
A user's guide to credit ratings

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This article explains how credit ratings can be used by individual investors to make informed investment decisions, and the benefits of credit ratings to the financial system. A credit rating is an independent assessment of the financial capability and willingness of an entity to meet its financial obligations as they fall due (i.e., its creditworthiness). The obligation to disclose credit ratings has been a feature of New Zealand's prudential supervision of registered banks since 1996. It became mandatory for all banks to have a credit rating from an approved rating agency in 2002. Similar obligations have been introduced for most non-bank deposit takers, and Cabinet has recently decided to require all insurers (not just disaster and property insurers) to obtain credit ratings in the future. Credit ratings play a useful role in encouraging sound management of financial institutions and in supporting market participants' ability to make informed choices about credit risk. Notwithstanding these benefits, and the usefulness to investors of credit ratings as a simple measure of credit risk, investors need also to be aware of the limitations of ratings. We highlight some of the key issues that investors should consider when using ratings as a tool in their decision making.

1 Introduction

This article explains how credit ratings can be used by individual investors to make informed investment decisions, and the benefits of credit ratings in improving the soundness and efficiency of the financial system. Since 1996, the Reserve Bank has required every registered bank with a rating from an approved credit rating agency to disclose the rating in its quarterly disclosure statement. In 2002, the Bank made it mandatory for every registered bank in New Zealand to obtain a credit rating from an approved rating agency.

The obligation to obtain a credit rating from an approved agency has recently been extended to non-bank deposit takers (e.g., finance companies and building societies), with effect from 1 March 2010.¹ Cabinet has also decided to introduce credit ratings as a key component of the prudential regulation of insurers that is currently being developed.²

Section 2 of this paper discusses what credit ratings are. In section 3, we outline some of the key issues that investors should consider when using ratings as a tool in their decision making. In section 4, we explain the benefits that credit ratings can provide to the financial system more generally. Section 5 concludes.

2 What are credit ratings?

Credit ratings produced by the major credit rating agencies aim to indicate the relative creditworthiness of entities – i.e., their ability to meet their debt-servicing obligations.

A credit rating gives investors and analysts an estimated likelihood that the issuer will be able to meet its financial obligations on time and in full (e.g., to fully repay a loan). A poor credit rating indicates a higher risk of non-repayment (default). All other things being equal, a higher risk of default should lead an investor to demand a higher rate of return in recognition of the additional risk. Ultimately, the investor may refuse to provide funding if the investor views the default risk to be too high to bear.

Ratings agencies synthesise and simplify a wide variety of complex risk factors into a single measure that allows investors, customers and suppliers to assess relative creditworthiness or financial strength. Credit ratings take into account both quantitative and qualitative factors. Financial measures are a core component of any rating, but ratings will also consider a range of economic, industry and business fundamentals, including the quality of an institution's risk management and governance structures.

A rating represents the rating agency's independent opinion of an institution's or a product's creditworthiness. Different agencies employ different rating methodologies, but they all essentially seek to capture the likelihood of default over any given period. Institutions and products viewed as

¹ This obligation is included in the Reserve Bank of New Zealand Amendment Act 2008 (No. 59).

² This cabinet paper is available on the Reserve Bank's website.

stronger by the rating agency will be given a stronger rating, according to the rating agency's own scale and approach to assessing creditworthiness.

It should be noted that, while ratings are useful indicators of relative credit risk (the risk of one entity or issue versus another), they are not precise measures of the absolute level of that risk. Rating agencies will have some view of the default probability attached to a particular rating level, but the probability of default associated with a rating cannot be known in advance. This contrasts with the throw of a die, say, where the probability of a given number is known to be one in six. With a long track record of ratings and experience of some rated entities failing (a 'default rate history'), one can estimate the probability of default for a specific rating class – and thereby draw an indicative relationship between ratings classes and the probability of default. However, because defaults tend to be quite infrequent at the higher

rating levels, this is always going to be inexact.

It should also be noted in this connection that even a triple A-rated organisation could default in the future, even if very few defaults of such entities have occurred over history. Investors should not see a strong rating as a guarantee of survival, though it can be said with more confidence that a strongly rated entity is more likely to survive than a more weakly rated one.

Comparability of ratings is important for all users. Although ratings agencies use different rating methodologies, and there are technical distinctions in what components of default are being covered (e.g., probability of default or expected loss),³ market participants commonly map the rating scales of the three major international ratings agencies for comparability and ease of use. Table 1 below groups and ranks the ratings classes of the three major

Table 1
Standardised rating scale

	Description	S&P Scale	Moody's Scale	Fitch Scale	Approx. probability of default over 5 years*
Capacity to make timely payment	Extremely Strong	AAA	Aaa	AAA	1 in 600
	Very Strong	AA	Aa	AA	1 in 300
	Strong	A	A	A	1 in 150
	Adequate	BBB	Baa	BBB	1 in 30
Vulnerability to non payment	Less Vulnerable	BB	Ba	BB	1 in 10
	More Vulnerable	B	B	B	1 in 5
	Currently Vulnerable	CCC		CCC	
	Currently Highly Vulnerable	CC	Caa	CC	1 in 2
	Default	D	C	D	

* The approximate, median likelihood that an investor will not receive repayment on a five-year investment on time and in full based upon historical default rates published by each agency.

³ Expected loss refers to an estimate of the amount of the exposure at default that will be lost (i.e., not recovered), together with the probability that this could occur. This quantity includes other economic costs (e.g., legal costs). Expected loss is influenced by characteristics of the obligation, such as the presence of collateral and the degree of subordination.

international ratings agencies operating in New Zealand (Standard & Poor's, Moody's Investors Service, and Fitch Ratings).⁴ The approximate probabilities in the table are derived from the agencies' published historical default rates for each alphabetical rating category.⁵

This table shows the significant differences in the approximate probability of default between, say, a AAA-rated entity (1 in 600 over five years) and a C-rated entity (1 in 2 over 5 years).

Types of ratings

There are a number of types of ratings. The two most relevant to this paper are issuer and issue credit ratings. An issuer credit rating is an indication of the rating agency's view of the creditworthiness of an organisation or sovereign nation. An issue credit rating relates to a specific financial obligation or a specific class of financial obligations issued by an institution or nation.

An issue rating takes into consideration the credit rating of the underlying issuer, the creditworthiness of any guarantors, insurers, or other forms of credit enhancement on the obligation, the currency in which the obligation is denominated, its standing in bankruptcy or liquidation and the legality and enforceability of the obligation.

Reserve Bank prudential rules require all New Zealand registered banks to obtain and maintain a current credit rating applicable to their long-term senior unsecured obligations payable in New Zealand, in New Zealand dollars.

A note on the term 'investment grade'

Market commentators and investors frequently use the term 'investment grade' when describing financial investment opportunities. This term gained prominence when US regulators imposed a minimum level of creditworthiness for investments that regulated institutions could hold for

prudential purposes. It was a US term imposed for specific US regulatory requirements. However, since then, the term has gained general currency as a shorthand description of ratings of BBB (Standard & Poor's and Fitch) or Baa (Moody's) or better. It is a commonly used benchmark: some investment funds are only permitted to invest in 'investment grade' issues.

For other investors, the distinction between investment and non-investment grade is arbitrary, in that it is ultimately up to the individual investor to decide what level of credit risk to take on and what level of return to demand for that risk. Various other terms have been used to describe non-investment grade credits – for example, 'high-yield', 'speculative' and 'junk'. These terms are simply alternative shorthand for non-investment grade obligations.

3 The limitations of ratings

Although ratings provide benefits for investors and advisers, users should be aware of the limitations of ratings. In particular, investors should understand that ratings are not guarantees of future performance, nor can they ever be perfect predictors of default. Rather, they are intended merely to be broad indicators of the relative credit risk of an institution over the medium term compared to other rated entities.

Ratings and the current international credit market disruption

Recent rapid downgrades of the formerly investment-grade ratings of highly complex financial instruments have called into question the integrity of credit rating agencies and the reliability of ratings for complex financial instruments. In the US, the President's Working Group on Financial Markets (PWGFM; Department of the Treasury *et al.*, 2008),⁶ in its report in March 2008, found that there were faulty assumptions in the underlying rating methodologies of the agencies involved in rating these instruments. The PWGFM

⁴ AM Best is also an international agency operating in New Zealand, but it is generally used for insurance credit ratings. AM Best does also issue ratings on deposit-taking financial institutions, although to date not in New Zealand.

⁵ Fitch Ratings Ltd (2007); Moody's Investors Service (2007); Standard & Poor's (2007).

⁶ The PWGFM was established in 1988 in response to the stock market crash of 1987.

recommended that the agencies reform the processes and practices regarding the rating of structured products.

By contrast, the ratings typically required by regulators relate to relatively simple obligations (deposits) issued by relatively simple financial institutions (banks and deposit takers). It is this type of rating that the Reserve Bank continues to use as a supervisory tool. These types of ratings have been the core business of ratings agencies for decades, and there is no reason to believe that such ratings are questionable in the same way as ratings on complex financial instruments (SEC, 2008). The PWGFM made no recommendations regarding ratings processes for simple obligations and issuers.

As a result of the questions being asked about the credit rating process, agencies have significantly improved their risk management and ratings processes. This should result in an overall improvement in the quality of ratings generally.⁷

Ratings cannot predict individual failures

Rating agencies do not pretend to be able to predict the failure of individual entities. The historical data suggests that ratings are reasonably reliable broad indicators of risk. They are therefore most useful when looking at the performance of a portfolio of investments.

Ratings are by their nature probabilistic. For example, the historical probability of default associated with a AAA-rated entity, while small, is not zero. In a portfolio of 600 separate AAA entities, an investor could expect one to fail, on average, every five years, based on the default histories summarised in table 1. A failure of a highly rated entity is therefore neither inconceivable, nor ruled out by a AAA rating from a rating agency.

Ratings do not always adjust in a timely manner

Agencies do not adjust their ratings on a frequent basis. This is a deliberate policy to ensure that ratings are only changed when there is clear evidence of a longer-term change in the risk profile of a rated firm, and that the change is likely to

be permanent. Ratings agencies attempt to 'look through' short-term fluctuations in an attempt to more correctly reflect the longer-term risk of a firm (SEC, 2008). This is to ensure that the rating is a correct and accurate reflection of the relative ranking of risk of a firm on average over time, rather than reflecting the circumstances of a particular time period. This is important for investors to understand. Ratings will not allow investors to predict change – merely to understand the relative level of risk of the firm over the longer term. The downside is that ratings can appear to be, and often are, slow to react in response to changes in a firm's risk profile.

Different ratings scales

Perhaps the most important issue for retail investors is to become familiar with the alphabetical systems of ratings outlined in table 1. In particular, there is no correlation between alphabetical credit ratings and grading systems that are used in schools, for example. Whereas a 'B' grade may have been a good outcome at school, a 'B' grade credit rating indicates an institution that has an approximately 1 in 5 chance of not paying back its obligations on time over a five-year period. By contrast, an A rating indicates a chance of obligations not being paid back of about 1 in 150, a much lower probability.

Furthermore, each agency has its own unique proprietary process for determining a rating, which can only be approximately compared with another agency's process. The default histories for each ratings class are the best tool to allow comparison between scales, bearing in mind that even these histories provide a generic sense only of the risks.

Ratings of smaller institutions

Investors should also realise that the methodology applied by ratings agencies means that smaller and less diversified financial institutions, such as regional deposit takers, will generally receive a lower rating than national institutions of greater scale. This reflects the fact that scale and diversification are effective buffers against credit risk. It also reinforces the need for depositors to consider other factors in addition to ratings when making investment decisions. In

⁷ SEC (2008) discusses recent reviews of rating agencies in more detail.

some cases, there may be sound reasons to invest in local institutions, notwithstanding a relatively low credit rating. It may also be the case that the rate of return offered to the investor may be sufficient to compensate for the risk that is disclosed. Low credit ratings do not mean that investors should ignore such entities – merely that they should invest with care and demand a sufficient reward for the risk being undertaken.

Rating agencies do not undertake an audit

A practical limitation of the rating process is that agencies rely heavily on information that is provided to them by the financial institution under review. Agencies do not independently verify the accuracy of this information. Accordingly, agencies rely on a free flow of information from the entity seeking a rating. This is especially important in changing economic times. A corollary of this reliance on management is that rating agencies will not necessarily detect misleading information that is provided inadvertently or fraudulently.

Public awareness of ratings

There are valid concerns about the current level of public awareness and understanding of credit ratings. In a 2007 survey by the Reserve Bank, about 38 percent of respondents indicated that they were either not aware of, or had little awareness of, credit ratings (Widdowson and Hailwood, 2007). Nevertheless, credit ratings remain a valuable comparative tool for investors. The same survey identified that, once ratings were explained to investors, around 80 percent indicated that credit ratings would be helpful in their investment decision making. A poll conducted by the Association of Financial Professionals indicated that while users believe that ratings agencies are slow to respond to changes in corporate credit quality, over 83 percent of the surveyed population believe that ratings accurately reflect the issuer's creditworthiness.

There is scope to enhance the general level of understanding of credit ratings. Enhanced understanding will have direct benefits for investors as well as for the broader financial system, as investment funds will become better aligned with

the investor's ability to accept risk. The more the public uses ratings as a tool to help determine where funds are placed, the stronger will be the incentives on the management and owners of deposit takers to operate their businesses in a prudent and sustainable fashion.

The Government recognises this issue and has, through the Retirement Commission, initiated a National Strategy for Financial Literacy, which will help to deal with some of the above issues.⁸ The Reserve Bank supports these financial literacy initiatives. Improved financial literacy, including better understanding of credit ratings, will promote the ongoing operation of an effective financial system.

Ratings cannot determine the suitability of an investment for an individual

As ratings are a generic assessment of creditworthiness, they should not be used to determine the suitability of any particular investment for any particular individual. Ratings cannot recognise the individual circumstances of investors and should be only one of a number of factors that investors or advisers take into account when making investment decisions.

Today, credit ratings provide retail investors with a valuable tool to compare risk across different institutions or investment opportunities. Intermediaries and offer documents also have a role, but can be costly, conflicted or potentially complex. Ratings, by contrast, are freely available (where the issuer has sought a rating) and relatively simple, so should form part of the decision-making process of any investor (RBNZ, 2006).

Investors should be aware of the limitations of ratings, though, and should not rely solely on them. In particular, the Reserve Bank recommends caution in the use of ratings from agencies without an established track record of consistent and unbiased rating, that can be matched to a comprehensive default history.

Most importantly, credit ratings do not replace personal responsibility when making investment decisions. It remains up to individual investors to make the ultimate risk decision.

⁸ See www.retirement.org.nz

4 The benefits of credit ratings to the financial system

The use of credit ratings in the financial system has a number of significant benefits for rated financial institutions, investors and regulators. In some cases, as noted, the Reserve Bank prudential rules require credit ratings to be obtained, because of these benefits.

Independent assessment of risk

Independent assessments of credit risk, in the form of credit ratings, are desirable features of a modern financial system because they improve transparency for investors and depositors. This improves the depth of the financial system, by allowing entities that may not traditionally have had access to some types of funding to be able access such sources. Greater financial market depth also presents investors with more choice. Finally, credit ratings form a valuable part of the information set for prudential regulators.

Overcome information asymmetry

The financial system channels surplus funds from savers to those that have a productive opportunity to use those funds. Without the financial system, the economy could not grow or function efficiently (Mishkin, 2001).

A very common and serious impediment to the efficiency of this intermediation is information asymmetry. This asymmetry is where the provider of funds in a transaction has much less information about the investment's quality than the user of funds. Mandatory disclosure of credit ratings can go a long way towards addressing this asymmetry.

Improve the safety and soundness of institutions

The use of credit ratings by regulators is not new. The US introduced the regulatory use of ratings in 1931 (Levich, 2002). Since then, ratings have been used to assess risk in a variety of other activities as regulators have seen the utility of ratings as a tool to support the safety and soundness of financial institutions and of the financial system as a whole.

Most recently, the tradition of regulators using credit ratings has been continued with the Basel Capital Framework, which uses credit ratings in the calculation of regulatory capital minima for financial institutions.

Improve information about risk

The use of credit ratings for deposit takers and banks supports investors' ability to make informed choices about risk. As credit ratings are a simple summary measure of relative risk, they can be easily understood by retail depositors who don't have the time or expertise to comb through extensive financial reports and analytical assessments.

There is no minimum credit rating threshold that institutions need to obtain to operate in the New Zealand market. Reliance is placed on market participants' capacity to assess and compare risk and to allocate and price resources optimally. The use of ratings in New Zealand is therefore not about seeking to eliminate risk, but rather to enable relative risk levels to be well signalled and priced.

Simplicity

Clear and unambiguous disclosure is central to this outcome. In the absence of simple measures such as credit ratings, investors have few alternatives but to review and try to compare often complex offer documents, or rely on the advice of financial intermediaries.

Credit ratings provide a simple metric that investors can use when they consider where to place their funds.

5 Conclusion

Notwithstanding the recent criticism of credit rating agencies in respect of complex financial instruments, credit ratings of traditional financial business such as found in banks, deposit takers and insurers still have a very useful role to play in strengthening market discipline and enabling investors to make more informed decisions.

For investors, the virtues of credit ratings lie in their wide availability, their ability to convey a simple measure of risk, and the way in which they enable investors to easily compare

alternative investment opportunities. In so doing, ratings support the superior allocation of financial resources that is essential for a productive economy.

Having said that, credit ratings are not a panacea for investors. This article has highlighted some of the limitations of ratings that investors should be aware of. Prudent investors should always supplement credit ratings with consideration of their own personal circumstances, their risk appetite, their personal investment strategies and prevailing market conditions. It remains up to investors to make the ultimate risk decision. Nonetheless, ratings are a very useful tool that research shows is under-utilised by New Zealand investors.

Looking forward, it is likely that the utility of ratings, both for investors as an informational tool and for regulators as a way of strengthening market- and self-discipline on financial institutions, will increase as more institutions are required to be rated and as more people use ratings as a way of determining where to place their funds.

To this end, the Reserve Bank remains supportive of the use of credit ratings. We will continue to promote initiatives that will deepen the public's understanding and use of ratings, and make for a more resilient financial system in New Zealand.

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