Astrea 9 Pte. Ltd.

Inside This Report | Page

Capital Structure

Class	Expected Rating	Outlook	Amount (Mil.)	Currency	Legal Final Maturity	Approximate % of NAV	Approximate Cumulative LTV (%)
A-1	A+(EXP)sf	Stable	615[a]	SGD	August 2040	29.5	29.5
A-2	A(EXP)sf	Stable	200	USD	August 2040	12.3	41.8
B PIK	BBB(EXP)sf	Stable	100	USD	August 2040	6.2	48.0
Equity	N.A.	N.A.	856[b]	USD	N.A.	52.0	N.A.

LTV – Loan to value. N.A. – Not applicable at launch. PIK – Payment in kind. Note: Expected ratings do not reflect final ratings and are based on information provided by the issuer as of 16 July 2025.
[a] Class A-1 principal is expected to equal USD480 million at launch, assuming a USD:SGD exchange rate of 1.281 as of 16 July 2025. The amount of Singaporean dollars issued may change at final closing.
[b] Equity value reflects the remaining portfolio NAV and includes the issuer's net working capital and capitalised transaction costs of USD11 million . At closing, the issuer will enter into a series of forward contracts to hedge all of the SGD615 million principal amount of the class A-1 bonds at their redemption on the class A-1 scheduled call date to US dollars.

Fitch Ratings expects to rate the class A-1, A-2 and B payment-in-kind (PIK) bonds to be issued by Astrea 9 Pte. Ltd. Astrea 9 is a private equity collateralised fund obligation (CFO) backed by interests in a diversified pool of alternative investment funds, with about USD1.6 billion in net asset value (NAV) and USD303.7 million of unfunded capital commitments as of 31 December 2024. Astrea 9 holds all the limited partnership interests of AsterNine Assets I Pte. Ltd. (AsterNine Assets I, or the AssetCo), a Singapore-based company that holds the fund interests.

The investment manager of the transaction is Azalea Investment Management Pte. Ltd. Azalea was set up in 2015 and is indirectly wholly owned by Temasek Holdings (Private) Limited. The sponsor is Astrea Capital 9 Pte. Ltd., which is owned by an Azalea affiliate and, ultimately, Temasek.

The underlying funds will distribute cash as they generate income or exit investments and will make capital calls when they require additional cash to invest. Cash flow generated by the funds will be used to pay off the bonds, as well as pay interest and expenses.

This presale report reflects information in Fitch's possession at the time that Fitch's expected ratings are issued; the transaction has yet to be finalised and changes could occur. As a result, the expected ratings disclosed in this report do not reflect final ratings but are solely based on information provided by the issuer as of the report date. These expected ratings are contingent on final documents conforming to information already received. Ratings are not a recommendation to buy, sell or hold any security. The prospectus and other material should be reviewed prior to any purchase.

Fitch's related Rating Action Commentary issued at transaction closing will include final ratings, which will include an assessment of any material information that may have changed subsequent to the publication of the presale.

Key Rating Drivers

Loan to Value: The cumulative loan to value (LTV) to the NAV at issuance of the class A-1, A-2 and B PIK bonds, as noted in the table above, provides a sufficient level of credit enhancement at the indicated rating levels. An LTV test will redirect cash flow to de-lever the transaction on any distribution date at which the class A LTV ratio is more than 50%. There is also an LTV test of 55% for the class B PIK bo**nds.**

Stressed Cash Flow Analysis: Fitch measured the ability of the structure to withstand weak performance in the underlying funds in combination with adverse market cycles. The class A-1 and A-2 bonds were able to withstand fourth-quartile-level performance in the underlying funds under all of Fitch's rating scenarios, indicating 'Asf' category stress. The class A-1 bonds' notional amount was considered at the US dollar equivalent amount to satisfy the expected Singapore dollar forward contract.

The class B PIK bonds were able to withstand fourth-quartile-level performance in the underlying funds under all of Fitch's rating scenarios, indicating 'Asf' category stress. However, the rating is a category lower given their structural subordination and Fitch's qualitative notching. The class B PIK bonds were also able to withstand third-quartile-level performance under all of Fitch's rating scenarios.

Analysts

Mounir Boudaoudi
+44 20 3530 1969
mounir.boudaoudi@fitchratings.com

Alexandra Semnont, CFA
+44 20 3530 1216
alexandra.semnont@fitchratings.com

Liquidity: The transaction's liquidity position is adequate, and Fitch expects it to improve further as the portfolio continues to season. As of June 2025, the portfolio generated positive net cash flow in the last year, and Fitch's modelling indicates that projected net cash flow is negative in some launch year scenarios. The transaction's liquidity position is supported by a contingent liquidity facility (USD280 million at launch) and portfolio net distributions since 31 December 2024, which will be added to available cash at the end of the first distribution period.

Fitch's modelling indicated some reliance on the liquidity facility, and the transaction was able to repay the liquidity facility in all launch year scenarios. Fitch's estimated one-year pro forma liquidity coverage ratio for the transaction is 2.4x.

Portfolio Composition: The portfolio of alternative investment fund interests is diversified by vintages, geographies, managers, funds, underlying holdings and sectors. As of 31 December 2024, the portfolio consisted of 40 funds, managed by 31 primarily large and well-established fund managers. The fund investments were invested in 1,086 investee companies. About 23.3% of the portfolio NAV relates to euro-denominated funds, of which about 70% is hedged.

Transaction Manager and Sponsor: Fitch believes Azalea has the capabilities and resources required to manage this transaction. Azalea's management team has extensive experience in and institutional knowledge of private equity, in addition to experience structuring private equity CFO transactions.

The interests of the sponsor Astrea Capital 9 (owned by Azalea and, ultimately, Temasek) and bondholders are strongly aligned, as the sponsor is expected to hold the entire equity stake (approximately 52% of NAV) in Astrea 9. The sponsor previously took voluntary actions – beyond what was required by transaction documentation – on some other Astrea deals to support senior bonds during market volatility. Fitch does not rely on any such support, but the historical record is viewed as incrementally positive.

Ratings Linked to Eligible Investments and Eligible Banker's Guarantee Providers: Funds in reserves accounts for the benefit of the class A-1 and A-2 bonds will be invested in securities or bank deposits, or cash balances will be replaced by eligible banker's guarantees, as specified in the transaction documentation. As these investments can have long-dated maturities and could have a material impact on the performance of the rated bonds, ratings of the class A-1 and A-2 bonds will be capped at and linked to the ratings of investments in the reserves accounts.

If the ratings of eligible investments in the reserves accounts or the ratings of the eligible banker's guarantee providers are downgraded below the rating levels of the class A-1 and A-2 bonds at a future date, a corresponding downgrade to the ratings of the class A-1 and A-2 bonds could occur, absent mitigating actions. At launch, these investments and eligible banker's guarantee providers are expected to be rated at the same level or higher than the ratings of the class A-1 and A-2 bonds, so will not constrain the ratings of the bonds.

Asset Isolation and Legal Structure: The issuer is structured as a special-purpose, bankruptcy-remote entity. The issuer will have 100% of the member interests in the AssetCo, and the assets held by the AssetCo will have been transferred to it as a true sale.

Rating Cap: Fitch has a rating cap at the 'Asf' category for private equity CFO transactions, driven by the less proven nature of the private equity CFO asset class relative to other structured finance asset classes, uncertainty related to investment performance and the timing of cash flows, the variability of asset valuations and lags in performance reporting.

Rating Notching and Outlook

The 'Asf'-category rating for the class A bonds reflects a high-quality portfolio comprised primarily of funds managed by large and well-established general partners (GPs), funds that have exhibited good performance to date, portfolio diversification across multiple metrics, a focus on relatively strong sectors, improving cash flow generation, sufficient liquidity, strong modelling results through Fitch stress scenarios, and a high-quality sponsor that exhibited its willingness to provide voluntary support to the bonds of previous deals.

The class A-1 bond rating of 'A+sf' is one notch above the model-implied 'Asf' rating, driven by the bonds' strong modelling results in both Fitch's base case and rating sensitivity scenarios, and their seniority in the priority of payments. The uplift is also supported by the transaction's high-

Applicable Criteria

Private Equity Collateralized Fund Obligations Rating Criteria (January 2025)

Global Structured Finance Rating Criteria (November 2024)

Structured Finance and Covered Bonds Counterparty Rating Criteria (November 2023)

Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (November 2023)

Structured Finance and Covered Bonds Interest Rate Stresses Rating Criteria (October 2024)

Covered Bonds Rating Criteria (April 2025)

Related Research

PE CFO Update: January 2025

quality portfolio comprising primarily funds managed by large and well-established general partners (GPs).

The class B PIK bond rating of 'BBBsf' is one category below the model-implied 'Asf' rating, driven primarily by the bonds' subordination to the class A bonds, delayed direct amortisation and PIK interest. The presence of a class B PIK maximum LTV serves as a structural mitigant prior to the redemption of the class A bonds; however, the bonds remain exposed to potential LTV increases in the event distributions are weaker than projected in Fitch's modelling on a sustained basis.

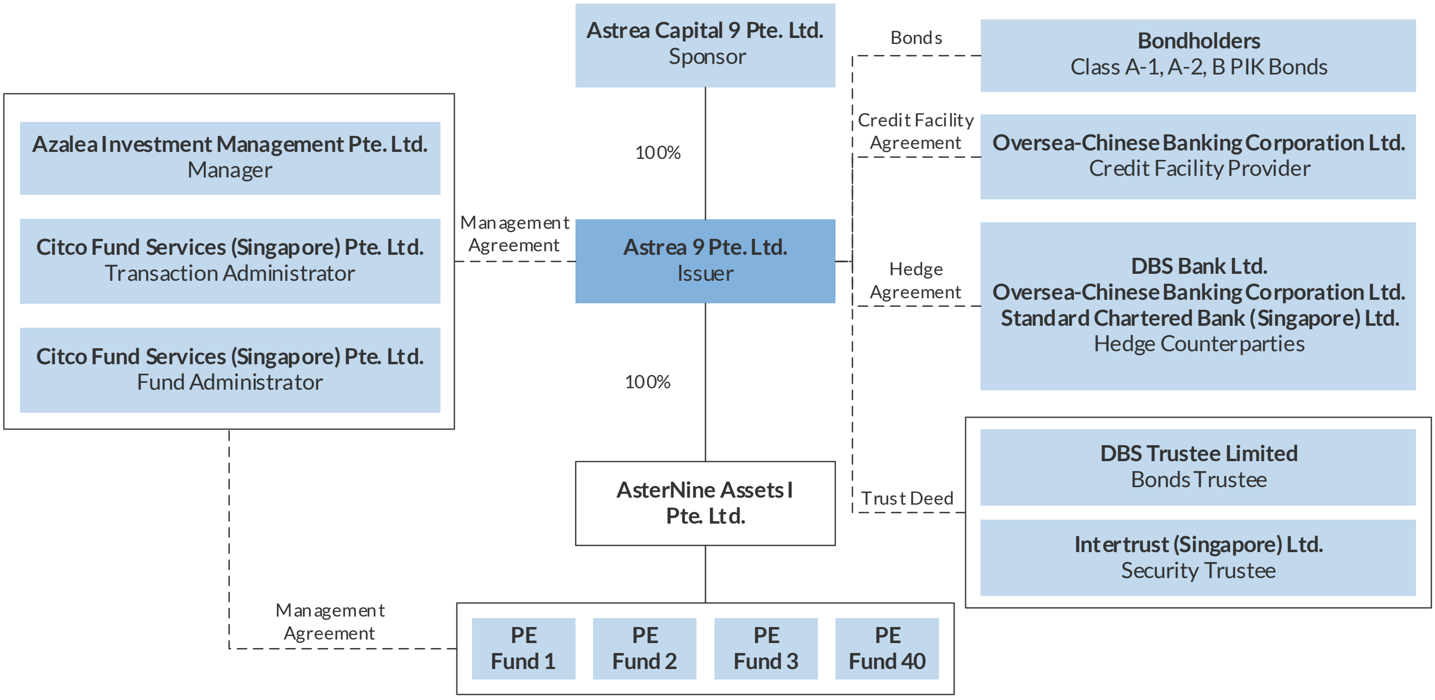
No notching has been applied to the model-implied ratings of 'Asf' for the class A-2 bonds.

Structure Overview

The issuer is structured as a special-purpose entity that will be the sole equity holder of the AssetCo. The issuer's capitalisation will include class A-1, A-2 and B PIK bonds, as well as an equity tranche. The net cash received by the issuer via the issuance of the bonds will be used by the issuer to repay a certain portion of existing loans from the sponsor, which were incurred in connection with the AssetCo's acquisition of the fund investments.

The AssetCo will hold the fund investments as a limited partner for each of the underlying interests. It will transfer cash distributions from the fund investments to the issuer, which will apply the distributions semiannually in accordance with the priority of payments (see *Appendix 2*).

Structure Diagram



Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Transaction Parties

Role	Name	Rating
Issuer	Astrea 9 Pte. Ltd.	Not rated
Sponsor	Astrea Capital 9 Pte. Ltd.	Not rated
Transaction manager	Azalea Investment Management Pte. Ltd.	Not rated
Fund and transaction administrator	Citco Fund Services (Singapore) Pte. Ltd.	Not rated
Account bank	DBS Bank Ltd.	AA-/Stable/F1+
Credit facility provider	Oversea-Chinese Banking Corporation Limited	AA-/Stable/F1+
Foreign-exchange hedge providers	DBS Bank Ltd.	AA-/Stable/F1+
	Oversea-Chinese Banking Corporation Limited	AA-/Stable/F1+
	Standard Chartered Bank (Singapore) Limited	A+/Stable/F1+

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Portfolio Overview

The funds were acquired by the sponsor from its affiliates for the private equity CFO transaction. Most of the funds in the Astrea 9 portfolio are the same funds or funds in the same series as in previous Astrea iterations. The portfolio is expected to be static.

Reinvestments in new funds are not permitted after the transaction closes, while selling fund interests is allowed, as described below, but is not expected under normal circumstances.

The portfolio consists of buyout and growth funds, and is diversified across vintages, regions, managers, funds, underlying holdings and sectors, as seen on the tables below and at the right.

Fund Strategy and Age Breakdown

Fund strategy and age	3 years old 2022 vintage	4 years old 2021 vintage	5 years old 2020 vintage	6 years old 2019 vintage	7 years old 2018 vintage	8 years old 2017 vintage	Total (% of TE)
Buyout	2.6	16.5	22.0	19.0	18.5	4.0	**82.6**
Growth	2.3	6.5	2.4	6.2	-	-	**17.4**
Total	**4.9**	**23.0**	**24.4**	**25.2**	**18.5**	**4.0**	**100**

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

The funds, on average, are less seasoned than in all but one of the previous Astrea transactions, as shown in the *CFO Transaction Comparison* table below, based on weighted-average (WA) age and remaining unfunded capital commitments. The portfolio has been net cash flow positive, and the age of the portfolio's funds and historical data suggest future distributions will generally continue to outstrip contributions.

The portfolio consists of U.S., European and Asian funds, managed primarily by large GPs with established track records. Fitch reviewed each fund and GP in the portfolio using quantitative and qualitative metrics, including reviewing the GP's history, resources, capital-raising success, and previous fund performance based on information available publicly, from third-party data providers and the sponsor.

Overall, the funds in the portfolio have exhibited moderate performance. As shown in the following charts, the GPs in the Astrea 9 portfolio tend to be very large, with extensive experience and success raising capital in recent years, which indicates investor confidence. The funds also tend to be large, and most are subsequent iterations of established strategies. Based on this review of the funds and GPs, Fitch determined that no performance-based haircuts were required beyond the base-case scenario analysis in accordance with Fitch's rating criteria.

The full portfolio is included in *Appendix 1*.

Underlying Investment Sector Breakdown

(As of 31 Dec 24)	(% of NAV)
Information technology	31
Industrials	21
Health care	15
Consumer discretionary	8
Financials	8
Communication services	6
Consumer staples	6
Materials	4
Real estate	1
Utilities	0
Energy	0

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Underlying Portfolio Company Breakdown

(As of 31 Dec 24)	(% of NAV)
Top holding	1.0
Second holding	0.8
Third holding	0.8
Top five holdings	4.0
Top 10 holdings	6.9
Top 20 holdings	11.3

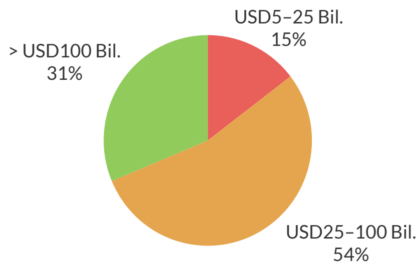
Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Top 10 General Partners

(As of 31 Dec 24)	(% of total exposure)
KKR	6.1
Thoma Bravo	5.9
Warburg Pincus	5.8
PAI Partners	4.9
TA Associates	4.9
CD&R	4.7
Bain Capital	4.4
Triton	3.8
L Catterton	3.5
TPG	3.4
Total	**47.4**

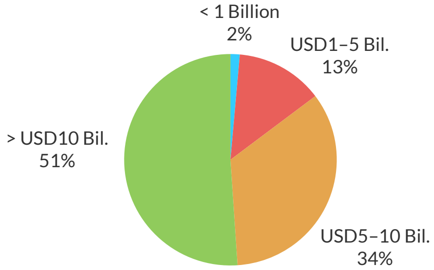
Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Portfolio Funds' Exposure by GP AUM
(As of 31 Dec 24)



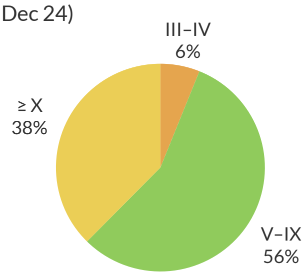
Sources: Fitch Ratings, Preqin

Portfolio Funds' Exposure by Fund Size
(As of 31 Dec 24)



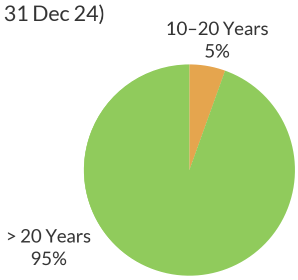
Sources: Fitch Ratings, Preqin

Portfolio Funds' Exposure by Number in Fund Series
(As of 31 Dec 24)



Sources: Fitch Ratings, Preqin

Portfolio Funds' Exposure by GP Track Record
(As of 31 Dec 24)



Sources: Fitch Ratings, Preqin

CFO Transaction Comparison

Name	Astrea 9 Pte. Ltd	Astrea 8 Pte. Ltd	White Rose CFO 2023	Astrea 7 Pte. Ltd.	Astrea VI Pte. Ltd.	MCA Fund III Holding LLC	Nassau 2019 CFO LLC	Astrea V Pte. Ltd.	Astrea IV Pte. Ltd.	Astrea III Pte. Ltd.
Sponsor type	Gov.-Linked	Gov.-Linked	Insurance	Gov.-Linked	Gov.-Linked	Insurance	Insurance	Gov.-Linked	Gov.-Linked	Gov.-Linked
Closing date	. 2025	July 2024	December 2023	May 2022	March 2021	October 2020	September 2019	June 2019	June 2018	June 2016
Total debt issuance (USD Mil.)	780	585	500	755	643	402	263	600	501	510
Debt legal final maturities (years)	15	15	15	10	10	15	15	10	10	10
Capital structure (%) – class LTV and (cumulative LTV)										
A+sf	29.5 (29.5)	26.2 (26.2)	—	19.9 (19.9)	19.6 (19.6)	—	—	—	—	—
Asf	12.3 (41.8)	13.6 (39.8)	50.0 (50.0)	9.2 (29.1)	15.7 (35.3)	40.0 (40.0)	50.0 (50.0)	17.4 (17.4)	35.6 (35.6)	29.8 (29.8)
BBB+sf			—	10.5 (39.6)	—	—	—	—	—	—
BBBsf	6.2 (48.0)		—	—	8.9 (44.2)	17.5 (57.5)	—	17.4 (34.8)	10.0 (45.6)	8.8 (38.5)
BBsf			—	—	—	12.5 (70.0)	20.0 (70.0)	—	—	—
Unrated debt			—	—	—	—	—	—	—	6.1 (44.7)
Equity	52.0	60.2	50.0	60.4	55.8	30.0	30.0	66.2	54.4	55.3
Portfolio										
Collateral NAV (USD Mil.)	1,625	1,471	995	1,905	1,456	575	376	1,324	1,098	1,142
Unfunded commitment (USD Mil.)	304	133	136	250	156	190	79	215	168	201
Total exposure (USD Mil.)	1,929	1,604	1,146	2,155	1,612	764	455	1,539	1,267	1,343
Total commitments	1,609	1,252	918	1,480	1,358	791	741	1,376	1,753	1,557

CFO Transaction Comparison

Name	Astrea 9 Pte. Ltd	Astrea 8 Pte. Ltd	White Rose CFO 2023	Astrea 7 Pte. Ltd.	Astrea VI Pte. Ltd.	MCA Fund III Holding LLC	Nassau 2019 CFO LLC	Astrea V Pte. Ltd.	Astrea IV Pte. Ltd.	Astrea III Pte. Ltd.
Unfunded (as % of total commitments)	19	11	15	17	11	24	11	16	10	13
Unfunded (as % of total exposure)	16	8	12	12	10	25	17	14	13	15
Unfunded (as % of NAV)	19	9	14	13	11	33	21	16	15	18
Weighted average fund age (by total exposure)	5.4	6	6	5	7	4	6	5	7	7
Number of funds	40	38	71	38	35	66	109	38	36	34
Number of co-investments	N.A.	N.A.	2	N.A.	N.A.	5	N.A.	N.A.	N.A.	N.A.
Number of managers	31	27	59	29	28	57	69	32	27	26
Number of portfolio holdings	1,086	1,028	578	982	802	1,336	1,273	862	596	592
Allowed to reinvest	No	No	Yes (less than 20% of commit-ments)	No	No	No	No	No	No	No
Allowed to sell investments (up to % of NAV)	Yes (100%)	Yes (100%)	Yes (100%), but only in case of default or to fully repay the notes	Yes (15%)	Yes (15%)	Yes (35%)	Yes (35%)	Yes (15%)	Yes (10%)	No
Largest fund strategy (% of total exposure)	Buyout (83%)	Buyout (78%)	Buyout (82%)	Buyout (79%)	Buyout (83%)	Buyout (27%)	Buyout (43%)	Buyout (82%)	Buyout (87%)	Buyout (77%)
Second-largest fund strategy (% of total exposure)	Growth (17.4%)	Growth (22%)	Growth (10%)	Growth (21%)	Growth (17%)	Mezzanine (20%)	Mezzanine (41%)	Growth (18%)	Growth (11%)	Growth (23%)
Third-largest fund strategy (% of total exposure)		—	Infra-structure (3%)	—	—	Secondaries (12%)	Venture capital (14%)	—	Private debt (2%)	—
US dollar exposure (as % of NAV)	76.7	80	99	73	80	100	100	82	81	88
Fund domicile: N.A. (%)	66	63	98	55	61	93	100	56	63	67
Fund domicile: Europe (%)	26	20	2	27	23	5	0	22	19	12
Fund domicile: APAC (%)	8	17	0	18	16	2	0	22	18	21

Source: Fitch Ratings, transaction documents

Structural Features

The class A-1 and class A-2 bonds have scheduled call dates of five years, and the class B PIK bonds do not begin to amortise until the class A bonds have been redeemed. However, all classes have longer legal maturities of 15 years, which could be supportive in weathering a potential market downturn. Fitch's ratings address the timely repayment of the bonds at their legal final maturities, not the potential repayment at the earlier scheduled call dates. Capital calls will be funded primarily by distributions from the underlying portfolio.

The reserves accounts will sequentially retain cash distributions for the repayment of the class A-1 and A-2 bonds until the scheduled call date or the distribution date at which the class A reserves accounts cap is met. The structure also has a credit facility sized to 50% of the amount of unfunded commitments to the underlying funds plus an amount that steps down to cover operating expenses and interest on the bonds. These features help mitigate the cyclicality of private equity funds that Fitch considered in its analysis.

Class A Reserves

The principal amount of the class A-1 and A-2 bonds is to be reserved until the bonds' expected call date and funded as provided in the priority of payments. Payments to the reserves accounts will be made on semi-annual distribution dates to provide sufficient funds to fully repay the bonds at year five, as per the table on the right.

If available cash on any distribution date is insufficient to satisfy the reserve amount, the unpaid balance carries forward to subsequent distribution dates until paid through the priority of payments. Amounts transferred to the reserves accounts are capped (the total reserves accounts cap) at USD680 million, or a lower amount if the required amount to settle the principal hedge is less than USD680 million.

Reserves Accounts

Distribution Date	Total Class A Reserve Amount (USDm)
First	68.0
Second	68.0
Third	68.0
Fourth	68.0
Fifth	68.0
Sixth	68.0
Seventh	68.0
Eighth	68.0
Ninth	68.0
10th	68.0
Total	680

Note: Final amounts will be based on FX forwards set at close.
Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Scheduled Call Date Scenarios for Class A Bonds

Balance of reserves account at the scheduled call date	Class A-1 bonds status	Class A-2 bonds status
Less than the principal amount of class A-1 bonds	Not redeemed	Not redeemed
Greater than or equal to the principal of class A-1 bonds but less than the aggregate principal amount of class A-1 and A-2 bonds	Redeemed	Not redeemed
Greater than or equal to the aggregate principal amount of class A-1 and A-2 bonds	Redeemed	Redeemed

Note: Assumes there is no balance drawn on the credit facility.
Source: Astrea 9 Pte. Ltd.

If at end of year five on the scheduled call date of the class A-1 and A-2 bonds, the total balance of the reserves accounts and reserves custody account is at least equal to the principal of the class A-1 bonds and there is no balance drawn on the credit facility, then the class A-1 bonds will be fully redeemed. If the remaining balance is insufficient to redeem all of the principal amount of the class A-2 bonds on the same date as the redemption of the class A-1 bonds, the class A-2 bonds will not be redeemed. However, if at the end of year five on the scheduled call date of the class A bonds, the total balance of the reserves accounts and reserves custody accounts is at least equal to the principal of the class A-1 and A-2 bonds, and there is no balance drawn on the credit facility, then the class A-1 and A-2 bonds will be fully redeemed.

In a transaction default scenario, the class A-1 and A-2 bonds have equal claim on money in the reserves accounts (*pari passu*), with payments made pro rata based on accrued interest and principal amounts outstanding.

Class B PIK Amortisation:

After the redemption of the class A bonds, the principal on the class B PIK bonds receive 90% of available cash on each distribution date, in accordance with clause 9 of the priority of payments.

Prior to the redemption of the class A bonds, the class B PIK bonds may be amortised if the disposal option is utilised or the class B PIK/cumulative maximum LTV ratio is triggered, in accordance with clauses 6 and 10 of the priority of payments, respectively. Pursuant to clauses 6 and 10, the class B PIK bonds will only receive 100% of remaining available cash on a given distribution date once the class A bonds are fully reserved. Fitch views these pre-redemption amortisation features as incrementally supportive of the class B PIK bonds but believes the class B PIK bonds remain exposed to subordination risk given these amortisation features' conditions and the class B PIK bonds' PIK coupon.

Class A Coupon Step-Up and Class B PIK Coupon

The class A-1 and A-2 bonds' coupons are each expected to be fixed-rate liabilities due and payable on a *pari passu*, semi-annual basis. Fitch's modelling considered the adequacy of expected distributions and contingent liquidity to service the rated debts' interest.

If either of the class A bonds is not redeemed in full on its respective scheduled call dates, the applicable interest rate is subject to a one-time 100bp per annum step-up, starting from the respective scheduled call dates.

The class B PIK bonds' coupon will be accrued (paid-in-kind interest) semi-annually. Fitch's modelling highlighted increased leverage in fourth- and third-quartile performance levels due to the accrual of class B PIK bonds interest prior to the redemption of class A bonds. The maximum, projected LTV for the class B PIK bonds in Fitch's launch year scenarios was 78% and 61% in the fourth and third quartile, respectively.

Class A Maximum LTV Ratio

The priority of payments provides for the additional reserving of the class A-1 and A-2 bonds on any distribution date at which the LTV exceeds 50% (maximum LTV ratio), subject to available cash. The purpose of this feature is to de-lever the structure to reduce bondholders' exposure to the risk of portfolio valuation declines or the risk of cash flow exiting the structure and rendering the remaining NAV insufficient to provide future distributions to support the bonds. There is no requirement to sell fund interests upon an uncured breach of the LTV ratio.

LTV is calculated as the total outstanding principal amount of the class A bonds and of all credit facility loans (net of reserves balance) divided by the portfolio NAV. If LTV exceeds the 50% threshold, 100% of the remaining cash flow after payment of amounts due under clauses 1 through 7 of the priority of payments in *Appendix 2* will be paid in accordance with clause 8.

Class B PIK / Cumulative Maximum LTV Ratio

The priority of payments also incorporates a deleveraging mechanism in clause 10 of the priority of payments, beginning on the transaction's first distribution date and calculated on each distribution date. The mechanism is triggered on any distribution date where the cumulative LTV exceeds 55%, after applying available cash in clauses 1 through 9 of the priority of payments. The calculation of the class B PIK/cumulative maximum LTV ratio is equal to the total outstanding principal amount of all classes bonds and of all credit facility loans (net of reserves balances) divided by the portfolio NAV. If the class B PIK/cumulative maximum LTV ratio is exceeded, and the class A-1 and A-2 bonds are still outstanding, 100% of the cash flow goes first to the class A reserves accounts and reserves custody accounts until the class A reserves accounts cap has been met, and thereafter to the repayment of the outstanding principal amount of the class B PIK bonds.

If the class B PIK/cumulative maximum LTV ratio is exceeded, and the class A bonds have been redeemed, 100% of the cash flow goes to the principal amount of the class B PIK bonds.

Credit Facility

The credit facility will be a senior standby multicurrency liquidity facility to be established with Oversea-Chinese Banking Corporation Limited (OCBC: AA-/Stable/F1+) to fund (i) taxes, administrative expenses, management fees, hedging-related payments and interest on the class A-1 and A-2 bonds (payments due under clauses 1 through 4, except for clause 4 (iii), and clause 5 of the priority of payments), and (ii) capital calls in the event of a shortfall in distributions in certain payment periods. The credit facility fully matures upon the earlier of the end of year 15 or the date on which all classes of bonds are fully redeemed (termination date).

The maximum amount available under the facility is USD280 million at issuance. The total amount available to draw under the credit facility is sized in two parts, "A" plus "B". Facility "A" will step down in accordance with the credit facility availability table, while facility "B" will be sized to 50% of the unfunded capital commitments.

Interest on the amount drawn is paid at the rate of the relevant Secured Overnight Financing Rate (SOFR) plus 1.50%. There is an annual 30bp commitment fee on the undrawn portion.

In line with clause 4 of the priority of payments in *Appendix 2*, any cash in the operating account on any distribution date will be used to pay the credit facility up to the lesser of the outstanding loan balance or the full amount of cash in the operating account. Any loan amount outstanding after this payment is repayable on the next distribution date if there is sufficient cash in the operating account. In any event, the full amount of the loan balance must be repaid by the termination date.

OCBC can cancel the commitment or declare the outstanding amount due and payable if there is an event of default (EoD) under the credit facility agreement. Such events include non-payment of loan principal or interest when due, insolvency or non-payment of any debt of the issuer and any EoD under the bonds.

The credit facility provider will be required to be replaced if the provider's rating falls below the lower of 'A-' and 'F1' or the then prevailing rating of the most senior class of outstanding Astrea 9 bonds (credit facility minimum rating requirement), provided the replacement would not cause a downgrade to the then-prevailing rating of the most senior class of outstanding Astrea 9 bonds. The documents provide that the issuer and lender make "commercially reasonable" efforts to affect the replacement within 30 days. These eligibility thresholds and replacement language are in line with Fitch's *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

The amount of liquidity available is sufficient for the projected use of the facility under Fitch's stress scenarios and is in line with other Fitch-rated private equity CFOs. The highest level of utilisation of the facility in Fitch's base case modelling was USD46 million under Fitch's fourth-quartile 2001 launch year. The highest utilisation in Fitch's rating sensitivities was USD70 million under Fitch's 2012 fourth-quartile, 1.3x Capital Call scenario.

Hedging Counterparties

Full principal and semiannual interest on the class A-1 bonds is payable in Singapore dollars, while the class A-2 bonds are payable in US dollars. Furthermore, the fund investments are denominated in US dollars and euros, creating a currency mismatch between Astrea 9's assets and liabilities. These currency mismatches introduce currency risk, for which the issuer will employ hedge agreements to help mitigate exchange-rate volatility that may negatively affect the cash flow needed to fund the required payments under the bonds. These agreements are expected to be with DBS Bank Ltd. (AA-/Stable/F1+), OCBC and Standard Chartered Bank (Singapore) Limited (SCB, A+/Stable/F1+).

Fitch notes that clause 12 of the priority of payments is a "flip clause", which places any termination payments due to a hedge counterparty that is in default in a junior position in the transaction's priority of payments. The purpose of this provision is to mitigate the potential impact caused by the default or non-performance of the counterparty. In case the issuer does not pay a hedge counterparty, the transaction documents include a "non-petition" clause that prevents the counterparty from causing the issuer to file for bankruptcy.

A hedge counterparty will be replaced if its rating falls below the lower of 'A-' and 'F1' or the then prevailing rating of the most senior outstanding class of Astrea 9 bonds (hedge counterparty minimum rating requirement), provided the replacement would not cause a downgrade to the then-prevailing rating of the most senior outstanding class of Astrea 9 bonds. The documents provide that the issuer and hedge counterparty make "commercially reasonable" efforts to affect the replacement within 30 days. These eligibility thresholds and replacement language are in line with Fitch's *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

Credit Facility Availability

Component A - stepdown provision	Amount (USDm)
Years 0–3 of the transaction	130
Years 4–6 of the transaction	100
Year 7 of the transaction through the termination date	40
Component B - % of unfunded	
% of total undrawn capital commitment	50%

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Class A-1 Bonds – Principal Amounts Hedge

To mitigate class A-1 bonds' FX mismatch risk, the issuer will enter into forward contracts to buy Singaporean dollars and sell US dollars to hedge 100% of the principal amount of the class A-1 bonds.

The issuer will take delivery of the expected SGD615 million to fully repay the class A-1 bonds across a series of fixed forwards that will be settled before the scheduled call date. If, for any forward contract, the reserves accounts are funded with less than the amount required to settle the forward contract, the issuer will settle the forward for the amount of US dollars that has been accumulated. For the underfunded US dollar amount, the issuer has the discretion to roll over the hedge by entering into a six-month or longer FX forward transaction with the counterparty. The forward transaction will result in cash flow to the issuer based on the difference between the initial forward transaction versus the new rate of the subsequent forward. There would be a net cash inflow if the US dollar has depreciated, and a net cash outflow if it has appreciated since closing.

At the discretion of the issuer, if the reserves accounts are still not fully funded at year 5.5, the rollover process would be repeated with another six-month FX forward for the underfunded US dollar amount. The FX forward would expire at the next distribution date, and at the issuer's discretion, the process would repeat until the class A-1 bonds are fully repaid.

If the class A-1 reserves account is funded with less than the US dollar amounts required to settle the hedge, the issuer will be required to make a payment to the counterparty to settle the hedge if the US dollar has appreciated against the Singapore dollar compared with the forward rate. The ability to roll the hedge if the reserves are not fully funded at the expected maturity introduces additional currency risk. However, Fitch considers the presence of the liquidity facility to cover shortfalls in the class A-1 reserve amount on the hedge contract settlement date, per clause 2 of the priority of payment, as a key mitigant. Fitch's modelling accounts for potential draws on the facility in the event of a shortfall on the class A-1 bonds hedge contract settlement date and indicates that the maximum utilisation rate of the facility across all launch years is 14% of the drawable amount.

Class A-1 Bonds – Interest Amounts

At closing, the issuer will enter into 10 separate forward contracts with the hedge counterparties in amounts to fully match the 10 semiannual interest payments on class A-1 bonds.

If the class A-1 reserves account is underfunded and the class A-1 bonds are not redeemed at the scheduled call date, the issuer may enter into a six-month forward contract for the interest payment due at year 5.5. If at year 5.5, the reserves accounts are still not fully funded, it will be at the discretion of the issuer to enter into a new six-month forward contract for the interest payment due at the next distribution date and, at the issuer's discretion, continue the process until the class A-1 bonds are fully repaid.

Euro NAV Hedge

Fitch views FX risk arising from the portfolio holdings as manageable, as the bulk of the fund investments provide distributions in US dollars. Of the 40 funds in the portfolio, 10 funds, totalling about EUR365 million of NAV (23.3% of total NAV), call capital and make distributions in euros. To mitigate FX risk posed by the euro-denominated funds (compared with bonds in US and Singaporean dollars), the issuer expects to enter into a series of fixed forward contracts (with fixed forward rates and forward dates) ranging in tenor from six months to six years, to hedge about 70% of the initial euro NAV. The tenors and notional amounts of the euro hedges were set by Azalea to match the manager's projections of euro NAV distributions and are subject to change until closing. This results in about 30% of the initial euro NAV unhedged, or approximately USD117 million of NAV (about 7% of total NAV and 6% of total exposure).

Fully hedging the FX exposure is impossible as the timing and amounts of distributions from private equity funds are uncertain. Not hedging at all would leave Astrea 9 vulnerable to significant FX exposure, but attempting to hedge 100% of NAV could still leave the structure over-hedged and exposed to FX risk if distributions come in lower than projected and the FX rate moves against the structure when it needs to settle the forwards. Fitch thinks hedging a

Euro NAV Hedge

No.	Forward tenor	Euro hedge amount (EURm)
1	0.5 Year	14
2	1.0 Year	14
3	1.5 Year	18
4	2.0 Year	20
5	2.5 Year	22
6	3.0 Year	24
7	3.5 Year	26
8	4.0 Year	24
9	4.5 Year	22
10	5.0 Year	20
11	5.5 Year	18
12	6.0 Year	16
13	6.5 Year	14

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

sufficient portion of the NAV and providing the manager flexibility to hedge further over time if deemed necessary, is a prudent approach.

Any underperformance in the euro-denominated funds would create an additional FX risk, as the structure is required to deliver euros for each foreign exchange hedge as they become due. As discussed in the *Euro Hedge Stresses* section, Fitch conducted stress scenarios to model the sensitivity of the structure to underperformance in European funds and to adverse moves in USD/EUR exchange rates, and the rated bonds passed at their assigned rating levels.

Fund Dispositions

Astrea 9 at its discretion is allowed to sell stakes in the underlying private equity fund interests (disposal option). Proceeds from the sale or disposal of any underlying fund interests will be received in the collection accounts and then swept into the operating accounts.

At each distribution date, net cash proceeds received from a fund disposition will be distributed in accordance with the priority of payments. The portion of fund disposition proceeds remaining after payment of clauses 1 through 5 will be distributed in accordance with clause 6. Clause 6 dictates that any proceeds from fund dispositions will be applied to the reserves accounts of the class A-1 and A-2 bonds, and thereafter to the repayment of the outstanding principal amount of the class B PIK bonds (regardless of whether the class A-1 or A-2 bonds have been redeemed). Fitch views as positive the fact that fund disposition proceeds will be used to reserve or repay principal, as it may allow the manager to realise some of the outstanding NAV if organic distributions come in lower and/or slower than needed to pay Astrea 9's liabilities.

Selling fund interests on the secondary market in a stressed environment would most likely require a steep discount and, in its modelling, Fitch assumed that the fund disposition option was not used.

Reserves-Eligible Investments and Deposits

Similar to prior Astrea transactions, eligible investments and deposits held in various accounts within the structure will be subject to certain requirements. Funds in the reserves accounts may be placed in security instruments, bank deposits or money market funds in accordance with eligibility requirements defined in the transaction documentation. The documentation permits these investments held in reserve to mature as late as the scheduled call date for the respective classes of bonds (five years from transaction launch for eligible investments for the class A-1 and class A-2 bonds), which significantly exceeds the maturity levels contemplated in Fitch's counterparty criteria for eligible (qualified) investments.

The ratings of Astrea 9's class A-1 and A-2 bonds will be capped at the ratings of investments in the reserves accounts or the ratings allowed for investments in the reserves accounts by the transaction documentation, whichever is lower, owing to the significant long-dated exposure bondholders may have to investment counterparties. Therefore, if a security in the reserves accounts is downgraded below the ratings of the class A bonds, the ratings of the bonds may also be downgraded, depending on the materiality of the exposure.

The transaction documents specify that eligible investments for both the class A-1 and A-2 bonds require a rating of at least 'AA-' by Fitch. Bank deposits are required to be invested with banks rated at least 'AA-' by Fitch. The minimum rating requirements are enforced for as long as either tranche of the class A bonds is outstanding. As noted, the transaction documents permit these investments to mature at the scheduled call dates or, if the bonds are not called on the call date, by the next distribution date. Following the redemption of the class A bonds, eligibility requirements decrease to ratings of at least 'A+' by Fitch.

Eligible investments for the reserves accounts include debt obligations or securities, commercial paper, certificates of deposits or similar types of investments that are consistent with the minimum rating and maturity requirements of the reserved class of bonds. The reserves can also include money market funds rated 'AAAmmf' by Fitch.

Capping and linking the ratings of the Astrea 9 bonds to the investments will not affect the bond ratings assigned at launch, since the ratings of the expected eligible investments and bank deposits are at the same level or higher than the ratings of the bonds. However, absent mitigants, in the event of a downgrade to an investment or deposit institution, Fitch's criteria would require the rating on the Astrea 9 bonds to be capped at the downgraded ratings of the investment or institution if the exposure is deemed material.

Eligible Banker's Guarantees

The sponsor (or an entity within the Azalea Group) can request the issuer to substitute uninvested cash balances from the reserves accounts to the requesting entity, subject to approval by the manager, in exchange for eligible banker's guarantees.

Eligible banker's guarantees consist of an unconditional and irrevocable guarantee by the banker's guarantee provider to pay the guaranteed sum upon receipt of a written demand in accordance with the terms of the banker's guarantees.

The maximum term of any eligible banker's guarantees is no later than the business day prior to the scheduled call date of the senior outstanding bonds or, in the event the senior most class is not redeemed on their respective scheduled call date, the next redemption date.

Unless the substituted cash is transferred to the reserves accounts by the substitution party three business days before the banker's guarantee expiry date, the manager will initiate the enforcement process. This timeline is aligned with the three-business-day notice period the banker's guarantee provider requires to enforce the guarantee.

The eligible banker's guarantee provider(s) are expected to be rated at the lower of: (i) the rating of 'AA-' and 'F1' in the case of Fitch (so long as any class A-1 or A-2 bond is outstanding and rated by Fitch); or (ii) the then prevailing ratings by the rating agency of the highest rated class of outstanding bonds.

Eligible banker's guarantee providers that are downgraded below the transaction's rating eligibility criteria must be replaced by the issuer within 60 days, or the cash must be transferred back into the applicable reserves account.

Similar to the eligible investments, the ratings of the expected eligible banker's guarantee providers are higher than the ratings of the bonds, and do not initially affect the bond ratings assigned at launch. However, absent mitigants, in the event of a future downgrade to a banker's guarantee provider, Fitch's criteria would require the rating on the Astrea 9 bonds to be capped at the downgraded ratings of the institution if the exposure is deemed material or not remediated.

Fitch sees the alignment of interest of the transaction's sponsor as the equity holder in the transaction as a further mitigant.

Account Bank Providers

Providers of the various account banks must maintain a rating of at least 'A-' or 'F1' from Fitch so long as any class of bonds is outstanding. Account banks that fall below these rating requirements must be replaced within 60 calendar days. These eligibility thresholds and replacement language are in line with Fitch's *Structured Finance and Covered Bonds Counterparty Rating Criteria*.

Transaction Accounts Overview

Account name	Owner	Bonds have security interest in the account(s)?	Account description
Collection accounts	AssetCo	Yes, via the daily cash sweep to the operating accounts in an enforcement event/following the daily cash sweep.	These accounts will receive any cash distributions from the funds in the structure or from the operating accounts to fund capital calls. Cash from these accounts will be used to fund capital calls and will be swept to the operating accounts on a daily basis.
Operating accounts	Issuer	Yes	Moneys will be swept here on a daily basis from the collection accounts. Any proceeds from credit facility drawdowns will also be deposited to these accounts. Proceeds (in excess of the retained amount) in these accounts will be applied to the priority of payments at each distribution date. Cash in these accounts may be used to satisfy a capital call on the structure.
Operating custody accounts	Issuer	Yes	Custody accounts held in the name of the issuer at the transaction's custodian to hold the eligible investments made from funds in the operating accounts. The eligible investments have minimum rating requirements consistent with class A bond reserves' eligible investments, and can mature no later than the next distribution date.
Reserves accounts	Issuer	Yes	These accounts will receive funds from the priority of payments to hold for ultimate repayment of principal on the class A-1 and A-2 bonds. In the interim, moneys will be used to fund investments in eligible assets.
Reserves custody accounts	Issuer	Yes	Custody accounts used to hold the eligible investments made from funds in the class A-1 and A-2 reserves accounts.
Distributions-in-kind (DIK) custody account	AssetCo	Yes, via liquidation of the DIK on behalf of bondholders, subsequently swept into the operating account in an enforcement event/following the daily cash sweep.	This account will receive any in-kind distributions from the funds in the structure. Funds from this account will be swept to the collection account on a daily basis. This account will only be set up in the future if needed to take in-kind distributions.
DIK custody accounts	Issuer	Yes	Custody account held in the name of the issuer for the safe custody of in-kind distributions received from the portfolio. In-kind distributions may be held here until disposing of the in-kind distributions at a later date, in lieu of disposing the in-kind distributions and depositing the proceeds in the operating account.

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Cash Flow Scenario Analysis

As described in Fitch's criteria, when rating private equity CFOs, the structure's projected performance and distributions over different market cycles are reviewed to assess whether cash flow is sufficient to pay off the rated obligations based on the transaction's structural features.

The performance scenarios for Astrea 9 were constructed based on historical data that matched the characteristics of Astrea 9's portfolio, primarily the strategies of the funds (buyout and growth) and the ages of the funds. Fitch classified each fund's strategy based on the fund's stated strategy, investments and historical cash flow curve, and Fitch's classifications aligned with the sponsor and third party's classifications in all instances.

Fitch then stressed the resilience of the structure to potential underperformance in Astrea 9's underlying funds. In measuring the results of the scenarios, Fitch focused on key metrics, such as the ability to make timely interest and principal payments with respect to the legal final maturity of the rated bonds, total cash flow as a percentage of the transaction NAV, the repayment periods, the use of distributions in the structure and how various structural protections drove performance of the transaction (LTV triggers, credit facility usage and so on).

The key launch year scenarios Fitch ran are displayed in the tables below.

Results

The class A-1 and A-2 bonds demonstrated resilience under Fitch's rating stress scenarios, withstanding fourth-quartile-level performance of the underlying funds across all tested scenarios, consistent with 'Asf' rating stress. Fitch's modelling assumed the class A-1 bonds initial principal amount to be equal to the forward USD equivalent to meet the targeted class A reserve amount of SGD680 million, equal to USD533 million. This amount was based on indicative rates at the time of the analysis. The hedge will be entered into at or around the pricing date.

The change in assumption was to measure the transaction's ability to meet the class A reserves account cap and the SGD forward hedging contract, and ability to repay the class B PIK bonds. This is higher than the initial principal USD equivalent of the class A-1 bonds SGD615 million, equal to USD480 million, and resulted in higher class A-1 bond coupon payments of up to approximately USD25million across Fitch's fourth-quartile launch year scenarios. The class B PIK bonds withstood fourth-quartile-level performance, aligning with a 'Asf' rating level.

Passing a scenario means that all interest payments were timely for the class A bonds, and principal payments were made with respect to the bonds' legal final maturity of 15 years. Under fourth-quartile scenarios, the class A-1 bonds were called on their scheduled call date (fifth year) in nine of the 16 tested launch years. The class A-2 notes were repaid by their scheduled call date in three launch years, with a maximum repayment period of 6.5 years under fourth-quartile stress. The class B PIK bonds achieved full repayment within a maximum of 10 years under the fourth-quartile performance scenario, and 7.5-years under the third-quartile performance scenario.

Launch Year Scenarios — Fourth-Quartile Performance

	Class A-1 Bonds		Class A-2 Bonds			Class B PIK Bonds								
Launch year scenario	Payback period (years)	Remaining collateral (USDm)	Payback period (years)	Remaining collateral (USDm)	Class A-1 and A-2 Combined Max LTV (%)	Payback period (years)	Remaining collateral (USDm)	Max LTV (%)	Distributions (% of initial NAV)	Capital calls (% of initial NAV)	Expenses (% of initial NAV)	Interest (% of initial NAV)	Bonds paid (% of initial NAV)	Equity distributions (% of initial NAV)
2000	5.5	604.42	6.5	456.32	63.80	8	308.33	78.04	104.73	15.35	1.62	13.64	57.41	16.29
2001	5.5	602.42	6.5	534.14	66.17	8.5	221.70	77.72	103.00	14.67	1.69	10.91	57.66	14.10
2002	5	674.51	5	674.51	54.42	6	498.38	63.19	110.53	13.67	1.28	9.71	55.95	28.00
2003	5	675.14	5	675.14	45.37	6	358.22	51.72	123.50	14.15	1.33	9.13	55.61	40.45
2004	6	479.64	6.5	420.14	44.80	10	137.27	51.93	118.18	14.83	1.95	16.58	58.42	29.22
2005	6	584.45	6.5	541.33	44.27	9.5	201.16	51.32	118.57	14.92	1.98	16.84	58.68	29.23
2006	5.5	836.14	6.5	721.62	41.67	8.5	291.36	48.23	125.74	14.42	1.98	15.30	57.95	38.41
2007	5.5	914.75	6.5	737.62	42.00	7.5	392.43	52.62	120.06	15.97	1.84	14.66	57.31	32.03
2008	6	831.62	6.5	520.71	57.32	8	276.96	66.11	104.89	14.60	1.72	12.16	57.09	17.13
2009	5	1115.25	5.5	878.31	44.53	6	698.15	50.88	118.04	13.12	1.53	9.50	55.72	36.08
2010	5	903.59	5.5	788.72	45.59	6.5	490.11	52.19	110.50	14.82	1.72	11.91	56.25	26.45
2011	5	719.64	5.5	584.83	43.72	6.5	470.71	50.98	105.97	13.98	1.48	10.78	56.14	22.74
2012	5	701.96	5.5	642.77	44.39	6.5	459.35	50.56	107.09	14.86	1.50	9.77	56.16	21.81
2013	5	624.70	5	624.70	42.69	6.5	376.03	49.34	104.91	13.43	1.54	11.19	55.97	23.09
2014	5	612.95	5.5	562.26	41.08	7	303.47	48.02	102.99	14.25	1.59	11.98	56.32	19.54
2015	5	668.36	5.5	537.00	45.03	8	279.61	52.77	102.62	15.70	1.78	12.63	56.97	16.94

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Launch Year Scenarios — Third-Quartile Performance

	Class A-1 Bonds		Class A-2 Bonds			Class B PIK Bonds			Uses of Distributions					
Launch year scenario	Payback period (years)	Remaining collateral (USDm)	Payback period (years)	Remaining collateral (USDm)	Class A-1 and A-2 Combined Max LTV (%)	Payback period (years)	Remaining collateral (USDm)	Max LTV (%)	Distributions (% of initial NAV)	Capital Calls (% of initial NAV)	Expenses (% of Initial NAV)	Interest (% of initial NAV)	Bonds Paid (% of Initial NAV)	Equity distributions (% of initial NAV)
2000	5	858.23	5	858.23	44.97	5.5	656.57	53.56	132.00	13.87	1.46	10.58	55.35	50.41
2001	5	636.02	5	636.02	48.17	5.5	563.05	55.54	132.15	15.05	1.39	9.99	55.34	49.49
2002	5	687.01	5	687.01	45.52	6	513.94	53.30	143.55	13.70	1.46	10.77	55.55	61.90
2003	5	776.65	5	776.65	42.49	6	471.36	48.95	159.33	14.53	1.54	10.80	55.57	76.83
2004	5.5	625.59	6	639.72	43.07	7.5	465.11	49.93	162.44	15.43	1.78	13.98	57.06	75.66
2005	6	656.57	6	656.57	41.03	7	493.09	47.56	157.99	16.01	1.70	14.47	56.75	70.26
2006	5	855.00	5.5	778.61	40.28	6.5	628.40	46.69	161.88	16.01	1.63	11.58	55.92	77.09
2007	5	954.69	5.5	872.65	40.29	6	733.94	50.61	145.70	14.36	1.54	11.55	55.89	62.63
2008	5	933.87	5	933.87	51.61	5.5	872.78	60.63	134.69	12.50	1.43	9.62	55.37	54.22
2009	5	1177.20	5	1177.20	44.23	5.5	1046.77	50.57	171.47	14.01	1.51	8.64	55.17	89.12
2010	5	988.19	5	988.19	42.56	5.5	881.48	48.74	160.82	14.30	1.58	10.55	55.33	78.48
2011	5	849.81	5	849.81	40.05	5.5	723.16	46.55	151.57	14.54	1.49	10.68	55.45	69.16
2012	5	779.99	5	779.99	42.46	5.5	675.79	48.79	152.53	14.84	1.49	10.72	55.50	69.85
2013	5	761.44	5	761.44	40.91	5.5	618.05	47.29	150.81	15.27	1.44	10.70	55.47	67.80
2014	5	717.64	5	717.64	39.84	6	573.48	46.06	151.68	16.12	1.52	10.78	55.55	67.71
2015	5	846.15	5.5	775.11	40.68	6.5	805.55	47.16	156.50	15.48	1.66	11.95	56.29	71.81

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

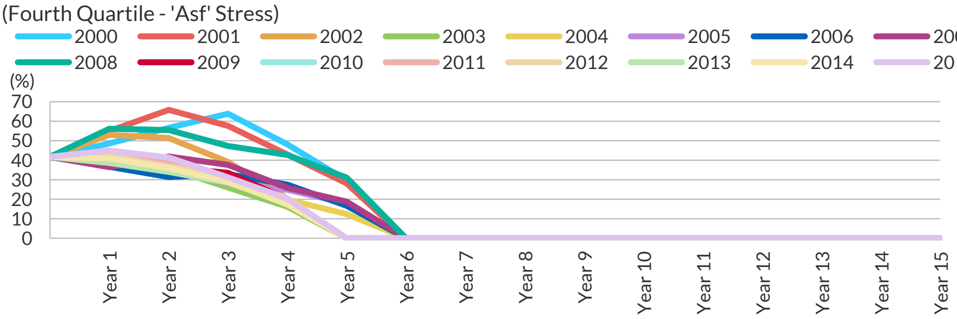
In addition, the disposal option discussed above is a positive qualitative factor to consider, although it was not specifically modelled in the scenarios Fitch ran since it is at the discretion of the manager. By exercising the disposal option, the manager may accelerate realisation of the NAV on the secondary market, but likely at a steep discount in a stressed market.

The charts below show the progression of the LTV ratio over the life of the transaction in different start year scenarios. The 2004 fourth-quartile launch year scenario experienced the highest distributions stress while paying down class A-1, A-2 and B PIK bonds. This is driven by weak distributions and a steep decline in distributions starting from 2008. For class B PIK, this is also due to the accrual of interest prior to the repayment of class A-1 and A-2 bonds which requires longer time frame to de-lever under simulations of stressed distribution.

An additional chart below shows the projected annual progression of the transaction under the 2004 and 2008 launch years scenario.

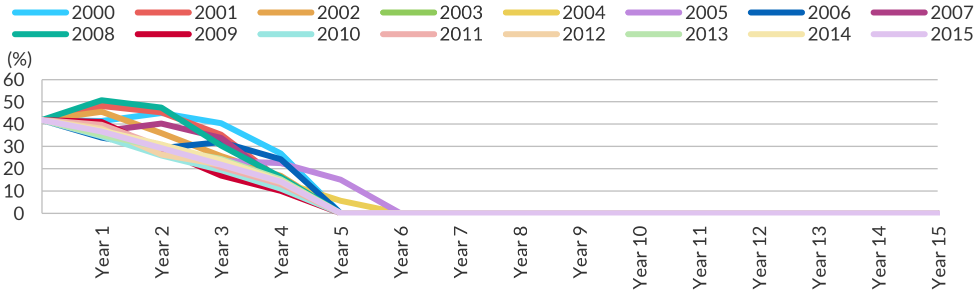
Class A-1 & A-2 LTV Progression in Stress Scenarios: by Start Year Scenario

(Fourth Quartile - 'Asf' Stress)



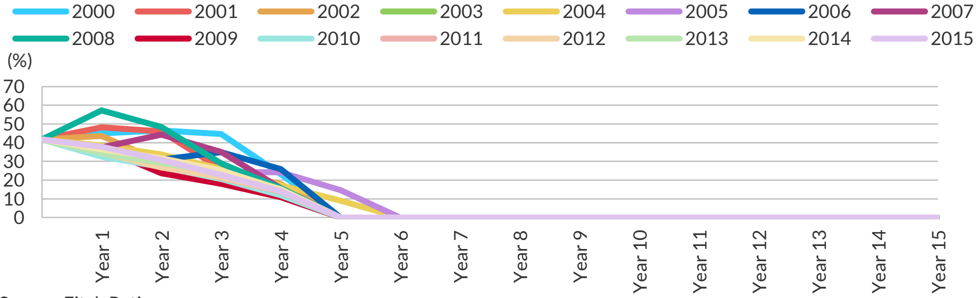
Source: Fitch Ratings

Class A-1 & A-2 LTV Progression in Stress Scenarios: by Start Year Scenario
(Third Quartile - 'BBBsf' Stress)



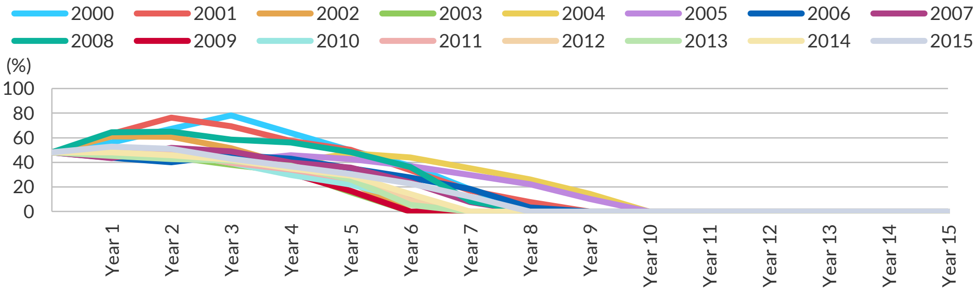
Source: Fitch Ratings

Class A-1 & A-2 LTV Progression in Stress Scenarios: by Start Year Scenario
(All Quartile - 'BBsf' Stress)



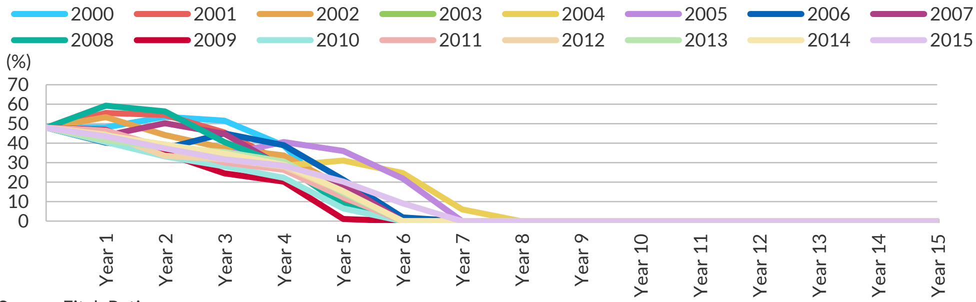
Source: Fitch Ratings

Class B LTV Progression in Stress Scenarios: by Start Year Scenario
(Fourth Quartile - Asf' Stress)



Source: Fitch Ratings

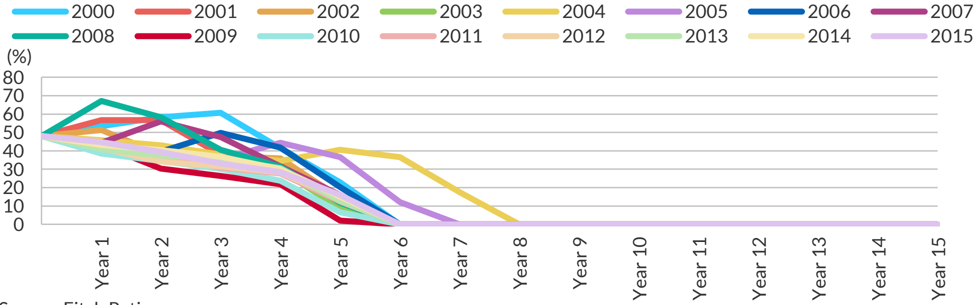
Class B LTV Progression in Stress Scenarios: by Start Year Scenario
(Third Quartile - 'BBBsf' Stress)



Source: Fitch Ratings

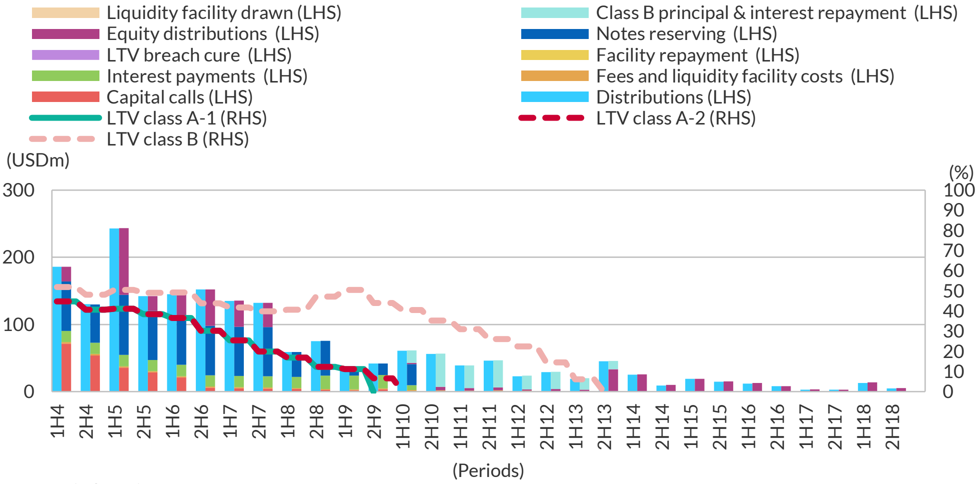
Class B LTV Progression in Stress Scenarios: by Start Year Scenario

(All Quartile - 'BBsf' Stress)



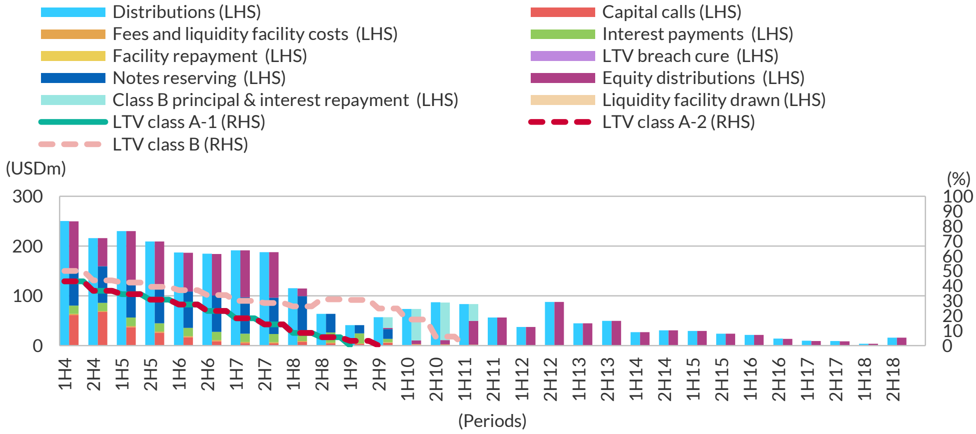
Source: Fitch Ratings

2004 Launch Year - Fourth Quartile - Use of Distributions



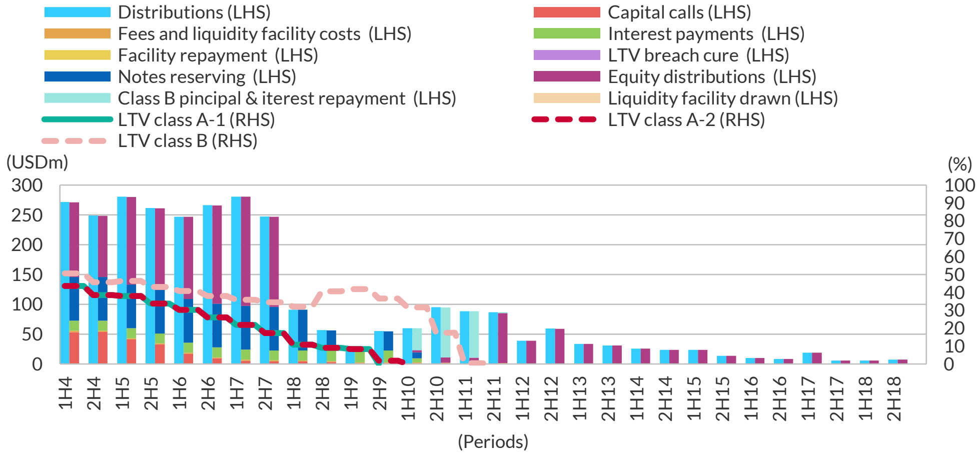
Source: Fitch Ratings

2004 Launch Year - Third Quartile - Use of Distributions



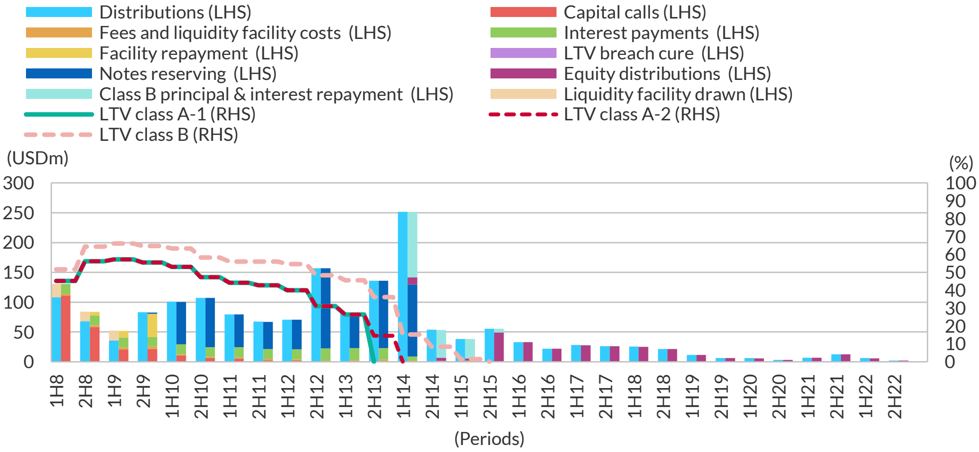
Source: Fitch Ratings

2004 Launch Year - All Quartile - Use of Distributions



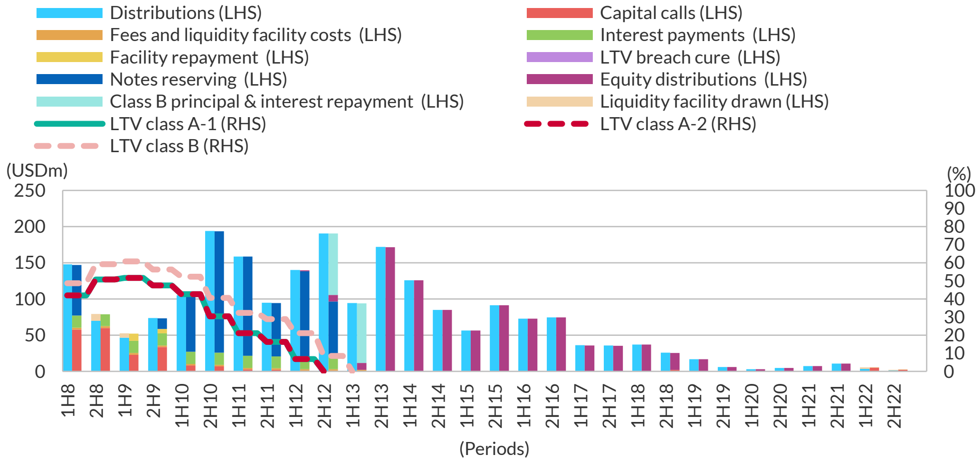
Source: Fitch Ratings

2008 Launch Year - Fourth Quartile - Use of Distributions



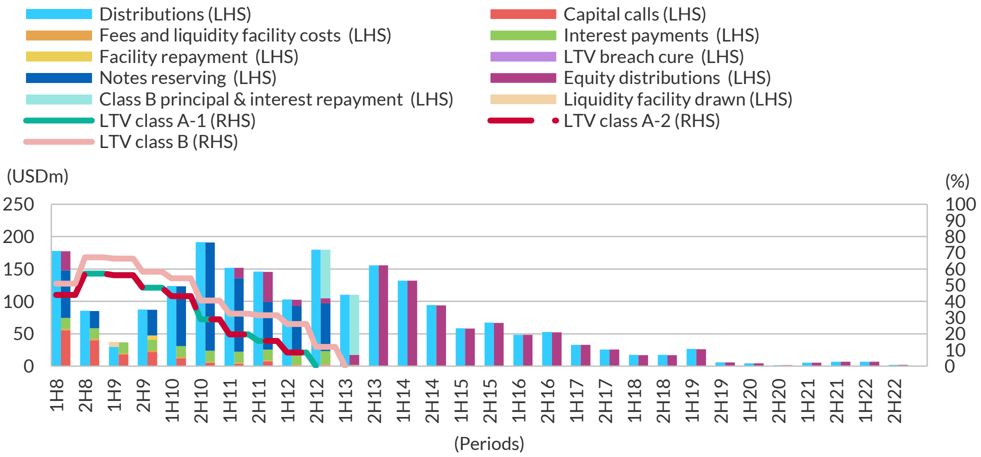
Source: Fitch Ratings

2008 Launch Year - Third Quartile - Use of Distributions



Source: Fitch Ratings

2008 Launch Year - All Quartile - Use of Distributions



Source: Fitch Ratings

Euro Hedge Stress

Fitch considered the impact of potential FX fluctuations on the structure given the portfolio's exposure to European funds that distribute NAV in euros. As outlined in the criteria, Fitch's private equity CFO cash flow modelling incorporates FX stress scenarios for any unhedged exposure within a portfolio. The scenarios are incorporated into Fitch's base case scenarios and sensitivity analyses, and are based on stress assumptions for currency movements, as outlined in Fitch's *Foreign-Currency Stress Assumptions for Residual Foreign-Exchange Exposures in Covered Bonds and Structured Finance Criteria*.

The FX movements are applied to periodic cash flow, factoring in the private equity CFO's hedges. For this rating analysis, the unhedged euro exposure represents about USD117 million equivalent, or 7% of NAV.

Valuations

Private equity fund valuations are generally made available quarterly on an unaudited basis and annually on an audited basis. Fund managers apply various valuation methods (discounted cash flow analysis, multiple analysis and so on) to the underlying holdings of the funds. Valuations are made as of a certain date and are reported to the limited partners a few months following the valuation reference date. Valuation methods can vary from fund to fund, as managers have discretion on the applied techniques. However, these valuations are prepared in accordance with IFRS or generally accepted accounting principles in the US or elsewhere.

The initial valuation of Astrea 9 was based on the reported NAVs of the funds as of the latest reported NAV valuation date, 31 December 2024. The NAV valuations for each fund were then adjusted for any capital calls and distributions made between the valuation date and June 2025. Between the NAV valuation date of 31 December 2024 and June 2025, public markets exhibited volatility and the transaction's NAVs may have depreciated. Fitch assessed the potential depreciation in the value of the portfolio using public market valuations as a proxy, as described in Fitch's criteria report. Taking into account the recovery as of the public markets as of the analysis and the net cash held in reserve from the portfolio, Fitch expects that LTVs at the first distribution date will remain in line with the initial LTVs. However, ongoing market volatility may expose future valuations to incremental depreciation.

Further valuations of the structure's NAV will be made at each determination date based on the most recent audited or unaudited NAVs provided by the underlying GPs. The valuations provided by each GP will be adjusted for any distributions (subtracted from NAV) and capital calls (added to NAV) made between the reference date of the GP's valuation and the distribution date of the structure. Recording the NAVs of the underlying funds and then building those into the overall PE CFO NAV is the responsibility of the transaction manager. The structure's NAV will be reconciled to the underlying funds' capital accounts during the annual audit of the structure.

Liquidity Analysis

Fitch-reviewed liquidity coverage levels remained adequate and in line with those of some previous transactions at launch. The liquidity analysis was created using actual cash flow provided by the sponsor for the underlying portfolio from 2Q24 to 2Q25. The scenario assumes a full interest expense liability for the prospective note ratings.

Astrea 9's liquidity position is adequate. Fitch expects the transaction's liquidity position to improve overtime as distributions increase and capital calls decrease due to the seasoning of the portfolio following the transaction's launch.

Astrea 9's Estimated One-Year Liquidity Profile

Item/calculation	Item description	Amount (USDm unless specified otherwise)
A	Distributions over one-year period ending June 2025	169
B	Liquidity facility part "A"	130
C	Liquidity facility part "B"	155.5
D = A+B+C	Total liquidity sources	419
E	Capital calls over one-year period ending Jun. 2025	136
F	Transaction pro forma fees and expenses for first year	6
G	Transaction pro forma bond interest for first year	36
H = E+F+G	Total liquidity needs	178
I = A-E	Portfolio net cash flow	33
J = A/E	Portfolio liquidity coverage	1.2x
K = D-H	Transaction net liquidity	241
L = D/H	Transaction liquidity coverage	2.4x

Source: Fitch Ratings, Azalea

Fitch analysed the sensitivity of Astrea 9's transaction liquidity coverage (item L in the preceding table) by increasing and decreasing the transaction's capital calls and distributions over the latest 12-month period. The analysis demonstrated that the transaction's liquidity coverage remained resilient under the most stressful scenarios. Under the most stringent scenario, which assumed a simultaneous 75% decline in distributions and a 75% increase in capital calls, the transaction had sufficient liquidity to cover expenses.

Liquidity Sensitivity Analysis

Liquidity sensitivity analysis (As of Dec. 31, 2024)		Distributions										
		-75%	-50%	-25%	-10%	-5%	0%	5%	10%	25%	50%	75%
Capital calls	75%	1.0	1.2	1.3	1.4	1.5	1.5	1.5	1.6	1.6	1.8	1.9
	50%	1.2	1.4	1.5	1.6	1.7	1.7	1.7	1.8	1.9	2.0	2.2
	25%	1.4	1.6	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.4	2.6
	10%	1.5	1.7	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.6	2.8
	5%	1.6	1.8	2.0	2.2	2.2	2.3	2.3	2.4	2.5	2.7	3.0
	0%	1.6	1.9	2.1	2.3	2.3	2.4	2.4	2.4	2.6	2.8	3.1
	-5%	1.7	2.0	2.2	2.3	2.4	2.4	2.5	2.5	2.7	2.9	3.2
	-10%	1.8	2.0	2.3	2.4	2.5	2.5	2.6	2.7	2.8	3.1	3.3
	-25%	2.0	2.3	2.6	2.8	2.9	2.9	3.0	3.0	3.2	3.5	3.8
	-50%	2.7	3.0	3.4	3.7	3.7	3.8	3.9	4.0	4.2	4.6	5.0
	-75%	3.8	4.4	5.0	5.3	5.4	5.5	5.6	5.7	6.1	6.6	7.2

Source: Fitch Ratings, Azalea

The Manager

Fitch considers Azalea suitably qualified, competent and capable of executing its transaction functions as the investment manager of Astrea 9.

Azalea's management team has extensive experience and institutional knowledge in the private equity sector, and it draws on and benefits from its connection with Temasek. Temasek and its affiliates have been investing in private equity funds for over two decades and remain active in this space. Additionally, Temasek and its affiliates have successfully launched a number of prior Astrea vehicles. However, Temasek and its affiliates are not providing financial support to the bonds or the transaction. As of 31 December 2024, Azalea had total assets under management of USD11 billion.

The investment manager will manage the fund investments, administer key fund matters, supervise the administration of assets and bonds, make drawdowns from the credit facility as needed, manage cash flow in accordance with the priority of payments, manage investor relations and reporting to stakeholders, hedge non-US dollar assets and obligations, and perform various other administration and management services with respect to the AssetCo and the issuer.

The manager will enter into a management agreement with the issuer and will receive a 18.75bp management fee for performing such services, distributed semiannually per clause (3) of the priority of payments.

Either the issuer or the AssetCo can terminate the services of Azalea as manager for a termination event as specified in the management agreement, such as breach of duty or bankruptcy. Absent the occurrence of a specific termination event, either the issuer or the AssetCo can terminate the manager with 90 days' written notice. Upon any termination of Azalea from the role of manager, the issuer and AssetCo will use commercially reasonable efforts to appoint a substitute manager that agrees to perform the requisite duties and whose appointment would not result in a downgrade to the then-prevailing rating of the most senior class of bonds. Upon receipt of the termination notice, the manager will use commercially reasonable efforts to assist the issuer and AssetCo in the appointment of a substitute.

Alternatively, Azalea may choose to resign from the role of manager by providing 90 days' written notice; however, the resignation will not be effective until a replacement that will not result in a downgrade to the then-prevailing rating of the most senior class of bonds is found. In the event the AssetCo does not appoint a substitute within 90 days of the resignation date, Azalea may select as substitute an entity willing to perform the requisite duties and whose selection will not result in a downgrade of the then-prevailing rating of the most senior class of bonds. Fitch believes these terms provide a sufficient procedural framework to find a suitable manager in the unlikely event it should become necessary.

Alignment of Interests

Astrea Capital 9 is expected to hold all the equity interests in Astrea 9 as of the settlement date and intends to maintain its equity position. As the owner of the equity, the sponsor will bear any losses of the structure prior to bondholders, providing for the alignment of interests. The sponsor is allowed to sell the equity position, but this is not currently expected.

Security and Bankruptcy Remoteness

Bondholders, credit facility and hedge counterparties are secured by:

- A first fixed charge by the issuer over its shares in the AssetCo and the dividends in respect of those shares;
- A first fixed charge by the issuer over its bank accounts and custody accounts;
- An assignment (as security) of the issuer's rights under the shareholder loan agreement between the issuer and the AssetCo, respectively, and each eligible banker's guarantee; and
- A first floating charge by the issuer of its undertaking and all its assets.

Fitch has not yet received and reviewed a legal opinion on enforceability related to the transaction; this is expected to be issued at closing.

If the legal opinion Fitch receives is not in line with its criteria, this could lead to final ratings different from the expected ratings noted in this report.

The Model

Fitch performed the cash flow analysis of the structure using its proprietary model to forecast hypothetical portfolio cash flow using historical private equity data. Private equity data were sourced from a third-party data provider and covered all quartiles of funds with vintages ranging from 1990 to 2025. The dataset encompassed buyout and growth to parallel the underlying breakdown of the Astrea 9 portfolio. Major data points driving the analysis include historical capital calls, historical distributions, and historical NAV appreciation and depreciation. The historical data within each dataset were extrapolated to simulate the average historical cash flow of a representative private equity fund. The historical cash flow were built up, as described in the *Cash Flow Scenario Analysis* section, to forecast the cash flow of Astrea 9's portfolio of private equity holdings.

The model applied the cash flow, as described above, to the priority of payments (see *Appendix 2*) to simulate the performance of the transaction.

Additionally, the model allowed hypothetical launch dates for the transaction to forecast performance if Astrea 9 was launched during various market cycles. This analysis used observed historical cash flow where available and applied these to the underlying portfolio based on the PE fund age and strategy profile of Astrea 9's holdings. This model provided the ability to run the analyses described in the *Cash Flow Scenario Analysis* section.

Fitch reviewed each underlying fund to determine the most appropriate asset class mapping relative to the sponsor-provided classification and the third-party cash flow dataset. Fitch mapped each fund to the most relevant strategy to align with the performance cohorts that drive Fitch's modelling, using historical cash flow and information provided by the sponsor and other third parties. In all cases, Fitch's strategy classifications aligned with those of the sponsor or third parties. Furthermore, Fitch did not find instances where data were insufficient to appropriately map them to relevant historical proxy data. Therefore, Fitch did not apply haircuts to the NAV and unfunded commitments of underlying funds in its base-case cash flow analysis.

Surveillance of Transaction

Fitch relied on information on the underlying funds for its analysis and will continue to do so for the ongoing surveillance of Astrea 9. Fitch will also receive monthly and semiannual reporting from the issuer through the life of the transaction, which will include cash flow (distributions, capital calls and so on) and valuations for the underlying portfolio, LTV calculations and other information on the transaction's financial profile.

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Actions/Downgrades

- Fitch expects to convert the expected ratings to final ratings, subject to receipt of final transaction portfolio composition, documentation and opinions consistent with initial issuer representations. Legal opinions or material changes to the draft documentation, inconsistent with initial issuer representations, may result in a downgrade of the ratings on the bonds.

- The class A-1 bond ratings may be downgraded if cash flow materialises at levels lower than modelled in Fitch's stress scenarios. The class A-1 bonds would be fully repaid assuming a 15% distribution haircut, with approximately USD479 million of collateral value remaining in the worst launch year. The class A-1 bonds did not fail any fourth-quartile rating sensitivities.

- The class A-2 bond ratings may be downgraded if cash flow materialises at levels lower than modelled in Fitch's stress scenarios. The class A-2 bonds would be fully repaid assuming a 15% distribution haircut, with approximately USD100 million of collateral value in the worst launch year.
- The class B PIK bond ratings may be downgraded if cash flow materialises at levels lower than modelled in Fitch's stress scenarios. The class B PIK bonds would be fully repaid assuming a 15% distribution haircut, with approximately USD351 million of collateral value in the worst third-quartile launch year. Fitch does not expect this in the near-term absent a material increase in LTV given the bonds' rating stability in Fitch's ratings sensitivities.
- A material decline in NAV that, in Fitch's view, would indicate insufficient forthcoming cash distributions to support the bonds could also lead to rating downgrades. The class A-1 bonds did not exhibit sensitivity in Fitch's 30% haircut scenario. The class A-2exhibited sensitivity in only Fitch's 30% scenario, and if materialised could result in a downgrade. The class B PIK bonds were resilient in the third-quartile rating sensitivity scenarios, and may be downgraded if NAV declines in excess of Fitch's rating sensitivities and/or a material increase in LTV were to materialise.
- Ratings of the class A-1 and A-2 bonds may be downgraded if they fail Fitch's 'Asf' modelling scenario on a sustained basis.
- Ratings of the class B PIK bonds may be downgraded if they fail Fitch's 'BBBsf' modelling scenario on a sustained basis. Fitch does not expect this in the near-term absent a material increase in LTV given the bonds' rating headroom to the model-implied results.
- Ratings of the class A-1 and A-2 bonds may be downgraded if the ratings of any of the eligible investments, bank deposits or banker's guarantees in the reserves accounts are downgraded below 'AA-'.

Factors that Could, Individually or Collectively, Lead to Positive Rating Actions/Upgrades

- Fitch has an 'Asf' category rating cap for PE CFOs. Positive rating sensitivities are therefore not applicable for class A-1 bonds, absent the bonds being fully reserved by eligible investments, bank deposits or banker's guarantees rated 'AA-'.
- The rating of the class A-2 bonds may be upgraded if they continue to pass Fitch's 'Asf' modelling scenario, with a larger cushion, and the LTV ratios decrease materially.
- The rating of the class B PIK bonds may be upgraded if they continue to pass Fitch's 'Asf' modelling scenario, with a larger cushion, and the LTV ratios decrease materially. However, material deleveraging is not expected in the near term given the PIK coupon of the bonds.

Rating Assumptions Sensitivities

Fitch runs a range of sensitivity analyses on key input parameters to examine the rating stability of each rated bond. The objective of this stress testing is not to eliminate rating migration through unrealistically conservative assumptions but, rather, to test the rating impact of changes in input parameters.

Fitch reviewed the impact on the rating for the following sensitivities.

- Rating sensitivity to NAV: Portfolio NAV immediately reduced by 10%, 20% and 30%.
- Rating sensitivity to fund distributions: Portfolio-level fund distributions reduced by 5%, 10% and 15% in each period. For purposes of calculating the ending-period NAV for each period, the full modelled distributions will be considered before reducing the cash flow generated by the percentages listed above.
- Rating sensitivity to fund capital calls: Portfolio-level fund capital calls increased by 10%, 20% and 30%.

The table below shows the modelling results under the base-case scenarios (the initial rating scenarios) and under the various sensitivities. The modelling results are generated at the rating category level (i.e. 'Asf', not 'A+sf'), and the final rating may be adjusted up or down from the model-implied rating based on other qualitative factors as described in the rating criteria.

Model-Implied Ratings' Sensitivity to Assumptions

	Class A-1	Class A-2	Class B PIK
No sensitivity	Asf	Asf	Asf
Capital call multiplier - 1.1x	Asf	Asf	Asf
Capital call multiplier - 1.2x	Asf	Asf	Asf
Capital call multiplier - 1.3x	Asf	Asf	Asf
Capital call multiplier - 0.9x	Asf	Asf	Asf
Capital call multiplier - 0.8x	Asf	Asf	Asf
Capital call multiplier - 0.7x	Asf	Asf	Asf
Distribution haircut - 5%	Asf	Asf	Asf
Distribution haircut - 10%	Asf	Asf	BBBsf
Distribution haircut - 15%	Asf	Asf	BBBsf
NAV haircut - 10%	Asf	Asf	Asf
NAV haircut - 20%	Asf	Asf	BBBsf
NAV haircut - 30%	Asf	BBBsf	BBBsf

Source: Fitch Ratings

Criteria Application and Data Adequacy

Criteria Application

Fitch applies the *Private Equity Collateralized Fund Obligations Rating Criteria* as its sector-specific criteria under the overarching framework provided by the *Global Structured Finance Rating Criteria*, which is the master criteria for the sector. The *Structured Finance and Covered Bonds Counterparty Rating Criteria* and the *Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum* outline Fitch's approach to counterparty risk that is relevant for the ratings. The *Covered Bonds Rating Criteria* and *Fitch's Foreign-Currency Stress Assumptions for Residual Foreign-Exchange Exposures in Covered Bonds and Structured Finance – Supplementary Data File* provide the framework for Fitch's analysis of the foreign-currency exposure for the ratings. See the Applicable Criteria on page 2.

Data Adequacy

Fitch used historical PE fund performance data from a well-known third-party data provider as the timing and size of the cash flow is uncertain. The data cover all performance quartiles of buyout, mezzanine, energy, secondaries, growth, venture, special situations, real estate, natural resources and debt, with vintages ranging from 1990 to 2024 to model expected distributions, capital calls and NAVs of the private equity funds.

Appendix 1: Portfolio Composition

Astrea 9 Pte. Ltd
(As of 31 Dec 24)

No.	Funds	Vintage	Geography	Strategy	Commitment (USDm)	NAV (USDm)	% of NAV	Undrawn capital commitments (USDm)	Total exposure (USDm)	% of total exposure
1	AdventInternational GPE IX-G Limited Partnership	2019	U.S.	Buyout	45.0	54.7	3.4	2.3	57.0	3.0
2	AEA Investors Fund VII LP	2019	U.S.	Buyout	30.0	26.8	1.6	2.3	29.1	1.5
3	American Securities Partners VIII, L.P.	2019	U.S.	Buyout	45.0	52.6	3.2	12.1	64.7	3.4
4	Bain Capital Fund XIII, L.P.	2021	U.S.	Buyout	45.0	42.4	2.6	8.2	50.6	2.6
5	Carlyle Partners VII, L.P.	2018	U.S.	Buyout	25.0	28.5	1.8	1.0	29.5	1.5
6	Clayton, Dubilier & Rice Fund X, L.P.	2017	U.S.	Buyout	40.0	35.7	2.2	5.7	41.4	2.1
7	Clayton, Dubilier & Rice Fund XI, L.P.	2020	U.S.	Buyout	45.0	41.7	2.6	7.8	49.5	2.6
8	Genstar Capital Partners X, L.P.	2021	U.S.	Buyout	30.0	31.4	1.9	1.5	32.9	1.7
9	Harvest Partners VIII Parallel, L.P.	2019	U.S.	Buyout	40.0	38.1	2.3	3.7	41.8	2.2
10	KKR North America Fund XIII SCSP	2021	U.S.	Buyout	50.0	40.5	2.5	16.9	57.4	3.0
11	L Catterton IX Offshore, L.P.	2020	U.S.	Buyout	35.0	35.1	2.2	5.0	40.1	2.1
12	Littlejohn Fund Vi-A, L.P.	2019	U.S.	Buyout	30.0	32.3	2.0	13.1	45.4	2.4
13	New Mountain Partners Vi, L.P.	2020	U.S.	Buyout	35.0	46.9	2.9	1.6	48.5	2.5
14	Onex Partners V LP	2018	U.S.	Buyout	45.0	51.5	3.2	5.7	57.2	3.0
15	Providence Equity Partners VIII-A L.P.	2018	U.S.	Buyout	25.0	30.1	1.9	3.7	33.8	1.8
16	Silver Lake Partners VI, L.P.	2020	U.S.	Buyout	50.0	57.1	3.5	5.1	62.2	3.2
17	Thoma Bravo Fund XIV-A, L.P.	2020	U.S.	Buyout	50.0	55.5	3.4	8.2	63.7	3.3
18	Thoma Bravo Fund XV-A, L.P.	2022	U.S.	Buyout	40.0	40.8	2.5	9.4	50.2	2.6
19	Thomas H. Lee Parallel Fund IX, L.P.	2021	U.S.	Buyout	40.0	25.5	1.6	16.7	42.2	2.2
20	TPG Partners VIII, L.P.	2019	U.S.	Buyout	50.0	59.1	3.6	6.4	65.5	3.4
21	A10 USD Feeder L.P.	2020	Europe	Buyout	50.0	51.8	3.2	0.9	52.7	2.7
22	Bain Capital Europe Fund V, SCSP	2018	Europe	Buyout	26.0	32.7	2.0	1.7	34.4	1.8
23	BC European Capital X-3 LP	2017	Europe	Buyout	31.2	32.7	2.0	3.4	36.1	1.9
24	Carlyle Europe Partners V, S.C.SP.	2018	Europe	Buyout	26.0	19.6	1.2	4.8	24.4	1.3
25	CVC Capital Partners VIII (A) L.P.	2020	Europe	Buyout	51.9	56.1	3.5	2.1	58.2	3.0
26	L Catterton Europe V SLP	2021	Europe	Buyout	26.0	18.0	1.1	9.2	27.2	1.4
27	Nordic Capital X Alpha, L.P.	2020	Europe	Buyout	36.4	44.8	2.8	5.7	50.5	2.6
28	PAI Europe VII	2018	Europe	Buyout	36.4	42.7	2.6	4.5	47.2	2.4
29	PAI Partners VIII-1 Global SCSP	2021	Europe	Buyout	46.7	19.0	1.2	28.5	47.5	2.5
30	Permira VII L.P.1	2019	Europe	Buyout	46.7	53.9	3.3	6.1	60.0	3.1
31	Triton Fund V L.P.	2018	Europe	Buyout	51.9	59.3	3.6	14.8	74.1	3.8
32	Hahn & Company III-S L.P.	2018	Asia	Buyout	40.0	55.1	3.4	1.8	56.9	2.9
33	KKR Asian Fund IV SCSP	2021	Asia	Buyout	50.0	34.9	2.1	25.8	60.7	3.1
34	Insight Partners (Cayman) XII, L.P.	2021	U.S.	Growth	35.0	30.6	1.9	4.6	35.2	1.8

Astrea 9 Pte. Ltd
(As of 31 Dec 24)

No.	Funds	Vintage	Geography	Strategy	Commitment (USDm)	NAV (USDm)	% of NAV	Undrawn capital commitments (USDm)	Total exposure (USDm)	% of total exposure
35	K5 Private Investors, L.P.	2021	U.S.	Growth	40.0	36.6	2.3	12.5	49.1	2.5
36	TA XIII-B, L.P.	2019	U.S.	Growth	40.0	49.0	3.0	3.4	52.4	2.7
37	TA XIV-B, L.P.	2021	U.S.	Growth	40.0	39.1	2.4	2.3	41.4	2.2
38	Warburg Pincus Global Growth 14, L.P.	2022	U.S.	Growth	40.0	26.3	1.6	18.1	44.4	2.3
39	Warburg Pincus Global Growth, L.P.	2019	U.S.	Growth	50.0	62.4	3.8	4.4	66.8	3.5
40	Hillhouse Focused Growth Fund V Feeder, L.P.	2020	Asia	Growth	50.0	34.3	2.1	12.7	47.0	2.4
Total		**2019**		**1,609.2**	**1,625.2**	**100.0**	**303.7**	**1,928.9**	**100.0**	

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Appendix 2: Terms of Bonds

Priority of Payments

Unless and until an enforcement event occurs, the payments to be made on each distribution date from the available cash flow (defined below) of the issuer as of the distribution reference date relating to such distribution date shall be made in the following order of priority:

1. Payment of taxes (if any) of the issuer and the asset-owning companies and expenses (other than those provided for in clauses 2 through 13 of the priority of payments) up to an aggregate cap of USD0.9 million per distribution period (which will be proportionately adjusted for a distribution period that is longer or shorter than six months, the "clause 1 cap").
2. Payment of amounts due and payable to the hedge counterparty under any hedge agreement in respect of swap transactions entered into by the issuer (save for the amounts payable under clause 12).
3. Manager fees.
4. Payment for the following uses relating to the credit facility agreement in the following order:
    a. credit facility commitment fees;
    b. credit facility interest expense and any other payables; and
    c. credit facility principal repayment.
5. Payment of unpaid accrued interest on the class A-1 and A-2 bonds on a pari passu and pro-rata basis.
6. If net cash proceeds are received from sale or disposal of fund investments pursuant to the exercise of the disposal option, payment of 100% of cash flow remaining after clauses 1 through 5:
    a. So long as any class A-1 or class A-2 bond is outstanding, to the reserves accounts until the total reserves accounts cap (including eligible banker's guarantees) has been met, and thereafter to the repayment of the outstanding principal amount of the class B PIK bonds (regardless of whether the class A-1 or A-2 bonds have been redeemed); or
    b. upon and after full redemption of all class A-1 and A-2 bonds, to the repayment of the outstanding principal amount of the class B PIK Bonds,

In either case, until the amount so paid under this clause 6 is equal to (but not exceeding) the total amount of net cash proceeds so received.

7. Payment to the reserves accounts for the following uses in the following order:
    a. Payment for the amount of any losses realised on investments held in the reserves custody account until such losses have been recouped;
    b. Payment for the unpaid reserve amount applicable to such distribution date; and
    c. Payment for the reserve amount applicable to such distribution date.

Until the total balance in the reserves accounts (including, for this purpose, the total amount of all eligible banker's guarantees then in force) and the reserves custody accounts has met the reserves accounts cap:

8. If the class A maximum LTV ratio of 50% has been exceeded, payment of 100% of cash flow remaining after clauses 1 through 7 to the reserves accounts until the lower of (i) the total balance in the reserves accounts (including, for this purpose, the total amount of all eligible BGs then in force) and the reserves custody accounts has met the reserves accounts cap or (ii) the class A maximum LTV ratio is no longer exceeded.

9. Upon and after full redemption of all class A-1 and A-2 bonds, payment of 90% of cash flow remaining after clauses 1 through 8 to the repayment of the outstanding principal amount of the class B PIK bonds.

10. If the class B PIK maximum LTV ratio has been exceeded, payment of 100% of cash flow remaining after clauses 1 through 9:

    i. so long as any class A-1 or A-2 bond is outstanding, to the reserves accounts until the total balance in the reserves accounts (including, for this purpose, the total amount of all eligible BGs then in force) and the reserves custody accounts has met the reserves accounts cap, and thereafter to the repayment of the outstanding principal amount of the class B PIK bonds (regardless of whether the class A-1 or A-2 bonds have been redeemed); or

    ii. upon and after full redemption of all class A-1 and A-2 bonds, to the repayment of the outstanding principal amount of the class B PIK bonds.

In either case, until the class B PIK maximum LTV ratio is no longer exceeded.

11. Administrative expenses in excess of the clause 1 cap and any other expenses.

12. Payment of amounts due and payable to any hedge counterparty under any hedge agreement in respect of the early termination of swap transactions entered into by the issuer where such early termination is due to an event of default, with respect to which such hedge counterparty is the defaulting party (as defined in such hedge agreement) or a termination event (as defined in such hedge agreement) with respect to which such hedge counterparty is the affected party (as defined in such hedge agreement).

13. Payment of 100% of the cash flow remaining after clauses 1 through 12 of the priority of payments to the equity investor(s).

Provided always that:

a. All capital calls will be paid first from the total cash balance in the operating accounts when due (even if such due date falls on a distribution date);

b. for any taxes or administrative expenses of any of the issuer and the asset-owning companies due on any date that is not a distribution date, such taxes or expenses will be paid from the total cash balance in the operating accounts when due. The amount of such payments will, on the next distribution date, be included in the calculation for determining whether the clause 1 cap has been met;

c. for any interest or principal repayment due on any loan made under the credit facility agreement (each a credit facility loan) on a date that is not a distribution date, such interest or principal repayment will be paid from the total cash balance in the operating accounts when due; and

d. for any payment due on any swap transaction under clause 2 above on any date that is not a distribution date, such payment will be paid from the total cash balance in the operating accounts.

In relation to each distribution reference date, available cash flow is defined as the total cash balance in the operating accounts as of such distribution reference date less the retained amount. For the avoidance of doubt, the total cash balance in the operating accounts includes, without limitation:

a. Any amounts transferred from the collection accounts;

b. Interest income and realised gains received from the reserves accounts and the reserves custody accounts;

c. Cash balance (if any), and the net proceeds realised from disposing all assets then held, in the operating custody accounts;

d. Proceeds of any credit facility loans;

e. Any retained amount and additional retained amount from the preceding distribution period;

f. Proceeds of any equity investments; and

g. Transfer of the residual balance from the settlement accounts (after the bond proceeds have been used for (a) repaying a certain portion of equity investor(s) shareholder loan(s) incurred in connection with the asset-owning companies' acquisition of the fund investments and (b) payment of fees and expenses incurred in connection with the issue and offering of the bonds.

Post-Enforcement Priority of Payments

If an event of default has occurred and the bonds have been accelerated (together, an enforcement event), all cash in the collection accounts will be swept to the operating accounts (via a daily cash flow sweep) and all available funds in the operating accounts, reserves accounts, and settlement accounts (except for amounts set aside for repaying a certain portion of the existing shareholder loans from the equity investor(s) incurred in connection with the acquisition of fund investments and payment of fees and expenses incurred in connection with the issue and offering of the bonds) will be applied according to the following post-enforcement priority of payments:

1. Payment of amounts due under clause 1 of the priority of payments. With regard to amounts due for payments of administrative expenses under clause 1 of the priority of payments, only those amounts required for enforcement of the security or the bonds will be paid under this clause 1. The amounts paid under this clause 1 will be paid without regard to any caps.
2. Payment of any amounts due and outstanding to the hedge counterparty under any hedge agreement in respect of swap transactions entered into by the issuer (save for the amounts payable under clause 9 below).
3. Payment for the following uses relating to the credit facility agreement in the following order:
   a. credit facility commitment fees;
   b. credit facility interest expense and any other payables; and
   c. credit facility principal repayment.
4. Payment of unpaid accrued interest on class A-1 and A-2 bonds on a pari passu and pro-rata basis.
5. Repayment of the outstanding principal amount (and, if applicable, premium) of the class A-1 and A-2 bonds on a pari passu and pro-rata basis.
6. Repayment of the outstanding principal amount of the class B PIK bonds.
7. Payment of any unpaid administrative expenses or any other expenses not included in clause 1 above.
8. Payment of any capital calls.
9. Payment of amounts due and payable to any hedge counterparty under any hedge agreement in respect of the early termination of swap transactions entered into by the issuer where such early termination is due to an event of default with respect to which such hedge counterparty is the defaulting party (as defined in such hedge agreement) or a termination event (as defined in such hedge agreement) with respect to which such hedge counterparty is the affected party (as defined in such hedge agreement).
10. Payment to equity investor(s).

Disclaimer

Fitch relies in its credit analysis on legal and/or tax opinions provided by transaction counsel for the avoidance of doubt. Fitch has always made clear that it does not provide legal and/or tax advice or confirm that the legal and/or tax opinions, or any other transaction documents, or any transaction structures, are sufficient for any purpose. The disclaimer at the foot of this report makes it clear that this report does not constitute legal, tax and/or structuring advice from Fitch, and should not be used or interpreted as legal, tax and/or structuring advice from Fitch. Should readers of this report need legal, tax and/or structuring advice, they are urged to contact relevant advisers in the relevant jurisdictions.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: https://www.fitchratings.com/understandingcreditratings. In addition, the following https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third- party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed. Fitch Ratings makes routine, commonly-accepted adjustments to reported financial data in accordance with the relevant criteria and/or industry standards to provide financial metric consistency for entities in the same sector or asset class.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US$1,000 to US$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US$10,000 to US$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.