Clarity on Reinsurance

An industry in transition

November 2015

16
The CEO view
Heads of major players discuss Switzerland’s future as a reinsurance hub.

30
Taxing times
Insights into Swiss corporate tax reforms and international transparency.

34
Critical trends
The effect of market and regulatory changes on business models and risk.
Editorial and Key Messages

02 Reinsurance in 2015:
The calm before the storm?

04 Key messages

Part II

Interviews

16 Closing the insurance protection gap:
What does the future hold?
Interview with Michel Liès (Group Chief Executive Officer of Swiss Re)

22 Meet the CEOs: Sharing insights into Swiss reinsurance
Interview with Emmanuel Clarke (President of PartnerRe Ltd.) and Andreas Molk-Ude (CEO and Managing Director of NewRe)

Focus Areas

26 The new normal in reinsurance

30 Tax reforms: Will Switzerland remain attractive to reinsurers?

34 Recent FINMA circulars: Increased regulation through EU-driven compliance or a more meaningful solvency and risk management framework?

38 Becoming mainstream: Insurer investment in alternative investments on the up?

44 Pinboard

45 Contacts & Imprint
Few catastrophe losses and reasonable yields on old bonds give the impression of a stable reinsurance sector. Yet stability does not necessarily equate to good health.

Excess capacity, an abundance of smaller players, as yet untested new reinsurance structures, a constant flow of new regulation … Any one of these – or more likely a combination of all – has the potential to expose the industry’s structural weaknesses.

The recent spate of megamergers between reinsurers testifies to the reforms that loom over the industry. Firms across reinsurance need to modify their business models in order to eradicate flaws and better position themselves for future success. When more testing times arrive, it is the agile and well prepared that will prosper.

In this publication we set out some of the key drivers of this upcoming change, addressing both the opportunities and the risks they create. We also provide a glimpse into likely responses as we hear fascinating insights from three leading global players into the strategic discussions that are currently raging across many boardroom tables.

As reinsurers weigh up possible strategies, we invite you to discuss the implications for your organization and how we might help you secure a sustainable position for the long term.

Hieronymus T. Dormann  
Sector Head Insurance, Switzerland

Bill Schiller  
Partner, Financial Services

Reinsurance in 2015
The calm before the storm?
Clarity on Reinsurance

Amid huge structural change in the market, reinsurers must be imaginative when adjusting their business models to capture the opportunities presented by big data, digitalization and prospects in rapidly growing economies.

EVOLUTION IS KEY
Changing business models

Amid huge structural change in the market, reinsurers must be imaginative when adjusting their business models to capture the opportunities presented by big data, digitalization and prospects in rapidly growing economies.
ON THE RISE
Consolidation driven by relevance

Mergers and acquisitions are on the rise with clients preferring to deal with fewer, more comprehensive reinsurers and as companies look for economies of scale and to grow where organic growth is difficult.
TAXING TIMES

Can Switzerland retain its appeal?

Although the impact of corporate tax reforms remains unclear, global transparency rules may help highlight Switzerland’s reinsurance capabilities and its allure for foreign reinsurers looking to relocate.
NO LONGER OVERLOOKED

Will alternative investments go mainstream?

With their low volatility, long-term nature and higher expected returns, often overlooked infrastructure assets may attract greater investment. Much will depend on how the Swiss Solvency Test and the Swiss regulator’s approach to this asset class evolve.
Insurance-linked securities are on the rise, pension funds are tending toward reinsurance as an asset class and investor sentiment is favorable. As a result, capital markets may become drivers of reinsurance growth.
THE FINMA EFFECT
How circulars will impact reinsurers

With significant changes expected regarding public disclosure and Own Risk and Solvency Assessment (ORSA), the Swiss Solvency Test is likely to become a full-fledged risk management tool with implications for production processes and governance.
Clarity on Reinsurance
Michel Liès
Group Chief Executive Officer
of Swiss Re
From cyberrisk to high-growth markets, from digital distribution to disruptive new competitors, Michael Liès, CEO of the Swiss Re Group, sets out where he expects the major opportunities and risks to arise over the next 10 to 15 years in this rapidly evolving industry.

Closing the insurance protection gap:
What does the future hold?

What is your vision for the insurance/reinsurance market in 10 to 15 years? How will the market look? How will it be structured? What players will dominate the future markets? What players will have disappeared?

Michel Liès
The most important challenge facing the industry is the issue of underinsurance, especially in emerging and high-growth markets. High-growth markets and emerging economies in Asia, Latin America and sub-Saharan Africa are growing strongly and creating wealth. However, these regions typically have low levels of insurance penetration.

This means there is a huge opportunity for insurance to play a role. Insurance and risk transfer is essential to support a variety of activities across economic sectors. We support investments as insurers and reinsurers are some of the largest asset managers; we provide stable retirement and healthcare systems by offering insurance solutions as we all live longer; we protect personal livelihoods and assets income; and we can support governments and societies in becoming more resilient to natural catastrophes. To name but a few.

When we consider that only about 20 to 25 percent of losses from natural catastrophes are insured, with that figure slipping to as little as 1 percent in some countries, there is a lot of business to be done to correct that situation. This is our largest market opportunity. The same types of issues are present in life insurance lines. For example, across Asia we calculate that families collectively have a mortality protection gap of about US$58 trillion. We’re not shifting our focus away from the mature markets, however. Protection gaps exist also in those markets and we shouldn’t forget that.
When looking to the future, it’s important to remember that reinsurance is a long-term business. Swiss Re itself has a 150-year history and some of the business lines we write go well beyond a 10 to 15-year horizon. Take longevity risks for example. Here we provide security against the risk that people live longer than their pension fund has provisions to provide for their pension. In these schemes, we accept the risk for people who are currently still working and may live for another 60, 70 or more years. So we have taken on a large responsibility for a significant part of their livelihood in a relationship that lasts for decades.

For the insurers who share their risks with us, it is absolutely essential that they know we are here for the long term and we can plan beyond business cycles and short-term challenges. Our market is changing at the moment, also evidenced by the ongoing consolidation in our sector. Many of the transactions are of a defensive nature, driven by the wish to offer size and global reach to clients – two important assets that Swiss Re has built up over a long time. We therefore expect that companies who offer only capital will face greater challenges in the future than those who have a close connection and an intrinsically-linked working relationship with their clients – like Swiss Re.

How will insurance and reinsurance be distributed in 10 to 15 years? Will there still be a London market? Will there be brokers?
Michel Liès Distribution is a very big issue for our primary insurance clients. A revolution is underway in the way primary insurance is distributed. Digital channels are opening up new opportunities for primary insurers to move even closer to customers in a way that has advantages for both the consumer and the insurer.

Insurers are already building new partnerships and creating the innovation that’s needed to be part of the change – and we’re supporting them where we can. One example is how insurance can now be offered via cell phones, which is very popular in China. In addition, Swiss Re works increasingly with governments to offer innovative insurance solutions for natural hazards.

In Africa, for instance, we supported the launch of the first ever natural disaster insurance pool to protect against drought risks. An innovative weather index scheme uses the latest in satellite weather surveillance technology to estimate drought-related crop losses. The policy triggers automatic payouts when there is not enough rain during a particular harvest season.

At Swiss Re we have one key element in our distribution channel: being close to our clients and knowing them inside out. Let me give you an example. We log around 1,000 contacts per year with each of our top five clients. This shows that we are dealing with relationships that go beyond the pure reinsurance transaction. We are – and need to be – a trusted advisor to these insurers beyond offering our capacity. We are what I like to call an advisor with ‘skin in the game’. When we advise one of our clients to do something, we complement the advice by taking a piece of the risk.

As to whether the London market and brokers will survive – I think it is safe to assume that they will. But they have the same challenge as all of us: they need to prove the value they bring. No one in the industry can be complacent. The key to a flourishing and successful reinsurance industry is, and will remain, answering exactly that question on the value we bring to our clients. This is the same for brokers, reinsurers, primary insurers or anyone else for that matter. It doesn’t matter what time frame you set, if a company is not able to add value to its clients, it will not last very long at all.

What role will the Web 2.0 play in insurance/reinsurance?
Michel Liès Digital technologies have already, indisputably, changed the way consumers approach financial services. It doesn’t matter if we are talking about a working family in Germany using e-banking services to pay their monthly bills, a young first-time car buyer in Australia using a comparison website for motor insurance or a Kenyan smallholder farmer using a mobile wallet to purchase crop insurance. The fact is that digital channels and the internet are where people do business today.

In that environment, primary insurers need to ask themselves how their services are relevant and accessible. As an industry we’re working hard to understand how insurance fits with people’s changing attitudes and ways of accessing information.
As an industry we’re working hard to understand how insurance fits with people’s changing attitudes and ways of accessing information.
Swiss Re has many roles in this process. As a reinsurer, we try to think beyond just Web 2.0 or any one single technological advance; we try to put the technological pieces together. So on the one hand we are helping insurance providers develop better online insurance products, but we are also working on more complex projects, such as integrating satellite data into parametric triggers for agricultural and energy insurance products – as I mentioned in an earlier example.

**What areas are you looking at for the future?**

**Michel Liès** One big area at the moment is cyberrisks, where insurance can play an important role. With increasing interconnection and digitization of commerce and everyday life, cyberrisk is on the rise and companies, governments and societies have a growing need to protect themselves against the financial impact of cyber-risk exposures. The overall market is still small – we estimate global premiums to be around US$2.5 billion worldwide – but it is a growing market. Our insurance business for large companies, called Corporate Solutions, has recently entered into a partnership agreement with IBM to support the risk assessment process for very large risks and to support the anticipated growth of its cyber portfolio.

We also invest in research in the cyberrisk area and have developed a capacity steering and cyberrisk accumulation monitoring framework that helps keep cyberrisks insurable. Swiss Re also contributes to efforts to improve the level of cyberrisk awareness and risk management by working with industry associations and academic institutions. We think that the accumulation potential of cyberrisks is not to be taken lightly and believe in stringent portfolio management to limit the exposure to potentially catastrophic events.

For us as reinsurers, it means autonomous cars are not the only example of how we are trying to understand how a coming technology will change the landscape for motor liability insurance. We can also see that big data, cognitive computing and the whole information revolution have brought us to a point where we can combine very powerful computers with large data sets to process information in ways we could never do before. This has the potential to revolutionize the way we perform certain parts of our business, such as our underwriting processes.

Again, this means not only understanding those new technologies but, even more importantly, trying to anticipate how these ‘new risks’ could potentially accumulate. It means that we may need a paradigm shift in the way we do things. We’re at the forefront when it comes to forward-looking models in liability insurance for example. This means we look at modeling liability risks where no historical data exists, or where the historical data has become unreliable. This is a departure from the past – where all modeling was done by looking backwards.

**What impact will the future Amazons, Googles and Facebooks have on the market?**
Michel Liès There is a concern that companies outside the insurance industry can use technology to serve clients better than insurers can. I don’t think this is happening yet and given that insurance is a knowledge business, there are high barriers to entry. However, as I mentioned before, we can’t be complacent and we have to brace ourselves for change, especially in primary insurance. It is not unlikely that digital native companies may start to look at entering our industry in the coming years. We might also see the entry of ‘primary attackers’, or nontraditional insurers like Google.

These players could potentially tap large customer bases and benefit from the information they already own. These companies are much more visible in people’s lives, and their other product offerings may already be more relevant to people – so the potential for disruption is large.

You mentioned that emerging markets are an excellent growth opportunity. Which markets are you targeting? What are some of the challenges?

Michel Liès Back in 2012, Swiss Re identified a group of high-growth markets and we plan to increase the share of our global premium contribution from these markets from 15 percent in 2012 to 20 to 25 percent by the end of 2015. At the end of 2014 we were well on track to reach that with around 21 percent of premiums coming from these markets.

Colombia, South Africa, Turkey and the UAE.

Despite the potential we have, we also face some challenges to grow in these regions. We see quite a broad range of regulatory regimes in these countries, diverse cultural attitudes toward insurance and also different expectations regarding the role of the state or community in providing for losses.

We need to make sure we have the right people in place in those countries, that we have solid information to measure and price risks, and most importantly that our solutions are the right ones for the markets we are already in or entering. We can’t always assume that we can just take a solution that has worked in an existing market and transplant it to this different context.

These challenges are not insurmountable, however, and the benefits of getting strong insurance systems in place in these markets will ultimately support our goal of helping to contribute to closing the insurance protection gap.
Emmanuel Clarke, President of PartnerRe Ltd., and Andreas Molck-Ude, CEO and Managing Director of NewRe, share their views on the opportunities and challenges facing Swiss reinsurers, consolidation in the market, diversification and Switzerland’s future as a reinsurance hub.

Meet the CEOs: Sharing insights into Swiss reinsurance

Today’s markets are characterized by abundant capital, relatively light claims and rock-bottom investment market returns. What is your company’s experience of these trends?

Andreas Molck-Ude We have seen these trends in reinsurance for 6 or 7 years. Pricing conditions are unsatisfactory but the fact that claims experience is below the long-term average gives a more optimistic view on actuals. Investment returns continue to benefit from historically higher-yield investments as well as investments in emerging markets.

Emmanuel Clarke I agree. What we also see are lower cessions to reinsurers and insurers retaining more risk themselves. There is plenty of capital, which comes from both the traditional reinsurance market and new entrants.

Do you regard the inflow of capital through capital markets as an opportunity or a threat for traditional reinsurers?

Emmanuel Clarke There are both threats and opportunities. Financial capital is only one of the two pillars needed to be successful. The other is intellectual capital and experience. There is an opportunity for capital market players entering the space to team up with traditional reinsurers and that way ensure that their capital is backed by in-depth understanding and experience of transacting complex reinsurance risks.

Andreas Molck-Ude Traditional reinsurers have excellent access to clients and have the necessary analytical tools. However, barriers to entry have been lowered in part as tools previously proprietary to individual reinsurers are now readily available in the open market. The quality of the coverage from the capital market vehicles has not yet been tested.
Emmanuel Clarke Some cat bonds have been triggered by losses, a few of which are being disputed. We have to see what happens if there is a very large claim. This will test the ILS response as well as clients’ reactions. Reinsurance sells a promise to the client to pay claims in combination with a continuity of cover for the time after the claim. The important question for the client is always: “Is my claim going to be paid?” Traditional reinsurance ensures a continuity of cover.

Clients are unwilling to trade out of a traditional reinsurance relationship that has been beneficial to them in the past as it has a tested track record. Many funds do not have a relationship with the client. Rather, they have a relationship with the ‘prospectus’ and their aim must be to contest the claim as they are responsible to the fund owners.

Andreas Molck-Ude In the past we have seen macrocycles of about 7 to 8 years with reinsurers experiencing hard or soft markets. The industry benefited from these cycles and globally increased prices after major claims events such as hurricanes Katrina and Wilma. Now we observe shorter, more localized cycles.

So the behavior of cedents has changed and companies buy less reinsurance?

Emmanuel Clarke It would not be accurate to make a general statement that all cedents are buying less reinsurance. Consolidation among larger insurers will lead to lower reinsurance demand, as by merging two companies you can save on operational costs and reinsurance spend. More sophisticated capital modeling has also helped reduce reinsurance purchase – cedents know they were buying too much. Combined with pressure to grow in a nongrowth market, this leads to companies taking on more risk and moving up on their risk-return curve. The danger is that they will exceed their risk appetite when incurring a higher frequency of medium-sized Cat losses, which are not necessarily well embedded in their models.

Andreas Molck-Ude Clients also tend to have an abundance of capital. Higher retentions is a way of bringing that capital to work. Today, we see the paradox that markets are very soft and clients are retaining more. If you consider reinsurance as an investment and if you look at it over a number of years, it is likely that clients are ‘leaving money on the table’. Meanwhile, transparency over company risks has increased tremendously – at a cost. Cedents now use reinsurance as a means of capital efficiency and partly decide they need less reinsurance.
A possible response to the challenging market environment is to diversify into innovative new products and markets. How is your company responding?

Andreas Molck-Ude NewRe is focusing on different forms of covering ‘old’ risks rather than venturing into new risk areas that need to be researched intensively. Several years ago, NewRe decided to enter into structured finance-driven reinsurance that developed very well and now represents around 80 percent of the entire business. More recently, it embarked on insurance derivatives and parametric trigger products to realize new ways of covering risks. This makes coverage available to clients who hadn’t previously had this possibility.

Emmanuel Clarke There have always been new products and markets to respond to. At PartnerRe, we respond to those opportunities in two ways: first, by being very close to our clients and understanding their needs and their approach to new risks, so that we can support them; and second, by constantly developing expertise in all our product line teams, so that we can be a relevant, valuable advisor to our clients.

What does this mean for the type of people that work in your industry in terms of required qualities, backgrounds and skills?

Andreas Molck-Ude The last decade was the decade of actuaries. While these skills will remain important, you must look to get the right mix in the underwriting team by involving people who are technically minded, who have commercial sense and who are good with clients.

Emmanuel Clarke If you leave everything to actuaries and modelers, you may end up in a situation where you cannot model it. If you cannot model it, you cannot price it and cannot sell it. This is where a good underwriter comes to the fore – someone who understands the risk without all the necessary data and who can structure a solution for the client. Overall, you need people who understand risk. And I completely agree, you need people who understand the client. The best people will combine these attributes. Clients are becoming more sophisticated and putting pressure on reinsurers to really fit the right solution to their needs.

There has been a lot of merger activity in insurance and reinsurance. What is driving this and how will it affect your business?

Emmanuel Clarke One driver of consolidation is to grow where organic growth is difficult. This is tied to the
need to extract economies of scale. Relevance is also gaining in importance – how relevant are you to the client and with how many partners does your client want to deal? The trend is toward dealing with a smaller number of more relevant reinsurers.

Andreas Molck-Ude Small and medium-sized reinsurers in the traditional NatCat business are the ones who will have problems with relevance in the future as their product has been almost fully commoditized. Cedents will select those who can offer the full scope of reinsurance and who can build tailored solutions for them.

Where do brokers fit into this in terms of their role and who owns the relationship?

Andreas Molck-Ude In the end, client relationships depend on the client. NewRe wants to know clients personally, even though we write our business exclusively via brokers. However, brokers themselves are facing cost pressures as they have added expensive staff in the past.

Emmanuel Clarke Brokers have been reshaping their skill sets from intermediary to expert consultant and have gained market share. PartnerRe carries out business through a mixed distribution channel where the prevailing share is through brokers – this share has grown consistently over the past 5 to 10 years. It’s worth noting that there is a fundamental difference between the North American market, where reinsurers are either working exclusively directly or exclusively through brokers, and the rest of the world, where the distribution model is more mixed and flexible. In North America, PartnerRe is a broker market.

How do you see Switzerland’s development as a European reinsurance hub?

Emmanuel Clarke Switzerland is a business-friendly environment with professional regulation and a good reputation. The challenge is talent. An attractive location puts pressure on the availability of talent, which in turn puts pressure on salaries.

Andreas Molck-Ude Developments aren’t very favorable at the moment for Zurich’s role as a reinsurance hub, though the city remains attractive. Future tax advantages will be limited compared to Germany, with no one domiciling in Switzerland for purely tax reasons. Being a hub ensures access to all the reinsurance experts you need. Swiss labor laws allow companies to breathe, to expand and to shrink quickly. A critical factor is the immigration law, which creates a negative perception as there is a risk that you cannot attract the workforce you need.

Looking into the next decade, what do you see as the greatest challenges and opportunities facing the reinsurance industry?

Andreas Molck-Ude The challenge is that reinsurers need to amend their business model. There is a huge structural change in the market and companies must be imaginative when it comes to new issues such as big data and digitalization.

Emmanuel Clarke I agree. The real challenge is to reinvent yourself. The risks will always be there; they just change over time. Digitalization and cyber are big opportunities, as are emerging markets in China, India and Brazil, where huge populations offer tremendous prospects. Demand in these markets is substantial for both direct carriers and reinsurers. More generally, demographics play a significant role for life and health products. The winners will be those reinsurers who can adapt and continue to evolve.
While the entry of alternative capital into the reinsurance market is not really a new concept, the impact it is having on the traditional reinsurance business model is underestimated.

Pension fund managers increasingly see reinsurance, especially catastrophe risk, as an asset class. Investors clearly like this new asset class. Now that the pension funds are in the market, they are not expected to leave soon.
The reinsurance sector is facing major change over the years to come as the capital markets continue to exert influence over the reinsurance market, and as insurance-linked securities become more relevant to the insurance and reinsurance market. There has been more change in the last 5 years than in the last 50 as the market deals with the influence of alternative and new forms of capital and the new business models this now promotes.

In general, capacity providers will increasingly compare the risk and return of insurance business to other assets rather than comparing it to other insurance risk. Overall, demand for reinsurance has also changed over recent years as cedents are retaining and bundling more risk, are centralizing origination and are establishing their own facilities, allowing them to generate higher margins from the risks they are underwriting.

Now that capital markets are in a position to efficiently enter and exit the reinsurance market, it has become more difficult for reinsurers to generate excess returns.
CONSOLIDATION AND THE END OF CERTAIN BUSINESS MODELS

Going forward, we will most likely also see a higher degree of consolidation between traditional reinsurance and insurance-linked security players. Alongside this, we will see more consolidation between traditional players themselves as they seek to find additional potential for growth, scale and diversification. This may even expand to insurance-linked securities players as well.

The stand-alone Bermudan reinsurance model may ultimately cease to exist, as market forces continue to put pressure on returns in a way that they are no longer acceptable for pure-play reinsurers. This has been evident for some time already, with margins declining to a level below where a traditional player can still make profit considering its operating cost and cost of capital. Even some more focused players are already at a point where the returns on the underwritten business are no longer sustainable.

As far as mergers and acquisitions are concerned, many deals will be unlikely to generate increases in value for the players involved unless the players clearly demonstrate that they add very tangible value. Acquisitions can certainly generate cost savings and synergies. These benefits will only be temporary, however, if no other real value is created from a deal.

With fewer players in the reinsurance market overall, and while gross margins are also under pressure, traditional companies will increasingly have to underwrite business for third-party capital. This fundamental change will affect the insurance market in many more ways than just through the availability of more efficient and cheaper reinsurance capital. Capital markets are becoming more and more of a challenge for primary insurance too and it is no longer just an issue for reinsurance.

Insurance-linked security managers will increasingly be providing risk capital to fronting primary insurers in order to access risks that are not readily available in the reinsurance market or to disrupt the reinsurance market even more. These new business models, along with the entry of insurance-linked security managers into the Lloyd’s market, the setting up of rated vehicles by insurance-linked security managers and the creation of follow-form...
arrangements, are all giving the capital markets greater access to risks. This is helping insurance-linked security to deepen its penetration into the traditional markets.

The fundamental change we have seen over the course of the last few years is nothing compared to the changes that we could see over the years to come. With the insurance-linked security market now around 20 years old, it is really just coming out of its infancy. This newfound maturity is enabling managers of insurance-linked securities capital to come up with ever more innovative ways to access more risk.

Change will certainly continue to accelerate across the reinsurance market. Although traditional players may not like to hear this, they are in a good position to leverage this trend to their own benefit.

markets become a larger and increasingly permanent fixture, will be challenging for many players.

Those players innovative and brave enough to embrace the change will leverage the positives and profit and may position themselves much more strongly for the coming decades. Those who try to fight it or ignore it will have to be ready for even further disruption and the sun may have set on them.

Successful players of the future will have a distinctive business model with very clear value propositions to their customers, and these very clear value propositions will come with a price. Finally, yet importantly, successful players will have a lean and integrated operating model that will run on a low cost base, and they will continually drive innovation and customer centricity in order to stay ahead of the game.

**WITH CHALLENGE COMES OPPORTUNITY**

Change, however, always comes with challenges, and something as major as the structural change coming to the reinsurance sector, while the capital
TAX REFORMS: WILL SWITZERLAND REMAIN ATTRACTIVE TO REINSURERS?

Swiss Re, Munich Re, Catlin, PartnerRe, Amlin ... just some of the world’s top reinsurers that are active in Switzerland. Of the 224 insurers regulated by FINMA in 2014, 29 were reinsurers and 33 were reinsurance captives. Together, these 62 institutions contributed almost 26 percent of the CHF183.5 billion gross premium underwritten by Swiss-based insurers and reinsurers in 2013.

Compared with other markets of a similar size, reinsurance in Switzerland is disproportionately large compared to insurance, and the reinsurance market is almost exclusively oriented toward outbound business. Underscoring Switzerland’s continuing appeal, 2013 saw reinsurance premium revenue grow by 5.7 percent, almost three times as much as domestic GDP did over the same period.

WHY IS SWITZERLAND ESPECIALLY INTERESTING TO REINSURERS?

Firstly, the Swiss regulatory regime appeals to reinsurers seeking to centrally service European markets. Swiss reinsurers are subject to the Swiss Solvency Test regime rather than the more onerous EU Solvency II regime, with full equivalence of both regimes confirmed in 2015. And further, Swiss firms are able to write cross-border business without a local presence or license in the target market. By contrast, an an EEA location (including Liechtenstein) is required to write direct insurance business into the EU by way of Freedom of Services (FOS). In addition, traveling to France, Germany and Italy (three of the top four insurance markets in Europe by premium volume) from Switzerland is easy due to geographical proximity as well as the fact that their languages are widely spoken in Switzerland.
Despite its reputation for long-standing stability, financial expertise, an accessible regulator and an attractive tax system, Switzerland is under pressure. Its privileged corporate tax regimes (such as mixed company status) have been heavily criticized by the EU. As the Swiss government moves to implement its Corporate Tax Reform III (CTR III) by 2018, seeing the end of the favorable treatment of foreign revenue over domestic revenue, can the country continue to appeal to foreign reinsurers?

Secondly, Switzerland offers reinsurers a favorable tax regime compared to other onshore jurisdictions such as Ireland, Luxembourg and more recently the UK, which has announced it will lower the corporate income tax (CIT) rate from 20 percent now to 18 percent by 2020:

- A 9 to 11 percent combined effective CIT rate with the mixed company regime and as low as 12.3 percent (Lucerne) without the regime. Privileged tax regimes also substantially reduce the annual capital income tax burden, which can otherwise be onerous for highly capitalized reinsurers.
- The combination of Switzerland’s exemption system (as opposed to tax credit system) for foreign permanent establishments with the solid protection from U.S. Federal Excise Tax (FET) offered by the US–Swiss Double Taxation Agreement (DTA). The result is attractive Bermuda branch structures for underwriting US risks.
- An exceptionally extensive Swiss DTA network that covers more than 100 countries, offering protection from target market attempts to tax foreign profits, as well as from high domestic withholding tax rates on investment revenue.
- At 8 percent, one of Europe’s lowest standard VAT rates, which compares to 20 to 25 percent in most EU countries. VAT is usually a cost to insurers and reinsurers, which cannot normally recover input VAT.
- Easy access to the Swiss tax authorities, from which binding clarification of tax treatments can be applied and obtained in advance.

It may not be plain sailing going forward, however. On the horizon are major tax reforms both in Switzerland and abroad that could impact Switzerland’s attractiveness from a tax perspective. Key among these are Switzerland’s Corporation Tax Reform III (CTR III) and the OECD’s Base Erosion and Profit Shifting (BEPS) project.
CTR III: GOOD OR BAD NEWS FOR SWISS REINSURANCE?

The abolition of privileged tax regimes at federal level (principal allocation and finance branch) and cantonal level (domiciliary, mixed and holding regime), without compensatory measures would negatively affect Switzerland’s attractiveness as a business location. With various compensatory measures (R&D incentives, abolition of the securities issuance stamp tax, changes in tax accounting rules and tax rate reductions) currently progressing through the legislative process, greater clarity is expected following the October 2015 parliamentary session.

One clear outcome will be the abolition of the cantonal tax privileges, currently expected to take effect in 2019. As shown in the previous chart, the majority of the premium underwritten by reinsurers based in Switzerland comes from abroad. The abolition of the mixed company regime could have a significant negative impact on these companies. An exception would be open-market reinsurance companies based in the Canton of Zurich, where the privileged tax regime was already discontinued some years ago. For open-market companies based in other cantons, and for most reinsurance captives, CTR III will subject the majority of their profits to a higher CIT rate.

Some compensatory measures announced to mitigate this impact are more meaningful than others. For example, the abolition of the 1 percent stamp tax would be welcome news to highly capitalized new market entrants or established companies planning to increase their capital. R&D measures, on the other hand, are more geared to other industries and may be of limited use to insurers. Significant uncertainty remains over whether the final version will be limited to patents or will also cover production and process intellectual property. The concern is that the abolition of the favorable mixed company regime will significantly harm Switzerland’s appeal and that it may even lead to some reinsurers exiting the Swiss market.

A more upbeat view is possible. General CIT rates in Switzerland (without privileged tax regimes) are among the most competitive in Europe. The average Swiss CIT rate is 17.9 percent, and is actually less than 15 percent in 7 of the 26 cantons. In addition, several other cantons have announced plans to lower their general CIT rates further – more cantons are expected to follow. See chart at the top of this page.

These rates are substantially below the UK rate and are close to – or even lower than – that in Ireland (12.5 percent), which is the lowest among developed EU countries.

One should also not overlook the tax base when comparing rates. While cantonal tax authorities will no longer have the power to grant mixed company regime rulings, other aspects exist whereby they can make themselves more attractive. These include clarity over the allocation between Switzerland and foreign branches, as well as safe haven rules for residual current year profits after augmenting fluctuation reserves. When taking this into account alongside some of the new measures discussed (e.g. R&D credits) and the lowest VAT rate in Europe, Switzerland will remain a

---

**SWISS MARKET PREMIUM SPLIT BY SEGMENT/SOURCE (2013, CHF BILLION)**

<table>
<thead>
<tr>
<th></th>
<th>Life</th>
<th>Non-Life</th>
<th>Reinsurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>32.7%</td>
<td>26.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Abroad</td>
<td>36.2%</td>
<td>41.2%</td>
<td>45.1%</td>
</tr>
</tbody>
</table>

---

**FOCUS AREAS**
competitive location for reinsurers from a tax perspective even after CTR III.

WILL BEPS BENEFIT SWITZERLAND?

While the changes to Switzerland’s tax system are substantial, a far more fundamental change is taking place globally. The OECD’s Base Erosion and Profit Shifting (BEPS) project seeks to combat international groups’ avoidance of corporation tax by setting standards for tax transparency and increasing international cooperation through the exchange of information among tax authorities.

Under BEPS, substance is a key requirement for any type of offshore structure. Without it, companies will be viewed as manipulating transfer prices to shift profits into offshore tax havens where they have no or limited substance. This could expose the companies to challenge by the jurisdictions in which they operate.

Another key BEPS measure is the requirement for international groups to report certain pretax and tax information on a country-by-country basis. This will significantly enhance transparency and draw attention to mismatches between substance and profits.

The combination of these two factors means that pure letter-box offshore operations are no longer viable. This may work to Switzerland’s advantage as its large pool of skilled reinsurance professionals may provide a relocation opportunity for offshore companies.

CONCLUSION

Switzerland has been the location of choice for reinsurers for a number of reasons, only one of which is its tax regime. As some features of this regime have come under attack as being unduly preferential to mobile capital, change will come through CTR III. The disappearance of low privileged tax rates will, however, be partly compensated by a range of measures including the lowering of general CIT rates.

There remains much uncertainty over the impact of upcoming tax reforms on the Swiss reinsurance market, though in reality there will be new opportunities alongside the risks. Most international businesses set great store by political stability and the availability of skilled talent. Appropriate responses from the Swiss authorities may therefore help to reaffirm the many advantages of a Swiss base and may prevent reinsurers from questioning whether the center of Europe is the place for them. Indeed, given the BEPS ‘flight to substance’, Switzerland may well be the next port of call for reinsurers currently based in sunny offshore locations.
The package of circulars put out for consultation by the Swiss Financial Market Supervisory Authority (FINMA) in July 2015 included a number of measures impacting the Swiss Solvency Test (SST). The result is the proposal of a significant number of changes that will both directly and indirectly impact the SST and its use by Swiss (re) insurers. The most significant are expected to be regarding public disclosure and Own Risk and Solvency Assessment (ORSA).

The proposed changes would retain the specific quantitative differences (Pillar 1) but would see the Swiss reinsurance regime move closer to the EU in terms of the qualitative Pillar 2 (ORSA) and Pillar 3 (disclosure) requirement. In particular, under the SST the end of temporary capital relief means insurers will no longer be able to value their business using swap rates per Solvency II. Instead, they must return to the SST-specific rates implied by government bonds.

Many insurers had lobbied FINMA for the right to discount insurance liabilities using swap rates. They had cited competition with European firms, comparability with Solvency II and theoretical economic valuation arguments. In the end, this was to no avail and the regulator’s adopted approach will be unwelcome to the industry in general.

The changes don’t end there. FINMA intends to mandate the increased use of the standard model rather than internal models, and requires that operational risk is quantified.

Additional disclosure requirements: releasing sensitive information into the public domain
The FINMA circular on public disclosure requires insurers to publish a report on their financial position (“Bericht über die Finanzlage”) that covers both quantitative and qualitative perspectives.
A key requirement for the report is that it must contain information about solvency, risk management, risk profile and the methods used to calculate insurance liabilities. In particular, the following supplementary information must be disclosed:

- market value balance sheet that reflects the market value of assets and liabilities
- components of risk-bearing capital under SST
- components of target capital under SST: insurance risk capital, market risk capital, credit risk capital and the market value margin.

This will not be new to all insurers. Some large Swiss institutions already disclose all such information, while medium-sized insurers reporting under IFRS already disclose the market value of assets. However, most market participants consider the full market value balance sheet and the composition of target capital to be highly sensitive information.

In fact, publicly disclosing SST figures is likely to impact the overall business strategy and risk management as well as the SST models and how they are produced. Investors as well as existing and potential policyholders will be able to more easily compare insurers’ financial conditions.

The result is likely to be that insurers will respond by adjusting their strategies to suit these stakeholders’ demands. Investors generally prefer a low capitalization with low volatility, leading to a higher capital utilization and consequent greater expected returns for a given level of risk.

Policyholders and regulators meanwhile prefer a high SST ratio, which suggests a high level of security and capitalization. This trade-off between shareholder and policyholder demands may become more of an issue as disclosure levels increase. In the long run, insurers may also try to adapt their SST models to enhance external parties’ view of their risks.

The largest risk currently faced by life insurers is not underwriting or insurance risk, but rather credit and market risk, which could be seen as noncore risks. Ultimately, investors do not need to invest in an insurer and suffer associated costs to assume market or credit risk. As there are more efficient ways of doing so, questions will be raised over insurers with a particularly large risk capital allocation to market and credit risk.

The requirement for additional disclosures also increases the risk of misinformation. It is therefore likely that boards and the regulator will demand higher standards of governance and enhanced controls in the production of the SST. This could include a full external audit.

Swiss ORSA: A further improvement in risk management practices or simply a compliance activity?
Swiss ORSA requires insurers to consider their risks over the whole business planning cycle – which is over at least 2 years. Stress scenarios used to test solvency are multiyear, extending the 1-year SST view. Stress and scenario testing will therefore come into greater focus and it is likely that insurers will need to give greater thought to the impacts, including second and subsequent impacts of given scenarios. This detailed consideration is likely to enhance the scenarios’ usefulness for risk management purposes.

The required availability of multiyear SST projections will increase substantially the applicability and relevance of the SST in broader risk management.
It will allow more holistic and sustainable risk management decisions. Insurers are likely to benefit considerably from implementing the ORSA, enabling the use of the SST as a risk management instrument by insurers and reinsurers of all sizes.

Although FINMA allows simplifications and approximations in the production of multiyear SST figures, the new requirement is likely also to have a significant impact on the production of the SST, with increasing demands for automation and finance transformation.

**Changes to SST**

**The end of capital relief under the SST**
The SST capital relief introduced in 2012 will not be extended, according to FINMA. The Federal Council affirmed its belief that the valuation of insurance liabilities should in principle be carried out using a risk-free yield curve, derived from government bonds.

FINMA has stated that the impact of the relief on the SST ratio across the market as a whole as at 1 January 2015 was only a few percentage points, and that the impact of this decision will therefore not be significant.

The temporary adjustment of the deadlines for restoring compliance with the thresholds (defined as the level of the SST ratio at which FINMA will intervene in the management of a company) will be incorporated permanently into the SST regulatory framework. In general, the increased flexibility of the threshold framework will allow distressed insurers to develop a more sustainable recovery plan.

**Standard models: Reducing capital adequacy?**

FINMA has in addition signified its intention to redevelop the standard SST model to make it branch-specific (e.g. life, non-life, captives, reinsurance). FINMA intends to mandate the use of the standard model in significantly more cases, meaning that some insurers may be required to move to the standard model – generally resulting in them having an increased capital requirement. It is possible that some insurers may challenge this and that the overall capital adequacy of the industry would be
reduced. It is as yet unclear how flexible the new standard models will be. For example, will the addition of new risk factors within the standard model framework be considered an internal model, a partial internal model or simply a standard model variant? It also remains to be seen whether firms will use their internal models for ORSA purposes even if they are required to move to a standard model for the SST.

**How to quantify operational risk?**

Despite the new requirement in the Insurance Supervisory Act (AVO) that operational risk must be quantified with the SST, the proposed circulars contain no indication of the specifics of this. It remains to be seen how the new standard models will include quantification of operational risk.

**Less attractive regime for captives**

Rather than the previously used factor-based Risk Based Capital regime, reinsurance captives are also now subject to the SST and must undertake additional calculations. The cost to these entities of implementing even the standard model will not be insignificant. In the medium term, this may result in a reduced number of captives in Switzerland and fewer new captives establishing themselves in the country.

The internal and external relevance of the SST will be significantly impacted by the proposed requirements regarding the disclosure and audit of SST figures and the introduction of the Swiss ORSA. The introduction of ORSA will turn the SST into a full-fledged risk management tool, with the associated increase in time and effort implied. Many insurers will need to transform their SST production process and enhance its governance as a result. By contrast, the end of capital relief under the SST is expected to have an immaterial effect.
Becoming mainstream: Insurer investment in alternative investments on the up?

A prolonged low, or even negative, yield environment. Persistently low-yielding fixed income investments. Current central bank policies. It’s a tough time for Europe’s insurers, especially for those based in Switzerland. Yet despite these significant changes to the economic environment, very few insurers have moved to dramatically modify their investment strategy, and in particular their asset allocation. While risk premiums can generally be earned by increasing investments in equities, real estate and lower-quality corporate bonds, these come at a heavy price for insurers operating under risk-based solvency regimes such as Solvency II and the Swiss Solvency Test. With bonds offering little yield and equities attracting high capital charges, alternative investments (and in particular infrastructure investments) may represent attractive investment opportunities.

The end of 2014 saw Swiss life insurers having invested around two-thirds of the assets directly backing their insurance liabilities (known as ‘tied assets’ in Switzerland) into core low-risk investments such as bonds, cash, derivatives for hedging and participations in group companies. A further 14 percent was invested in real estate, 11 percent in mortgages and other loans, 5 percent in equities and other collective investments and a mere 2 percent in alternative investments. The allocation to alternative investments was considerably higher for non-life insurers, rising from 8 percent at the end of 2013 to 10 percent at the end of 2014.
However, the extremely low allocation to alternative investments – and in particular infrastructure investments – is surprising. Alternative investments offer additional diversification benefits that cannot easily be obtained from existing asset classes. They also represent opportunities to earn additional risk premiums.

The alternative investments universe

Alternative assets generally include assets that don’t fall within the definitions of existing asset classes. As a result, they tend to be diverse assets such as hedge funds, private equity and venture capital, commodities, real estate, infrastructure and collectables such as artwork, wine or coins.

Investments in hedge funds are often volatile and are perceived to be high risk, with profits often coming from short-term complex trading strategies that exploit arbitrage in the markets. Similarly, private equity and venture capital investments are generally seen as relatively high-risk given the relatively low numbers of successful start-ups. In addition, they can carry reputational risk due to the perception that private equity players often make harsh strategic decisions. Commodities are viewed as speculative and likewise carry certain reputational risks.

Setting them apart from equity investments, infrastructure investments depend on predictable and stable revenue, promise high profitability and are very long-lived, typically in excess of 25 years. They are thus potentially suitable for insurers wishing to replicate predictable long-term liability outgo, such as annuities. These desirable features have been identifiable in the asset management world for some time. In fact, preferred infrastructure funds invest in infrastructure projects and listed companies, typically in the transport and utilities industries, with exposure to infrastructure that exhibit the following key criteria:

- predictable revenue streams, leading to predictable dividend yields
- profitability, often supported by a strong regulatory framework that guarantees the rights to infrastructure-related revenue
- longevity.

Infrastructure investments are still relatively undeveloped as an asset class. After a pause of over half a century, however, the new millennium saw an international trend toward increased private-sector ownership and management of infrastructure. Investments by pension funds and insurers across the EU, in particular in the UK, have been steadily growing. At the end of 2013, for instance, a group of the largest UK life insurers signed up to invest GBP15 billion in UK government infrastructure projects. In addition, the UK has established a Pensions Infrastructure Platform to provide for such investments from pension funds, a larger provider of capital funding. Nevertheless, investment opportunities in infrastructure investments are small compared to investments made by insurers in other asset classes.

---

Risk return characteristics of major infrastructure indices

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Return</td>
<td>Risk</td>
</tr>
<tr>
<td>MSCI World Infra</td>
<td>2.10%</td>
<td>14.40%</td>
</tr>
<tr>
<td>MSCI World Infra (sector capped)</td>
<td>3.30%</td>
<td>12.60%</td>
</tr>
<tr>
<td>S&amp;P Global Infra</td>
<td>8.00%</td>
<td>15.10%</td>
</tr>
<tr>
<td>FTSE Macquarie Global Infra</td>
<td>8.80%</td>
<td>12.60%</td>
</tr>
<tr>
<td>UBS World Infra</td>
<td>8.40%</td>
<td>17.30%</td>
</tr>
<tr>
<td>UBS World Infra Utilities</td>
<td>9.00%</td>
<td>13.70%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>3.50%</td>
<td>15.10%</td>
</tr>
<tr>
<td>FTSE</td>
<td>2.30%</td>
<td>13.90%</td>
</tr>
<tr>
<td>SMI</td>
<td>1.10%</td>
<td>14.10%</td>
</tr>
</tbody>
</table>

---

1 Return is calculated as the annualized monthly return; risk as the annualized monthly standard deviation. The first observation period covers January 2000 to May 2015, the second January 2009 to May 2015.

---

However, the extremely low allocation to alternative investments – and in particular infrastructure investments – is surprising. Alternative investments offer additional diversification benefits that cannot easily be obtained from existing asset classes. They also represent opportunities to earn additional risk premiums.

The alternative investments universe

Alternative assets generally include assets that don’t fall within the definitions of existing asset classes. As a result, they tend to be diverse assets such as hedge funds, private equity and venture capital, commodities, real estate, infrastructure and collectables such as artwork, wine or coins.

Investments in hedge funds are often volatile and are perceived to be high risk, with profits often coming from short-term complex trading strategies that exploit arbitrage in the markets. Similarly, private equity and venture capital investments are generally seen as relatively high-risk given the relatively low numbers of successful start-ups. In addition, they can carry reputational risk due to the perception that private equity players often make harsh strategic decisions. Commodities are viewed as speculative and likewise carry certain reputational risks.

Setting them apart from equity investments, infrastructure investments depend on predictable and stable revenue, promise high profitability and are very long-lived, typically in excess of 25 years. They are thus potentially suitable for insurers wishing to replicate predictable long-term liability outgo, such as annuities. These desirable features have been identifiable in the asset management world for some time. In fact, preferred infrastructure funds invest in infrastructure projects and listed companies, typically in the transport and utilities industries, with exposure to infrastructure that exhibit the following key criteria:

- predictable revenue streams, leading to predictable dividend yields
- profitability, often supported by a strong regulatory framework that guarantees the rights to infrastructure-related revenue
- longevity.

Infrastructure investments are still relatively undeveloped as an asset class. After a pause of over half a century, however, the new millennium saw an international trend toward increased private-sector ownership and management of infrastructure. Investments by pension funds and insurers across the EU, in particular in the UK, have been steadily growing. At the end of 2013, for instance, a group of the largest UK life insurers signed up to invest GBP15 billion in UK government infrastructure projects. In addition, the UK has established a Pensions Infrastructure Platform to provide for such investments from pension funds, a larger provider of capital funding. Nevertheless, investment opportunities in infrastructure investments are small compared to investments made by insurers in other asset classes.
Current risk capital charges under Solvency II and SST

Under Solvency II, infrastructure investments are treated within the existing standard formula for equity and debt investments.

Equity-like investments in infrastructure are adversely classified as type-2 equity investments, suffering a considerable capital charge of 49 percent and the symmetric adjustment to market value. As with any other equity investments, they may be classified as type-1 equity investments if they qualify as social entrepreneurship funds, venture capital funds or as closed-ended unleveraged alternative investment funds.

Debt-like investments are classified according to their characteristics as bonds, securitizations type-1 or securitizations type-2. They are therefore subject to the same credit spread factors as they are calibrated for any regular fixed income investment and are thus often arguably penalized as many infrastructure projects are too small to be rated.

The calibration of the standard formula for both equity and credit spreads are inappropriate for infrastructure investments as such assets are exposed to different underlying economic risks than common stock and bonds and would generally be expected to be much less risky.

The historical volatility observed in equity investments in infrastructure does not justify a more adverse treatment of infrastructure investments than type-1 equities, which are subject to a capital charge of 39 percent plus a symmetric adjustment. See the table “Risk return characteristics of major infrastructure indices.”

Historical cumulative default rates of infrastructure investments are lower than in any other industry sector in Moody’s default rate analysis. The credit spreads of regular fixed income investments are thus too adverse for infrastructure investments.

Alternatively, infrastructure investments could also be considered as real estate if they are held directly. Compared to the high capital charge of type-2 equity investments of 49 percent, property is subject to a much lower charge of 25 percent. To compare the capital charge, however, one must consider the whole funding structure of an infrastructure project. In addition, the market-ability and the operational burden are considerably higher for direct investments in infrastructure and insurers may lack the relevant expertise.

Similarly under the SST, there is no special consideration of infrastructure assets under the standard model. Two main approaches are envisaged:

- Mapping infrastructure investments to the default risk factors, such as interest rates, credit spreads and key global equity indices. This means equity-like investments in infrastructure would be charged based on the same risk factor as other investments in stocks in the same geographical region (e.g. investment into UK infrastructure would incur a capital charge appropriate to investment in the FTSE 100 index). Similarly, debt-like investments would be subject to the same credit spreads and credit default risk factors as other regular fixed income investments with the same rating. In practice, use of this approach would require the insurer to demonstrate that the default risk factors appropriately cover the infrastructure risks.

- Using self-defined risk factors appropriate to infrastructure assets by using a partial internal model. By calibrating additional risk factors, the characteristics of infrastructure
investments could be more appropriately allowed for and the resulting capital charge would be more suitable. The difficulty in this approach is likely to be the appropriate calculation of historical infrastructure volatilities and correlations with other asset classes, given the relatively illiquidity of infrastructure investment as well as the relatively short period of data history available.

Overall, the current treatment of infrastructure investments does not reflect the relative predictability of returns and the low risk profile of infrastructure assets. Such investments are thus penalized and less attractive than other asset classes for insurers.

**Future treatment under Solvency II**

To address the above concerns, in February 2015 the European Insurance and Occupational Pensions Authority (EIOPA) established a roundtable on infrastructure investments by insurers. The group aims to define infrastructure investments where a long-term cash flow is predictable and where risks can be properly managed, and to analyze how these investments can be adequately reflected in the Solvency II standard formula.

At the end of March 2015, EIOPA published a discussion paper on these topics. It identified potential criteria for a general definition of infrastructure investments and discussed possible enhancements of the standard formula to include infrastructure investments. At the beginning of July 2015, EIOPA published a consultation paper on these topics.

**General definition of infrastructure investments**

One suggestion for a definition is based on existing definitions which refer to a range of characteristics of infrastructure investments. They must provide facilities of general interest and meet specific economic and financial features relating to credit risk, demand and competition, as well as satisfy restrictions on ownership and use of the assets. Further restrictions relate to being long-term in nature and capital intensive.

A second possibility is a definition that refers to the functions provided by the infrastructure investment (i.e. its social use). This would require a specified list of eligible functions such as the provision of public transport or communications facilities.

A third suggestion focuses on the contractual arrangements governing the revenues produced by the assets. The assets must for example be used to provide functions for which the contractually agreed revenues are sufficiently stable – where ‘sufficiently stable’ would need to be further defined.

Finally, as a further suggestion, EIOPA is considering basing its definition on either the Basel II criteria for project finance or the risk weightings currently being developed by the European Banking Authority for specialized lending exposures.

In its latest consultation paper, EIOPA proposes defining infrastructure assets as physical structures, systems and networks that provide or support essential public services and are subject to limited competition. This may cover services in the areas of health, safety or security, among others. The reference to public services would exclude assets that provide services to a single consumer. According to EIOPA, the requirement of limited competition is essential to justify a better risk profile than implied by the standard formula.

**Further criteria**

EIOPA presents criteria that could be applied to limit the definition of infrastructure investments or allow for a more granular treatment in the standard formula. A potential limitation to OECD countries is therefore considered. Other points cover potential structural requirements of the investment, such as a proper separation of the special purpose entity from the sponsoring entity, the limitation of the use of derivatives to mitigate risk and the requirement that mechanisms exist that ensure both active monitoring and investor engagement.

Other potential restrictions discussed are the limitation to availability-based projects or the consideration of projects with a public off-taker only. The requirement that the level of revenues is contractually guaranteed, provided that the project meets the relevant performance levels, would restrict eligible projects to those with purely availability-based payments.

Further requirements relate to the financial structure of the investments. EIOPA considers that debt investments must have the most senior ranking or that generally a minimum debt service coverage ratio must be reached.
Conditions to limit the prepayment risk for infrastructure project debt are also considered. In its latest consultation paper, EIOPA proposes four requirements for all investments:

- Existence of an infrastructure project entity that was created specifically to finance or operate infrastructure assets. It gives the lender a substantial degree of control over the assets and the income they generate, and the primary source of payments is the income generated by the assets.
- The infrastructure project entity can meet its financial obligations under sustained, severely stressed conditions. The stress scenarios include adverse refinancing conditions, economic shocks, delays in design or construction or insolvency of the construction company, among others.
- The infrastructure project entity generates predictable cash flows. This requirement would be met if, for example, revenues are availability-based, subject to a rate-of-return regulation or subject to a take-or-pay contract.
- The infrastructure assets and infrastructure project entity are governed by a robust contractual framework and there is a strong security package to lenders. The security package restricts the activities of the infrastructure project entity to reduce the risk to lenders and improves protection of the creditor relative to the equity investors.

Furthermore, EIOPA proposes limiting infrastructure project debt with an external rating to those investments with at least step-3 credit quality, that is the equivalent of an S&P BBB rating. Unrated infrastructure project debt may still qualify but would need to satisfy more detailed criteria relating to political risk, structural requirements, financial risk, operating risk and design and technology risk.

**Calibration of the capital charge**

EIOPA also discusses possible calibrations of the capital charge in the standard formula. One approach is the use of partial internal models as this new asset class is perceived to be more heterogeneous than other asset classes. For equity investments, a more favorable treatment as equity type-1 instead of type-2 is being considered or the introduction of an additional equity type-3 classification that would be correlated less with the other equity types. EIOPA considers appropriate a risk charge of between 30 and 39 percent for well-diversified portfolios of qualifying equity-like investments in operational infrastructure projects.

For debt investments, the introduction of specific spread charges for infrastructure debt, a spread reduction approach for hold-to-maturity infrastructure debt or a combination of these are being considered:

- A specific spread risk charge would reflect differences in the fundamental credit risk of the exposure of qualifying infrastructure debt. Proposed spread risk charges are around 30 to 60 basis points lower than standard ones (i.e. the average across all industries).
A spread reduction approach for hold-to-maturity infrastructure debt requires conditions to ensure the insurer is able to hold the debt to maturity (similar to those required to apply a matching adjustment for certain blocks of illiquid liabilities). These conditions are, however, not as stringent as for the matching adjustment. Proposed spread risk charges under this approach are 10 to 30 basis points lower than the standard ones.

Other suggestions are to handle infrastructure debt in the counterparty default risk module or introduce additional criteria for unrated infrastructure debt that would allow it to be treated as rated debt.

**Conclusion**

Alternative investments as a whole are currently not considered a suitable asset class by insurers. Many types of alternative investments are indeed perceived as high-risk and not suitable for insurers as a mainstream asset. Some infrastructure investments may, however, be suitable given their low volatility, long-term nature and higher expected returns.

In the meantime, infrastructure investments remain a relatively undeveloped asset class. There is insufficient capacity for insurers to invest in any significant manner in this asset class. However, developments point to increasing investment opportunities.

The current treatment of infrastructure investments under risk-based solvency regimes such as Solvency II and SST is unfavorable. The SST generally allows for a more appropriate treatment of equity-like investments in infrastructure in the standard model than under Solvency II.

The future treatment of infrastructure investments under Solvency II is still unclear but is under review. Substantial developments in either direction could take place. Regulators appear keen to drive forward the necessary regulatory tweaks as quickly as possible to enable insurer investment in this class on a larger scale than is currently practicable.
Clarity on publications
This series of publications from KPMG Switzerland provides insights, analyses and studies on a range of topics. All publications are available as hard copies as well as online.
For more information, please contact kpmgpublications@kpmg.com.

Latest issues

Clarity on Performance of Swiss Private Banks
Clarity on Compliance
Clarity on Business Reporting
Clarity on Cyber Security
Clarity on Commodities Trading
Clarity on The Future of Swiss Private Banking
Clarity on Swiss Taxes
Clarity on Life Insurance matters

KPMG Knowledge App
Get instant access to our experts’ knowledge with our KPMG Knowledge App for iPad, iPhone and Android phone.