Asian life insurers:

Unlocking potential and current applications of economic capital

Survey: Applications of economic capital in the Asian life insurance market – 2022

Asian life insurers are already seeing benefits from the use of economic capital modelling, but there are significant opportunities for further development and a resulting competitive advantage.

The ability of internal economic capital (EC) models to help insurers understand risk and make strategic decisions has driven a majority of life insurers across Asia to include these models as part of their management reporting and risk management processes, supplementing the more generic and blunt measures such as regulatory capital. In early 2022, WTW surveyed 25 companies across Asia. Of all the respondents, 64% report their EC positions at least quarterly and 88% said they have regular risk-based local regulatory capital reporting in place. Internal EC reporting is conducted by 76% of respondents, with the majority of the remaining 24% planning to implement EC in the short- to medium-term future.

The wider adoption of EC models raises a question as to whether the cost of building and maintaining these models is more than offset by the business value insurers can gain from their use.

The answer was a strong **yes** from the survey responses. The survey further investigated what future applications insurers feel would be beneficial to target, and how well equipped they are to achieve their EC model development goals.

Practice yardsticks

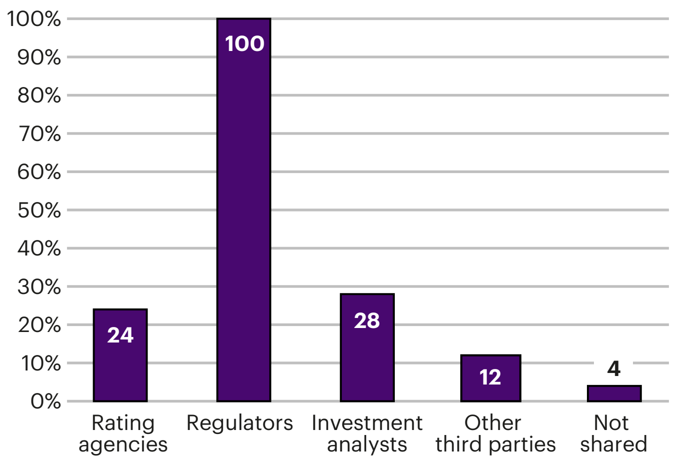
Let's begin with what Asian insurers currently do with EC metrics and where the perceived gaps or opportunities currently exist.

Around 75% of respondents report EC at the enterprise level, and also split by business unit or legal entity. Less common is to report at a more granular level – between 40% to 60% of respondents report more detailed measures such as individual risk or risk category, product, or new business vs in-force. These results somewhat lag the responses of a similar survey WTW did in 2021 with North American life insurers, in which 96% of respondents said they were reporting at an enterprise level.

A notable comparison with the North American results is that usage in APAC is typically more focused on risk management, asset and liability management and regulatory discussions.

APAC participants placed lower priority on external sharing or disclosures with the likes of rating agencies and investment analysts (*Figure 1*).

Figure 1: **With whom do you share risk-based capital results externally?**



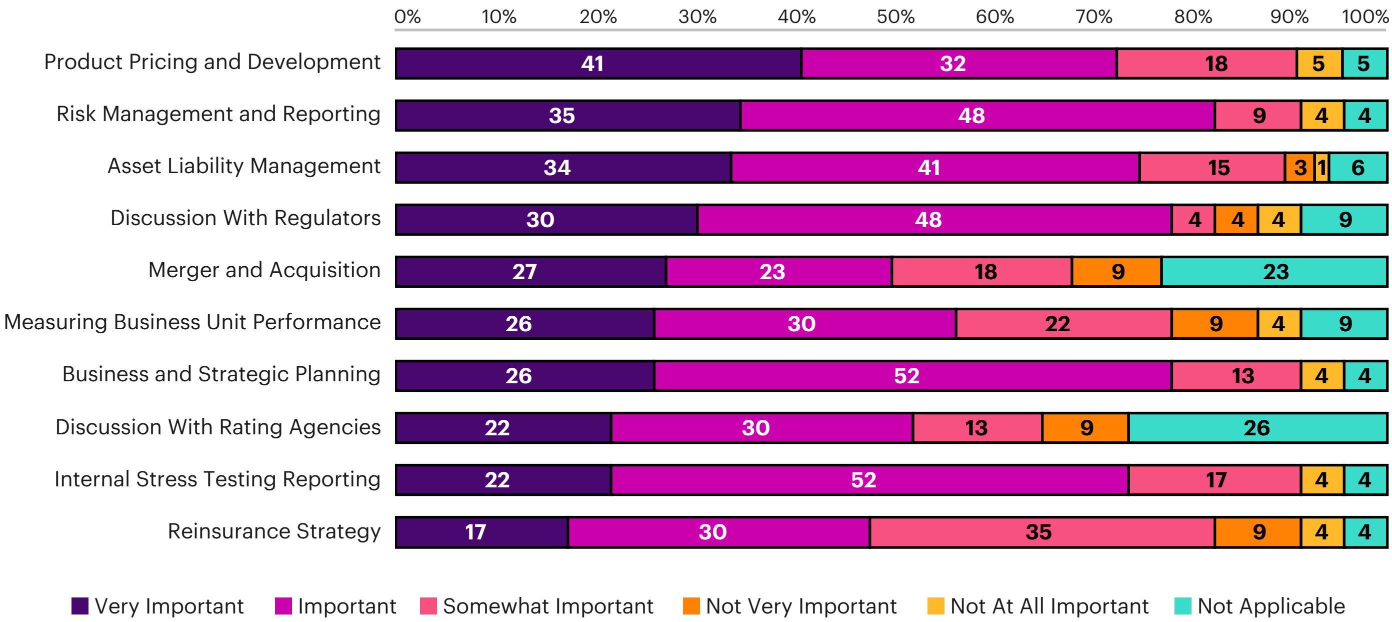
External sharing and disclosure is a potential area of development in APAC, and a better understanding of the benefits of doing so can be gained from the North American experience.

As to how Asian life insurers rate the importance of EC to the business over the next five years (*Figure 2*), risk management and asset liability management are expected to remain key activities, with notable anticipated increases in importance for areas such as product pricing, merger and acquisition, performance measurement and business strategy.

One area where our Asian survey respondents are ahead of the North American 2021 survey respondents is the time taken to generate EC results.

Forty per cent of Asian life insurers are able to report within four weeks after the valuation date, compared with 12% in the North American survey. A contributing factor may be the methodologies used for EC models taking efficiency into account, where a mixture is used spanning in complexity and model runtime.

Figure 2: **Importance of EC in various business activities within the next five years**



Reaping the benefits and rising to challenges

Nearly half (47%) of the respondents believe their current use of EC provides them with a competitive advantage. This belief typically correlates with greater sophistication of the models in use and a longer history of calculating EC. The EC models of these respondents tend to be more detailed, with EC assessment going down to the individual risk level and being more embedded in business and strategic planning activities.

The survey results suggest an increase in EC capabilities and greater use in business are recognised as needs by insurers across the region.

In order to increase the sophistication of EC, widen the scope of use in business activities and to thereby gain competitive advantage, 63% identified faster model run times as a key issue, followed by risk parameterisation and calibration, and results analysis capabilities (*Figure 3*). It was interesting to note that many companies are using external support to bolster their own resources, 54% in the case of model calibration and validation while over 80% have independent reviews of EC.

Looking beyond the balance sheet

When asked what they consider to be the ideal EC modelling method(s), participants gave a range of responses (*Figure 4*). This indicates an understanding that different methods provide a trade-off between accuracy and run time, and the ideal method depends on the use. For example, a less accurate but faster method would be useful for periodic early warning updates, whereas a more accurate but slower method would be needed for regulatory and external reporting. We believe this is an area where development of EC modelling process and technology would greatly benefit from peer comparison and regular review of where the company uses the EC model outputs.

Figure 3: **Current key challenges of the economic capital production process**

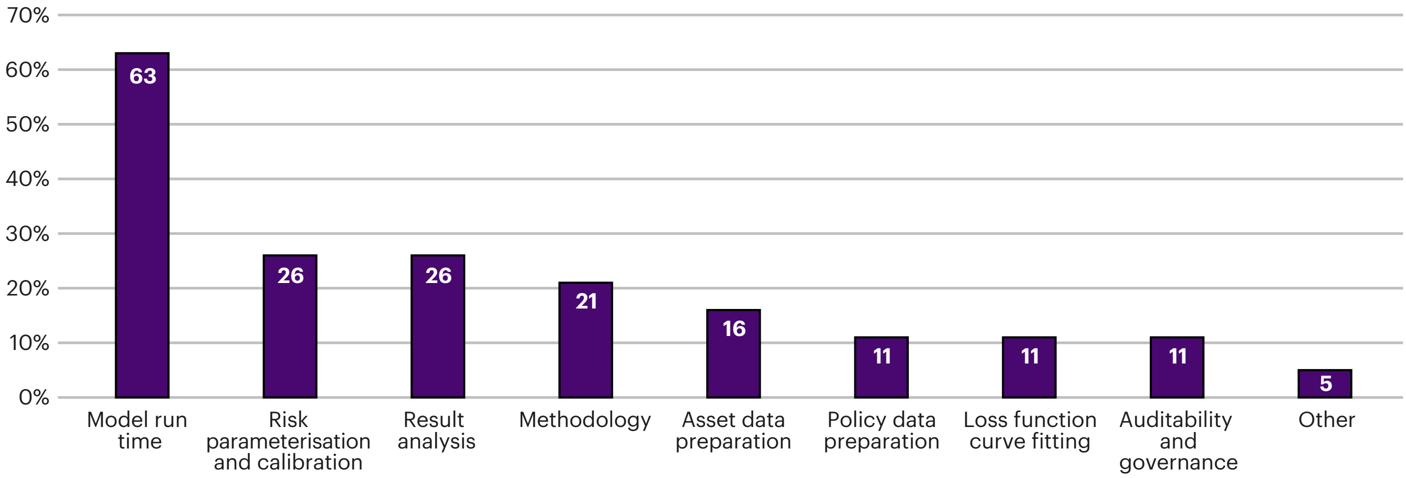
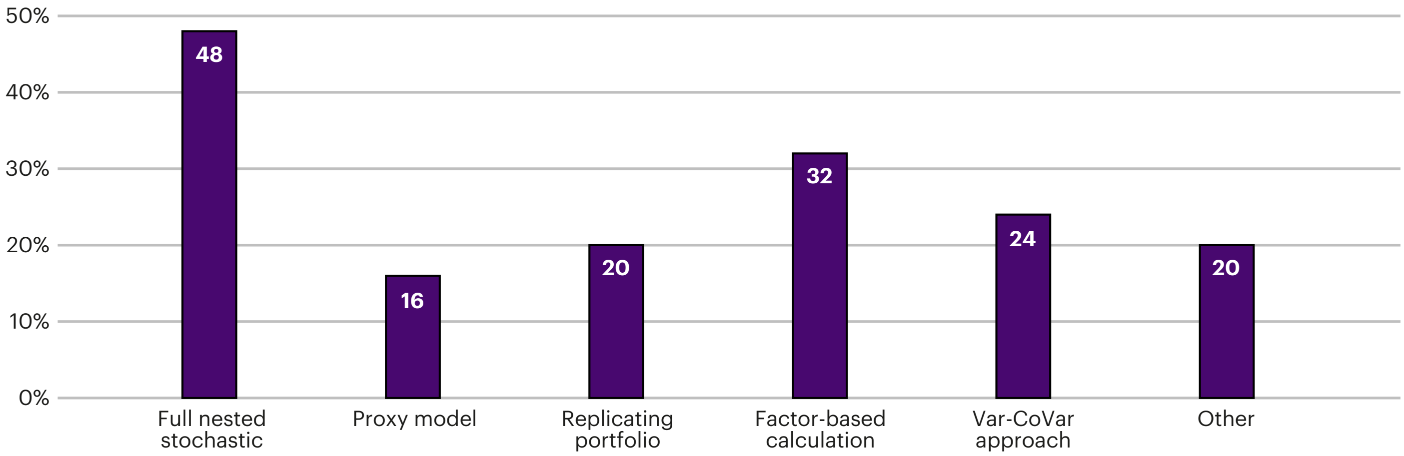


Figure 4: **Ideal methodologies to be adopted for internal economic capital model in the future**



With those thoughts in mind, our view is that for life insurers to continue to be successful, effective implementation of EC and improving capabilities around EC modelling will be of significant benefit to Asian insurers.

Improvements are likely to be achieved by focusing on areas such as:

- Accelerating model run times to speed up the overall EC calculation – this can be done by using curve fitting or proxy function methodology to reduce reliance on lengthy actuarial model runs
- Deploying governance and automation tools to reduce the reliance on manual steps in the calculation, review and reporting process
- Taking advantage of the above to increase frequency and make EC results available in a more timely fashion
- More robust and connected supporting systems infrastructure
- Making results sharing more impactful, by developing standard reporting dashboards that are quick to refresh, simple to understand and business relevant
- Putting in place internal/external support capabilities that help with interpreting results and making informed decisions based upon them.

Contact

If you would like further information about the survey, to discuss any of the findings or delve further into the potential benefits of EC to your business, please contact your usual WTW consultant or:

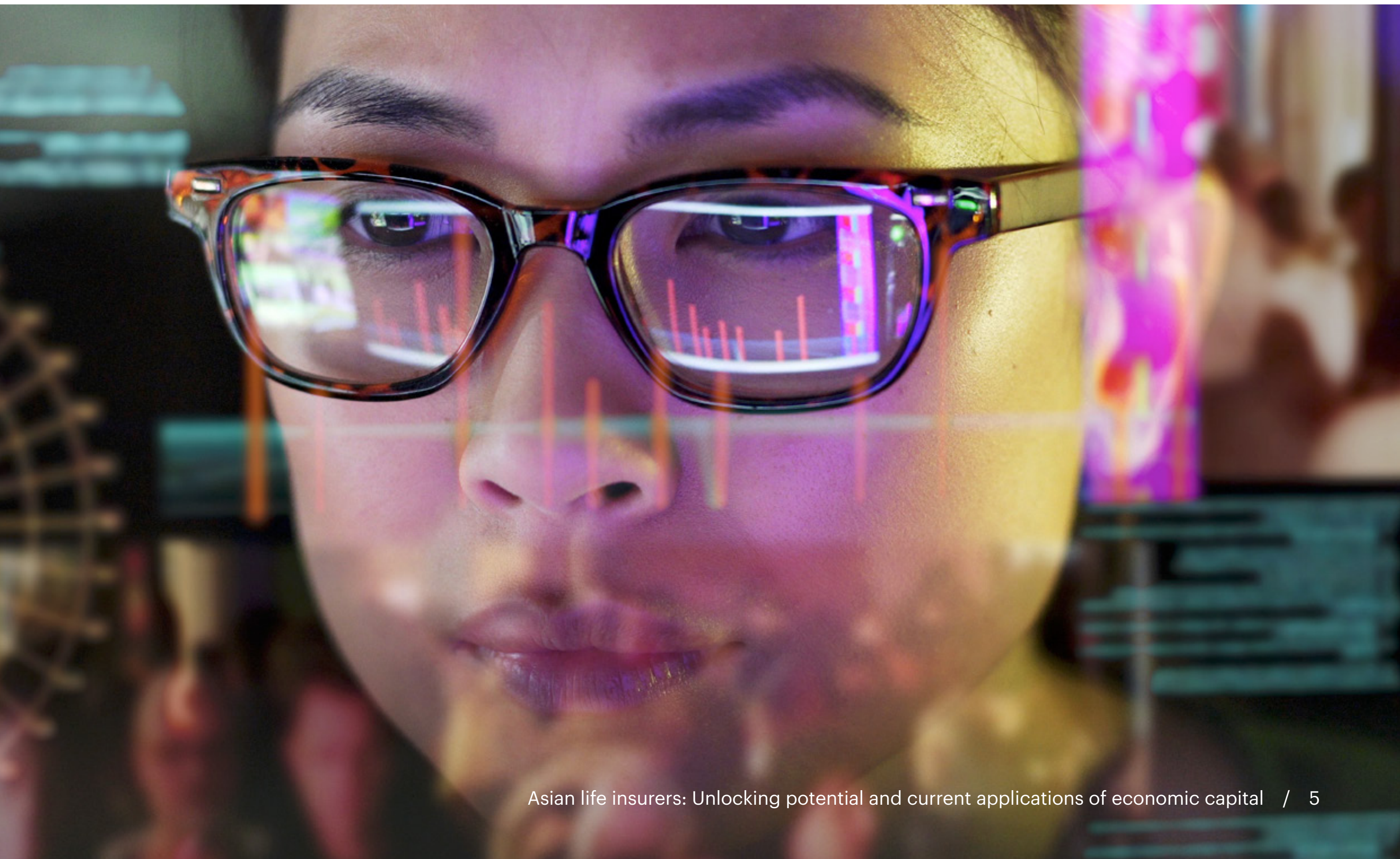
Christine Wu, FIAA
Director, Hong Kong
Insurance Consulting and Technology
christine.zz.wu@wtwco.com

Lucien Shu, ASA, CERA
Senior Actuarial Analyst, Hong Kong
Insurance Consulting and Technology
lucien.shu@wtwco.com

About the survey

WTW conducted the online survey between January and March 2022 in Hong Kong, Singapore and South Korea, receiving 25 responses from individuals representing companies with assets ranging from less than $25 billion to over $100 billion. The majority (44%) have assets above $100 billion.

Responding companies were split 24% local, 32% multinational within Asia, and 44% global multinationals.



About WTW

At WTW (NASDAQ: WTW), we provide data-driven, insight-led solutions in the areas of people, risk and capital. Leveraging the global view and local expertise of our colleagues serving 140 countries and markets, we help you sharpen your strategy, enhance organisational resilience, motivate your workforce and maximise performance. Working shoulder to shoulder with you, we uncover opportunities for sustainable success — and provide perspective that moves you. Learn more at wtwco.com.

wtwco.com/social-media

WTW-HP-2022-0635

wtwco.com