

# Subscription Finance Rating Criteria

## Master Criteria

### Scope

This criteria report outlines Fitch Ratings' methodology for assigning ratings to fund obligations backed by capital call commitments. Such subscription finance facilities (SFFs), also known as capital call facilities, subscription lines or equity bridge facilities, are provided to alternative investment funds and secured by their limited partners' (LPs) capital commitments. This report applies globally to new ratings and their surveillance.

### Key Rating Drivers

The following key rating drivers are listed in the typical order of influence on ratings of SFFs.

**Limited Partner Pool Quality:** As SFFs are secured by a fund's LPs' commitments, the credit quality and diversification of the LP pool are key factors in Fitch's analysis. Higher-rated and more diversified LP pools will result in better modeling results. For unrated LPs, Fitch will follow a classification approach based on the attributes of the ultimate investor to derive a rating assumption as an input into the quantitative analysis.

Fitch may notch down from the assumed rating of the ultimate investor if the ultimate investor invests through a subsidiary or an investment vehicle. Fitch may notch down further to reflect constraints due to an LP's legal arrangements, such as side letters. Fitch applies more stressful rating, recovery and/or correlation assumptions in its analysis for concentrated exposures and for LPs based in jurisdictions considered less creditor friendly.

**Quantitative Rating Indication:** Fitch uses its Portfolio Credit Model (PCM) to project LP capital call defaults and losses at different rating levels, based on inputs driven primarily by the LPs' attributes. These results are then compared to the overcollateralization available through the maximum permitted borrowing specified in SFF documentation to arrive at a quantitative rating indication (QRI). In addition to the LPs' attributes, key inputs into this analysis include the SFF's terms, including limits to the facility size and the maturity date or term limits.

**Qualitative Assessment:** Fitch assesses the capabilities of the borrowing fund's manager, the fund's characteristics and structure, and the SFF's terms to complement the quantitative analysis of the LP pool. Such considerations may result in notching, up or down by up to two notches, from the QRI.

**Rating Caps and Limits:** Fitch may cap the SFF rating if the qualitative assessment identifies asymmetric risk factors, including, in particular, fund manager weaknesses. Fitch will also cap the SFF rating at 'AA+' if more than 20% of the ultimate investors are unrated. Additionally, where the PCM-estimated defaults are in excess of 70% for a given rating level, Fitch will limit the QRI by assuming no recoveries on LP defaults at that rating.

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This criteria report replaces the exposure draft dated Feb. 16, 2023.

## Applicable Criteria

[CLOs and Corporate CDO Rating Criteria \(March 2023\)](#)

[Single- and Multi-Name Credit-Linked Notes Rating Criteria \(January 2023\)](#)

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## Overview of Rating Process

In assigning ratings to SFFs, Fitch follows the process described below and in further detail throughout this report.

1. Review the capabilities of the SFF's originator/lender, the governing documents of the fund and facility agreement, and other legal documentation.
2. Determine the credit quality of the LPs and potentially adjust input rating assumptions based on analysis of the LPs' legal arrangements, such as side letters.
3. Project LP capital call defaults and losses at different rating levels through PCM.
4. Compare results from PCM to the overcollateralization corresponding to the maximum permitted borrowing specified in SFF documentation to arrive at the QRI, potentially adjusted based on Fitch's sensitivity analysis.
5. Assess the manager, fund, and facility structure and terms, and based on the assessment, notch the QRI up or down and/or cap the SFF rating.
6. After the initial rating assignment, monitor and assess the SFF's ongoing performance by reviewing the collateral pool composition, updating modeling, and taking into account changes to the manager, fund and facility attributes discussed in this report.

## Limited Partner Pool Quality

Fitch analyzes the LP base forming the collateral pool to determine its credit quality, which is a key input for the QRI. Fitch considers in its analysis all LPs in the pool, including those excluded by the lender or where the lender advances less credit due to concentration or other considerations.

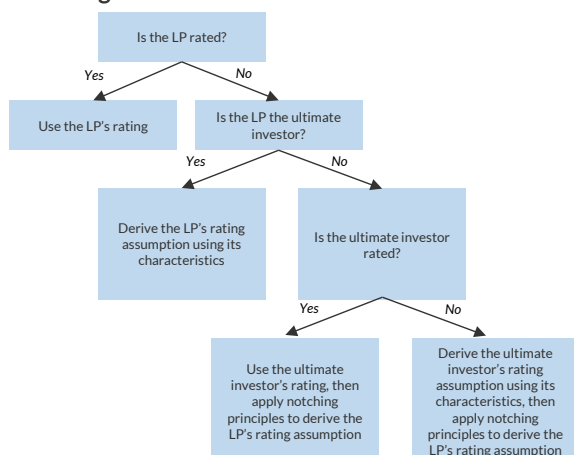
To input the LPs into the PCM model to calculate defaults and losses, Fitch applies a rating or rating assumption to each LP. For LPs that are rated, Fitch will use the LP's rating.

For LPs that are not rated, Fitch will determine the relevant ultimate investor, which may be the LP itself or a direct or indirect parent. The LP is the entity that is the recorded investor in the fund. The ultimate investor is the most relevant entity where investment, operations, asset allocation, treasury and/or risk management staff operate, and it usually aggregates assets under management (AUM) of various subsidiaries or brands. For example, if a sovereign wealth fund invests in a fund through an investment vehicle, Fitch will consider the investment vehicle as the LP and the sovereign wealth fund as the ultimate investor (note that Fitch will not consider the sovereign itself as the ultimate investor).

If the ultimate investor is rated, Fitch will use its rating to derive the rating assumption for the LP. Otherwise, Fitch will derive a rating assumption for the ultimate investor based on its characteristics as further detailed below. If an LP is unrated and is a subsidiary of an ultimate investor, Fitch will notch the assumed rating of the LP down from the assumed rating of the ultimate investor. LP rating assumptions are usually subject to a 'CCC' floor.

The chart below illustrates these steps.

### LP Rating Derivation Framework



## Ratings Usage

When using ratings as inputs in the analysis of SFFs, such as rating assumptions for LPs for the purpose of the PCM modeling, or in assessing rating thresholds described in this report, Fitch first looks to public or private ratings or credit opinions assigned by Fitch. If a Fitch rating or opinion is not available, Fitch will use the lowest available public issuer rating assigned by Moody's or S&P, or the equivalent. Fitch typically uses foreign-currency ratings or the equivalent.

## Unrated Ultimate Investors

When an ultimate investor is not rated, Fitch will classify the ultimate investor based on the investor type and the factors outlined in the tables below, into Tiers 1 and 2, which correspond to ratings of 'BBB-' and 'B-', respectively. If an ultimate investor does not sufficiently meet the Tier 1 or Tier 2 attributes, it will be classified as Tier 3, corresponding to a 'CCC' rating assumption, as described below. The classification framework below generally follows a "weakest-link" approach, whereby the ultimate investor needs to meet the thresholds for all factors to be classified at that tier.

### Investor Classification Characteristics

Investor Type	Factor	Tier 1 Investor	Tier 2 Investor
Common to All Investor Types	Investor or manager's AUM (\$ bil.)	≥ 50	5 ≤ x < 50
	Investor or manager's operating history	≥ 15 years	5 years ≤ x < 15 years
	Investor or manager's domicile Country Ceiling	BBB- or above	B- to BB+

Source: Fitch Ratings

Some ultimate investor types will be analyzed based on additional factors, as described in the table below.

### Investor-Specific Classification Characteristics

Investor Type	Factor	Tier 1 Investor	Tier 2 Investor
Sovereign wealth funds	Sovereign rating	A- or higher	BB- to BBB+
Investment funds	Fund size (\$ bil.)	≥ 5	1 ≤ x < 5
Defined benefit pension funds	Sovereign, state or parent rating	A- or higher	BB- to BBB+
	Funded ratio (%)	≥ 80	40 ≤ x < 80

Source: Fitch Ratings

Investor types not explicitly described in the classification table but that share similar characteristics with an included investor type will be classified in line with those similar investor types included in the table. Fitch may develop classification frameworks for additional investor types, and will disclose these in the rating commentary.

Fitch will classify ultimate investors as Tier 3 where the ultimate investor does not meet the thresholds for classification into Tiers 1 and 2, or where Fitch has not obtained sufficient information to classify the ultimate investor, such as for high net-worth individuals, or where exposure is immaterial. Fitch may classify high net-worth individuals as Tier 2 if they invest in a fund through a wealth-management platform that implements vetting and risk controls to reduce the risk of investor defaults and increase recoveries, and where Fitch is able to assess the platform's controls and/or performance history.

The classification framework is a conservative estimate of the quality of an ultimate investor's commitment, where the rating assumption reflects the lack of an explicit credit view on the ultimate investor and the limited number of data points used to derive the rating assumption. For SFFs that have more concentrated LP positions, Fitch may seek to obtain internal ratings on ultimate investors that comprise material exposures to form a more precise credit view on these investors. Fitch may also update its credit view on certain ultimate investors over time once it gathers data on these entities' performance in meeting capital calls.

Appendix 1 includes examples of how Fitch would apply these concepts.

## PCM Rating Correspondence

Tier 1	BBB-
Tier 2	B-
Tier 3	CCC

Source: Fitch Ratings

## Ultimate Investor-LP Notching

Investors sometimes invest in funds through subsidiaries or investment vehicles that will be the LPs of record in the fund. Where the LP itself is unrated, Fitch will determine the ultimate investor as discussed above, and analyze the linkage between the ultimate investor and the unrated LP to derive a rating assumption for the LP.

Fitch's assessment of the ultimate investor's obligation or incentives to fund the LP's capital calls will drive the notching:

Ultimate Investor-LP Linkage	LP Rating Assumption
<b>Strong contractual links</b> , such as guarantees, cross-default provisions, funding agreements, equity commitments and similar agreements	Same as ultimate investor rating assumption
<b>Reputational and economic links and weaker contractual links</b> , such as strategic operating subsidiaries with shared branding, investor and comfort letters, strong historical performance of the LP meeting capital calls and/or the ultimate investor funding the LP's capital calls, and LPs investing across multiple funds over time for an ultimate investor with a large alternative investment platform that will need to retain access to investments in the future	3 notches down from ultimate investor rating assumption
All others	6 notches down from ultimate investor rating assumption

In determining the linkage between the ultimate investor and the LP, Fitch relies on information provided by the fund manager, the lender, and/or other publicly or privately available data.

These notching principles are a conservative estimate of the relationship between ultimate investors and LPs, attempting to balance a relative view of the credit quality of the LP against a lack of a formal rating analysis. Fitch does not explicitly link the assumed rating of an ultimate investor to the rating of a potential ultimate parent (such as a sovereign, a state or a corporation), absent a formal analysis of the relationship, including the legal framework, financial analysis and economic ties, achieved through a formal rating or consultation with the relevant analytical group within Fitch.

Appendix 1 includes examples of how Fitch would apply these concepts.

## Prefunded Commitments

For an LP that prefunded its capital commitments, Fitch will use a rating assumption for PCM of the higher of the LP's rating assumption as determined under this criteria report, or based on the characteristics of the collateral backing the capital commitment. Fitch will consider the collateral under this framework when permitted investments are expected to have maturities of up to 30 days and when the collateral is expected to be used to satisfy capital calls.

The rating assumption for such LPs when taking the prefunded collateral into account will depend on the guidelines governing the investment of the collateral. Prefunded commitment vehicles that typically invest in securities or bank deposits rated 'BBB-' or above, rated 'B-' or above or do not impose any limitations will be classified as Tier 1, 2 and 3, respectively. For larger such exposures, and where Fitch has sufficient access to analyze the collateral and its documentation, Fitch may directly link the assumed rating of the LP to the collateral or minimum investment guidelines.

## Concentration Considerations

Although Fitch's modeling of projected LP pool losses already considers concentrations, Fitch will notch down rating assumptions for concentrated positions to reduce excessive reliance on rating assumptions in modeling. For unrated ultimate investor exposures in excess of 5% of the total LP base, Fitch will lower the rating assumption by three notches. For example, for an unrated ultimate investor classified as Tier 1 and representing 13% of total uncalled capital commitments, the exposure would be divided and input separately in PCM. The first 5% of the exposure would be input as 'BBB-' (Tier 1) and the excess exposure of 8% would be input as 'BB-'. This treatment does not apply to rated ultimate investors.

For SFFs backed by concentrated LP pools of four to 14 ultimate investors Fitch will use a threshold of 3% instead of 5% when applying the treatment described above, and will apply it to both rated and unrated ultimate investors. For example, if an ultimate investor making up 5% of

exposure is rated 'AA', 3% of the exposure will count as 'AA' and the 2% excess exposure above 3% will count as 'A'.

The table below summarizes this framework.

No. of Ultimate Investors in Pool	% Threshold for Single-Ultimate Investor Concentration		Ultimate Investor Rating Assumption Impact (Notches)
	Unrated Ultimate Investor	Rated Ultimate Investor	
One to Three	See QRI for Concentrated LP Pools Section Below		
Four to 14	3	3	-3
At least 15	5	N.A.	-3

QRI - Quantitative rating indication  
Source: Fitch Ratings

Where Fitch determines that modeling results do not accurately reflect the risk presented by the LP pool, including through excessive concentration, Fitch may conduct supplemental analysis or stresses, apply a rating cap or may not assign a rating.

### Limited Reliance on Unrated Ultimate Investors at Highest SFF Rating

Fitch limits its reliance on classifications of unrated ultimate investors when assigning the highest rating of 'AAA' to a SFF. Only SFFs consisting of 80% or more rated ultimate investors by exposure may achieve 'AAA' ratings, subject to other standard quantitative and qualitative considerations.

### Analysis of LP Legal Documentation

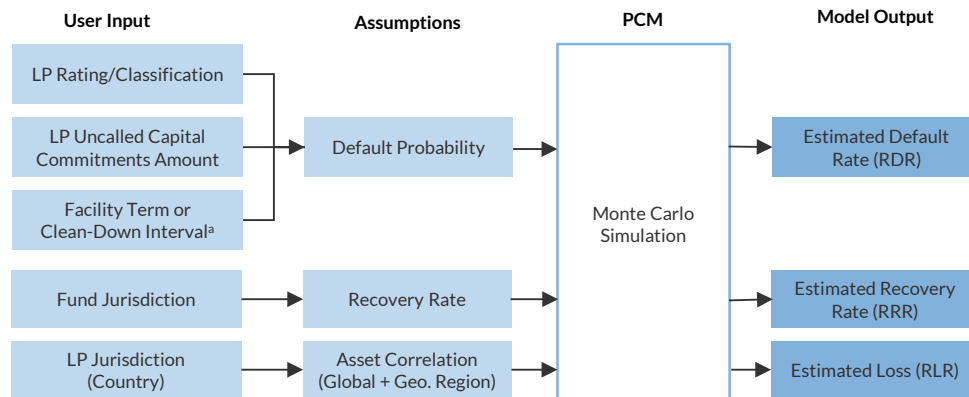
Fitch will lower the rating assumptions for LPs whose terms or side-letter arrangements with a fund potentially reduce the LP's obligation to satisfy capital calls, or the manager or lender's ability to enforce such obligations. For moderate impact terms, such as sovereign immunity that is not waived, Fitch will notch down the LP's rating assumption by up to three notches. For higher impact terms, such as limitations on the fund's ability to call capital from the LP or remedy capital call defaults, Fitch will notch down the LP's rating assumption by more than three notches. The rating assumption that will be notched down will be the rating assumption derived for the LP under the framework discussed in this criteria report. Fitch believes, that even in situations where there may be limitations on the enforceability of an LP's capital call obligations, there are usually still reputational and economic incentives for the LP to satisfy capital calls. Fitch expects to receive information on LPs' side-letter terms and may rely on external legal analysis performed in relation to the transaction to determine the impact of LPs' terms. When relying on analysis of LP side letters and other terms and conditions, Fitch expects the analysis to contain a review of any terms that could materially affect the enforcement of capital call obligations.

Appendix 1 includes examples of how Fitch would apply these concepts.

## Quantitative Rating Indication

Fitch's primary instrument in quantitatively assessing SFFs is the Fitch PCM, which is available for [download on Fitch's website](#). The model is updated from time to time, and a release log is maintained on the website to indicate updated features and assumptions. A description of the source data used to derive the model's assumptions, as well as the inputs, outputs and usage of the model are detailed in Fitch's "[CLOs and Corporate CDOs Rating Criteria](#)."

## Overview of the Portfolio Credit Model Process



<sup>a</sup>Clean-Down Interval represents the period after a draw on the facility by which that obligation must be repaid.  
Source: Fitch Ratings

The PCM is used for analyzing joint default behavior within credit portfolios. The main inputs to the model are default and recovery assumptions for each LP, based on LPs' derived ratings and the jurisdictions of the LPs and the fund, as well as correlation assumptions. The shorter of the facility's maturity, term limit or clean-down interval is used as the maturity input in PCM. The primary outputs of the model are default, recovery and loss rates for the LP pool for each rating scenario.

### Default and Recovery Rates

The characteristics of capital call obligations, such as reputational and economic incentives, have historically resulted in extremely rare default incidents for institutional LPs and very low default rates for high net-worth individuals. Even when LPs defaulted, this often resulted in high recoveries due to LP default remediation provisions, which usually include the defaulting LP losing part of its LP interest and the replacement of the defaulting LP.

The main drivers of projected defaults in PCM are LPs' rating assumptions and domiciles, and facility maturity or term limits.

For typical fund jurisdictions in PCM, Fitch utilizes upper (95%) and lower (60%) bounds as the recovery rates for the 'CCC' and 'AAA' model rating stress levels, respectively, and applies linear interpolation to arrive at notch-specific recovery rates. For less favorable fund jurisdictions, Fitch may adjust the recovery assumptions. In all circumstances, Fitch will apply a 0.75x multiple on recovery rates to the excess concentration of any ultimate investor's exposure above 6.5% of the total pool's uncalled capital.

### Correlation Inputs

Correlation inputs in PCM for the purposes of these criteria are limited to a global component (given the potential for higher systemic correlation among ultimate investors in a macro-stress) and a regional component (to account for potentially higher loss severity in less developed or emerging markets). Fitch applies a global correlation assumption of 6% and maintains the same regional correlation assumptions typically used in PCM (see table at right). Country, emerging markets (separately from the regional correlations in the table at the right) and industry-specific correlation figures are set to 0%.

### Prospective LP Pools

Subscription facilities may be established before a fund's final close, based on expected commitments. In these cases, Fitch may consider expected and stressed LP composition assumptions to arrive at the QRI, based on the level of visibility to the expected LP pool.

### Fitch Advance Rate

In most cases, the Fitch Advance Rate (Fitch AR) for a given rating level is 100% minus PCM's projected loss (RLR in PCM) output at that rating level. The projected loss output represents projected capital call defaults and recoveries at a given rating level. The Fitch AR represents the implied advance rates at different rating levels based on the LP pool's total undrawn capital commitments.

### Regional Correlation Table for PCM

Region	Correlation (%)
Central and South America	10
Asia	10
Australia & New Zealand	2
Central Europe	2
Developed Asia	2
Europe - Other	10
Middle East and Africa	10
North America	2
Northern Europe	2
Southern Europe	2
United Kingdom	2

Source: Fitch Ratings

However, where projected defaults (RDR in PCM) exceed 70% for a given rating level, Fitch will assume no recoveries, and the Fitch AR will be calculated as 100% minus PCM's projected defaults (instead of projected losses). This is done to avoid reliance primarily on recoveries to support the SFF when LP defaults are very high. Fitch expects that this complementary analysis will apply to few transactions, primarily pools consisting of a low-rated and highly concentrated LP base.

### Maximum Permitted Advance Rate

Fitch reviews the fund and SFF's documentation for financial covenants that determine the facility's maximum permitted advance rate (Max AR), which is the maximum possible draw on the facility as a percentage of undrawn capital commitments. Fitch takes into account reductions in the effective advance rate through concentration limits, LP exclusions or other considerations, when calculating the Max AR.

### QRI Determination

The QRI is set at the highest rating level at which the Fitch AR is higher than or equal to the Max AR. For example, if the Max AR is 70% and the Fitch AR is 76%, 72% and 68% at the 'A-', 'A' and 'A+' rating levels, respectively, then the QRI will be 'A'. Fitch conducts additional sensitivity analyses, in particular, simulations of negative changes in the LP base, and may adjust the final QRI lower than the QRI generated based on the actual current LP base, if the QRI shows higher sensitivity to these tests.

### QRI for Concentrated LP Pools

Fitch utilizes the alternative approaches described below to determine the QRI for LP pools composed of three or fewer ultimate investors, or where other ultimate investors, except for the top three, make up an immaterial portion of the exposure. While Fitch assesses the concentration at the level of the ultimate investor, the LP itself must be rated. In these situations, Fitch typically expects that the ultimate investor will invest directly and, therefore, will be the LP.

**Facilities Backed by Single LP:** Fitch will link the QRI to the rating of the LP. The LP in single-LP facilities must be rated by Fitch.

**Facilities Backed by Two or Three LPs:** To arrive at the QRI, Fitch will use the Two-Risk or Three-Risk CLN matrices, found in the ["Single- and Multi-Name Credit-Linked Notes Rating Criteria."](#) All LPs considered in the analysis must be rated by Fitch. However, if a default of one or two of the LPs can be absorbed by the overcollateralization available under the SFF, those LPs will be disregarded in this analysis. For example, if two LPs make up the LP base, at 90% and 10%, respectively, and the SFF includes overcollateralization of 20%, Fitch will disregard the smaller LP and link the QRI to the larger LP only.

## Qualitative Assessment

While the LP base is a key driver of Fitch's analysis of SFFs, the assessment of the manager, the fund and SFF structural terms is important as well, as these can materially influence LPs' incentives to meet capital calls, as well as recoveries upon LP defaults on capital calls.

The table below summarizes the key factors Fitch reviews as part of its manager, fund and facility assessment (qualitative assessment), and the risks each factor is meant to address. Each factor is scored on a scale of 1 (best) to 5 (worst), and is assigned a weighting indicating its importance and influence in the overall qualitative assessment (high, medium or low). Based on the scores and weights of each factor, a rating committee will determine the overall qualitative assessment score, also 1 (best) to 5 (worst). The qualitative assessment corresponds to notching from the QRI to arrive at the SFF rating, as shown in the table below. For example, if the analysis of the LP pool results in a QRI of 'A', and the qualitative assessment score is 4, one notch will be deducted from the QRI, and the SFF rating will be 'A-'.

However, if any of the qualitative assessment factors present high asymmetric risks to the SFF, Fitch may notch the QRI lower than the standard notching indicated in the table below. Certain scores assigned to certain qualitative assessment factors may also result in rating caps on the SFF, as described in the qualitative assessment factors section below.



Fitch expects that, for most funds performing in line with or better than expected, the qualitative assessment score will improve over time once performance becomes evident and value accretes in the fund, leading to higher ratings for the SFF over time.

## Qualitative Assessment Adjustment to QRI

Qualitative Assessment Score	1	2	3	4	5
Rating Notching from Quantitative Rating Indication (QRI)	+2	+1	0	-1	-2

Source: Fitch Ratings

## Qualitative Assessment Factors

Below are the factors considered in the qualitative assessment, an explanation of their importance, typical weight in Fitch's qualitative assessment analysis, and thresholds and guidelines for Fitch's scoring of the factors. The scores are organized into sections by manager, fund and facility, as shown in the table below.

### Qualitative Assessment Factors

Section	Factor	Primary Considerations
Manager	Resources and scale	AUM, operating experience, staffing
	Franchise and fundraising	Alternative investment AUM, fundraising pacing and traction
	Historical performance	Measures of the manager's funds' historical performance
Fund	Strategy and assets	Diversification, stability and development of markets and assets the fund is expected to invest in
	Manager alignment	Manager's experience investing in the types of assets the fund is expected to invest in
	Performance	Measures of the fund's performance
	Economic incentives	Percentage of capital called, remaining value in the fund
	LPA terms	General partner's (GP) rights to remedy defaults, such as over-call provisions, forfeiture of defaulting LP's interest, terms addressing borrowings
Facility	Structural features	Covenants to limit borrowing, security interest in collateral, lender pre-approvals for SFF changes
	Foreign exchange (FX) risk	Currency alignment between SFF and LP capital commitments

Source: Fitch Ratings

Fitch's qualitative assessment is guided by the framework described below, although Fitch may take into consideration additional factors deemed relevant. Where certain data points may not be available, Fitch will use proxies to inform its analysis. If Fitch's access to a fund's management is limited, Fitch will rely on information provided by the originator/lender in connection with Fitch's rating of the SFF, as well as Fitch's proprietary data and publicly available information.

While the framework describes typical weights for each factor, ultimate weights will be determined based on the factors Fitch considers as having the greatest potential impact on the credit quality of the SFF. In addition, weighting of various factors can change over time based on the degree to which a fund is invested and how it is performing, reflecting LPs' economic incentives to satisfy capital calls at that time. For example, in the earlier stages of the investment period, or at the fund's launch, higher weight may be placed on the manager's historical performance. As the fund matures, higher weight may be placed on the current performance of the fund, or if the fund performs poorly, on default remediation provisions.

Fitch's rating committees ultimately apply analytical judgement to determine factor scores, weightings and the overall qualitative assessment score based on the circumstances of each SFF. Neither the overall qualitative assessment nor the underlying factor scores follow a "weakest-link" approach, but are, instead, scored based on the committee's view of the most relevant strengths or weaknesses of the transaction or subfactors making up a factor. For example, for the "Resources and Scale" factor, a manager might score '4' on the "Total AUM" subfactor, but score '1' and '3' on the "Operating Experience" and "Scale" subfactors, respectively, for an overall score for the factor of '2' or '3'.



In cases where an entire platform spins out of an existing manager, Fitch may consider the platform's history in the previous business if deemed applicable based on the degree of overlap between the investment strategy, staff and franchise strength of the predecessor and successor organizations.

### Manager: Resources and Scale

**Why This Is Important:** Larger and more diversified managers typically benefit from better financial stability, and longer operating experience may indicate more consistency in processes, established systems and experience through down cycles. Larger and more experienced staff with better controls reduce the risk of fraud or mismanagement at the manager, which could affect the fund's performance and LPs' propensity to meet capital calls. Larger managers can apply their resources and market position toward funds' performance and reduce downside risk.

**Weight in Qualitative Assessment:** Typically of medium importance.

**Factor Scoring:** Better-scoring managers will have greater scale and diversification, operate from leading positions across multiple markets (primarily developed) and business segments, have bigger and more experienced staff, and lower levels of key person risk. In cases where this factor is scored '3', '4' or '5', Fitch's rating committee may impose a rating cap on the SFF, at 'A', 'BBB' and 'BB', respectively. The rating caps are meant to address instances of perceived weakness at the manager that could lead to potential mismanagement or adverse events that would present an asymmetrical risk to the SFF regardless of the strength of the LP base. Fitch will not impose a rating cap where it perceives these kinds of risks to be low.

### Subfactors

	Score				
	1	2	3	4	5
Scale	Very large staff, no key person risk, operating across multiple strategies and geographies	Large staff, limited key person risk, operating across multiple strategies or geographies	Adequate staff, moderate key person risk, operating across multiple strategies or geographies, or strong franchise in flagship strategy	Small staff, elevated key person risk, limited number of strategies or funds	Very small staff, high key person risk, very limited platform
Total AUM (\$ Bil.)	≥ 50	15 ≤ x < 50	5 ≤ x < 15	1 ≤ x < 5	< 1
Operating Experience (Years)	≥ 25	15 ≤ x < 25	7 ≤ x < 15	1 ≤ x < 7	< 1

Source: Fitch Ratings

### Manager: Franchise and Fundraising

**Why This Is Important:** A stronger franchise and fundraising capabilities indicate investor demand for the manager, including confidence in the manager's performance. This may incentivize LPs to meet capital calls to maintain access to the manager in the future and may also lead to higher recoveries on defaulting LPs.

**Weight in Qualitative Assessment:** Typically of medium importance but can have a high weight at the beginning of a fund's life when the fund's performance is uncertain, or when recoveries on defaulting LPs become important.

**Factor Scoring:** Better-scoring managers will have a strong franchise in the alternative investment management sector, including higher AUM and consistent fundraising of larger funds. While Fitch considers the manager's overall franchise, it places greater emphasis on more recent funds and on strategies similar to the fund being evaluated.

## Subfactors

	Score				
	1	2	3	4	5
Alternative Investment AUM (\$ Bil.)	$\geq 50$	$15 \leq x < 50$	$5 \leq x < 15$	$1 \leq x < 5$	$< 1$
Traction	Recent funds are larger than previous ones in the series		Recent funds are similar in size to previous ones in the series	Recent funds are smaller than previous ones in the series	
Pacing	Consistent fundraising cycles, and often in the market across strategies		Some fundraising for key strategies	Inconsistent or no recent fundraising	

Source: Fitch Ratings

### Manager: Historical Performance

**Why This Is Important:** While past performance is not fully indicative of future results, consistently strong historical performance, particularly through down markets, may indicate a manager's capabilities in mitigating downside risk for the fund being evaluated.

**Weight in Qualitative Assessment:** More important at the beginning of a fund's life, particularly if negative, otherwise, typically of lower weight.

**Factor Scoring:** Better-scoring managers will exhibit consistently positive or strong performance, including through weaker market conditions. Fitch will review relevant measures such as the internal rate of return (IRR), money on invested capital (MOIC), distributions to paid-in capital (DPI), remaining value to paid-in capital (RVPI), total value to paid-in capital (TVPI), quartiles and/or other measures as warranted and with an emphasis on more recent funds and on strategies similar to the fund being evaluated.

## Subfactors

	Score				
	1	2	3	4	5
Historical Performance	Consistently strong, including through down markets	Mostly strong, including through down markets	Mostly moderate	Usually moderate, sometimes weak	Consistently weak performance

Source: Fitch Ratings

### Fund: Strategy and Assets

**Why This Is Important:** Riskier fund strategies or more concentrated assets are more likely to underperform, negatively affecting LPs' incentives to meet capital calls, as well as the manager's ability to replace defaulting LPs.

**Weight in Qualitative Assessment:** Typically of low weight once performance is evident, but may be more important at the beginning of a fund's life and/or particularly if the strategy is riskier.

**Factor Scoring:** Better-scoring funds will invest in more stable assets in well-developed markets, and will exhibit higher diversification across assets, sectors and/or geographies. Market development and asset stability and diversification are considered in the context of standards typical in private capital funds. The market development subfactor considers a market's size and longevity, while the stability subfactor considers the potential for volatility and value loss, and the diversification subfactor considers the number of assets a fund invests in, as well as sector and geographical focus.

For example, buyout strategies in the U.S. are considered to be in a well-developed market, while buyout strategies in developing economies will score lower on that subfactor. However, equity control investments in both cases will score lower than senior credit strategies on the

stability subfactor, although higher than venture strategies. On diversification, a fund expected to hold 100 assets across sectors and geographies will score higher than a sector-focused fund expected to hold 15 assets, for example.

### Subfactors

	Score				
	1	2	3	4	5
Assets' Market Development	Very high	High	Medium	Low	Very low
Assets' Stability	Very high	High	Medium	Low	Very low
Assets' Diversification	Very high	High	Medium	Low	Very low

Source: Fitch Ratings

### Fund: Manager Alignment

**Why This Is Important:** A fund may be less likely to perform poorly if the manager has more experience implementing the same strategy, with well-established investment processes and staff dedicated to the strategy. A strategy core to a manager's offering may also attract higher investor demand, potentially improving recoveries if LPs default.

**Weight in Qualitative Assessment:** More important if the manager has less experience and fewer resources dedicated to the strategy, otherwise, typically of lower weight.

**Factor Scoring:** Fitch will score funds better where the manager and/or its staff have more experience implementing similar strategies, including through down markets, and has larger staffing dedicated to the strategy.

### Subfactors

	Score				
	1	2	3	4	5
Manager Alignment	Fund strategy is a core competency of the manager, with experience through down markets	Fund strategy is a near-core competency of the manager	Fund strategy is an adjacent competency of the manager	Fund strategy is a tactical fundraise, or tangential to the competency of the manager	Fund strategy is an opportunistic fundraise, outside the scope of the manager's competency

Source: Fitch Ratings

### Fund: Performance

**Why This Is Important:** A fund's performance can influence LPs' propensity to meet capital calls, particularly if a fund performs poorly, and affect the ability to replace defaulting LPs.

**Weight in Qualitative Assessment:** Typically of low importance at the beginning of a fund's life, when performance measures are less meaningful or negative due to fees, and later in its life, usually of medium importance, or high if the fund is performing poorly.

**Factor Scoring:** Better-scoring funds will exhibit strong performance relative to the fund's strategy, targeted return and/or peers. Fitch will review relevant measures such as IRR, MOIC, DPI, RVPI, TVPI, quartiles and/or other measures as warranted.

## Subfactors

	Score				
	1	2	3	4	5
Performance	Material out-performance relative to expectations	Out-performance relative to expectations	Performance in line with expectations	Under-performance relative to expectations	Negative return

Source: Fitch Ratings

### Fund: Economic Incentives

**Why This Is Important:** LPs are less likely to default on capital calls when they have already invested in the fund and may lose a portion of their existing stake. A higher funded percentage and value in the fund may also improve recoveries by providing new LPs a bigger economic incentive to replace defaulting LPs.

**Weight in Qualitative Assessment:** Typically of high or medium importance.

**Factor Scoring:** Better-scoring funds will have called more of their LPs' capital commitments, with a greater value remaining in the fund. Generally, funds are expected to score weaker on this factor early on, with the score improving over time.

## Subfactors

	Score				
	1	2	3	4	5
Funded Percentage (% of Total Commitments Called)	$\geq 40$	$20 \leq x < 40$	$10 \leq x < 20$	$0 < x < 10$	0

Source: Fitch Ratings

### Fund: LPA Terms

**Why This Is Important:** Stronger LPA terms and more negative economic consequences for defaulting LPs incentivize LPs to meet capital calls and may also improve recoveries if LPs default.

**Weight in Qualitative Assessment:** Typically of high or medium importance.

**Factor Scoring:** Better-scoring funds will have terms that allow them to impose more negative consequences on defaulting LPs or otherwise mitigate LP defaults. Such default remediation provisions may allow the GP or lender to call more capital from other LPs (over-call), transfer or sell a defaulting LP's interest in the fund at a discount, retain future distributions from a defaulting LP's interest and impose other similar remedies. Stronger LPAs will also contain legal protections for the lender, such as LPs' explicit waiver of setoff, counterclaim or defense with regard to capital contributions; explicit permission to incur debt under a subscription facility; acknowledgement that lenders are relying on capital contributions for repayment; and other similar clauses.

## Subfactors

	Score				
	1	2	3	4	5
LPA Terms	Very strong economic incentives to meet capital calls and provisions to recover funds	Strong economic incentives to meet capital calls and provisions to recover funds	Adequate economic incentives to meet capital calls and provisions to recover funds	Weak economic incentives to meet capital calls and provisions to recover funds	Very weak or limited economic incentives to meet capital calls and provisions to recover funds

Source: Fitch Ratings

### Facility: Structural Features

**Why This Is Important:** Stronger covenants reduce the risk of the facility by controlling the quality of the LP base or the size of the loan relative to collateral, limiting the lender's exposure period, and providing the lender with other rights. These provisions aim to reduce the SFF's default risk and improve the lender's recovery upon default.

**Weight in Qualitative Assessment:** Typically a medium weight, except if covenants are unusually strong or weak.

**Factor Scoring:** Better-scoring facilities will contain stronger covenants to limit risks, including those arising from the LP base, the performance of the fund and legal risks, among others. Covenants may include limitations on the size of the facility, the quality of the LPs and the exposure period, re-margining provisions, security interest, and rights provided to the lender and others. Most facilities are likely to score better on this factor given standardization in the industry. For example, a facility that includes NAV and value to cost tests, as well as lender approval of new LPs entering the borrowing base, among other terms, will typically score '1' or '2', depending on the thresholds of the tests.

### Subfactors

	Score				
	1	2	3	4	5
Structural Features	Very strong limits to borrowing, control of LP base quality and lender rights	Strong limits to borrowing, control of LP base quality and lender rights	Adequate limits to borrowing, control of LP base quality and lender rights	Weak limits to borrowing, control of LP base quality and lender rights	Very weak limits to borrowing, control of LP base quality and lender rights

Source: Fitch Ratings

### Facility: Foreign Exchange Risk

**Why This Is Important:** High foreign exchange (FX) exposure may introduce material risks to the facility that are not addressed elsewhere in the analysis.

**Weight in Qualitative Assessment:** Typically a low weight, except where FX risk is higher.

**Factor Scoring:** Better-scoring facilities have limited FX risk across permitted borrowings and LP capital commitments' denomination. Single-currency facilities denominated in the same currency as LPs' capital commitments will typically score better, while multicurrency facilities will be evaluated based on the volatility of permitted currencies, facility terms governing FX risk such as FX cushions, the likely FX risk based on the fund's expected investments and provisions governing the manager's ability to hedge FX risk. In cases where this factor is scored '4' or '5', Fitch may impose a rating cap on the SFF, at 'BBB' and 'BB', respectively, if FX is likely to pose an asymmetrical risk to the facility.

### Subfactors

	Score				
	1	2	3	4	5
Foreign Exchange (FX) Risk	No material exposure to FX	Limited exposure to unhedged FX	Some exposure to unhedged FX	High exposure to unhedged FX	Very high exposure to unhedged FX

Source: Fitch Ratings

## Additional Analytical Considerations

### Legal Documentation

To conduct its analysis, Fitch reviews relevant documentation governing the fund and the SFF, which may include LPAs, management agreements, legal opinions and other documents, as applicable. In addition, Fitch typically relies on analysis of legal documentation conducted by the

originator or lender's external legal counsel to assess the authority and duties granted to the GP and the manager under the documents as well as the rights of the SFF lenders, the LPA terms, the facility's structural features and covenants, the enforceability of the agreements in relevant jurisdictions, LP side letters and subscription agreements, and/or other relevant terms. Fitch will reflect the strength of the terms present in the legal documentation in its analysis as described in the sections above.

Fitch may assign ratings to SFFs globally, in jurisdictions where appropriate legal regimes govern funds and partnerships, and enforceability of creditors' rights.

Material amendments to the governing documents may occur over the term of a Fitch-rated SFF. Fitch expects notification of such amendments and will reflect any potential impact on the assigned rating at the time of the amendment.

## **Umbrella Facilities**

### ***Multiple Ratings***

Umbrella facilities are typically set up as a means to simplify documentation and reduce legal expenses, and the borrowings by the underlying funds or borrowers under the umbrella are viewed as distinct subfacilities from a credit perspective as long as there are no terms tying them together. Therefore, when analyzing umbrella SFFs extended to more than one fund or borrower, Fitch will typically assign individual SFF ratings to each subfacility or borrowing under the umbrella.

### ***Single Rating***

If terms in the documentation tie the various subfacilities together from a credit perspective, such as cross-default provisions under which a default under any of the subfacilities would translate to a default on all of them, Fitch will take the approach described below. Fitch will also take the below approach if it is asked to assign one rating to the umbrella facility, instead of individual ratings to the subfacilities under the umbrella, as a default on any of the subfacilities would lead to a default on the umbrella facility in this case.

First, Fitch will assess the terms of the facility to determine whether the LP pools are cross-collateralized. Where there is no cross-collateralization across the LP pools, Fitch will derive a QRI, a qualitative assessment and a SFF rating for each fund separately and will rate the overall SFF based on the lowest individual underlying SFF (weakest-link approach).

Where the SFF is cross-collateralized across funds, Fitch will analyze the facility as comprising one LP pool to derive the QRI. The qualitative assessment will be conducted separately for each fund, and the overall SFF rating will be derived by considering the weight of each fund in the SFF.

## **Transaction Party Review, Data Reliability and Alignment of Interests**

Fitch will assess the reliability of the information provided by the originator, lender and/or fund manager in its review of SFFs, as well as the alignment of interests between the originator and investors. Fitch expects that, in most or all cases, information received from the originator and/or the fund manager will be deemed reliable, and that interests will be sufficiently aligned or sufficient checks will be in place, and, therefore, no adjustments to Fitch's rating analysis will be needed. However, where these pre-conditions do not exist, Fitch may decline to rate a transaction.

Fitch's assessment of information reliability is based on the originator and/or fund manager's resources, experience, underwriting and monitoring procedures, and expertise of any third-party service providers, and may include corroboration of information from alternative sources.

Fitch reviews the originator's alignment of interests with investors and/or additional checks on the underwriting process. This review focuses on risk retention, the fee structure, facility terms and LP base composition relative to market norms, potential reputational and business implications for the originator, and the involvement and experience of additional parties in the transaction, including other lenders or investors and external legal counsel.

Fitch will rate transactions where it believes there is sufficient alignment of interests and/or checks, with supportive factors including the originator retaining a portion of the exposure; the originator's fee structure depending, to a degree, on the transaction's performance or being paid over time; the originator having an established track record within the subscription finance market; the originator

bearing reputational and/or business risk in the event of facility underperformance; the transaction's structure and LP base composition aligning with market standards; and other parties to the transaction, such as legal counsel, having experience in the sector.

## Rating Assumption Sensitivity

Fitch's opinions are forward looking and include the agency's views of future performance. SFF ratings are subject to positive or negative rating actions based on changes to the actual or projected quality or performance of the LP pool, the manager, the fund or the facility terms. The non-exhaustive list below includes the primary assumption sensitivities or shifts in key rating drivers that can influence SFF ratings.

- **Limited Partner Pool Quality:** Changes in the credit quality or concentration of the LP pool due to LP rating changes or the addition, substitution or removal of LPs.
- **Manager Assessment:** Changes in the manager's resources or franchise due to market conditions, internal changes or manager substitution.
- **Fund Assessment:** Changes to the fund's performance or terms that affect LPs' incentives to satisfy capital calls or ability to recover value if LPs default.
- **Facility Assessment:** Material changes to the facility's terms.

Fitch may perform sensitivity analyses to reflect specific considerations of a transaction. Fitch's rating committees will consider the stability of the SFF rating under these sensitivities in assigning the SFF rating.

## Surveillance

Once Fitch rates an SFF, and if the ratings are not point in time, the SFF will be subject to surveillance, and ratings will be reviewed at least annually or on an ad-hoc basis if there is a material change to the SFF or macro-economic conditions. Fitch expects to receive at least quarterly reporting on the facility and LP pool, and be notified about material changes in a timely manner.

## Changes to Facility Terms and LP Pool

The LP pool, as well as terms governing the fund and the facility can change during the life of the SFF, and such changes often require lender approval. In fact, changes to the LP pool are quite common given the growth of the secondary market for LP interests. Fitch will review such changes as they occur and will reflect them in the rating. Material changes may result in a large positive or negative impact on the SFF rating.

## Data

Fitch's rating analysis is reliant on materials provided by the SFF originator or fund manager, and Fitch will assess the reliability of the information based on the data provider's capabilities and experience. To conduct its SFF rating analysis, Fitch requests information on the composition of the LP pool, and relevant documentation regarding the fund, SFF and manager, as described in this report.

## Variations from Criteria

Fitch's criteria are designed to be used in conjunction with experienced analytical judgment exercised through a committee process. The combination of transparent criteria, analytical judgment applied on a facility-by-facility and full disclosure via rating commentary strengthens Fitch's rating process while assisting market participants in understanding the analysis behind our ratings.

A rating committee may adjust the application of these criteria to reflect the risks of a specific facility or entity. Such adjustments are called variations. All variations will be disclosed in the respective rating action commentaries, including their impact on the rating where appropriate.

A variation can be approved by a ratings committee where the risk, feature or other factor relevant to the assignment of a rating and the methodology applied to it are both included within the scope of the criteria, but where the analysis described in the criteria requires modification to address factors specific to the particular facility or entity.



## Criteria Disclosures

In its rating action commentary, Fitch will disclose the rating drivers, application of rating caps and their rationale, rating sensitivities, additional LP classification frameworks developed and variations to criteria.

In many cases, Fitch uses the assumptions derived from its initial rating analysis in its surveillance reviews. To focus Fitch's rating action commentaries on the most important changes to the rating, Fitch will not disclose these assumptions in subsequent rating action commentaries, unless there is a material change to the assumptions.

## Limitations

Ratings, including Rating Watches and Outlooks, assigned by Fitch are subject to the limitations specified in Fitch's Ratings Definitions page, available at <https://www.fitchratings.com>.

## Appendix 1: LP Rating Derivation Framework Examples

**Example 1:** The LP is an unrated investment vehicle of a sovereign wealth fund (SWF) that is the ultimate investor, but is itself also not rated and is classified as Tier 1 under the investor quality classification framework, which indicates a 'BBB-' rating assumption. As the SWF has signed an equity commitment agreement for the benefit of the investment vehicle, there is no further notching down from the SWF's rating assumption, and, therefore, the LP's rating assumption would also be 'BBB-'. The side letter review indicates that sovereign immunity is not waived, which leads to an additional three-notch downward adjustment, resulting in an LP rating assumption of 'BB-'.

**Example 2:** The LP is an unrated investment vehicle of a SWF that is the ultimate investor, and which is itself rated 'AAA'. As the SWF has only provided a comfort letter for the benefit of the investment vehicle (as opposed to an explicit guarantee or equity commitment agreement), there is a three-notch downward adjustment from the SWF's rating, resulting in a 'AA-' rating assumption for the LP. The side letter review indicates that sovereign immunity is not waived, which leads to a further three-notch downward adjustment, resulting in an LP rating assumption of 'A-'.

**Example 3:** The LP is a pension fund investing directly in the fund, meaning it is both the ultimate investor and the LP. The pension fund is not rated and is classified as Tier 1, indicating a 'BBB-' rating assumption. The side letter review indicates no material issues, and, therefore, no further rating assumption adjustments are warranted.

**Example 4:** The LP is a pension fund investing directly in the fund, meaning it is both the ultimate investor and the LP. The pension fund is rated 'AA', and as the side letter review indicates no material issues, the final LP rating assumption is 'AA'.

**Example 5:** The LP is a fund of funds investing directly in the fund, meaning it is both the ultimate investor and the LP. The fund of funds is not rated and is classified as Tier 2, indicating a 'B-' rating assumption. The side letter review indicates no material issues, and, therefore, no further rating assumption adjustments are warranted.

The table below illustrates these examples and provides additional detail.

	Example 1	Example 2	Example 3	Example 4	Example 5
LP Type	Investment vehicle	Investment vehicle	Pension fund	Pension fund	Fund of funds
LP Rating	Not rated	Not rated	Not rated	AA	Not rated
Same as LP?	No	No	Yes	Yes	Yes
Type	SWF	SWF	Pension fund	Pension fund	Fund
Rating	Not rated	AAA	Not rated	AA	Not rated
Investor or manager AUM (\$ bil.)	120	120	200	200	35
Years of experience	45	45	30	30	30
Domicile Country Ceiling	AAA	AAA	AAA	AAA	AA
Sovereign/state/parent rating	AAA	AAA	AA	AA	N.A.
Funded ratio % (for pensions)	N.A.	N.A.	92	92	N.A.
Fund size (\$ bil., for funds)	N.A.	N.A.	N.A.	N.A.	3
Tier classification	Tier 1	N.A.	Tier 1	N.A.	Tier 2
Rating assumption	BBB-	AAA	BBB-	AA	B-
Driver of rating assumption	Tier classification	Ultimate investor rating	Tier classification	LP rating	Tier classification
Ultimate Investor and LP Relationship	Equity commitment	Comfort letter	Same entity	Same entity	Same entity
Relationship Notching	0	-3	N.A.	N.A.	N.A.
Resulting LP Rating	BBB-	AA-	BBB-	AA	B-
Side Letter Constraints	Sovereign immunity	Sovereign immunity	None	None	None
Side Letter Notching	-3	-3	N.A.	N.A.	N.A.
Resulting Final LP Rating	BB-	A-	BBB-	AA	B-

Source: Fitch Ratings

## Appendix 2: Portfolio Credit Model (PCM) Assumptions

### Correlation Assumptions

Fitch calibrated the global and regional correlation figures within PCM for the SFF criteria, utilizing a similar approach as the “CLOs and Corporate CDOs Rating Criteria.” Correlation inputs for the purposes of this criteria were limited to a global component (given the potential for higher, systemic correlation among ultimate investors in a macro-stress) and a regional component (to account for potential increasing loss severity in less-developed or emerging markets [EMs]). The global correlation figure is set at 6% and the regional correlation figures are the same as typically instituted in PCM (see Regional Correlation Table for PCM on page 6). Country, industry-specific and emerging market (separate from regional) correlation figures are set to 0%.

Furthermore, Fitch calibrated the correlation assumptions based on a pool of ‘B’ to ‘BBB’ rated LPs and a 3-5 year time horizon.

### Regional Correlation

Outside the global base correlation, the regional correlation assumption is also considered. Fitch’s view is that diversification can be achieved across regions. The base level correlation for assets is 6%, with an uplift of 2% for all non-EM regions and a 10% uplift for EM regions. The differentiated uplift for EMs increases the pair-wise correlation between LPs within these jurisdictions, producing more conservative PCM results for portfolios with higher concentration in EMs.

Although this calibration was done for a different asset type than LP capital commitments, the underlying assumptions for regional correlation are applicable for this criteria report. Nevertheless, the assumptions were tested for their impact on projected defaults and SFF rating outcomes, and results were consistent with Fitch’s expectations of limited impact on both.

The table below summarizes the results for a 300-LP, three-year term uniformly distributed portfolio with ‘B-’ rated LPs and varying regional compositions. “Mixed” compositions are portfolios with 50% of assets in one region and 50% in another region. The “Mixed Non-EM” portfolio is composed of LPs from two different non-EM regions, the “Mixed EM” portfolio is composed of LPs from two different EM regions, and the “Mixed EM and Non-EM” portfolio is composed of LPs from one EM region and one non-EM region.

### Model-Projected Defaults (RDR %) for Equally Weighted Portfolio of 300 LPs with 6% Flat Pair-Wise Correlation and Three-Yr. Term, Different Regions

RDR	All Non-EM	Mixed Non-EM	Impact on RDR	All EM	Mixed EM	Impact on RDR	Mixed EM and Non-EM	Impact on RDR (Compared to All Non-EM)
AAA	39.3	37.0	2.3	57.3	46.7	10.6	42.3	3.0
AA	37.0	35.0	2.0	53.0	43.3	9.7	39.7	2.7
A	32.0	30.3	1.7	45.7	37.3	8.4	34.3	2.3
BBB	26.3	25.0	1.3	36.0	30.0	6.0	28.0	1.7
BB	20.7	20.0	0.7	26.3	23.0	3.3	21.7	1.0
B	16.7	16.0	0.7	19.7	18.0	1.7	17.0	0.3

Source: Fitch Ratings

Regional concentration has a greater impact on projected defaults for portfolios consisting of EM and lower-rated LPs compared to developed market and higher-rated LPs.

### Recovery Rates Assumptions

For eligible fund jurisdictions, Fitch utilizes upper (95%) and lower (60%) bounds as the recovery rate for the ‘CCC’ and ‘AAA’ rating levels, respectively, and applies linear interpolation to arrive at notch-specific recovery rates. For less favorable fund jurisdictions, Fitch will determine the appropriate recovery assumptions on a case-by-case basis.

## Recovery Rates Assumptions by Rating Level

(%)

AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC
60	62	64	66	68	70	72	74	76	79	81	83	85	87	89	91	93	95

Source: Fitch Ratings

The interpolated recovery rates must be input into PCM as “asset-specific recovery estimates”, prior to running the model. The recovery assumptions applied to interests of more concentrated ultimate investors are stressed further in the quantitative analysis. This is done by applying a 0.75x multiple on recovery rates to the excess concentration of any ultimate investor’s exposure above 6.5% of the total pool’s uncalled capital.

### **Excessive LP Concentration: PCM Stress**

Portfolios with a small number of ultimate investors, or those where individual ultimate investors represent a disproportionate exposure within the portfolio, are stressed further in PCM.

To address the idiosyncratic risk with respect to the default behavior of the largest ultimate investors, Fitch applies a correlation stress of 50% to the largest ultimate investors. The largest ultimate investors are based on the individual ultimate investors’ uncalled committed capital in the LP portfolio. The stresses are applied to the largest ultimate investors up to a maximum of 15 ultimate investors for which the aggregate undrawn commitment is in excess of 30%, or any individual ultimate investor that is at least 6.5% of the portfolio’s undrawn commitments.

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