



# Turning risk into value\*

## Insurance Actuarial Services in Asia

\*connectedthinking

PRICEWATERHOUSECOOPERS 

PricewaterhouseCoopers Actuarial can help your business to develop a better understanding of the trade-offs between risk and reward, leading to smarter capital allocation and more sustainable shareholder value creation.

Asia is one of the world's fastest growing financial services markets, offering huge opportunities for foreign investors as well as local firms. Yet, the development of successful strategies in areas ranging from product design to merger and acquisition requires insightful decision-making that balances the rewards with the potential risks.

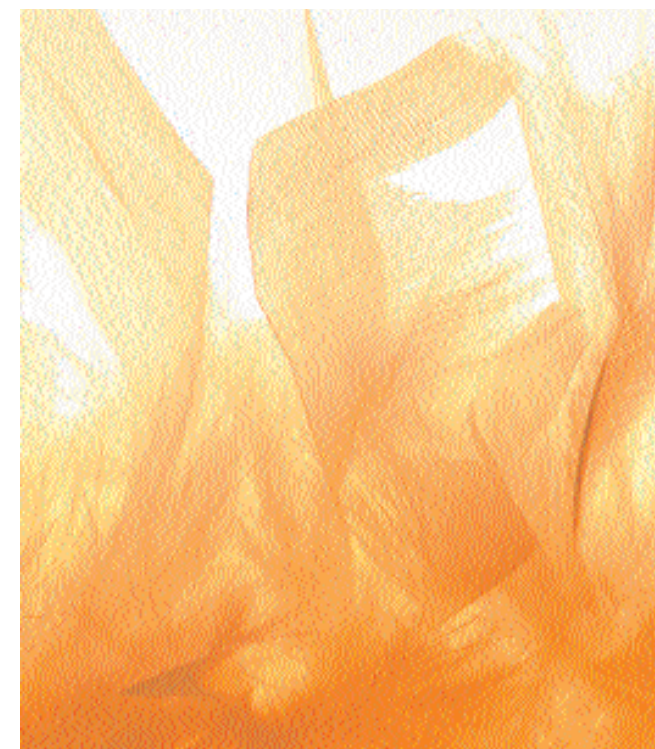
PricewaterhouseCoopers is one of the leading actuarial and financial risk services groups in Asia, combining broad local knowledge and experience with the unparalleled support and expertise of the world's largest professional services firm.

Our actuarial team specialises in helping insurers and other financial services companies to enhance decision-making and

optimise returns through the development of a risk and value-based approach to the issues they face. This includes the 'risk-adjustment' of prices, capital levels and performance measures, enabling companies to set appropriate business goals, monitor their delivery and ensure they are understood throughout the organisation.

This introduction to PricewaterhouseCoopers Actuarial Services outlines how our advice and support is helping to add value to financial services businesses across Asia.

If you would like to discuss any of the issues or services covered here in more detail please speak to your usual PricewaterhouseCoopers representative or contact one of the team members listed at the end of this document.



# 01

An increasingly competitive marketplace demands effective product pricing, innovation and customisation

Customer demands are evolving in the face of increasing wealth, an ageing population and the desire for ever more accessible and personalised financial products and services. As the opportunities opened up by e-commerce and other technological developments take hold, we are also likely to see a growing distinction between the manufacturing and distribution of financial products. Strong branding and effective joint venture distribution strategies will be critical to success in this increasingly specialised and disaggregated commercial arena.

Meeting these varied and complex challenges requires a close understanding of customers' changing needs and aspirations, combined with an appropriate risk-adjusted profitability framework that enables companies to work within viable risk and capital criteria.

Advice and support from PricewaterhouseCoopers combines industry knowledge with a statistically-based actuarial approach to pricing financial products and services. This allows companies to align product design and pricing with customers' perceptions of value and

the margins needed to adequately reward underlying risk-based capital. It can also help companies to discern the most appropriate business model and value strategies for the future.

Our recent assignments have included advising a foreign life insurer planning to enter the Chinese market. The client was at the time largely unfamiliar with the particular demands of local customers and the workings of the industry in the country. We helped the new entrant to develop a portfolio of products capable of matching local requirements with its overall global standards. Support included product design and customisation, statutory pricing and profit testing.

We also recently helped an insurance client to secure strategic investment for a new joint venture start-up. This included supporting the client's negotiations with potential backers through the evaluation of projected embedded values, providing a detailed analysis of the expected profits and financial status of the joint venture over the coming ten years. We also assisted in product design and the development of a comprehensive

business plan. Such expert actuarial input will become ever more important as Asian markets mature over the coming years. In particular, increasing competition stemming from deregulation and new entrants is likely to intensify the pressure on prices and margins.

A case in point has been the deregulation of motor insurance premiums in China; rates had previously been set at an industry level. We recently carried out a multi-way analysis of claims data for one of the country's top three non-life insurers. This has enabled the client to develop a highly segmented risk premium rate, which is now being used as a basis for competitive pricing.

We have also evaluated pricing and margin projections for a Chinese life insurer seeking foreign investment. The company had found that potential backers were concerned about the impact of falling margins on future profitability. We analysed the returns achieved on new business and compared them with more mature markets. This enabled us to develop a projection of emerging profits that allowed for a gradual movement of margins to mature market levels.

# 02

Financial services businesses are gearing up for a fresh wave of acquisition and consolidation

In the autumn of 2003, PricewaterhouseCoopers and the Economist Intelligence Unit carried out an in-depth global survey examining financial services institutions' views and approach to restructuring.

The study\* revealed that four out of five respondents expected their firms to be restructured significantly over the coming five years. Among Asian insurers this view is virtually unanimous, with expansion by multinational groups likely to be matched by consolidation among national businesses. Significantly, 40% of Western European respondents and one third of North American participants have set their sights on Asia as an important target for acquisition activity. It is equally telling that Asia was the only region in the survey where far more respondents expected to expand than divest.

The main drivers for restructuring cited by respondents in the region will be regulatory liberalisation, such as the opening of insurance markets to new players, combined with growing competition and ever more exacting customer demands. Many of those surveyed will be looking to merger and acquisitions to enhance their range of products and services and strengthen their market share, with geographical expansion being of lesser importance. South Asia, in particular, is also likely to benefit from the rapid growth in off-shore outsourcing.

However, many companies remain cautious about M&A, especially as many past takeovers have failed to create

value for shareholders. Indeed, while the Asian market offers perhaps the greatest growth potential of any of the world's regions, companies seeking to expand here face particular risks in areas ranging from continuing regulatory barriers to limited credit rating data. As a result, the freewheeling deal-making of the 1990s is likely to give way to more innovative and focused strategies based on outsourcing, joint ventures and incremental growth. In particular, the need to satisfy wary investors will require greater precision and selectivity in acquisition and other restructuring moves.

Expert actuarial input will be vital in assessing the true shareholder value of restructuring strategies and identifying suitable acquisition targets. This includes due diligence appraisal and detailed evaluations of policy and asset values, projected returns, outstanding claims and technical reserves. As part of the global leader in providing advice and support for financial buyers, our clients also benefit from integrated services in areas ranging from corporate finance to tax, legal and HR consultancy. At the heart of our support is a systematic value-orientated approach to preparation, targeting, execution and integration that seeks to embed restructuring into a coherent overall business development plan.

Our recent assignments include assisting a leading global insurer in the acquisition of a non-life bancassurer in Hong Kong. One of the keys to the success of the deal was our

ability to provide a rapid review of the target's technical reserves and analysis of product line profitability. We have also helped a global group to negotiate a strategic investment in a leading Chinese composite insurer. Our support included analysis of product line profitability, along with a detailed risk review and evaluation of life and non-life liabilities. Our wide-ranging due diligence appraisals have included a reinsurance sufficiency review for a global group that was interested in taking a stake in a leading Chinese insurer. Our analysis identified key gaps in weather catastrophe cover.

The coming years are also likely to see an increase in flotation, privatisation and demutualisation as companies seek additional investment to finance their competitive strategies. We have a strong track record of support for initial public offerings (IPOs). This is augmented by accounting standards conversion to facilitate overseas listings and broaden access to international financial market investment.

We are currently assisting a major Chinese life insurer in its plans to float on the Shanghai stock exchange. This includes providing an appraisal valuation for the listing and evaluating reserves on an International Financial Reporting Standards (IFRS) basis. We have also helped another leading Chinese insurance group to prepare for an IPO by developing a methodology for evaluating reserves under US GAAP. This included reviewing and validating the client's key models and assumptions.

\* *Focus on restructuring: The drivers shaping the financial services sector* – available for download on [www.pwc.com/financialservices](http://www.pwc.com/financialservices)

# 03

Mounting financial, competitive and regulatory pressures require companies to manage risk, capital and performance in a more effective and integrated way



All businesses are now waking up to the heightened risks of operating in an increasingly complex and uncertain financial and geopolitical environment. Companies are also under ever-increasing pressure from investors, regulators and rating agencies to provide more information about the risks they run and the quality of the procedures in place to mitigate them.

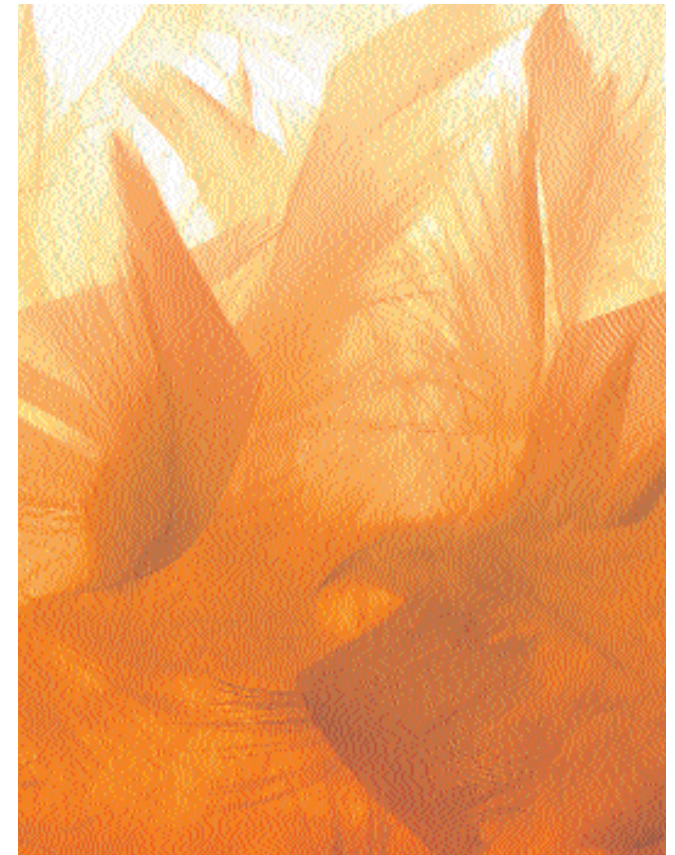
Successful businesses therefore need to be able to identify and quantify all the risks they face in order to calculate both the capital needed to cover them and the real risk-adjusted returns being achieved. Such informed analysis can enhance companies' ability to identify weaknesses and new growth opportunities, target investment where it can earn its best return and improve operational decisions in key areas such as risk selection, pricing and reserving. In practice, however, effective integration between risk, capital and performance measurement and management is rarely achieved.

Our actuarial team is a leader in the area of dynamic financial analysis (DFA) and other integrated performance management methodologies. Such advanced measurement and modelling techniques aim to ensure that key financial performance indicators

reflect the true risk and profit drivers for each business function and enable companies to determine business strategies that are in keeping with their risk tolerances.

Under this approach, a business unit concentrates on the information necessary to meet a soundly designed set of balanced goals, which are cascaded and refined consistently for successive levels of the organisation. Crucially, our analytical scope now extends beyond the 'traditional' financial risks to incorporate business and operational risks in areas such as systems breakdown, reputational damage and loss of key personnel.

Recent projects include developing a bespoke DFA planning model for a leading global insurer. The model helps to ensure adequate capital allocation for different operations around the world, taking into account the particular risk and business profiles of each region. We have also developed a new DFA model for a leading regional insurer that has enabled the client to allocate capital on a risk basis to individual business entities and create a comparable risk-based profitability measure across the organisation. Such analysis has also proved invaluable in developing business plans and assessing future capital needs for new entrants and start-ups.



## Conclusion

### Our unique contribution

Financial services businesses in Asia are facing an unprecedented pace of change driven by the mounting impact of convergence, globalisation and new technology. Yet, we also recognise that many of the most fundamental questions in running a business remain the same. Only the answers are changing.

As actuaries, we recognise that our unique contribution lies in our technical expertise in statistics and risk analysis. We have the capacity to process, manipulate and analyse large volumes of data. This is backed up by significant investment in technology, resulting in an IT infrastructure that serves as a valuable client resource. We believe that these analytical capabilities can provide businesses with the critical information and insights they need to develop successful competitive strategies and enhance shareholder wealth.

## Summary of services

### IPO support, appraisal valuation and US GAAP reserve conversion

- Outstanding claims, prudential margins and IBNR provisions for non-life insurers
- Policy and capital adequacy reserves for life insurers
- Appraisal valuations

### Market entry

- Local knowledge of the workings of the industry in particular countries including the specific requirements of customers and regulators
- Product development including design and customisation to meet local demands
- Business planning including profit testing, capital and strategy evaluation

### Merger & acquisition including due diligence

- Assessing shareholder value of restructuring strategies
- Identifying suitable acquisition targets
- Due diligence appraisal including detailed evaluations of policy and asset values and projected returns
- Expert advice on merger negotiation, execution and integration
- Access to integrated services including corporate finance, tax, legal and HR consultancy

### Product development

- Customer trend and competitor analysis
- Product design
- Pricing and profit analysis by line of business and distribution channel
- Benchmark assumption analysis
- Preparation of product applications to meet regulator requirements including those of the China Insurance Regulatory Commission

### Capital adequacy

- Solvency requirements for life, non-life and health insurers
- Capital requirements and prudential margins
- Asset/liability analysis

### Capital management

- Business unit allocation
- Risk-based performance targets

### Risk sharing

- Reinsurance analysis
- Risk sharing options for corporate liabilities

### Modelling

- Modelling and projections using stochastic processes
- Early warning systems for necessary re-pricing or intervention
- Strategic benchmarks and performance monitoring

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