

INSURANCE RATING METHODOLOGY

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1. ABOUT THIS METHODOLOGY

Scope

This methodology presents the broad principles and assumptions that Capital Intelligence Ratings (hereinafter CI Ratings or CI) uses when it rates operating insurance companies. This methodology establishes criteria for assigning Insurer Financial Strength Ratings (IFSRs), which are a new addition to the rating services offered by CI. CI intends to apply this methodology to many types of insurers, including non-life, life, and health insurers, as well as reinsurance organisations. In addition to this master methodology, CI may publish special reports or commentaries providing more insight on specific topics (e.g. reinsurance or Takaful insurance) that are relevant to the entities we rate.

Effective Date and Impact on Existing Ratings

This methodology is effective immediately and will apply to all new insurance ratings. The IFSR is a new industry-specific addition to CI's rating services. Consequently no current ratings are affected by the introduction of this methodology.

Changes Since the Request for Comment

CI Ratings requested feedback on the Proposed Insurance Rating Methodology from subscribers, other stakeholders, and market participants for a period of one month beginning 27 May 2016. No substantive changes have been made to the methodology following the end of the consultation period.

Structure of this Methodology Report

The remainder of this document is organised as follows:

- Section 2 contains an overview of CI's analytical approach for determining IFSRs.
- In Section 3 we provide a detailed description of our assessment criteria for each key rating factor.
- In Section 4 we outline the criteria for determining extraordinary support levels and associated notching.
- In section 5 we explain the relationship between IFSRs and sovereign risk.
- Annex 1 contains the rating scale used for IFSRs.
- Annex 2 contains the guidelines we use for mapping long-term and short-term ratings.
- Annex 3 contains a list of the main quantitative indicators used in our insurance analysis.

2. SUMMARY OF OUR ANALYTICAL APPROACH

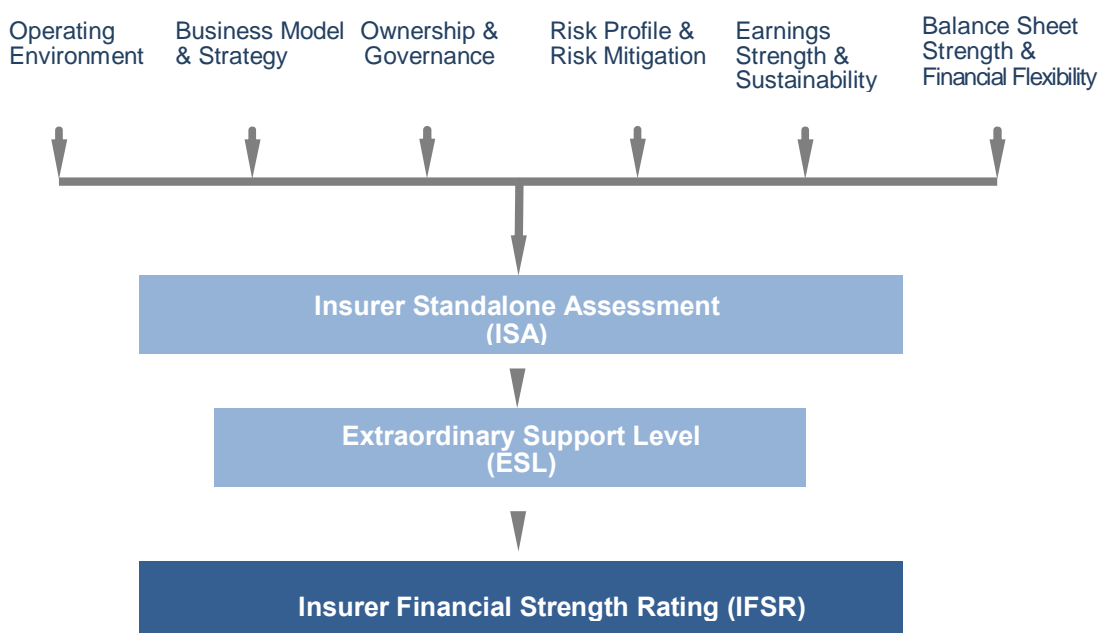
Overview and Framework

The **Insurer Financial Strength Rating (IFSR)** is the main rating that CI assigns to operating insurers. The IFSR provides a forward-looking opinion of the financial capacity and willingness of an insurer to pay its valid insurance contract obligations when they become due. The framework for determining the IFSR is summarised in Box 1 below.

The IFSR takes into account an insurer's standalone strengths and weaknesses, expressed in the **Insurer Standalone Assessment (ISA)**, as well as the likelihood of it receiving extraordinary support from private or public sector owners in the event of financial difficulties, expressed in the **Extraordinary Support Level (ESL)**. The ISA and ESL are not credit ratings per se; rather they are conceptual analytical constructs used in the process of determining the financial strength and creditworthiness of the insurer. The likelihood of extraordinary support may result in the IFSR being set at a higher level than implied by the ISA. Where such support is not deemed likely, the ISA and the IFSR will be set at the same rating level. In contrast to extraordinary support, ordinary (on-going) support is factored into the ISA.

BOX 1: INSURANCE RATINGS FRAMEWORK

When CI rates an insurer we consider both its standalone credit profile (ISA), which is based on six analytical pillars, and the likelihood of it receiving extraordinary support in the event of need (ESL).



Insurer Standalone Assessment

The criteria for the ISA are divided into six analytical pillars:

1. Operating Environment
2. Business Model and Strategy

3. Ownership and Governance
4. Risk Profile and Risk Mitigation
5. Earnings Strength and Sustainability
6. Balance Sheet Strength and Financial Flexibility

Each of the pillars consists of a number of different sub-factors. Each sub-factor is generally assessed as being very strong, strong, satisfactory, moderate or weak. The results of our analysis of each sub-factor are combined to form an overall assessment of each pillar. The assessments of all six pillars are then combined to arrive at the ISA. The relative weights of sub-factors and analytical pillars are decided by CI's rating committee and may vary according to entity-specific circumstances.

The mapping from pillar descriptors to indicative, or baseline, ISA categories is shown below.

Analytical Pillar		Indicative ISA Category
Very Strong	→	aa
Strong	→	a
Satisfactory	→	bbb
Moderate	→	bb
Weak	→	b

Where appropriate, we may assign ISAs above ~~aa~~ or below ~~bb~~. We may also append the ~~±~~ and ~~±q~~ modifiers to the ISA in order to give a more granular view of the insurer's standalone financial strength.

The ISA incorporates some, but not all, aspects of sovereign risk. Where the baseline ISA is higher than the sovereign rating of the country in which the insurer is based, we will give additional consideration to whether the insurer would be sufficiently robust to withstand the direct and indirect effects of a government default, or whether the sovereign's rating should represent a limit for the insurer's rating.

Given that insurers generally carry out their business within national borders and have high exposure to the local economy and home sovereign, we would expect, in most cases, the ISA and the IFSR to be no higher than the rating of the sovereign. The sovereign does not impose an insuperable constraint on insurer ratings, however, and in certain cases strong insurers with low vulnerability to sovereign risk could be rated up to 3 notches above the sovereign (see Section 5).

Extraordinary Support Level

Once we have established the ISA, we evaluate the likelihood that, in the event of difficulties, the insurer would receive extraordinary external support. We capture the likelihood and the dimension of such potential support in the ESL. Extraordinary support may be ~~added~~ to the ISA in order to arrive at the IFSR, provided the likelihood of such assistance being forthcoming is deemed to be in the range from ~~moderate~~ to ~~very high~~. In line with CI's rating guidelines, the insurer's ratings could potentially be uplifted to the rating level of the support provider, although in most cases we would expect the uplift to be limited to one or two notches.

Rating Scale and Definitions

The scale for IFSRs and the associated rating definitions is given in Annex 1. Outlooks are also assigned to the IFSR to indicate the likely direction of a change in the rating over the next 12 months. A Positive (Negative) outlook signals a better than even chance that the rating will be raised (lowered) within a year. A Stable outlook indicates that the rating is unlikely to change within the next 12 months.

Parents-Subsidiary Considerations

Under our framework, the rating of a subsidiary would generally be no higher than that of its parent. Where appropriate, we may analyse the credit profile of an entire group as if it was a single entity. The resulting assessment may be used to establish a limit for the ratings of individual group members. The rationale for this treatment is CI's view that excess capital (i.e. capital above regulatory solvency thresholds) is generally fungible and, where the financial need arises, may be transferred from a relatively strong subsidiary to another group entity by the parent (unless other regulatory restrictions apply).

In most cases the rating of an insurance company, including a foreign-owned subsidiary, would not be above the rating of the relevant sovereign. While a domestic branch of a rated insurer would automatically benefit from the rating of the rated parent, the rating of a foreign branch would take into account, and may be constrained by, risks relating to the host sovereign and country.

Relationship with Other Ratings

The IFSR is generally the starting point for other ratings. Where an insurance company issues debt, CI would, on request, also publish a debt rating. Debt ratings are generally notched down from the IFSR subject to local law, seniority or deferral stipulations. In jurisdictions such as the European Union (EU), where policyholders have a preferred senior position compared with other obligations of an insurer, CI will generally assign lower ratings to an insurer's debt obligations compared to its IFSR. Conversely, in countries where policyholder obligations rank *pari passu* with debt obligations, or similarly in the case of reinsurers, senior unsecured debt would generally be rated at the same level as the IFSR.

National Ratings

In some markets CI may also assign ratings on a national scale. Unlike IFSRs, national ratings are not comparable across countries and refer instead to the creditworthiness of issuers or issues relative to all other issuers or issues in the same country.

Takaful Insurers

CI Ratings will generally apply the same methodological approach to both Takaful firms and conventional insurers. However, there are a number of factors that are unique to Takaful insurers which can have a significant impact on the risk profile, and subsequently the rating, of such companies.

Takaful is a system of Islamic insurance based on the principles of *Taqwun* (mutual assistance) and *Tabarru* (voluntary contribution), where risk is shared collectively by a group of participants who, by paying contributions to a common fund, agree to jointly guarantee each other against loss or damage. Takaful follows Sharia (Islamic) law principles, which do not allow *Gharar* (uncertainty or speculation), *Maisir* (gambling) and *Riba* (usury).

A Takaful firm typically operates two separate funds within one company: a Takaful (policyholder) fund and a shareholder fund. In effect the manager of the shareholder fund also acts as operator of the Takaful fund. Both funds have separate balance sheets and profit and loss accounts.

When analysing Takaful insurers, CI will put specific analytical focus on issues such as:

- The type of Takaful business model employed, corporate governance and the role of the Sharia board.
- The relative strength of the policyholder fund and the shareholder fund, as well as the inter-relationship between them.
- The availability of Sharia compliant investment opportunities.

CI Ratings will provide specific commentary on Takaful Insurance in the near future.

3. INSURER STANDALONE ASSESSMENT: ANALYTICAL PILLARS

In this section we explain the rationale for each of the six analytical pillars of the Insurer Standalone Assessment (ISA) and outline the criteria used to assess the underlying key rating factors. The analytical pillars are:

1. Operating Environment
2. Business Model and Strategy
3. Ownership and Governance
4. Risk Profile and Risk Mitigation
5. Earnings Strength and Sustainability
6. Balance Sheet Strength and Financial Flexibility

ANALYTICAL PILLAR 1

OPERATING ENVIRONMENT

The financial strength of an insurance company is influenced by the political, economic and regulatory environment of the country, or countries, in which it operates, and also by the structure and dynamics of the industry itself. The demand for insurance products and the growth of premiums are linked to the level of development and performance of the economy, while the ability to undertake asset-liability management and to generate the investment returns needed to pay future policy claims are affected, *inter alia*, by macroeconomic and financial market conditions, the depth and breadth of local financial markets, and prudential regulations.

A marked slowdown in economic activity or increased volatility can have a profound impact on an insurer's balance sheet and profitability through a number of channels, including a decline in new business, early termination of existing contracts (with life insurance being particularly vulnerable), and lower asset values. Likewise, a decline in interest rates to persistently low levels may potentially erode earnings and claims-paying capacity by increasing reinvestment risk, driving down investment returns, and pushing up the value of liabilities (especially for life insurers). Inflation may also cause problems for insurers, particularly if not adequately reflected in the price of long-tail products.

The franchise strength and growth prospects of an individual insurer may also be affected by the size, structure, sophistication and general risk profile of the insurance sector and broader financial system in which it is active. For example, low barriers to entry and overcapacity may lead to strong pressures on pricing and profitability, while market fragmentation may potentially undermine long-term industry stability.

Institutions also matter for the soundness of the insurance industry. Regulatory and legal frameworks influence the scope of insurers' activities and the risks that they take, while effective supervision facilitates the identification of problems at weak insurers before they become severe.

Assessment Criteria

Our assessment of the operating environment takes into account a number of factors that may affect insurer credit fundamentals and business prospects. The key rating factors are:

1. Economic Risk
2. Industry Structure and Trends
3. Regulatory Environment

The impact of political risk on operating conditions is also considered, where significant.

KEY RATING FACTOR 1

Economic Risk

Our assessment of economic risk draws on the analysis of our Sovereign Ratings Unit and takes into account the resilience of the economy to unanticipated disturbances and its capacity to generate real output growth, raise living standards, and facilitate business planning and growth opportunities.

As part of our analysis we examine the country's economic structure, paying particular attention to the generation and distribution of per capita income, the diversification of the production and export bases, general economic competitiveness, and the pace and depth of structural changes. We also consider the susceptibility of the economy to exogenous shocks, including events of particular relevance to the insurance industry, such as natural disasters.

We assess the outlook for the real economy, including the labour market, and evaluate the appropriateness of the macroeconomic policy mix, as well as the stability of domestic prices and the exchange rate regime. We also take into account developments in the money, capital and real estate markets and explore national and sectoral balance sheets for imbalances that may increase financial vulnerability, such as high leverage, high foreign currency exposure, or reliance on short-term funding.

Our analytical conclusions do not simply reflect the general level of economic risk. Importantly, we consider what the various strengths, risks, vulnerabilities, as well as the outlook for the economy mean for the insurance sector, including in terms of revenue growth, investment-related risks (taking account also of the diversity of investable opportunities) and business volatility.

KEY RATING FACTOR 2

Industry Structure and Trends

The financial strength of the individual insurer is also affected by the strengths, weaknesses, vulnerabilities and growth prospects of the wider industry in which it operates. Our industry assessment focuses on industry-specific structural and secular factors that may influence the demand for and availability of insurance products, as well as affect the franchise strength of incumbents and the general risk profile of the industry.

We consider the size and depth of the insurance market in terms of premiums to GDP and premiums per capita, as well as the number and types of insurers active in the market, the diversity of the customer base and the variety, risk profile and $\%tail+$ (meaning the settlement time for claims, which is typically short-tail in property insurance and long-tail in liability insurance) of the product range. We consider the medium to long-term growth prospects for the industry, both in general . taking into account factors such as demographic trends, income growth, and legal and regulatory changes (including to the classes or enforcement of compulsory insurance) . and with regard to the market segments in which the rated insurer is active.

We assess market concentration and competition and consider the implications of current conditions and likely future developments for franchise strength and market stability. Concentration is often, though not always, viewed as a positive factor as insurers operating in concentrated markets are typically able to achieve greater market power and higher franchise values than those operating in more diffuse environments. By contrast we tend to regard highly fragmented insurance sectors unfavourably, as the number of players relative to the size of the market tends to constrain overall

efficiency and profitability. In addition, fragmentation may raise some concerns about long-term market stability, particularly where consolidation pressure is expected to increase.

Competition may be a positive or negative factor depending on how it shapes the risk profile of the industry. For example, competition may be a driver of institutional efficiency and product innovation, thereby supporting sustainable insurance sector growth. Conversely, in some settings competitive pressures may contribute to declining franchise values, significant premium discounting and weaker pricing power (in turn increasing reliance on investment returns), or to aggressive commercial practices that drive up underwriting risk and miss-selling risk.

CI\$ industry assessment also entails an examination of the strength, or insurmountability, of barriers to entry – both regulatory and operational – and the implications for insurance sector stability. In CI\$ view high barriers to entry are more typical in developed countries with strong institutional frameworks. In such markets regulatory barriers may be relatively low or moderate but operational barriers tend to be high, reflecting the sophistication of some products and the required scale and cost of investment in IT, know-how, and distribution systems. In some developing markets the combination of low regulatory requirements and moderate operational barriers to entry may make it challenging for new entrants to what is often an already fragmented market to generate scale advantages and, consequently, profitability.

The impact of government policy on the insurance industry is also assessed. In particular we consider the impact on business models and financial performance of any restrictive regulations, for example on product pricing, permissible lines of business, or geographic expansion. Where relevant, we also take into account the capacity of domestic insurers to withstand more intense competition from foreign insurance groups.

We also assess the role of the insurance sector in the wider financial system and the extent to which the sector faces, or may be expected to face, competition from non-insurance financial service providers (for example, car producers and dealers in the motor insurance segment). We also take into account, where applicable, the impact of technological innovation and digitalisation on traditional market structures and business models.

KEY RATING FACTOR 3

Regulatory Environment

We consider the extent to which regulatory and supervisory frameworks support a sound and healthy insurance industry or, conversely, the degree to which existing or emerging weaknesses in such frameworks could have an adverse impact on the financial stability of the sector.

In CI\$ view, a strong and comprehensive risk-based regulatory framework is essential to ensure the safety and soundness of the insurance sector. Equally important is the existence of efficient supervisory structures that are independent, competent, and adequately staffed (including with a sufficient number of well-trained actuaries). Supervisors must not only be empowered to enforce regulatory standards, but also proactive in their interventions and timely in their supervisory actions.

We are aware that at first glance many regulatory frameworks exhibit similar features. However, closer inspection often reveals significant differences in terms of the scope and rigor of regulatory standards. In addition, the quality and enforcement capabilities of regulatory and supervisory institutions can vary greatly, even after taking into account the relative size and complexity of the sectors they oversee.

In evaluating the regulatory environment we put great emphasis on the following: (a) the scope and quality of prudential regulations (including with regard to solvency capital, the management of investment risk, and public disclosure); (b) the capacity of the authorities to identify institution-

specific and broader industry risks; and (c) the track record of the authorities in taking timely corrective action and in resolving failing insurers whilst preserving confidence in the sector.

In addition to regulatory and supervisory frameworks, we also consider the overall strength and predictability of a country's legal system and the speed and impartial enforcement of legal rights and contracts. We also take into account the quality of financial reporting and may make a negative adjustment to our overall assessment of the operating environment in cases where we have significant concerns about the accuracy of financial data in the insurance industry, due to poor accounting and auditing practices.

ANALYTICAL PILLAR 2

BUSINESS MODEL AND STRATEGY

In this pillar we assess the robustness and resilience of an insurer's business model and competitive position. We also consider the experience and effectiveness of management in steering the company's strategic course, setting risk tolerances, and coping with operational challenges.

The sustainability of an insurer's business model typically reflects the robustness and resilience of its competitive position, the strength of its brand and reputation, as well as its diversification by product and geography. Together, these factors form the basis of an insurer's ability to generate and maintain appropriate levels of high-quality earnings and capital, in turn enabling it to withstand periods of economic or financial market stress, honour its insurance contract obligations, and ultimately to satisfy owners' dividend expectations.

Management's ability to develop and execute adequate strategic plans is critical in shaping an insurer's business model and franchise. Franchise strength, in turn, is underpinned by those factors which make an insurer competitive, that differentiate it from its rivals, and which are difficult or costly to replicate.

CI therefore seeks to form an opinion regarding an insurer's market position, its competitive strengths and weaknesses, the benefits (or risks) stemming from diversification (or lack thereof), and potential growth opportunities (or limitations) in the context of an insurer's financial and operational capacity. CI also strives to understand the key characteristics of organizational structures and efficiencies that create the foundations for competitive strengths and weaknesses.

Historical evidence suggests that the origins of insurer distress are often rooted in non-viable business models, overambitious strategies, or significant changes in the operating environment. Such weaknesses can lead to the erosion of franchise strength and customer confidence and, consequently, to revenue losses.

Some of the common characteristics of non-viable business models include, but are not limited to, the following:

- Overambitious strategic assumptions and poor execution by a weak management team. In particular excessive optimism about capabilities, growth opportunities, and market trends can lead to poor strategic decisions (often accompanied by under-pricing and under-reserving) and threaten the viability of an insurer's business model.
- Aggressive expansion and large-scale acquisitions in new business areas or outside traditional home markets, or a shift in insurer activities, including expansion of more volatile activities or investment in high risk or illiquid securities and derivatives. Such developments can make insurers more complex and ultimately more difficult to manage.
- Revenue and earnings volatility, identified by significant changes in the earnings mix or earnings levels over a relatively short time frame, and particularly when driven by non-core business lines. Such changes may also indicate vulnerability to challenges in the operating environment, such as low interest rates.

In CI's opinion, the insurers that are best able to generate and maintain strong recurring earnings, build strong capital buffers, and withstand prolonged adverse economic or financial market conditions tend to share a number of characteristics. In particular such insurers generally have business models that are stable and predictable, provide good growth potential, and also benefit from strong and defensible franchises, realistic strategic ambitions and adequate capabilities. Such insurers also tend to demonstrate strong resilience against adverse developments in the operating environment, including regulatory changes and tend to be less at risk of failure or default compared to insurers with weaker characteristics.

Assessment Criteria

CI's assessment of an individual insurer's business model and strategy looks at how the insurer is positioned and performs within its operating environment. Our analysis of an insurer's business model and strategy includes the following two key rating factors:

1. Business Model and Franchise Strength
2. Management and Strategy

The analysis aims to identify and assess, on a forward-looking basis, those areas that are most relevant in terms of the current viability and future sustainability of an insurer's business model and strategy, and are most likely to increase the institution's resilience or vulnerability to changes in the operating environment. Such vulnerabilities could emerge from a variety of developments, including changes in the economic, business or regulatory environment, but also from developments like acquisitions, expansion (local or international), or management failures. Vulnerabilities could also emerge from the misalignment of an insurer's business model and strategy with changing market conditions.

KEY RATING FACTOR 1

Business Model and Franchise Strength

There are significant differences in insurer business models globally and numerous labels exist for classifications. Relevant aspects in CI's assessment of an insurer's business model and franchise include:

- Business mix, diversification, concentration and correlation of activities.
- Distribution capabilities.
- Reputation and brand.
- Stability and predictability.

The product, client and service mix of an insurer greatly affect the riskiness of its business. There are lines of business that are not prone to the same risks and thus can provide risk diversification, whereas other products are vulnerable to the same events, resulting in accumulation risk. For example, long-term life insurance products often have contract durations exceeding 20 years (especially with guarantees) and are therefore very sensitive to interest rates, whereas short-term, annually renewable property business (for homeowners) is not. Short-tail property business is often significantly exposed to natural catastrophes, whereas liability business is not. Another aspect to consider is that with short-term lines of business premiums can generally be adjusted quickly, whereas in long-term lines, such as traditional life insurance, the insurer is in many countries bound by the originally agreed terms over a very long time, which can create significant risks.

There are also insurers that focus on private lines of business, whereas others focus more on commercial business, both of which require different sets of product and distribution capabilities. Insurers may also choose to focus on a low-cost, low-service, low-premium strategy, whereas others focus more on service driven strategies. In addition many insurance offerings have become commodity type products and digitalisation is changing business models and importantly the interaction between an insurer and its clients. Geographic diversification can also be considered to be a tool to improve risk diversification, but this has to be evaluated very cautiously in CI's view.

CI also considers if the products sold are largely legally mandatory products (like motor third party liability insurance), or if they are commodity type or value-added products, as this may influence customer purchasing behaviour and loyalty.

CI examines the company's distribution network and considers, in particular, whether it is dependent on single distribution or multi-distribution channels and to what extent it can influence its distribution channels. We consider the appropriateness of these arrangements given the type and scale of the business, the productivity of the network, as well as the impact on the retention of existing customers and the growth of new business.

Finally, CI seeks to understand an insurer's initiative for building reputation and brand, as confident and satisfied clients appear to be one of the best sources of competitive success.

CI believes that well diversified insurers with low concentrations and limited correlations (in terms of geography, business segment, product, and client) are generally better positioned to withstand cyclical swings and extended periods of economic stress. However, such diversification needs to go hand-in-hand with adequate expertise, financial and operational capacity, and should finally translate into superior franchise, earnings and capital strength.

In addition to the above, there are also various measures that may be used to assess the market position of an insurer, including indicators of market share, market rankings, and product rankings.

Strong market positions are often, but not necessarily, associated with competitive advantages such as better pricing power, greater economies of scale, stable client relationships, more favourable growth opportunities, and higher operational barriers of entry for competitors. Such credentials should ultimately lead to stronger business and earnings stability and predictability and hence a reduced likelihood of failure.

Strong market positions are sometimes equated with the size of the insurer, as large companies are perceived to benefit from economies of scale. However, in CI's view size does not guarantee sustainable economic success, as the complexity of larger groups requires more sophisticated managerial and risk-management capabilities. The cost of which may partially offset some of the benefits of scale. Indeed, small-scale insurers can thrive as niche players with defendable and profitable business positions.

Historically, the legal form under which an insurer operated was also an important distinguishing factor. Today, the impact of such differences on business models has largely diminished, but they are still important for the assessment of a company's governance and financial flexibility.

CI also analyses the extent to which an insurer is able to mitigate related risks through its underwriting practices, as well by its competitive behaviour. In CI's view, a well-diversified book of business may create the substance for an overall balanced portfolio, as well as the insurer's ability to withstand cyclical swings. However, product and geographic diversification may not necessarily be positive rating factors. The key point is whether they are reflected in earnings diversity and sound profitability.

KEY RATING FACTOR 2

Management and Strategy

CI aims to assess whether an insurer's plans are sound and realistic in the context of its current business model and franchise and given its managerial, financial and operational capacity. The senior management team plays a crucial role in formulating and executing an insurer's strategy and in shaping its business model, risk appetite and risk profile. Weaknesses in any of these areas could over time translate into weaker financial strength.

In CI's view, the following factors are relevant in identifying potential weaknesses and challenges regarding an insurer's senior management team and the execution of their strategic ambitions and plans:

- The ability of management to sustain the business model and organization . This includes consideration of the architecture of the business model; the track record in adjusting the business model to environmental changes (e.g. digitalisation); limitations due to financial or operational constraints, or to the excessive influence of owners; and the ambitiousness of plans.
- Steering in accordance with operational financial targets and risk tolerances . Here we consider the implementation and active use of a risk appetite framework; the implementation of operational and financial standards; the insurer's underwriting record; the implementation of risk-reward strategies; and the compensation of management and whether it is linked to short-term targets.
- Depth, experience and effectiveness of management . This includes consideration of the management team's expertise and experience; the involvement of senior management in risk management and strategic planning; the degree of reliance on a small number of key people; the ability to attract and retain qualified staff (including actuaries); the turnover of key staff; succession planning; success in achieving plans; and management's relationship with regulators.

ANALYTICAL PILLAR 3

OWNERSHIP AND GOVERNANCE

In this pillar we consider the complexity and effectiveness of an insurer's ownership and organisational structures, risk management framework and practices, as well as accounting, disclosure and transparency standards.

Sound ownership and governance structures are beneficial to an insurer's business and financial profile. For example, a member of a group may benefit from skills and capabilities developed on a group basis (including managerial methods, risk management, and other best practices), enjoy preferred access to international clients, have the ability to tap into group-wide liquidity pools, and have access to financial support in order to facilitate growth or overcome difficult financial situations.

Conversely, unrealistic expectations or undue influence exercised by an insurer's owners can contribute to poor strategic decisions and ultimately jeopardise the viability of the business model. Furthermore, a lack of relevant and timely financial disclosure or an aggressive interpretation of accounting standards (or exploitation of accounting loopholes) can make it difficult for stakeholders to monitor and identify adverse developments at an early stage.

A critical element of the analytical process, therefore, is to assess the effectiveness of the insurer's ownership and organisational structures, risk management frameworks and practices, as well as the insurer's accounting, disclosure and transparency standards.

CI views unfavourably insurers that are subject to undue influence from their owners (or other external stakeholders), have opaque organisational structures, lack adequate and effective risk management and control functions (including internal audit, credit review and compliance functions), and exhibit low levels of financial disclosure and transparency.

Assessment Criteria

CI's analysis of ownership and governance includes the following four key rating factors:

1. Ownership
2. Organisational Structure and Complexity
3. Risk Management and Control
4. Accounting, Disclosure and Transparency

The assessment of these factors is largely driven by qualitative judgements, taking into account behaviour through both good and bad times. Information on acquisitions, corporate restructurings, lawsuits, and legal settlements may also be used to provide insight into an insurer's governance and management capabilities.

If there are no significant weaknesses in any of the four factors, CI will generally treat ownership and governance as neutral in terms of the impact on ratings. However, if one or more deficiencies are detected, we will generally treat ownership and governance as a negative factor and ratings may be affected as a result.

KEY RATING FACTOR 1

Ownership

There are significant differences in ownership model and structure among insurers worldwide. The various types include stock-market listed insurers with a diversified shareholder base, insurers owned or controlled by an individual or a small number of shareholders (typically family or other related parties), insurers owned by other (strategic) financial institutions, and insurers under public sector ownership, where owners are typically central government entities or regional, state or local governments. Additionally, there exist member-owned insurance companies or groups organised under co-operative or mutual ownership models.

The focus of this key rating factor is on identifying and weighing up the potential challenges and benefits which can stem from the different ownership models. We pay particular attention to conflicts of interest arising from an insurer's ownership model and structure, how these are managed or mitigated, and what impact actual and potential conflicts could have on an insurer's risk profile and financial strength.

CI also assesses the various benefits (or challenges) that an insurer may receive from its owners. Ordinary and ongoing support is reflected in various elements of the ISA, while extraordinary support is considered separately. For both forms of support CI takes into consideration the owner's capacity, ability and willingness to provide support, as well as their long-term strategic commitment to the insurer (see Box 2 in Section 4).

In CI's view the following factors could have a negative impact on an insurer's risk profile and financial strength:

- Concentrated ownership structures . for example institutions owned by management, a family or families, or by non-financial corporate, particularly where there are concerns about corporate governance or succession.
- Opaque or overly complex ownership structures . which can create significant challenges in terms of risk management and board overview.
- Undue public or political influence exercised by owners . including by directing specific insurance coverage or prices, directed investments, or insider and related-party transactions.
- Unrealistic or aggressive financial expectations by shareholders.
- Business activity driven by related parties . including shareholders and other companies within the same group.

KEY RATING FACTOR 2

Organisational Structure and Complexity

CI analyses the structure of an organization and, where relevant, the significant subsidiaries or sister companies within a group. CI also assesses whether the group structure is effective for meeting the group's goals and if there are entities within the group that might negatively impact the financial strength of the rated insurer or the credit profile of the entire group.

In many industrialised countries the organisational and legal structures of insurance companies, as well as their business models and activities, have become increasingly complex. In some cases this has been driven by domestic and cross-border acquisitions, as well as by tax and regulatory arbitrage considerations. Complex corporate structures also reflect the diversity of business lines,

making it important to carve out the legal entity which is being rated and its intra-group relationships with holding companies and sister entities, such as reinsurers.

In CI's view such complexity may pose serious challenges for management and boards, including their ability to monitor activities, evaluate risk and manage the impact of complexity on the insurer's profitability, capital, and risk profile. CI also considers whether the economies of scale achieved by such complex structures are partially offset by the cost (including large head office organisations) necessary to maintain them. In contrast, smaller organisations, which may lack economies of scale, may potentially be run more efficiently and flexibly.

KEY RATING FACTOR 3

Risk Management and Control

This rating factor involves an assessment of the effectiveness of an insurer's policies, procedures and resources for identifying, measuring, monitoring and controlling risk, as well as its ability to maintain risk levels within acceptable limits. This includes the capability to use the same measurements across a company or a group. CI's analysis also includes an assessment of an insurer's risk culture and risk appetite, its application of strategic risk management and capital allocation based on risk-adjusted returns, as well as how it has managed underwriting risk and investment risk over time and through the economic cycle. The involvement of risk management in correctly modelling and pricing underwriting and investment risk is often a key ingredient in an insurer's financial performance and long-term viability, to a greater extent than is generally the case with banks.

We focus here on the structural and formal ways an insurer steers its activities to ensure any losses generally fall within tolerable levels. The actual risk profile on the insurer is considered in Analytical Pillar 4, Risk Profile and Risk Mitigation.

CI expects insurers to have in place an appropriate risk management function and hence we treat risk management as a neutral rating factor unless there are significant deficiencies.

Our evaluation of risk management and control takes into account the following:

- The complexity of the business model of the insurer and management's risk appetite.
- The active use of an appropriate risk appetite framework, including risk tolerances and risk limits; evidence of monitoring actual risk exposures versus risk limits; demonstrated commitment to sound risk management by the board of directors and management.
- Formal risk management structures, including internal audit and compliance.
- The strength and rigour of formal risk policies and whether standards are likely to be eroded under competitive pressure.
- The comprehensiveness of risk management and related systems, including whether the interrelationship of various types of risks (such as underwriting, investment, credit, concentration and liquidity risk for counterparty exposures) is adequately captured.
- The involvement of risk management in product pricing and development of new products.
- Evidence of risk-based models covering all major business exposures; determination of adequate levels of own funds; and adherence to regulatory capital requirements.
- Whether the company focuses primarily on risk control (thereby concentrating on downside protection) or whether it has developed a holistic and consistent risk-based and economic methodology to assess and steer risks actively and prospectively (strategic risk-return management).
- Processes for identifying emerging risks and addressing or mitigating the related threats.

- The insurer's track record in successfully managing risk through the economic cycle and periods of stress, including its performance relative to country peers.
- The insurer's management of and vulnerability to operational risk. Operational risk can take various forms. It can involve people (conduct, fraud, incompetence), system failures (breakdowns in systems or technology), process failures (back-office problems), or outsourced functions.

In terms of potential conduct risk, CI will assess the relevance and significance of potential exposures to:

- Miss-selling or pushed cross-selling of products, especially in private line business.
- Conflicts of interest in conducting business.
- Poorly designed distribution channels that may enable conflicts of interest with false incentives.

KEY RATING FACTOR 4

Accounting, Disclosure and Transparency

Comprehensive, relevant, accurate and timely disclosure of information on an insurer's financial condition and performance, business activities, and risk management practices are essential for sound and effective corporate governance. Otherwise it is difficult for shareholders, non-executive board members, policyholders, intermediaries, other relevant stakeholders and market participants to monitor the performance and risk profile of an insurer and the effectiveness of its management.

Equally important, CI believes that strong (internal) management information systems (MIS) supported by robust information technology platforms play an increasingly important role for enhancing management and board oversight and decision-making.

In recent years, CI has observed an improving trend in the frequency, timeliness, comprehensiveness, materiality and comparability of insurers' financial reporting and related disclosures, including the successive implementation of International Financial Reporting Standards (IFRS) across most developed and developing markets. Despite such improvements, CI still observes material differences in the quality of public disclosure and transparency across countries and between individual insurers.

The same holds true for the interpretation of regulatory and accounting standards by individual insurers. Indeed CI considers to what extent an individual insurer exploits any accounting latitude (for example with regard to provisions for technical reserves and earnings recognition) in order to paint an overly positive picture of its financial health. We also consider the substance of any qualified opinions issued by the auditor in the annual report.

As with other elements of this analytical pillar, a favourable assessment of this key rating factor is unlikely to have a material impact on ratings. However, significant weaknesses in the timeliness, comprehensiveness, relevance or accuracy of financial and other important information may have an adverse or constraining impact on ratings.

ANALYTICAL PILLAR 4

RISK PROFILE AND RISK MITIGATION

Taking and managing risk is an insurer's core business. Traditionally, underwriting activities and investments have been the most important sources of risk for insurers. More recently other types of risk – including operational, strategic and reputational risk – have grown in importance.

In this pillar we consider the wide array of risks an insurer is taking, including how relevant and interrelated these risks are. The potential impact on an insurer's business model, earnings, capital position and, ultimately, its financial strength are of critical importance in CI's rating analysis.

We focus in particular on the following key risks, the relative importance of which may vary from insurer to insurer, and over time:

- Insurance underwriting risk – which refers to the risk that the cost of claims and benefits may deviate from the expected cost owing to errors, changes in circumstances, or due to inadequate pricing and provisioning assumptions.
- Credit risk – namely the risk to current or anticipated earnings or capital arising from default by, or fluctuations in the creditworthiness of, securities issuers, counterparties and other debtors against which an insurer has a valid claim.
- Market risk and asset liability mismatch (ALM) risk – market risk refers to the risk of financial loss or adverse change in the financial situation of an insurer arising from movements in market prices as a result of changes in interest rates, foreign exchange rates, and equity and real estate prices. ALM risk arises from differences in maturities between an insurer's liabilities and investments.

Other risks that insurers face – such as liquidity risk, operational risk and strategic risk – are captured elsewhere in this methodology.

Assessment Criteria

Our evaluation of an insurer's risk profile and risk mitigation is based on four broad-based key rating factors:

1. Balance Sheet Structure, Asset Mix and Concentration
2. Insurance Underwriting Risk
3. Credit Risk
4. Market Risk

We draw on a range of sources to assess an insurer's risk profile, including annual reports, investor presentations and, where available, regulatory filings. Increasingly, regulators are conducting and publishing stress tests and additional analyses, which – although still seldom available for individual insurers – can provide valuable general information regarding the risk profile of the sector. Discussions with senior management and internal risk managers can also provide additional insight. Analysis is, however, often made challenging by a lack of public disclosure, sufficiently harmonised international definitions, and differing national (and intra-national) practices. This results in limitations in using quantitative indicators when assessing an insurer's asset quality and requires analytical and qualitative judgements.

KEY RATING FACTOR 1

Balance Sheet Structure, Asset Mix and Concentration

CI analyses the structure and composition of an insurer's balance sheet and seeks to understand the riskiness of the various components, particularly where concentrations exist. (Concentration risk means all risk exposures with a loss potential large enough to threaten the solvency or the financial position of the insurer.)

Insurers receive premiums upfront and generally transfer a significant part of this income to technical reserves. These reserves provide the basis for meeting claim payments when they become due. The funds remain at the insurer's availability until the final claims settlement. As insurers have to invest the funds related to technical reserves and generally have only small portions of fixed assets and intangibles, the asset side of the balance sheet tends to be dominated by invested assets. However, where an insurer has acquired insurance portfolios intangibles can be sizeable. In addition, reinsurance recoverable may be significant . a potential source of credit risk . where the business model is dependent on support from reinsurers.

The liability side of the balance sheet of an insurer is typically dominated by obligations or potential obligations against its policyholders or other related claimants. The nature of these contractual obligations is different to ordinary debt as technical reserves are generally fully financed via the profit and loss account in the year in which they are incurred, whereas debt needs to be financed by future earnings or new sources of funding. The main risk inherent in these technical reserves is that they may prove to be insufficient, which could adversely affect profitability. CI is aware that inadequate loss reserves have been the primary cause of many insurer insolvencies. However, for an insurer with sound loss reserves, little or no debt on its balance sheet, and good underwriting profitability, the liability side of the balance sheet should generally not create any major problems.

Consequently, for many insurers balance sheet risks are more likely to stem from the asset side rather than from the liability side. In assessing the asset mix and concentration risk, our first step is to analyse the current asset mix in terms of its fundamental soundness and consistency with the insurer's stated business and investment strategies. To the extent that data are available, we analyse the asset profile of the insurer by type of risk exposure (e.g. bonds issued by the government and public institutions, corporate bonds and loans, other fixed income securities, equities, real estate, amounts due from reinsurers), as well as by size, maturity, currency, economic sector, and geographical distribution.

We consider a number of factors including:

- The diversity of assets and avoidance of excessive concentrations.
- Excessive exposure to high risk assets such as (unlisted) equities or real estate (investment leverage).
- High exposure to single industry or economic sectors, single issuers or counterparties (including sovereigns).
- High exposure to reinsurers.
- High exposure to related or connected parties, such as entities within the same group.
- Relatively high portions of fixed assets and intangibles, including goodwill (such assets may not be realizable if liquidity is needed).
- The relevance of specialised lending exposures which exhibit a high level of complexity and riskiness.

- A high share of investments in foreign currency, particularly if these are not linked to obligations in the same currency.
- Recent changes in the risk profile of assets.

The most important vulnerabilities in the asset structure tend to arise from high exposure to individual issuers, high sector concentrations, or excessive exposure to high-risk investments. Such concentrations may leave an insurer vulnerable to financial losses in the event of the creditor or sector experiencing serious financial difficulties. In CI's view, diversification is therefore an important line of defence against major investment losses.

For non-life insurers in particular, the reliance on reinsurers may be vital to the company's business model. Additionally, significant exposure to a relatively small number of low rated or unrated reinsurers may threaten capitalization, as write-offs could impact earnings and capitalization.

KEY RATING FACTOR 2

Insurance Underwriting Risk

Insurance risk refers to the risk that the premiums received by an insurer may not be sufficient to cover the total burden of the cost of claims and benefits and administration and acquisition expenses.

As part of this assessment we seek to establish the extent to which an insurer understands its exposure to the various types of insurance risk and what conclusions it draws from such analysis. We take into account how product-specific risks are being mitigated by means of pricing, underwriting, competitive behaviour and by controlling or influencing distribution channels. In our opinion adherence to processes for underwriting, product design and pricing, claims management, reserving, and reinsurance management is essential to identify, evaluate, mitigate, monitor and control insurance-related risks.

The risk that the actual cost of claims and benefits may deviate from original expectations may be affected by the insurer's product profile. For example, property lines of business are often more exposed to low frequency, high severity events, including natural disasters. Liability and similar lines of business are often more influenced by developments or events that can affect a whole portfolio in similar ways, for example unanticipated changes in judicial practices or laws. For life insurers, underwriting risk may be affected by changes in longevity and mortality patterns, which may lead to claims being higher than charged for in premiums.

Premiums have to be calculated for future periods, but future claims burdens cannot be calculated with certainty upfront. However, in some segments, for example private lines of business where insurance portfolios tend to consist of large volumes, calculation methods are generally fairly accurate. Importantly, where the contract period is short (generally one year) insurers may be able to adjust premium levels, provided the competitive landscape allows this.

CI also seeks to understand to what extent the risk of unforeseen significant technical losses is restricted by the usage and control of risk limits, underwriting guidelines, adequate reserving exercises, and by active claims management, as well as the usage of actuarial know-how in the pricing of products.

CI also considers to what extent a portfolio is exposed to natural catastrophes, how deeply the insurer understands its exposure, whether internal or external granular models are applied, and what risk mitigation techniques are used. Additionally, CI considers how an insurer is using reinsurance techniques in order to mitigate the frequency and severity of claims.

CI assesses the risk that reserves for unsettled claims may initially be set too low to cover final

costs. As the claims settlement process can be lengthy (for example in liability and accident lines), CI also focuses on the claims handling processes, trends in the run-off of claims reserves (i.e. the adequacy of reserves during the duration of the claims settlement process) and the findings of actuarial reserve reviews.

The sheer size of technical reserves generally indicates the importance of sound reserving practices and the analysis of non-life loss reserves is therefore a critical, although challenging, task. Higher loss reserve leverage (loss reserves in relation to incurred claims/net written premiums) indicates that the insurer tends to be a long-term or long-tail writer, in which case the reserving factor is a highly important rating factor. We also consider to what extent the run-off of claims reserves for previous years contributes on a sustainable basis to profitability (or losses), and to what extent the experience of the current year is positive or negative. CI also considers the availability of internal and external actuarial claims reports. CI will also consider the appropriateness of incurred but not reported (IBNR) risk, i.e. reserves for claims that have probably occurred in the past, but have not yet been reported.

CI examines an insurer's need for, and reliance on, reinsurance support, which is the most common form of risk mitigation for insurers. Non-life insurers use reinsurance far more extensively than life insurers. CI is aware that the reinsurance needs of large and financially strong insurers active primarily in private lines is often largely confined to protection against natural catastrophes and accumulation risk. In contrast, providers of commercial and industrial insurance tend to be more dependent on reinsurance support as the volumes to be insured significantly exceed the capacity of individual insurers.

In emerging markets, insurers active in commercial business often have to rely on the know-how of professional reinsurers. Many of these insurers cede very large portions of their business to reinsurers and their profitability often relies on the resulting commissions received. CI therefore, in addition to the reinsurance dependency ratio (ceded premiums against gross written premiums), carefully analyses the reinsurance programme, including the diversification of the programme and the credit quality of reinsurers. CI is also aware that other instruments (e.g. securitisations) can offer protection against natural catastrophes and will analyse these if a company is actively using such methods. CI also analyses the development of underwriting profitability for the insurer and reinsurers and will draw conclusions about the sustainability of reinsurance protection and potentially the business model of the insurer. CI also examines to what extent finite reinsurance is used in order to enhance current profitability and capital.

CI also considers to what extent an insurer is coping with new or emerging risks (e.g. cyber risks, global warming) and also whether there are tools in place for risk based capital allocation and for optimising the balance between risk taking and mitigation.

To gauge an insurer's expertise and capabilities in managing insurance risk, CI assesses whether the underwriting results of the insurer are sustainably stronger compared to peers.

KEY RATING FACTOR 3

Credit Risk

This key rating factor refers addresses credit risk arising from an insurer's investment portfolio and, where significant, other assets and off-balance sheet exposures. Our analysis is divided into two sub-factors: investment credit risk and other counterparty credit risk; and direct exposure to government credit risk.

SUB-FACTOR 3.1

Investment Credit Risk and Other Counterparty Credit Risk

Fixed income investments tend to be the dominant asset class for insurers as they generally try to match their technical liabilities with assets of similar durations. The degree of credit exposure may vary considerably, as insurers have to make choices on the trade-off between security and yield. Analysis of the quality of financial investments cannot be divorced entirely from consideration of market risk due to the interaction between credit risk and market risk and the shared underlying economic determinants of both risks. For example, in the case of tradable instruments, market risk and default risk tend to become interdependent when there is a large deterioration in market conditions. In such situations, an insurer's positions may become hard to liquidate, resulting in sharp declines in fair value and the lengthening of the intended holding period.

Where material (and subject to data availability) we assess the quality of investments with respect to the following:

- The diversity of fixed interest investments.
- Recent or expected impairments on investments, including credit losses on off-balance sheet activities.
- The creditworthiness of issuers of securities and counterparties, including banks.
- The degree of investment exposure to private equity, property development and complex securitised instruments (which we consider to be particularly risky asset classes).
- Unrealised fair value losses on securities that the insurer considers temporary and therefore not impaired (typically recorded through other comprehensive income rather than net income), particularly where we consider there to be a significant risk that assets will not recover their value in the future.
- Potential mark-to-market losses associated with deterioration in the creditworthiness of counterparties (credit valuation adjustment).
- The degree of exposure to lowly rated or unrated reinsurers.

SUB-FACTOR 3.2

Direct Exposure to Government Credit Risk

Insurers are exposed to government credit risk in a variety of ways and both directly (e.g. loans and securities) and indirectly (e.g. exposure to the banking system). Such credit exposures may represent a substantial share of an insurer's assets and a multiple of its capital base. When assessing such exposures we consider, inter alia:

- The credit quality of the exposures, as indicated by government credit ratings.
- The size of exposures relative to capital, assets, or earnings.
- The type of government borrower (e.g. central or local government) and single borrower concentrations (e.g. different layers of government might be viewed as a single borrower if we believe default risks are strongly correlated).
- The origin of exposure, in particular whether it is to the home sovereign in domestic currency or to foreign governments.

- Preferential treatment of government debt in regulatory frameworks (e.g. low or zero capital requirements on sovereign exposures or categorisation of sovereign debt as a highly liquid asset).

KEY RATING FACTOR 4

Market Risk

We consider the company's exposure to market risk, especially as fluctuations in the market values of assets can adversely impact the profit and loss account and the balance sheet. Additionally CI analyses the company's exposure to interest rate changes, and its ability to manage and mitigate relevant risks within its risk tolerances. We also consider foreign exchange risk, although this tends to be low as insurers generally invest in assets in the same currency and amounts as their respective liabilities.

Insurers with long-term liabilities are particularly exposed to interest rate risk. Whilst they generally try to invest the funds linked to claims or other benefits into assets with the same or similar maturities, this is often difficult to achieve due to the limited availability of adequate long-term assets. Insurers with long-term liabilities therefore tend to be more exposed to reinvestment risk, as the return available for the reinvestment asset may be lower than the current asset or the guaranteed returns inherent in certain (life) products.

Additionally, insurers tend to invest significantly in long-term fixed income securities with high creditworthiness. However, insurers face the dilemma of whether to accept very low interest income from such securities, or to increase their exposure to riskier but higher-yielding assets (if their capital situation allows this). Investment leverage based on significant investment in high risk assets can potentially create a problem for the financial strength of an insurer. Moreover, insurers tend to invest heavily in government bonds or in banking entities, resulting in significant concentrations. Given the various trade-offs, CI is keen to understand the insurer's investment strategy and how it addresses the resulting risks.

These issues tend to be less of a concern in non-life short-term or short-tail business. However, in a low interest rate environment the insurer has to safeguard underwriting profitability, as underwriting losses can be offset by investment income only to a very limited extent.

To better determine the interest rate risk profile of an insurer, CI seeks to understand the main features of the institution's assets, liabilities and, where appropriate, off-balance sheet exposures, including:

- The interest rate sensitivity of assets and liabilities and the interaction between them.
- The insurer's investment strategy regarding investments exposed to market risk.
- The insurer's governance of interest rate risk, including the institution's risk appetite in relation to interest rate risk.
- The extent to which the development of long-term products reflects interest rate management policies.

ANALYTICAL PILLAR 5

EARNINGS STRENGTH AND SUSTAINABILITY

In this pillar we assess to what extent an insurer is benefiting from stable and diversified recurring revenues and earnings, and its ability to withstand adverse financial developments over an economic cycle.

Earnings, or profitability, demonstrate an insurer's ability to transfer its competitive strengths into sound revenue opportunities. Earnings are an important line of defence for insurers to cope with adverse underwriting or financial developments without eroding their capital base. Earnings provide insurers with the ability to strengthen their capital through retained profits, to pay dividends to their owners and create value through capital appreciation. Earnings are therefore important determinants of an insurer's solvency and creditworthiness over the medium to long term. Underwriting and investment income are the key drivers of earnings growth and should result from sound business growth, positive underwriting claims or cost experience, and prudent investment policies.

Profitability is generally considered to be strong when the level of earnings is more than sufficient to cover operating costs and reserving expenses on a consistent and sustainable basis, while at the same time providing for adequate pay-outs to shareholders without compromising the capital base and growth objectives. Conversely, persistent net losses erode capital and in the absence of appropriate corrective action may threaten the viability of an institution.

Assessment Criteria

CI's assessment of earnings strength encompasses various measures of returns, margins and costs and involves a careful interpretation and forward-looking evaluation of the insurer's capacity to generate sufficient revenues and sustain profitability over time.

Our analysis considers the following two key risk factors:

1. Profitability and Efficiency
2. Revenue and Earnings Quality

KEY RATING FACTOR 1

Profitability and Efficiency

CI's earnings analysis includes not only a detailed analysis of trends in an insurer's current and historical results and earnings drivers, but also an assessment of future expectations. We are not overly influenced by the latest annual results because in the short-term earnings and profitability ratios may be heavily distorted by tax strategies, asset valuation methods, reserving practices, as well as extraordinary or non-recurring items.

A comparative analysis of earnings and profitability must take into consideration differences in leverage, business mix and accounting practices between individual insurers and across countries. The operating environment, including the stage of the economic cycle, may also be important. As a result, the relationship between statement-based quantitative indicators of profitability and insurer default risk is not always straightforward.

An insurer that has strong indicators of current profitability could be deemed to have more moderate earnings strength overall if there are concerns about the quality and stability of its earnings on a forward-looking basis. We are cognizant of the potential impact of cyclical factors and increased risk-taking on short-term profits and will lower our assessment of earnings strength where we

consider recent gains to be excessive or temporary and possibly at the cost of future quality and income growth.

CI will also consider to what extent the profitability of an insurer is benefiting from core underwriting results, accordingly making the entity relatively independent from investment income.

On the accounting side, different valuation or booking methods, asset sales, tax treatment, depreciation and other such variables within the profit and loss statement can alter the bottom line significantly. Such differences have to be taken into account when assessing an insurer's earnings resilience, its peer group position, and when interpreting financial performance ratios. They also underscore the importance of analysing trends in several key ratios at the same time.

KEY RATING FACTOR 2

Revenue and Earnings Quality

In CI's view, an insurer that benefits from high levels of stable diversified and recurring revenues and earnings, preferably generated in the insurer's core business lines and core geographic area, is generally in a better position to absorb losses and other negative financial trends over the economic cycle. Such stability and sustainability is generally strongly correlated with the business model and the type of activities, but also needs to take into consideration anticipated changes in an insurer's strategy, including acquisitions and divestments.

Key areas considered include:

- Stability, diversification, and repeatability of revenues.
- Strength and stability of technical underwriting profitability.
- Investment yields and reliance (if any) on investment income to offset underwriting losses.
- Cost efficiency and cost management.

Financial Indicators

Our overall assessment of earnings strength and stability draws on a number of quantitative indicators selected on the grounds of relevance, availability, and comparability. The importance of individual indicators may vary, and their interpretation needs to take into account the specific characteristics of the individual insurer and its operating environment.

It is also important to consider, inter alia: how the insurer's ratios compare relative to its peer group; expected trends in key metrics; and factors that are not necessarily captured by the ratios (such as restatements, volatility, extraordinary or non-recurring income) or expense items including those due to the impact of taxes or changes in accounting rules.

Key earnings ratios for all insurers include:

- Premium growth rate . on a gross and net basis.
- Net retention rate . i.e. net premiums as a percentage of gross premiums, which indicates to what extent the insurer is able to generate business volumes and to what extent this growth is dependent on support from reinsurers.
- Return on Equity (ROE) . which measures net income after tax as a percentage of average equity. CI tends to not overemphasize this ratio as it is influenced by an insurer's capital

structure and leverage. The ROE of a highly capitalised insurer may thus be much lower than that of a thinly capitalised insurer, thus potentially leading to misinterpretations.

- Current investment yield.
- Net yield.

Some of the key profitability ratios for non-life insurers include:

- Gross loss ratio . i.e. the value of losses incurred as a percentage of premiums earned. This ratio is examined for the company as a whole, as well as for major lines of business.
- Gross expense ratio . i.e. underwriting expenses (acquisition cost and administrative expenses) as a percentage of premiums earned.
- Goss combined ratio . which combines the loss ratio and expense ratio and indicates the profit margin an insurer is able to derive from business volumes.
- Loss reserve run-off . which indicates the adequacy of an insurer's loss reserves. It compares loss reserves set at the end of the previous year with claims paid out of these reserves.
- Return on Revenue (ROR) . which measures net income before tax as a percentage of revenues (net premiums earned plus investment income). Although CI also calculates the ROE, in our opinion the ROR provides a better gauge of the overall performance of a non-life insurer. ROR includes both underwriting and investment income and thus captures both components of an insurer's earnings. CI evaluates earnings before tax and excluding realised and unrealised capital gains as this provides a better gauge of the profitability of recurring sources of income. In CI's view capital gains are largely a function of interest rates and a company's potential needs to demonstrate high profits, for example in order to upstream high dividends.
- Net operating ratio . which is the net combined ratio (measuring the net underwriting performance) less the ratio of net investment to net earned premiums. An operating ratio of more than 100% indicates that a company is unable to generate profits from its underwriting and investment activities.

Some of the key profitability ratios for life insurers include:

- Return on Assets (ROA) . This ratio measures net income before tax as a percentage of revenues (net premiums earned plus investment income). Although CI will also measure the ROE, in CI's opinion the ROA measures best the overall performance of a life insurer. ROA includes both underwriting and investment income and thus captures both components of an insurer's earnings
- Gross expense ratio (see above).

ANALYTICAL PILLAR 6

BALANCE SHEET STRENGTH AND FINANCIAL FLEXIBILITY

Together with earnings, capital is a critical source of defence which provides an insurer with the ability to absorb unexpected losses and maintain a cushion to meet its obligations, while remaining a going concern. Capital is the ultimate determinant of an insurer's capacity to undertake underwriting and investment risk. Excess or strong capital enables an insurer to grow its premium and asset base and, in turn, increase earnings. Capital also provides an incentive for the owners to ensure that the institution is managed in a prudent manner, as they have their own funds at stake.

Capital is also important for building and maintaining confidence with investors, clients and intermediaries. Its relevance is also derived from the high regulatory focus on capital and the potential dire consequences if an insurer breaches regulatory capital requirements (or market expectations).

In CI's view, a sound capital base is a necessary ingredient for the success of an insurer, but it is its business model and franchise strength that are the cornerstone of its future financial health. An analysis of an insurer's capital strength needs to be seen in the context of a range of factors, including:

- The insurer's risk profile and the volatility of its operating environment (the greater the risks, the higher should be the capital buffer).
- Its ability to generate capital internally through retained earnings and sustained profitability.
- The adequacy of loss reserves.
- The insurer's dependency on reinsurers.
- Its access to additional capital or liquidity in case of potential needs (such as acquisitions or unexpected large losses).
- The availability of sufficient liquidity to meet obligations as they become due.
- The ownership structure, including, where relevant, risks stemming from related group entities.
- The quality of financial disclosure and regulatory supervision.

In general, CI believes that insurers with strong capital levels . consisting of high-quality capital instruments . and which can demonstrate mitigation strategies for managing potential volatility have a stronger resilience against adverse developments in the operating environment, including competitiveness challenges and regulatory changes, as well as event risk.

Assessment Criteria

In assessing an insurer's balance sheet strength, CI focuses on the following key rating factors:

1. Capital and Reserve Adequacy
2. Liquidity
3. Financial Flexibility

KEY RATING FACTOR 1

Capital and Reserve Adequacy

From CI's perspective, it is critical that an insurer's risk exposures are backed by a high quality capital base that is permanently and freely available, with no repayment requirements and against which losses can be written off without threatening the viability of the institution.

A key focus of CI's analysis is the extent to which an insurer's capital position is commensurate with its risk profile on a forward-looking basis, including its business model, business strategy, asset-liability structure and operating environment. For example, an insurer that appears to be adequately capitalised based on key quantitative metrics may receive a less favourable assessment for financial flexibility if its capital position is considered insufficient for its risks. Such risks may include the following: excessive growth; model and data weaknesses; the failure to take sufficient account of risks arising from off-balance sheet items, or unconsolidated subsidiaries that are significantly undercapitalised; and an expected deterioration in sectors to which the insurer is exposed.

CI generally views capital buffers well in excess of regulatory requirements favourably, as they increase the insurer's flexibility to cope with adversities and respond to strategic opportunities.

There is no single measure of the adequacy of an insurer's capital cushion and differences between jurisdictions in terms of the definition of capital, as well as different regulatory, tax, accounting, and disclosure standards can make cross-country comparisons difficult or inaccurate. In addition, capital adequacy cannot be evaluated by using static ratios only. Indeed, capital ratios judged in isolation may provide a spurious or misleading indication of the relative strength of an insurer's capitalisation. Furthermore, based on CI's experience, there is often insufficient consistency in public disclosure across jurisdictions to routinely monitor and analyse the level, composition and adequacy of an insurer's capital base in full detail.

The key ratios we monitor are selected on the basis of relevance and data availability. We may also apply other supplementary ratios, where deemed relevant. The selection primarily reflects the still wide divergence in regulatory standards and the limited access to related information. With the implementation of Solvency II in the EU and improved disclosure standards, CI plans to integrate additional ratios in its analysis as they become available. Key ratios relate to the following:

- **Capital structure and financial leverage** . We consider the relative importance of the types of capital employed by an insurer, including hard forms of capital (e.g. equity, equalization reserves) and softer forms of capital (e.g. loss reserve redundancies) and how they and off-balance items (e.g. embedded value of life insurers) may influence the soundness of the capital position. Similarly, we consider the impact of intangibles or investments in affiliates. We also consider the extent to which a company uses debt or hybrids for funding. Capital instruments with the greatest capacity to absorb losses on a going concern basis include an insurer's common equity (share capital and premium) and retained earnings.
- **Capital adequacy** . We examine capital adequacy ratios (CARs) for individual companies or for groups. We put more emphasis on risk-based CARs, if available, though we are cognizant of the possibility that risk-weights may not be adequate in standard models, resulting in overly favourable ratios.
- **Operating leverage** . We use net written premiums relative to shareholder funds as a simple indicator of the relative financial strength of companies with similar business portfolios. However, this ratio is not risk-based and does not adequately capture the riskiness of different products and assets.
- **Adequacy of claims reserves** . This is indicated by net claims reserves relative to net earned premiums and is evaluated over a number of years and assessed in conjunction with the run-off experience of reserves.

- Retention of premiums and incurred claims . Relevant ratios indicate the extent to which a company cedes premiums and reserves to reinsurers and thus gives insight into an insurer's dependency on reinsurer support. In this respect the soundness of reinsurance programmes will also be evaluated, including the degree to which the reinsurer participates or contributes to the technical results of the insurer.

KEY RATING FACTOR 2

Liquidity

Liquidity risk refers to the risk of the insurer having insufficient liquid financial resources to meet obligations as they become due, or only being able to access such resources at excessive cost.

Insurers are generally liquid and funding rich, reflecting the nature of the business model. They receive premiums upfront and establish reserves for claims and obligations not yet settled. The respective assets remain on the insurer's balance sheet, offering the insurer the opportunity to benefit from investment income. Insurance liabilities tend to be medium to long term and are generally either not callable by clients (e.g. non-life products) or callable subject to penalties or potential tax losses (e.g. with-profits life policies), which could make such an action uneconomic.

The above notwithstanding, liquidity risk may be a factor where, for example, exposure to surrenderable life policies is high, financial market conditions are highly stressed, or extreme events trigger a sudden need for significant amounts of cash (a potential problem for property insurers following a natural catastrophe). The strength of an insurer's asset-liability management is crucial in helping to mitigate such risk.

As liquidity reflects an insurer's ability to meet both expected and unexpected cash flows, it is intrinsically linked to both sides of an insurer's balance sheet. CI therefore considers the maturity structure of policyholder obligations and the amounts of assets that are available in cash or that are readily convertible to cash.

CI's analysis aims to identify and assess on a forward-looking basis those vulnerabilities that could negatively impact an insurer's liquidity risk profile, and how well the insurer is positioned to withstand changing and potentially stressed market conditions.

We also assess how an insurer's exposure to other risks (e.g. credit risk, market risk, and reputational risk) may affect its liquidity position. Thus, while various risks are assessed in different places within this methodology, it is important to understand the interdependencies between them and to avoid viewing them in isolation. Any product or service may expose an insurer to multiple risks . and a real or perceived problem in any area could potentially have an adverse effect on an insurer's liquidity position.

A critical component of an insurer's ability to effectively respond to potential liquidity stress is the availability of an adequate buffer of financial assets that are unencumbered, highly liquid and without legal, regulatory, or operational impediments, and that can be sold or pledged to obtain funds in a range of stress scenarios. In order to be a reliable source of funds across a range of possible market conditions, such securities should comprise assets that have the best chance of remaining liquid in stressed times. Such securities may include bonds from highly rated government borrowers that trade in large, active markets. However, even if they may remain liquid, selling such assets during stressed market conditions could entail significant discounts.

CI regards the following liquidity profiles as generally stable and offering good mitigation against liquidity risk:

- Strong buffer of cash and highly liquid and unencumbered assets, preferably eligible as collateral for central insurer operations.
- High cover of technical reserves by liquid assets.
- The absence of restrictions on the transfer of intra-group liquidity.
- The availability of contingent liquidity plans that are commensurate with the insurer's risk profile (including committed credit lines from high quality counterparties).

When assessing liquidity, CI considers a number of ratios, the two most important of which are:

- Liquid asset ratio . i.e. highly liquid assets (defined as government and corporate bonds, money market instruments, deposits, cash and equivalent assets, and listed common stock) relative to total invested assets. Unlisted bonds, unlisted common stock, real estate, mortgages, affiliates are generally not treated as liquid assets. However, the above definitions may vary subject to CI's assessment of local market conditions. The higher the proportion, the less vulnerable the insurer is to liquidity risk.
- Liquid assets to technical reserves ratio . which indicates the extent to which an insurer would be able to pay its technical reserves from assets in the event of claim payments suddenly and unexpectedly becoming due (e.g. following a natural catastrophe or, for life insurance policies with guarantees, where a large number of policyholders cancel contracts and withdraw related funds).

KEY RATING FACTOR 3

Financial Flexibility

Financial flexibility considers an insurer's potential future needs for capital or liquidity and compares it with available, and potentially available, sources of finance. Future needs often arise in connection with an insurer's strategic objectives and may relate to acquisition plans. Such needs may also stem from large losses linked to significant stress in the underwriting or investment portfolios, which could make recapitalisation a necessity.

Our assessment criteria are aimed at distinguishing between those insurers that are able to generate sufficient capital internally and externally from those with more limited ability to access or attract additional funds when needed.

Insurers may have various options to raise capital internally, including through the sale of subsidiaries or parts of its operations. This may be part of a strategic repositioning, but could also be due to the need to raise capital due to financial pressure. The likelihood of success and the level of proceeds will depend on the attractiveness to the potential buyers and general market sentiment. Particularly for insurers under pressure, these options might not be available. Even if successful, the potential impact on the insurer's franchise needs to be taken into consideration.

The ability to raise new capital from shareholders or sister companies could be positive for an insurer's flexibility. This could be either from existing shareholders, provided they are willing and able to support the insurer during the bad times as well as the good, or from new (strategic) shareholders. However, the fungibility of capital within an insurance group . that is, the ability to shift capital from one part of the group's global operations to another . has been increasingly constrained by local regulators in recent years. This has resulted in capital being trapped in national markets. Consequently, insurance groups may not be able to utilise excess regulatory capital in

parts of the group. Thus, capital ratios on a consolidated basis may be misleading and need to be interpreted carefully.

An insurer's capital management could also include sustainable parental support in the form of reduced dividend payments or increased reinsurance protection. An insurer could also consider reducing capital consuming activities. For example, it could write less business, sell specific portfolios, utilize higher cessions of business to reinsurers, or adjust policyholder bonuses.

One alternative for listed insurers could be to raise new capital from stockmarkets, although this option is highly dependent on market sentiment and may not be available to weak insurers or during periods of general market stress. Another alternative could be to access long-term debt markets or the commercial paper market.

An insurer's financial debt leverage and interest coverage are also important considerations in the assessment of financial flexibility.

4. EXTRAORDINARY SUPPORT LEVEL: ASSESSMENT CRITERIA

The IFSR reflects CI's forward-looking opinion of an insurer's financial creditworthiness and the likelihood that the insurer would fail and be unable to meet its insurance contract obligations.

When assigning an IFSR, CI takes into consideration whether an insurer might receive sufficient and timely extraordinary financial support from its parent or other support providers if it is at risk of not being able to meet its insurance contract obligations.

Such support, which we label **extraordinary support**, can potentially mitigate weaknesses in the insurer's standalone financial creditworthiness (summarised in the ISA) and thus improve its creditworthiness. In contrast **ordinary support** is factored into the ISA (see Box 2).

Historically, owners have tended to support insurers in financial difficulty. Support has been forthcoming for a variety of reasons including a desire to protect investments and avoid, or at least limit, the potential damage to the owner's reputation and franchise from the insurer failing.

Unlike private sector banks, which have often been deemed by governments to be **too-big-to-fail** or **too-important-to-fail**, extraordinary support for insurers in stress has generally not come from sovereign governments (with the notable exception of AIG). Given the political desire in many countries to resolve future banking crises without taxpayer's money, government support for private insurance companies is likely to remain uncertain, even if they are regarded as systemically important.

Assessment Criteria

The Extraordinary Support Level (ESL) indicates CI's expectation of the likelihood that in the event of financial distress the insurer would receive extraordinary support to prevent it from failing and to enable it to continue meeting its insurance contract obligations. Such support would typically come from either private or public sector owners.

The various levels of extraordinary support and how we define them are shown in the table below.

ESL	Definition
VERY HIGH	The likelihood of extraordinary support is very high. The willingness, financial capacity and ability of potential supporters to provide sufficient and timely support are regarded as very strong.
HIGH	The likelihood of extraordinary support is high. The willingness, financial capacity and ability of potential supporters to provide sufficient and timely support are regarded as high.
MODERATE	The likelihood of extraordinary support is moderate. The willingness, financial capacity and ability of potential supporters to provide sufficient and timely support are regarded as moderate.
UNCERTAIN	The likelihood of extraordinary support is uncertain. There is a high degree of uncertainty, or lack of information, regarding the willingness, financial capacity and ability of potential supporters to provide sufficient and timely support.

The determination of the ESL follows a 3-step process:

Step 1: Identify potential support providers.

Step 2: Evaluate the likelihood of support.

Step 3: Determine the ESL and the impact on ratings.

Step 1: Identity potential support providers

The potential supporter of an individual insurer will generally be one or more of the following:

- Parent company (generally larger insurance groups, including mutual or cooperative organizations, with full or majority ownership).
- Other Insurers (with minority ownership, joint-ventures).
- Non-insurers (e.g. holding companies, financial institutions, corporates, hedge funds, private equity investors, private individuals or families).
- Governments or public sector institutions.

Private sector owners . Insurers are often part of larger diversified insurance groups and historically it has been very rare that insurance subsidiaries were not supported by their (typically stronger) private parent insurance or holding company.

A particular focus in assessing the likelihood of support for an insurance subsidiary is the parent's long-term commitment to, and the strategic importance of, the subsidiary. In CI's view, a decline in the strategic importance of the subsidiary could signal a reduction in the likelihood of extraordinary support in the future and potentially result in the sale of the subsidiary to another (eventually weaker) third party. This could result from revised strategic or risk priorities (vis-à-vis products, client segments, or geographical regions), the consistently weak performance of the subsidiary, or because of weaknesses at the parent level leading to a redirection of financial and managerial resources back home.

Insurers may also have a variety of other shareholders, including other insurers as minority shareholders (including joint-venture insurers) and non-insurers (including corporates, hedge funds, private equity investors, families or private individuals). The willingness, capacity and ability to provide extraordinary support in such cases is often more difficult to assess, and is often uncertain or even questionable. For example, the strategic importance of an insurer purchased by a private equity firm might be highly uncertain, possibly resulting in a lower ESL. Likewise, there may be insufficient information on the creditworthiness and financial capacity of private or family shareholders, or on private equity investors, to make a reasonable assessment of the likelihood of support.

Public Sector Owners . Public sector ownership of insurance companies is not significant in most countries. For this reason much of the criteria in Step 2 and Step 3, below, is focused on private sector owners. Where public sector ownership is a factor, CI would evaluate the owner's willingness, financial capacity and ability to support the insurer in much the same way as for private owners, but taking into account also the strength and durability of the links between the insurer and the public institution, the insurer's public policy role, and potential privatization prospects.

Step 2: Evaluate the likelihood of support

CI assesses the likelihood that extraordinary support from one (or more) potential supporters would be forthcoming. This likelihood is based on CI's qualitative judgment of the supporter's willingness, financial capacity, and ability to provide extraordinary support.

Willingness . Factors CI takes into consideration when gauging the supporter's willingness include the following:

- Size of the ownership stake.
- The insurer's long-term strategic importance to its owners (including in terms of business segments, clients, products, regions). The importance of the insurer's public policy role may be a key factor for public sector owned entities.
- Level of integration with its owners (brand name, management, board representation, distribution network, IT systems, shared or centralised functions, such as treasury, risk management guidelines, business referrals, liquidity pooling).
- Potential reputational risk arising from a failure to support.
- Legal status and nature of ordinary support (e.g. regular capital contributions and/or reinsurance protection).
- Supporter's track record in providing extraordinary assistance to subsidiaries in general and to the rated insurer in particular.
- Public statements or commitments regarding future support.

Financial capacity . Here we assess whether the potential support provider has the financial means to provide sufficient and timely support. Factors we consider include the following:

- The support provider's own intrinsic financial strength.
- The relative size of the insurer compared with the support provider (in terms of capital and earnings).
- Correlation of activities between supporter and insurer.¹

Ability . Even if the potential supporter is willing and has the financial capacity to provide support it may lack the ability to do so. The analysis needs to take into consideration whether the potential support provider might eventually face legal or regulatory restrictions in providing support, which could limit or even eliminate likelihood of support.² In contrast, there might be legal or regulatory requirements (such as guarantees and net worth maintenance agreements), which increase the likelihood of support.

Factors we consider include:

- Potential legal obligations (e.g. guarantees, profit-and-loss transfer agreements, net worth maintenance agreements).
- Potential regulatory obligations to support subsidiaries.
- Potential regulatory constraints to support subsidiaries (e.g. ring-fencing).

¹Typically, the correlation between a parent and an insurance subsidiary and between sovereigns and insurers should be regarded as high. Thus, the assessment needs to take into consideration the possibility that the support provider might face similar difficulties at the same time as the insurer.

²For example, home regulators might impose restrictions on an insurance group's parent (increase of capital requirements, ring-fencing of activities) which could impair its ability to support a foreign subsidiary.

Step 3: Determine the ESL and rating impact

We classify the ESL for private sector ownership support in accordance with the descriptors shown in the table below and notch up the ISA (if appropriate) in line with the guidelines. Key characteristics of each support level are shown in Box 3.

ESL	Typical notching impact ³
VERY HIGH	Equalize with supporter's ISA / supporter's ISA -1 notch
HIGH	Insurer's ISA +2 / +3 notches
MODERATE	Insurer's ISA +1 notch
UNCERTAIN	None

Rating Insurers Above the Supporter (Parent)

The rating methodology focuses on situations where the potential supporter is stronger than the insurer needing support. There may be situations, however, where the reverse is true, raising the question of whether the insurer can be rated higher than the supporter.

Such exceptions may apply if all of the following conditions are met:

- The insurer's ISA is higher than the supporter's standalone assessment.
- The insurer exhibits superior and sustainable independence from the parent (in terms of operations, management, systems, funding etc.).
- There are strong regulatory or legal constraints which prevent the supporter (parent) from weakening the insurer during periods of stress (e.g. through capital reallocation, up-streaming of dividends, transfer of assets, intercompany loans).
- There are no sovereign rating constraints.

³In case of a very high+ ESL, the starting point for the notching of the insurer's ISA for extraordinary support would be the supporter's ISA, which reflects the supporter's stand-alone financial strength. In all other cases the starting point would be the ISA of the supported insurer. There may be specific cases, such as captive insurers, where it does not make sense to set an ISA for the supported entity; in such cases the supporter's ISA would be the starting point.

BOX 2: Distinction ‘Ordinary’ and ‘Extraordinary’ Support

CI distinguishes between **ordinary support**, which insurers receive on an ongoing basis during the normal course of business and which is reflected in the ISA, and **extraordinary support** to avert failure and which is reflected in the ESL and the final IFSR.

In practice, the dividing line between ordinary support and extraordinary support is somewhat blurred and hence the distinction is often based on analytical judgement.

Examples of potential extraordinary support would generally include the following:

- Capital injections, or asset purchase programs . potentially on uncommercial terms.
- Loans from the parent, or through affiliates or public sector entities . potentially on beneficial terms.
- One-off transfers of risk (e.g. via reinsurance) from an insurer to its parent or an affiliate, or to a public entity.
- Liquidity support that governments, parents, or affiliates provide to specific entities.
- A solvency rescue package directed by the government or through other market participants tailored to an individual institution.

Examples of positive ordinary support would generally include the following:

- Transfer of management and risk management expertise and operational systems, and assistance with business origination.
- Availability of centralized group liquidity resources.
- Favourable dividend policies, equity issuance flexibility.
- Recurrent capital increases to support business growth or strengthen the capital base (e.g. in response to new system-wide regulatory requirements).
- Existing reinsurance contracts.
- Existing lines of credit by the parent.
- Provision of services (property, investment, payroll, shared distribution channels, etc.)
- Favourable public contracts.

It is important to bear in mind that owners (supporters) may have a negative impact on the financial strength of an insurer through ~~ordinary~~ interactions. For example by:

- Aggressive business and financial expectations from owners (including dividend policy and high double leverage).
- Excessive politically motivated or related-party lending, forced lending, lending at un-commercial terms.
- Special shareholder distributions.
- Asset- or cash-stripping to service other obligations of the group.

BOX 3: Characteristics of Extraordinary Support by Level (Private Sector Ownership)**VERY HIGH**

- The parent/owner has the financial capacity to provide sufficient and timely extraordinary support. AND
- There are no legal, regulatory or other limitations (e.g. access to local currency) to the parent providing extraordinary support. AND
- The parent/owner provides legally binding and enforceable commitments (e.g. full, timely and irrevocable guarantees) on the subsidiary's insurance contract obligations. OR
- The subsidiary is fully owned, operates most likely in the same country as the parent in core business lines of the group, is highly integrated with and key to the parent group's operations, franchise and reputation. Acts more like a branch or is established as a separate legal entity mainly for regulatory reasons.
- There is a strong track record of ordinary and extraordinary support for group subsidiaries, and there are no concerns regarding the parent's long-term commitment.

HIGH

- The parent/owner has the financial capacity to provide sufficient and timely extraordinary support. AND
- There are no legal, regulatory or other limitations to parent providing extraordinary support. AND
- The parent/owner provides strong commitments (but not full, timely and irrevocable guarantees) on the subsidiary's insurance contract obligations. OR
- The subsidiary is at least majority owned, operates in core regions and business lines of the group. The insurer is highly integrated and key to the parent's operations, franchise and reputation. There is a strong track record of ordinary and extraordinary support for subsidiaries, and no concerns regarding the parent's long-term commitment.

MODERATE

- There are some uncertainties regarding the parent/owner's financial capacity to provide sufficient and timely extraordinary support. AND
- There are some uncertainties with regards to legal, regulatory or other limitations on the parent providing extraordinary support. AND
- The insurer may have a variety of minority shareholders, including other insurers or (unregulated) entities (including corporates, hedge funds, private equity investors). OR
- The insurer may have been taken over only recently.

UNCERTAIN

- The insurer does not have a strategic owner. OR
- There is a mixed track record of ordinary and extraordinary support from the parent.
- The strategic importance and long-term commitment of the owners is questionable.
- The sale of a subsidiary or transfer of material operations has been announced or is becoming more likely.⁴
- There are significant concerns about, or CI does not have access to information to assess, the owner's financial capacity (capital, strength, liquidity etc.) to provide extraordinary support during times of stress.
- The relative size, performance and loss potential raise concerns regarding the parent's capacity to support the subsidiary.⁵
- There are tangible concerns regarding regulatory, legal or other (e.g. access to local currency) limitations to providing extraordinary support, particularly in the case of foreign subsidiaries.

⁴ In such a scenario, we would need to assess whether a new owner would have the willingness, capacity and ability to provide extraordinary support to its new subsidiary. To determine the financial capacity, CI will perform an internal assessment of the parent's creditworthiness, if CI has no public rating for the parent.

⁵ Obviously, in such cases the ISA of the parent should already reflect this contingent liability.

5. SOVEREIGN RISK AND INSURER FINANCIAL STRENGTH RATINGS

CI accepts that insurers are not as vulnerable as banks to sovereign stress and rarely exhibit the same systemic importance. This reflects fundamental differences in the two business models and in the nature of their respective liabilities. In particular, insurance policy obligations are pre-funded by premiums. They are generally not callable and are triggered instead by the insurable event . characteristics which greatly reduce the risk of a run on liabilities. Banks, in contrast, tend to undertake significant maturity transformation (borrowing short to lend long) and hence are vulnerable to liquidity and funding risks . which tend to escalate at times of sovereign distress.

Moreover, insurers are not as interconnected as banks, which are linked, for example, through the interbank system and central bank activities. Consequently, contagion risk, which also tends to increase with sovereign stress, is less of a threat to insurers. In addition, policy and institutional links with the sovereign are weaker for insurance companies compared to banks. For example, it is banks . not insurers . that are the main intermediaries through which governments transmit monetary policy and, in crisis scenarios, implement capital and exchange controls.

Although sovereign risk is more highly correlated with banking sector risk than with insurance industry risk, the transmission channels from sovereign risk to insurer risk are nevertheless relatively strong. This means that individual insurers are still likely to be significantly adversely affected in the event of a government debt crisis.

Our assessment of the relative strength of this risk transmission is based on three main observations. Firstly, insurers often have large investment exposures to the government, typically for the purpose of duration matching. Consequently, sovereign financial distress may result in direct losses or write-downs on holdings of government bonds, resulting in the weakening of an insurer's capital position.

Secondly, sovereign debt crises are usually accompanied by a marked deterioration in economic and financial conditions, including declines in asset prices, funding pressures in the banking system, and weaker domestic demand. Stressed operating conditions may impact insurers via reduced sales of insurance products, impairments of investments and generally weaker asset quality. In addition, insurers also tend to have high exposure to the banking sector . which is the industry perhaps most vulnerable to the materialisation of sovereign risk.

Thirdly, the ability of insurers to honour financial obligations may be impaired in the event that the government imposes capital controls or freezes deposits in an effort to safeguard its own debt-servicing capacity or to preserve broader financial stability.

Rating Rules of Thumb for Insurer Ratings Above the Sovereign

Given the above, insurers that carry out their business activities within national borders and have high exposure to the local economy and home sovereign will, in most cases, have IFSRs that are no higher than the long-term local currency rating of the sovereign.

However, the sovereign rating does not pose an insuperable constraint on insurer ratings. Indeed, CI is cognizant of the fact that governments can and do default without interfering directly in the insurance sector, and many insurers have endured sovereign debt crises and the associated economic turbulence without defaulting on their obligations.

We may, therefore, set the IFSR above the sovereign rating when we consider the insurer's financial strength to be sufficiently robust to withstand the direct and indirect effects of a government default, including losses on sovereign debt, bank debt and equity investments, as well as the impact of highly stressed operating conditions.

How many notches an insurer may be rated above the sovereign will depend, *inter alia*, on the company's standalone financial fundamentals, the degree of direct exposure to sovereign credit risk, its sensitivity to domestic economic conditions and banking system stress, and its demonstrated resilience to previous episodes of sovereign stress or adverse economic and financial shocks. There may also be circumstances in which a rating above the sovereign is warranted owing to the ability and willingness of a parent company to provide extraordinary support despite, elevated levels of sovereign and broader country risk.

The maximum notch differential would generally be restricted to three notches (equivalent to one rating category) above the sovereign long-term local currency rating. CICI's policy of restricting IFSRs in the ratings space above the sovereign rating reflects the degree of uncertainty in the assessment of the insurer's capacity to withstand sovereign-induced stress. In short, neither the economic conditions that will prevail at the time of, and following, a government default, nor the severity of the default itself (in terms of the haircut), nor the behaviour of the authorities in the event of financial stress can be known for certain ahead of an actual situation of sovereign stress.

In CICI's opinion sovereigns generally have little incentive to interfere directly in a way that prevents insurers honouring local currency insurance obligations to policyholders. Even an intervention that would cause a bank to default on local currency financial obligations (e.g. a deposit freeze) would not necessarily cause an insurer to default on policyholder obligations. Consequently we would not generally constrain (*ex ante*) an insurer's local currency IFSR by an assessment sovereign interference risk.

IFSRs could also be assigned to foreign currency policy obligations, although this is likely to be less common given the nature of the insurance business. In contrast to the treatment of local currency insurance obligations, an analysis of claims-paying ability in foreign currency would require an assessment of transfer and convertibility (T&C) risk. In accordance with our standard rating policy we would generally cap the IFSR at a level equivalent to our opinion of T&C risk, unless we had strong reasons for believing that government controls would not apply to the insurer or could be effectively circumvented.

ANNEX 1: INSURANCE RATING DEFINITIONS AND RATING SCALE

The Insurer Financial Strength Rating (IFSR) provides a forward-looking opinion of an insurer's capacity and willingness to pay its valid insurance contract obligations when they become due. An IFSR is not specific for any particular policy or product, nor does it address non-policy obligations. IFSRs take into account the standalone assessment of an insurer, as well as the likelihood that the entity would receive external support in the event of financial difficulties.

IFSRs are generally local currency ratings as an insurer's business activities are usually carried out within national borders. In accordance with CI's ratings architecture, this means that in determining the IFSR we take into account the insurer's capacity and willingness to meet policyholder obligations regardless of the currency in which those obligations are denominated, absent transfer and convertibility (T&C) risk. CI would generally only consider assigning foreign currency ratings to internationally active insurers, in which case we would also assess T&C risk.

An IFSR is generally a long-term rating, as an insurer's contract obligations are generally long-term. However, where an insurer's contractual obligations have durations shorter than one year, CI may also assign a short-term IFSR.

The rating scales below may apply to local and foreign currency IFSRs.

Long-Term Insurer Financial Strength Ratings

Investment Grade	
AAA	The highest credit quality. Exceptional capacity for fulfilment of insurance obligations and most unlikely to be affected by any foreseeable adversity. Extremely strong financial condition and very positive non-financial factors.
AA	Very high financial strength. Very strong capacity for fulfilment of insurance obligations. Unlikely to have payment problems over the long term and unquestioned over the short and medium term. Adverse changes in business, economic and financial conditions are unlikely to affect the entity significantly.
A	High financial strength. Strong capacity for fulfilment of insurance obligations. Possesses many favourable financial security characteristics but may be slightly vulnerable to adverse changes in business, economic and financial conditions.
BBB	Good financial strength. Satisfactory capacity for fulfilment of insurance obligations. Acceptable financial security characteristics but some vulnerability to adverse changes in business, economic and financial conditions. Medium grade credit characteristics and the lowest investment grade category.
Speculative Grade	
BB	Speculative grade financial strength. Capacity for fulfilment of insurance obligations is vulnerable to adverse changes in internal or external circumstances. Financial and/or non-financial factors do not provide significant safeguard and the possibility of investment risk may develop.
B	Significant risk to financial strength. Capacity for fulfilment of insurance obligations is very vulnerable to adverse changes in internal or external circumstances. Financial and/or non-financial factors provide weak protection; high probability for investment risk exists.
C	Substantial risk to financial strength is apparent and the likelihood of default is high. Considerable uncertainty as to the payment of insurance obligations. Financial strength is of poor standing with financial and/or non-financial factors providing little protection.
RS	Regulatory supervision. The insurer is under the regulatory supervision of the authorities due to its weak financial condition. The likelihood of default is extremely high without continued external support.
SD	Selective default. The insurer has failed to service one or more class of insurance obligations, but CI believes that the default will be restricted in scope and that the insurer will continue honouring other obligations.
D	The insurer has defaulted on all, or nearly all, of its insurance obligations. A D would also be assigned upon filing for bankruptcy or similar protection.

Short-Term Insurer Financial Strength Ratings

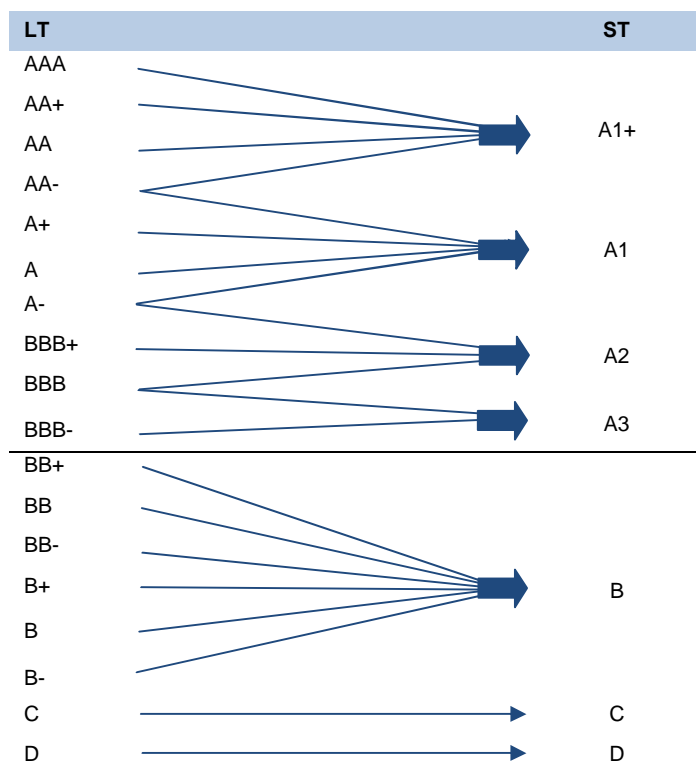
Investment Grade	
A1	Superior financial strength. Highest capacity for the payment of short-term insurance obligations that is extremely unlikely to be affected by unexpected adversities. Institutions with a particularly strong credit profile have a % A + affixed to the rating.
A2	Very strong capacity for payment of insurance obligations but may be affected slightly by unexpected adversities.
A3	Strong capacity for payment of insurance obligations that may be affected by unexpected adversities.
Speculative Grade	
B	Adequate capacity for payment of insurance obligations that could be seriously affected by unexpected adversities.
C	Inadequate capacity for payment of insurance obligations if unexpected adversities are encountered in the short term.
RS	Regulatory supervision. The insurer is under the regulatory supervision of the authorities due to its weak financial condition. The likelihood of default is extremely high without continued external support.
SD	Selective default. The insurer has failed to service one or more class of insurance obligations, but CI believes that the default will be restricted in scope and that the insurer will continue honouring other obligations.
D	The insurer has defaulted on all, or nearly all, of its insurance obligations. A D q would also be assigned upon filing for bankruptcy or similar protection.

CI Ratings appends "+" and "-" signs to its **long-term ratings** in the categories from "AA" to "C" to indicate a more granular view of the strength and weaknesses of a particular rated entity.

Outlook: expectations of improvement, no change or deterioration for an insurer's long-term rating over the 12 months following its publication are denoted ~~P~~Positiveq ~~S~~Stableq or ~~N~~Negativeq

ANNEX 2: CORRESPONDENCE BETWEEN LONG-TERM AND SHORT-TERM RATINGS

Short-term ratings are mapped from long-term ratings using the guidelines below. Deviations may be permitted where entity-specific circumstances render the guidelines inappropriate.



ANNEX 3: KEY QUANTITATIVE METRICS

Some of the main ratios that may be used by CI Ratings when analyzing insurance companies are provided below. The list is offered for guidance and is not exhaustive. Furthermore, ratios may be adapted subject to data availability and our opinion of analytical suitability or relevance to individual markets.

All Insurers

Competitive position

Gross written premiums: are the total premiums received from policyholders (including direct written premiums and gross of ceded reinsurance premiums). The change in gross written premiums is a key metric for measuring revenue growth.

Gross premiums earned: gross premiums *less* the change in the provision for gross unearned premiums. That part of premiums received that will only be earned in the forthcoming period is transferred to the unearned premium reserve. Hence premiums earned define that part of premiums which is allocated to the current financial period.

Net written premiums: net written premiums reflect that part of gross written premiums that may be ceded to reinsurers. Net written premiums are therefore booked for the insurer's own account.

Net retention: net written premiums as a percentage of gross written premiums.

Net premiums earned: net written premiums *less* the change in net unearned premiums. The change in net premiums earned may indicate an insurer's growth of risk exposure, especially in non-life insurance.

Total revenue: net premiums earned *plus* other underwriting income *plus* investment income *less* investment expenses.

Operating performance

Earnings before interest and tax (EBIT): net profit before tax and interest expense.

Return on Equity (ROE): net income divided by average equity. Although this ratio is an often used measure of profitability, CI tends to not overemphasize it as it is influenced by an insurer's capital structure and leverage. The ROE of a highly capitalised company may thus be much lower than that of a thinly capitalised insurer, thus potentially leading to misinterpretations.

Investments

High-risk assets: typically include equity investments, real estate, affiliates, partnerships, alternative investments, delinquent mortgages, bonds rated BB+ and lower, other investments.

Investment leverage ratio: high-risk assets divided by total capital.

Illiquid assets: typically include real estate, investments in affiliates, unlisted bonds and equities, mortgages and loans, other investments.

Liquid assets: total invested assets *less* illiquid assets.

Liquid asset ratio: sum of liquid assets divided by total invested assets.

Liquidity ratio: liquid assets divided by net claims reserves (for non-life insurers).

Current investment income: return on invested assets, excluding realised and unrealised gains and losses. For life insurers income from unit-linked accounts is excluded.

Current investment yield: current investment income divided by the two-year end-period average of total invested assets.

Net investment income: return on invested assets, including realised and unrealised gains and losses. This figure reflects the total income achieved on invested assets. For life insurers income from unit-linked accounts is excluded.

Net investment yield: net investment income divided by the two-year end-period average of total invested assets.

Capital and financial flexibility

Operating leverage ratio: net written premiums divided by shareholders' equity.

Debt leverage: debt divided by capital.

Interest coverage: EBIT (excluding realised and unrealised capital gains) divided by interest expense (excluding debt instruments qualifying as capital).

Fixed-charge coverage: EBIT (excluding realised and unrealised capital gains) divided by interest expense (including debt instruments qualifying as capital).

Non-Life Insurers

Return on Revenue (ROR): net income before tax divided by total revenue. This metric may be adapted to exclude realized and unrealized investments gains.

Gross loss ratio: amount of gross claims incurred for current and previous year divided by gross earned premiums.

Net Loss ratio: amount of net claims incurred (after deduction of reinsurers' share) for current and previous year divided by net earned premiums.

Current year net loss ratio: amount of net claims incurred (i.e. after deduction of reinsurers' share) for the current year divided by net earned premiums.

Prior year net loss ratio: amount of net claims incurred (i.e. after deduction of reinsurers' share) for the previous year divided by net earned premiums.

Gross expense ratio: gross operating expenses (underwriting, acquisition and administrative expenses) divided by gross earned premiums.

Net expense ratio: gross operating expenses (underwriting, acquisition and administrative expenses) less reinsurance commissions (i.e. the commission that reinsurers pay to insurers as participation in the original costs) divided by net earned premiums.

Gross combined ratio: this combines the gross loss ratio and the gross expense ratio. The combined ratio provides an indication of how well an insurer has calculated its products.

Net combined ratio: gross combined ratio adjusted for the impact of ceded reinsurance. The ratio provides a measure of net underwriting performance.

Net operating ratio: net combined ratio less the ratio of net investment income to net earned premiums.

Loss reserve run-off: net claims paid and addition/reduction in claims reserves for the previous year divided by claims reserve at the end of the previous year.

Life Insurers

Return on Assets (ROA): EBIT excluding realised and unrealised investment gains or losses divided by the two-year end-period average of total assets. As a secondary measure realised and unrealised investment gains and losses may be included in the ratio.

General expense ratio: gross operating expenses divided by gross written premiums.

Lapse ratio: The sum of lapses and surrenders divided by the two-year end-period average of technical reserves.

Embedded value (EV): is based on the appraisal value of a life insurer. EV usually represents shareholders' net worth *plus* value of in-force business (i.e. discounted present value of future distributable after-tax profits expected to emerge on existing business).

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