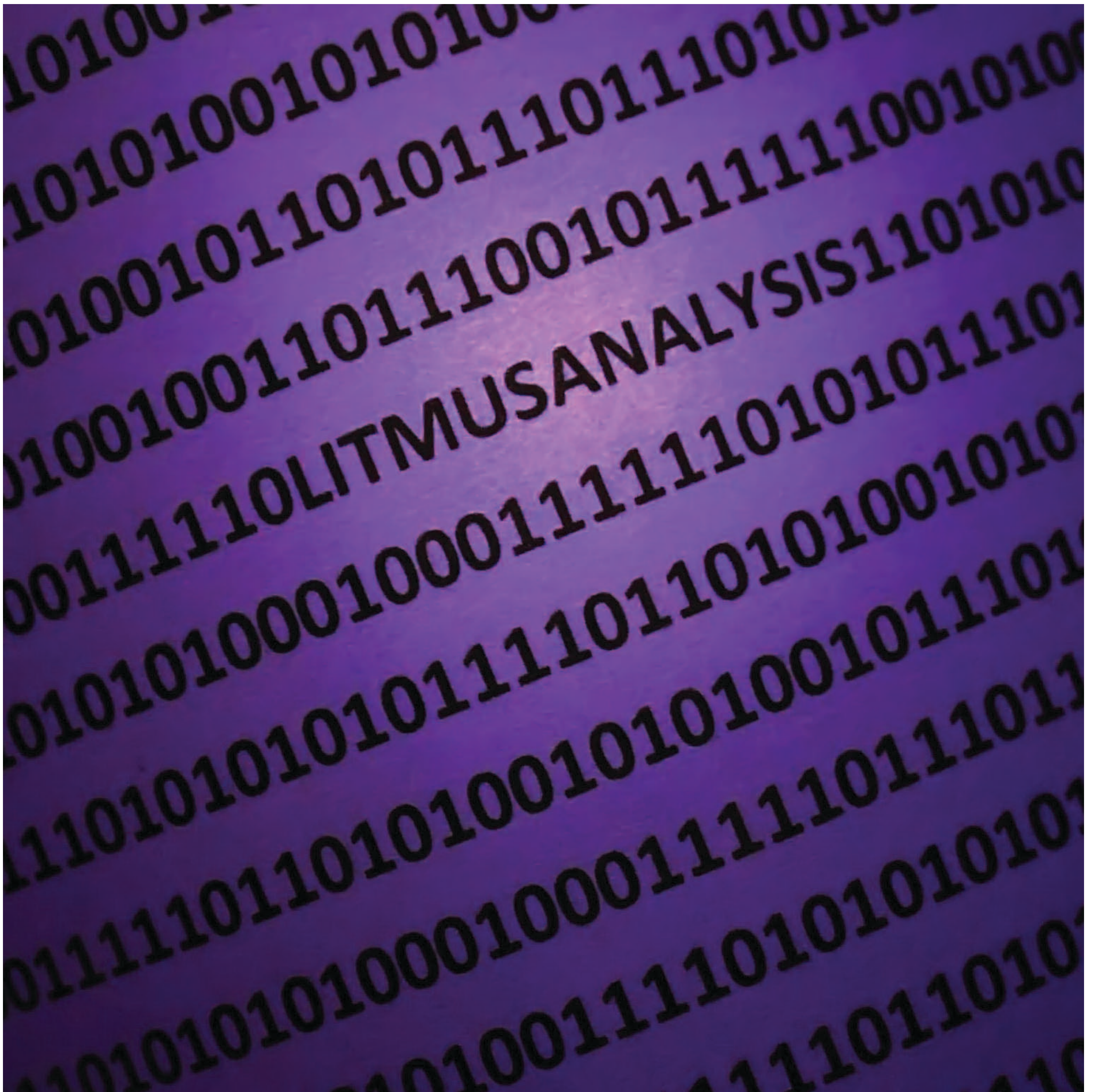
LITMUS ANALYSIS

THE LITMUS RATINGS GUIDE

TO NON-LIFE INSURER & REINSURER FINANCIAL STRENGTH RATINGS



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About Litmus Analysis

Litmus is a specialist insurance consultancy focussed on re/insurer[1] analysis and financial governance. Litmus offers:

- Ratings Advisory Services – Helping re/insurers and their professional advisors manage their relationships with the rating agencies.
- Analytical Services – Analysis and research in the global insurance and reinsurance markets, plus helping brokers and re/insurance buyers effectively manage the market security process.
- Training – Including courses on; "Understanding re/insurer ratings" and "Understanding re/insurer financials and key ratios". All of our current courses are posted at www.litmusanalysisblog.wordpress.com.

Plus, launched in 2013, two new on-line services:

- LitmusQ – The online credit-scoring tool for the insurance markets - your cedant and reinsurer financial health assistant.
- LUCID – The Litmus unique company identification system - an extensive and growing database of live and legacy markets and groups.

To find out more about Litmus services and products, email info@litmusanalysis.com or visit **www.litmusanalysis.com**.

About the Author

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During the 1990s Stuart held a series of insurance ratings and business development roles within S&P. He is a well-known speaker on insurance ratings and analysis. Stuart also spent time as a sell-side analyst with Morgan Stanley covering financial institutions.

Stuart began his analytical career with Insurance Solvency International, then a unit of Fox-Pitt Kelton. Stuart holds a degree in Biochemistry from London University and an MBA from the Cass Business School.

About This Guide

In re/insurance, and elsewhere in finance, ratings and rating agencies occupy a contradictory place in the transaction process; both heavily relied on but also the subject of a lot of cynicism.

This guide seeks to throw more light on the reality and help market participants make the most effective use of ratings. The guide represents our opinion with regard to the common misconceptions that we see existing around both ratings use and how rating agencies operate.

Whilst ratings agencies certainly don't always get it right they remain very widely used and, for many market participants, it's not obvious what the alternative to their use could realistically be. So our comments are focussed on the intention of the rating agencies and giving our view on how ratings should be used. A central 'theme' is that ratings are all too often treated as 'facts' rather than merely independent 'forecasts' and opinions'.

We hope you find this Litmus Guide useful and welcome any comments, observations and questions you have.

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[1]Note: We use 're/insurers' throughout as the shorthand for 'insurers and reinsurers'

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Introduction

a) Overview

In core segments of the global insurance market the ratings produced by rating agencies (S&P and/or A.M. Best in particular) can be fundamental to a re/insurer's ability to trade. Unlike the debt ratings used in the bond markets, the ratings the insurance industry is focussed on relate to the credit risk taken by policyholders and cedants when buying re/insurance.

The promise to pay out on a valid insurance claim is what a re/insurance buyer is paying for. In essence this has two aspects; the ability of the re/insurer to pay and its willingness to pay.

While the latter is loaded with contractual and definitional issues (thus keeping a not insignificant part of the legal profession gainfully employed) the former is conceptually simple. A solvent re/insurer can pay claims, an insolvent re/insurer cannot (at least not in full).

Since a non-life insurance contract is a promise to pay claims in the future contingent on a possible, but not certain, event (essentially a type of option) a re/insurance buyer needs some sense of the forward looking financial health of the re/insurer; something they may not be equipped to evaluate for themselves. Since no regulatory regime guarantees the future solvency of re/insurers in its jurisdiction, re/insurance buyers, brokers and others look to additional sources of guidance on this, especially ratings.

b) Scope of this paper

Ratings, and rating agencies, can of course be the source of a lot of controversy and we seek to cover the main issues that relate to that, including their perceived conflicts of interest, the regulation of rating agencies and the use of ratings themselves in regulation.

Despite the controversy ratings remain very widely used in financial markets and, as noted above, particularly so in insurance markets.

The ratings we focus on here are 'financial strength' ratings which is the name generally used in insurance for ratings related to the credit risk taken by the policyholder/cedant in doing business with the re/insurer.

While many organisations around the world provide what can be regarded as financial strength ratings or opinions of re/insurers, globally four rating agencies dominate; A.M. Best ("Best"), Fitch, Moody's and Standard & Poor's (S&P). Of these A.M. Best and S&P are particularly significant in terms of market use (with their strongest positions overall in North America and the Rest of the World, respectively).

Where practical we seek to cover all 4 agencies but to keep this as succinct as possible we use S&P and/or A.M. Best to illustrate key points.

Given the extensive use of ratings within insurance markets this introductory guide seeks to highlight those key aspects of insurance ratings that we believe users should be conscious of. This includes providing some wider background on how re/insurer ratings are created and the context within which they are used by insurance market participants. As noted above we also cover some of the sources of contention and debate around rating and rating agencies such as their business model, regulation and perceived performance.

We begin though with a brief history of how this very extensive use of re/insurer ratings came about and the impact on their current use this history has.

c) How did we get here?

For the forward looking opinions (forecasts) of private third party organisations to have the impact on an industry that ratings do on much of the global insurance market clearly needs some explanation. This comes in large part from the history of the regulatory process and re/insurer failure in those insurance markets where insurance ratings usage is today most significant.

A.M. Best began publishing ratings on US insurers' likely ability to pay claims over 100 years ago. As time passed Best's ratings became institutionalised in the US insurance industry as a fundamental selection criteria for carriers (and in related activity like bank lending on construction projects where insurance cover was required). This in large part reflected the fact that the US insurance regulatory environment was never a 'zero failure' regime; re/insurer failure in the US has always been part of the landscape and so agents, brokers and buyers needed a source of advice on re/insurer security.

In most developed economies outside the US the concept of re/insurer failure was generally perceived as far more extreme. It happened from time to time of course but the regulatory and political imperative was that it should be, at worst, extremely rare and ideally non-existent.

By the 1980's this premise was increasingly challenged by the growth of the reinsurance markets and in particular the reinsurance and specialty market in London. While the Lloyd's market was perceived by many at the time as having unquestionable security (a misconception about any organisation), the company market that had grown up around it self-evidently presented the potential for re/insurer failure. Moreover, in many jurisdictions the regulatory oversight of reinsurers was clearly far less overt than for primary insurers (and sometimes non-existent).

With Best not covering the non-US market at that time, and no significant focus on this from the traditional debt rating agencies S&P and Moody's, a specialist London-based analytical firm, Insurance Solvency International ("ISI"), emerged as a provider of ratings to re/insurance brokers and sophisticated buyers.

Although ISI's ratings were produced as a private subscription service for paying clients, by the late 1980's they were widely used in the London Market and elsewhere.

In 1990 S&P, by now more focussed on the insurance market, bought ISI. At roughly the same time the implosion of the LMX spiral, the related issues of the emergence of US asbestosis and environmental losses and a series of severe catastrophe losses triggered the start of a serial collapse of London Market and other carriers; culminating in the near death experience for Lloyd's that was only avoided through the R&R initiative and the creation of Equitas.

With London Market brokers keen to avoid being held liable for the use of subsequently insolvent carriers the overt adoption by

them of ISI (S&P) ratings as a selection criteria and the move to 'client approval only' for carriers lacking a rating above a given level (typically "A-") accelerated.

When, in 1997, the then chairman of Lloyd's David Rowland declared that the assignment of 'A range' ratings to the post R&R market by S&P and A.M. Best (now also actively producing non-US ratings) was a fundamental measure of its success, the process of ratings institutionalisation in the global reinsurance and specialty markets was largely complete; with the large commercial lines market close behind.

The legacy of this history is with us today, both in terms of which rating agency carries most weight in a given market and the use of the "A- ratings cliff" by many brokers in both requiring client approval for a carrier rated below this and in the use of ratings trigger clauses in policy wordings.

d) Market security & the use of re/insurer ratings

An insurance or reinsurance buyer's use of ratings in evaluating their credit risk exposure to re/insurers is a straight-forward concept.

If they have some relevant internal analytical expertise (as clearly reinsurance buyers typically will) then they may weigh the extent to which they wish to rely on a rating with any views of their own.

Having decided on a view of carrier strength (via the rating and/or their own analyses) they may then consider the extent to which the price and nature of the cover available should influence their tolerance for the perceived credit risk of that carrier.

Things are far less clear cut for brokers.

For a broker to offer a client an opinion about a carrier's security in a way that seems at odds with the published ratings is no simple choice. If they are more bullish and the carrier subsequently fails then they will, at best, have a very unhappy client. Conversely if they are more negative and this view reaches the carrier then defending that to the carrier will be no easy task.

In this context many brokers simply take the ratings at face value, draw a minimum line of automatic acceptability (commonly 'A-' outside the US although sometimes in the 'BBB range') and formally request 'client approval' for use of any carrier that doesn't meet that.

For almost all but the largest brokers this position is reinforced by the assumption that it is untenable for them to carry the degree of analytical resource internally required to do their own in-depth research and that, therefore, analytically second guessing the rating agencies (who typically also have access to detailed confidential information on 'interactively' rated re/insurers) is pointless.

However, brokers also have a 'duty of care' to clients and will often have a depth of perspective on issues such as the quality of the business written by individual carriers that the rating agencies simply cannot have. They have therefore, in some key aspects of re/insurer analysis, more information than the rating agencies.

Larger primary market brokers will also often be dealing with substantial numbers of unrated carriers and have clients that expect them, given their scale, to have sufficient internal resources to at least help address the market security question and not solely rely on 'client approval'. Large brokers may also see the provision of market security related analysis as a core part of their 'added value' service to clients.

Given the above we observe a spectrum of approaches used by brokers in the creation of the 'approved' market security list (and the use of any carriers not on it) which can be summarised in three models:

i) To rely solely on ratings or client approval

ii) To use ratings or client approval as the core but provide some non-analytical colour to the approved list based on 'market information' and the broker's own perceptions (or those of an external advisor) of the quality of the carrier

iii) To use ratings but also conduct independent analysis in-house

In practice a case can be made for and against each of these approaches from a broker's point of view and clearly the third option is limited to brokers with the necessary analytical resources.

However, while there is no 'one size fits all' approach by brokers to the use of ratings, we know of no broker (at least in international reinsurance, speciality and large commercial lines) that actively ignores them; i.e. we know of no broker that if a major carrier that it uses were to be downgraded out of the 'A range' tomorrow, would choose to simply ignore the fact (irrespective of whether they agree with the rating action or not).

So, whatever any given broker's approach to ratings is, their use is likely to be involved in some significant context or another. While second guessing ratings may not typically be the goal, clearly understanding them properly must be.

For both re/insurance buyers and brokers therefore this guide seeks to cover the key issues and background context necessary in our view for the effective use of re/insurer ratings.

Understanding Insurance Ratings

a) What is a financial strength rating?

The phrase 'financial strength rating' (FSR) was initially adopted for insurance ratings related to the credit risk taken by policyholders by S&P in the mid-1990's. Previously it had used the term 'claims-paying ability' (CPA) ratings. There was no change in the intended meaning or rating definition, just a change in name.

A.M. Best also adopted the term 'financial strength rating' in the late 1990's and other agencies tend to also use this or add 'insurer' to it (as in 'insurer financial strength rating'; IFSR). We will simply use 'FSR' for convenience.

An FSR is a forward looking opinion as to the future ability of a re/insurer to meet its (financial) obligations to policyholders. It should therefore only logically be assigned to a legal entity that issues insurance policies (with the exception of the Lloyd's market FSR, see page 15).

Unlike debt ratings FSRs do not typically refer to 'willingness to pay' but purely 'ability to pay'. This reflects the innate difficulty that can occur in re/insurance of agreeing the validity of claims (and the time it can take to resolve that).

b) The importance of recognising ratings as opinions about the future (forecasts)

Ratings are opinions about the future based in part on historical information; that is to say they are 'forecasts'. This point is often lost on commentators who report on ratings as if the agency is claiming it is making a statement of fact. They are not and even a cursory review of the information the agencies release makes it very clear that these are intended as no more than forward looking opinions (forecasts).

A good comparison here is economic forecasts (such as inflation projections by central banks). They will typically give a single figure as their forecast but stress a range of other outcomes are possible.

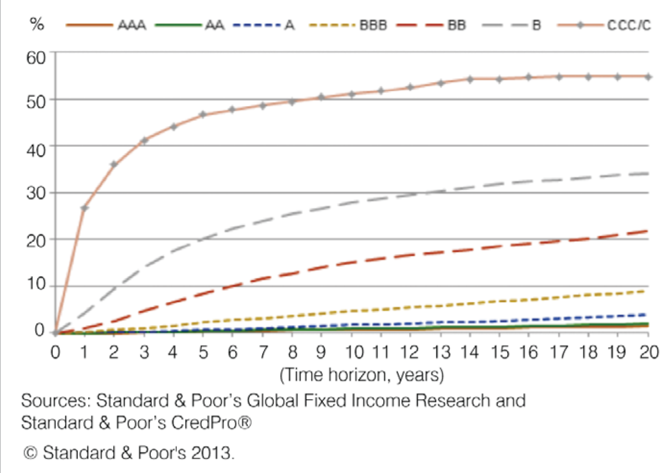
Critically, for ratings and rating users this means that the agency is describing its view as the most likely outcome for the future financial strength of the re/insurer through its rating, NOT the only outcome it can perceive.

c) Ratings default studies and what these imply for ratings use

S&P and Moody's in particular have long published studies of the frequency of default observed in practice for different rating levels over time across all industries.

That is to say for example that the agency takes all the entities in the world it rates 'A' on January 1st of a given year and then observes how many of them default by the end of the year. This exercise is repeated every year across all rating categories and over multiple time periods, allowing a picture to be built up of what the observed probability of default is for any given rating level.

S&P's data shows, on average after 1 year roughly 1 in 1000 'A' rated firms default (if we take historical incidences of default as being a proxy for future probability, rounding this to a 0.1% probability, the actual observed level is 0.07%). But if we wait 15 years we see that roughly 1 in 40 typically default (a 2.5%



probability). The 15 year number does not mean they are all still rated 'A' when they default, just that they were rated 'A' at the start of the first year of the 15 year period being observed.

Whether a 0.1% one year default probability for an 'A' rating is what it should be or not is really in the eye of the beholder. All we can say for certain is that logically an 'A' rated firm should be more risky than a 'AA' and less risky than a 'BBB' and that S&P's data says that on average it is (with 'AA' showing a 0.02% default level and 'BBB' a 0.22% default level). (There are more advanced ways of looking at rating performance such as Gini coefficients but that's beyond the scope of this paper). Notably even down at the 'CCC' rating level near term survival is the most likely outcome, with one-year 'CCC' default risk being around 27% (i.e. nearly 3 out of 4 'CCC' rated issuers do not default in the following year).

What that data also tells us is that, if we have enough examples, we should not view the default of an 'A' rated firm within a year of having that rating as a surprise. It should be rare (in that an individual 1 in 1000 year event is rare) but if we have 500 'A' rated firms then it would happen, on average, once every two years. Of course we might expect that default-causing events impact several companies at once and so we won't actually see a regular 'once every two years' default pattern from our 500 'A' rated firms, but rather periodic clusters of defaults. Nonetheless, the data says we should not be surprised when it happens.

We can also use this data to compare ratings with the Solvency 2 risk adjusted capital rules. The Solvency 2 SCR (Solvency Capital Requirement) is calibrated to a 1 in 200 year probability of failure. Thus a re/insurer with an SCR of 100% has risk adjusted capital roughly in line with the probability of default of an S&P 'BB+' rated firm.

This, however, relates purely to current capital adequacy; credit ratings, being forward looking, reflect issues the agencies view as predictive of future capital adequacy (overall industry risk, strategy, management quality, prospective earnings, Enterprise Risk Management etc.)

d) Applying ratings default data to FSRs

The rich default data history published by both S&P and Moody's

reflects a relatively straightforward observation; whether a bond issuer has made interest or principal payments on time and in full. There are some nuances around that but, in essence, a bond default is an observable fact occurring at at a specific date.

Applying this to a re/insurance carrier's payment of policyholder claims is far more challenging.

Unlike the capital markets where a 'pay now, argue later' premise generally exists, in re/insurance disputes over the validity and scale of claims are routine prior to settlement. So simply defining what 'payment on time and in full' means is difficult if not impossible in any truly consistent way.

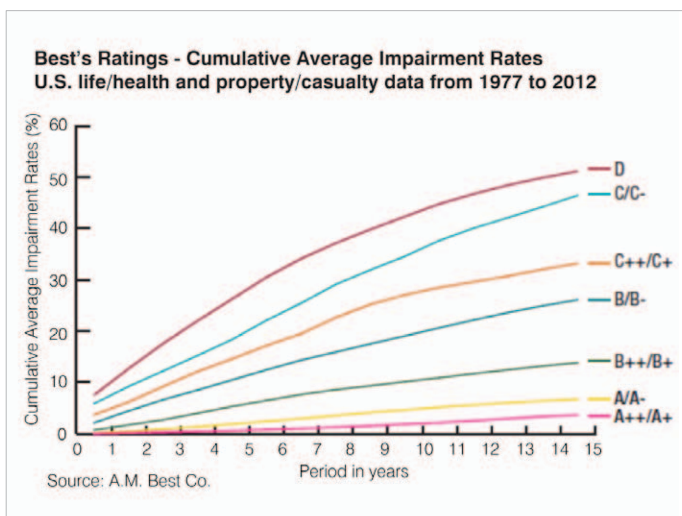
Moreover a carrier going voluntarily into run-off, or even being closed down by a regulator, does not mean that it is inherently in default. As long as it remains solvent then in theory it can pay its policyholder obligations in full until its insurance liabilities reduce to zero.

Whether a carrier in run-off is considered insolvent (meaning that a judgement has been made that the present value of its liabilities exceeds the present value of its assets) is itself by definition a matter of opinion.

So, for both active re/insurers and those in either solvent or insolvent run-off, since neither the correct timing nor amount of claims payments is explicit (as it is with payments to bond investors) there is no clear and objective trigger for when non-payment on time and in full indicates default.

Moreover, carriers will often negotiate settlement with policyholders for something less than their full claim. But whether this can be considered analogous to default is very hard to define in most cases.

Accordingly A.M. Best publishes an alternative, insurance specific data set based on insurer 'impairment'. Best uses regulatory intervention rather than default as an observable fact. This still requires some interpretation as to its cause by Best but, in essence, can be expected to be a significantly more frequently seen event at any given rating level/time period than a bond default.



e) The ratings scales

Of the four most widely used agencies in insurance globally (A.M. Best, Fitch, Moody's and S&P), two (Fitch and S&P) use essentially the same FSR rating scale, Moody's uses one that has the same number of gradations until the very bottom of the scale but with some modest differences in symbols, while Best uses a different scale with fewer gradations and significantly different symbols at some points of the scale.

Best does however provide a mapping of its scale to what it describes as the 'credit market scale' (the scale used by Fitch and S&P). In addition Fitch maps its ratings scale to that of Best. Happily both agencies execute this mapping identically.

<table>
<tr><th colspan="2">Mapping* of A.M. Best Rating Scale to Credit Market Scale used by S&P & Fitch</th></tr>
<tr><th>S&P/Fitch Scale</th><th>A.M. Best Scale</th></tr>
<tr><td colspan="2">Secure Range</td></tr>
<tr><td>AAA</td><td rowspan="2">A++</td></tr>
<tr><td>AA+</td></tr>
<tr><td>AA</td><td rowspan="2">A+</td></tr>
<tr><td>AA-</td></tr>
<tr><td>A+</td><td rowspan="2">A</td></tr>
<tr><td>A</td></tr>
<tr><td>A-</td><td>A-</td></tr>
<tr><td>BBB+</td><td rowspan="2">B++</td></tr>
<tr><td>BBB</td></tr>
<tr><td>BBB-</td><td>B+</td></tr>
<tr><td colspan="2">Vulnerable Range</td></tr>
<tr><td>BB+</td><td rowspan="2">B</td></tr>
<tr><td>BB</td></tr>
<tr><td>BB-</td><td>B-</td></tr>
<tr><td>B+</td><td rowspan="2">C++</td></tr>
<tr><td>B</td></tr>
<tr><td>B-</td><td>C+</td></tr>
<tr><td>CCC+</td><td rowspan="2">C</td></tr>
<tr><td>CCC</td></tr>
<tr><td>CCC-</td><td rowspan="2">C-</td></tr>
<tr><td>CC</td></tr>
<tr><td>C</td><td>D</td></tr>
<tr><td colspan="2">*Source A.M. Best</td></tr>
</table>

f) Comparing ratings from different agencies

While mappings of the different scales can be done, this is not the same as deciding that agency ratings can be directly compared. While they use the same scale we cannot know, for example, that S&P and Fitch mean the same thing even if a carrier has the same ratings from both agencies.

There is a tendency to assume that an agency that appears to issue lower ratings than others is somehow more rigorous. But there is no logical basis for that assumption; a rating that is too low is as incorrect as a rating that is too high; the challenge being that it is impossible to prove an individual rating is 'too low'. As the earlier data above on rating default histories highlights, even the lowest rating levels do not indicate default is more likely than survival (and at the 'BBB' level survival is very probable). Hence the subsequent survival of a low rated carrier is not 'proof' that the rating was too low. Nor is a subsequent rating upgrade since this can simply mean that the carrier has got stronger.

g) 'Unsolicited', 'public information' and 'interactive' ratings

The terms 'unsolicited' and 'public information' for insurance ratings are often used interchangeably. While they can relate to the same thing they are actually addressing two different issues. Unsolicited ratings are simply those where the rated entity did not ask to be rated.

'Public information' (pi) ratings (a term coined by S&P; Best uses the term 'public data' ratings) are, as the name implies, based exclusively or very largely on published information and not on extensive non-public information and/or dialogue with the rated firm's management. Conversely ratings reflecting discussions with management and, usually, considerable non-public information, are described by S&P as 'interactive'.

Thus in practice 'solicited' ratings are normally 'interactive' and 'unsolicited' ratings are normally 'public information'.

S&P initially used two different subscripts to define its 'public information' ratings; a lower case 'isi' for the former ISI ratings (as in 'Aisi') and a lower case 'q' for ratings it produced on US carriers based purely on a quantitative model (as in 'BBBq'). It moved to using the 'pi' subscript in the mid-1990's.

Best introduced a 'pd' (for 'public data') subscript on a similar basis.

Fitch and Moody's tended not to use subscripts for what were (or appeared to be), in effect, public information ratings (although Fitch did so for a period in Europe). The agencies would argue that these ratings reflected some dialogue with the rated firms and hence, while they were 'unsolicited' they were not simply based on 'public information'.

It is an area that can get very semantic.

A widely held belief is that 'public information' type ratings sometimes get held down in order to encourage re/insurers to request an 'interactive' rating (for which they pay). There is, however, a far less cynical logic for explaining why some re/insurers can achieve higher 'interactive' ratings than a previously published 'pi' rating; which is that, analytically, they probably should.

First, the materially lower degree of information when relying on just public information is itself a risk factor in the analysis and so a 'reasonably conservative' assumption where information is lacking should be made when producing the 'public information' rating (exactly analogous to increasing pricing on an insurance risk to reflect limited information about it). This also leads to a lack of the use on the part of S&P of the rating modifiers of +/-, giving many fewer rating categories and therefore less differentiation.

Second, the request of an interactive rating is by definition voluntary; only those re/insurers who believe it will be neutral or positive for their rating (i.e. that the non-public information is at least as good as, if not better than, the agency's assumptions in a 'pi' rating) tend to enter the process and see it through.

Third, the extension of a 'group' rating (see later) to an otherwise lower rated subsidiary analytically requires the interactive process. With rare exceptions 'pi' ratings are inherently 'stand-alone' opinions of a carrier or reflect only minor uplift from a strong parent group.

a) Profile and market position of the main agencies

The four largest providers of re/insurer ratings are, in alphabetical order, A.M.Best, Fitch, Moody's and S&P. By largest we mean having the widest ratings coverage and analytical resources assigned to the sector globally. We would also assert that (not surprisingly given the above) they are the most influential.

While the nature of the use of ratings can be highly contentious, the statement that the above four agencies are the most influential is, we believe, pretty much unarguable. There are, however, very substantial differences between their respective market positions. The market position of an agency is all about how much the organisations that drive re/insurance buying in a given market 'require' or at least 'look for' that agency's rating when selecting a carrier. In essence this means the re/insurance buyer, broker or both. In some jurisdictions this is also impacted by regulation (although globally less than is often assumed).

In essence this boils down to three questions;

i) Is the **rating user** domiciled in the US or not?

ii) Is the **rating user** a capital markets or insurance markets practitioner?

iii) Do **rating users** look for more than one rating?

The history covered in 'how did we get here' earlier explains quite a large part of this. In the US Best had decades of first-mover advantage and its ratings (and its unique rating scale) are written into numerous policy and procedure documents impacting the industry. It is also a very major industry specific publisher and data provider. By any criteria we know of A.M. Best is the most influential rater of US re/insurers among US re/insurance buyers, agents and brokers.

In recent years Best has sought to develop its capital markets franchise assigning debt and 'issuer credit' ratings (ICRs) to re/insurers and focussing on some specific niches of the Insurance Linked Securities (ILS) market. However, with insurance company debt investment overall being only a modest part of most fund manager's portfolios, the organic development of any significant capital markets franchise for Best outside of some case specific niche situations is not easy to imagine .

S&P, through its acquisition of ISI and its earlier more significant focus on the sector than Moody's or Fitch, achieved a similar position in many non-US insurance markets (especially in the more sophisticated parts of non-life markets where ratings are most used).

The two agencies, having greater dedicated insurance analytic resources than the others, built strong secondary positions in each other's core market(s). There are nuances to this but in essence the two agencies are respectively first and second in the majority of the non-life insurance markets where FSRs are materially used at all.

Moody's, which in debt ratings across all sectors is the clear global co-leader with S&P, either did not recognise that developing a major franchise with re/insurance buyers and brokers was required to be a significant player in re/insurance ratings, or simply chose not to invest sufficient time and money in seeking to develop that franchise. Our best guess is that, as is often the case with a large organisation, the strategy was never quite that clear cut (Moody's did, for example, purchase a specialist Lloyd's syndicate analysis business over a decade ago) but that, in all probability, insurance was not routinely a sufficiently high priority to drive the consistent investment and global focus required.

That said, Moody's inevitably becomes a much more significant player if there is a strong capital markets component to insurance ratings usage and can rank more highly among some larger corporate insurance buyers than insurance market practitioners may expect due to the firm's franchise with the wider financial management structure within larger corporates (treasury, debt issuance etc.)

Fitch probably has the least easily defined position of the four, in part due to its own history as a series of mergers and acquisitions of rating agencies. (Contained within today's Fitch are the original agency of that name, the bank rating agencies IBCA and Thomson Bankwatch, and the former Duff and Phelps rating agency).

Between them these predecessor agencies had various niches of existing or potential influence in insurance markets. The net effect is that while it is rare to see re/insurers with only an FSR from Fitch (whereas this is quite common with S&P and A.M. Best), in markets where two ratings are looked for it is often seen as a potential alternative to whichever of S&P or Best is not the market leader, or as a third rating if that is desired (Fitch are generally seen as more significant than Moody's in most insurance markets). Unlike A.M. Best they also have a material capital markets franchise.

b) Other re/insurer rating agencies

There are numerous rating agencies around the world, most independent and some aligned with (or partially owned by) Fitch, Moody's or S&P. Most however are focussed on local bond issuers into domestic or international debt markets and hence have limited if any re/insurer coverage.

However, some insurance specialists have emerged over the years. The following two US based agencies are among those that, in our experience, insurance market practitioners are more likely to come across (our apologies to all those not named here, this is not intended as a selective list).

DEMOTECH

Demotech is focussed on the US Property/Casualty and Title insurance sectors. It publishes two types of analysis related to re/insurer financial strength. The first, described as 'Financial Stability Ratings' (FSRs) address the ability of the re/insurer to withstand a downturn in the economic and/or underwriting cycle. As described by the firm these appear similar in concept to the Financial Strength Ratings of the main agencies but with a greater emphasis placed on capital. It uses a different rating scale from any of the main agencies.

It publishes significantly more 'Comparative Financial Observations' than it does FSRs. These appear to rank re/insurers by the aggregate of key financial metrics but the firm strongly highlights that these are not a proxy for a rating (which indeed a purely relative measure could not be, irrespective of what the analysis reflects).

WEISS

Weiss states that it publishes financial strength ratings on over 11,000 financial institutions including over 4000 Life, Annuity and P&C insurers. The definition of these is essentially in line with that of the main agencies although it uses a different rating scale other than 'Global Banks' Weiss' coverage is purely for the US.

While its published methodology appears to imply some degree of qualitative judgemental overlay on top of what is clearly a quantitatively driven analysis, and it stresses an 'open door' in communication with rated organisations, it would seem its ratings are largely driven by quantitative factors. Indeed given that the main agencies typically need one full time analyst per 15 to 20 rated organisations it seems inevitable that Weiss' approach is more fundamentally driven by published data (and data rated firms voluntarily disclose to it).

Weiss also notes a 'weakest link' aspect to its ratings (meaning a weakness in any one area of the financials is a limiting factor on the overall outcome).

c) The performance of ratings and the expectations users should have of them

A paradox of the widespread use of ratings in the insurance industry (and elsewhere) is that it co-exists with significant degrees of cynicism as to how well ratings actually perform.

As we mention elsewhere, since ratings are in practice simply forecasts, it only really makes sense to consider agency performance in the aggregate. S&P and A.M. Best both publish extensive data on this.

Evaluating the quality of performance from this data is, of course, highly subjective. To us the performance seems consistent with what one might reasonably expect from a 'future forecasting' exercise expressed in terms of 'degrees of probability of failure' across a rating scale.

Nonetheless, clearly many insurance commentators and market participants hold a more negative view than might be implied by the aggregate performance data. For the insurance industry in our experience this reflects a combination of the following:

- A general mischaracterisation of what ratings actually are;
- War stories of re/insurer failures 'the market' believes it saw coming but the agencies seemed to miss;
- Cynicism around the 'issuer pays' business model of the main agencies (see 3d below).

More generally there is often a difference between the rating agencies' definition of 'default' or 'impairment' and the perception of what constitutes re/insurer 'failure' common in the insurance market-place, where a re/insurer moving into run-off will often be seen as having 'failed', even if it continues to meet its obligations to policyholders.

As we have stressed a rating is a forecast; an opinion about the most likely future outcome partly based on historical information. The published rating will never be the only outcome a rating agency could perceive, merely the one that, on-balance, it considers most probable given the information it has available to it.

It is axiomatic in finance that expert forecasts are important contributors to debate and decision making; but they are not certainties and should never be treated as such. Any sentient forecaster will stress that his or her forecasts will prove to be wrong some of the time. Moreover, for every forecast there will be other informed observers holding a different view. So when, as is periodically inevitable, a forecast proves too positive those holding the more negative view are proved right.

Superficially it can appear that they are the better forecaster, but, of course, that is not a logical conclusion unless you confirm that by reviewing a wide and representative body of all of their forecasts.

This, we trust, is pretty obvious as a theoretical point, but there remains a strong sense in the insurance industry that the agencies generally 'miss' the emerging problems at specific carriers well known to many others.

We would suggest though that for every 'war story' of re/insurer failure happening that others believe they saw coming but that the agencies didn't, there are many others that did not happen (that is to say where the agency forecast was in fact more correct). This 'crying wolf' effect is very common in predictions of serious negative events; a widely used story in the capital markets is to point out that a given bank's economists are so clever that they have managed to predict 10 of the last 3 recessions! That is to say that it is much easier to see why and how something might go horribly wrong than to evaluate the probability that it actually will in the form of a rating/forecast.

Given this tendency for market participants to react as if the agencies should have been rating a subsequently failed firm on a 'worst likely case' scenario, periodically the agencies have surveyed capital market participants as to whether in fact they should move towards doing this. The response has always been the same. No.

An additional factor is that an agency cannot materially second guess the financial data it is given or simply react to market rumours without serious supporting information and data. If the accounts it sees are audited by a respected firm, and the reserves are considered appropriate for the audit by the internal and/or external actuaries, it typically has limited room to reach a materially more negative view than the data implies.

So a rating is not an exercise in fundamentally speculating whether the audited accounts are misrepresenting the true position, or that the firm's management are presenting seriously misleading information. The agency will assume management is presenting the rated firm in a genuine but naturally positive and optimistic light. The agency will therefore take a reasonably conservative view of what they are told, using peer comparisons and looking for inconsistencies in the total picture, but they have typically no basis for taking a radically more conservative view than that represented by the information they have been given.

Why though are there not more examples of where the agency was more negative than perceived wisdom in the market and is then subsequently proved correct?

In one sense the examples are in fact much more common than is usually noted. This is where controversial downgrades happen

but that, over time, the lower rating becomes the conventional wisdom (both reinsurance ratings in general and those of many large primary companies today versus 15 years ago are prime examples of this).

But the particular use of ratings in the insurance markets also impacts this. Where a rated firm knows its rating is critical to its business it will, if it sees a risk to that rating breaching a key market level of acceptability, make very considerable efforts to save the rating (e.g. by raising capital) even while stressing (and quite possibly believing) that the agency is wrong. Management therefore acts to prevent the negative rating action from being required.

d) The business models of the agencies and their regulation

As mentioned in 3c above, among the most contentious aspects of rating agencies is that the most influential, in both the capital and insurance markets, all operate on the 'issuer pays' model. That is to say that the organisation being rated (the 'issuer' in bond market jargon) pays the agency to produce an objective and independent opinion of its creditworthiness.

Self-evidently this represents a conflict of interest and as and when a rating appears to have been too high on a subsequently failed firm (or more generally within an asset class such as with CDOs of US sub-prime mortgages in the run-up to the credit crunch) this invariably becomes the focal point of political, media and market criticism of the agencies. This commonly results in calls for greater regulatory control, a forced change to the 'issuer pays' business model, or both.

Perhaps surprisingly what is not contentious is the conflict of interest itself. The agencies have both always highlighted that they recognise it and been very explicit in publicly communicating how they are paid. Rather the contention relates to how well they manage that conflict and whether the main alternative business model is actually any better.

How well the agencies manage the conflict is very much a matter of individual opinion. They have long sought to segregate analysts from any direct commercial activity, but the potential indirect commercial influences on analysts, such as the inevitable overall relationship between the profitability of the agency and analyst compensation, are harder to define and control.

More generally the desire for 'market share' (linked to being the most 'important' agency in a given sector) and the inevitable human nature tendency of analysts to be more inclined to believe managements they have met several times and come to like, are much harder issues to try and manage. Policies like analyst rotation are used (and in some regulatory environments required) but these can cause their own problems in terms of then having a lead analyst with less expert knowledge of the rated organisation. There has been some introduction of formalised 'whistle blowing' channels to encourage individual analysts to surface any concerns they have but it is too soon to know if this will prove effective.

To our knowledge there is no proven case of any of the main agencies inflating a rating specifically because they were paid to produce it, but for many observers the fact that the agencies have missed some high profile company failures over the years, combined with the problems that emerged in US real estate related structured finance ratings prior to the credit crunch, clearly suggest to them that there can have been 'no smoke without fire'.

Since the agencies cannot prove a negative (that ratings are not inflated) we are left with conjecture.

However, we would note that the two constituencies that could be viewed as having the best insight into this act in a way which suggests they do not believe the agencies are unduly influenced by being paid for ratings.

The first are the leaderships of rated organisations themselves. They, more than anybody, would have a strong sense of whether they are able to 'bid-up' a rating via the payment of the rating fee. In fact quite the reverse message tends to come out of rated companies; namely frustration that their rating is too low. Of course they would be expected to say that, but anybody who has met a CEO in the insurance industry in a state of apoplexy about their rating will know that the emotion often seems only too genuine!

More tellingly rated insurers invariably use ratings themselves to monitor their own credit risk with their reinsurers and in managing their bond portfolios. It would be perverse of an insurance company leadership that believed it had unduly pushed up its own rating through paying a fee to then rely on that rating agency's ratings of its reinsurers.

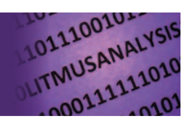
The second informed group are the credit 'sales and trading' parts of investment bank fixed income divisions. These have an absolute selfish interest in trading against any artificially inflated rating. They are credit risk experts and often have ex-rating agency analysts on staff. But both their own research publications and apparent trading activity suggest they presume no structural bias in ratings. Some they think are too high, some too low, but there is no obvious element of an assumption by them that ratings are inflated because of rating fees.

However, irrespective of the effectiveness or otherwise of how this conflict is managed, why not simply get rid of the problem by having ratings paid for by rating users rather than rated companies?

Indeed, all the main rating agencies themselves began by producing ratings on this 'subscription' model basis.

Certainly this is again being seen by some (including new entrants to the ratings business) as the better model, but it too comes with its share of problems.

Most obvious is the problem of a lack of transparency. One fault the 'issuer pays' model does not have is any lack of information available to market participants to reach an opinion about the quality of an agency's ratings. Being paid for by the issuer means that ratings can be published for all to see and their performance observed through time by anybody who chooses to do so (which many academics, banks, investors and others do). However the 'subscription' model requires restricting access to those who pay. Even if some degree of 'free' access is allowed it is much harder for markets to get a true picture of the quality of the agency's research.



A second problem is that many rating users are simply not prepared to pay enough, or even anything at all, to support the degree of research required. Since the 'subscription' model requires spreading the research costs across as many users as possible this can be a fundamental limiting factor to the rating coverage and/or depth of analysis the 'subscription' model agency can provide.

Concerns as to the 'issuer pays' model are often tied to a related view that rating agency regulation is a necessary but missing (or insufficient) element in the global financial system.

In fact in some jurisdictions, notably the US, some form of regulation has existed for a long time. But the concept of rating agency regulation itself is very challenging. It's a detailed subject and we won't dwell on it too much here but the essence of the problem is; what exactly do you regulate when you're considering the independant forecasting of possibilities in the future?

The purpose for market participants of a rating is that it is an independent opinion. And, while various attempts have been and continue to be made to regulate how agencies organise and run themselves in order to produce those opinions, ultimately the opinion itself (and the fact of its publication) has to remain unregulated if ratings are to meaningfully exist at all.

We would contend however that the problem has to some degree been inverted. In our opinion it is less one of how to regulate the rating agencies, but rather the use of ratings in regulation. We cover this in the next section.

e) The use of ratings in regulation and 'self-appointed' regulators

The idea that the agencies are 'self-appointed' regulators is a commonly stated complaint within re/insurance markets. It is also self-evident nonsense. The concern comes from market environments where ratings have become sufficiently important to mean that their impact can seem to be analogous to that of a regulator (e.g. in terms of a re/insurer feeling it has to raise more capital to defend its rating or even ceasing to trade due to the level of its rating dropping below a level of acceptability to its clients). But in no sense are the agencies 'self-appointed' in this context. Rather they are 'market-appointed'; it being market participants' use of a given agency's ratings that drives these outcomes.

To the extent that this market use is in turn driven by regulation then that too is obviously not 'self-appointed'.

As we note above however, the use of ratings within regulation itself is, we believe, a significant problem. We have stressed throughout that ratings are merely forecasts. We also note that independently produced private sector forecasts are important contributors in business and finance.

However, by introducing them formally into a regulatory process, the regulator reinforces the misunderstanding that ratings are presented as facts not simply opinions. Use in regulation also inevitably leads to a view that the ratings (and hence the rating agencies) should themselves be regulated.

Again, as we have noted, if that leads to the ratings themselves being some function of regulation then the purpose is lost.

In our view the rating agencies themselves are remiss in not more stridently and publicly arguing against the use of ratings in regulation. It is hard to see how they can prevent it if a regulator chooses to go ahead anyway but they could be much more consistently vocal as to what the issues and concerns around it are. Indeed, if the agencies' legal position of being purely independent and objective commentators (part of the media in other words) is ever really effectively challenged it seems not difficult to imagine that a history of insufficient objection to being used in regulation will have played a significant part in that.

Periodically the idea is proposed that state, or multi-national institution backed, rating agencies should be created. This is often a political reaction to criticism of the agencies (as much for their ratings being too low in a given country as for them over-rating subsequently failed organisations).

Were this to be purely for the purposes of regulation (e.g. for assessing the credit risks banks take in their exposure to other banks) it could be a logical solution to the problem we highlight above. Indeed the US association of state insurance regulators (the NAIC) has long produced 'ratings' on bonds held by US insurers for this purpose.

However, commonly it is proposed as a substitute for the private sector agencies.

Absent this being run by a truly global body with no mandate for maintaining political, economic and financial stability and development, it is extremely difficult to see how this could work. And, to our knowledge, no such body exists.

There are two fundamental road-blocks.

First, investors use ratings precisely because they see them as un-impacted by any 'agenda' (notwithstanding the 'issuer pays' business model). The probability that institutional fund managers would believe that national or even supra-national 'public sector owned' rating agencies are publishing their opinions with no thought for, or control from, government objectives is vanishingly small. And, indeed the cry for creating state owned rating agencies often goes up with precisely this explicit goal.

Investors would simply ignore these ratings.

Second, anything other than a truly global institution backed, at least, by all members of the G20 would run into huge political issues the moment it started downgrading the banks (and potentially the sovereign) of a given country. It is one thing for a private sector firm to be doing that, quite another for a public sector entity. Indeed, such a move could easily create an international diplomatic crisis.

The Interactive Ratings Process

The 4 main rating agencies essentially follow the same rating process for what S&P terms 'interactive' ratings; that is ratings requested by the rated organisation and produced via a process that includes extensive dialogue with them.

As elsewhere where we refer to individual agency terminology we mention primarily S&P and A.M. Best to keep this as succinct as possible. However we are not aware of any area in this section where Moody's and Fitch terminology and policies materially differ.

a) The roles of the rating committee and the rating analysts

At the heart of the rating process is the 'rating committee'. For each agency these will have a formal structure and rules such as the selection and role of the chair, what constitutes a quorum, which analysts have a vote and more.

While different agencies have their own protocols for whether and how any further review of a committee vote might take place, fundamentally it is the rating committee that is prime arbiter of the rating outcome.

This is not always well understood by rated companies, rating users and commentators.

A single analyst is usually defined as the focal point of the analysis and leads interaction with the rated company. An additional analyst will typically also attend meetings with the rated company and work closely with the primary/lead analyst on producing a rating recommendation. Both will also usually be named in any public release on the rating.

As a consequence they are often presumed to be the ones assigning the rating. They are not. They make the rating recommendation to the committee and provide the committee with the background analytic material they see as relevant (some of which, such as capital model outputs and standardised spreadsheets, being prescribed as required material; other supplemental information being at their discretion).

However while their rating recommendation and analytic views will be an important contribution to the debate there is no requirement for the committee to agree with them. Indeed, to a significant degree the committee's role is to review and challenge their initial recommendation.

The committee is specifically intended to be distanced from the rating organisation both to help the process of maintaining consistency across ratings but also to be un-impacted by the human interaction with the management of the rated entity.

b)Production of an initial interactive rating

As these ratings are voluntary the formal process begins with the signing of a rating engagement letter or contract that defines the commercial commitment (rating fees) being made by the re/insurer. This, or a companion document, will also outline operational issues such as the confidential nature of the process, required information, the option around whether to publish the initial rating, expectations around on-going communication once the rating is published and the right to withdraw the rating after it is published.

Contact with the rating agency up to this point will typically have been with the 'commercial' not the 'analytical' function as the analysts should be ring-fenced from any commercial discussions.

That said, some degree of analytical discussion around issues such as the likely approach to the application of elements of rating criteria to the rated organisation can usually take place ahead of a formal engagement if the re/insurer seeks this. These discussions though should always be caveated by the fact that until the rating process has been finalised (and above all a committee has voted) nothing is definitive.

Once the formal engagement is signed the analytical team made up of the primary/lead analyst and the second analyst will be assigned and analytical contact will begin. Typically an individual of some significant seniority within the re/insurer will be identified as the 'ratings contact' and will be the focal point of communication and coordination with the primary/lead analyst.

The agencies will request information to populate various specific aspects of their analytical process (both quantitative elements such as capital models and qualitative elements such as strategic plans and ERM documentation). They will arrange a 'management meeting' date with the re/insurer's leadership (typically between a half and a full day) and send an agenda to be covered at that meeting. This will relate directly to the structure and content of the published insurance ratings methodology.

The re/insurer therefore will typically be both supplying specific elements of data/information to the agency prior to the management meeting and a presentation covering the agenda items to be delivered at the meeting.

After the management meeting the agency analysts will review the information further, produce their recommendation and supporting data/information pack and call a rating committee (as described above).

The committee will vote and once the decision is finalised the analytical team will communicate the outcome to the re/insurer and the key analytic factors behind it.

c) Acceptance and publication of an initial interactive rating

Much of the following section reflects regulation and/or explicit publicly disclosed policy by the rating agencies that they deem consistent with their understanding of regulatory and market expectation.

Typically acceptance and hence public disclosure of the initial rating is at the discretion of the rated organisation. Exceptions to this relate to where some form of other opinion from the agency on the rated organisation (such as a 'pi' S&P rating) already exists in the public domain and hence the agency believes it must release the initial interactive rating in order to disclose this updated view to rating users.

Whether or not the rated organisation can indeed therefore decline acceptance of the initial 'interactive' rating should be explicitly addressed in the rating agreement.

Assuming public disclosure of the initial rating is not required, some modest time may be allowed to lapse while the rated

organisation makes its decision as to whether to accept it and hence see it published by the agency. (Note: this is very different to the scenario for 'rating actions' as described below).

If the re/insurer believes material information about it has not been understood (or they had not previously disclosed it because they did not appreciate its relevance prior to hearing the rating outcome and its key drivers) they may be able to 'appeal' the outcome but under quite tightly defined terms.

Assuming public disclosure takes place this will typically be through the agency's public website with a press release. Detailed rating reports ('rationales') may be free for a period to any user of the public website and typically rated re/insurers may make these available for review at their own site or to individual clients or trade counterparties as they see fit. (Note: regulatory rules of disclosure of bond ratings, being related to traded market instruments, are generally more onerous than for financial strength ratings).

d) Rating surveillance, rating reviews, rating actions and appeals

As with the previous section much of the following reflects regulation and/or explicit publicly disclosed policy by the rating agencies that they deem consistent with their understanding of regulatory and market expectation.

Conceptually, interactive ratings are under 'ongoing' surveillance, with the agency having established short and medium term expectations that support the current rating (often explicitly disclosed in the rating 'rationales').

In practice this tends to mean, in the absence of a specific material change in the re/insurer's profile, that the analysts conduct periodic informal sanity checks through the year (reinforced by occasional wider 'peer' reviews), followed by a formal 'annual review'. The latter repeats the initial rating process albeit based on the existing rating.

The key distinction is that there is now an existing rating opinion from the agency on the re/insurer in the public domain. This sets a very different context for any change in the rating opinion.

When the committee meets it is reviewing the recommendation of the analysts as to whether to 'affirm' or change the currently published rating. A change to a rating is known as a 'rating action'. It will also consider whether to change the 'rating outlook' (see below).

This creates a far more time-sensitive scenario for any form of discussion with the rated company after the committee decision and for 'rating appeals'. This is a critical area of focus for both ratings regulation and rating agency policy. In essence, in the absence of a rapid and very clear highlighting by the re/insurer of overtly material additional information, any form of negative rating action or 'outlook' will need to be publicly disclosed by the agency very shortly after the committee has finalised its view (since it is required to update rating users as to any change in its view).

e) Rating 'outlooks' and 'watches'

Though they may appear superficially similar rating 'outlooks' and 'watches' address different issues.

The former is an indication of the 'possible' but not, in theory (see below), 'probable' direction of travel of the rating over a 12 to 24 month (S&P) or 12 to 36 month (A.M. Best) period from the date the outlook was assigned.

Both agencies use the terms 'positive', 'stable' and 'negative' for their outlooks; as in "A+, Outlook Negative".

A change in rating outlook is NOT a rating change.

Nonetheless they are an important (and often overlooked) source of ratings transparency. S&P's rating outlook definition highlights this;

"S&P assigns positive or negative outlooks to ratings when we believe that an event or trend has at least a one-in-three likelihood of resulting in a rating action over the intermediate term for investment-grade credits (generally up to two years) and over the shorter term for speculative-grade credits (generally up to one year)". (Source – S&P General Criteria: Use Of CreditWatch And Outlooks 14-Sep-2009).

The fact that an outlook is nonetheless only indicating a 'possible' not a 'probable' change derives from the fact that ratings are forward looking opinions. If the rating committee concludes a rating change is 'probable' then that ought to trigger an immediate rating action. However, the extent to which this logical premise is always stuck to in practice is not clear (especially as it relates to developing positive or negative trends in a re/insurer's operating performance).

Rating 'watches' ('creditwatch' in S&P terminology,' 'under review' ' for AM Best) by contrast are not possible intermediate term rating trend indicators but rather a flag that indicates that the agency needs to review some specific new information or event that may immediately impact the rating (for example due to M&A activity, capital raising, catastrophe losses, a newly identified hole in reserves).

The language used for 'watches' is therefore; 'positive' (rating may go up or stay the same), 'negative' (rating may go down or stay the same) or developing (all three alternatives are possible).

Desired timeframe limits for resolving a watch are much shorter than the periods covered by 'outlooks' and would rarely exceed 6 months.

Interactive Ratings Criteria

a) Basic building blocks of insurance rating criteria

Ratings criteria refers to the detail of the analytical methodology employed by the agency in assessing a re/insurer's 'prospective' creditworthiness.

While the 4 main agencies all have differences in how they describe the details of their criteria (and consequent differences in the details of their approach), the core elements taken into consideration are common (and indeed central to any prospective analysis of a non-life re/insurer's financial strength that seeks to be more than purely a quantitative approach).

These are:

Capital adequacy

The amount of capital the re/insurer has relative to the risks it takes and its scale.

Underwriting portfolio

The riskiness and diversification of its business lines combined with a view on how well the re/insurer understands and prices these.

Reserve adequacy

The potential for 'hidden' gains or losses impacting reported capital due to over- or under-stated loss reserves and the related over or understatement of prior year(s) underwriting performance.

Reinsurance reliance

The degree and nature of protection afforded by reinsurance, offset by the credit risk taken with reinsurers and extent to which reinsurers have pricing power over the insurer.

Financial flexibility

The extent to which the re/insurer can raise new capital if needed, the degree of debt capital usage and coverage of debt interest payments.

Investment risk

The degree of risk embedded in the re/insurer's investment portfolio.

Liquidity

The extent to which liquid assets (or external sources such as committed bank lines) are available relative to what might be needed.

Industry risk

The structural risks associated with participating in different segments of the re/insurance industry.

Sovereign/country risk

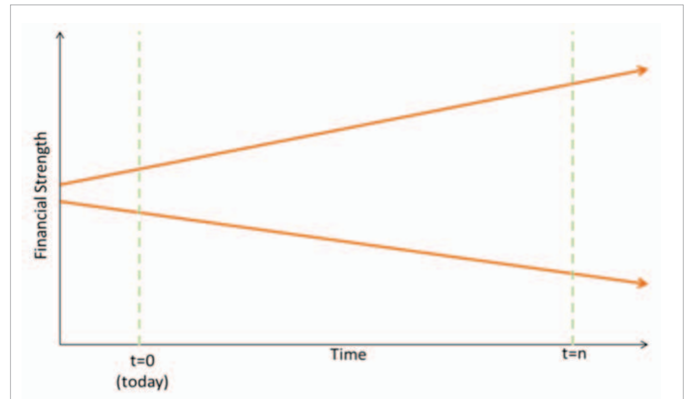
The intrinsic risk of operating in the re/insurer's domicile.

Operating performance

The historic and prospective performance both in underwriting and after investment (and other) income. This includes a view of earnings 'quality' (its sustainability and volatility).

Competitive/market position

The degree to which the re/insurer has business advantages or disadvantages that will drive future earnings.



Strategy and management

The riskiness and logic of management strategy and its apparent ability to deliver on both that and relevant governance and control.

Governance and ERM

The quality of governance overall and the specific evaluation of Enterprise Risk Management in the context of the risk profile of the re/insurer.

Growth

A 'goldilocks' concept of 'not too much' and 'not too little', with the emphasis on 'not too much'.

Inevitably these elements inform and overlap each other and different agencies will address these in different combinations.

b) The relationship between reported solvency and future financial strength

At first sight it may seem strange that much of the above is part of a rating opinion designed to comment on the ability of the re/insurer to meet its obligations to policyholders (or indeed other creditors), begging the question "why is this not simply about the degree of reported solvency or capital adequacy?"

The key to that is the prospective nature of the obligation the re/insurer has to policyholders. In essence most policyholders have a 'future' not a 'current' credit risk exposure and hence it is 'future' not 'current' capital adequacy that matters (i.e. for all but those with a current outstanding claim). Moreover, the last reported balance sheet is inevitably 'historic' by the time it has been produced.

As the conceptual graph above illustrates, the criteria therefore seeks to take the 'last reported' balance sheet position and project forward where that might be in the future.

As a generalisation rated re/insurers and rating users tend to over-emphasise the presumed importance of capital in a re/insurers' rating and under-emphasise the importance of prospective earnings (and those things that influence analysis of it such as the strength of market position, ERM, strategy, and historical earnings).

However, if perceived capital adequacy weakens beyond a certain point then it becomes disproportionately important since the degree of risk to near-term survival (or at least regulatory intervention) crowds out analysis of more long-term drivers of strength.

c) The use of capital models

Capital models in essence compare the amount of capital the re/insurer has (typically called 'total available capital'; 'TAC') versus the amount prudently required for the risks it takes (typically called 'total required capital'; 'TRC') and calibrates the result relative to benchmarks of the highest degrees of strength to the lowest.

The calculations for this are beyond the scope of this paper but this approach lies at the heart of both S&P and A.M. Best insurance capital models and regulatory models such as Pillar 1 in Solvency 2 and the NAIC model.

Total available capital (TAC) calculations reflect a series of accounting and quasi-accounting rules combined with interpretations of finance theory. Hence different models lead to different outcomes for the same re/insurer. The required capital calculation methodology is even more open to judgement.

S&P and A.M. Best's models do have material differences. However, in our experience working directly with organisations rated by both agencies, the final outcomes often do not diverge by that much; especially when each agency's context for how it uses the model outcome is taken into account (meaning how the agency then reflects things it has not sought to build into its model but rather adjusts for qualitatively).

d) Group ratings

While the phrase 'group rating' is widely used it has no proper meaning. A financial strength rating is logically assigned to legal entities issuing policies. In practice the rating agencies look at the parent organisation on a consolidated group basis and assign it a rating. This then becomes the 'group rating' benchmark.

The concept of a group rating is basically a judgement as to the extent to which the consolidated future balance sheet of the group stands behind any given limited liability underwriting subsidiary.

For a stock company the premise that it would support an individual subsidiary beyond its legal obligation to do so is not a simple one. Fundamentally that decision needs to reflect what is in the best interests of the group's shareholders. Of course ignoring the interests of policyholders, regulators or other stakeholders is not a simple decision either (not least because of the impact that might have on the surviving group).

It might seem a more simple issue for a mutual group (at least in terms of policyholder obligations) but that can then get complex when different policyholders have greater or lesser exposure to one part of the group versus another.

As with capital models the details of this are beyond the scope of this paper. In summary however, two forms of group or parental support are considered; explicit and implicit.

Explicit support reflects capital substitutes provided by other parts of the group (e.g. intra-group reinsurance) and/or binding commitments to recapitalise the operation if required (guarantees, net worth maintenance agreements etc.)

Implicit support relates to a judgement of the business logic for the group supporting the subsidiary if need be. It is in this that the concept of 'core' subsidiaries is used (those that merit the same rating as the wider group), 'strategic' subsidiaries (those whose rating is enhanced by group membership but not necessarily up to the group rating level) and 'ancillary/non-strategic' subsidiaries (those whose rating is basically a 'stand-alone' analysis of the individual rated insurer).

Further gradations exist and other jargon may be used. In addition there can be detailed 'rules' around the relationship of 'non-core' rating levels to the group rating level.

A crucial outcome of all of this is that not all re/insurance operations of rated groups may therefore carry the 'group rating', or indeed any rating at all. This means rating users need to be specific as to the rating of the legal entity underwriting the policy to ensure they actually have the credit exposure (as described by the rating) they intended.

e) Rating notching and the seniority of financial strength ratings vs. debt ratings

A 'notch' in ratings jargon is the distance between any given rating level and the next point on the rating scale. Thus the difference between an 'A' and an 'A-' rating is 'one notch'.

This concept is used both in defining the difference in ratings levels between, say, 'core' and 'strategic' subsidiaries and also in the difference between ratings of policyholder obligations (financial strength ratings) and bondholder obligations (debt ratings).

Bondholders are, almost invariably, considered to be 'junior' creditors relative to policyholders (in practice even if not always in theory). Hence the agencies 'notch down' debt ratings from the FSR level. In addition the legal entity issuing the debt can often be a non-operating business reliant on income from other parts of the group.

The combination of these two factors leads to even senior debt from an insurance group being typically rated two or three notches below the FSR level. Hence an insurer whose main underwriting operations are rated 'A' would tend to have their senior debt rated 'BBB+' or 'BBB'.

f) Sovereign or other non-group support

Re/insurer ratings may be increased beyond the stand-alone or group rating level if the agency believes that some higher rated entity stands behind that. Most obviously this would be a public sector owned re/insurer.

As with the group ratings methodology noted above there would need to be either some form of explicit support or a high level of implicit support, the latter coming from the role the re/insurer plays in public economic policy.

An important caveat to this is that any 'moral hazard' type legislation that requires policyholders to share even a modest part of the cost of the re/insurer's failure (by some reduction to claims payments) in theory invalidates this support for ratings purposes.

Certain other types of ownership structures (such as industry collectives supporting a mutually owned re/insurer) may also enhance a stand-alone or group rating.

g) Sovereign 'ceilings' and country risk

As the recent economic environment has highlighted, sovereign or country risk can also play a significant negative role in a re/insurer's financial strength profile.

In essence this comes down to two contexts. First the degree of investment risk a re/insurer has in its ownership of sovereign government debt (or securities that can be highly correlated such as domestic bank debt). Second the positive or negative impact the political, macro-economic, legal, social and operational environment within a country has on re/insurers domiciled and/or active there.

The impact and relevance of this can differ materially by sector, such that a domestic life insurer might have a materially different systemic exposure to a country than a non-life insurer. And re/insurers operating in multiple jurisdictions will have a range of exposures along with some 'domicile specific' context.

S&P, Moody's and Fitch all materially use their 'sovereign debt' ratings to inform this part of their rating analysis.

A.M. Best uses third party ratings for the investment risk aspect and its own 'country risk' analyses for the non-investment factors.

As we mention below, S&P has now introduced a similar concept (the Insurance Industry and Country Risk Assesment; IICRA) although this continues to draw on the sovereign rating analysis for some core aspects of it.

The impact of the sovereign/country risk analysis can vary between being a 'constraint' to a 'ceiling' on a rating.

h) The Lloyd's market rating and Lloyd's syndicates

The Lloyd's market rating is an unusual concept. As noted elsewhere logically a financial strength rating is assigned to the legal entity issuing re/insurance policies on its own balance sheet. In the case of the Lloyd's market it is Managing Agencies that issue policies on behalf of Members (capital providers) that back each syndicate.

However, Lloyd's is structured such that there is a 'partial mutualisation' of Members' capital available to pay claims across the whole market, primarily via the Central Fund.

Since this exists to pay losses a syndicate's resources cannot meet, fundamentally policyholders are ultimately exposed to the Central Fund; hence the concept of the Lloyd's market rating.

Other 'regulated' and 'centralised' aspects of Lloyd's reinforce this concept including the holding of received premiums in centralised 'premium funds'; the role of the Franchise Board in reviewing and approving syndicate plans; Lloyd's risk based capital requirements for syndicate capital providers (Members); and its global brand and licences.

Lloyd's refers to the combination of its risk based capital requirement for Members (i.e. in terms of the capital they commit to support their trading activity), premium funds, the Central Fund and the other centralised assets of the Society as the 'Chain of Security'. The concept being that any individual claim is met first out of the retained premiums of the syndicate, then if this is exhausted, from the Members' capital backing the syndicate, then, if need be, by the Central Fund and finally, if that were to be exhausted, from other assets of the Society.

The syndicates themselves are the vehicle through which one or more Members take underwriting risk at Lloyd's (managed by a 'Lloyd's Managing Agency'). Thus the risk based capital requirements are actually those imposed on the underlying Members investing in the syndicate. This can get a bit involved and is outside the scope of this paper.

A key point to note however is that while the Lloyd's Managing Agent is frequently owned by a high profile re/insurance industry group, that group may not necessarily provide all, or indeed any, of the capital supporting the syndicate (i.e. it can come from other Members).

The different agencies have somewhat different approaches to reporting on the syndicates. Moody's for example publishes a performance rating for them (as opposed to a financial strength rating), S&P publishes an assessment based on each syndicate's potential reliance on the Central Fund, whereas A.M. Best will rate individual syndicates but with a 'floor' (i.e. minimum) level set at that of the market rating.

Again the details of these are beyond the scope of this paper but suffice to say all of the agencies that publish a market rating regard this as the security offered by Lloyd's syndicates generically, with Best's then allowing for the potential that some syndicates exceed that.

i) Start-up ratings

The key role ratings play in many re/insurance markets leads to a 'chicken and egg' issue when it comes to 'start-up' re/insurer ratings. For 'traditional' re/insurance businesses (by which we mean those set up to write 'open market' business and not providing some form of 'collateral' as the fundamental basis of policyholder security) having a rating from the start of operations can be critical.

However, since, as noted above, ratings criteria heavily reflects expected operating performance (and related issues such as competitive position) this begs the question as to how this is analysed given no track record to extrapolate from?

The agencies address this via a combination of factors. While different agencies have different degrees of emphasis all will consider:

- The plausibility and coherence of medium term (5 years) business plans
- The track-record of the leadership (especially in underwriting)
- The strength of risk-adjusted capital over the plan period
- The quality and nature of the capital providers
- The operational controls, ERM process proposed

Inevitably there will be a substantial extra degree of conservatism in the rating relative to a well established business.

For 'traditional' reinsurers (the most common 'start-up' rating scenario) having one of A.M. Best or S&P's ratings can be particularly important at launch. A widely held market belief is that S&P does not actually rate 'start-up's. This is not true. However, the generally greater degree of emphasis A.M. Best appears to give to 'redundant' capital (more capital than is required for

the rating) through the plan period in assigning the initial rating, means that achieving the 'A-' level (generally regarded as the fundamental hurdle level for reinsurers) can be a more practical option than from S&P. This is because, if market conditions are favourable enough, investors can be prepared to over-capitalise the reinsurer to achieve the rating.

Conversely, S&P's perceived greater emphasis on track-record and market position as a core indicator of prospective performance is obviously hard to address for a true start-up. This greatly increases the chance of an S&P rating at launch only being in the 'BBB' range even where capital and business plans seem robust and the reinsurers leadership have strong personal track-records.

An obvious potential exception to this is where the 'start-up' is in practice the 'spin-out' of an existing book of business.

j) S&P's 2013 criteria update

While this guide is not intended to go into re/insurer rating criteria in any significant depth, the recently launched (as at May 2013) S&P criteria is an important step-change in how their ratings are executed and reported. Accordingly we provide a summary of what we see as the key aspects of that here.

The goals of the S&P criteria update (which was finalised after a 10 month 'request for comment' process) are stated as enhancing ratings transparency, consistency and prospectiveness (the latter relates in particular to the more explicit use of prospective earnings within the projected outcome of forward-looking capital models).

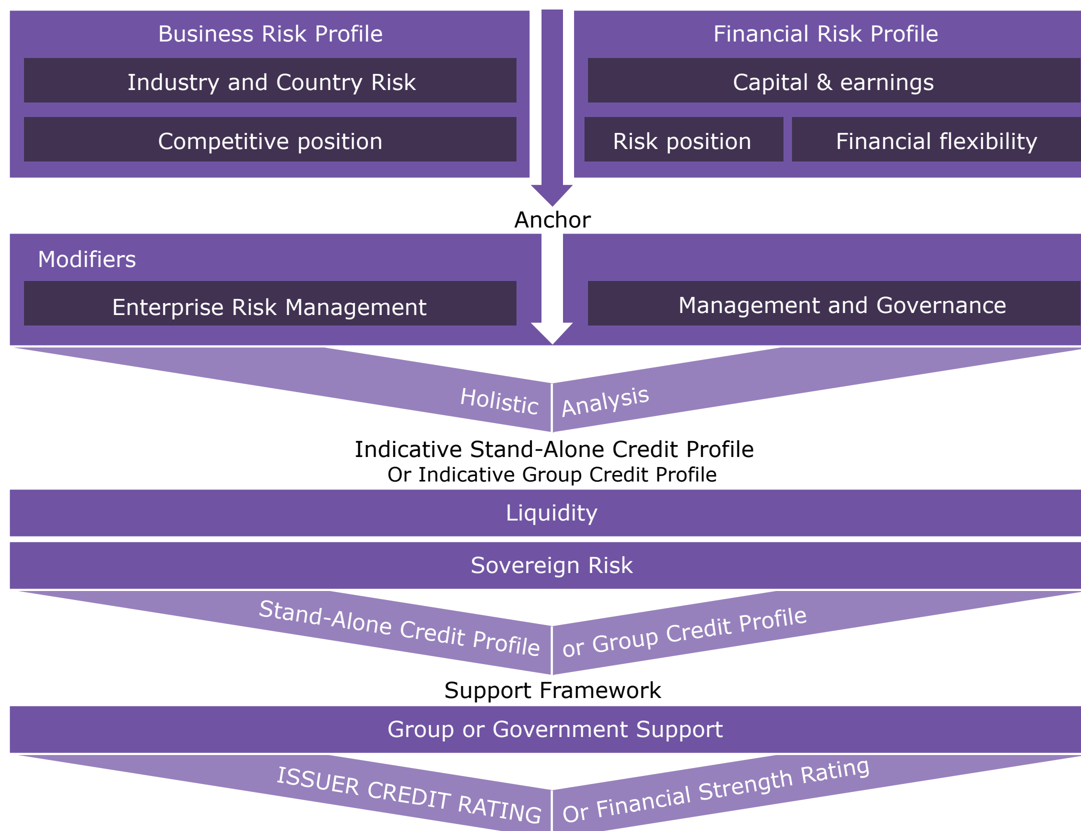
The substantially enhanced disclosure on the factors that drive the final rating are adding insight into how S&P is arriving at its rating conclusions in any given case (and hence both the areas of perceived strength in a current rating and the main sources of risk to their rating that rated re/insurers have).

The new disclosure follows the updated 'step-wise' logic of the S&P process described below.

At one level we question how much this really equates to more transparency. That is to say, it does in that we see the details of the analytical judgements making up the rating decision more clearly, but it doesn't in that much of many components of the rating remains inherently a function of qualitative judgement (although S&P has provided a lot of 'directional guidance' for how it reviews each factor and sub-factor within the rating process).

In our view that is as it should be given that a move further away from qualitative judgement (as was mooted initially) leads to the problems associated with a too mechanistic and rule-based analysis. Nonetheless the retention of qualitative flexibility will, inevitably, not fully meet the desires of those who wish to be able to completely define how and why the agency reached its decision in any given case.

The ratings process starts with the calculation of a 'ratings anchor'. This is a crucial part of the new disclosure as this is now being published as part of the rating rationale.



Source: Standard and Poor's

The ratings anchor combines two areas of analysis which form the core of the initial review by S&P of a re/insurer (and indeed other sectors and industries). These are the 'Business Risk Profile' (BRP) and the 'Financial Risk Profile' (FRP).

The BRP relates to how the competitive strengths and weaknesses of the re/insurer, combined with its operating environment, will drive its future operating performance. The operating environment is derived from S&P's newly launched Insurance Industry and Country Risk Assesments (IICRAs) which evaluate the systemic risk of any given country or industry sector (for most countries S&P now publishes a life and non-life IICRA, while the global life and non-life reinsurance, P&I club and trade credit insurance sectors each have their own IICRAs)

The FRP addresses risk-adjusted capital strength (including, as noted above, prospective earnings), the risks to that strength from specific risk factors not fully captured in the capital model (a part of the analysis known as 'risk position') and its degree of financial flexibility.

S&P blends the BRP and FRP outcomes to produce the 'anchor'. A particular point of note to this is that prospective performance and its volatility (both in part informed by historic performance) impact both the BRP and the FRP, highlighting the impact this has overall.

Having established the rating anchor (which as we note above is now published; shown in lower case rating symbology in the rating rationale), S&P then moves on to the particularly qualitative aspects of its view of how the firm is managed. This is covered in two parts; 'management & governance' and 'enterprise risk management'. The latter is addressed separately in part to give it due focus and in part because its impact on the rating is specific to how important ERM is per se to a re/insurer's credit profile (dependent on its size, complexity and lines of business).

These qualitative factors then move the 'rating anchor' up or down.

S&P then finalises this process by adding an 'holistic' review whereby they may change the rating up or down further by one notch to capture any important aspect of the re/insurer's profile they feel has not been sufficiently picked up, or to recognise where a re/insurer has been consistently on the cusp of more positive or negative outcomes in most components of its analysis to this point.

These 'modifiers' to the ratings anchor result in the establishment of the indicative rating (known as the indicative credit profile).

Thereafter S&P may apply a 'cap' to the rating driven by either liquidity concerns or issues related to sovereign risk not already captured in the BRP or FRP above.

Finally, any rating change due to the support of a group or government is added leading to the published rating.

NOTE; S&P publishes extensive background descriptions of the methodology described above overall and specific papers on core sub-components of it such as its capital model, methodology for rating groups, the evaluation of 'management & governance' and ERM.

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