

Corporate credit ratings: a quick guide

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What is a credit rating?

In its simplest form, a credit rating is a formal, independent opinion of a borrower's ability to service its debt obligations. The majority of ratings are publicly disclosed (though not always, as we will come on to later) and are used by debt investors in their investment appraisal process (where the rating is applied to a specific debt instrument), although they are also used by creditors and other parties for understanding an entity's credit profile (where a more general entity credit rating may be issued). From a borrower's perspective, a credit rating is generally a requirement of public bond issuance (corporate or high yield) and certain loan structures (with institutional lenders) and thus provides access to a wider range of lenders and debt products.

An alternative category of credit references is those provided by Dunn & Bradstreet, Experian and others. In addition to being used by trade creditors and other counterparties, D&B scores are used in calculating the UK pension regulator's PPF levy, although they tend not to be used by debt investors and so are not considered further in this guide.

The rating agencies

Credit ratings are predominantly provided by three main independent rating agencies, namely; Standard & Poor's (S&P), Moody's Investor Services (Moody's), and Fitch IBCA (Fitch), although there are others.

Although the agencies adopt different rating scales, there is equivalence across the scales which facilitates comparison such that a Baa1 rating (for example) from Moody's is equivalent to a BBB+ rating from S&P and BBB+ from Fitch. The full rating scales are shown in Figure 1.

Investors also use a broad categorisation of issuers as "investment grade" (Baa3/BBB-/BBB- and above) or "non-

investment grade" (aka speculative grade, junk, high yield – being Ba1/BB+/BB+ and below). An investment grade rating is important for certain borrowers to ensure full market access (as some investors are prohibited from investing in sub-investment grade debt), achieving flexible/attractive covenants and terms on debt issues, and in some cases for the prestige value in front of competitors, customers and suppliers. Non-investment grade debt issues tend to require greater operating and financial restrictions and inevitably attract higher pricing.

When the bond markets shut for several weeks post Lehman, even the strongest investment grade companies could not issue bonds, far less BBBs and below. When the markets did reopen, they did so gradually, opening first to issuers at the top end of the rating spectrum and then eventually moving down towards the bottom. So even a 'AA' or 'A' rating should not be seen as a guarantee of capital markets access. Moreover, in the current economic climate it remains challenging for non-investment grade companies to issue debt due to investors' reduced risk appetite.

An important extension to the concept of a borrower or an issue's credit rating is the rating outlook (positive, stable, negative or developing), which is a directional evaluation of where the rating is likely to move over time. In addition, certain entities subject to announced or expected major corporate events (typically around M&A) can be placed on credit-watch pending outcome of the event, and in some circumstances the agency will give a view about what would happen to the rating under different outcomes.

A rating looks not just at "probability of default", but also "loss given default". This is particularly important for non-investment grade issues, where the presence of credit enhancements (asset backing, security, covenants, priority ranking) or weaknesses (contractual or structural subordination, absence of security or covenants) can lead to individual issues being "notched up" or "notched down" relative to other issues by the same borrowing group or overall corporate credit rating to reflect a lower expectation of recovery in the event of a default.

Rating agency methodology

The rating agencies use broadly similar methodologies in arriving at their credit rating determination, although they operate independently of each other and so differences in approach and rating outcome may exist in certain instances

The rating agencies distinguish between rating short-term (<365 days) and long-term (1+ year) obligations, owing to the different investment dynamics of the different investor bases. In general, there is little value in having a short-term rating unless issuing commercial paper and such rating is in the top two categories, as it is only really used in the (short-term) commercial paper market which requires minimum P2/A-1/F1 ratings. Investors, creditors and other interested parties tend to look to a borrower's long-term credit rating as a general measure of creditworthiness.

Figure 1: The ratings structure

	MOODY'S		S&P		FITCH			
	Long term	Short term	Long term	Short term	Long term	Short term		
INVESTMENT GRADE	Aaa	Prime 1	AAA	A-1+	AAA	F1+	HIGHEST	
	Aa1		AA+		AA+			
	Aa2		AA		AA			
	Aa3	AA-	AA-					
	A1	Prime 2	A+	A-1	A+	F1		
	A2		A		A			
	A3		A-		A-			
	Baa1	Prime 3	BBB+	A-2	BBB+	F2		
	Baa2		BBB		BBB			
Baa3	BBB-		BBB-					
NON-INVESTMENT GRADE	Ba1	Not prime	BB+	B	BB+	B	LOWEST	
	Ba2		BB		BB			
	Ba3		BB-		BB-			
	B1		B+	B+				
	B2		B	B				
	B3		B-	B-				
	Caa		C	CCC	C	CCC		C
	Ca			CC		CC		
	C			C		C		
			D	D	D			

Source: The Association of Corporate Treasurers

and for certain sectors or products, notwithstanding identical information. The agencies provide an overview of their detailed rating methodologies on their websites, but in general the analysis will focus on two broad areas:

- **Business Risk:** Evaluation of strengths/weaknesses of the operations of the entity, including: market position, geographic diversification, sector strengths or weaknesses, market cyclicality, and competitive dynamics. This approach allows businesses to be compared against each other and relative strength/weakness to be identified.
- **Financial Risk:** Evaluation of the financial flexibility of the entity, including: total sales and profitability measures, margins, growth expectations, liquidity, funding diversity and financial forecasts. At the heart of this analysis is credit ratio analysis, which is used to quantitatively position companies of similar business risk against each other.

One additional consideration for the agencies is the "sovereign ceiling", which can serve to cap at country rating level the Foreign Currency Credit Rating of a high credit corporate with jurisdiction and primary operations in a lower credit country. The agencies updated their methodology in 2005/6 to reflect perceived lower likelihood that a government default would be accompanied by a more general moratorium on foreign-currency payments

(following expansion of international capital markets), but such instances tend to be restricted to the larger players within the infrastructure, natural resources, and to a certain extent financial services sectors.

Financial analysis and credit ratios

The area of Financial Risk analysis is often distilled (especially for a well known company in a widely rated sector) down to the analysis of a certain number of key credit ratios. Although there are numerous adjustments that can be made, and many adjustments are made on a sector or even company specific basis, there are a handful of main rules when it comes to credit ratio analysis:

- **Debt adjustments:** The agencies typically capitalise operating leases and also treat debt-like financial obligations (such as post retirement deficits) as debt when arriving at Adjusted Net (or Total) Debt.
- **Funds From Operations:** The agencies tend to prefer FFO based metrics to EBITDA based metrics as FFO is a closer proxy to cashflow. Broadly FFO is EBITDA less cash interest and tax, although precise calculations can vary significantly from such crude guides.
- **Retained Cashflow/Free Operating Cashflow:** These are FFO variants (RCF being FFO less dividends, FOCF being

FFO less capex).

- **Operating lease adjustments:** Leases are capitalised on the balance sheet typically by adjusting reported debt and assets by the present value of lease commitments. The "factor method" by which annual lease expense is multiplied by a factor reflecting the average life of leased assets is also often used. The implicit lease interest is added back to interest expense and EBITDA. The difference between the average first year minimum lease payments and the implied interest expense, the lease depreciation expense, is treated as capex and is added back to FFO.
- **Hybrid bonds:** partial equity treatment for certain qualifying debt instruments, with level (25%/50%/75%) depending on level of subordination, maturity, replacement language and coupon deferral. Borrowers issue hybrids (straight or convertible) to support (or even reach) a desired credit rating, reducing (or even eliminating) the need for equity.

Although the above can get you much of the way towards replicating the published credit ratios, it is often difficult to replicate the analysis exactly without explicit guidance from the rating agencies. This guidance is something that is not always forthcoming, but in the context of a transparent relationship is something we would encourage treasurers to seek.

Dealing with the rating agencies

Responsibility for dealing with the rating agencies will usually lie with the corporate treasurer (or occasionally the finance director direct).

In order to deal effectively with the rating agencies, it is important to understand clearly both how the rating is determined, and also its positioning relative to its peers. An open and regular dialogue with the agencies, together with a clear understanding of the financial adjustments they employ to arrive at the credit ratios, will therefore greatly facilitate a company's understanding of its own rating headroom, risks and mitigants.

A treasurer with a good grasp of how the agencies analyse both his business risk and financial risk for their credit will be better positioned to understand the likely reaction of the agencies to changes in operating performance (market weakness, increased competition) or corporate events (acquisitions, divestitures and dividends).

One particular area to focus on is credit ratio analysis, as accurate replication of the precise adjustments the agencies use will make the qualitative aspect of the analysis as transparent as possible. When combined with guidance on ratio expectations, the ability to accurately replicate the rating agency adjustments will give the treasurer a useful tool to anticipate the agencies' likely reaction to various scenarios (such as determining the maximum special dividend that can be made without jeopardising a certain rating).

It is helpful when dealing with the agencies to present in a manner that is immediately comparable with their own analysis (and even share the model), while the provision of

consistent reliable information – and the development of professional relationship with analysts – will significantly support credibility of projections, forecasts and corporate action.

Information requirements

Although the agencies can have access to financial forecasts and other non-public information, what they publish tends to be restricted to historical (public) information only, although there can be statements of expectations or assumptions such as "we expect company X to maintain a ratio of Y in the medium-term".

The information requirements of the agencies will vary depending on the nature of the corporate and what is available. For larger corporates who already make extensive disclosure, the determination will often be based solely on publicly available information. However, in most cases there will be a higher level of interaction between the company and the agency, and the agency would review both public and non-public information. As a general guide, a corporate should expect to have a transparent relationship with its credit agencies in the same way it would have with a close relationship bank, and consider making available items such as annual budgets, periodic reporting and management meetings.

Alternatives to a public credit rating

As companies find it challenging to raise capital from relationship banks and seek to limit refinancing risk, they are increasingly turning to the debt capital markets (where investor demand is currently strong but ratings are recommended / required) to refinance upcoming maturities. Many unrated companies are therefore considering obtaining a credit rating to ensure smooth capital markets access and as a first step to obtaining a public rating are increasingly using the different services offered by the rating agencies to assess their credit rating. Two of the options companies may consider instead of a public credit rating are:

Private credit assessments

Private Credit Assessments can be used to get an initial view from the agencies of the rating category they would assign to a borrower/issuer. It is essentially a desktop exercise and not a firm Credit Rating. The two to three page report typically takes 8 to 10 business days to produce and contains an analysis of public information, but does not include any management meetings and is not sanctioned by a Ratings Committee (and thus is not a formal rating opinion or even a rating indication). It is reviewed by the sector rating analysts for policy consistency, but is little more than a point in time view with no ongoing obligation on either side. This compares with a full (private or public) internal credit rating process which takes four to eight weeks and involves more in-depth analytics, a Management Meeting and a formal Rating Committee.

Private credit rating

When a company obtains a full corporate credit rating, it can choose to publish the rating or maintain the rating on a confidential basis. Whilst S&P offers a confidential monitored

rating service, Moody's usually only gives point in time confidential ratings ("indicative ratings"). S&P maintains confidential credit ratings periodically similar to a public rating and the rating can be published on request. Public dissemination of a private credit rating is not permitted.

Other considerations

Guidance provided publicly to debt investors concerning ratings can give support to the rating. For example, publicising your "target rating", will be seen as a moral commitment, and will give investors and agencies comfort that you are committed to a given financial policy. Clearly this undertaking carries its own risks.

■ Credit ratings through the cycle

Although rating agencies claim to "rate through the cycle", this generally reflects the framework (including ratio targets) and not the potential cyclical recovery prospects of a rated entity. To illustrate the point, over 75% of Moody's rating changes in 2008 were downgrades compared to 33% in 2007. The high proportion of companies downgraded during a recession is due to the effect of weaker trading on credit metrics and profitability. So although the agencies generally do not revise their methodology or guidance down in a recession, (unless sector specific issues are identified), they will actively downgrade companies where target metrics are not maintained.

■ "What if" rating analysis

When considering a first time rating or a rated issue, or if unsure of the impact of a corporate event (such as an acquisition, disposal or capital return) on an existing rating, it can make sense to take advice from a ratings adviser. Book-runners often offer this as part of the overall issue process but it is important to be comfortable that the adviser is incentivised to deliver the best possible rating (to minimise cost of capital), rather than the lowest (necessary to get the deal away or to support more complex structuring advice) and an independent rating adviser may be particularly valuable in this respect when employed at an early stage in the process, before structure has been determined and banks mandated. The agencies will offer a desktop credit assessment as a rating guideline (as discussed above). However, if greater certainty of rating outcome is required, the agencies can provide firm rating guidance on a private basis of rating outcome under a particular corporate scenario (e.g. acquisition, disposal, exceptional dividend) under their Rating Evaluation/Assessment Service. The former generally takes two to three weeks and the latter four to eight weeks (but both can be done more quickly in certain situations).

■ Rating risk

As the capital markets become more transparent and investors and issuers more critical, this risk is diminishing. Issuers should remember that without anything changing in the real world, a company rating can be changed because the agency has decided to change its approach or

fundamental view of a sector. Changes to assessment of pension deficits caused a number of corporates to be downgraded in the early 2000s and, more recently, rating approaches to financial institutions serve to remind us that this risk should be borne in mind when planning a capital structure around a rating target.

In the context of capital markets issues, increasing numbers of high grade bond issuers have coupon step-ups which are triggered by ratings downgrades (typically on descent to non-investment grade). For those companies maintaining investment grade credit ratings is crucial to avoid a steep increase in interest costs.

■ Bank internal credit ratings

Most banks now have their own internal risk rating scale and since the implementation of Basel II these broadly map to the rating agency ratings, not least because that is how they have been designed. The bank rating processes, however, tend to be far more numerically mechanical than those of the agencies and consequently their scales may not be directly comparable (also because for example their default definition is different or they capture loss given default differently). It should be noted, however, that almost all banks (directly or indirectly) use Moody's KMV to calibrate their rating scales for expected default probability or expected loss.

Treasurers might also be interested to know that KMV uses (forward looking) equity market measures to map the market value of assets to liabilities ("distance to default") but uses historic observed default experience of the main rating agencies to approximate the expected default probability of any given "distance to default". Whether publicly rated or not, the agencies influence ratings and cost of debt.

Recent developments

■ The decline of the monolines

In 2007-2008, US sub-prime losses hit monolines' capital stores and ratings across the bond insurance sector were slashed causing turmoil in the markets of the bonds wrapped and insured by the monolines.

First to be downgraded in early 2008 were the insurers with the largest exposures to high risk CDOs – notably, CIFG and FGIC, soon followed by MBIA and AMBAC and finally in November 2008 the last two remaining AAA bond insurers, Financial Security Assurance and Assured Guaranty, were stripped of their AAA ratings.

In downgrading the last two monolines, the agencies cited the damage the credit crunch had inflicted on the financial guarantee business model and how this would affect monolines' ability to do business. Now that monolines have lost their AAA ratings what use are they to the structured finance industry? In the past, demand for credit enhancement was partly driven by regulatory capital arbitrage; now that guarantor ratings are lower, capital benefits may be extinguished. Moreover, when the structured finance market does return, structures are not likely to be as risky as the past begging the question how

much credit enhancement structured products would actually need anyway. Perhaps in future monolines will limit their remit to the municipal bond market, previously their core business, where margins are low but so are risks.

■ Structured finance

2007 witnessed the collapse of the US sub-prime mortgage loan market. Mortgage providers were hit by massive losses in their sub-prime loan portfolios and investors, many of them hedge funds affiliated to the major global investment banks, in the complex structured products backed by sub-prime mortgages were also affected. Looking for a scapegoat, investors pointed to the agencies who had assigned sub-prime mortgage backed securities with credit ratings which they believed were correct and upon which they relied. But by not adequately accounting for rising unemployment and falling house prices the agencies' models had miscalculated the credit risks associated with sub-prime mortgage backed debt. Markets were spooked and other classes of asset backed securities were hit hard. As the monolines affected by sub-prime mortgage payouts were downgraded, the bonds they wrapped were also downgraded and the markets saw a sell-off from investors mandated to invest in only AAA rated debt. Moreover, rating downgrades of structured products to reflect the higher risk of default served to cause further fire sales and losses.

■ Agencies review the way they look at financial institutions

As banks began to report mounting losses on their mortgage related holdings, trust began to break down and banks refrained from lending to each other. When they did lend, they required a higher rate of interest to compensate for the substantial risk of lending while it was not clear who held the most toxic sub-prime mortgages. It was only a matter of time until the agencies began to downgrade the financial sector to reflect their view of the pressure on banks' future performance due to increasing bank industry risk and the economic recession. However, reflecting its expectations of significant future government support, S&P has said it is unlikely that large, systemically important banks will be downgraded below A+ and it will publish the rating notches attributed to expected government support for such banks.

■ Calls for greater regulation of the agencies

The rating agencies are not regulated like other financial services firms but voluntarily comply with the code of conduct of the global body of securities regulators, IOSCO. The code stresses that the integrity of the rating process is paramount. In the aftermath of the financial crisis, the rating agency business model has come under intense scrutiny and there have been calls by the FSA and the European Commission for the rating agencies to be more strictly regulated. To address these concerns, in 2008 IOSCO issued a report tightening up its voluntary code of conduct. Proposed reforms to the code included: ensuring analysts have sufficient information to correctly rate structured credit products, setting up of a "rigorous and formal review function" to periodically review methodologies and models,

a responsibility to educate the market about the meaning of structured credit ratings – including clearly indicating the "attributes and limitations of each credit opinion" and differentiating ratings for structured credit from other products (e.g. vanilla bonds) by using a separate set of symbols. Moody's, S&P and Fitch have all substantially implemented these revisions.

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- S&P – <https://www.creditportal.ratingsdirect.com> -> Criteria | Corporates | General: Corporate Ratings Criteria 2008
 - Moody's – <http://www.moodys.com/cust/default.asp> -> Credit Policy and Methodologies -> Rating Methodologies
 - Fitch – <http://www.fitchibca.com/creditedesk/ratings/definitions/index.cfm>