FitchRatings

Astrea 9 Pte. Ltd.

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Capital Structure

Class	Rating	Outlook	Amount (m)	Currency	Interest rate (%)	Legal final maturity	% NAV	Cumulative LTV (%)
A-1	A+sf	Stable	615[a]	SGD	3.40%	8 August 2040	29.5	29.5
A-2	Asf	Stable	200	USD	5.70%	8 August 2040	12.3	41.8
B PIK	BBBsf	Stable	100	USD	7.35%	8 August 2040	6.2	48.0
Equity	n.a.	n.a.	856[b]	USD	n.a	n.a.	52.0	n.a.

LTV: loan-to-value. PIK: payment-in-kind.
[a] Class A-1 principal equals to USD550 million equivalent at launch and was converted at a USD:SGD exchange rate of 1.2813 at 28 July 2025.
[b] The equity value reflects the remaining portfolio net asset value (NAV) and includes the issuer's net working capital and capitalised transaction costs of USD12 million. At closing, the issuer entered 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.

Source: Fitch Ratings

Fitch has assigned ratings to the class A-1, A-2 and B payment-in-kind (PIK) bonds issued by Astrea 9 Pte. Ltd (Astrea 9, or the issuer) as seen in the table above. Astrea 9 is a private equity collateralised fund obligation (PE CFO) backed by interests in a diversified pool of alternative investment funds, with about USD1.6 billion in NAV and USD303.7 million of unfunded capital commitments at 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.

Key Rating Drivers

LTV: The cumulative LTV to the NAV at issuance of the class A-1, A-2 and B PIK bonds, as shown 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 bonds.

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.

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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.

Liquidity: The transaction's liquidity position is adequate, and Fitch expects it to improve further as the portfolio continues to season. At June 2025, the portfolio had generated positive net cash flow over the previous 12 months, 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 (up to USD280 million) 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. At 31 December 2024, the portfolio consisted of 40 funds, managed by 31 mostly 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 and bondholders are strongly aligned, as the sponsor holds the entire equity stake (approximately 52% of NAV) in Astrea 9. The sponsor previously took voluntary actions – beyond what was required by the transaction documents – 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, the 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 has 100% of the member interests in the AssetCo, and the assets held by the AssetCo has 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 about 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 comprising primarily funds managed by large and well-established general partners (GPs). These funds have shown good performance to date, portfolio diversification across multiple metrics; a focus on relatively strong sectors; improving cash flow generation; sufficient liquidity; strong

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

modelling results through Fitch stress scenarios; and a high-quality sponsor that has shown 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-quality portfolio comprising primarily funds managed by large and well-established 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.

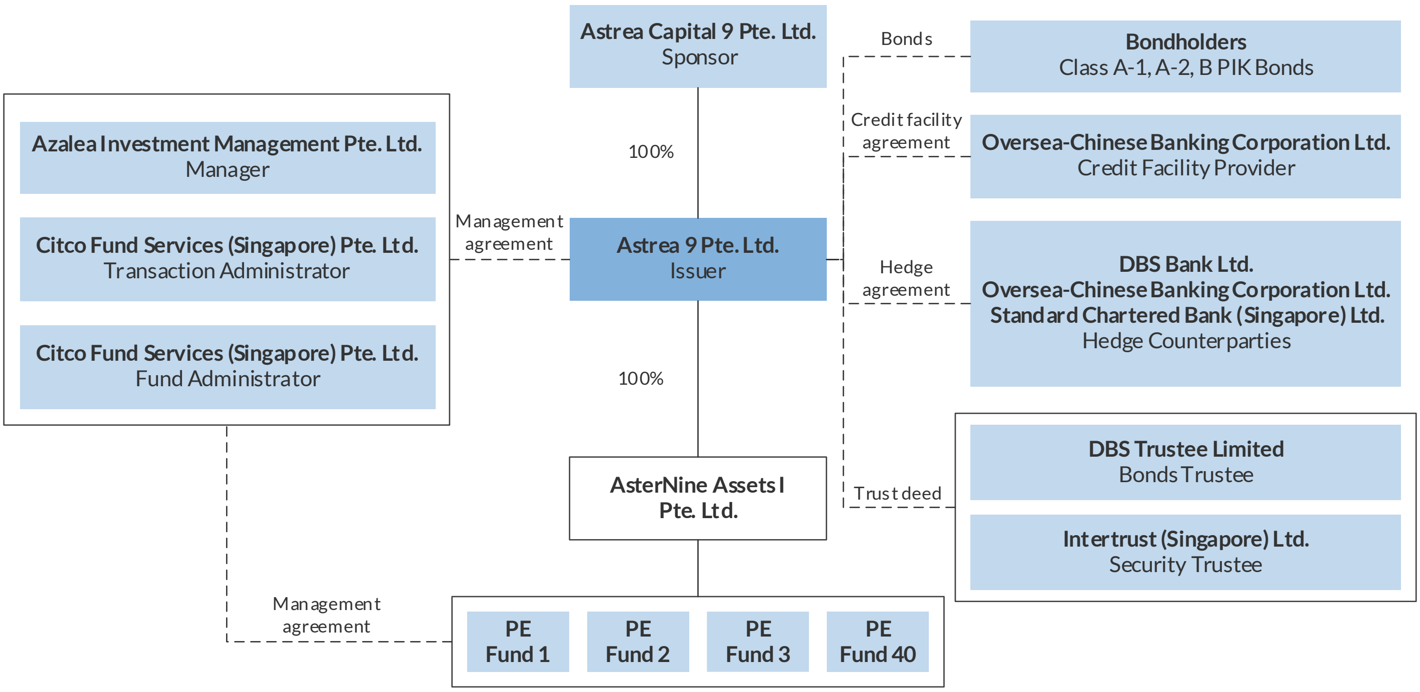
No notching has been applied to the model-implied ratings of 'Asf' for the class A-2 bonds.

Structure Overview

The issuer is structured as a special-purpose entity is the sole equity holder of the AssetCo. The issuer's capitalisation includes 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 was 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 holds 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 semi-annually 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 explained 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 in the tables below and in the margin.

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 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 US, 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 seen 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

(At 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	<1
Energy	<1

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Underlying Portfolio Company Breakdown

(At 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

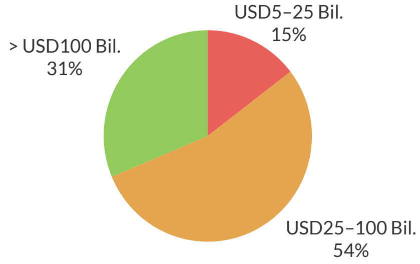
Source: Fitch Ratings, Astrea 9 Pte. Ltd.

Top 10 General Partners

(As of 31 Dec 24)	(% of total exposure)
KKR	6.1
ThomaBravo	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**

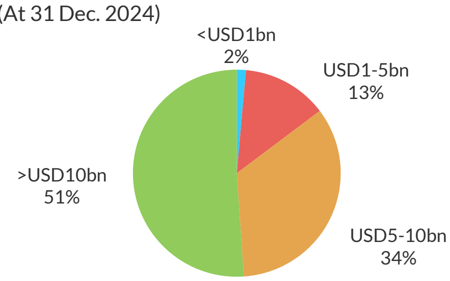
Source: Fitch Ratings, Astrea 9 Pte. Ltd.

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



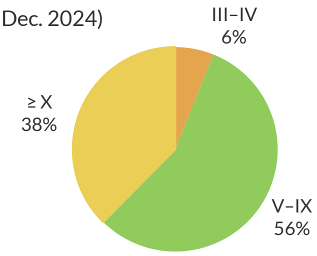
Sources: Fitch Ratings, Preqin

Portfolio Funds' Exposure by Fund Size
(At 31 Dec. 2024)



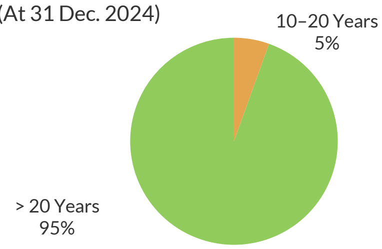
Sources: Fitch Ratings, Preqin

Portfolio Funds' Exposure by Number in Fund Series
(At 31 Dec. 2024)



Sources: Fitch Ratings, Preqin

Portfolio Funds' Exposure by GP Track Record
(At 31 Dec. 2024)



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	August 2025	July 2024	December 2023	May 2022	March 2021	October 2020	September 2019	June 2019	June 2018	June 2016
Total debt issuance (USDm))	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 (USDm)	1,625	1,471	995	1,905	1,456	575	376	1,324	1,098	1,142
Unfunded commitment (USDm)	304	133	136	250	156	190	79	215	168	201
Total exposure (USDm)	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
Unfunded (as % of total commitments)	19	11	15	17	11	24	11	16	10	13

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 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%)	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 USD750 million, or a lower amount if the required amount to settle the principal hedge is less than USD750 million.

Reserves Accounts

Distribution Date	Total Class A Reserve Amount (USDm)
First	75.0
Second	75
Third	75
Fourth	75
Fifth	75
Sixth	75
Seventh	75
Eighth	75
Ninth	75
10th	75
Total	750

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 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 interest on the rated debt.

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 62% 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 on 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 is a senior standby multicurrency liquidity facility 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 is 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 USD42 million under Fitch's fourth-quartile 2012 launch year. The highest utilisation in Fitch's rating sensitivities was USD71 million under Fitch's 2012 fourth-quartile, 1.3x Capital Call scenario.

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.

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 foreign exchange (FX) risk, for which the issuer employs 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 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 is 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*.

Class A-1 Bonds – Principal Amounts Hedge

To mitigate class A-1 bonds' FX mismatch risk, the issuer entered 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 17% of the drawable amount.

Class A-1 Bonds – Interest Amounts

The issuer entered 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, totaling 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 and a half 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 believes hedging a sufficient portion of the NAV and providing the manager flexibility to hedge further over time if deemed necessary, is a prudent approach.

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.

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 are 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 do not affect the bond ratings assigned at close, 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	Do the bonds have security interests in the accounts?	Account description
Collection accounts	AssetCo	Yes, through 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, through 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 explained 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 USD750 million. The hedge was entered into at the pricing date. This is higher than the initial principal USD equivalent of the class A-1 bonds SGD615 million, equal to USD480 million, and aims to assess the ability to meet the payment of the SGD forward contract.

The class B PIK bonds withstood fourth-quartile-level performance, aligning with an '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 two 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 nine 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	65.09	8	308.33	78.34	104.35	15.32	1.62	10.63	56.38	17.96
2001	5.5	602.42	6.5	534.14	67.37	8	255.16	78.25	102.62	14.65	1.62	7.99	56.52	15.94
2002	5	674.51	5	674.51	55.76	6	498.38	64.23	110.15	13.64	1.29	7.61	55.53	28.90
2003	5	675.14	5	675.14	46.43	6	358.22	52.73	123.12	14.12	1.33	6.90	55.28	41.24
2004	6	479.64	6.5	420.14	45.84	9	186.39	52.91	117.80	14.83	1.83	12.84	56.81	31.65
2005	6	584.45	6.5	541.33	45.30	9	376.21	52.29	118.19	14.92	1.91	13.04	57.00	31.66
2006	5.5	836.14	6.5	721.62	42.77	8	596.44	49.27	125.36	14.42	1.90	11.99	56.70	40.37
2007	5.5	914.75	6.5	737.62	42.88	7.5	392.43	52.85	119.68	15.97	1.85	11.64	56.35	33.61
2008	6	831.62	6.5	520.71	58.63	7.5	363.35	67.13	104.50	14.57	1.64	9.34	56.19	18.79
2009	5	1115.25	5.5	878.31	45.59	6	698.15	51.89	117.66	13.10	1.53	7.22	55.37	36.92
2010	5	903.59	5.5	788.72	46.70	6.5	490.11	53.24	110.12	14.82	1.73	9.45	55.73	27.46
2011	5	719.64	5.5	584.83	44.87	6.5	470.71	51.76	105.59	13.96	1.49	8.43	55.65	23.73
2012	5	701.96	5.5	642.77	45.43	6.5	459.35	51.54	106.71	14.84	1.50	7.41	55.66	22.80
2013	5	624.70	5.5	536.51	43.80	6.5	376.03	50.40	104.53	13.43	1.55	9.25	55.52	23.60
2014	5	612.95	5.5	562.26	42.15	6.5	325.33	48.96	102.61	14.25	1.53	9.43	55.70	20.73
2015	5	668.36	6	510.83	46.19	8	279.61	53.68	102.24	15.70	1.79	10.32	56.18	17.81

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 (%)	Distribu-tions (% of initial NAV)	Capital Calls (% of initial NAV)	Expenses (% of Initial NAV)	Interest (% of initial NAV)	Bonds paid (% of Initial NAV)	Equity distribu-tions (% of initial NAV)
2000	5	858.23	5	858.23	46.00	5.5	656.57	54.20	131.62	13.87	1.47	8.45	55.14	51.09
2001	5	636.02	5	636.02	49.29	5.5	563.05	56.51	131.77	15.05	1.40	7.83	55.13	50.17
2002	5	687.01	5	687.01	46.54	5.5	618.77	54.16	143.17	13.70	1.38	8.56	55.24	62.77
2003	5	776.65	5	776.65	43.57	6	471.36	49.98	158.95	14.53	1.55	8.57	55.25	77.61
2004	5.5	625.59	6	639.72	44.07	7.5	465.11	50.87	162.06	15.43	1.79	11.03	56.16	77.16
2005	6	656.57	6	656.57	41.98	7	493.09	48.45	157.61	16.01	1.71	11.62	55.99	71.67
2006	5	855.00	5.5	778.61	41.21	6	694.06	47.57	161.50	16.01	1.55	9.20	55.48	78.12
2007	5	954.69	5.5	872.65	41.21	6	733.94	50.82	145.32	14.36	1.55	9.21	55.49	63.53
2008	5	933.87	5	933.87	52.99	5.5	872.78	61.70	134.31	12.50	1.44	7.70	55.16	54.91
2009	5	1177.20	5	1177.20	45.26	5	1177.20	51.54	171.09	13.98	1.39	6.61	55.02	89.86
2010	5	988.19	5	988.19	43.60	5.5	881.48	49.72	160.44	14.30	1.59	8.44	55.12	79.15
2011	5	849.81	5	849.81	41.07	5.5	723.16	47.46	151.19	14.54	1.50	8.52	55.21	69.87
2012	5	779.99	5	779.99	43.53	5.5	675.79	49.80	152.15	14.84	1.50	8.56	55.24	70.57
2013	5	761.44	5	761.44	41.98	5.5	618.05	48.31	150.43	15.27	1.45	8.54	55.22	68.51
2014	5	717.64	5	717.64	40.89	6	573.48	47.05	151.30	16.12	1.53	8.55	55.24	68.49
2015	5	846.15	5.5	775.11	41.62	6.5	805.55	48.04	156.12	15.48	1.67	9.45	55.73	72.87

Source: Fitch Ratings, Astrea 9 Pte. Ltd.

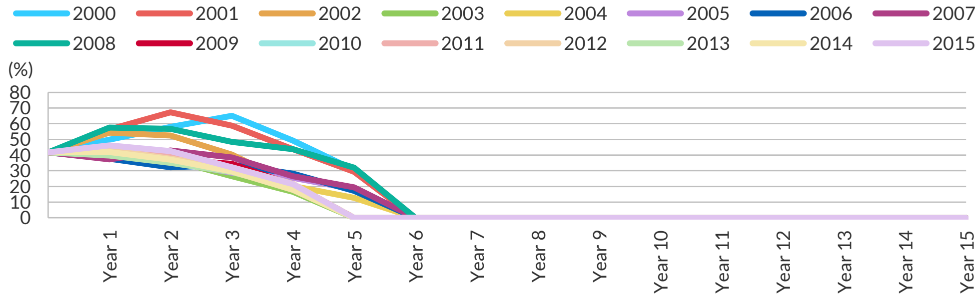
In addition, the disposal option discussed above is a positive qualitative factor to consider, although it was not specifically modelled in the scenarios Fitch ran since it is at the discretion of the manager. By exercising the disposal option, the manager may accelerate realisation of the NAV on the 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 and A-2 LTV Progression in Stress Scenarios: by Start Year Scenario

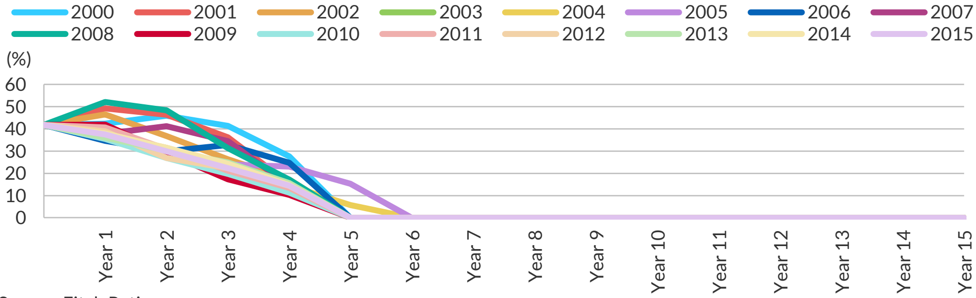
(Fourth Quartile - Asf Stress)



Source: Fitch Ratings

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

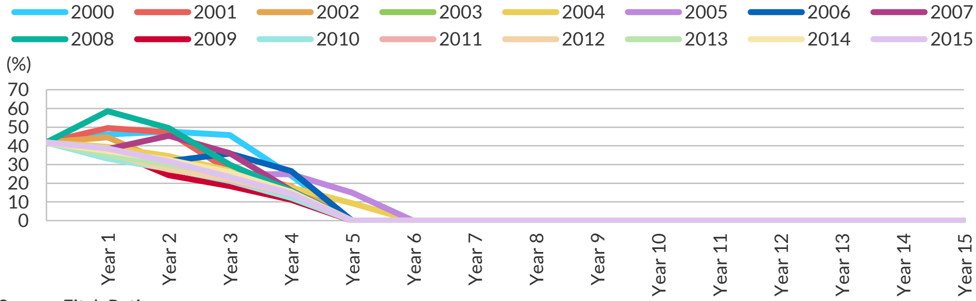
(Third Quartile - BBBsf Stress)



Source: Fitch Ratings

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

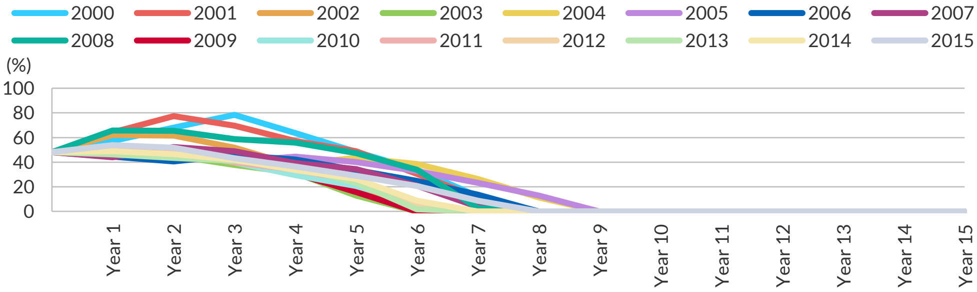
(All Quartile - BBsf Stress)



Source: Fitch Ratings

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

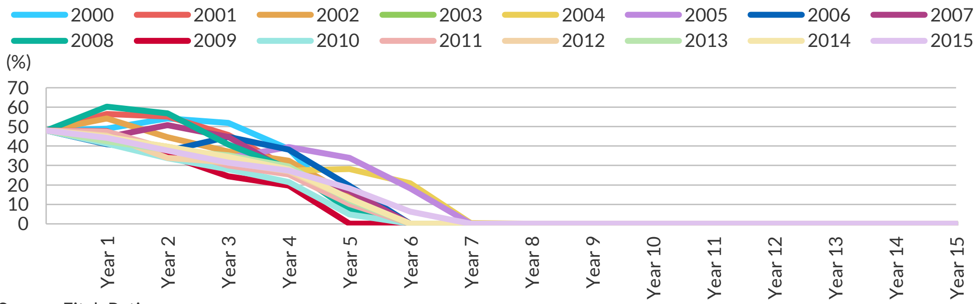
(Fourth Quartile - Asf Stress)



Source: Fitch Ratings

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

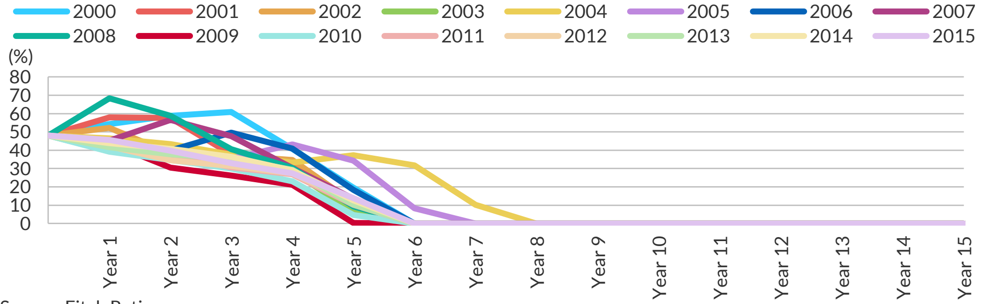
(Third Quartile - BBBsf Stress)



Source: Fitch Ratings

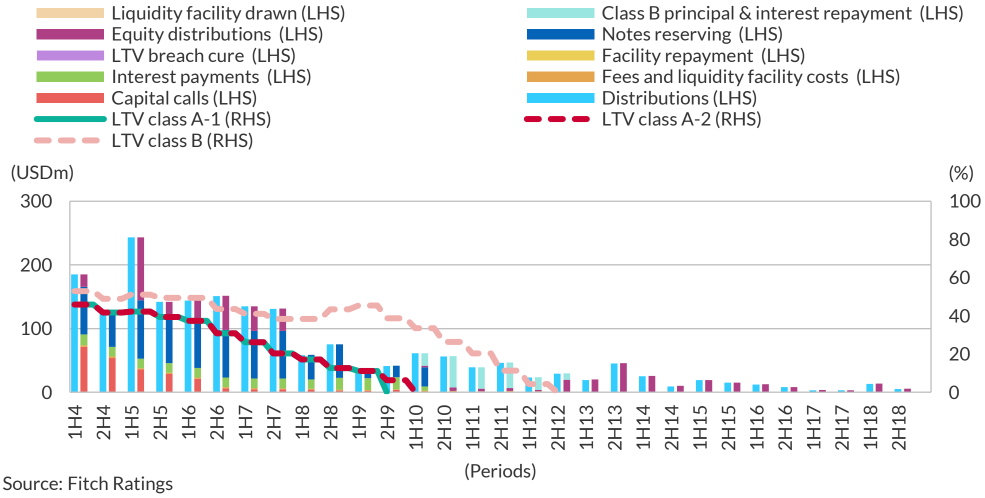
Class B LTV Progression in Stress Scenarios: by Start Year Scenario

(All Quartile - BBsf Stress)



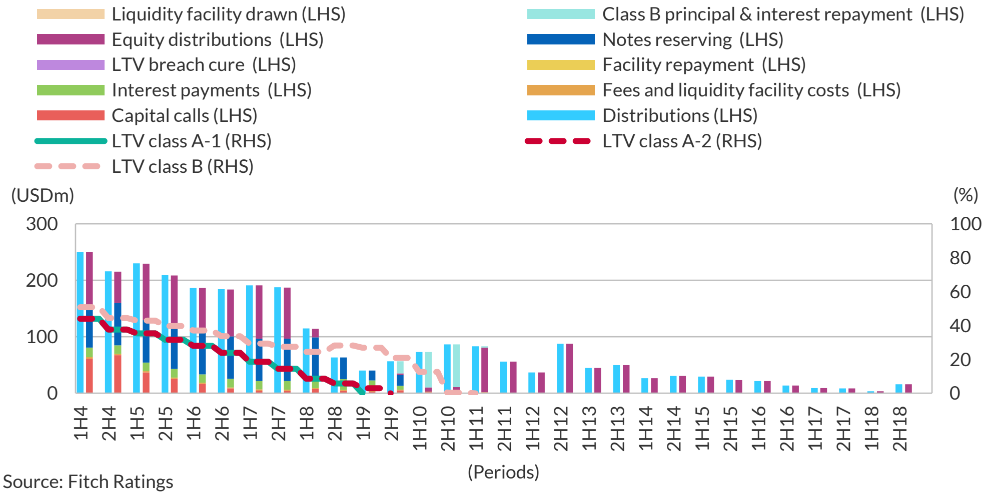
Source: Fitch Ratings

2004 Launch Year - Fourth Quartile - Use of Distributions



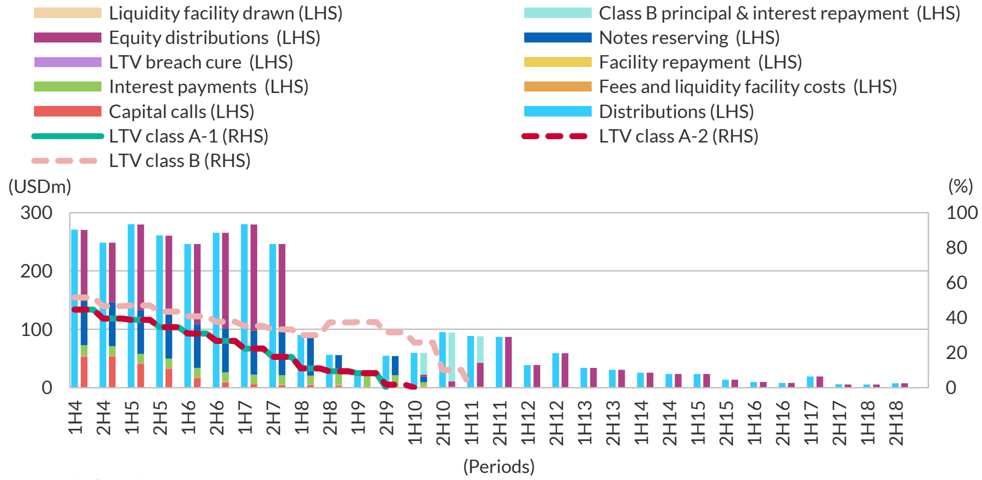
Source: Fitch Ratings

2004 Launch Year - Third Quartile - Use of Distributions



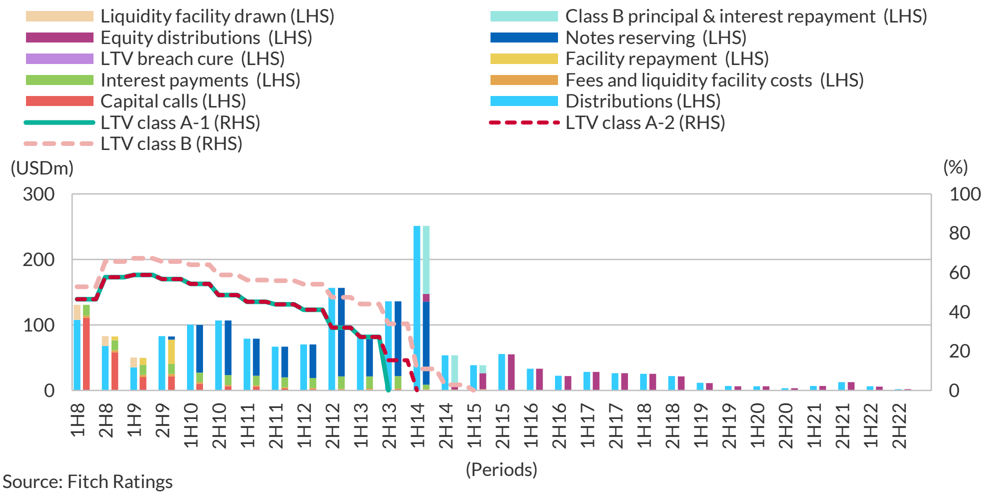
Source: Fitch Ratings

2004 Launch Year - All Quartile - Use of Distributions



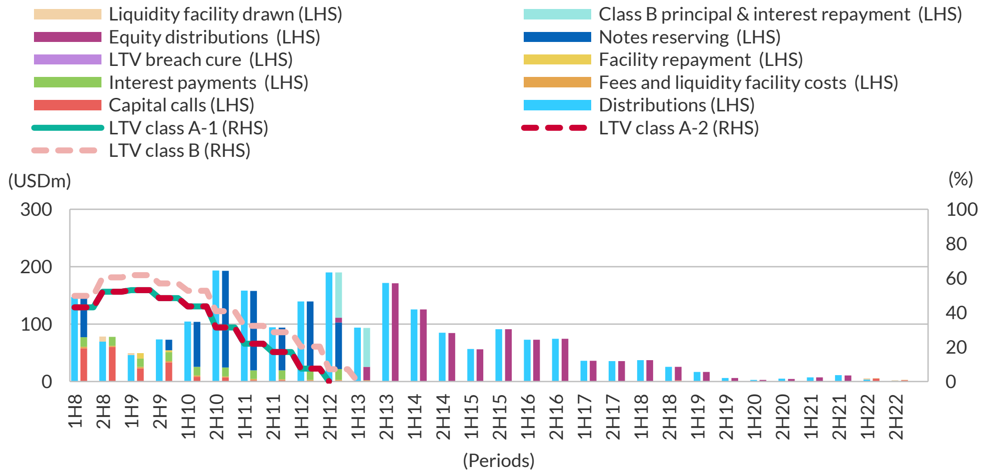
Source: Fitch Ratings

2008 Launch Year - Fourth Quartile - Use of Distributions



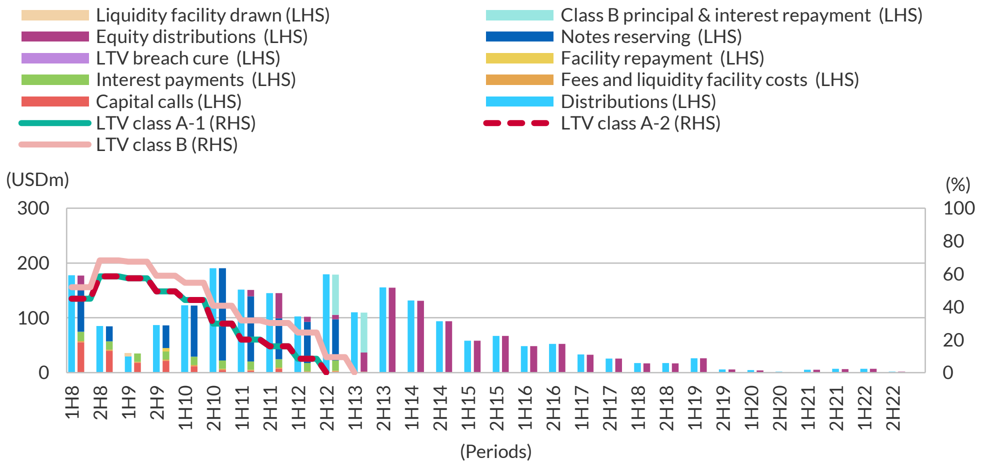
Source: Fitch Ratings

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 PE 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 at 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, the public markets were volatile, 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 of the public markets by the date of the analysis and the net cash held in reserve from the portfolio, Fitch expects LTVs at the first distribution date will remain in line with the initial LTVs. However, continuing 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	5
G	Transaction pro forma bond interest for first year	32
H = E+F+G	Total liquidity needs	173
I = A-E	Portfolio net cash flow	33
J = A/E	Portfolio liquidity coverage	1.2x
K = D-H	Transaction net liquidity	246
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 (At December 31, 2024)		Distributions										
		-75%	-50%	-25%	-10%	-5%	0%	5%	10%	25%	50%	75%
Capital calls	75%	1.1	1.2	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.8	2.0
	50%	1.2	1.4	1.6	1.7	1.7	1.7	1.8	1.8	1.9	2.1	2.3
	25%	1.4	1.6	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.4	2.6
	10%	1.6	1.8	2.0	2.2	2.2	2.2	2.3	2.3	2.5	2.7	2.9
	5%	1.6	1.9	2.1	2.2	2.3	2.3	2.4	2.4	2.6	2.8	3.0
	0%	1.7	1.9	2.2	2.3	2.4	2.4	2.5	2.5	2.7	2.9	3.2
	-5%	1.8	2.0	2.3	2.4	2.5	2.5	2.6	2.6	2.8	3.0	3.3
	-10%	1.8	2.1	2.4	2.5	2.6	2.6	2.7	2.7	2.9	3.2	3.4
	-25%	2.1	2.4	2.7	2.9	3.0	3.0	3.1	3.1	3.3	3.6	3.9
	-50%	2.8	3.2	3.6	3.8	3.9	4.0	4.1	4.2	4.4	4.8	5.2
	-75%	4.1	4.7	5.3	5.7	5.8	5.9	6.0	6.1	6.5	7.1	7.7

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 an 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. Onn 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 prevailing rating of the most senior class of bonds. On 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 holds all the equity interests in Astrea 9 and intends to maintain its equity position. As the owner of the equity, the sponsor bears 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 the following.

- 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.

The legal opinion that Fitch reviewed indicates that the issuer is bankruptcy remote, that its assets are unlikely to be consolidated with those of the sponsor, that the transfer of the fund investments under the purchase agreements would be characterized as a sale of rights over the fund investments and would not be regarded as property of the seller in the event of the seller's insolvency.

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 flows were built up, as set out 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 explained 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 shown 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

- 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 USD420 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 A-2 bonds did not fail any fourth-quartile rating sensitivities.
- 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 and A-2 bonds did not exhibit sensitivity in Fitch's 30% haircut scenario. 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.
- The 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.
- The 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.
- The 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 (Asf), and the final rating may be adjusted up or down from the model-implied rating based on other qualitative factors as explained 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	Asf
Distribution haircut - 15%	Asf	Asf	BBBsf
NAV haircut - 10%	Asf	Asf	Asf
NAV haircut - 20%	Asf	Asf	Asf
NAV haircut - 30%	Asf	Asf	Asf

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 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 2025, to model expected distributions, capital calls and the 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	Advent International 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 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 will 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 for each 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 banker's guarantees 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. on 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 investors.

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 investors.

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