



Article from

The Actuary

November 2015
Volume 13 Issue 1



The
Far
East:

STEP

**LOCALIZED INVESTMENT
MANAGEMENT FOR
BURGEONING INSURERS
IN ASIA**





BY FRED NGAN, MICHAEL CHAN AND ERIC FORGY

The insurance story in Asia has been so dominated by “growth”—for example, China’s doubling of insurance industry assets over the last five years¹—that it is easy to lose sight of the many other interesting tides through which Asian insurers are navigating. The product demands in Asia are ultra-localized yet rapidly evolving, as are the regulations and capital markets. Coupled with continued strong growth,² these demands may pose many pronounced business management challenges for life insurers that can no longer simply focus on growth.

With the exit of several multinational insurers such as AIG and ING from the region to shore up capital back home, local offices often are left without the support of sophisticated group actuarial, risk and investment functions. While this may have relieved local offices from foreign requirements that were at times burdensome and incompatible with the domestic market, relatively new capital management functions need to set up their own frameworks while keeping pace with the rapid business developments. This article aims to share some experiences in insurance investment management from the Far East.

REGIONAL ASSET ALLOCATIONS

FIGURE 1 summarizes the allocation of assets for major life insurers across key Asian markets. Although a majority of investments are in fixed income, local circumstances lead to varying allocations and riskier assets. We immediately see a wide variation in practices; for example, Japan, Thailand and South Korea stand out with significantly higher allocations to government bonds than other countries. We see that Taiwan and South Korea are weighted toward loans and alternatives in a search for yield, while insurers in China have kept large cash holdings due to the attractive rates and the lack of bond supply. Sales in Indonesia remain dominated by investment-linked products, hence the significant equity exposure.

CHALLENGES FOR THE INDUSTRY

Asia is a complex arena that challenges insurance companies at all stages of their Asset Liability Management (ALM) processes. This article illustrates some of the interesting stories faced by investment actuaries along every step of the path, starting with finding suitable asset classes in which to invest, to the competition in sourcing the assets, to managing conflicting views across risk and constantly changing regulatory frameworks at all stages of development—and balancing all of these demands with relatively young risk and capital functions.

Much like the rest of the world, the low interest rate environment continues to challenge Asian insurers. This is particularly acute in Taiwan, Japan and South Korea, where pricing competition led to guaranteed rates of 6 percent and higher in some legacy products. Insurers have had to invest in riskier assets, often going offshore, in their quest for longer duration and higher yields. South Korean insurers invest significantly in floating-rate loans (over 10 percent of invested assets⁴) to boost yields, but take on substantial interest rate risk to back fixed-rate liabilities. In Taiwan, the insurers have invested heavily offshore,⁵ right up to the regulatory limit of 45 percent, at the expense of taking on foreign exchange rates risk and significant hedging costs. In contrast, China recently relaxed the controls around overseas investments to address the lack of investment channels available, but other regulations such as currency controls do not always move in lock-step, resulting in different “effective” limits. In-force management practices that have emerged in the United States over the past few years are still nascent in Asia, and there remain significant opportunities for actuaries to better participate in this area.

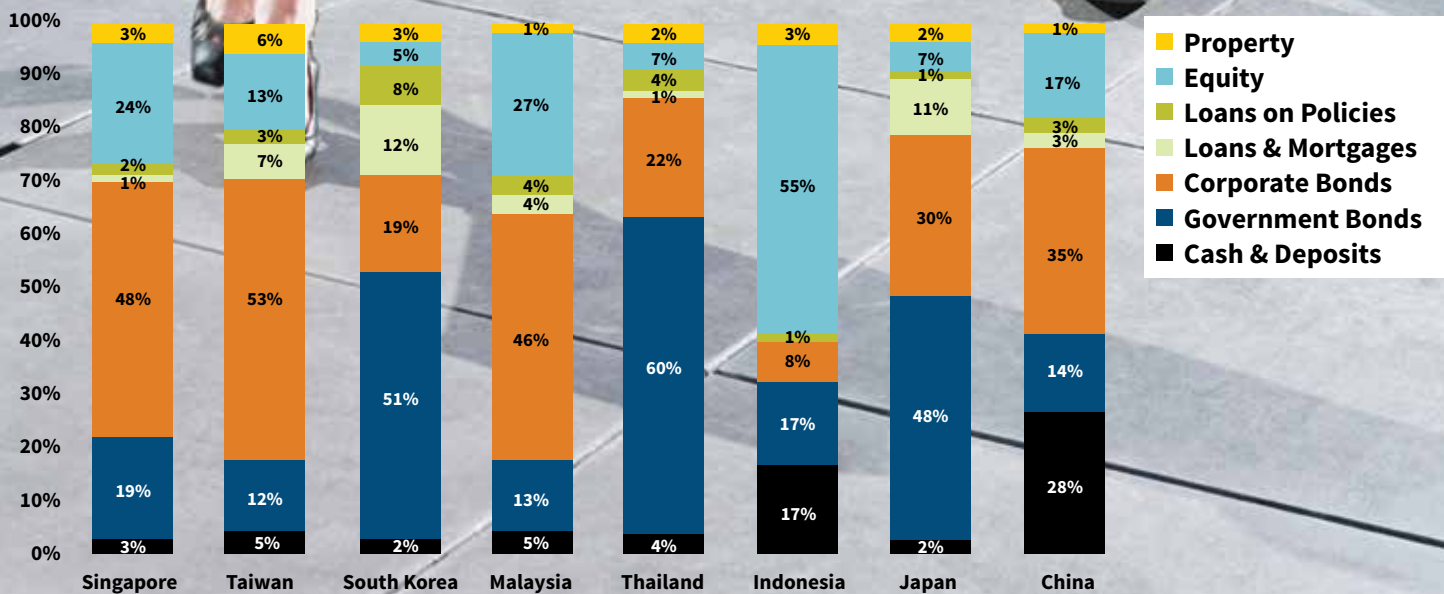


The Asia region will continue to see varying stages of insurance regulations suited to each country’s development needs.”

Smaller insurers face significant competition in sourcing assets. The local debt markets are often underdeveloped, lacking the depth (size and diversity among issuers) and liquidity (limited secondary markets) for insurers to effectively manage their interest rate risks. Consider China, for example. Direct life premiums in 2014 were USD \$177 billion,⁶ compared to about USD \$5 billion in corporate bond issuance the same year.⁷ In Taiwan, the entire government bond market is only about half the size of life insurance industry assets. This has led to situations in which some larger local insurers lobby companies to issue bonds and private loans—an avenue that’s clearly not always available to smaller or less-connected foreign insurers.



FIGURE 1 2014 LIFE INSURERS' ASSET ALLOCATION BY MARKETS



Source: Public company and regulatory data. Coherent Capital Advisors Research.³

Another dilemma is the basis for evaluating asset liability mismatches. With the rise of ALM capabilities, domestic insurers increasingly have been able to adopt market consistent frameworks, but this has led to conflicts with some of the more rules-based local statutory frameworks. For instance, under the Korea Risk-Based Capital (RBC) regime, risk charges are measured using a dollar duration gap with liability durations prescribed/capped for different products. For certain products, the economic duration can be much longer than the statutory duration, especially if internal models are used to value embedded options in the products, leading insurers to choose between “economic” and “regulatory” mismatches. Domestic insurers often find

themselves optimizing on a set of metrics and constraints that are internally conflicting.

Coming to grips with these trade-offs is made more challenging when a country in the region is changing its solvency framework nearly every year. In more mature markets, there is an increased focus on prudent solvency regulations and more sophisticated frameworks, but for less developed markets, the regulators need to balance this against the need to encourage growth in the markets. Increasing insurance penetration requires insurers to finance their new business strain, which means the market needs to be able to offer attractive returns on capital.



SIMPLER PRODUCTS AND FEWER LEGACY SYSTEMS GIVE ASIAN INSURERS THE POTENTIAL TO LEAPFROG THEIR WESTERN COUNTERPARTS BY ADOPTING NEW TECHNOLOGY MUCH FASTER.

Ultimately, this means the Asia region will continue to see varying stages of insurance regulations suited to each country's development needs. In Singapore, a new "RBC2" framework is being developed, which should be conceptually similar to the Solvency II standard formula. Other Southeast Asian countries such as Thailand and Malaysia are watching the developments closely and could implement similar changes. Some of the proposed changes are likely to have fairly large effects on the asset allocation decisions. For example, the current consultation papers are proposing a 50 percent or higher increase in equity risk capital charges, and similar levels are seen for below-investment-grade assets.

In Hong Kong, although a regional hub for many life insurers, the regulator is still preparing to roll out its first RBC framework. The current solvency margin framework has no explicit capital charge for asset risks, although there are fairly complex rules around valuation interest rates and

dynamic solvency testing. In China, a new solvency framework similar to Solvency II (China Risk Oriented Solvency System, or C-ROSS), will be effective in early 2016.

Keeping up with the regulatory changes is a challenge for the investment, risk and capital functions that have been busy keeping up with the business growth. In the past decade, the focus has been on building out the distribution channels, with ALM being a secondary concern as cash inflows significantly outpaced outflows and were growing every year. One consequence of this environment is that the tools and technology supporting a holistic view across the many different regions are often lacking, making it difficult to analyze company-level risk and capital positions.

EXPLORING OPPORTUNITIES IN ASIA

With the pace of business growth showing signs of slowing down in Asia and as more focus is paid to capital efficiency in the face of changing regulatory demands, insurers are

beginning to re-think their value proposition to shareholders. Capital-efficient investment strategies have gained popularity as the solvency margin is becoming better linked with “economic” views, and insurers expecting additional capital demands from the new regulations consummate with an increasingly mature market. This is also a unique opportunity to outperform the competition; i.e., differences in capital regulations across Asia present an opportunity for multinational insurers to optimize their product and capital positions. Examples include capital charges that can vary across countries and businesses, such as:

- 1 | Is it more capital-efficient to buy risky assets in the Thailand portfolio or the Malaysia portfolio?
- 2 | Should the portfolio be optimized at the stand-alone fund level or at the company level?
- 3 | Can the regional office take advantage of diversification benefits across businesses?

We see plenty of opportunities for asset managers to present innovative, capital-friendly solutions that can provide attractive returns while improving an insurer’s overall risk profile. Prerequisites include a deep understanding of how insurers make investment decisions and the trade-offs they face, plus the ability to effectively communicate the cost and benefits to the relevant ALM stakeholders. This is a challenge for traditional investment advisers who do not have deep insurance knowledge or the scale to support dedicated insurance specialists who understand the processes from the inside out.

Some of the more advanced insurers are beginning to adopt the concept of an efficient frontier in analyzing their Strategic Asset Allocation (SAA) decisions by customizing to embedded value, economic capital, solvency-at-risk and other insurer-specific metrics while incorporating constraints in the form of risk appetites/budgets. For instance, a company can scan through its asset universe to select an asset mix that provides the highest return at a given target level of capital. Another objective might be to minimize the interest rate risk charge by better aligning the assets and liabilities at different levels of aggregation across the company. Ultimately, insurers at different stages of development, with different business models operating in different markets and facing different regulations and investors, will need to develop investment strategies that best meet their own needs.

Rather than relying on the investment function alone, these SAA studies are increasingly undertaken jointly by actuarial, risk and investment functions, often in the form

of ALM committees. Opportunities for improvements abound as local insurers may lack established governance and systems to industrialize the SAA analysis and further embed it into the decision-making process. Although this poses challenges, it also presents huge opportunities as the businesses are not yet encumbered by complex legacy systems or stifling processes, so they can embrace new technologies to leverage fast and flexible systems that capture the local characteristics in each country.

DIVERSIFYING INTO ALTERNATIVES

Historically, life insurers focused on conventional fixed-income assets, and occasionally ventured into domestic equities to back participating products. In response to low interest rates, well-capitalized insurers have shown greater appetites for nontraditional asset classes such as loans, offshore assets, real estate and other alternatives such as hedge funds, private equity funds and direct investments into infrastructure projects. Many regulators are loosening investment restrictions on alternatives and offshore assets in response to insurers’ needs. In this section, we’ll explore some examples of these trends.

Real Estate

Real estate is often the fourth-largest asset class for insurers.⁸ South Korean and Chinese insurance and pension funds have directly invested in commercial real estate and sometimes reached for “trophy” investments by purchasing landmark properties such as the Waldorf Astoria in New York (2014) and the Lloyd’s Building in London (2013). Under the current RBC framework, the treatment of property remains fairly attractive (6 percent for South Korea and 16 percent for Thailand) compared to equity and low-rating fixed income.

Furthermore, real estate provides a hedge to inflation and is assigned a low correlation with stocks and bonds, making it a popular addition to a multi-asset portfolio, particularly from the risk-adjusted perspective. With an average exposure of 2.7 percent,⁹ and just 1 percent in China, the real estate exposure remains very low with a lot of room to grow compared to more developed markets, where the figure stands at nearly 7 percent in the United States and 5 percent in the United Kingdom.¹⁰ As direct real estate investments tend to be quite large and “lumpy,” a fairly large asset base is required to properly absorb the investment, and as Asian insurers grow in size, we expect this asset class to be increasingly attractive. The challenge, as is similar to Western markets, is the need to build up the internal infrastructure and personnel to support direct real estate

investments and management. Aside from the operational changes needed, the tax consequences (especially with foreign investments) will need to be properly evaluated.

Exchange Traded Funds (ETFs)

Exchange Traded Funds (ETFs) offer alternative strategies that open gateways to many new classes of assets around the globe. ETFs can provide operational efficiency for tactical allocations and portfolio rebalancing, as well as easier access to offshore assets. BlackRock reports that 74 percent of Asian firms will likely increase their use of ETFs over the next three years.¹¹ While most regulations permit the use of ETFs, the “look-through” treatment varies across the region. In South Korea, ETFs received a blanket treatment as equity and were subject to a higher capital charge of 12 percent even if the underlying assets were fixed income. The new regulations allow a look-through approach and open up another avenue for local insurers to manage their fixed-income exposures.

Infrastructure Investments

Other illiquid assets such as infrastructure investments have been well-received across Europe under Solvency II. Infrastructure assets offer reasonably predictable long-term cash flows that can be difficult to achieve through other asset classes. Domestic supply of such investment opportunities has been fairly limited in most markets, with the exception of China and India. To illustrate, Chinese insurance companies’ investments into infrastructure projects rose 56.8 percent on a yearly basis to reach RMB 1.1 trillion in 2014,¹² and in June 2015 the government initiated an RMB 300 billion insurance investment fund to support infrastructure. For offshore investments, the pipeline for infrastructure projects stays strong across Europe, but the regulatory restrictions and associated foreign exchange risk inhibit Asian insurers from making significant investments.

Easing of regulatory restrictions on these asset classes is likely to continue in the face of growing appetite for diversification and better liability matching. Insurers are eager to see investment opportunities beyond the traditional assets, and their knowledge gap opens the door for asset management specialists to provide their services.

CONCLUSION

Insurers operating in Asia face a multitude of local ALM challenges that are distinct from those in the Western world, such as:

- 1 | Operating under multiple regulatory regimes, all at various stages of maturity;

- 2 | Investing in less-developed capital markets;
- 3 | Making decisions without the support of fast and robust projection models; and
- 4 | Working with young, multicultural teams that often communicate in different languages.

Asia has the appetite for more investment-savvy actuaries who not only have a solid technical foundation and a creative mindset, but also an unparalleled commitment to learning how to deal with business uncertainties in Asia. Rather than importing experts from the West, domestic firms are looking for local asset managers, consulting firms and software vendors to demonstrate local insights and develop solutions that meet their specific needs.

Asia is ripe with opportunities that reward those with creative solutions in these developing markets. Simpler products and fewer legacy systems give Asian insurers the potential to leapfrog their Western counterparts by adopting new technology much faster. A great example of this is China’s digital insurance revolution that capitalized on its gigantic e-commerce industry. ALM practices may seem behind those of their Western counterparts for the moment, but with the exponential growth of insurance business and an ever-growing SOA membership base, combined with the rate of regulation and infrastructure transformation, Asia’s life insurance market may come out ahead of the game in the not-so-distant future. ■

References

¹ China Insurance Regulatory Commission statistics.
² Compound annual growth rate of life insurance premiums is estimated to be 10 percent from 2010 to 2020. Sources: country regulatory bodies; McKinsey Global Insurance Pools.
³ All data from public sources as of 2014, except for South Korea and Indonesia as of 2015. Expert judgment applied in processing scarce/incomplete data. Investment linked assets are included for Malaysia and Indonesia.
⁴ Mostly unsecured loans or loans secured by real estate.
⁵ Source: Taiwan Insurance Institute—Foreign investments relative to total asset up to 44.4 percent in 2014 (from 26.4 percent in 2008) of the total asset, which is slightly below the current regulatory cap of 45 percent. Some firms are allowed to invest over half of their assets overseas under new rules passed in May 2014.
⁶ Insurance Association of China, 2014 Industry Statistics, life insurance premiums only.
⁷ Goldman Sachs Asset Management, China’s Bond Market First Half 2015.
⁸ Behind government and corporate bonds, and equity investments.
⁹ Coherent Capital Research across eight countries.
¹⁰ CBRE research, *Accelerating Insurance Liberalization Driving Real Estate Investments*.
¹¹ BlackRock, *Asian Insurers: Adapting Investment Strategies to a Changing World*.
¹² Xinhua Finance, *China’s Insurers Invest RMB 1.1 Trillion into Infrastructure in 2014*.

Fred Ngan, FSA, MAAA; Michael Chan, FSA; and Eric Forgy, Ph.D., CAIA, are co-founders of Coherent Capital Advisors, a fintech consulting and software company in Hong Kong.

fred.ngan@coherent.com.hk