

The Nature and Role of Capital in Insurance

Insurance at its core is about accepting and pooling risks in a measured and controlled way. In a new report, The Geneva Association explains the role of capital in insurance as a key metric used to better understand, quantify and manage risk-taking in the insurance business. In doing so, insurance companies are able to protect individuals as well as small businesses and large corporations against the financial consequences of risk.

The properties of the insurance business model, and the characteristics of capital in insurance, have become a bit blurred in the wake of the Global Financial Crisis. Prior to the crisis, non-insurance subsidiaries of a very small number of large, complex insurance groups had engaged in activities that strayed far away from traditional insurance activities. When the crisis erupted, sudden liquidity demands revealed an unprecedented vulnerability, inducing policymakers to place a few large insurance groups next to large banks as source of systemic risk.

One should nevertheless recognise that such developments did not, and do not, describe the mundane reality. The overwhelming majority of the insurance industry engages in traditional insurance activities. It is with these firms in mind that our report endeavours to illuminate the role of capital. As policymakers around the world are engaging in discussions about a global capital standard, we encourage them to be mindful of the salient characteristics of capital in insurance.

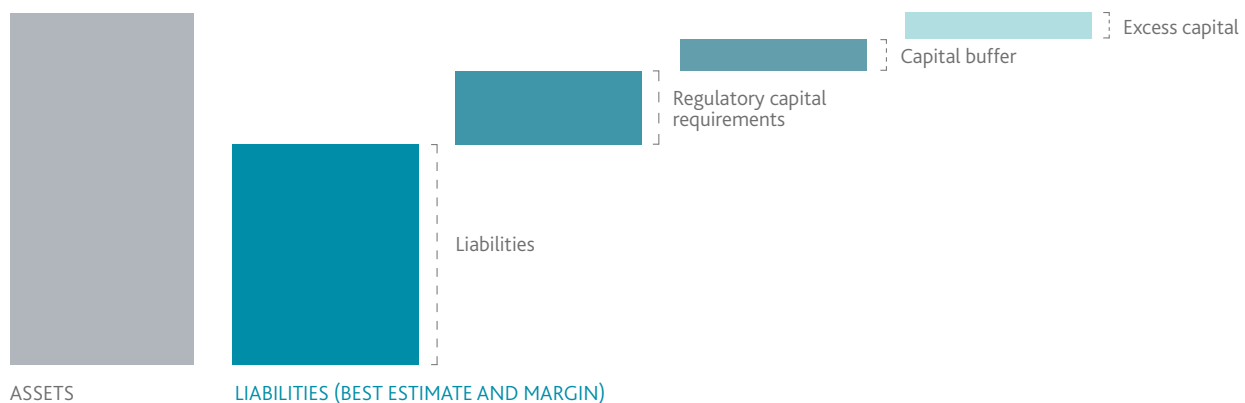
FINANCIAL RESOURCES AVAILABLE TO MEET AND HONOUR POLICYHOLDER OBLIGATIONS

Insurers provide policyholders with a high level of security that the protection and benefits they purchase under policies will be honoured. This is achieved by maintaining various layers of financial protection:

- **Liabilities** are generally established upon issuance of the contract; they reflect the expected value of future obligations. Premium payments received from policyholders are used to purchase financial assets that back the liabilities.
- **Regulatory capital requirements** specify the minimum threshold for the amount of capital insurance companies are required to have. Regulatory capital requirements are designed to ensure that, even if the future loss experience is more onerous than assumed when the liabilities were calculated, the insurer can still be expected to fully honour future claims.
- **The capital buffer** is a company-defined target level of assets held over and above liabilities and regulatory capital requirements to ensure that insurers can withstand an adverse event and still be able to fully meet regulatory requirements. In some jurisdictions, part of the financial buffer is established as a (loss-absorbing) liability.
- **Excess capital** comprises assets in excess of the sum of liabilities, regulatory capital requirements and capital buffers.

This is shown in **Figure 1** below.

Figure 1:
Assets, Liabilities and the Role of Capital



MAIN MESSAGES

The main messages in the new Geneva Association report are:

- **Capital is a measure of funds in excess of what is needed to meet future obligations to policyholders (insurance liabilities).** It is measured on an available basis (how much does the insurance company have?) and a required basis (how much does the insurance company need?). Given the uncertain and often long-term nature of insurance liabilities, the intricacies of insurance products and the complexities of risk exposures, answering these questions can involve intensive calculations and assumptions about the way risks may evolve over time.
- **Insurers receive premiums from policyholders and in return, promise to pay future claims.**¹ Insurers invest premiums received from policyholders in financial assets to support liabilities that the insurer establishes to cover expected future claims payments.
- **The valuation of liabilities is based on assumptions about the future.** In addition to covering expected claims, funds must be established to meet unexpected losses. Depending on jurisdictions, the amount set aside to meet unexpected losses may be established solely as capital, or partly as capital and partly as liability. From an economic point of view, the ability to cover unexpected losses would be the same. Insurers hold financial assets to support both expected claims and unexpected claims.
- **Naturally, there is a risk that the future is different than assumed.** This raises the question whether the financial assets backing the liabilities will suffice to meet all future obligations. Capital is the instrument that insurers hold to help them understand, manage and mitigate the impact of the risks that might unfold.²
- **Capital is key to securing that the financial promises made to policyholders and society at large will be met.** However, capital is not the answer to all economic problems potentially affecting insurers. Distress or failures of insurers historically have been rare. When they did occur, they were primarily the result of (i) poor

management decisions, (ii) exposure to illiquid assets in times of financial distress and (iii) activities outside the core insurance business. And capital is not the only means to back promises made to policyholders. That is why capital requirements are supplemented by a wide range of regulatory requirements on—among other things—the governance of insurance companies, including qualitative requirements and the need to focus on potential liquidity risks.

- **Life insurance contracts usually have long-term cash flows.** An important risk is known as asset-liability mismatch. It concerns the risk that changes in economic and other conditions result in the value of liabilities moving differently than the value of the financial assets held to back them. Conditions that could impact differing valuations include financial market developments such as interest rate and share price movements, but also unexpected changes in longevity, mortality and other underwriting risks.
- **Non-life (also known as general and as property & casualty) insurance contracts are typically short term.** The dominant risks are either that more adverse than expected future claim events occur (in particular, the risk of very large, catastrophic events³) or the risk that provisions set aside for past claim events will end up being inadequate (reserve risk).
- **The investment strategy for the financial assets backing liabilities must reflect the nature of the liabilities.** This underscores the importance of an appropriate asset-liability management (ALM) framework, especially in the life insurance business, where the time horizon of the liability-driven investment strategy may allow an insurer to 'ride out' short-term market volatility. In that sense, short-term market volatility will not impact investment and other decisions. It is on the basis of this sector-specific liability-driven investment approach that insurers can achieve long-term returns for policyholders and shareholders.
- **Insurers hold assets considerably in excess of those needed to back their liabilities to protect the balance sheet against a future being more adverse than expected.** Excess holdings also serve to strengthen the resilience against shocks, such as financial market crashes and natural or man-made catastrophes. Such holdings reflect an insurer's own view of the capital it

1 Future payments made under policies in respect of covered risks (e.g. death, sickness, damage to property and cars, and third-party liability) and accumulated amounts on savings and retirement products.

2 If liabilities also reflect unexpected losses, capital is reduced accordingly. The ability to withstand unexpected losses is not affected by funds being established as a liability or capital.

3 A series of losses from a single underlying extreme event, either a natural event (for example, pandemics, windstorm, flood, earthquake, hail) or man-made events (terrorism).

Figure 2:
The Role of Capital in a Risk Framework



needs to hold. The result of such capital buffers,⁴ held over and above regulatory capital requirements,⁵ is that insurers can withstand adverse events and still meet regulatory requirements, thereby providing policyholders with a high level of security.

- **Risk diversification is key to managing and improving shock resilience.** Diverse risks have different characteristics and drivers, meaning that they are not likely to occur at the same time (they are idiosyncratic and typically not correlated) or to the same extent. For example, geographic diversification means that insurers exposed to storms causing severe losses in Spain are unlikely to simultaneously incur severe storm losses in Norway. Similarly, life insurers writing term assurance and annuity business will benefit from natural risk synergies and offsetting loss developments; the former is vulnerable to more deaths than expected, the latter to fewer.
- **To better manage risk exposures, insurers have developed risk-based capital models.**⁶ The models employ sophisticated techniques to generate probability distributions that help insurers understand the

frequency and severity of different risk events. This includes an assessment of the likelihood of different risks occurring at the same time in order to estimate the benefits of risk diversification.

- **Insurers rely on capital models to support business decisions.** The models also help them determine the type and extent of business (i.e. risks) they will accept. This is usually done in a robust risk framework⁷ (see below) that defines how the model will be used and governed. The risk-based capital model establishes the basis for risk-taking decisions, quantifying risk exposures and defining risk appetites, and helps set limits for different risk exposures.

RISK FRAMEWORKS

The purpose of a risk framework is to identify, measure, manage, monitor and report significant risks in a controlled and robust structure that has clear objectives, priorities, responsibilities and accountability. Internal economic views of capital are at the core of this framework in quantifying risk exposures and allowing them to be monitored against defined limits.

⁴ The capital buffer may be held as part of liabilities to cover unexpected losses.

⁵ Minimum level of capital that regulators require.

⁶ Another term for risk-based capital is economic capital, which is the minimum amount of capital required in the U.S. by the National Association of Insurance Commissioners. Here, the former, more generic, definition is meant.

⁷ A well-defined and structured process that allows a company to identify, measure, manage and monitor its exposures to different types of risks in a robust governance structure.

Figure 2 shows the key elements of a risk framework, illustrating the role of economic capital in relation to the annual and day-to-day activities of insurance companies and the factors (internal and external) influencing these activities.

Insurance capital models guide how best to allocate capital to specific activities, products, geographic regions or entities. Making business decisions that optimise diversification benefits reduces overall risk, and economic capital models are central to understanding this. Examples of decisions for which insurers might rely on capital models are:

- **Investment and ALM strategy**—understanding liability duration to help minimise ALM risk and the possible benefits of hedging certain risks to stay in line with risk appetite or to reduce risk concentrations, thereby improving the benefits of diversification.
- **Reinsurance strategy**—understanding and optimising reinsurance cover to free up capital for alternative uses.
- **Product design/pricing decisions and distribution strategy**—understanding capital intensity and the extent to which different products bring risk exposures that either increase existing risk concentrations or help offset and diversify other risks.

Successful and influential capital models are those that engage with all levels of an insurance company. Capital metrics (the way various risks are analysed and monitored) will feature in feedback loops that link with decision-making bodies (Boards of Directors and senior management). They also influence and help shape key functions, such as risk steering and preferences, product design and pricing, reinsurance strategy, ALM, and capital and liquidity management.