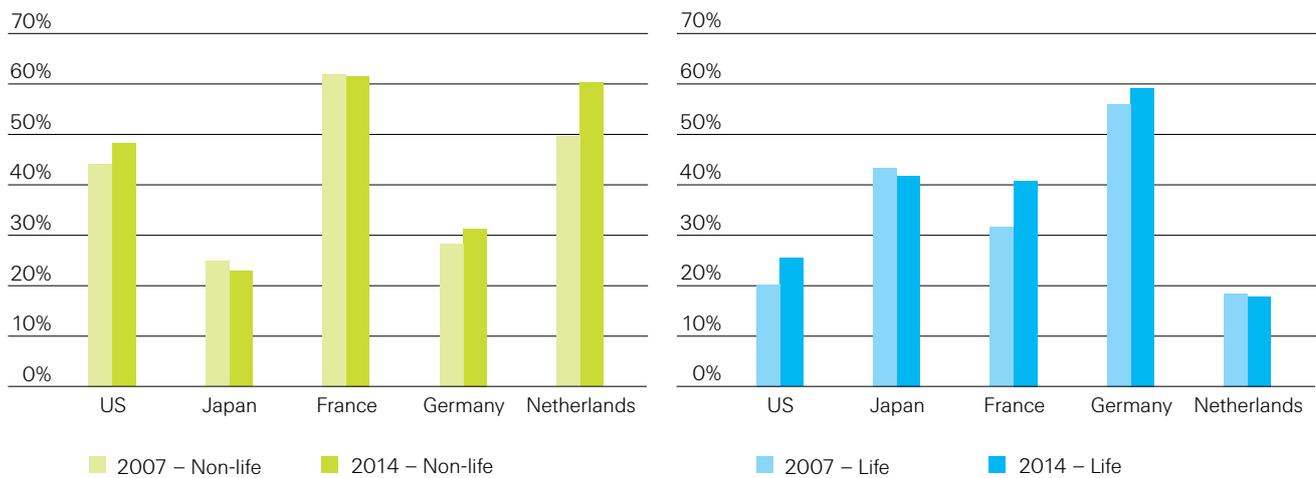
Recent market developments in mutual insurance

Their market shares nonetheless continue to differ across countries and lines of business.

The relative standing of mutuals differs across markets, reflecting the evolution of insurance in different countries (see Figure 5). Among the top 5 mutual insurance markets, in Germany and Japan life mutuals have maintained a substantial market share, while the share of non-life mutuals remains relatively low. In the Netherlands, by contrast, mutuals increased their share in non-life to well over half the entire market by 2014. However, their presence in life insurance remains relatively small.

Figure 5

Life and non-life mutual insurer shares of five largest mutual insurance markets



Note: to ensure consistency with aggregate industry numbers in the calculation of mutual market shares, in France, the total industry figures have been amended to include complimentary health insurance premiums, (ie, those written by Mutuelles 45, Institutions de prévoyance and other insurers); in Japan, premiums written by small co-operative non-life insurers are included in the total industry figures; in the US, as well as including premiums of some omitted mutual insurers, adjustments have been made to the treatment of accident & health insurance premiums and guaranteed investment contracts in the total industry figures.
Source: ICMIF, Swiss Re Economic Research & Consulting.

There has also been increased mutual start-up activity in both advanced and emerging markets...

At the same time, new mutuals have started up in a number of regions. For example, in the US, new specialist professional liability and worker compensation mutuals have been created in recent years. New mutuals have also been formed in Turkey, Southeast Asia and Latin America. In the UK, a number of discretionary mutuals have formed, such as the Military Mutual that was launched in 2015 to cater to the needs of serving members, reservists and veterans of the UK military.

...reflecting a renewed appreciation of the benefits of mutual insurance.

The recent start-ups seem to reflect the perceived benefits of mutuals, unlike earlier episodes such as after the 1980s liability crisis when a retreat by traditional insurers from certain types of cover prompted a wave of risk retention groups to form. In 2015, the Chinese insurance regulator drafted rules to promote mutual insurance pilot schemes in a move to deepen insurance penetration and improve social cohesion.¹⁷ Generally speaking, since the financial crisis regulators and policymakers have come to recognise the benefit of diverse organisational forms in financial sectors, and this has boosted the appreciation of mutuals.

¹⁷ In June 2016, the China Insurance Regulatory Commission granted approvals for the establishment of three mutual insurance companies, one focusing on credit insurance for small enterprises, one on construction insurance, and one on pension and healthcare insurance for a specific community. These first-to-be-approved three mutual insurers are Zhonghui Property Mutual, Huiyou Construction Property Mutual and Xinmei Life Mutual. See "ICMIF welcomes approval of three mutual insurance companies in China", www.icmif.org, 5 July 2016, <https://www.icmif.org/news/icmif-welcomes-approval-three-mutual-insurance-companies-china>

Underwriting performance

In recent years, the mutuals' aggregate loss ratio has tended to exceed that of other insurers.

The aggregate loss ratio for mutual insurers (total claims incurred relative to net earned premiums) has been a little worse than that of the overall insurance industry in recent years. For the period 2007 to 2014, the mutual insurance sector had a loss ratio of 67%, compared with a global benchmark of around 63% for non-mutual insurers.¹⁸ This could reflect the business model of mutual insurers whereby they may choose to limit premium increments for members, and accept more claims rather than striving solely to maximise profits.

But the aggregate masks significant differences across the sector.

Larger mutuals, which provide multi-line insurance and often conduct business internationally, operate in highly-competitive commoditised lines such as motor and household insurance. This works to reduce their premiums relative to losses, pushing their loss ratio up above those of the smaller mutuals, and also the world aggregate.

Smaller mutuals typically have lower loss ratios than larger mutuals ...

Smaller mutuals, particularly very small ones, typically have much lower loss ratios. Some studies have shown that small mutuals are disproportionately focused on personal insurance. This tends to be more stable over time and less prone to cyclical swings in pricing and lumpy claims experience than commercial lines, especially liability.¹⁹ Furthermore, smaller mutuals with a close relationship to their members enjoy more loyalty and may be better able than their larger peers to assess risks and price accordingly. Affinity among members within a small mutual might also help to reduce fraudulent or exaggerated claims.

... but they also tend to have higher overall expense ratios than their larger peers.

Any competitive advantage for smaller mutuals, however, is generally offset by higher expenses. Some mutuals operate very efficiently and have minimal operational overheads, but there are often economies of scale associated with claims handling and policy management that very small enterprises miss out on. Commissions and fees are also typically higher for small mutuals which often rely heavily on local agents to distribute their products in their key territories.

Mutual insurers' combined ratios have been similar across size of firm and slightly above the insurance industry average.

Mutual insurers' combined ratios (a measure of overall underwriting profitability) have been slightly above the global insurance industry (see Figure 6).²⁰ In some countries, mutuals reward their policyholders/members with regular dividends which also boosts their implied combined ratios. For example in Germany, those mutuals that paid dividends on average returned the equivalent of about 12% of premiums to members in the period 2007 to 2013. Taken together with other expenses, these dividends reduce any underwriting profits earned.

¹⁸ Based on a selection of countries for which underwriting results data for individual mutuals were available, weighted by premiums. Given different accounting treatments across insurance sectors, the loss ratio defined here focuses solely on claims incurred and excludes any claim adjustment expenses (ie, the direct costs of investigating and adjusting losses). The latter are implicitly captured in the total expense ratio.

¹⁹ *Addressing Structural Differences in the Ratings Process*, A.M. Best, August 2012.

²⁰ The combined ratio is generally defined as incurred claims plus expenses divided by earned premiums. It is the sum of the loss ratio (claims divided by net premiums earned), expense ratio (underwriting expenses divided by net premiums written), and policyholder dividend ratio (dividends to policyholders relative to net premiums earned).

Recent market developments in mutual insurance

Figure 6

Average loss and combined ratios by size of mutual compared with overall industry experience (average in the period 2007 to 2014)

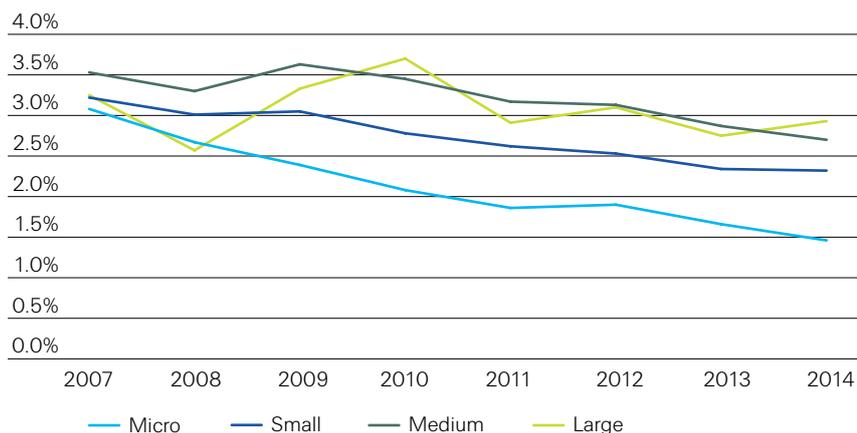


Notes: (1) "Micro" refers to mutuals with assets less than USD 10 million. "Small" refers to mutuals with assets greater than USD 10 million, but less than USD 100 million. "Medium" mutuals have more than USD 100 million in assets, but less than USD 1 billion. "Large" mutuals have more than USD 1 billion in assets. All categorisation calculations are based on average figures for the period 2007 to 2014. Where figures for assets are not available, premium data have been used to define size. (2) The mutual averages are based on a selection of countries for which loss ratios for individual mutuals were available. To limit the impact of outliers in any single year, trimmed mean calculations were used, which strip out the top and bottom 10% of observations from the yearly calculation. The industry indicator refers to average sector-wide underwriting results across a wide sample of advanced and emerging countries. Overall averages for the 2007 to 2014 period were constructed as unweighted means of the yearly averages. Source: Swiss Re Economic Research & Consulting calculations.

Smaller mutual insurers invest heavily in cash, and their investment returns have been weak in the low interest rate environment of recent years.

Figure 7

Average investment return on assets, by size of mutual



Note: based on trimmed mean calculations which strip out the top and bottom 10% of observations each year to limit the impact of outliers. Source: ICMIF, Swiss Re Economic Research & Consulting calculations.

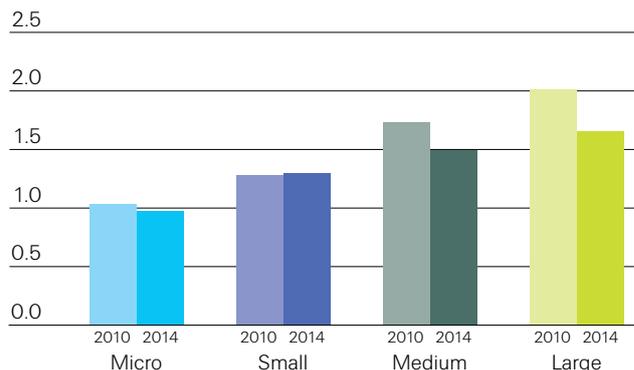
Mutuals' have expanded their capital cushions over recent years ...

Capital positions

Mutuals have been able to use ongoing profits to boost their capital buffers, despite the tough environment facing all insurers in the past few years. Apart from the very smallest mutuals, reported policyholder surpluses have grown. This capital has been used to support additional premium growth and as a result, underwriting leverage ratios (premiums divided by policyholders' surplus) have remained broadly stable, for all sizes of mutuals (see Figure 8).

Figure 8

Average underwriting leverage ratio, by size of mutual (in 2010 and 2014)



Note: ratio of premiums to policyholder surplus. Based on trimmed mean calculations which strip out the top and bottom 10% of observations each year to limit the impact of outliers.
Source: ICMIF, Swiss Re Economic Research & Consulting calculations.

... and have robust solvency positions.

According to a global 2013 survey of mutual insurers, over 70% of respondents reported that they had sufficient internal capital to finance business growth.²¹ Mutual insurers also appear well capitalised relative to the overall riskiness of their balance sheets and business revenues. Over 75% of rated US mutual insurance companies report Best's Capital Adequacy Ratio (BCAR) scores of 250 or higher, which is well in excess of published guidelines.²² Compared with stock insurers, US mutuals' solvency positions are robust – the median BCAR for P&C mutuals insurers of 324 in 2014 was above that for publicly-listed insurance companies of 265.²³

However, the move to risk-based regulation and pressure from rating agencies could challenge some mutuals' capital positions.

Ongoing changes to regulatory solvency requirements and rating agency pressure may, however, strain the capital position of some mutuals, especially those with a narrow regional or business line focus. For example, meeting Solvency II requirements in Europe will likely lead to higher capital requirements for some insurers. Also, A.M. Best's recently proposed changes to their capital adequacy methodology,²⁴ which will use stochastic modeling to derive capital strength metrics at various confidence levels for US P&C companies, could stretch some mutuals' balance sheets. The next chapter considers the solutions available to mutuals to manage their capital positions.

²¹ Global survey of life insurer members of ICMIF, PartnerRe, 2013.

²² *Mutuals at a Glance*, A.M. Best, September 2015.

²³ Based on a sample of US P&C insurers that have a BCAR for 2014.

²⁴ Implementation expected as of the first quarter of 2017. See *A.M. Best Issues Revised Best's Credit Rating Methodology, Requests Comments*, A.M. Best Press Release, 10 March 2016.

Capital strategies for mutual insurers

High levels of capital mean insurers are better able to meet commitments to policyholders, but too much capital can be costly for company owners.

Insurers hold economic capital to cover unexpected losses up to a chosen confidence level.

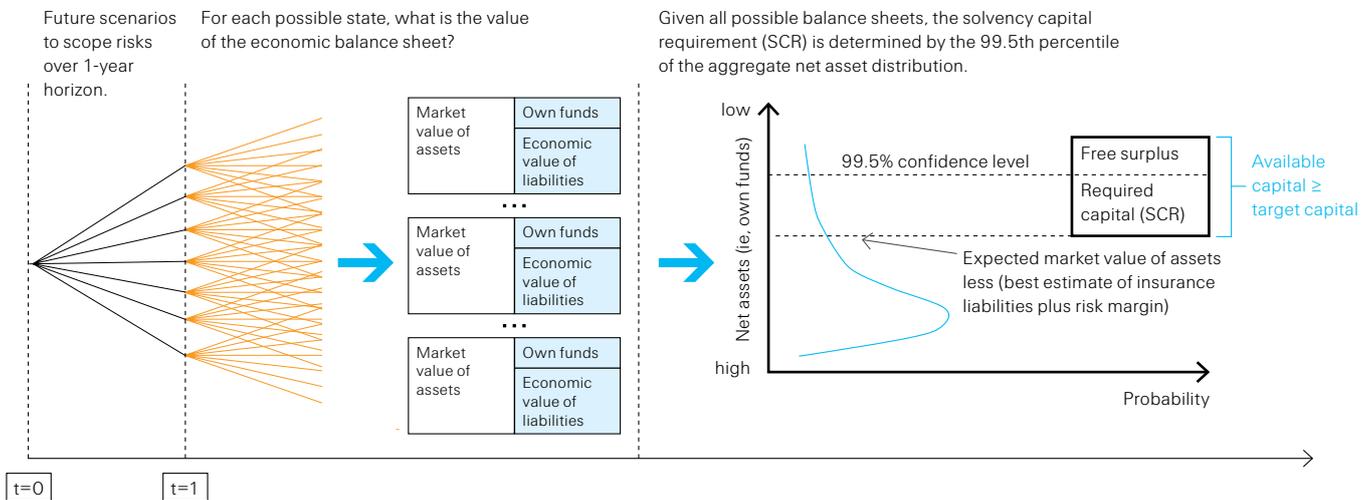
The capital optimisation problem

All insurance companies, regardless of governance structure, face the same underlying capital optimisation problem: how much capital to hold to cover unexpectedly large losses? Significant capital buffers benefit policyholders by increasing the likelihood that the insurer will be able to absorb large claims and/or investment losses. Consumers may thus be willing to pay more for products from a financially strong insurer, and/or be more loyal, providing an incentive to hold abundant capital. However, too much capital can be costly to the owners of an insurer, if it is not used efficiently.

Insurers determine their optimal capitalisation by trading off the costs and benefits of holding capital. Under an economic capital approach, an insurer will project forward the values of all of its assets and liabilities under different scenarios, making explicit adjustments to reflect the uncertainty attached to the underlying cash flows. Comparing the initial and projected economic balance sheets enables a probabilistic assessment of whether the insurer's net assets are sufficient to cover unexpected large losses, or tail risk. This translates into the target level of capital from the insurer's perspective, which will depend on not only the insurer's views on the risks in its own operations, but also its desired level of confidence about its solvency position and the time horizon over which future losses should be covered.

Figure 9

Stylised representation of regulatory capital requirement under risk-based capital models



Source: Swiss Re Economic Research & Consulting, based on insights from *Economic capital for life insurers: The 'state of the art' – an overview*, Towers Watson, 2013.

They must also meet regulatory and accounting rules which typically impose constraints on the quantity and quality of capital.

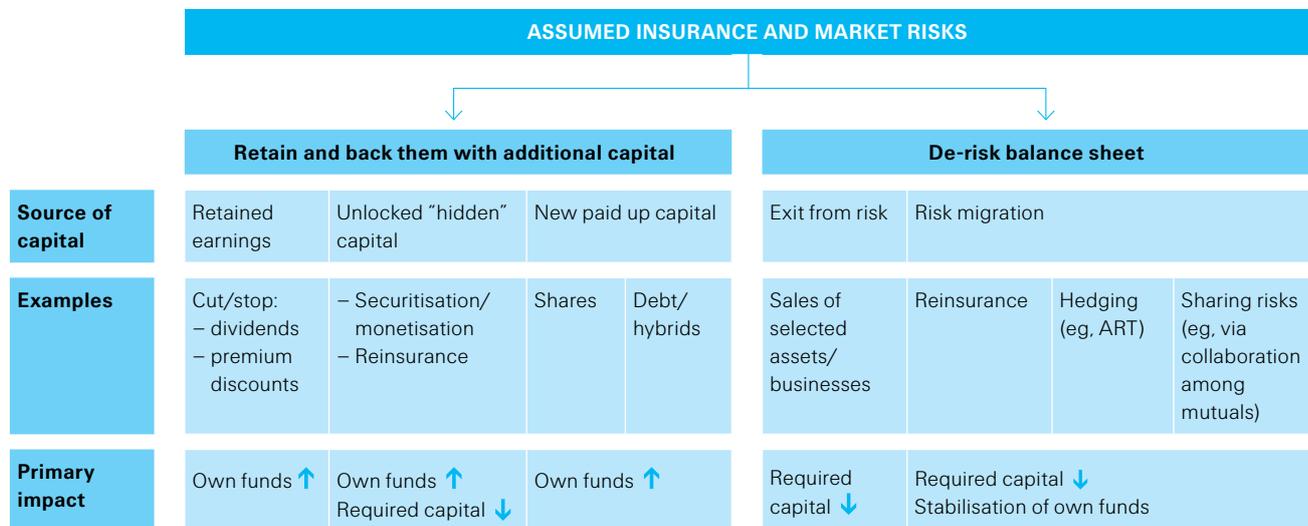
Not all insurers employ economic capital frameworks, relying instead on regulatory and statutory reporting metrics. But increasingly, insurance accounting and prudential regulations incorporate economic valuation methods, adding external constraints on an insurer’s capital management decision. In particular, risk-based solvency regulations typically limit the types of assets and liabilities that may be included in order to calculate *available* capital eligible to absorb unexpected losses. They also impose valuation parameterisations and risk metrics to construct minimum levels of *required* capital that must be held (see Figure 9). Similarly, regulators often place restrictions on the quality of capital (ie, its permanency and loss-absorbency) that can be included in regulatory metrics.²⁵

Mutuals’ capital choices

Mutual insurers’ robust capital position reflects their preference to run a lower risk of insolvency, but may also be due to their limited ability to raise external capital.

Given the uncertainty involved in assessing possible future losses, mutual insurers prefer to be well-capitalised, reflecting their low risk appetite and strong desire to meet commitments to their policyholder-members. It may also reflect their limited possibilities to raise external capital. Like all businesses, mutuals can retain profits and can borrow against future earnings, but by their nature they have no equity shareholders and hence no access to this type of prime capital.²⁶ In principle, some mutuals may be able to call on members for funds but this option is rarely, if ever, used.²⁷ This would likely only be feasible for a small mutual with a limited customer base.²⁸

Figure 10
Possible solutions for mutuals to manage risk and capital



Source: Swiss Re Economic Research & Consulting.

²⁵ All risk-based solvency frameworks define the minimum amount of capital an insurer must hold taking account of its size and risk profile, but there is wide disparity in regimes across regions. In Europe for example, Solvency II takes a holistic view of risks facing insurance groups (including operational risks) and explicitly allows for the use of internal model valuations. In contrast, the US aims to develop a predominantly standardised risk-based capital rule for each legal entity based on statutory accounting, without reliance on internal models.

²⁶ *Raising New Capital in Mutuals – Taking action in the UK*, Mutuo, October 2013.

²⁷ Levying “assessments” on their member-policyholders was a key avenue to replenish the capital coffers of reciprocal mutuals. In effect, these companies’ by-laws required a mutual policyholder to sign a promissory note that obligated the member to meet capital calls by the firm in the case of any capital shortfall.

²⁸ *Cross-border business and cooperation in the mutual and cooperative insurance sector*, Association of Mutual Insurers and Insurance Cooperatives in Europe (AMICE), 2011.

The narrow access to external capital can present business and operational challenges.

This lack of access to external capital can present business and operational challenges. It leaves mutual insurers vulnerable to regulatory/rating pressures should they need to re-build capital quickly in the event of significant losses, and it may also hinder growth plans or the development of new products. In light of this, mutual insurers in a number of jurisdictions have sought to widen the set of available financing solutions while remaining true to their mutual/co-operative principles. This includes the development of new types of dedicated mutual securities issued to investors. Figure 10 summarises the suite of current and possible future capital solutions available to mutuals. Most of these work to increase available capital and/or reduce required regulatory capital, allowing insurers to restructure their balance sheets and achieve a more efficient risk-reward allocation.

External capital sources

Borrowing is a common way for mutual insurers to access external funds.

Borrowing/debt instruments

One of the more common ways for mutual insurers to access external funds is by borrowing. Debt can take many forms, ranging from simple bank loans and trade credit to more complicated hybrid securities that combine both debt and equity features. The different forms often vary in maturity and, crucially, in terms of the degree of sub-ordination (ie, how creditors rank in relation to other commitments, including policyholder claims, in terms of repayment). Generally, the longer the term of debt and the greater the subordination, the more likely it is to count towards risk-absorbing capital. A longer maturity also provides increased certainty to the issuer in terms of capital available for long-term strategic planning purposes.²⁹

Almost all the largest mutual insurers issue publicly-rated debt securities.

The sale of debt securities to members and non-members can provide mutual insurers with access to external capital without affecting mutual/co-operative ownership, not least because these securities typically do not confer voting rights (except in bankruptcy, winding up or reorganisation).³⁰ According to research sponsored by the International Co-operative Association (ICA), around 90% of the largest mutual insurers issue publicly-rated debt.³¹ In the US, subordinated debt in the form of surplus notes³² on average makes up a larger share of mutuals' capital finance than it does for stock companies.³³

Long-term debt financing is nonetheless a relatively small fraction of mutuals' liabilities, especially for small firms.

However, long-term debt typically makes up a small fraction of mutual insurers' liabilities compared with members' own funds and even short-term borrowing such as bank credit (see Figure 11). Smaller mutual insurers are sometimes unable to issue stand-alone subordinated debt in sufficient size to interest outside investors, and may face prohibitively high interest rates or transactions costs.³⁴ Institutional investors may also face restrictions on their investments in unrated securities, which could further impact small issuers.

²⁹ M. Day and R. Milburn, "Reinsurance Versus Subordinate Debt: Which Is Best for Solvency Capital? Part I," *GCCapitalIdeas.com*, 28 April 2015.

³⁰ A. M. Andrews, *Survey of Co-operative Capital*, Filene Research Institute, March 2015.

³¹ *Ibid.*

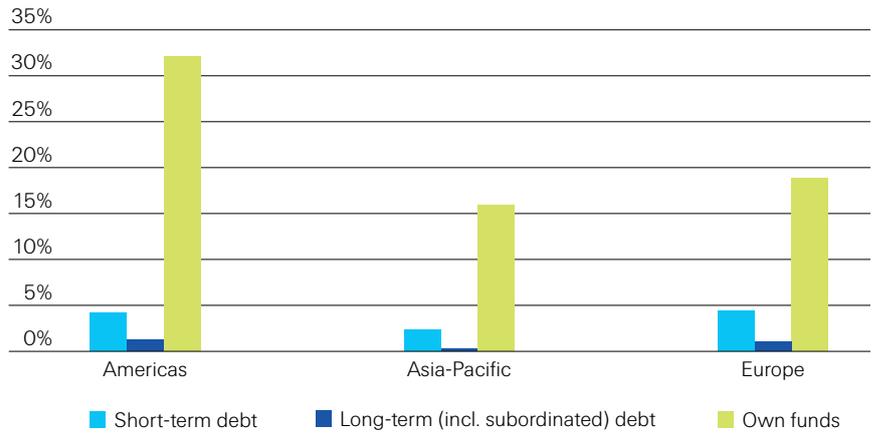
³² Surplus notes are deeply sub-ordinated debt, so regulators allow insurers to count them as "surplus" (or equity), ie part of the insurer's capital. Regulatory approval is required prior to issuance of the note, however.

³³ Based on 2014 statutory data from A.M. Best.

³⁴ *Future proofing the UK mutual insurance sector*, Deloitte, November 2011, and *Funding the future. Emerging strategies in cooperative financing and capitalization*, Deloitte, 2012.

Figure 11

Sources of finance used by selected large mutual insurers and co-operatives, average across firms by region (% of total liabilities)



Note: (1) Given data availability, the sample of large mutuals is not the same as used in earlier analysis. The data here refer to those insurance entities that feature in the largest 300 co-operatives and mutuals by turnover as published in the World Co-operative Monitor 2013. (2) Own funds refers to net assets and includes retained earnings, member and non-member share capital and non-policyholder reserves. Source: data obtained from A. M. Andrews, *Survey of Co-operative Capital*, Filene Research Institute, March 2015.

Smaller insurers may collectively issue debt securities, but such arrangements are not common.

In some countries, financing structures have developed to enable small mutuals to collectively issue debt securities. For example, in the US the National Association of Mutual Insurance Companies (NAMIC) runs a surplus notes program for its members.³⁵ NAMIC also endorses a pooled surplus note program for member firms, available in amounts starting from USD 2 million.³⁶ Additionally, some specialist investment firms help smaller mutuals gain access to private debt markets.³⁷

Changes to prudential regulations have reduced the attractiveness of debt finance.

The attractiveness of debt finance has been dented by more stringent prudential regulations on what qualifies as regulatory capital, despite the persistently low cost of credit over recent years. For instance, under Solvency II in Europe, there are limitations on the levels of subordinated debt for both the Solvency Capital and Minimum Capital Requirements.³⁸ Likewise, in the US the issuance of surplus notes requires supervisory consent in most states. Each payment of interest and principal is also often subject to the prior approval of the state insurance department.

³⁵ <http://www.namic.org/surplus/ncbprogram.asp>, accessed 11 August 2015.

³⁶ <http://www.namic.org/surplus/ftnprogram.asp>, accessed 11 August 2015.

³⁷ For further details, see eg, D. Grieger, "Raising Capital to Reach New Markets," in the *Introduction to Twelve Capital* presentation to the ICMIF General Meeting, 9 October 2015.

³⁸ New banking regulations (Basel III) also impose heavy capital charges on banks' investment in insurance company debt instruments, restricting an important source of finance for insurers.

Mutuals have traditionally focused on the role reinsurance can play to reduce earnings volatility, but increasingly it is also used as a balance sheet management tool.

The impact of reinsurance on solvency depends on the risks ceded and the reinsurance structure adopted.

Reinsurance

Reinsurance is often the key mechanism by which mutuals manage their insurance portfolios to better align with their overall risk appetite. As for most insurance firms, however, capital optimisation often takes a back-seat role in a mutual insurer’s decision to buy reinsurance, which is more commonly arranged to transfer risks and reduce earnings volatility. The recent and prospective changes in accounting and regulatory frameworks towards more economic valuation have shifted attention to the balance sheet as the primary vehicle through which to assess the financial health of an insurer. This has increased interest in reinsurance as a mechanism for achieving optimal capital allocation.

Possible reinsurance structures

The impact of reinsurance on capital efficiency depends on the composition of the risks transferred, and the particular reinsurance structure adopted. Traditional reinsurance typically works by transferring the risk of claims (ie, the uncertainty around the severity and frequency of claims) either on a prospective or retrospective basis. Increasingly, structured solutions are available which, in addition to hedging insurance risks, enable the ceding insurer to transfer financial risks to protect its balance sheet. These include risks surrounding the amount and timing of future premiums and expenses, the potential for lower-than-expected returns on investments/assets, and the uncertainty over whether policyholders will exercise the rights under their insurance contracts (eg, lapse risk in life insurance).

Figure 12
Selected reinsurance solutions to address capital constraints

Capital issue	Potential reinsurance solution
Insufficient risk diversification	(Structured) quota share
Highly volatile peak risks	(Structured) excess of loss/ (structured) stop loss / private insurance-linked securities/ industry loss warranties
High frequency of losses	(Structured) aggregate excess of loss
Volatility of reserve run-off	(Structured) quota share/ loss portfolio transfer/ adverse development covers
Trapped embedded value	Value in-force monetisation

Source: Swiss Re.

Reinsurance can be tailored to suit the risk transfer needs of the cedant.

Tailored to individual companies’ risk profile and preferences, structured reinsurance solutions typically blend different asset and underwriting risks. Combined with product features such as risk aggregation (eg, multi-year, multi-line etc) and loss sharing arrangements, bespoke reinsurance structures offer insurers a flexible and efficient risk transfer and capital management tool. Figure 12 outlines some typical reinsurance solutions and the core capital issues they seek to address. The following box discusses a particular application of reinsurance for mutual health insurers in Europe.

Solvency II may strain European health insurers' balance sheets.

Reinsurance can be used to reduce required capital.

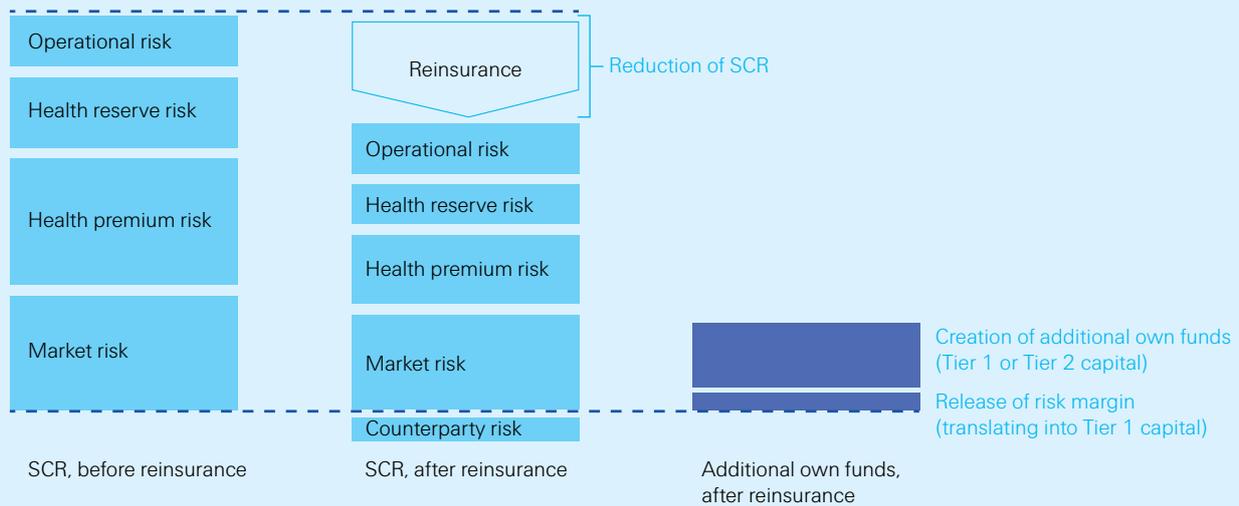
Reinsurance solutions for European mutual health insurers

Under the Solvency I regime, mutual health insurers in Europe faced relatively low regulatory capital requirements and made little use of reinsurance. Solvency II takes a more comprehensive view of the risks that health insurers face, including premium risk, claim reserves risk, asset risk and operational risk.

Reinsurance can help mutual health insurers manage their balance sheets and steer their business, which may be especially helpful in a market that is consolidating. Figure 13 provides an example of the capital relief achievable using a quota share reinsurance contract. By ceding some of the premium, reserve and market risks (the latter as a result of assets transferred for the ceded reserves), an insurer can reduce its solvency capital requirement (SCR) under Solvency II. The quota share reduces the insurer's risk exposure by the percent reinsured, freeing up capital that can be redeployed within the business.

Figure 13

Stylised impact of multi-year quota-share reinsurance on a mutual health insurer's regulatory balance sheet



Source: Swiss Re.

It can also boost available capital.

This is especially true of VIF reinsurance which monetises future profits from existing policies.

Risk transfer through reinsurance also reduces the risk margin – the additional buffer of reserves that insurers need to hold to reflect the uncertainty surrounding their insurance liabilities. The risk margin is not part of an insurer's own funds but of technical provisions. Hence, any reduction in the risk margin increases own funds and therefore available capital.

Depending on the stability of the profit margins, with a multi-year quota share structure, the reinsurer can also provide upfront financing for expected future profits (value-in-force (VIF)), thus further boosting the insurer's own funds. The reinsurer pays a ceding commission to the insurer in exchange for rights to future surpluses from the policies as they emerge.³⁹ This amount can be in cash or as a reinsurance receivable, thus enhancing available capital (Tier 1 or Tier 2 capital).

³⁹ For details on VIF monetisation through reinsurance, see box "Value-in-force reinsurance" in *sigma* 3/2015: M&A in insurance: start of new wave?, Swiss Re.

Capital strategies for mutual insurers

Depending on the structure and risks transferred, reinsurance can be a competitive form of capital.

However, reinsurance is often seen as an expensive capital solution.

Reinsurance has many advantages, including protecting capital, reducing reserves leverage, ...

...and efficiently providing financing to meet regulatory solvency targets.

Measuring the value of reinsurance

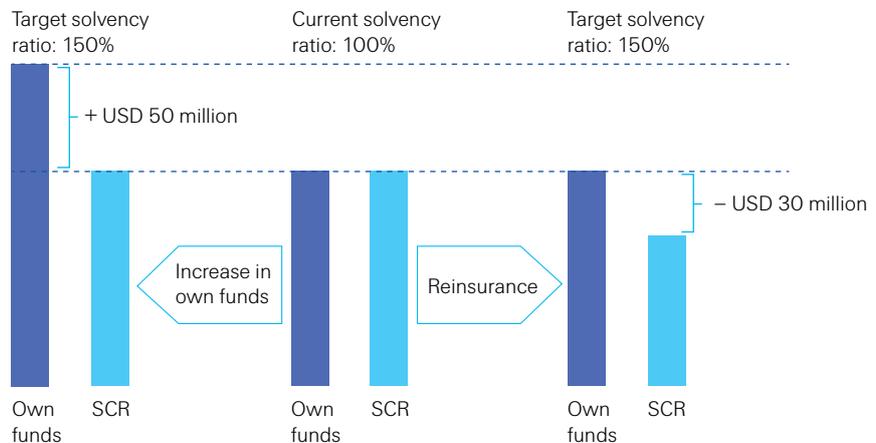
The cost of reinsurance varies across types of risk, but for some types of exposure, reinsurance can be a very competitive capital solution. For example, the cost of reinsuring mortality risks is usually between 3% and 7% of the capital benefit achieved.⁴⁰ And for longevity solutions, it is typically between 1% and 3%.⁴¹ This compares favourably with the usual costs associated with other sources of external capital.

Even so, reinsurance is often perceived as relatively expensive compared with other forms of capital. In a global survey of mutual life insurers, nearly 40% cited the cost of reinsurance as a constraint on its use as a vehicle to finance business growth.⁴² The perception is currently more prominent because borrowing costs are relatively low, unlike during the height of the global financial crisis.

There are also other advantages of reinsurance. For instance, it protects an insurer's available capital at times when most needed, since unlike other external forms of capital, reinsurance will pay its share of losses on the business it covers. It can also reduce reserves leverage and can be designed with bespoke structures and flexible terms. Moreover, reinsurance often adds a "second set of eyes" on the business plan and can provide expertise in specific areas targeted for expansion.

Furthermore, some researchers argue that financial intermediaries such as insurers face increasing per unit costs of raising external capital.⁴³ Reinsurance is often an efficient form of financing since the same target solvency ratio can be achieved using less capital relief than when raising own funds (see Figure 14 for a stylised example of how this works).

Figure 14
Efficiency of reinsurance to achieve target solvency



Source: Swiss Re.

⁴⁰ The reinsurance premium less the expected losses ceded net of foregone investment income (suitably discounted) can be thought of as the "cost" of reinsurance. The decrease in regulatory capital together with any reduction in estimated risk margin is the corresponding benefit.

⁴¹ Ó. Mayo and B. Heinen, "Reinsurance as a capital management tool under Solvency II", *Actuarios*, no. 32, Instituto de Actuarios Españoles, 2013.

⁴² D. Graham and C. Renia, "Turning capital needs into capital opportunities," *PartnerRe presentation to the ICMIF Biennial Conference*, 6 November 2013.

⁴³ See for example, K. Froot and J. Stein, "Risk management, capital budgeting and capital structure for financial institutions: an integrated approach", *Journal of Financial Economics*, vol 47, 1998, pp 55–82.

Smaller mutuals can collaborate to purchase reinsurance, like in Canada, ...

... the US, Sweden, France, Denmark and some countries in Latin America.

Mutuals can also make use of risk swaps, although these are seldom used.

Securitisation can be used to bolster mutual insurers' capital but so far, interest has been limited.

Collective reinsurance arrangements

Smaller mutuals can get together to economise on costs and improve access to reinsurance services. For example in Canada, smaller mutuals have set up their own mutual reinsurer, the Farm Mutual Reinsurance Plan (FMRP), to better manage the concentration of risk in their individual portfolios. Owned by its members, the FMRP allows the mutuals to share risk among themselves and benefit from stable reinsurance terms. The FMRP retains certain limits of risk, but also has access to the wider reinsurance market to lay off risk if needed.

There are similar arrangements in other countries, albeit with different organisational structures. Examples include:

- In the US, various groupings of mutual insurers have come together to set up a number of reinsurers, such as Grinnell Mutual Reinsurance and American Agricultural Insurance Company.
- In Sweden, a group of mutuals form the Länsförsäkringar alliance which organises a collective reinsurance programme.
- In France, mutuals group together for motor reinsurance through their trade association, Groupement des entreprises mutuelles d'assurance (GEMA).
- In Denmark, mutual insurers collectively negotiate with wholesale reinsurers. Importantly, each mutual insurer contracts individually with the reinsurer (in order to achieve regulatory approval for risk transfer).
- In Latin America, a group of 17 mutual insurers drawn from across the region place joint reinsurance treaties.

Some mutuals have proposed the idea of insurance risk swaps – an agreement whereby an insurer exchanges its uncertain future insurance liabilities in return for a fixed stream of cash flows – between mutuals, including perhaps cross-border transactions, to spread risks across the sector.⁴⁴ A proposal for international swap agreements has however, not yet progressed.

Alternative risk transfer

Insurance-linked securitisation (ILS)

Insurance-linked securities are another external solution that can strengthen a mutual's capital position. For example, catastrophe bonds ("cat bonds") provide re/insurers with protection against a specified catastrophic event in exchange for a cash flow (the interest payments on the bond). Collectively, mutual insurers account for around 20% of annual issuance of non-life cat bonds (see Figure 15). But in general, interest in securitisation deals among mutual insurers has been limited. Sponsors have tended to be concentrated among a few large mutuals, especially Japanese co-operatives and some of the large US mutual insurers. According to data from Aon, there have been no mutual sponsors of life and health cat bonds.⁴⁵

⁴⁴ Japanese co-operative Zenkyoren, for example, has suggested the potential to establish catastrophe risk swaps with other members of the ICMIF. See *voiceMagazine*, ICMIF, September 2010.

⁴⁵ See for example, *Insurance-Linked Securities: Alternative Markets Adapt to Competitive Landscape*, Aon, September 2015.

Figure 15

Property catastrophe bond issuance by year (total, showing share of mutuals), in USD billions



Source: Aon Securities Inc., Swiss Re Economic Research & Consulting calculations.

The complex nature and big-ticket size of transactions is a deterrent.

The complexity of the transactions, the typical minimum deal size to make the issuance cost-effective, and worries about disputes with counterparties could be factors that hold many mutuals back from participating in the ILS market. Additionally, in terms of risk-sharing structure, many of the catastrophe bonds are parametric or index-based, and mutuals could be put off by having to manage the resulting basis risk.

However, product innovation is helping to widen the range of potential market participants ...

Recently, cat bonds with indemnity structures, where payouts reflect the losses incurred, have been issued. Achmea and Unipol both issued bonds with such features.⁴⁶ More generally, market innovations (eg, to lines of business included in the portfolio, loss triggers and collateralisation) continue to bridge the gap between investor appetite and those seeking risk transfer solutions, potentially encouraging more mutual insurer involvement.

... and brokers are developing platforms that offer small-ticket, low-cost access to capital markets.

Some large commercial brokers have also developed platforms for their clients that offer efficient and low-cost access to reinsurance capacity sourced from capital markets. The aim is to make ILS more accessible to buyers of all sizes and territories, including mutuals, and to fund smaller amounts of risk-transfer by harnessing the benefits from simplified processes and documentation for qualifying risks.⁴⁷

⁴⁶ See "Aon on Windmill I Re, the first Europe windstorm indemnity cat bond", *www.artemis.bm*, 22 January 2014, <http://www.artemis.bm/blog/2014/01/22/aon-on-windmill-i-re-the-first-europe-windstorm-indemnity-cat-bond/> and "Azzurro Re I, the first Euro/Italy quake indemnity cat bond launches" *www.artemis.bm*, 2 June 2015, <http://www.artemis.bm/blog/2015/06/02/azzurro-re-i-the-first-euroitaly-quake-indemnity-cat-bond-launches/>, both accessed 14 April 2016.

⁴⁷ For example, in October 2014 Willis Re launched Resilience Re, which will serve as a platform to simplify client access to catastrophe bond capacity. Similarly, Guy Carpenter has partnered with ILS specialists to establish a private catastrophe bond platform. JLT Re has also set up its own platform called MarketRe that enables smaller issuers to sponsor private cat bonds. See *Willis Establishes Resilience Re Catastrophe Bond Platform*, Willis News Announcement, 27 October, 2014; *New private catastrophe bond platform broadens access to capital markets*, Guy Carpenter Case Study, available at <http://www.guycarp.com/content/dam/guycarp/en/documents/dynamic-content/New%20private%20catastrophe%20bond%20platform%20broadens%20access%20to%20capital%20markets.pdf>; and *JLT Capital Markets brings Market Re 2014-1 cat bond on new platform*, *Artemis*, 8 May 2014.

Contingent capital gives the issuer the right to raise capital at pre-agreed terms.

Mutual insurers are not active users of contingent capital securities, possibly due to limited need, or because they can be complex to execute.

Some countries have introduced new legislation permitting mutuals to issue equity-like shares.

Contingent capital

Contingent capital is a structured financing instrument that gives issuers the right to issue debt or equity at pre-agreed terms should a pre-defined event occur. The trigger for the capital infusion is often based on verifiable indicators of a company's financial condition (eg, rating or solvency ratio). But some transactions have linked the provision of capital to insurance risks, much like ILS. For example, US insurer Farmers Insurance Exchange entered into a facility in 2007 that gives it the right to issue USD 500 million in 10-year surplus notes if it suffers severe windstorm losses in specific states over the following five years.⁴⁸ The facility has been renewed twice.⁴⁹

Beyond the Farmers deal, however, there have been few contingent capital transactions involving mutual insurers. This may be because mutuals tend to attract premiums from non-mutual insurers during episodes of system-wide financial distress, which may be when contingent capital is most valuable.⁵⁰ In such circumstances, mutuals may be able to rebuild capital relatively quickly through their own retained earnings, rather than accessing capital markets. Also, contingent capital can pose operational problems: it needs regulatory approval, may not qualify for rating agency capital relief and requires specialist negotiators.

New paid-up equity-like capital instruments

In a bid to widen the sources of new, loss-absorbing core capital, yet at the same time safeguard the integrity of the mutual business model, some countries have recently approved issuance of dedicated capital instruments by mutuals, similar to equity shares.⁵¹ In particular:

- In France, "certificats mutualistes" were created in 2014 to give mutual insurance companies and groups access to new sources of external capital.⁵² These certificates can be issued to members or customers of the issuer or companies in the same group. They provide a financial return to holders at the discretion of the members but do not confer any AGM voting rights. Nor do they confer any right to the net assets of the mutual in case of winding up or liquidation.⁵³
- In the UK, beginning in 2015 mutual insurers have been allowed to issue deferred shares to institutional investors and current members or customers. Such instruments, though not transferrable, are redeemable by the issuing mutual. The shares do confer membership rights, but all members may only have one vote regardless of the size of their investment. Crucially too, investing non-members are excluded from any voting decision related to a merger or dissolution of the mutual.

⁴⁸ "Farmers Acquires Right to Use Subordinated Notes for Severe Cat Losses", *Insurance Journal*, 12 July 2007.

⁴⁹ *Farmers Exchange announce \$500 million surplus note facility; Ensures access to regulatory capital after major catastrophes*, Swiss Re news release, 3 May 2012; and *Farmers Insurance Exchange successfully renews USD 500 million surplus note facility providing an option to access capital after major cat event*, Swiss Re news release, 17 February 2015.

⁵⁰ The empirical evidence is only suggestive, but according to Moody's, compared with their stock holding peers US life mutuals show better credit-worthiness in times of crisis. See *Revenge of the Mutuals: Policyholder-Owned U.S. Life Insurers Benefit in Harsh Environment*, Moody's, 2009.

⁵¹ P. Hunt, I. Snaith, J. Gilbert, and M. Willetts, "Raising New Capital in Mutuals – Taking action in the UK", *Mutuo*, October 2013.

⁵² Based on information from the French regulator's website, at http://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Societes-cotees-et-operations-financieres/Marches-obligatoires/Offre-au-public-de-certificats-mutualistes.html, accessed 29 September 2015.

⁵³ *Raising Mutual Capital Without Destroying the Mutual Principle*, Reunion des Organismes D'Assurance Mutuelle, February 2012.

However, so far there are few examples of issuance.

So far, no UK and only one French mutual insurer has issued these new core capital instruments.⁵⁴ The experience of the UK building society sector, which recently implemented similar financing innovations, nonetheless suggests considerable potential investor demand.⁵⁵ A constraining factor for mutuals could be cost, with such instruments likely attracting a novelty premium, including high initial arrangement fees.⁵⁶ But as investor familiarity grows, the cost of raising share capital by mutuals should fall, especially if internal trading schemes develop, whereby interested retail investors can on certain days of the year trade their shares on an organised exchange.

Strategic alliances to share back-office functions can help mutuals strengthen their financial resilience.

Structural solutions to strengthen balance sheets

Collaboration among mutuals

Strategic alliances or affiliations among peers are another way that mutuals can boost their financial resilience. In their most basic guise, these arrangements enable mutuals to share back-office functions (eg, claims handling, inspections, billing and collections), buttress marketing arrangements, increase product diversity, and expand the product distribution system.⁵⁷ While adhering to the relevant competition rules, such collaboration helps lower costs through economies of scale and scope, boosting profits.

In some countries, mutuals may also establish formal financial ties to support each other.

Aside from operational collaboration, in some countries mutuals may agree to establish formal financial links with each other while maintaining their individual identity and specific mutual structures. In France for example, a number of mutual insurers have organised themselves into affiliated groups, so-called Mutual Insurance Group Societies (SGAM).⁵⁸ In addition to sharing administrative and operational facilities, members of a SGAM may choose to provide back-stop financial support to other partners in the grouping in the event of financial difficulties. Likewise, in some Scandinavian countries, mutual insurers exchange guarantee capital among themselves, thus providing a paid up source of external finance.⁵⁹

Regulations under Solvency II impose tighter restrictions on such financial solidarity arrangements.

New prudential regulations in Europe will, however, impose tighter restrictions on such horizontal groupings. For example, to comply with Solvency II and remain a SGAM, mutuals in France must choose to become either: (1) formally integrated, and thereby agree to stand behind each other in case of trouble at one member in a mechanism of financial solidarity that counts towards regulatory capital; or (2) stay more loosely connected but separately supervised and capitalised, in which case they need to choose a different form of collaboration.

⁵⁴ In December 2015, Groupama Rhône-Alpes Auvergne marketed the first mutual certificate in France. Other Groupama regional mutuals are due to launch their own mutual certificates in 2016. See <http://en.groupama-sa.com/finance/financial-information/results-and-financial-reports-@/index.jspz?id=1005>

⁵⁵ Nationwide's core capital deferred share offering in 2013 was 10 times oversubscribed. See *Mutual market poised to flourish with new legislation*, Association of Financial Mutuals, July 2015, <http://www.financialmutuals.org/resources/mutually-yours-newsletter/mutual-market-poised-to-flourish-with-new-legislation>

⁵⁶ *voiceMagazine*, ICMIF, January 2016.

⁵⁷ *Focus on the Future: Options for the Mutual Insurance Company*, NAMIC, 25 March 2010.

⁵⁸ In addition to the SGAM structure, other similar grouping types are possible in France, including Union de mutuelles, Union de groupe mutualiste (UGM) and Union mutualiste de groupe (UMG). For further information on these grouping instruments, see S. Broek, B Buiskool, A Venneken and R. Van der Horst, *Study on the current situation and prospects of mutuals in Europe*, Panteia, 12 November 2012.

⁵⁹ Guarantee capital is distinct from share capital although often it affords voting rights on how the paid-up capital is invested. The financing instrument is more akin to subordinated debt in the sense that holders of guarantee capital receive interest, but the liability does not increase or decrease as the value of the company changes.

Cross-border financial links between mutuals are rare, but there are some examples.

Cross-border collaboration among mutuals is more limited than within-country arrangements. This in part reflects the fragmented legal/regulatory structures that exist in different countries. In addition, cross-border groupings of mutuals almost inevitably involve a decrease in members' control.⁶⁰ Nonetheless, international cooperation happens in Europe, for example, with the Eurapco and Euresa alliances facilitating exchange of knowledge on common insurance activities, and also generating cost savings for members' functions like human resources, IT, reinsurance and marketing.⁶¹ Improvements in and greater harmonisation of Europe-wide regulations would probably boost financial solidarity across borders.

Mutuals can also boost capital by selling a part of their organisation, merging with a peer, ...

Corporate reorganisation

Mutuals can reorganise to boost capital. Selling off a part of the business that is no longer a good strategic fit can be a means for a large or diversified mutual to realise profits embedded in the associated assets and/or free up existing capital for redeployment elsewhere. Likewise, a merger between two or more mutuals can promote higher retained earnings and economise on required regulatory capital. Merger activity among mutual insurers in Canada and some European countries has increased over recent years, and surveys indicate that further consolidation is likely.⁶² However, there are sometimes legal and/or regulatory constraints. For example in France, mutual insurance companies are not allowed to merge with health mutuals.

... or demutualising and issuing equities, ...

The most radical option available to a mutual seeking to raise fresh capital is to demutualise, convert to a stock company and issue equity. Eligible members receive the proceeds of the conversion in the form of cash, shares or a combination of both. However, demutualisation is not a quick or easy process, and nor is it a step that can be easily reversed (although there are exceptions. Eg, Swedish insurer Skandia recently re-mutualised). Regulators are typically keen to ensure that all members – current and future – are fully informed about the consequences, and that the demutualised entity will remain financially sound and able to meet its obligations to policyholders.⁶³ Moreover, enhanced government support for a plurality of corporate forms to increase financial system resilience means that in some jurisdictions, demutualisations face significant political obstacles.

... although the latter is not a quick or easy process, not least because it can attract considerable regulatory scrutiny.

A key stumbling block is how the accumulated surplus built up over the years is distributed to members who subsequently become private investors. In light of the experience of demutualisations in a number of advanced countries in earlier decades, regulators often look to impose rules on mutuals wishing to demutualise to avoid the process being dominated by the mutual's management and/or a small influential group of members. For example in Canada, a new regulatory framework for the demutualisation of property and casualty insurers was introduced in 2015. This sets out processes and voting criteria to ensure the apportionment of benefits is fair and equitable for all policyholders.⁶⁴

⁶⁰ S. Broek, B Buischool, A Venneken and R. Van der Horst, op cit.

⁶¹ *Cross-border business and cooperation in the mutual and cooperative insurance sector*, AMICE, 2011.

⁶² According to a survey, *Ready for Take-off: The Outlook for Insurance M&A in EMEA*, Towers Watson, 2014, around 37% of respondents expect further consolidation among mutual insurers.

⁶³ M. Fulton and J-P. Girard, "Demutualization of Co-operatives and Mutuals," a report prepared for *Co-operatives and Mutuals Canada*, October 2015.

⁶⁴ Canada Gazette, Vol. 149, No. 9, Part I, February 28, 2015.

Upgrading corporate governance practices

As a result of the financial crisis, authorities in many countries strengthened corporate governance requirements for financial institutions.

A well-functioning Board is critical for a mutual given the lack of external review by investors.

A key issue for mutuals is to recruit directors who have an affinity with members but are also independent.

Long tenure can sometimes undermine a director's independence and term limits are often recommended.

On average mutuals' Boards tend to meet such criteria, but there is considerable variation and some directors serve very long terms.

In the wake of the financial crisis, governments in many countries have strengthened financial-sector corporate governance requirements. This varies between jurisdictions, but there are a number of common themes that frame the current governance agenda for mutual insurers. These include the composition of the Board of Directors, adequate review and management of key business and operational risks, the degree and type of information disclosed to regulators and their membership, and effective engagement with members.

Composition of the Board

A well-functioning Board is arguably more important for mutuals than for stock companies, given an absence of investor scrutiny. Their limited access to capital markets also restricts the ability of mutuals to recover from a sudden depletion of reserves, making effective governance even more critical. For mutuals, the key issues are the independence, risk expertise and diversity of Board members.

Independent directors

The make-up of Boards of mutual insurers, including the Chair, is typically biased to more non-executives, to compensate for potential weakness in ownership control. On average, non-executives occupy around 80% of Board positions, compared with about 60% for publicly-listed firms.⁶⁵ A main challenge facing mutuals is to appoint directors with close affinity to and knowledge of the organisation, who are also able to challenge executive management.

Though there are benefits from stability of leadership, long tenure of outside directors can become a negative if they start thinking too much like an insider. Thus, a growing number of countries have adopted tenure guidelines or restrictions for outside directors. The recommended maximum tenure for a non-executive director to be considered independent is typically between nine and 12 years.⁶⁶ For example, the European Commission recommends that independent directors serve a maximum of three terms or 12 years, whichever is shorter.

Many mutuals' Boards meet the recommended tenure criteria with current non-executives and executives serving on average around 9 years in office.⁶⁷ However, this is higher than their peers at publicly-listed companies, which in the UK was 4.2 years for non-executives and 7 years for executives in 2014.⁶⁸ Moreover, average tenure figures mask considerable variations (see Figure 16). Some mutual insurers' Boards, particularly at smaller entities, include directors who have served for multiple terms and/or extended periods, in some cases upwards of 30 years. This runs the risk of inducing strategic inertia and possibly exacerbates key-person risk.

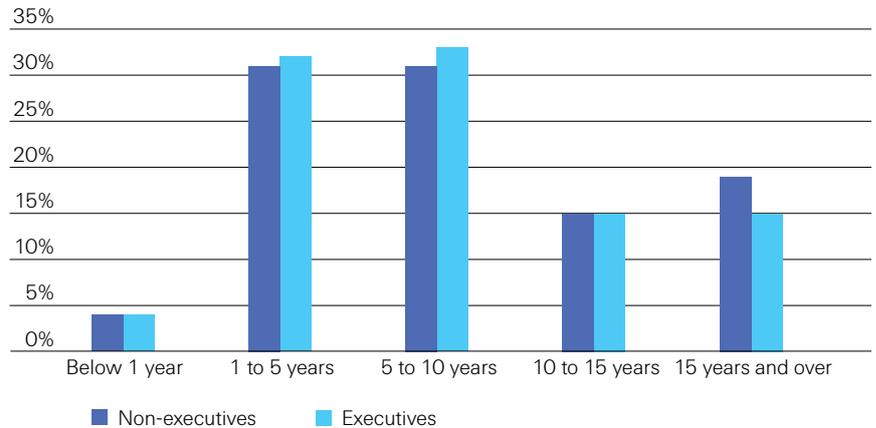
⁶⁵ Mutual insurer information is from ICMIF while details of stock company Boards are based on information collated by SpencerStuart to construct their board indices for various countries. See <https://www.spencerstuart.com/>

⁶⁶ *Director Tenure*, Effective Governance, 2014.

⁶⁷ Based on available information on dates of appointment published on a selection of mutuals' websites or annual reports.

⁶⁸ The average tenure for FTSE 350 companies in 2014. See *Corporate Governance Review 2014*, Grant Thornton, 2014.

Figure 16
Distribution of directors' tenure at mutual insurers (% of sample)



Note: based on available information from mutual insurers' websites in Australia, Canada, Ireland, the Netherlands, the UK and the US.
Source: Mutual insurer websites, Swiss Re Economic Research & Consulting calculations.

To increase financial and risk management expertise, some mutuals have recruited external directors.

Boosting Boards' financial expertise may lead to higher costs for mutuals.

The number of women in senior leadership positions in mutuals has risen over recent years.

Financial and risk management expertise

Another key issue for mutuals is having financial and risk management expertise on the Board. This has led a number of mutuals to appoint senior independent directors who are often drawn from outside the mutual's membership but typically bring prior Board and financial sector experience. The latter has become increasingly important given regulatory initiatives for more stringent qualification criteria and accountability expectations for directors of a firm.

The new regulatory requirements in a number of jurisdictions, which stress that insurers' Boards need to include financial and risk management professionals, can add to mutuals' costs. This can be a burden, particularly for smaller firms.⁶⁹ Additionally, it makes it more difficult for a mutual to have (only) members on its Board, if membership of the mutual is restricted to, for example, a particular religious or professional group. While increased training for lay directors can help, this is often no replacement for hands-on, senior-level experience.⁷⁰

Diversity in the Boardroom

Mutual insurers have responded to political initiatives to boost gender diversity, although official targets for female representation on Boards do not typically apply to non-listed companies.⁷¹ There has been an increase in women appointments to senior leadership positions in mutuals. In 2013, of the International Cooperative and Mutual Insurance Federation's (ICMIF's) 214 members, 29 mutuals had women CEOs, Chairs or presidents, up from just six in 2005.⁷²

⁶⁹ According to the UK trade body the Association of Financial Mutuals (AFM), as a proportion of premiums written, the cost of Boards for smaller UK mutual insurers is on average twice that for their larger peers. See *Remuneration in the Mutual Sector*, AFM/FootAnstey, 2014.

⁷⁰ In his report into the governance weaknesses at the Cooperative Group following the near collapse of its banking subsidiary, Lord Myners concluded that training alone will not equip an otherwise inexperienced person with the skills required to serve effectively on the Board when the entity increases in scale and complexity. See P. Myners, *Report of the Independent Governance Review*, The Co-operative Group, May 2014.

⁷¹ Over recent years, a number of European countries have introduced official quotas, which ultimately require that 30–40% of Board seats be allocated to women. These include Germany, Norway, Spain, the Netherlands, Iceland, Italy, Belgium and Denmark.

⁷² *Women in leadership positions*, ICMIF, 2013.

Upgrading corporate governance practices

Low turnover rates and limited capacity for first-time directors is nonetheless slowing the change in gender mix on mutuals' Boards.

On the whole, mutual insurers have adopted specialist control functions and separate Board committees.

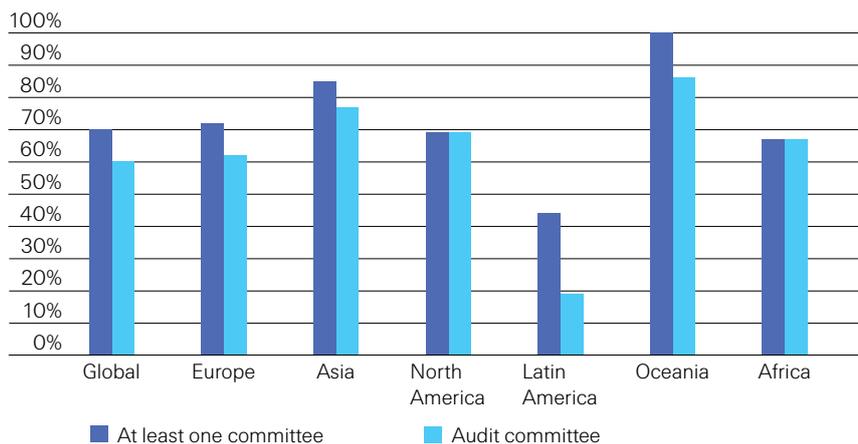
However, the shift in the gender mix on mutuals' Boards is not happening as fast as within public companies, partly because of low turnover rates among directors, but also perhaps due to an apparent reluctance to make first-time, female Board appointments. For example, first-time non-executive directorships at UK mutual insurers in 2014 made up 27% of the total number of new appointments, of which only 10% were women. By comparison, the proportion of FTSE 350 non-executive directorships that went to first-time appointees was 54% (up from 45% in 2007), and 39% were women.⁷³

Internal and external management control mechanisms

Best practice in governance includes dedicated Board oversight of, for example, risk, regulatory compliance, legal issues and elements of finance and human resources. Many mutual insurers have these committees. According to the ICMIF, 70% of mutual insurers have operated with some form of sub-committee for their Boards since at least 2010, with just under a half (49%) having three or more sub-committees. Such governance arrangements are particularly prominent in Asia and Oceania (see Figure 17). Even small mutual insurers tend to have an audit committee, although sometimes that responsibility is undertaken by the main Board.⁷⁴

Figure 17

Adoption of Board committees by mutual insurers in 2010



Source: ICMIF.

However, new regulatory requirements will likely stretch mutuals' existing governance arrangements.

Mutual insurers also need to comply with new regulatory and rating agency requirements for more robust enterprise risk management (ERM) practices and initiatives such as Own Risk & Solvency Assessments (ORSAs). The regulations are guided by the principles of materiality and proportionality, meaning that small and medium-sized mutual insurers can tailor how they comply. Nevertheless, meeting these requirements represents a significant challenge, especially for small, local mutuals which may have limited resources to staff and maintain oversight committees. Also, the additional expenses could put the smaller mutuals at a disadvantage relative to larger insurers which can benefit from economies of scale. For example under Solvency II, credit rating agencies will charge market participants additional costs for using ratings information in their reports to supervisors, meaning that some insurers will have to pay several times for the same information.⁷⁵

⁷³ *The class of 2014: New NEDs in the FTSE 350*, Korn Ferry, 2014.

⁷⁴ *Corporate Governance Report*, AFM, 2014.

⁷⁵ *AMICE raises alert on reliance on credit rating agencies*, AMICE, 29 March 2016.

To increase the usefulness of annual reports, some mutuals are adopting best practices for narrative reporting and public disclosure.

Yet too detailed disclosure could prove to be a regulatory burden, especially if auditing is required.

To enhance transparency, mutuals have implemented their own “comply or explain” governance disclosure codes.

Enhanced disclosure and transparency

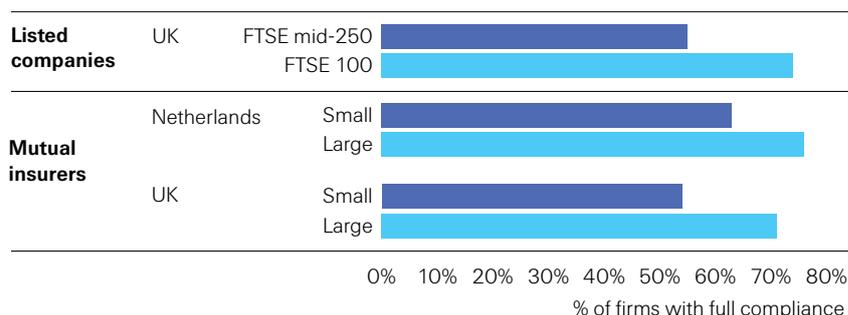
Although expressly aimed at publicly-listed companies, some mutuals are adopting best practices for narrative reporting in their annual reports.⁷⁶ This trend may be reinforced by additional mandatory requirements.⁷⁷ For example under Solvency II, insurers in Europe will be required to make public their report on solvency and financial conditions, as regulators see public disclosure as an important tool to foster market discipline.⁷⁸

Yet the *quality* of the reported information on the mutual’s stewardship is the key factor. Stock companies and some mutuals are finding that the new rules are not necessarily increasing the clarity and relevance of narrative reporting.⁷⁹ A balance must be struck between providing an abundance of information in supervisory and annual reports and the cost of producing it, including the potential expenses for external audit. The burden can be challenging, especially for smaller mutuals.

Some jurisdictions (eg, the UK, the Netherlands and Germany) have codes of best practice on governance disclosure. Companies may choose to comply with particular provisions of the code or, if they choose not to comply, explain publicly why not. Mutual insurers in these countries have adopted similar approaches either to meet insurance laws that apply to all insurers or echo existing governance rules for publicly-listed companies.⁸⁰ Smaller mutual insurers tend to comply with fewer of the voluntary detailed code provisions than their larger peers, but this appears to be the case also in the publicly-quoted company sector (see Figure 18).

Figure 18

Compliance with voluntary corporate codes in the UK and the Netherlands



Source: *Corporate Governance Report*, Association of Financial Mutuals, 2014, *Report on Governance Principles for Insurers*, Netherlands Insurance Governance Monitoring Committee, December 2012, *Corporate Governance Review*, 2014, Grant Thornton, 2014.

⁷⁶ Founded in 2010, the International Integrated Reporting Council (IIRC) has promoted more integrated reporting to improve the usefulness of non-financial reporting by companies. It is mandatory in South Africa and Brazil, and is being increasingly adopted in other countries, including the UK, the Netherlands and Australia.

⁷⁷ For example, starting in 2017, large European public-interest entities with more than 500 employees will be required to disclose in their annual reports information on environmental, social and employee affairs, respect for human rights, and anti-corruption and bribery matters. Public-interest entities may include some unlisted companies such as banks and insurance companies, although the new legislation will give firms flexibility to disclose relevant information in the way that they consider most useful.

⁷⁸ See for example, *Need for high quality public disclosure: Solvency II’s report on solvency and financial condition and the potential role of external audit*, EIOPA, June 2015.

⁷⁹ For more details, see *Corporate Governance Review 2014*, Grant Thornton, 2014. Also, see comments by AMICE on “EIOPA’s consultation paper 009/11 on the Proposal for Reporting Templates and Guidelines on Reporting and Disclosure”, www.amic-eu.org, 20 January 2012, www.amic-eu.org/Download.ashx?ID=28432

⁸⁰ Examples of corporate governance codes adopted by mutual insurers include the “Annotated combined corporate governance code” developed by the Association of Financial Mutuals in the UK ([http://www.financialmutuals.org/files/files/ACGC.%20v%20October%202014\(1\).pdf](http://www.financialmutuals.org/files/files/ACGC.%20v%20October%202014(1).pdf)) and *Recommendations on Corporate Governance*, French Association of Mutual Insurers, January 2010.

Upgrading corporate governance practices

Mutuals prefer to align manager incentives to long-term performance.

A particular area of non-compliance is performance-related compensation for executive directors.⁸¹ Boards at smaller mutuals in particular often feel that bonuses should not form a prominent or any part of remuneration.⁸² Instead, the remuneration policy is expected to explicitly align manager and company objectives with a long-term view of sustaining the mutual.

Some insurance regulators are seeking enhanced governance disclosure as part of the normal supervisory process.

Some regulators also require periodic governance reports. In Europe, Solvency II authorises national supervisory bodies to do this while in the US, from 2016 regulators are introducing the Corporate Governance Annual Disclosure (CGAD) Model Act. This mandates that US insurers annually provide a report on governance to their lead regulator, with details of directors' qualifications, roles and attendance at Board meetings. In contrast to Solvency II and ORSA, even the smallest companies must comply with CGAD.⁸³

Relationships with members

Ordinary members may have limited ability to affect the actions of the mutual.

Mutuals generally use a democratic system of "one member, one vote", so members are all equal decision-makers in the enterprise.⁸⁴ But in practice, ordinary member-policyholders may have limited ability to influence the business and social objectives of a mutual. For example, many mutual insurers allow "proxy voting" in which policyholders can allow their Board of Directors to cast votes on their behalf. Also, some jurisdictions allow mutuals to have a dual policyholder structure with only certain policyholders entitled to vote.

Member engagement can become more difficult as mutuals increase in scale and complexity.

More generally, as mutuals grow, one of the biggest challenges is to maintain sufficient connection to members' common goals while managing a complex economic entity.⁸⁵ This is especially the case when mutuals grow by acquisition, as it is often difficult to give membership rights to new customers due to legal and technical constraints. Likewise, as it grows larger, a mutual's original social agenda can sometimes become disconnected from its strategic and commercial objectives.

In practice, participation at annual general meetings is low in a number of jurisdictions.

According to data collected by the Association of Financial Mutuals (AFM), less than 5% of the total membership of UK mutuals voted at annual general meetings in 2013, although turnout has been steadily increasing over recent years.⁸⁶ Similarly, a 2014 survey found that only 40% of UK member-policyholders thought their mutual regularly engaged with them.⁸⁷ Even in countries like France where the solidarity mutual model remains pervasive in insurance, some of the traditional democratic structures, including regional or departmental assemblies, are reportedly losing their vitality.⁸⁸

⁸¹ The revelation in 2012 that Liberty Mutual in the US paid its former chief executive roughly USD 50 million a year prompted a political backlash and ultimately led to the requirement for public disclosure of compensation packages for senior executives at mutual insurance companies.

⁸² Association of Financial Mutuals' Corporate Governance Report, 2014.

⁸³ ERM, ORSA and Corporate Governance: *The Small Company Challenges*, First Consulting & Administration, Inc., 2015.

⁸⁴ *Enlightened Co-operative Governance*, Ernst & Young, 2012.

⁸⁵ *Ibid.*

⁸⁶ See *Corporate Governance Report*, AFM, 2014. By way of comparison, in 2014 turnout at UK mutually-owned building societies' annual general meetings averaged 11.8% of eligible members (see *Engaging conversations*, Building Societies Association, May 2015).

⁸⁷ See <http://www.financialmutuals.org/files/files/Master%20AFM%20Optimising%20member%20engagement.pdf>

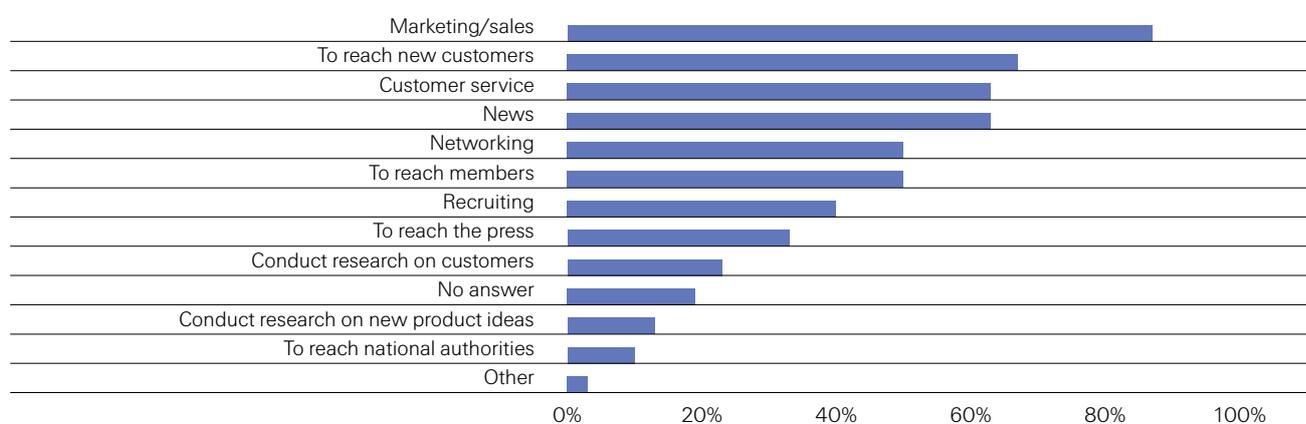
⁸⁸ "Plotting the path ahead for France's health mutual MGEN", *voiceMagazine*, ICMI, September 2015.

Using new technology can increase member engagement.

Against that background, many mutual insurers are seeking to reinvigorate their communications with members. Some co-operatives and mutuals have established a communications committee to oversee the quantity and quality of their disclosures, and to promote dialogue with members. Some are also embracing social media to facilitate ongoing, two-way communication with members, although most are still using this mainly for marketing purposes (see Figure 19). New technology can also reduce the cost of maintaining membership support infrastructure, which for some mutuals is often a constraint.⁸⁹

Figure 19

Use of social media by European mutual insurers



Source: Association of Mutual Insurers and Insurance Cooperatives in Europe (AMICE), based on a survey of its members between April and July 2014.

⁸⁹ A 2014 working party of AFM members found that many mutuals are reluctant to implement member engagement strategies, stating high cost, IT restrictions, data issues, resource deficiency, product limitations and restrictions. Less than 25% of working group members embraced social media. See *Optimising Member Engagement – Sharing Best Practice and Opportunities*, October 2014, <http://www.financialmutuals.org/files/files/2717%20AFM%20Member%20engagement%20leaflet.pdf>

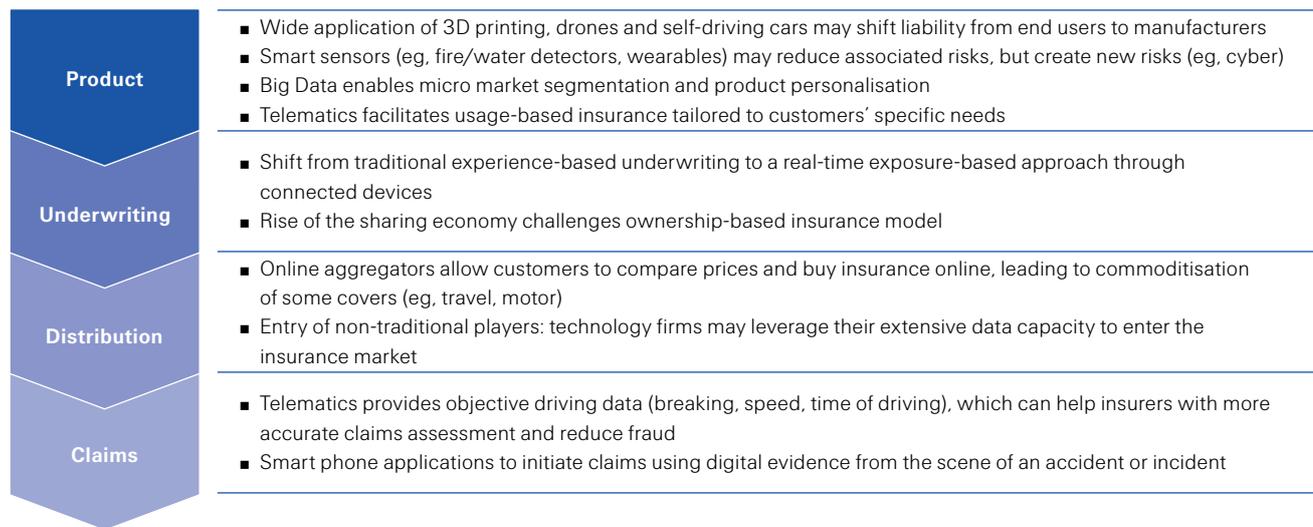
Digital disruption and Mutualism 2.0

Technology-led disruption across the insurance value chain

Technological disruption is taking hold in insurance.

Insurance is increasingly impacted by the digital revolution. The emergence of Big Data and smart analytics, cognitive computing, wearable devices, telematics and the Internet of Things (IoT) are coalescing to disrupt the traditional elements of the insurance value chain from product and pricing, to distribution and policy/claims management (see Figure 20).

Figure 20
Impact of digitalisation on the insurance value chain



Source: Swiss Re Economic Research & Consulting.

More granular data and new analytical tools enable greater personalisation and more accurate underwriting of individual risks.

The growing proliferation of data about insureds, be it collected via dedicated sensors, smart mobiles or other devices, provides an opportunity for more granular underwriting of individual risks. Smart analytics, predictive modelling and connected telematics devices assist insurers in designing products and setting premiums based on how insureds actually behave, rather than using general proxies such as age, marital status and gender to assess risk.⁹⁰

The traditional agent/broker distribution model is facing strong competition from digital channels.

Technological innovations and changing consumer preferences are also disrupting traditional insurance distribution. Price comparison websites provide consumers more information on products and costs, especially for more commoditised products like auto and travel insurance. Modern consumers are more self-directed in their insurance decisions and want to interact through various channels when buying insurance. Surveys indicate that consumers often still value the personal interaction and expert advice of agents and brokers, especially when it comes to complex commercial, financial and life and health risk exposures. But they also want a seamless shopping experience anytime, anywhere, whether online, by telephone or in a store or agent's office.⁹¹

⁹⁰ K.-U. Schanz, "The technology and data revolution in insurance: A brave new world?", *Middle East Insurance Review*, May 2015.

⁹¹ See for example, *Insurers, intermediaries and interactions. From channels to networks*, IBM Institute for Business Value, 2012. *Consumer-Driven Innovation Survey: Playing to win*, Accenture 2013, and *Life insurance consumer purchase behaviour tailoring consumer engagement for today's middle market*, Deloitte, 2015.

Mutual insurers recognise the potential of digital technology.

Some mutuals are implementing technology-led product and process improvement,...

Mutual insurers' response to technological change

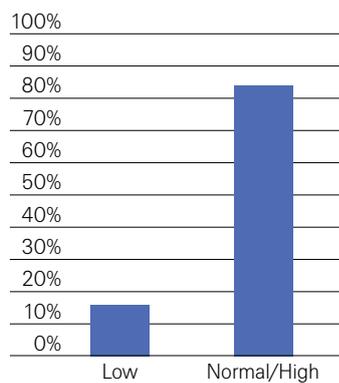
Mutual insurers recognise the potential of digital technology. According to a 2013 survey covering 21 countries, 84% of the mutual CEO respondents placed innovation high on their company's strategic agenda, with a particular focus on using digital technology to simplify core functions (see Figure 21).⁹² Likewise, in a 2014 survey, 94% of the US mutual CEO respondents said technology is their most pressing concern.⁹³

A number of mutuals have set up dedicated innovation labs to design and road-test new ideas to challenge conventional thinking. For example, the US military mutual USAA has developed an in-house, online community that allows its employees to submit ideas, participate in specific enterprise challenges, and collaborate with peers on solution development.⁹⁴

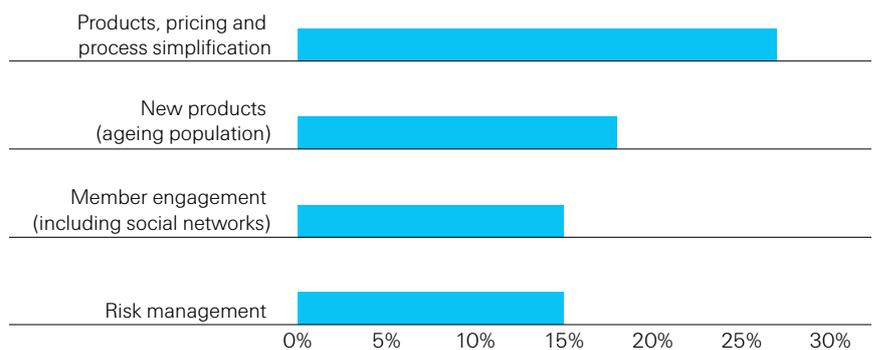
Figure 21

Mutuals' innovation efforts

Priority attached to innovation*



Main areas of innovation**



* Based on a question about how highly innovation features in the respondent's organisation. Normal/high priority refers to those respondents who saw innovation as a regular element of how they run their businesses or were investing considerable resources to stimulate innovation.

** Based on a question highlighting the main areas of innovation effort in the respondent's organisation.

Source: *Chief Executive Insights: perspectives on leadership in the fastest growing insurance sector*, ICMIF, 2013.

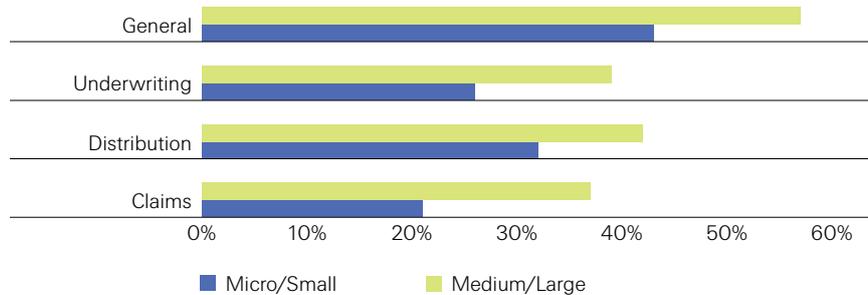
⁹² *Chief Executive Insights: perspectives on leadership in the fastest growing insurance sector*, ICMIF, November 2013. The survey was conducted in 2013 and included responses from 34 CEOs drawn from ICMIF members in 21 countries. This message was echoed in a more recent poll of mutual insurers at the ICMIF Biennial conference in Minneapolis in October 2015.

⁹³ *Property-Casualty Mutuals, Resilient and Staying Relevant*, Conning, 2014. The survey was conducted in June and July 2014 and included responses from 67 executives at mutual insurers, with half at the CEO/President/Chairman level.

⁹⁴ *Bringing simplicity through Innovation*, USAA, https://content.usaa.com/mcontent/static_assets/Media/USAA_Fact_Sheet_Innovation.pdf?cacheid=1252878913_p

A review of a selection of mutual insurers’ websites shows that larger firms tend to have a relatively higher degree of online functionality, perhaps reflecting resource constraints on digital investments facing smaller insurers. The difference between small and large firms is particularly noticeable with respect to online underwriting and distribution/claims handling capabilities (see Figure 22).

Figure 22
Mutuals’ adoption of technology, by size of firm



Note: data collected from websites of 210 mutual insurers across five geographic regions (Asia, Europe, Oceania, North America, South America and Caribbean). Percentages refer to the share of companies in each of the size groups (micro/small, and medium/large as defined in the note to Figure 6) offering all specific online functionalities within a category. The following functionalities were investigated for each company: (1) General: company has a web presence, an online platform to exchange views and vote, and publishes its annual report online; (2) Underwriting: customised quote available online; (3) Distribution: existence of online product descriptions, price matrix, live chat capability, active social media account(s), web-based insurance purchase option and membership application, and a mobile app; and (4) Claims: existence of a members-only platform and online claims reporting.
Source: Swiss Re Economic Research & Consulting, based on information compiled from mutual insurers’ websites in February 2016.

Personalisation increases the risk of anti-selection for less tech-savvy mutuals.

More generally, adapting underwriting practices to the digital world is a big challenge for many mutuals.

Towards full risk-based product design and underwriting

Technological advances will change the degree of asymmetric information that often characterises insurance markets. Companies with innovative pricing models and information on individual risks can better identify the lowest-risk clients, while self-informed, higher-risk clients may seek out less sophisticated providers offering more attractive rates, based on less information. In this environment, late adopters of new technology would be more susceptible to the threat of adverse selection.

Alert to the competitive threat, some mutual insurers are rolling out telematics-based policies, especially in motor insurance.⁹⁵ For instance in the US, Liberty Mutual offers a pay-how-you-drive, usage-based motor cover to customers who agree to have their driving behaviour tracked.⁹⁶ Others are beefing up in-house predictive modelling teams, or engaging with analytics companies to gain additional predictive underwriting capabilities.⁹⁷ But for many mutuals, legacy computer systems and the cost of the technologies remain a significant challenge. According to a poll conducted by ICMIF at a conference in October 2015, 64% of voting delegates thought it would take one to three years, or even more, for their organisations to address Big Data and the use of advanced data analysis techniques.⁹⁸

⁹⁵ See for example, “The big data of bad driving, and how insurers plan to track your every turn”, *The Washington Post*, 4 January 2016.

⁹⁶ “Liberty Mutual Partners With Subaru on Usage-Based Insurance”, *Internet of Things Journal*, 20 January 2016.

⁹⁷ See for example *Annual Report 2014*, The Motorists Insurance Group; *Annual Report 2014*, Grinnell Mutual; *A.M. Best Affirms Ratings of Penn National Insurance Companies’ Members*, A.M. Best Press Release, 1 May 2014; *FHM Insurance Company Adds Valen Analytics InsureRight Platform for More Insight and Improved Underwriting Capabilities*, Business Wire, 19 November 2013; *Valen Technologies Partners with Mutual Insurer*, Insurance Networking News, February 2013.

⁹⁸ *New Thinking, New Opportunities*, ICMIF Biennial Conference 2015, October 2015, Minneapolis.

Mutuals traditionally rely heavily on intermediaries for distributing their products, ...

... but generational effects are likely to reinforce the need for omni-channel, multi-touch distribution.

Many mutuals have started to adapt to the digital distribution reality, ...

... and some are partnering with technology companies to upgrade their digital know-how and offer a better customer experience.

The need for omni-channel, multi-touch distribution

Mutuals have traditionally relied on independent specialist intermediaries to distribute their products and are likely to continue to do so. These agents seek to provide unbiased professional advice and guidance about the range of insurance solutions available to the mutuals' members. In a 2014 survey, about 70% of US mutual CEOs, when asked about their distribution model, said they would increase the use of independent agents.⁹⁹

While the agent-broker model may suit existing customers, new generations of insurance buyers will demand omni-channel, multi-touch distribution. Gen Y customers (those born between about 1980 and 2000) use all modes of distribution. According to a recent survey, they interact with insurers on social media up to two-and-a-half times more than other customers, and more than twice as much via mobile online channels.¹⁰⁰

As in underwriting, mutual insurers are adapting to the new digital distribution reality. At the October 2015 ICMIF conference, one third of participants said that changing customer preferences and increased digitalisation were their biggest motivation to innovate. Many mutuals, small and large, have introduced enhanced product descriptions on their websites and offer direct online purchase facilities, sometimes through the use of dedicated member-only portals. Some also offer on-line chat features, perhaps with an independent broker, enabling interactive advice to be given as the customer is reviewing and evaluating insurance options. Similarly, web-based systems to initiate and process claims are becoming more common. And a few mutuals are employing gamification techniques to promote customer engagement and understanding of complex insurance products.¹⁰¹

Some mutual insurers are also partnering with technology firms to upgrade their digital know-how, improve efficiency and offer a better customer experience. Outside analytics and Software-as-a-Service companies can assist with anything from improving customer relationship management to investment accounting to fraud detection.¹⁰² In some cases, mutuals have chosen to collaborate amongst themselves. For example, a group of Canadian mutuals joined forces to own and operate two IT systems companies that deal with policy management, claims handling, and accounting systems.¹⁰³ In addition, some of the larger US mutuals have set up venture capital arms, funding various fintech start-ups from robo-financial advisors to IoT and cybersecurity providers, sometimes offering the services of those start-ups to their members as an additional benefit.¹⁰⁴

⁹⁹ Conning, 2014, *op cit*.

¹⁰⁰ *World Insurance Report 2016*, CapGemini/Efma, 2016.

¹⁰¹ K. Burger, "How CUNA Mutual Uses Gamification To Improve Annuities Sales," *Insurance and Technology*, 9 June 2014, <http://www.insurancetech.com/channels/how-cuna-mutual-uses-gamification-to-improve-annuities-sales/d/d-id/1315289>.

¹⁰² "MPS Chooses Accenture as Consulting Partner for Member Experience Transformation", *Insurance Innovation Reporter*, 6 January 2016; "Franklin Mutual Selects ISCS's SurePower Innovation as Modernization Platform", *Insurance Innovation Reporter*, 25 June 2015; "Mutual of Enumclaw Deploys Guidewire Solution for Billing", *Businesswire.com*, 11 June 2015; "Exeter Family Friendly Taps Clearwater Analytics to Comply with Solvency II", *Insurance Innovation Reporter*, 20 February 2015; "Amica Deploys SAS for Fraud and Subrogation", *Insurance Innovation Reporter*, September 2015; "P&V Group Adopts Guidewire Solutions to Support Non-Life Business Transformation", *Insurance Innovation Reporter*, 11 January 2016.

¹⁰³ See the "About Us" sections of Mutual Concept Computer Group website at <https://www.mccc.net/about/company/>, accessed April 14, 2016, and SEH Computer Systems website at <https://www.sehcomp.ca/about.html>, accessed April 14, 2016.

¹⁰⁴ For further details, see Table 1 in *sigma* 6/2015, Swiss Re.

Digital disruption and Mutualism 2.0

Progress is further along in some regions than others ...

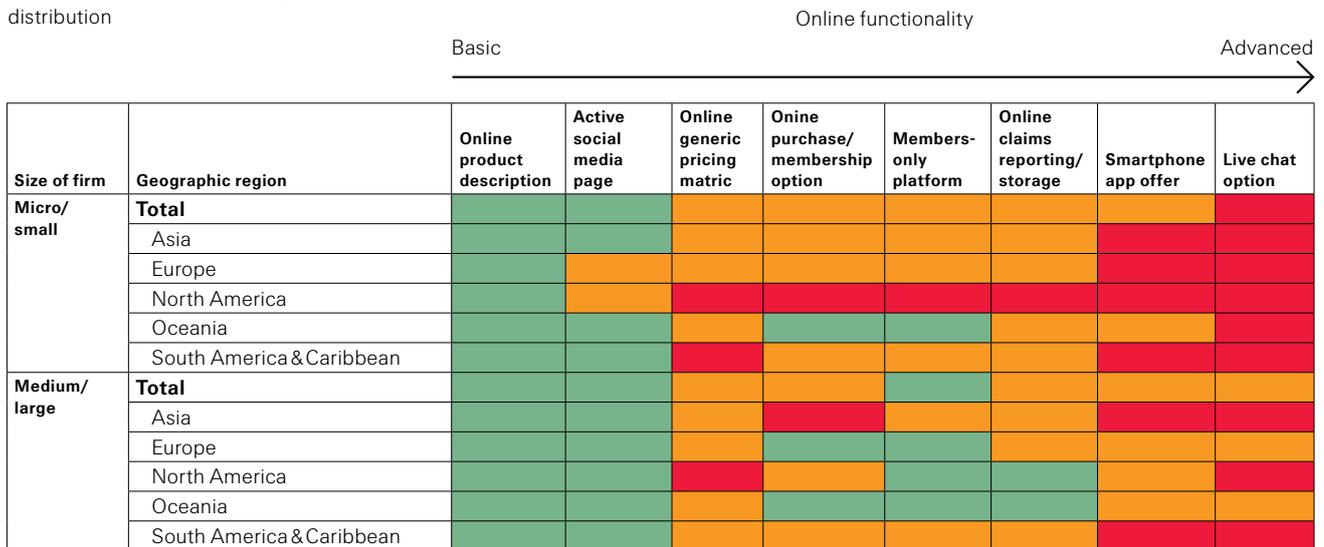
...with Europe and Australia leading the pack.

Digital distribution is further advanced in some regions than others. Smaller mutual insurers in North and South America lag in terms of advanced online functionality, perhaps reflecting their greater affinity with traditional agent/broker distribution, and potential worries about channel conflict (see Figure 23). Larger mutual insurers in Asia (especially in Japan) appear reluctant to shift significantly to online distribution, perhaps linked to consumer preferences for traditional distribution channels. For instance in Japan, survey findings show that around two thirds of consumers prefer personal interaction when researching or buying an insurance policy. Although more Japanese consumers indicate intention to use online channels for pre-purchase research, the figures still lag behind other parts of Asia.¹⁰⁵

Mutual insurers in Europe and Australia, on the other hand, provide more digital offerings, including smart phone applications. More than half the websites of the surveyed Australian mutuals in the health sector have very advanced online features, reflecting the long pedigree of the Australian healthcare industry in using innovative communications technology.¹⁰⁶

Figure 23

Mutuals' adoption of technology in distribution



- More than half of the companies surveyed have the particular feature on their website
- Less than half but more than 10% of companies have the particular feature on their website
- Fewer than 10% of the companies have the specific functionality on their website

Note: See notes to Figures 6 and 22 for details of the size classification and sample of selected insurers. Source: Swiss Re Economic Research & Consulting, based on information compiled from mutual insurers' websites in February 2016.

¹⁰⁵ *Global Consumer Insurance Survey 2012*, Ernst & Young, 2012. [http://www.ey.com/Publication/vwLUAssets/Global_Consumer_Insurance_Survey_2012_-_Japan/\\$FILE/0177_EY_GIR_JAPAN_SML.pdf](http://www.ey.com/Publication/vwLUAssets/Global_Consumer_Insurance_Survey_2012_-_Japan/$FILE/0177_EY_GIR_JAPAN_SML.pdf)

¹⁰⁶ *Digital Health*, Australian Trade Commission, February 2016.

The changing insurance landscape

Technology is changing the overall competitive landscape in insurance.

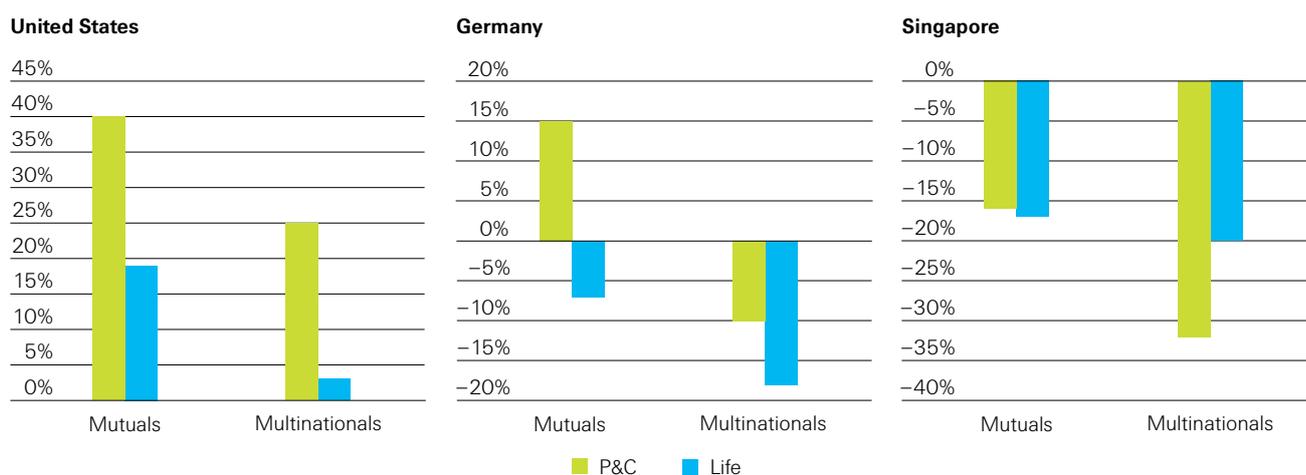
For instance, Big Data and smart analytics encourage non-traditional competition.

Digitalisation is not just impacting the insurance value chain, but is fundamentally changing the overall competitive landscape in which insurers operate. Market participants are becoming more interconnected and interdependent. Internet-based collaboration is gaining speed. With the ease of social connection, the world is moving more towards a “sharing economy” and peer-to-peer (P2P) platforms.

Mutuals have traditionally enjoyed significant loyalty from their members, a point reinforced in surveys (see Figure 24). This reflects their ability to compete not only on price, but also on the value-added services they provide to their members. But commoditised personal line products sold via multiple distribution channels may make self-directed customers more fickle.¹⁰⁷ It will be harder for mutuals to maintain customer loyalty as technology breaks down industry barriers and enables entry for new, non-traditional competitors, especially those that offer customised solutions developed by leveraging Big Data and smart analytics. New types of risks created by digitalisation will also require mutuals to diversify into new products. For example, as driver-assisted technology develops, traditional auto insurance markets will likely shrink while demand for cyber-related cover may increase.

Figure 24

Customer loyalty scores in insurance



Note: the survey measures loyalty by calculating the net promoter score (NPS) for each insurance company, derived from responses to this question: On a zero-to-10 scale, how likely are you to recommend your insurer to a friend or a colleague? Based on the scores they give, respondents are classified as promoters (9–10), passives (7–8) or detractors (0–6). NPS is the percentage of promoters minus the percentage of detractors.

Source: *Customer Loyalty and the Digital Transformation in P&C and Life Insurance: Global Edition*, Bain & Company, 2014.

¹⁰⁷ *The Future of Financial Services – How disruptive innovations are reshaping the way financial services are structured, provisioned and consumed*, World Economic Forum, 2015.

New P2P insurance offers scope to reduce underwriting and distribution costs.

P2P insurance schemes are similar to traditional mutuals: risk-absorbing capacity is provided by members who share any surplus created, but the platforms are not member-owned.

Peer-to-peer (P2P) insurance: the new mutuals on the block

New technology has sparked novel personal P2P insurance schemes. By leveraging the internet, mobile technology and social media, individuals can attract other people to form co-insurance pools, at least for small-scale exposures. Friends and colleagues may be better able to screen out high-risk individuals, and are also more likely to be honest with each other, making fraud or exaggerated claims less likely. Members in a P2P scheme are also less likely to put in for very small claims, which typically can be administratively costly. All this helps keep distribution and acquisition costs low, and can generate significant underwriting efficiencies.

Table 2 describes some recent P2P insurance start-ups in different countries. Some of the schemes have yet to be launched and details of the business models of those that are up and running are not always very transparent. But in many ways the schemes appear similar to small, traditional mutual insurers. Policyholders typically have the same status with respect to their exposure to the overall risk, member rights and their stake in any surplus generated by the network. Most P2P platforms themselves are specialist intermediaries and not insurers. The risk absorbing capacity is provided collectively by members of the network, while the P2P platforms (usually privately-owned and backed by venture capital) organise individuals into groups and process claims.¹⁰⁸ The schemes typically only offer aggregate cover up to the total amount of pooled premiums, meaning that they either partner up with re/insurers for excess of loss provision, or claims payments are capped at a certain threshold.

¹⁰⁸ However, new P2P entrants such as Lemonade and Guevara are aiming to become risk carriers and have applied for insurance licenses (see <http://lemonade.com/> and <https://heyguevara.com/>).

Table 2

Selected P2P insurance platforms

Firm name (country)	General idea	Payment of claims	What is typically insured?	Status
BeSure (Canada)	Peer-to-peer risk sharing platform	Unknown	Gadgets, health, travel, events, automobiles, home	Not officially launched yet
Broodfonds (the Netherlands)	Creation of protection pool for network of self-employed professionals; each broodfond (ie, "bread fund") is a local cooperative of people who save monthly to help sick members	Capped depending on monthly contributions and an indemnification period of up to two years	Workers compensation	Live
Friendsurance (Germany)	Part of premium pooled within network to pay small losses; up to 40% reimbursement of premium if no claims each year	Small claims covered by pool; large claims met by supporting insurer through a traditional insurance policy	Mobile, tablet, laptop, camera, household, third-party liability, legal expenses, car	Live
Gaggel (UK)	Peers pay an annual and monthly premium to build a collective fund; if there are no claims then the monthly contributions are returned	Members mutually cover damage or replacement costs suffered by others in the network, with individual exposure capped at GBP 25	Mobile phones	Not officially launched yet
Gather (US)	Creation of captive for network of small businesses; profits of captive used to reduce premium at renewal	Capped depending on coverage	Liability, workers compensation	Live
Guevara (UK)	Premiums used to finance group insurance fees and create a protection pool among peers; unused funds in pool used to reduce premiums at renewal	Claims initially met from the protection pool; reinsurance backs the pool when claims exceed the maximum amount	Car	Live
Inspool (UK)	Creation of protection pool among peers; 25% of the pool is used to buy reinsurance; unused funds at the end of the contract period are paid out	Claims met from protection pool; reinsurance programme in place for claims exceeding pool	Car	Not officially launched yet
Insure A Peer (US)	Pooling of deductible/excess on traditional insurance policies; up to 90% reimbursement of premium if no claims from members in the network	Capped at level of specific protection pool and size of deductible	Car	Not officially launched yet
Lemonade (US)	Small groups of policyholders pay premiums into a claims pool	No details announced, although backstop finance from reinsurers reportedly arranged	Property, casualty, specific products	Not officially launched yet
PeerCover (New Zealand)	Creation of protection pool per network; reimbursement of premiums if no claims in network	Capped at 3 times contribution or what is left in the pool	Defined within network	Live
PeersMutual Protection (China)	Creation of protection pool per network, pay-out when claim occurs but details still unclear	Defined within network	Defined within private or public network.	Not officially launched yet
Riovic (South Africa)	Private-investor backed insurance platform; investors can offer their capital to underwrite certain liabilities in exchange for premiums	Claims are first paid from policyholder's premiums, assets provided by investors serve as a fallback in case claims exceed premiums	All types of liabilities	Live
Shacom/Intercare (Taiwan)	Creation of protection pool without age limits or health screenings; each member pays an annual fee to join	Payouts depend on duration of membership and age, and are capped at NTD 60 000	Life insurance, supplemental accident insurance and funeral services	Live
TongJuBao (China)	Pooling of funds to insure certain events (ie, divorce, lost child, job transfer to new city); also provides professional consulting services	Depends on type of insurance and member contributions	Safety-net in case of divorce, missing child or other income disruptions	Live
Wesura (Colombia)	Creation of protection pool among peers; reimbursement of premiums if no claims occur in your network	Coverage ranges from 70–100% depending on number of members in network, claims need to be approved by its members or by Wesura (if less than 3 members)	Theft, loss or damage of mobiles, bicycles, computers, tablets and computers.	Live

Source: Swiss Re Economic Research & Consulting, based on press reports and information posted on the websites of the P2P platforms as of May 2016.

There may be natural limits on the scale of P2P schemes.

However, Blockchain technology could eventually be leveraged to scale up P2P insurance.

Blockchain applications may ultimately automate underwriting, loss adjustment and adjudication.

Technological constraints, regulatory approval and privacy concerns still stand in the way of Blockchain technology becoming mainstream.

From peer-to-peer to crowd-based insurance solutions

The new P2P risk pools may have natural limits on their size and ability to displace traditional insurance. Some types of exposure are likely to exceed the aggregate risk absorbing capacity of individuals' social networks. In these situations, more conventional institutional structures to provide risk capital to cover unexpected losses may be required.¹⁰⁹ Furthermore, there may be limited appetite among consumers to involve friends and family in claims settlements, especially if negligence is involved or pay-out disputes arise.

Nevertheless, some commentators argue that further technological innovations could yet widen the scope and increase the scalability of P2P insurance. Blockchain technology might eventually enable the formation of insurance pools between a widely dispersed network of individuals.¹¹⁰ With the Blockchain design, each member of a network keeps a record of all stored information in the database without the need for a trusted third party such as an insurer. Together with smart contracts that execute automatically once a particular verifiable criteria is fulfilled, in principle many functions of a traditional insurer could be performed by a P2P network.¹¹¹

Specifically, the adoption of Blockchain technology could disrupt three core insurance functions: underwriting, loss adjustment and loss adjudication. Smart contracts secured on a Blockchain might ultimately automate the underwriting process and allow the creation of self-administered risk protection pools that explicitly screen out highly correlated risks. In doing so, they could facilitate the shift towards real-time usage-based insurance. Easily verifiable claims could also be processed through a smart contract and safely stored on a Blockchain. Finally, claim disputes could be resolved quickly and efficiently using a Blockchain to achieve consensus among members about the claim.

Despite its potential, many obstacles need to be overcome before Blockchain-supported P2P insurance becomes mainstream. The technology is new and largely untested. The costs and computing power needed to maintain a distributed insurance ledger remain significant. Also, data privacy issues and uncertainties about consumer comfort levels with new P2P technologies still need to be resolved. And the regulatory and legal architecture pertaining to Blockchain applications is still evolving, which could hinder the pace and degree of adoption of the technology.

¹⁰⁹ In the banking world, peer-to-peer (P2P) loans are in some circumstances being bundled together and sold as securities to large investors, opening P2P lending to an even broader potential pool of capital.

¹¹⁰ A Blockchain is a digitally decentralised database that can verify and store information without a trusted third party. Every member owns a copy of the ledger where information is updated using cryptography. For more details see "The great chain about being sure about things", *The Economist*, 31 October 2015, <http://www.economist.com/news/briefing/21677228-technology-behind-bitcoin-lets-people-who-do-not-know-or-trust-each-other-build-dependable>

¹¹¹ Smart contracts are computer protocols that can execute contractual clauses by themselves without a central authority that verifies the prerequisites. The information on the contractual conditions are stored on a Blockchain, which automatically updates the smart contract to execute the service. For more details see <https://github.com/ethereum/wiki/wiki/White-Paper>, http://szabo.best.vwh.net/smart_contracts_idea.html

Mutualism 2.0?

P2P schemes are therefore unlikely to replace traditional insurance in the near term.

Though P2P schemes will continue to evolve and develop, traditional institutions (both shareholder and member-owned) will likely be the dominant providers of insurance for the foreseeable future. Nonetheless, mutuals should be well-positioned to tap into the growing appetite for the sharing economy. With social media, Blockchain and other emerging digital facilities, they will likely be able to better engage with existing and prospective members to select and optimise risk-sharing pools.

Mutuals could make use of Blockchain and other emerging digital technologies to connect existing and prospective members in search of insurance.

For instance, assuming that regulatory hurdles can be overcome and development costs are not prohibitive, mutual insurers might ultimately be able to build private Blockchain-based platforms of their own that connect prospective members with a common affinity, but come from different regions/countries.¹¹² This would potentially provide increased natural diversification opportunities that currently elude many mutuals. The new technology would replicate in a virtual setting the essential trust among members that lies at the heart of a mutual. Importantly too, a user-governed and/or co-operatively owned platform would allow the profits from intermediation to flow back to members rather than owners of the platform.¹¹³

Mutuals may also have a crucial role to play in keeping insurance affordable for some individuals and risks.

Advances in more granular, risk-based pricing will likely mean that more risky individuals pay more for insurance than less risky ones (ie, with better, more accurate information there will be less cross-subsidisation across individuals with different risk profiles). In some cases, that could make insurance prohibitively costly. But without the distraction of providing returns to external shareholders, existing mutuals could have a crucial role to play in keeping insurance premiums affordable and certain risks insurable. Some commentators suggest that the cost of paying dividends to shareholders could be worth as much as 3% of premiums.¹¹⁴ Retaining those funds gives mutuals significant freedom to manage their businesses to the advantage of all their customers.

The increasing importance of the tech-led sharing economy could ultimately bolster the mutual insurance model.

To a certain extent, some of the rise of the tech-led sharing economy reflects increased solidarity and a commitment to mutual support and cooperation, so this could further bolster the role of mutual insurance. By enabling individuals to share risk capital to cover potential adverse developments that might affect individuals in a network, mutuals offer an important safety net for the less fortunate or poorer in society. This is becoming increasingly important as governments in many parts of the world retreat from social insurance provision.

¹¹² With a private rather than public Blockchain, permissions to update the ledger are restricted to a specified group of individuals or perhaps one central organisation. For more discussion on types of Blockchain, see <https://blog.ethereum.org/2015/08/07/on-public-and-private-blockchains/>

¹¹³ Some commentators worry that the tendency of for-profit platforms to look to scale and dominate the market may undermine the benefits for ordinary people of the sharing economy that they purport to enshrine. See for example, J. Lanier, *Who Owns the Future?*, Simon & Schuster, New York, 2013.

¹¹⁴ *Mutuality and Insurance*, AFM, March 2013, see <http://www.financialmutuals.org/resources/mutually-yours-newsletter/mutuality-and-insurance>

Conclusion

Following a period of decline, the mutual sector has embarked on a modest revival in recent years.

It would be unfortunate if new post-crisis prudential and governance regulations were to place some mutuals at a competitive disadvantage.

Some countries are looking at ways to foster mutuality through proportionality in applying regulations as well as allowing innovative mutual-specific capital instruments.

Digitalisation is fundamentally changing insurance and while some mutuals are actively gearing up, others have been slow to adapt.

Exploiting digital technology should be a natural fit for mutuals focused on meeting the long-term needs of their members.

The mutual insurance sector retrenched in the later decades of the 20th century. Its performance in more recent years, however, suggests something of a revival. The renaissance is not universal and the sector still has a long way to match previous market penetration levels. In some advanced countries in particular, past demutualisations have had a significant and lasting impact on the structure of insurance markets. But mutuals are enjoying a renewed period of relative popularity, which has also led to international expansion by some groups and the establishment of new mutuals in a number of markets.

To some extent, mutual insurers benefited from the recent financial crisis as policyholders retreated from stock-owned institutions. That mutuals' premium performance did not reverse once economic growth resumed suggests a permanent shift in insurance buying behaviour. It would be unfortunate therefore if post-crisis measures intended to boost the resilience of individual insurers and curb excessive risk taking were to place some mutuals at a competitive disadvantage, given the additional operational and funding costs associated with compliance. Higher capital requirements and more stringent governance arrangements are particularly challenging for smaller players.

Governments and regulators are alert to the unintended consequences of regulation. Notably, they emphasise proportionality in new prudential and governance regimes, although considerable uncertainty still attaches to what that means in practice. Moreover, governments in a few countries have introduced explicit legislation to allow mutual-specific capital instruments to be issued. Alongside more effective use of reinsurance and capital market instruments such as ILS, this should provide mutuals with increased financial flexibility to cope with unexpected losses, grow their business and compete with other types of insurers.

While laws and regulations can be designed and tweaked to suit particular business models, rapid technological change is less discriminating. Digitalisation is fundamentally and permanently changing the way that insurance is designed, priced and sold. It can increase efficiency and leverage information about existing and prospective customers. Mutuals, along with all insurers, must adapt and upgrade their underwriting and distribution practices if they are to continue to prosper. There are signs that many in the mutual insurance sector are actively embracing such change, but some are lagging behind. The laggards run the risk of losing out to other market participants better placed to harness the new technologies.

At the same time, advances in digital technology could yet prove to be a boon for the mutual model. Exploiting social media and smart analytics to better understand the needs and preferences of customers should be a natural fit for mutuals, whose *raison d'être* is to serve the needs and maintain the trust of their members. Furthermore, if technology-led moves towards full risk-based pricing mean that some people are priced out of conventional insurance, mutuals may have an increasingly important role to play in keeping some risks insurable. Mutual insurers are driven by the long-term needs of their owner-members, so they may continue to strive to provide insurance protection that other insurers are unwilling to offer.

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