Rating criteria for life insurance companies

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Executive summary

CRISIL Ratings assigns corporate credit ratings to insurers\(^1\) to measure their financial strength, i.e., their ability to meet policyholder obligations. Companies are evaluated on a standalone basis, and also based on the parent support they receive. On a standalone basis, factors such as industry and business risks, risk management systems, investment quality, goals and strategies, and business plan are analysed, in addition to the financials and liquidity. Parental support is crucial, especially for start-up insurance ventures, given the need for recapitalisation until they break even and start generating profit.

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\(^1\) Previous published document on ‘Rating criteria for life insurance companies’ may be found at:
Scope

This criteria document highlights the CRISIL Ratings approach to assessing the credit quality of life insurance companies. The methodology outlined in this document is used to arrive at the standalone rating of a life insurer. CRISIL Ratings may notch up the standalone rating for support from the parent / government. The extent of notch-up is driven by the criteria for notching up standalone ratings of entities based on parent / government support, which can be found on the CRISIL Ratings website, www.crisilratings.com. The document also covers CRISIL Ratings’ approach to financial ratios used for analysing these entities.

Standalone assessment

Business risk

This is an analysis of specific factors influencing a company, including:

Business mix and competitive position: The business plan is studied to understand a company’s commitment to prudential underwriting standards.

A life insurance company can offer both life and annuity products. Life insurance supports families of those who pass away early, whereas annuities are a stable source of income. Nevertheless, life products can combine features of an annuity, and annuity products can also be designed to provide life cover.

Death of a life insurance policyholder at a young age, entails meeting obligations from an earlier date, whereas prolonged life of an annuitant implies payment exceeding the estimated obligation. From a risk perspective, both these situations can result in a loss for the insurance company, and hence, the business mix must be an optimal combination of life policies and annuities.

Like business diversity, product diversity is also important. Life insurance companies offer both unit-linked investment plans (ULIPs) and traditional policies. Through ULIPs, the companies provide a life cover along with an investment option to the policyholder. A small part of the premiums received from policyholders in ULIPs, is set aside as premiums pertaining to non-participating life cover, and the balance amount is invested in a fund of the policyholders’ choice. The net asset value (NAV) of a fund is impacted by ups and downs in the capital market. The NAV may show a rise or a fall, depending on volatility in equity markets or interest rates. Investment risks in ULIPs, arising from movement in NAVs, is entirely borne by policyholders, and hence, the profit margin of insurance companies offering ULIPs tends to be low.

Traditional policies can be bifurcated into non-participating and participating policies. In a non-participating policy, an insurance company promises a guaranteed benefit to the policyholder, as a life cover in term policies, annuity cover in pension and annuity products, and a life cover along with guaranteed returns in endowment policies. Investment risk in these policies is entirely borne by insurance companies, and hence, the profit margin is higher. The profit margin of insurance companies in participating policies is moderate, as companies share the risks and rewards with policyholders, in the form of bonuses and dividends.

Large scale of operations is beneficial as a better market position ensures that the insurer is able to withstand potential losses, which may arise due to sudden rise in claims in one or more segments. Diversity in geographic reach is equally important, as sizeable exposure to a single state or district exposes a life insurance company to catastrophic and pandemic risks, in addition to other related risks.

The overall insurance industry is also analysed based on its importance to the economy, its size and growth potential (present penetration levels and growth prospects), entry barriers, stability of underwriting performance, and regulations governing the sector. On the regulatory front, licensing requirements, investment guidelines, accounting
norms, pricing freedom and solvency margins are examined; all insurance companies need to comply with these regulations.

An insurance company with a balanced product mix, diversified geographic presence, established brand and superior competitive positioning, is likely to have a more stable business risk profile.

**Pricing:** As life products are a combination of savings and life cover, the prevailing interest rate plays a critical role in their pricing. Besides, pricing is dependent on the mortality rate, age at entry, product features (with profit and without profit policies) and other features such as occupational risk, family and health history, and personal habits.

For annuity products, pricing is based on the annuitant’s longevity or survival rate.

**Underwriting policy:** Sound underwriting guidelines and their ability to manage associated risks are pivotal to the long-term solvency of an insurance company. For life insurance companies, payments to policyholders include claims due to death, surrender of policy or its maturity. The mortality risk and associated estimated claims is projected based on historical mortality rates. However, the survival rate or longevity of a policyholder is increasing gradually, due to sustained improvement in healthcare services. This in turn, involves higher uncertainties in estimation of liabilities pertaining to annuity or pension policies. On the other hand, risks like a pandemic are a category of catastrophe risk which brings in significant uncertainties to claims in pure risk term life products. Hence, assumptions on mortality risk and claims reserving and its implications on solvency buffers are also analysed.

**Distribution channel:** As life insurance targets individuals, a wide and strong retail distribution network is required to generate business volume. Besides, individuals need to be provided with appropriate counselling to protect themselves through life covers. This is an educative process and converting prospective customers into effective insured clients has its own gestation period. The analysis captures the effectiveness of a distribution channel set up by an insurance company. A wide distribution channel is critical for growth and for optimising distribution expenses. The profile of agents, in terms of their experience, productivity and policy lapses and surrenders, is also analysed. Productivity parameters for agents include first-year premium income generated and sum insured per agent. Finally, direct digital channel and use of digital means for customer onboarding and retention is also an important pre-requisite as customers are technology savvy and seek frictionless transactions.

**Reinsurance policy:** Reinsurance facilitates diversification of an insurance company’s underwriting risks amongst a pool of reinsurers, besides increasing the underwriting capacity. The level of risk retained by an insurance company is examined by studying its reinsurance strategies, the reinsurance schemes it has entered, extent of reinsurance, and its financial strength and credit profiles.

**Investment quality:** Prudent management of the investment portfolio is critical for bolstering overall performance of an insurance company. Appropriate systems, judicious investment policies and internal controls are essential components of fund management.

Life insurance is a long-term product. Premiums received from policyholders are invested in short-, medium- and long-term assets. Investment inflows (interest and principal on maturity) are utilised to meet policyholder obligations. The investment strategy should focus on asset quality, containing asset-liability mismatches and maximising yield on investments. In fact, some of the factors that have led to poor performance of insurance companies globally include asset-liability mismatch, poor quality of asset portfolios and low return on investments.

This analysis captures the company’s investment strategy, in terms of credit quality, capital appreciation, long-term safety and easy liquidity. The investment portfolio’s diversity across industries and companies, along with single risk concentration limits, is important to determine the overall asset quality.
Technology and risk management: Technology to support timely delivery of products and efficient risk management are critical. Appropriate systems facilitate better risk selection, pricing of products, monitoring of claim legitimacy and quick settlements.

Persistency and conservation ratios are also evaluated to assess the efficacy of the life insurance company. Persistency ratio is calculated as the total number of policies renewed in the current year, expressed as a percentage of the total number of policies outstanding in prior years. Conservation ratio represents the total renewal premium collected in the current year, expressed as a percentage of total premium collected in the previous year.

Financial risk

Fund infusion plans, in line with business requirements, are scrutinised, to confirm whether the company’s solvency ratio complies with the Insurance Regulatory and Development Authority of India’s (IRDAI) stipulations, and to verify the adequacy of the solvency margin. This is critically examined for companies that are at a nascent stage of operations, and yet to achieve break even. This is also examined for companies growing at a pace higher than that supported by their internal accruals.

Capitalisation

IRDAI has prescribed a minimum start-up capital of Rs 1 billion for life insurance companies. To ensure the company’s safety and financial health, IRDAI has specified the solvency margin to be maintained by all life insurers. In addition to regulatory compliance, the analysis considers adequacy of the solvency margin projected by an insurance company.

In 2016, IRDAI allowed issuance of hybrid instruments to supplement the capital requirement, thereby boosting available solvency margin of several insurers. This would ensure the solvency margin remains above the regulatory minimum, as pay-outs to these instruments are contingent on this.

Along with the solvency ratio, the available solvency margin against economic capital requirement and market consistent embedded value, is also taken into consideration while assessing the capital position.

Earnings profile

A life insurance business takes a while to break even and report profits. While all the expenses and reserve requirements must be met in the first year of underwriting itself, profitability improves over a period, in line with growth in scale and operating efficiency. Therefore, in addition to return on equity, other metrics such as value of new business margin and return on embedded value are also factored in, if available, while assessing the earnings profile of a life insurance company.

Liquidity and financial flexibility

This parameter looks at an insurance company’s resource strength and liquidity support available to meet policyholder obligations. Primary sources of liquidity include underwriting cash flow, operating cash flow and investment portfolio liquidity. A line of credit facility from banks to meet short-term liquidity requirement, is an additional plus point. Timely and need-based funding commitment from promoters is also critical because insurance companies are expected to have adequate financial flexibility. Surrender, lapse, and cancellation of policies can weaken liquidity of life insurers. Hence, the mechanism set up by the company to cope with such eventualities, remains vital.
Management risk

Quality of management is a key differentiator with respect to future performance of an insurance company. Managements are evaluated based on their goals and strategies, appetite for risks, ability to manage and control risks, integrity, depth, and stability. Management risk can be used for constraining the standalone rating in case of a poor management profile.

Parent support

In this case, the economic rationale, and moral obligation of the parent towards the insurance subsidiary are inspected.

The economic rationale captures the strategic importance of the subsidiary, the economic incentive for the parent to offer support, along with the current and prospective ownership structures. An assessment of the parent’s moral obligation to provide support involves evaluation of factors such as management control, common branding or name sharing and its stated posture towards the insurance subsidiary. The parent’s stated posture to support its subsidiary on an ongoing basis and under distress is hence evaluated.

Conclusion

CRISIL Ratings considers business mix, market position, investment policy and quality, risk management, capitalisation, earnings, and liquidity as the business and financial risk parameters that drive the rating of a life insurance company. These parameters determine the company’s ability to underwrite, price and manage its risks, generate sufficient returns, and maintain adequate capital for loss absorption, liquidity, and growth.
Key ratios used by CRISIL Ratings while rating life insurance companies

**Expense ratio** = (Operating expense + Commission expense) / Net premium written

The operational efficiency of insurance companies is measured by expense ratio. Expense ratio captures the operational cost of underwriting policies as well as the commission paid to the insurance agents and is used as one of the measures of profitability. Higher the expense ratio, lower is the operational efficiency and therefore underwriting profitability.

**Solvency ratio** = Available solvency margin / Required solvency margin

Solvency ratio is a measure of adequacy of capital against the underwriting risks inherent in the business and growth of an insurance company. IRDAI stipulates a minimum solvency margin ratio that needs to be maintained by all insurance companies to ensure their steady state financial health.

The numerator in solvency ratio – available solvency margin is an indicative measure of capital cushion and profitability of an insurance company. It is the excess of assets over liabilities of policyholders’ funds and shareholders’ funds of an insurer.

The denominator in solvency ratio is calculated using a methodology prescribed by the regulator. The regulator requires all the insurance companies to always maintain a minimum excess of assets over the liabilities - required solvency margin (RSM). RSM is a factor of the risk inherent to the underwriting business as well as the investment portfolio of an insurance company. Higher the risk an insurer takes, higher RSM will be applicable to it and vice versa.

**Return on investment (RoI)** = Investment income / Average total asset under management (AUM)

Insurance companies’ profitability is typically categorised under two heads. The first head includes profit made purely from the insurance underwriting business. The other, is investment income which the insurance company makes by investing the assets it owns under both policyholder and shareholder account into various securities. These investments are regulated as per IRDAI (Investment) Regulations. RoI indicates the returns generated on deployment of assets as investments. Consistently higher ratio indicates better performance of the investment portfolio.

**Return on equity** = Profit after tax (PAT) / Net worth

Return on equity is a measure of the profits generated by an insurance company vis-à-vis the value of shareholders’ fund. Consistently higher return on equity indicates better utilisation of the shareholder’s funds.

**Persistency ratio** = Number of policyholders paying the premium / Total active policyholders in the same period.

Persistency ratio is the ratio of policies against which timely premiums are received and the total number of active policies in the same time period. The ratio indicates how many policyholders pay the due premiums regularly on the policies with the insurer. A higher persistency ratio is an indicator of policyholders’ trust with the life insurer.
Return on embedded value = Profit after tax / (Present value of future profits + Net asset value of capital & surplus)

Embedded value (EV) is a metric used for life insurance companies as a measure of shareholder value. EV indicates the present value of the expected future profits from the existing policies written by the life insurer as well as the total accumulated funds (capital and surplus) which belong to the shareholders after netting off any liabilities. Embedded value is a measure of shareholders’ interest in the company.

VNB margin = Value of new business / Annualised premium equivalent

VNB margin is used as an indicator of the profit margin of the new policies written by a life insurance company. The numerator, value of new business (VNB), is the present value of the expected future earnings from the policies written by the life insurer in a year. The denominator, annualised premium equivalent, is the sum of the regular annualized premium from the new policies written as well as 10% of the lumpsum premium received in the year.

“A 30% VNB margin for a life insurer would mean that on an average, for every new policy worth Rs.100 underwritten in a year, the total expected profit over the life of the policy will be Rs. 30.”
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It is India’s foremost provider of ratings, data, research, analytics and solutions with a strong track record of growth, culture of innovation, and global footprint.

It has delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers through businesses that operate from India, the US, the UK, Argentina, Poland, China, Hong Kong and Singapore.

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CRISIL Ratings pioneered the concept of credit rating in India in 1987. With a tradition of independence, analytical rigour and innovation, we set the standards in the credit rating business. We rate the entire range of debt instruments, such as, bank loans, certificates of deposit, commercial paper, non-convertible / convertible / partially convertible bonds and debentures, perpetual bonds, bank hybrid capital instruments, asset-backed and mortgage-backed securities, partial guarantees and other structured debt instruments. We have rated over 33,000 large and mid-scale corporates and financial institutions. We have also instituted several innovations in India in the rating business, including rating municipal bonds, partially guaranteed instruments and infrastructure investment trusts (InvITs).

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