Fitch Ratings

Short-Term Markets Deserve a Fresh Approach

Contents

Fitch's Approach to Short-Term Ratings

A recurring market question over many years has been whether the traditional correspondence table approach used by all rating agencies for investment-grade short-term ratings allowed adequate distinction for better short-term profiles from the baseline expected at each long-term rating level. The traditional correspondence table approach inevitably resulted in an inflexible linkage between long-term and short-term ratings, especially for our corporate ratings.

In May 2019, Fitch Ratings published new criteria for short-term ratings. The enhanced framework provides more differentiated views of short-term creditworthiness, ensuring the short-term rating scale offers greater value to investors.

Taking short-term investors' feedback into account, Fitch amended its correspondence table between Long- and Short-Term Issuer Default Ratings (IDRs) to provide a more differentiated analytical view of short-term risk between issuers. The criteria introduced two new cusp points at 'A' and 'BBB+', in addition to the existing three cusp points ('A+', 'A-' and 'BBB') where one of two short-term ratings can be assigned based on the liquidity profile of the rated entity.

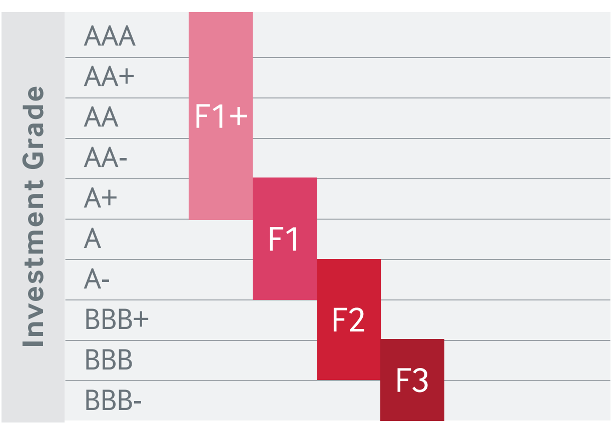
In addition to the new cusp points, Fitch defined sector- specific factors that determine which of the two short-term ratings is assigned for issuers at the cusp points.

For Corporates, financial flexibility factors are primary determinants, subject to constraints of leverage and location. These factors are similar across sectors, including financial discipline, liquidity, FFO fixed charge cover, FX exposure, as well as other quantitative measures specific to each sector.

For Financial Institutions, funding and liquidity factors are the key drivers. They include structural balance sheet features, such as loans-to-customer deposit ratios, and shorter term liquidity or LCR.

These changes improved the risk differentiation of issuers at these levels: 20%-25% of the ratings at 'A' and 'BBB+' were assigned the newly created higher Short-Term IDR options of 'F1+' and 'F1', respectively, after the criteria change and this share remains stable.

Previous Scale



Three crossover points

New Scale

Five crossover points

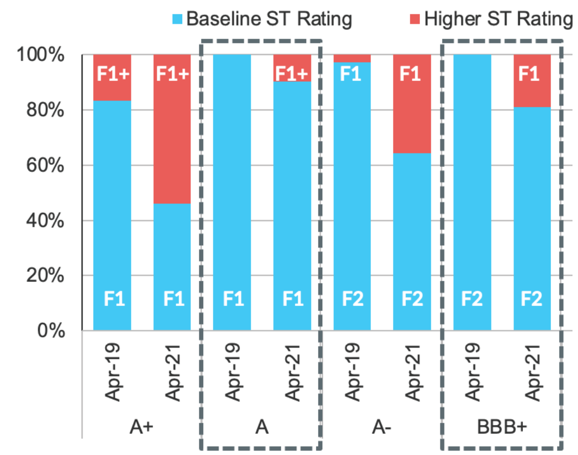
In addition to the new cusp points, Fitch defined sector-specific factors that determine which of the two short-term ratings is assigned for issuers at the cusp points.

For Corporates, financial flexibility factors are primary determinants, subject to constraints of leverage and location. These factors are similar across sectors, including financial discipline, liquidity, FFO fixed charge cover, FX exposure, as well as other quantitative measures specific to each sector.

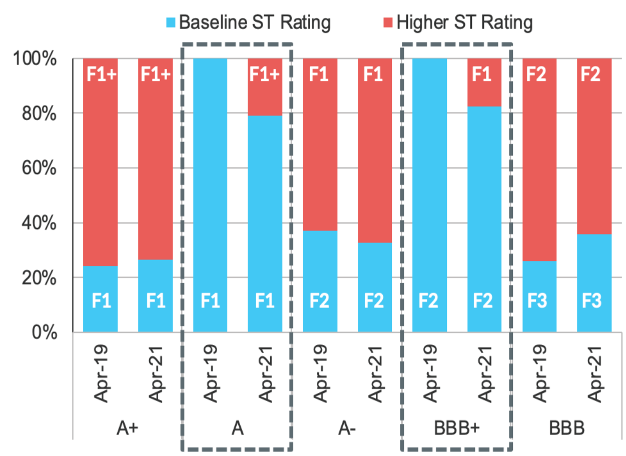
For Financial Institutions, funding and liquidity factors are the key drivers. They include structural balance sheet features, such as loans-to-customer deposit ratios, and shorter term liquidity or LCR.

More Optionality – The Picture Two Years After Implementation

Corporates – ST Issuer Default Rating



Financial Institutions – ST Issuer Default Rating



CORPORATES

PRIMARY DETERMINANT	SUBJECT TO LEVERAGE	SUBJECT TO LOCATION
Financial Flexibility	Financial Structure	Operating Environment

FINANCIAL INSTITUTIONS

PRIMARY DETERMINANT

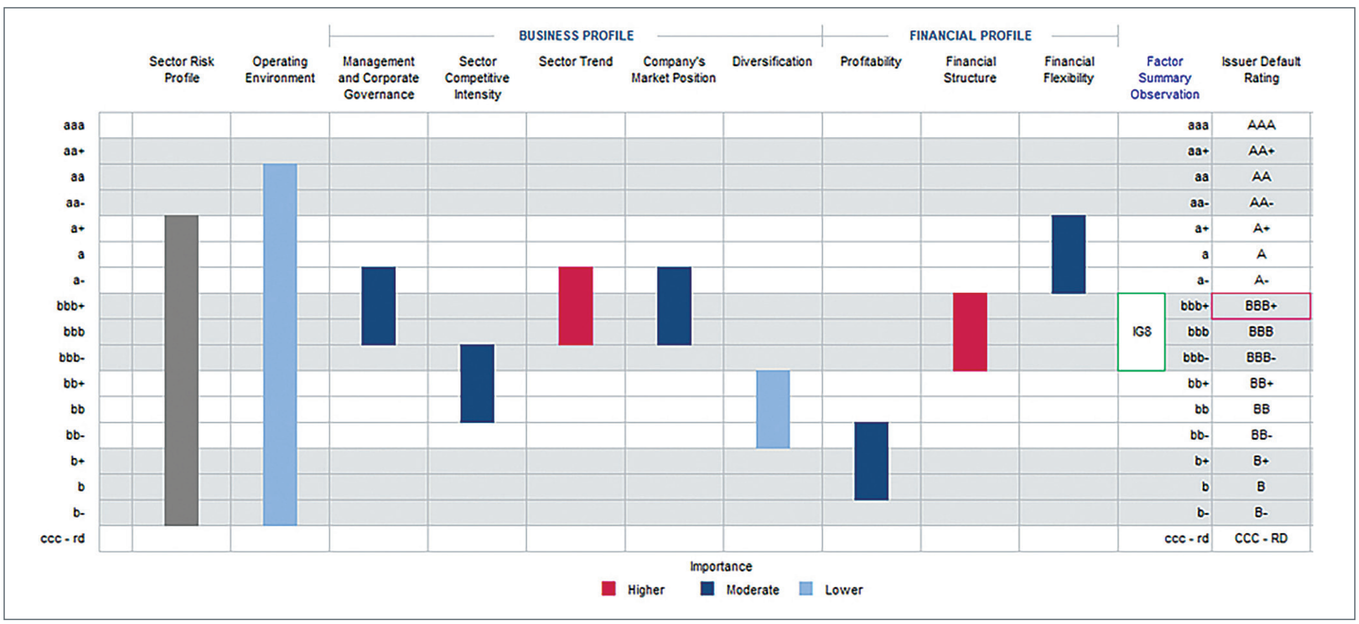
Funding & Liquidity

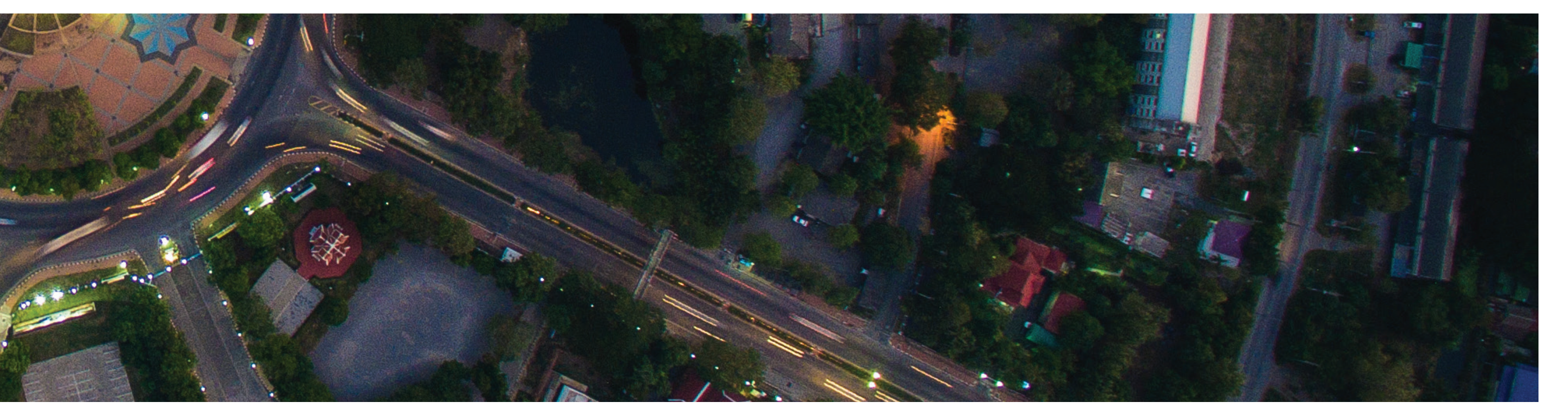
Transparency for Investors

Fitch's Ratings Navigator is a visual summary of the key quantitative factors driving each entity's credit rating and embodies our commitment to providing other measures of transparency to investors and issuers. Employed as a key part of Fitch Ratings' own internal rating process, Ratings Navigator is aligned with the agency's published Rating Criteria, and articulates how a rating is constructed.

Each report:

- Shows the relative importance of each factor in determining the final ratings and gauges potential rating sensitivities.
- Presents the fundamental trends or outlooks underlying each component of a credit rating, including operating environment, management, company profile, and financial profile in an accessible format.
- Assesses each rating factor using the traditional 'AAA' scale as well as sector-specific rating scales.





Are Your Investment Guidelines Leaving You Behind?

We believe current industry best practice for investment guidelines is to take into account all of the "big three" global rating agencies (Fitch Ratings, S&P and Moody's). Outdated investment policies that only rely on one or two rating agencies have fallen behind the reality of the modern market and unnecessarily restrict investors from accessing the investable universe by hundreds of billions, and sometimes trillions, of dollars. It also exposes investors to the risk of ratings volatility from a single outlying agency, which can lead to including forced-selling in some situations.

Long-term debt markets have already largely adopted these best practices, as illustrated by major investment-grade bond indices eligibility rules. They require assets to be "rated investment grade using the middle rating of Fitch Ratings, S&P and Moody's after dropping the highest and lowest available ratings". Similarly, the vast majority of bond mutual funds in the U.S. and Europe are inclusive of all three major agencies in their credit risk guidelines. An example includes:

> "Quality ratings are assigned in accordance with the methodology applied by the Fund's respective benchmark. If all three of Moody's, S&P, and Fitch provide a rating for a security, the middle rating (after dropping the highest and lowest ratings) is assigned; if two of the three agencies rate a security, the lower rating of the two is assigned and if only one rating agency rates a security, that rating is assigned."
>
> – Alliance Bernstein High Income Fund*

The same is increasingly true in the short-term markets, with major institutions following similar practices. For most conservative short-term investors, according to JP Morgan Investment Peer View, the norm is now A-1/P-1/F1 or Tier 1. We believe Treasury policies are increasingly reading:

- *Investments must be rated A/A/A2 or higher on the long-term scale and/or F1/A-1/P-1 or higher on the short-term scale by at least two of the three global rating agencies (Fitch Ratings, S&P or Moody's).*
- *Money market funds and other liquidity products as per this investment policy must be rated equivalent of AAAmmf/AAAm/Aaa-mf by at least two of the three global rating agencies (Fitch Ratings, S&P or Moody's).*

* Sourced from Fund Prospectus.

Fitch Inclusion in Fixed Income Indices

All major fixed-income indices have criteria inclusive of Fitch Ratings.

Many of these indices specifically cite using:

- The median rating when 3 agencies are used and available
- The lowest rating when just two agencies are used

Index Sponsor	Examples of Relevant Indices	Interpretation of Rules for Inclusion
ICE / BANK OF AMERICA	• ICE BofAML US Corporate & Govt Index • ICE BofAML Asian Dollar HY Corp Index • ICE Municipal Indices	• General: Average of Fitch, S&P and Moody's
Bloomberg Fixed Income Indices	• Bloomberg Barclays Global Aggregate Index • Bloomberg Barclays US Corporate Index • Bloomberg Barclays Municipal Indices	• 2 Ratings: Defaults to Lower • 3 Ratings: Middle rating of Fitch, S&P, Moody's
CREDIT SUISSE	• Credit Suisse Index	• General: Median ratings from 3 major agencies • 2 Ratings: Defaults to lower • 3 Ratings: 2 of 3 in category
IHS Markit	• iBoxx USD Indices • Markit iBoxx ALBI Indices	• General: Average of Fitch, S&P, Moody's
IHS Markit	• CDX Indices	• General: Median from three major agencies • 2 Ratings: Defaults to lower • 3 Ratings: 2 of 3 in category
FTSE Russell	• FTSE Canada Bond Indices	• General: Median from three major agencies • 2 Ratings: Defaults to lower • 3 Ratings: 2 of 3 in category
J.P.Morgan	• J.P. Morgan Asia Credit Index (JACI) • Emerging Markets Indices	• General: Average of Fitch, S&P, Moody's • 3 Ratings: 2 of 3 in category
Bloomberg Barclays Indices	• Emerging Markets Hard Currency • Emerging Markets Local Currency	• 2 Ratings: Defaults to Lower • 3 Ratings: Middle rating of Fitch, S&P, Moody's
CREDIT SUISSE	• Emerging Market Corporate Bond Index	• General: Median from three major agencies • 2 Ratings: Defaults to lower • 3 Ratings: 2 of 3 in category

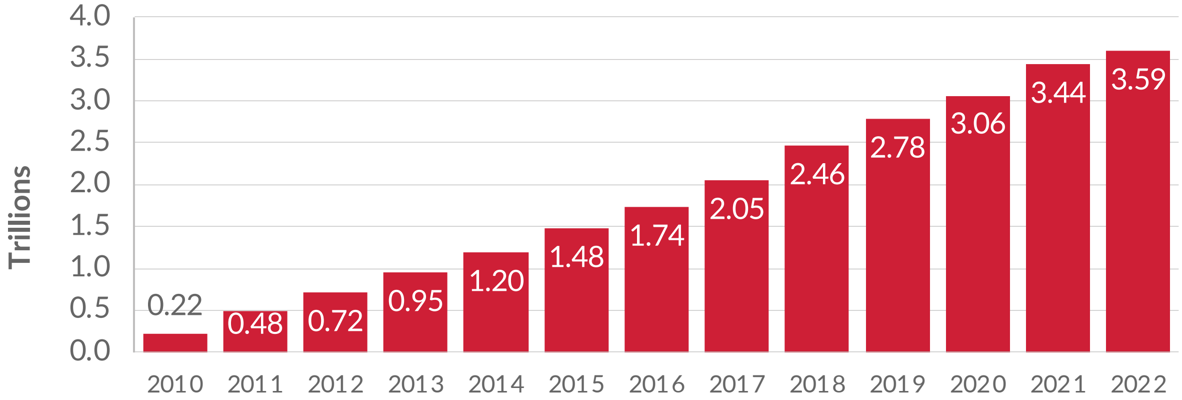
The Reality of Rating Agency Coverage Has Changed

The recent decade saw major changes in rating coverage by the three major agencies:

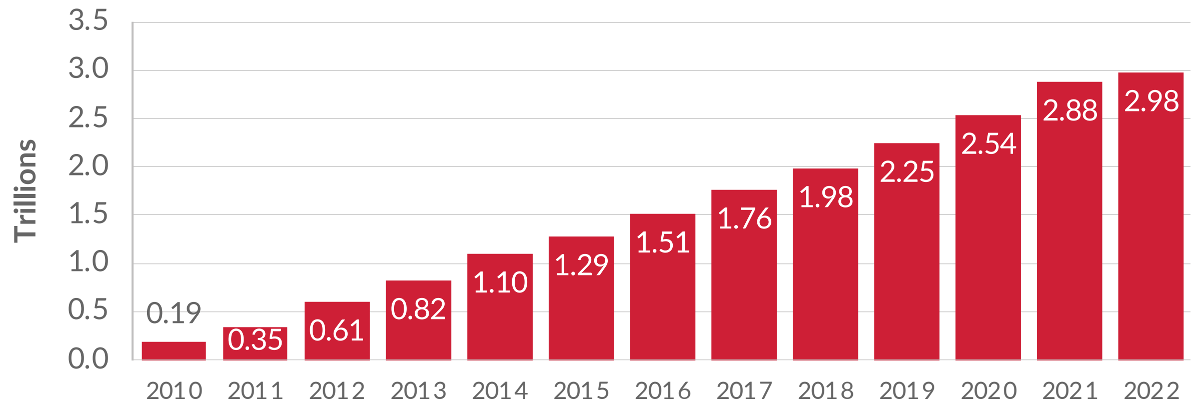
- Fitch now rates 2,958 banks and 4,296 Corporates. We now have approximately 75% global bank market share and 57% of corporates, based on issuance.
- USD 302.5 billion in North America Structured Finance and USD459.2 billion in global Structured Finance.
- Since 2009, rating coverage of U.S. prime money market funds has changed considerably, with a decline in Moody's and S&P coverage. During the same period, Fitch Ratings substantially increased its rating coverage of prime money market funds. There are currently 128 U.S. and European MMFs rated by Fitch totaling USD2.1 trillion in assets under management (AUM). Of these funds, over half are rated by Fitch only or Fitch plus one other major credit rating agency.
- More recently, U.S. local government investment pools (LGIPs) are increasingly rated by Fitch, in many cases replacing one of the other rating agencies. This trend has been primarily driven by that agency's rating criteria, which unnecessarily restricts the investable universe in a self-serving way. Indeed, the agency in question requires that all underlying holdings in the portfolio are rated by them, otherwise punitive notching is applied. By contrast, Fitch-rated funds are not constrained to only invest in Fitch-rated assets. Fitch's coverage of LGIPs continues to rise, with recent new coverage of several funds managed by PTA/PFM.
- There is now a wide variation of coverage between the agencies in the various segments of the fixed-income market. Banks and Corporates increasingly carry ratings from two of the three global rating agencies, in particular Fitch plus only one other major agency (Fitch +1.) Since the financial crisis over USD6.6 trillion of debt (Corporate, Bank and Structured) is rated by Fitch+1 and this number will continue to grow.
- More than half of U.S. ABS money market tranches (over USD118 billion) were also rated Fitch+1 over the same period.

USD 6.6 Trillion of Assets Rated by Fitch +1 Other Major Rating Agency Since 2010

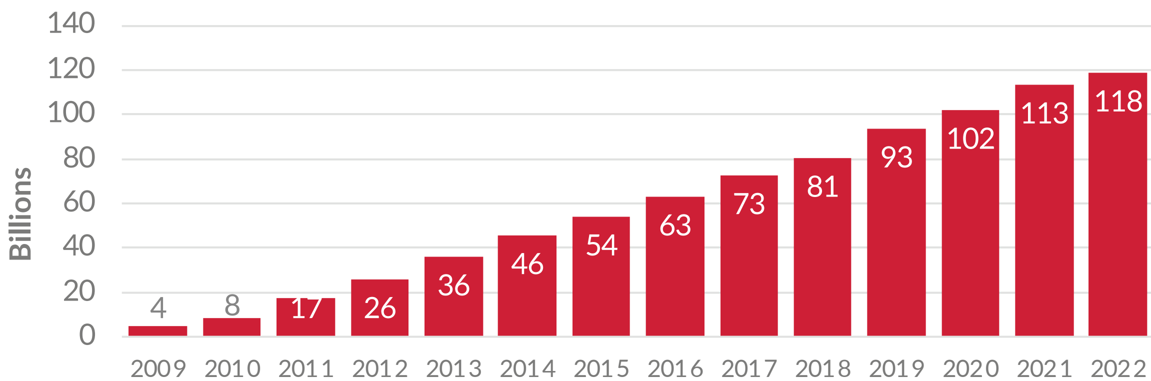
Global Structured Finance Cumulative Issuance Rated by Fitch+1



Global Banks and Corporates Cumulative Issuance Rated by Fitch+1



US ABS Short Term Cumulative Issuance rated by Fitch+1



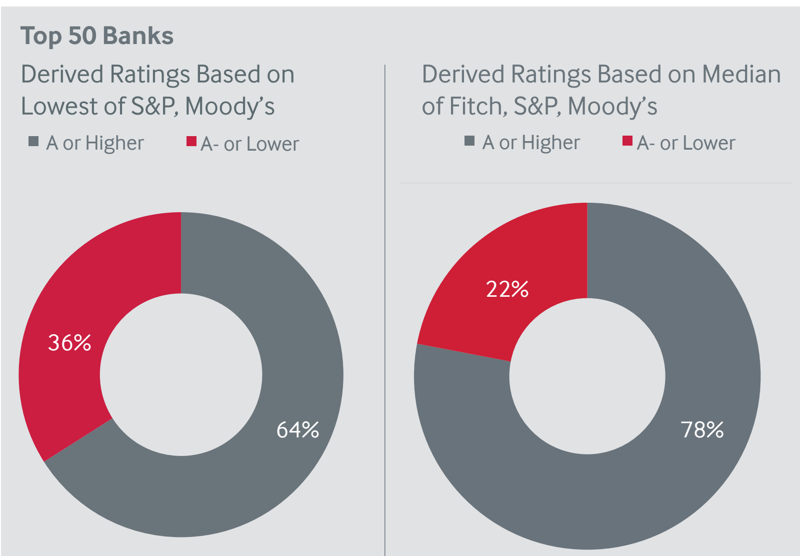
Thru 1H 2022

Data from Fitch Ratings, imoneynet.com, Crane Data

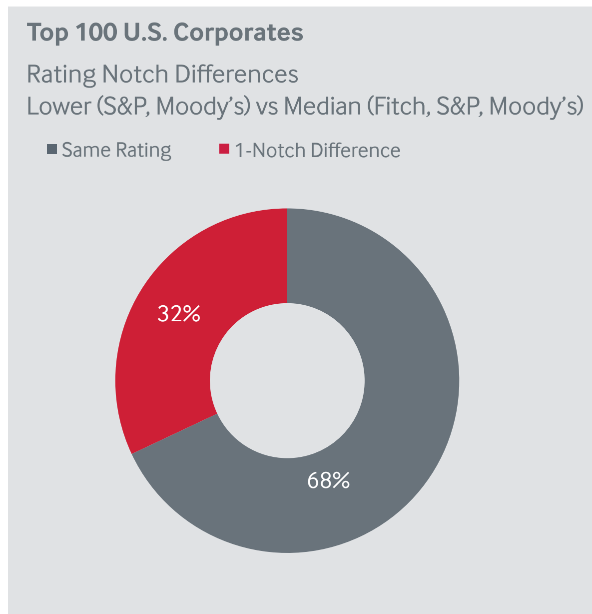
Investment Flexibility Matters

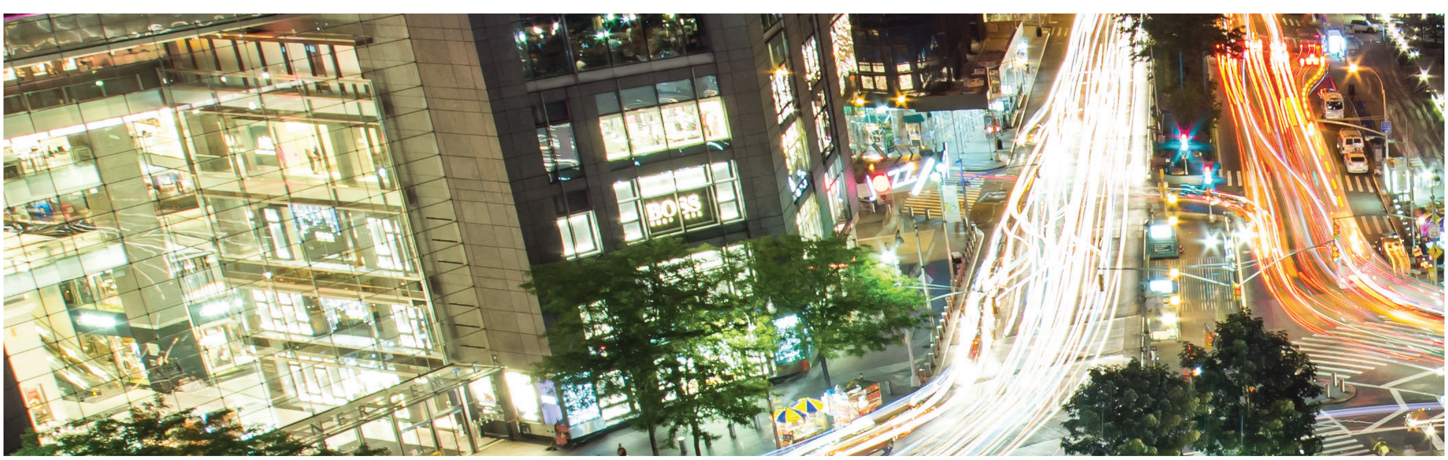
Investment guidelines that do not include Fitch's ratings offer less flexibility, fewer opportunities and unnecessarily restricts the investable universe. As the graph below shows, an investor with outdated guidelines that only consider the lowest of S&P and Moody's ratings with an 'A' threshold would miss the opportunity to invest in 14% of the top 50 global bank issuance. Likewise, the composite rating based on the lowest of S&P and Moody's is one notch lower than the median of all three agencies for 32% of the top 150 U.S. corporates. In today's supply-constrained market and at times of rating migration below thresholds of 'A' or 'BBB-', it is particularly important for investors to have access to the full universe of investable assets.

Investment Flexibility Matters with Decreased Eligible Supply



April 2022
Source: Fitch Ratings





Flexible CP Market Offers More Opportunities

(Sample of Split Ratings for U.S. CP Programs)

Name	Industry	Fitch	Moody's	S&P
Bank of Ireland	Banks	F2	P-1	A-2
BASF SE	Chemicals	F1	P-2	A-1
BBVA	Banks	F2	P-1	A-1
Boeing Co/The	Aerospace & Defense	F3	P-2	A-3
BP PLC	Integrated Oils	F1	P-1	A-2
Campbell Soup Co	Food & Beverage	F2	P-2	A-3
Deutsche Bank AG	Diversified Banks	F2	P-1	A-2
DTE Electric Co	Utilities	F2	P-1	A-2
Edison International	Utilities	F3	P-3	A-2
Elevance Health (f/k/a as Anthem Inc)	Managed Care	F2	P-2	A-1
Fortune Brands Home & Security Inc	Home Improvement	F2	P-3	A-2
Goldman Sachs Group Inc/The	Financial Services	F1	P-1	A-2
ONEOK Inc	Pipeline	F2	P-3	A-2
PECO Energy Co	Utilities	F2	P-1	A-2
Prudential Financial	Life Insurance	F1	P-2	A-1
Rockwell Automation Inc	Electrical Equipment Manufacturing	F1	P-2	A-1
Snap-on Inc	Home Improvement	F1	P-1	A-2
Stanley Black & Decker Inc	Home Improvement	F1	P-2	A-1
Transport for London	Government Local	F1+	P-2	A-1
UnitedHealth Group Inc	Managed Care	F1	P-2	A-1
Walt Disney Co/The	Entertainment Content	F2	P-1	A-2

As of September 2022

Mitigate Your Exposure to Outliers

Outdated investment policies expose investors to rating volatility and may result in potential undue forced-selling, especially around cross-over points. Only using the "lowest of two" to evaluate investment eligibility creates excessive reliance on the credit view of a single credit rating agency. The hypothetical example below shows how using the median of three ratings versus the lowest of two reduces the reliance to an outlying credit rating.

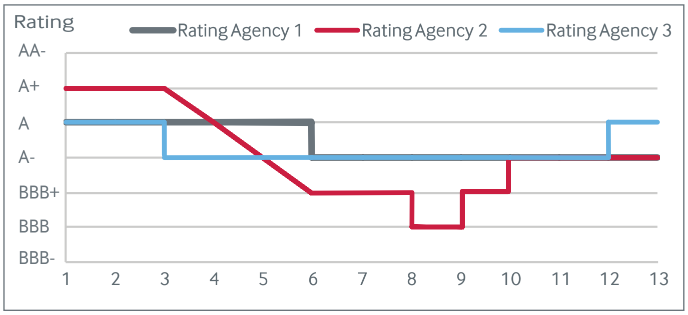
This is why major bond indexes decided to include Fitch almost 15 years ago:

- *"The addition of Fitch afforded a more consensus opinion, in addition to promoting longer-term index rating stability. The advantage of this method, as opposed to a most conservative rule, is that at least two agencies need to agree on a rating to prompt an index rating change. The original method [...] proved sub-optimal in cases of split-rated issues; [...] the desire to mitigate further reliance on a single outlier agency prompted the addition of Fitch ratings in 2005 and the transition to the use of the middle of three ratings."*

  — Bloomberg Barclays Index Methodology

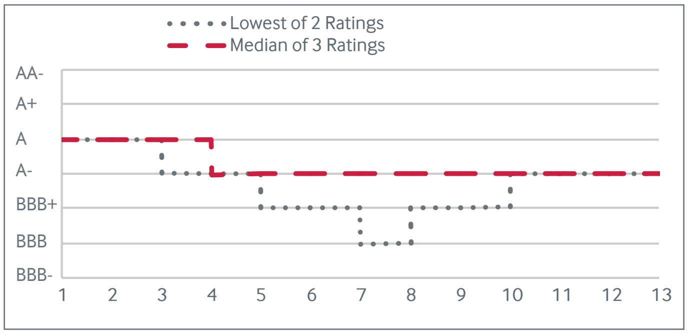
Dated Rating Guidelines Increase Rating Volatility

Rating Trajectories on Hypothetical Issuer



Source: Fitch Ratings

Derived Composite Ratings



Source: Fitch Ratings

Fitch's Ratings Are Time-Tested

Guidelines are part of an investor's infrastructure, so it is important that they are based on reliable and time-tested indicators. Fitch's ratings offer a long track record and robust stability, on par with other agencies, as evidenced by the long-term transition and default data (see tables below).

Fitch Global Corporates Average Annual Transition Matrix: 1990–2021

(%)	To AAA	To AA	To A	To BBB	To BB	To B+ and below	To unrated
From AAA	88.77	5.04	0.23	0.00	0.00	0.11	5.84
From AA	0.13	86.18	8.62	0.32	0.02	0.06	4.66
From A	0.01	1.51	88.93	5.01	0.35	0.12	4.08
From BBB	0.00	0.10	2.63	87.88	3.33	0.52	5.54
From BB	0.00	0.02	0.08	6.66	77.50	7.68	8.07

Source: Fitch's Global Corporate Finance 2021 Transition and Default Study, March 2022

Moody's Global Corporates Average Annual Transition Matrix: 1970–2021

(%)	To AAA	To AA	To A	To BAA	To Ba	To B1 and below	To unrated
From Aaa	87.94	7.69	0.56	0.07	0.02	0.00	3.72
From Aa	0.75	85.50	8.35	0.40	0.05	0.05	4.87
From A	0.05	2.44	87.34	5.02	0.43	0.12	4.55
From Baa	0.03	0.13	3.77	86.63	3.45	0.76	5.11
From Ba	0.01	0.04	0.38	5.95	76.78	7.73	8.33

Source: Annual Default Study: After a sharp decline in 2021, defaults will rise modestly this year, February 2022

S&P Global Corporates Average Annual Transition Matrix: 1981–2021

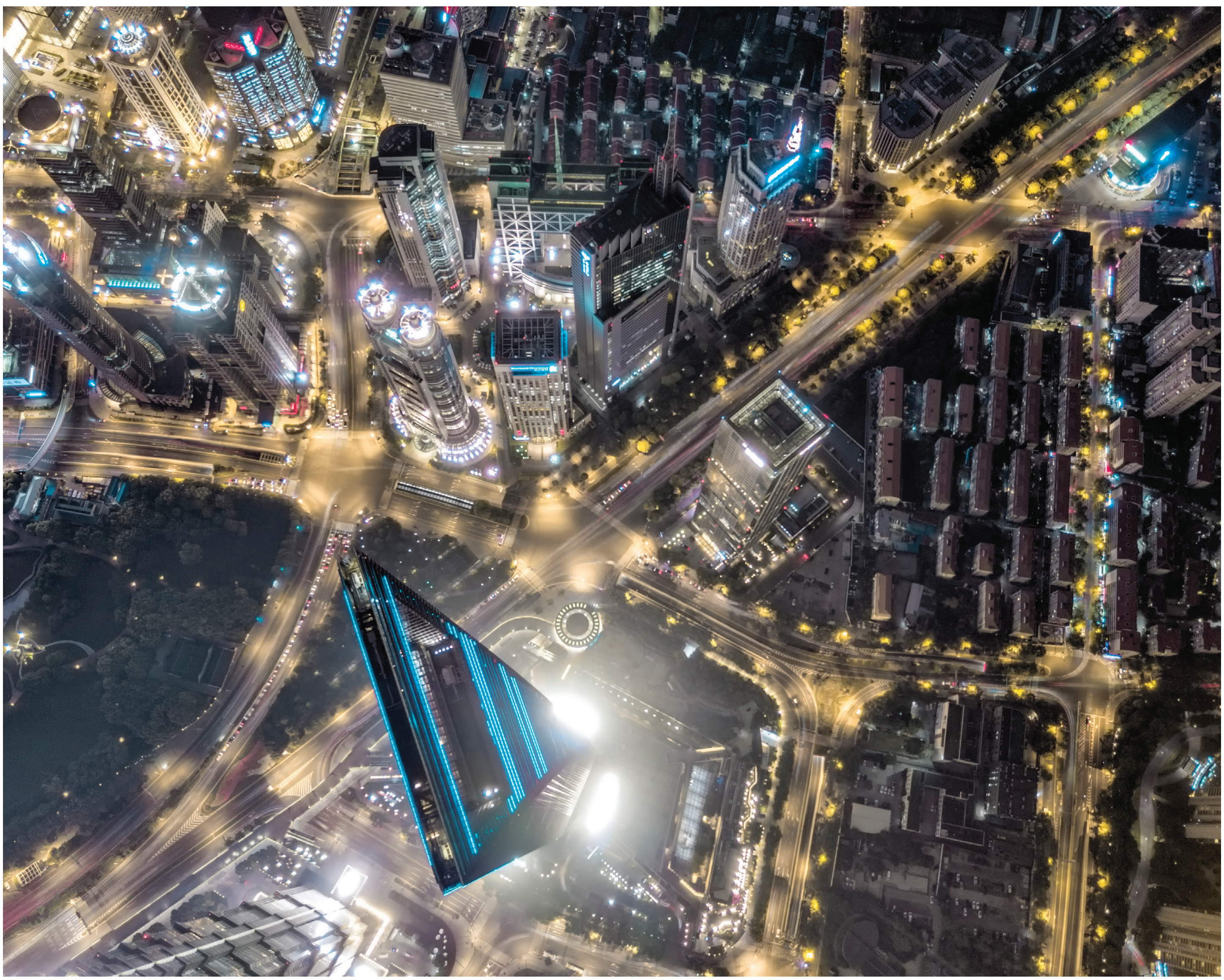
(%)	To AAA	To AA	To A	To BBB	To BB	To B+ and below	To unrated
From AAA	87.09	9.05	0.53	0.05	0.11	0.08	3.10
From AA	0.48	87.32	7.72	0.46	0.05	0.10	3.88
From A	0.02	1.56	88.73	4.97	0.25	0.17	4.29
From BBB	0.00	0.08	3.19	86.72	3.48	0.66	5.86
From BB	0.01	0.02	0.10	4.52	78.12	7.79	9.43

Source: S&P's 2021 Annual Global Corporate Default Study and Rating Transitions, April 2022

In Summary

Investment management best practices call for a senior-level review of investment policies, generally on an annual basis. Investment flexibility calls for using ratings that have a long track record of good performance and ones you can trust. Guidelines should not impede flexibility and should not expose clients to ratings volatility or undue forced selling. Market changes, including changing rating agency coverage, make these thoughtful, strategic reviews imperative.

Investors can not wait for a volatile environment to adopt guidelines that reflect the new market reality. When performing these reviews and making changes, it is critical to understand that the world has changed and you need to position yourself in the best possible way. This includes how you use credit ratings for addressing credit and counterparty risk. It is in investors' best interest; and today you have a choice to include Fitch.



FitchRatings

Contact Us

John Harchuck
Business & Relationship Management –
Head of Short-Term Markets
+1 646-582-4453
John.harchuck@fitchratings.com

Aymeric Poizot, CFA, CAIA
Investor Development – Global Head
+33 1 44 29 92 76
aymeric.poizot@fitchratings.com

Douglas Murray
Business & Relationship Management –
Global Head of Structured Finance
+1 212-908-0518
douglas.murray@fitchratings.com

Joe Giarratano
Business & Relationship Management –
U.S. Funds and Asset Management
+1 212-612-7853
joe.giarratano@fitchratings.com

Scott Cassie
Business & Relationship Management –
North America Corporates
+1 212-908-9134
scott.cassie@fitchratings.com

Andrew Cardamone
Business & Relationship Management –
North America Corporates and Structured Credit
+1 212-908-9130
andrew.cardamone@fitchratings.com

Michele O'Brien
Investor Development – U.S. Public Finance
+1 312-368-2087
michelle.obrien@fitchratings.com

Charlotte Quiniou, CFA
Investor Development – Europe Short-Term Markets
+33 1 44 29 92 81
charlotte.quiniou@fitchratings.com