Global
Master Criteria

Insurance Rating Methodology

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Related Research

- *Non-Life Insurance Rating Methodology (Global) (24 March 2010)*
- *Life Insurance Rating Methodology (Global) (24 March 2010)*
- *Fitch's Approach to Rating Groups (24 March 2010)*
- *U.S. Health Insurance and Managed Care Rating Methodology (24 March 2010)*
- *Rating Guidelines for U.S. Private Mortgage Insurers (19 November 2008)*
- *Insurance Industry: Global Notching Methodology and Recovery Analysis (29 December 2009)*
- *Rating Hybrid Securities (29 December 2009)*
- *Fitch Ratings Definitions*
- *Short-Term Ratings Criteria for Corporate Finance (12 June 2007)*
- *Country Ceilings (12 September 2008)*
- *Country-Specific Treatment of Recovery Ratings - Revised (21 August 2006)*
- *Equity Credit for Hybrids & Other Capital Securities (29 December 2009)*
- *Takaful Rating Methodology (25 October 2007)*
- *Criteria for Model Management (30 September 2009)*
- *Evaluating Corporate Governance (12 December 2007)*
- *National Ratings - Methodology Update (18 December 2006)*
- *Coercive Debt Exchange Criteria (3 March 2009)*

Summary

Fitch Ratings' criteria for rating insurance organizations is designed to set out the minimum rating factors that Fitch considers in the rating of insurance entities, as well as their debt issues and policyholder obligations. This global master criteria report presents the broad principles that apply for all of Fitch's insurance company ratings and is supplemented by sector-specific criteria providing more detail by company specialty.

The agency regards this methodology as generally being applicable to registered insurance firms and to those firms accepting similar risks. The guidelines in the report are purposely broad in scope, recognizing that Fitch's analytical process is dynamic and that each issuer possesses unique characteristics that cannot be captured by a narrow or overly rigid approach. Further details on the agency's methodology may be available in the agency's sector-specific criteria reports.

The main factors used by Fitch for the analysis for insurance companies are as follows:

- Industry Profile and Operating Environment
- Company Profile and Risk Management
- Financial Profile
- Management Strategy and Corporate Governance
- Ownership, Support and Group Factors

The agency does not use a pre-set "weighting" for each of these rating factors or for the various elements within each factor, as Fitch considers that the appropriate weightings can change given particular circumstances. As a general guideline, where one factor is significantly weaker than others, this weakest element tends to attract a greater weight in the analysis.

This master criteria identifies factors that are considered by Fitch in assigning ratings to a particular entity or debt instrument within the scope of the master criteria. Not all rating factors in this criteria may apply to each individual rating or rating action. Each specific Rating Action Commentary or rating report will discuss those factors most relevant to the individual rating action.

Scope of Criteria

Insurance firms are financial organisations that offer protection to policyholders and are often identified and defined based on the types of contract that they write or by the way that they are authorised or regulated. The International Accounting Standards Board has defined an insurance contract as "A contract under which one party (the insurer) accepts significant insurance risk from another party (the policyholder) by agreeing to compensate the policyholder if a specified uncertain future event (the insured event) adversely affects the policyholder." Although this definition is helpful, it is not uncommon for registered insurers to offer some products that do not meet this strict definition. Similarly, non-insurance companies may issue contracts that provide risk coverage.

By offering protection to their clients in return for a premium (or in some cases a fee), insurers aim to generate a suitable return on the capital that they hold. This return can be achieved by ensuring that the firm charges an adequate premium compared to expected claims but also by successfully managing their investment assets and in some cases also by charging sufficient additional fees to meet expenses or the costs of guarantees.

Given the nature of their operations, insurers are regulated in most jurisdictions and typically expose themselves to a number of risks. The main risks faced by insurers include product risk (including various factors such as the risk that claims are of a higher frequency or severity than anticipated), reserve risk (the risk that reserves set aside to meet future claims are inadequate) and asset risk (the risk that asset valuations fall, leaving the insurer with inadequate resources to pay claims.) Other risks which can be important in some cases include liquidity and expense risk.

There are a range of types of insurance firm, which face the above risks to varying extents. Some of the most common types of insurance firm are listed below.

- Non-Life Insurance (also known as property & casualty or general insurance)
- Life Insurance
- Reinsurance
- Health Insurance
- Title Insurance
- Financial Guaranty Insurance
- Mortgage Insurance
- Other

A general description of each of these insurers is included in appendix 1. Additional details on the rating process that is applicable to many of these types of insurer are available in the more specific criteria reports referenced on page 1 of this report. These more specific criteria are additive to this document.

Ratings Limitations

Ratings are primarily based on a review of public information together with Fitch's judgements and forecasts. Where management interaction is forthcoming, the information derived may or may not influence the rating, based on Fitch's judgement of the usefulness of such information. In certain cases, Fitch's forward-looking views related to risk exposures or forecasts may dominate a rating conclusion, and such forward-looking views may be based on factors that are highly judgmental.

Especially given the diverse nature of the global insurance industry, both by geography and product, there are a large number of issues that can potentially have credit rating implications. The agency's internal analysis and external communication will be limited to those issues that Fitch considers material and most relevant to its ratings.

Unlike many non-financial ratings, insurance is an industry where the financial strength of the insurer offering a policy is intrinsically linked to the value of the policy that is offered. Put more simply, a promise to pay claims or benefits by a very strong insurance company may be considered as being worth more than from a weaker firm and some policyholders may have minimum levels of financial strength that they consider adequate. One implication of this is that a slight weakening in financial strength can in some cases have a magnified effect, due to a loss of new business or the presence of explicit or implicit rating triggers. Given this characteristic of the insurance industry, the severity of ratings transition may be more pronounced for insurers relative to non-financial corporates, especially in the case of downgrades around the cusp of market sensitivities.

Although financial institutions such as banks share some similar characteristics to insurers, most notably a potential vulnerability to a sudden loss of confidence, the volatility of ratings for financial institutions is moderated to some extent by an expectation of government support. Given the lower systemic importance of insurance firms, Fitch does not typically assume that government support will be forthcoming. That said, in specific instances, an expectation of government support or continued government support can provide support to ratings levels.

'Event Risk' is a limitation defined as an unforeseen event which, until the event is known, is not included in the existing ratings. Event risks include management's decision to unexpectedly acquire another company, undertake a sizeable share buyback, or unexpected losses arising from an operational breach. Some ratings may already include a reasonable assumption that management's strategy is acquisitive, prone to utilizing existing financial flexibility or has a weak operational infrastructure, but the specifics of any given event and its effect on funding, capital and liquidity will not be known until the event is announced or consummated, at which point ratings can be ascertained.

Insurance ratings are subject to the limitations that are outlined in the document *"Definitions of Ratings and other Scales"*, published March 2009 and available on www.fitchratings.com.

Insurance Ratings

Fitch assigns a number of rating types to insurance entities, reflecting the range of different liabilities that can exist for insurers and in accordance with the agency's rating definitions. Details of Fitch's issuer and issue ratings are also provided in the document *"Definitions of Ratings and other Scales"* referenced above.

Long-Term IFS Ratings

Unique to insurers is the Long-Term Insurer Financial Strength (IFS) Rating which is an issue rating assigned to the insurance company's policyholder obligations. This provides an indication of an insurer's capacity to pay its insurance obligations and is derived from the Issuer Default Rating (IDR) of the insurance operation.

Issue ratings can be notched up or down from an applicable IDR depending on expected recoveries. For those entities where policyholders would be given a priority claim to assets in the event of a winding up, Fitch typically assumes enhanced recoveries which lead to the IFS rating being one notch higher than the IDR. Where Fitch considers that no priority for policyholders exists, the agency generally rates the IFS and IDR at the same level. For insurers with an IDR of 'B+' or lower, Fitch uses a bespoke recovery analysis.

Further details on the agency's methodology for notching insurance issue ratings are shown in the criteria report *"Insurance Industry: Global Notching Methodology and Recovery Analysis"*, published 29 December 2009 or successor report. For exceptions to the principles outlined in this master document pertaining to financial guaranty insurers and mortgage insurers, please see appendix 4.

Fitch assigns ratings to both operating insurance entities and in many cases also to non-operating holding companies within an insurance group (i.e. holding companies that do not conduct any significant business in their own right, hereafter "holding companies"). Ratings are typically assigned to insurance holding companies based largely on the strength of insurers and other businesses within their group. The starting point of Fitch's analysis on an insurance holding company is therefore consideration of the financial strength associated with the major operations of the group. Where ratings are assigned to holding companies, these are determined by the agency's notching methodology and are often lower than the insurers' within the group due to regulatory or legal restrictions on the payment of dividends to the holding company. Further details are provided in the *"Insurance Industry: Global Notching Methodology"* referenced above.

Short-Term IFS Ratings

Whilst the Short-Term IDR is linked to the Long-Term IDR, the Short-Term IFS is linked primarily to the Long-Term IFS rating. The assignment of short term ratings is described in more detail in the criteria report *"Short-Term Ratings Criteria for Corporate Finance"*, published 12 June 2007 or successor criteria.

Relationship Between Long-Term and Short-Term IFSs

Long Term IFS	Short Term IFS
AAA	F1+
AA+	F1+
AA	F1+
AA-	F1+
A+	F1 or F1+
A	F1
A-	F2 or F1
BBB+	F2
BBB	F3 or F2
BBB-	F3 or F2
BB+ to B-	B
CCC to C	C

Source: Fitch

Local- and Foreign-Currency Ratings

Fitch does not frequently publish separate local-currency and foreign-currency ratings for insurance (referring to local-currency and foreign-currency obligations respectively) given that transfer and convertibility (T&C) risk and therefore country ceilings are rarely a defining factor to an insurer's rating. However, separate ratings may be assigned where considered appropriate. In practice, given that investments in local-currency denominated government securities are often substantial — especially in emerging markets — it is rare that an insurer focused on one country has an IFS rating (or IDR) that is higher than local-currency sovereign debt.

For an insurer to be rated higher than local sovereign debt, Fitch would need to have a view that the insurer would be able to continue to meet obligations in the case of a sovereign default. Further details on country ceilings are given in Fitch's criteria *"Country Ceilings"*, published 17 August 2006 or successor criteria.

Sufficiency and Robustness of information

Although Fitch may receive non-public information from rated issuers, the extent and usefulness of such non-public information can vary widely from issuer to issuer, as well as over time for a given issuer. Thus, while such information can be informative, Fitch generally does not rely on non-public information when rating insurance organizations. Further, the agency recognises that publicly available information is often the only data available for investors, brokers, insurance policyholders and other stakeholders with an interest in the creditworthiness of insurance organisations.

Some exceptions do exist, for example mortgage insurers (MI) and financial guaranty insurers (FG) where Fitch regards detailed exposure data as important for its analysis of these organisations. These data are provided by the rated organisations, remain relevant for a period of time and are unaudited. The period for which this exposure data remains sufficient depends on specific circumstances but would rarely exceed 18 months from date of provision.

Excluding MI, FG as well as some emerging markets, circumstances under which Fitch is not able to maintain a rating on an insurer are expected to be relatively rare. These circumstances would be limited to where the available information is considered neither sufficient nor robust enough to reach a rating conclusion. This could occur in cases where Fitch uses only public information, as well as cases when

Fitch also receives non-public information from the issuer. In any instance where Fitch believes information is neither sufficient nor robust, it will not assign a new rating, or it will take steps to withdraw an existing rating. This determination is made solely by Fitch.

Sufficiency of Information

Information is considered sufficient for rating purposes if it meets the agency's minimum information threshold and in the agency's view, it is possible to evaluate known key risks that impact the company. In this evaluation, Fitch may employ reasonable estimations and in assessing sufficiency, the agency will take into account the extent of information which is typically available for other rated companies.

Fitch's minimum guidelines are for financial information covering the last five years of operation or from the start of business operations where this is shorter. That said, unique circumstances may exist (eg involving mergers and acquisitions) that would allow Fitch to rate insurance organisations using less than five years of data. The agency's guidelines also call for information on the organisation that allows an insurance analyst to satisfactorily address each factor of Fitch's master insurance criteria. In some cases, sector-specific criteria may set higher information requirements.

Most publicly traded companies would be deemed to have sufficient information to meet Fitch's minimum guidelines, although as noted above, exceptions could exist. Private, mutual and specialty companies may require closer scrutiny. In some jurisdictions, regulatory data is sufficient and meets Fitch's minimum information guidelines such that an IFS and other ratings may be applied despite the organisation's securities not being publicly traded.

Estimations, risks, uncertainties and a lack of a theoretical "ideal" level of information are inevitable for any form of corporate analysis and do not in themselves constitute a limitation to the rating. However, there are cases when the agency's minimum information guidelines are met, but material estimations are required in relation to key risks. Information supporting these estimations may in some cases fall below that used in rating peer companies and potentially result in a greater risk of forecasting error. In such cases, Fitch will disclose this as a limitation to the rating, and explain the impact of how this limitation may have affected the level of the rating. Where these issues are particularly severe, Fitch will either not assign or withdraw the rating.

An example of how Fitch would evaluate information sufficiency and possible disclosure of a ratings limitation, would be a catastrophe reinsurer that does not provide details of its exposure to possible catastrophic losses, such as through Probable Maximum Loss (PML) simulations. Although this situation would fall below the agency's typical information preferences, in some circumstances, it may be possible for Fitch to estimate the PML based on historical reported results of the reinsurer, exposure information, market intelligence, comparisons to peers, or through other means. If Fitch considers its estimated PML analysis to be reasonable, Fitch would be comfortable rating the reinsurer but would disclose the non-availability of company-provided PML data as a limitation of the rating.

Robustness of Information

Information is considered robust where the minimum guideline of five years of financial statement information is met through audited information, and the rating committee find the data sufficiently robust relative to its materiality to the rating. Although Fitch places reliance on the work of auditors in its review of financial statements, the agency may also make use of other experts in its analysis where considered relevant and reliable. Examples of other experts used by Fitch in the assessment of insurance organisations include actuarial consultants, risk modelling agencies and legal advisers, amongst others. In addition to information provided by such experts, Fitch frequently also makes use of a variety of third-party information

Start-Up Ratings and Organisations with a Limited History

In some cases, Fitch assigns ratings to insurance companies that are commencing operations or have a limited track record. In such cases, the agency assesses management's track record, data and experience as well as placing greater weight on a critical assessment of forward-looking forecasts and budgets. Corporate governance and ownership factors also play a more important role in the assessment of a start-up. This includes the alignment of incentives between the management and owners but also the owners' identity, resources, investment style, exit strategy and investment track record. Owners that have limited resources, an aggressive exit strategy, and high return expectations are usually less favourable for the insurer's rating.

In rating such firms, the degree of judgement that is required in the rating process is increased and the rating is heavily impacted by Fitch's perception of management's ability to reach its financial projections. The agency generally views a limited track record for a firm as elevating the risk profile relative to peers, reflecting the challenges of attracting quality new business as well as potential operational difficulties. These challenges are often less significant and long-lasting for industry segments where business is short-tailed, customers more opportunistic and significant data is publicly available to help quantify and assess risks (eg catastrophe reinsurers.)

Reflecting this elevated risk profile, it is rare for Fitch to assign insurers a 'stand alone' rating (ie before taking into account the impact of support) above the 'A' category and many well capitalised, well run institutions with a limited history would be rated in the 'BBB' category. Where Fitch assigns a rating to an insurer based on its standalone profile and with less than five years of audited information available, this will be disclosed at the time of assignment.

sources as well as data provided directly by the rated organisation. Fitch does not attempt to test or validate the information provided through these channels.

Selection and Use of Information

Fitch recognises that different accounting rules or policies can affect an insurer's results and the agency may therefore make adjustments to the reported financial information to increase comparability with other rated companies, or to better align reported information with Fitch's definitions of financial ratios or other measurements. In completing its rating analysis, Fitch often has various forms of information available which overlap and combine to inform the agency's analytical view on an issuer's or issue's rating. Analysts may liaise with analysts in Fitch's other analytical groups to gain a full and prospective view of the operating environment as well as obtaining additional details on various credits and sectors.

Fitch's analytical criteria can be applied to various groupings of issuers or rated entities, to an individual entity or to a group/sub-group of entities. Accordingly, in its analysis, Fitch may review consolidated financial statements of insurance groups, individual statements of specific insurance companies, parent-only holding company statements and/or consolidating financial statements. The extent to which each of these types of financial statements are relevant varies according to circumstances and in particular, the scope of the ratings exercise including which entities are to be rated, and the extent to which rated entities would expect to support, or be supported by, other entities within an ownership group. Fitch notes too that not all of these types of financial statements are available from all rated entities, and when that is the case Fitch will use the best available information.

Stress Testing and Forward-Looking Analysis

Fitch strives to be forward looking in its analysis so the agency's insurance ratings do not necessarily move in line with the strength of recently reported results. These forward-looking elements are built in partly through analytical expertise and an understanding of the key factors driving the market and the risks associated with insurance organisations. This expertise is documented in part through various reports published by the insurance group as well as other groups within Fitch, particularly through industry special reports and macroeconomic commentary. However, forward-looking elements are generally also built in to the analytical process more directly through the inclusion of forecasts or stress tests.

Fitch may conduct various stress tests in the course of its analysis, designed to identify the vulnerability of an insurer to various economic circumstances or events. Examples of stress tests include investment losses from equities, credit losses from debt instruments or potential exposure to various natural catastrophe events.

Rating Analysis

The main rating factors used by Fitch for the analysis of insurance companies are as follows:

Industry Profile and Operating Environment

Ratings for organisations that operate in industry segments viewed as higher-risk are likely to be negatively affected and these insurers will generally find it more difficult to achieve high ratings. For example, Fitch has virtually no reinsurers rated above 'AA' but a number of (especially mutual) life insurers are rated above this level. This difference is in part related to the inherently volatile nature of reinsurance, which can in some cases, and to some extent, act as a constraint to rating levels. Lower-risk industries include motor (auto) insurance and some forms of life business; in these instances higher ratings can be achieved more easily.

In addition, industry segments which are suffering from an adverse operating environment are on average, more likely to experience losses and financial difficulties. An adverse operating environment is therefore generally considered negative for an insurer's rating, subject to the proviso that where this adverse environment is considered a purely cyclical phenomenon, Fitch will be cognisant of a 'normal' or 'expected' cyclical element in its rating determination. Unless specifically stated, Fitch's insurance ratings are forward-looking and are not considered to be point-in-time evaluations of creditworthiness. The agency's ratings on insurers aim to capture all identifiable risks that may affect the issuer or rated entity. However, in practical terms, this generally equates to a focus on a three to five year time horizon, less during periods of high stress.

Examples of the generic factors that may be considered relevant to the rating in respect of the industry profile and operating environment include:

The Risks That are Associated With the Types of Products Offered

Some non-life insurance products carry greater risk than others, depending on a range of factors including — but not limited to — the variability associated with the frequency and severity of claims and the ability of the insurer to reprice products.

For life products, risk can be elevated by the provision of guarantees to policyholders and where options are provided to policyholders to recover the value of their contract at short notice, which can lead to sudden liquidity demands. Risk is often closely linked to product design and especially, the ability of the entity to share risk with policyholders.

For both life and non-life products, asymmetric information between policyholder and insurer can lead to moral hazard (the potential for an insured individual to behave differently from one that is uninsured) and adverse selection (poor risks are generally more likely to purchase insurance than good risks). These are key concepts for insurance and can have an important bearing on the way that expected claims are assessed and products are priced. Although products are often relatively standard within markets, the risk associated with the types of products offered can be an important determinant of creditworthiness.

The Industry Outlook and Inherent Industry Risks

Certain segments of the insurance industry may be threatened by factors including political decisions, the emergence of substitute products, long term demographic changes or shifts in preferences.

Such changes to the general environment can make the future operating environment more or less favourable for the rated organisation. An insurer operating in an industry with a favourable outlook and low industry risks would tend to be rated more highly than where this is not the case. As noted above, structural shifts would tend to be given greater weight in the analysis than short-term cyclical movements, especially where these cyclical movements align with Fitch's prior expectations. For example, likely legislative reform that would have the effect of substantially increasing insurers' costs would tend to impact the rating much more significantly than a normal level of cyclicality associated with non-life pricing.

The Competitive Landscape and Barriers to Entry

The competitive landscape encompasses factors such as the degree of industry concentration within and across industries, variability by customer (commercial versus retail) and elements of concentration or diversification. Many life insurance companies compete amongst themselves and against asset managers and banks. Some insurance products are dominated by a small number of industry players (eg credit insurance) whilst others are characterised by a large number of competitors. Dominant market positions in a fragmented market or a profitable niche are likely to benefit from greater pricing power and may allow higher credit ratings.

Some segments of the insurance industry are characterised by relatively low barriers to entry (eg reinsurers in Bermuda) whilst others are significantly higher (eg niche insurance lines highly dependent on specialist distribution, expertise and data, as well as lines of business requiring a critical mass to achieve expense efficiencies). Where barriers to entry are low, competition is liable to be higher and the potential pressure to reduce premiums to uneconomic levels is increased.

Product differentiation and strong distribution networks are especially important when barriers to entry are low. In many cases, the insurance product is relatively homogeneous or is perceived by the customer as such (eg motor insurance). A lack of differentiation and an increasing power of insurance intermediaries compared to insurers would tend to increase competition and act to reduce the credit quality of an insurer. Similarly, the existence of substitute products would tend to pressure returns. Self-insurance is a key competitor for commercial insurance products in some business lines. The capital markets have also emerged as a significant competitor for some insurance and reinsurance products, most obviously in the form of Insurance-Linked Securitisation (ILS) which is discussed in more detail below.

The competitive landscape and barriers to entry are often inherent to an industry and as such can have an important impact on ratings, as noted above. The impact of such inherent features as low barriers to entry can also feed through to other areas of the analysis including profitability and potentially also capitalisation if the only way to achieve an adequate return on capital employed is to increase operational leverage.

The Sovereign Environment and Macroeconomic Risk Factors

The macroeconomic environment can have a significant effect on both the assets and the liabilities of insurers and can therefore affect the credit quality of insurance firms. The impact on claims and liabilities can vary greatly dependent upon product type. Insurers that are especially affected in adverse economic conditions would include those offering insurance where claims are closely related to the macroeconomic environment such as trade credit insurance and mortgage insurance. More traditional insurers are less directly impacted by weak economic conditions but may experience a higher level of fraud and criminal activity as well as a change in the propensity of policyholders to either save (for life business) or purchase protection. An inflationary environment can negatively impact both claims and in some cases asset performance, thereby creating capital and liquidity challenges.

The sovereign environment affects ratings in several ways, some of which relate to the creditworthiness of the government and others relate to financial stability, the availability of foreign exchange and the local legal framework. Further details are provided in the criteria documents *"Country Ceilings"*, published 17 August 2006 and *"Country-Specific Treatment of Recovery Ratings – Revised"*, published 21 August 2006 or successor criteria.

Regulatory, Legal and Accounting Risks.

Insurance policyholders benefit in many cases from being customers of a regulated industry which may provide certain legal protection such as priority over unsecured creditors in a winding up. The form and strength of this regulatory and legal protection varies globally but strong regulation and suitable capital requirements are viewed positively for both the IDR and IFS rating.

Given that these factors are not specific to any particular company, they are often outlined through industry special reports. However, from an analytical perspective, these factors are primarily factored into ratings through Fitch's analysts maintaining a suitable understanding of the relevant insurance industry, regulatory and accounting regime, products offered, as well as the relevant macroeconomic and sovereign environment.

Fitch's public commentary in Rating Action Commentaries and published reports will generally mention an insurer's industry profile and operating environment where these factors constitute a meaningful rating driver. Where this is not the case, such factors are unlikely to be mentioned.

Company Profile and Risk Management

After consideration of the inherent risks of an insurance firm operating in particular markets, Fitch considers the specifics of the organisation to be rated and the extent to which it has strengths or weaknesses which are unique or unusual. This evaluation of both company profile and risk management is principally qualitative in nature and based on available information.

Examples of idiosyncratic risks affecting an insurer's company profile can include significant capital markets or other non-insurance operations, rapid growth, known unusual contract features or risk concentrations. If additional idiosyncratic risks are identified for the rated organisation then this may reduce the rating assigned to the extent that it is considered material. In some cases, the negative impact on credit quality from these sources may be substantial. Alternatively, non-standard operations or features may be viewed positively if Fitch considers that they are beneficial. Positive idiosyncratic features could for instance include unusually low-risk products, especially strong distribution channels, economies of scale, a superior technological platform, particularly strong underwriting capabilities, effective expense management or highly profitable but low-risk non-insurance operations. Although such benefits can aid a rating, such advantages can easily be more than outweighed by any additional risks stemming from poor product design, risk concentrations or non-standard operations.

As part of its assessment of the company profile, Fitch may consider market-based indicators including, but not limited to, credit default swap (CDS) rates, bond prices, market implied ratings and share price movements. Although Fitch's ratings are based exclusively on the credit fundamentals of an insurer, these market-based indicators are used to help identify relative degrees of financial flexibility as well as being a tool to identify changes in market information and sentiment.

Risk Management

The ability to monitor and control risk can be an important differentiator in the financial strength of an organisation compared to peers. Enhancements to risk management, often termed "Enterprise Risk Management" have been a key focus for many firms in recent years. Fitch views genuine improvements in the monitoring and management of risk favourably but is cautious of risk management programs that are used to justify significant increases in leverage or reductions in capitalisation. Examples of areas that analysts may take into consideration in respect of an organisation's risk management are:

- management's appetite for risk and communication of this appetite through the organization;
- the independence of any risk management function as well as senior management's understanding and involvement in risk management issues;
- the perceived effectiveness of processes and in some cases tools to monitor and control risks relative to the organization's risk appetite; and
- whether all risks are managed centrally or can be easily compiled to establish an enterprise wide view of risk.

Fitch would usually expect companies with investment-grade ratings to have effective risk management processes. This would include suitable procedures being in place to identify, monitor and control exposures to key events or individual counterparties as well as good underwriting expertise.

Fitch is not in a position to either audit or perform a detailed review of risk management systems or practices and the agency generally only comments publicly on risk management where it is viewed as a significant rating driver or an outlier from peer organisations. In situations where management does not interact with Fitch as part of the ratings exercise, the evaluation of areas such as underwriting expertise and risk management controls are typically based on historic performance, peer comparisons and/or market intelligence. Although differences in the effectiveness of risk management can potentially have a substantial impact on the credit quality of an organisation, it is relatively infrequent that such differences represent a key ratings differentiator between peer companies.

Financial Profile

The financial profile of a company is the most quantitative element of Fitch's rating analysis although the interpretation of results and weighing them into the rating includes significant elements of qualitative judgement.

In the course of its financial analysis, Fitch reviews various financial ratios and other quantitative measurements. These are generally evaluated relative to a combination of industry norms, specific ratings benchmarks, prior time periods and expectations developed by Fitch specific to the rated entity.

The agency's analysis focuses on those ratios and measures deemed most relevant to the insurer's type. More details on specific ratios applied by type of insurer are provided in the specific criteria for sectors or groups. Definitions and guidelines on the interpretation of selected ratios are shown in appendix 2 although not all of these will be applicable to every rated insurer and interpretation can vary according to circumstances.

Fitch will address each of the financial risks that it considers key to the analysis with estimations where necessary based on historical performance, peer averages and any other relevant information sources. Information may be derived from a range of sources including audited financial statements, regulatory returns, management reports, actuarial evaluations and in some cases, company projections. For further details about Fitch's data sources and estimations, see the section *Sufficiency and Robustness of Information* above.

Some of the main elements that are typically reviewed are as follows.

Investment and Asset Risk

The quality and variability of investment assets is often an important determinant of balance sheet strength and credit quality. An insurance company typically has investment risk in several forms including market, credit volatility, impairments and liquidity for marketable and intangible assets.

Fitch therefore considers asset quality as part of its analysis both through an assessment of the extent of equity and property holdings, the credit quality of the fixed-income portfolio as well as the security and volatility of other assets. The agency also considers the liquidity of assets with real estate, loans, structured finance instruments and high-yield corporate bonds amongst others generally being viewed as relatively illiquid. Illiquidity can be especially important if the products sold can generate sudden demands for payment, for example through their nature (eg catastrophe reinsurance) or through specific product features (eg certain policy surrender options).

Highly rated insurers tend to have a diversified and highly rated asset portfolio with limited exposure to equity investments, property and high-yield bonds. Insurers with a substantial exposure to volatile investment assets or investment concentrations to moderate or weak credit quality assets are much less likely to achieve high ratings.

In evaluating investment and asset risk, it is important to consider the corresponding liabilities or potential liabilities that the assets are backing. For example, where investment risk is shared with policyholders (for example some participating life products with limited or no guarantees) then a higher degree of asset risk may be appropriate. Similarly, the liquidity of assets should be considered relative to expected and potential liquidity needs.

Total Financing and Commitments

Insurers often issue debt as a cheaper source of capital and funding than equity. Although the use of debt in an insurer can enhance returns to shareholders, the degree of leverage and increased fixed expenses can significantly add to risk, particularly if the scale of the borrowing reaches high levels. In addition, if the organisation becomes dependent on access to the capital markets to continue its operations or where significant near-term maturities exist, organisations can become vulnerable to closures in the debt markets.

Therefore, to assess the risk associated with financing, where the use of debt is significant and considered appropriate, Fitch considers both:

1. the extent of financings and commitments relative to capital; as well as
2. the vulnerability of the organisation to an inability to refinance debt and other commitments.

In its evaluation of total financings and commitments relative to capital, Fitch includes a broad range of financing types including, long-term notes, bank borrowings, commercial paper, repurchase agreements, match-funded debt at the holding company, letters of credit, securitisations and guarantees of other debt issued by other entities.

In assessing the vulnerability of an organisation to either a general or organisation-specific closure of the credit markets, the agency views both dependence on future funding and near-term concentrations in the effective maturities of financings and commitments negatively for the rating. A highly rated issuer would be expected to avoid excessive levels of leverage as well as avoiding a dependence on future financing to meet its obligations, particularly from a single financing source.

The ratio Debt / Debt + Equity may also be reviewed as a supplementary measure with certain adjustments being made. One such adjustment would be to adjust both numerator and denominator to the extent that the issued debt meets Fitch's criteria for equity credit. Further details on the calculation of equity credit for such instruments is included in *"Equity Credit for Hybrids & Other Capital Securities"*, published 29 December 2009 or successor document.

In the interpretation of the above leverage ratios, Fitch pays attention to the use of the debt and the extent to which debt is closely matched by similarly yielding assets.

Double Leverage

In some jurisdictions, a holding company is created to raise debt for use as capital at the operating company level of the group. Double leverage is defined as equity investments in subsidiaries/ equity of the holding company and is a measure of the extent to which the capitalisation of the insurance entities has benefitted from downstreamed financing. High levels of double leverage indicate a weaker quality of capital at the operating company level and would be expected to put negative pressure on ratings relative to a firm without double leverage.

Interest Coverage

Interest coverage is a measure of the affordability of interest payments and defined as EBITDA/interest expense, where EBITDA is earnings before interest, taxes, depreciation and amortisation. High levels of leverage or low levels of interest coverage can lead to wider notching between the operating company and holding company IDR or less commonly, a lower operating company IDR. Guidelines on the level of interest coverage are shown in appendix 2.

Financial Performance and Earnings Evaluation

Financial performance affects the ability to generate capital within the organisation and where favourable, can positively impact the ability to absorb adverse deviations in performance as well as promoting financial flexibility. Performance is considered from several perspectives which vary according to the type of insurer. In addition to accounting measures of profitability, typical ratios include measures of

1. revenue margins;
2. return on assets (ROA); and
3. return on equity (ROE).

Although expected values for each of these measures would be affected by the extent of risk, the ROE profitability measure is especially sensitive in this regard and should be considered in conjunction with the degree of leverage.

In its consideration of financial performance for an organisation, Fitch considers not just the level of profitability but also the quality of earnings. Earnings are considered to be high quality if they are from reliable and repeatable sources such as consistent underwriting profitability. "One-off" items such as asset sales or abnormal releases from technical reserves are viewed less favourably.

An adequate level of profitability depends on the level of risk that the organisation is taking. Insurers that take on a higher degree of risk would be expected to obtain a higher level of profitability in order to compensate their capital providers. On this basis, the return expected from a low-risk motor insurer would be lower than that from a higher-risk catastrophe reinsurer.

Financial performance is often the economic manifestation of other ratings factors and so to some extent may reflect (rather than drive) creditworthiness. For example, favourable financial performance may merely reflect strong management, a strong company profile and favourable operating environment. Care is therefore necessary to avoid double counting these factors. In addition, more important than the level of performance is often the variability of this factor, with more volatile results indicating a higher degree of risk.

Whilst strong and stable financial performance is generally viewed favourably, it is not a reliable indicator of future risk. It is therefore usually less important to the overall rating than other more "intrinsic" risk factors such as product risk and asset risk.

Capitalisation

Capital provides a buffer for policyholders and other creditors, enabling the company to absorb adverse deviations in experience and represents an important part of the financial strength of the organisation. Fitch's view of capitalisation is subjective but informed by measures such as the agency's internal risk-based capital assessment tools, traditional operating leverage ratios (eg net written premium / shareholders funds), regulatory capital ratios and in some cases, an insurer's own in-house capital model.

Fitch believes each perspective on capital holds merit, and will weigh the implications of the various measures as deemed appropriate for a given company. For example, when risk-based capital measures imply strong capital, but notional operating leverage ratios imply weak capital, Fitch could give greater weight to either based on its judgment. While risk-based measures are in many cases more robust, high leveraging of perceived "remote" risks can also result in material capital impairment if such risks were understated. The sensitivity of capital ratios to various factors including market movements and modelled losses, especially around key triggers, can also be relevant in some circumstances.

Fitch's internal risk-based capital assessment tools include:

- Fitch's Prism capital model launched in 2007 in select jurisdictions for life and non-life companies;
- Fitch's Matrix model is used for financial guarantors;
- a mortgage insurance and title insurance capital evaluation tool; and
- several sector- or regionally specific factor-based tools which risk weight various risk drivers.

Regulatory capital requirement calculations vary significantly in both complexity and calibration between jurisdictions. In stressed circumstances, these regulatory measures can become a key constraint to the company remaining a going concern due to either the risk of regulatory intervention or inclusion of the measures in ratings triggers or covenants. In such cases, regulatory measures tend to become the most important indicator of capitalisation in Fitch's analysis.

A number of insurers have developed their own in-house measure of capitalisation, partly to assist with risk management and partly in response to actual or anticipated changes in insurance regulation — most notably "Solvency 2" in Europe. Once introduced in Europe, it is anticipated that there will a system for validation of these models for regulatory purposes but such procedures are currently sporadic and confined to a limited number of jurisdictions. When presented with results from a company's in-house capital model, the agency will exercise professional scepticism towards the results, but if the results of the model are deemed useful by Fitch for ratings purposes, the model result may also affect Fitch's view on overall capitalisation.

Regardless of the capital measure used, in assessing capital adequacy, a target level of capital is often defined by Fitch at various levels of financial strength and this is compared to a measure of available capital (ie the resources available to absorb losses). Available capital is typically subject to some modifications from accounting net assets such as the exclusion of intangible assets (eg goodwill may be excluded in some measures) and the inclusion of equalisation or catastrophe reserves.

When analysing the capitalisation of insurance groups, the fungibility of capital (ie the extent to which capital can be used to meet losses within the group) is often a key consideration. Common obstacles to capital fungibility include regulatory requirements at specific entities, restrictions on dividends or the existence of significant minority interests. Fungibility can be enhanced by reducing the number of operating entities to create larger pools of capital, the use of intragroup reinsurance to match capital and risk or holding excess capital at a holding company or other level which allows downstreaming of capital to where it is required.

Capitalisation is often an important differentiator between firms and a key rating factor. However, capital can only offset weaknesses in other areas to a limited extent. For example, strong capitalisation does not significantly mitigate risks associated with liquidity and may only be effective at absorbing losses from weak management, high-risk products, asset concentrations etc to a very limited extent. Losses from such sources, or more generally from weak risk management, will often more than outweigh any perceived "buffer" in capital.

Thus, where an issuer is well-positioned among the other rating factors and capital is a meaningful rating element, strong capitalization typically leads to stronger ratings and weak capitalization leads to weaker ratings. However, if capitalization is strong but susceptible to meaningful weakening as a result of other factors, such as impending losses due to poor asset quality or poor underwriting performance, strong capital alone will usually be insufficient to maintain a rating or to have a high rating.

Reserve Adequacy

Reserve adequacy, especially for non-life insurers, is often closely linked to the adequacy of pricing and has proven to be a major reason for insurance failures. Reserves are assessed using a range of measures that can include external reserve reviews where available, simple ratios (eg reserve leverage, growth in reserves relative to growth in premium) and when more detailed data is available, a review of the pattern of reserve development.

Evaluating reserve adequacy is a challenge, and given accounting, regulatory and legal requirements as to setting reserves, this factor is often not a differentiating factor between peer companies. However, some reserves do have a wider range of possible outcomes associated with them (eg European asbestos reserves for non-life insurers) and are therefore considered to be higher-risk. Companies that have greater levels of variability or lower confidence levels associated with their reserves would tend to be viewed more negatively from a credit perspective.

It is less common for reserve adequacy to be seen as a positive rating factor but some firms do demonstrate low variability in their reserving estimates or especially strong confidence levels associated with their reserves. Low variability in reserving estimates can be an indicator of low-risk products and/or effective reserving practices, whilst a high confidence level associated with reserves may be viewed as a benefit to capitalisation.

Asset/Liability and Liquidity Management

Asset/liability and liquidity management are most often significant risks for life insurers given the higher investment leverage that is often associated with this business as well as the typical product features. Where identified as a key risk, available information and disclosures on asset/liability management are evaluated to gain a better understanding of strategies applied in ‘matching’ assets and liabilities as well as the potential impact of this on solvency and liquidity. Fitch’s objective is to understand the potential vulnerability of the firm to external markets, changes to policyholder behaviour or a sudden requirement to pay insurance claims. The agency’s review may include an assessment of traditional liquidity measures, consideration of duration, convexity and cashflow matching, and in some cases a review of the insurer’s modelling results under a range of deterministic and dynamic scenarios. Strong asset/liability management practices would tend to be associated with more highly rated institutions, whilst weaker practices would be regarded as a negative rating factor.

A failure to adequately manage ALM can lead to inadequate liquidity to meet obligations or losses arising due to external market movements such as changes in the yield curve. Liquidity is assessed through the consideration of expected liquidity needs relative to sources. However, whilst weak or poor liquidity or liquidity risk management will translate into lower ratings and negative ratings momentum, a strong liquidity position alone will not garner a high rating or provide upward rating momentum.

Catastrophe Exposures

Both life and non-life insurers can be exposed to catastrophic risks which are low-frequency, high-severity events. Common examples of such exposures include hurricanes or earthquakes in some parts of the world as well as the risk of a pandemic for some life insurers or reinsurers. The exposure to particular catastrophe risks is often communicated through a “Probable Maximum Loss” (PML) or through disclosures referencing the expected size of loss from certain scenarios. Understanding these potential exposures to such catastrophe events on a gross and net basis (ie before and after reinsurance and other risk mitigation), compared to the firm’s financial resources can help to quantify risk.

Catastrophe exposures are by their nature volatile from year to year, which adds to risk. To attain good ratings despite such risks requires the avoidance of excessive concentrations to particular perils and close monitoring of exposures and aggregations. The highest-rated insurers and reinsurers exposed to catastrophe risk tend to be those that Fitch views as having strong monitoring processes and where exposure to catastrophe risk is only part of the overall portfolio.

Reinsurance, Risk Mitigation and Capital Markets Products

Various forms of risk protection are available to insurers, including reinsurance (on a proportional or non-proportional basis; obligatory or facultative), risk securitisation, Industry Loss Warranties (ILWs) or capital markets products such as options, forwards or futures. Where such forms of contract are considered to reduce risk materially, this would be viewed positively for a rating. In addition to being able to offset risks, capital markets products can be used as an alternative method for taking risk, for example through the sale of CDS protection or the purchasing of catastrophe bonds. Some capital markets products can add significant additional risks, especially if there is inadequate product understanding, leverage is used, or if features such as cash collateralisation of the mark-to-market value can generate liquidity requirements.

Where the risk mitigation is considered effective (ie basis risk is low) and all other things being equal, greater risk protection may be considered positive for an insurer's rating. However, overreliance on specific forms of risk mitigation (eg reinsurance) may be considered negative for ratings, for example due to potential counterparty, dispute and ongoing availability issues. Higher rated insurers often use less reinsurance precisely because their stronger financial standing, less-concentrated portfolio allows them to retain more of their own risk.

Insurance Linked Securitisation, Off-Balance-Sheet Risks and Other Exposures

The securitisation of insurance risks is typically used either to aid financing (eg "Triple-X" transactions in the United States) or to transfer risk (eg a catastrophe bond), for example as a substitute for reinsurance. The impact of such securitisations on the rating of the sponsor firm depends on the degree of risk transfer and, where material, the extent to which the structures add any additional risks to the sponsor entity.

In some cases, insurance firms may have other risks that are not shown on the balance sheet deriving from factors such as securities lending, guarantees or contingencies or derivatives transactions which could lead to calls for collateral. One example would be contingent counterparty risk associated with a major derivative purchased in order to hedge against future market movements. Such risks are especially relevant where the risks being hedged are long-term, counterparty concentration exists, the counterparty is weak and features to mitigate credit risk are inadequate, to name just a few. Where identified as significant, off-balance-sheet risks can lead to a lower rating being assigned.

Financial Flexibility

Defined as the ability of an insurer to generate additional funds relative to needs, an insurer with financial flexibility is more able to access capital required for growth, strategic repositioning or for the replenishment of losses. However, Fitch also recognizes that under stress, financial flexibility of even historically strong companies can vanish quickly. As a result of this, the agency does not assume in its forecasts that financial flexibility will necessarily exist for companies in stressful scenarios. That said, where financial flexibility is demonstrated in stressful circumstances, the agency typically views this as favourable for the rating.

Management Strategy and Corporate Governance

The strategy of an organisation's management team can have a significant impact on creditworthiness with some teams being more conservative in their strategies than others. Strategies that would be considered higher-risk include a rapid expansion into new areas (especially without suitable experience and expertise), aggressive mergers and acquisitions activity as well as high return expectations leading to high tolerances to risk. The design of remuneration packages can be a key determinant and indicator of management strategy. Similarly, management experience and track record can be an indicator of the effectiveness of a management team although this is just one part of an organisation's corporate governance.

Corporate governance refers to the institutions, systems and processes by which a business is controlled and managed. As such, it incorporates factors such as board effectiveness, board independence, management compensation, related-party transactions and the integrity of accounting and audit. Further details on corporate governance and guidance on issues are shown in Fitch's report *"Evaluating Corporate Governance"*, published 12 December 2007. However, whilst providing additional commentary, the document should be read in the context of guidance rather than as indicating required information for all rated companies.

The primary focus is on the fairly isolated instances of outlier corporate governance behaviour that may have an impact on ratings, particularly on the downside. If corporate governance is not sufficiently weak as to impact the ratings, it is often not commented upon in published reports and rating action commentaries.

Ownership, Support and Group Factors

The form and identity of ownership can affect the financial strength of a rating unit through an impact on financial flexibility and management strategy. Fitch does not have a "preferred" ownership structure but considers the credit implications of each case on its merits. As an example, mutual firms tend to be characterised by a lower level of transparency than listed stock companies which can translate into lower public management accountability; the ability to raise additional capital can also be reduced. However, an absence of a need to remunerate shareholders and a more conservative strategy in some cases more than offset such potential limitations.

In its assessment of various operating units, Fitch will generally review the extent capital is fungible amongst legal entities and other management linkages between them. In some cases, this involves linkages between various insurance operations (eg a US and a UK insurance operating entity within the same group) whilst in other cases the linkage is between insurance operations and banking operations (the bancassurance model). In either case, Fitch seeks to assess the ratings of the core operations, making appropriate allowance for the financial strength of other linked operations. The allowance to be made for these linked operations, and the benefit (or ratings drag) that these operations derive from the core group is principally determined through application of the agency's group rating methodology. Further details of the agency's group ratings methodology is provided in Fitch's criteria document *"Fitch's approach to Rating Insurance Groups"*, published 19 June 2007 or successor document.

As already noted, ratings of non-operating entities such as the holding company (or intermediate holding companies) are derived from the financial strength of the group's major operating units through the application of notching criteria. Ultimately, the degree of notching between the IDR of the insurance companies and the IDR of the holding company is based on the unique relative default risk between the two entities. This unique default risk is not only influenced by the general implications of restrictions placed on cash flows due to the local regulatory regime, but attributes that can vary significantly from organization to organization. These unique attributes include the degree of financial leverage or double leverage employed by the holding company, fixed-charge coverage levels, the amount of liquid assets or other alternate backup liquidity sources maintained at the holding company itself, as well as diversity of cash flow sources reflected in the organizational structure, especially any non-regulated sources.

Further details on the rating of holding companies, as well as Fitch's methodology for the determination of insurance issue ratings, are available in the document *"Insurance Industry: Global Notching Methodology and Recovery Analysis"*, published 29 December 2009 or successor report. Criteria on the rating of hybrid securities is shown in the document "*Rating Hybrid Securities*", published 29 December 2009.

Appendix 1

Types of Insurance

Insurance groups and in many cases, insurance companies, offer a range of different types of insurance to customers. In such circumstances, Fitch typically uses the specific criteria documents (or combination of specific criteria documents) that it believes best captures the risks associated with the rated entity or group. For example, life insurers often offer forms of health insurance protection both separately from and embedded with life insurance products. Many forms of health insurance, especially outside of the US, bear a close resemblance to life (or in some cases non-life) products and may be assessed using these specific criteria as guidance. The main types of insurance include those listed below.

Non-Life Insurance (Also Known as Property & Casualty or General)

This form of insurance typically offers protection to property against loss, theft or damage or provides financial protection against various liability claims. Common product lines include motor (auto) insurance, homeowners (household insurance) and workers compensation (employers' liability). The risk associated with these products largely varies according to the predictability of future claims.

Business is often segmented by the length of the "tail" (ie the time to settlement), whether it relates to property or liability or by whether it is sold to the general public (personal insurance) or businesses (commercial insurance). As a general rule, personal lines insurance tends to be less volatile than commercial lines. Reserve risks tend to be lower for property business given that it is usually easy to establish when loss or damage has occurred and the scale of loss. Liability business is generally longer tail given sometimes lengthy court proceedings and the time that it takes to establish the extent of loss (eg healthcare costs). Some business lines may have greater exposure to catastrophic risks due to location and weather such as homeowners business in Florida.

Life Insurance

In contrast to non-life insurance, life insurers' main distinguishing feature is the provision of protection relating to the life or death of an individual. The purest form of this protection is annual term insurance which pays out a defined amount if the policyholder dies. However, many traditional products offered by life insurers are long term policies and often have a substantial investment component for the policyholder.

Given the savings component of many of the products offered by life insurers, investment risk is often significant (and in some cases dominant), along with mortality risk, longevity risk and expense risk. However, products vary between jurisdictions, often driven by tax or legislative differences and some products are characterised by significant risk sharing or risk transfer between insurer and policyholder. The sharing of risk with the policyholder can be a key risk mitigant; however, risk is increased where guarantees or policyholder options are embedded within products. A good understanding of how risks from guarantees or options may be hedged or minimized is an important goal in credit ratings, although challenged by limited disclosure in some circumstances.

Reinsurance

Reinsurance firms offer insurance protection to insurance companies and so help them to offset some of the direct risks that they have accepted. Both life and non-life reinsurance is available with the risks varying according to the type of business reinsured and the way that the reinsurance is structured. Given the wholesale nature of reinsurance, results tend to be more volatile than for primary insurers.

The risks for a reinsurer are in many respects similar to those for other insurers although exposure to "peak" risks such as Florida hurricane, Tokyo earthquake or pandemic can be significant.

Health Insurance

Health insurance typically covers medical expenses in the case of sickness or injury although it can also provide financial support in the case of disability or critical illness. The design of products is often influenced by the structure and form of healthcare provision with many policies offering supplementary cover in addition to that provided by the state.

The main specific risks for health insurers are related to morbidity experience and the cost of medical provision. Given the uncertain cost of healthcare, most policies covering medical expenses can be repriced frequently. Health insurers can also be impacted by changes to government policy relating to the provision of healthcare.

Title Insurance

Title insurers protect the ownership rights of a property purchaser or mortgagor from financial and legal claims against the property. A title insurance policy therefore protects against errors and omissions in the title search and evaluation process and specifically, any liens, unpaid taxes and undisclosed third party ownership of a property.

Relative to many other non-life insurers, title insurers tend to have very low loss ratios and high expense ratios. As a consequence of the high level of expenses, the vulnerability to reductions in revenues is a key rating factor, as is adequate underwriting to avoid adverse selection.

Financial Guaranty Insurance

Financial guarantors are monoline insurance companies that provide credit enhancement products to the capital markets. The two main classes of asset that have historically been guaranteed by financial guarantors are municipal bonds and structured finance securities (including pooled credit default swaps). The key risk for these monoline organisations is the leveraging of credit risk stemming from the guarantees that they provide, and their historical highly ratings sensitive nature.

Mortgage Insurance

Mortgage insurers are monoline insurers that provide credit insurance solely against credit related losses on residential mortgage loans. This protection can either be provided in respect of individual loans, a pool of loans or in some cases through offering protection on certain RMBS securities. Similar to financial guarantors, the key risk associated with these organisations are credit risks associated with the loans that they provide protection for. Risk selection and the level of capitalisation are therefore important in assessing credit quality.

Other

Some insurers may not fall into the above categories and in these cases or where specific criteria does not apply, Fitch considers the specific risks posed on a case by case basis using the principles contained in this master criteria.

Further details of rating these specific types of insurer can be obtained in the criteria papers below or their successors.

Specific Criteria for Sectors or Groups

	Publication Date
Non-Life Insurance Rating Criteria (Global)	2 March 2007
Life Insurance Rating Criteria (Global)	2 March 2007
Reinsurance Rating Criteria (Global)	2 March 2007
Title Insurance Rating Criteria	2 March 2007
US Health insurance and Managed Care Rating Criteria	2 March 2007
Rating Guidelines for Financial Guarantors	9 January 2007
Rating Guidelines for U.S. Private Mortgage Insurers	19 November 2008

Source: Fitch

Appendix 2

The following are select key ratios that are commonly applicable to insurers, especially life and non-life companies. These ratios will not however, be applicable in all cases and Fitch's analysis will focus on those ratios and measures deemed most relevant to the insurer's type and circumstances. Further details on those ratios considered most relevant for specific types of insurer are given in the specific criteria for sectors or groups.

Key Ratios

Ratio	Interpretation
Investment and Asset Risk	
Liquid Assets / Technical Reserves	Measures the ability of an insurer to meet its reserve payments through liquid assets and helps to assess the exposure to liquidity risk. Favourable ratios depend heavily on the type of risks accepted and their liquidity profile (eg whether cash is, or can be, required within a short time period).
Equities as % of total adjusted equity	Measures market risk from equity price movements. A high ratio is generally viewed less favourably, especially where the investment risk is not primarily borne by policyholders.
Below Investment Grade bonds as a % of Capital	Measures credit risk from below investment grade bonds. A high ratio is generally viewed less favourably, especially where the investment risk is not primarily borne by policyholders.
Leverage and Coverage	
Total Financing and Commitment Ratio (Debt / net assets)	This is a comprehensive measure of debt-related leverage, making use of a broad definition of debt to include essentially all financing activities (including "traditional" debt discussed in the Financial Leverage ratio below, as well as both recourse and non-recourse securitizations, letters of credit facilities with banks provided to third party beneficiaries and so-called match-funded debt), and debt guarantees and other financing-related commitments. The ratio is designed to measure the debt, financing and capital markets "footprint" of an organization, and its overall reliance on ongoing access to funding sources.
Double Leverage (Investments in subsidiaries/ equity of the holding company.)	Measures the extent to which operating company capitalisation benefits from downstreamed holding company resources, in excess of shareholders funds. (This ratio is typically only calculated when Fitch has access to parent-only holding company financial statements)
Adjusted Debt Leverage (Debt / (Debt + Equity)	This is a more narrowly defined measure of the use of debt leverage within the capital structure, primarily encompassing more "traditional" forms of debt raised for purposes of double leverage, acquisitions, liquidity management (including commercial paper issuance) or other general purposes. Numerator and denominator are adjusted according to Fitch's equity credit criteria for hybrid securities. Ratings are liable to be pressured where the calculated leverage ratios exceed the following levels: AA+ IDR: 15% AA IDR: 20% AA-/A+ IDR: 30% A/A-/BBB+ IDR: 40% BBB/BBB-/BB+ IDR: 50%
Interest Coverage (EBITDA / Interest expense)	Measures the ability of an insurer to service interest payments. The following are guidelines relating to the interpretation of interest coverage and financial leverage.

Financial Leverage

Coverage	<15%	16-30%	31-40%	41-50%	51%+
Over 10x	0	Fav	Fav	V-Fav	V-Fav
8-10x	Unfav	0	Fav	Fav	Fav
4-8x	Unfav	0	0	Fav	Fav
2-4x	V-Unfav	Unfav	Unfav	0	0
Under 2x	V-Unfav	V-Unfav	V-Unfav	Unfav	Unfav

Fav= Favourable, **V-Fav**= Very Favourable, **Unfav**=Unfavourable, **V-Unfav**=Very Unfavourable

Where coverage is unfavourable, interest coverage is viewed as negative for the rating level and vice versa for favourable.

Key Ratios (Continued)

Ratio	Interpretation
Capitalisation	
Regulatory Solvency Requirements	Various regulatory solvency requirements or capital ratios exist. In many developed economies, the regulatory action level is targeted at a "Good" Level of capitalisation, equivalent to a low "BBB" category IFS rating. Fitch often develops its own standards for higher rating levels. It is not uncommon for Fitch to make adjustments to regulatory ratios when used for analytical purposes.
Reserve Adequacy	
Total Liabilities / Adjusted Equity	This ratio measures the leveraging of insurance product risks against capital. It is not risk-adjusted. Where ratios are high in either absolute terms or compared to peers offering similar products, this would generally be viewed negatively.
Performance	
Return on Assets (Pre-tax, pre-policyholder dividend operating profitability / Mean Assets.)	The ratio measures the margin earned as a percent of the companies' asset base. The ratio is accordingly less sensitive to differences in operating leverage than the return on surplus/equity ratio above. Reasonable levels for this ratio will generally be lower for long-tail writers and life insurers, and higher for short-tail writers, reflecting natural differences in the build up of loss reserves and accumulation of assets.
Investment Yield	Measures investment performance and is calculated as investment income as a percentage of mean beginning and ending cash, investments and accrued investment income. Reasonable values vary over time depending on market conditions. Deviations among companies can be explained by differences in the taxable/tax-exempt mix, the credit quality and resultant yield characteristics of the bond portfolio, concentrations in higher-return/lower-yielding common stocks, the level of investment expenses and the quality of portfolio management.
Combined Ratio Sum of the loss ratio (Claims / Premiums) and expense ratio (Expenses / Premiums).	A combined ratio of 100% suggests that the non-life insurer is breaking even on its underwriting. A lower ratio indicates that the company is making a technical profit on underwriting. A high degree of volatility to the ratio suggests greater underwriting risk and would be viewed negatively. The ratio can be affected by business mix and by rapid growth. Longer tail business would tend to have a higher combined ratio compared to short tail business as a result of the greater investment income expected to be received on the premiums before the claim is paid.
Return on Equity (After-tax net income / mean surplus or equity levels)	Indicates both overall profitability and the ability of a company's operations to grow surplus organically. Variances between companies are explained by both differences in operating profitability and differences in leverage. For a profitable company, a less favourable (ie higher) leverage position may result in a more favourable result on this test, so it needs to be carefully interpreted.

Source: Fitch

Appendix 3

Attributes of Rated Issuers - Examples

Attributes of One Highly Rated, Investment-Grade Life Insurer

AA Life Insurer (AA Life) is a wholly-owned subsidiary and lead operating company of AA Holdco, a large, publicly traded insurance holding company. The company is a large life insurer with top-tier market positions in four major business lines: individual life, individual annuities, group pensions and asset management. The company's key competitive strengths include strong brand-name recognition, significant operating scale, and diversified product profile and distribution channels.

The company has a highly experienced and deep management team with a favorable track record of meeting expectations. Risk management processes are well developed at the division level but less well developed at the enterprise level. The company is in the process of developing an economic capital model to help assess risk and manage capital across the enterprise.

Profitability levels have improved in recent years due to stable interest margins on a growing asset base, favorable underwriting margins in the individual life, and progress on various expense reduction and productivity improvement initiatives. Growth in the unit-linked and asset management businesses has improved the balance between fee-based, spread-based and underwriting earnings. Profitability is measured by return on equity (ROE) and return on assets (ROA), and is expected to be in the range of 13%-15% and 1.00%-1.10%, respectively.

Strong balance sheet fundamentals include the company's moderate financial leverage, strong risk-based capitalization, good liquidity profile and strong asset quality. The company's capital structure consists of a conservative mix of debt, hybrid securities and equity. Outstanding debt maturities are well laddered, which mitigates refinance risk. Equity-adjusted financial leverage is expected to be maintained in the 20%-25% range. Financial flexibility is considered to be excellent—the company has demonstrated the ability to access the debt and equity market to raise capital.

Debt service is primarily funded from upstream dividends from AA Life, which is subject to regulatory dividend restrictions, and the asset management subsidiaries. Other liquidity sources include committed holding company cash balances, which amount to two times annual debt service, and a commercial paper program, which is backstopped by bank liquidity commitments consistent with Fitch's rating guidelines.

Risk-based capitalization is maintained at levels in line with the assigned rating based on Fitch's Prism capital model, and is well in excess of regulatory minimums. Based on the AA Life's expected business growth and earnings profile, Fitch expects the company to be able to self-fund future capital needs to support organic growth.

Invested assets, which are primarily concentrated in investment-grade, publicly traded securities, are tagged to specific liabilities, and duration is tightly matched. The company limits credit risk by maintaining a diversified investment portfolio that is subject to well-defined sector and issuer limitations. Asset liquidity and interest rate risk is managed within the context of the company's asset/liability management process, and is well controlled in the aggregate. Over the long term, investment performance has been favorable relative to benchmarks and peers.

Attributes of One Lower-Rated, Non-Investment-Grade Life Insurer

BB Life Insurer (BB Life) is a wholly owned subsidiary and sole operating company of BB Holdco, a small, privately held insurance holding company. The company is a small life insurer with a niche market position selling fixed annuity products through financial institutions. Operating track record has been negatively impacted by lack of scale, and limited product profile and distribution channels.

The company has an experienced management team but lacks depth. Risk management processes are not well developed but considered adequate given the company's simple operating structure. Given the company's product focus, primary risk exposure is to large increases and decreases in interest rates. BB Life does not have in place any type of hedging program to protect earnings and capital from adverse interest rate scenarios.

Operating performance has been negatively impacted in recent years due to low interest rates, which led to reduced interest margins, decreased revenues and lower earnings. BB Life's earnings profile continues to be negatively impacted by high expense levels due to the company's limited operating scale. Continued low interest rates will likely lead to further reduction in interest margins and operating losses.

BB Life's risk-based capitalization is considered adequate as measured by Fitch's Prism capital model, but financial leverage is considered high. Equity-adjusted financial leverage is expected to be maintained in the 40%–45% range over the near term. Outstanding debt consists entirely of a term bank loan that is due in 18 months. Financial flexibility is very limited due to the company's size and high financial leverage.

Debt service is primarily funded from upstream dividends from BB Life, which is subject to regulatory dividend restrictions. BB Life's dividend capacity is constrained due to the company's risk-based capital levels.

Invested assets, which are primarily concentrated in investment-grade, publicly traded securities, are tagged to specific liabilities, and duration is reasonably well matched. Credit risk is limited as the company does not buy below-investment-grade bonds. However, approximately 30% of invested assets are residential mortgage-backed securities, which further expose the company to interest rate risk.

Appendix 4

Exceptions to the Master Criteria

Although Mortgage Insurers and Financial Guaranty Insurers do fall under this master criteria document, there are currently some exceptions to the principles that are outlined here. The rating methodology for these organisations is set out in the sector specific criteria documents and currently makes use of “Rating Guidelines for U.S. Private Mortgage Insurers”, published 19 November 2008 and “Rating Guidelines for Financial Guarantors”, published 9 January 2007.

- IDRs are not currently published for Mortgage Insurers or Financial Guaranty Insurers.
- The base rating for these organisations is the IFS rating, rather than an IDR rating

Further details are available in the sector specific criteria documents referenced above.