S&P Global Ratings

Presale:

# Silver Arrow S.A., Compartment 17

April 8, 2024

### **Preliminary rating**

Class	Preliminary rating*	Preliminary amount (mil. €)	Available credit enhancement (%)§	Interest	Legal final maturity
A	AAA (sf)	500.00	6.94	1ME plus a margin	June 2031
В	NR	31.90	0.94	Fixed rate	June 2031
Subloan	NR	5.00	N/A	N/A	N/A

Note: This presale report is based on information as of April 8, 2024. The rating shown is preliminary. Subsequent information may result in the assignment of a final rating that differ from the preliminary rating. Accordingly, the preliminary rating should not be construed as evidence of a final rating. This report does not constitute a recommendation to buy, hold, or sell securities. \*Our preliminary rating addresses timely payment of interest and ultimate payment of principal on the class A notes. §Available credit enhancement consists of subordination and a general reserve that is ultimately available to mitigate potential principal shortfalls. The reserve is funded through the subordinated loan's proceeds. 1ME--One-Month Euro Interbank Offered Rate. NR--Not rated. N/A--Not applicable.

## Supporting ratings

Institution/role	Ratings	Replacement trigger	Collateral posting trigger
Elavon Financial Services DAC as bank account provider	ICR: A+/Stable/A-1	А	N/A
DZ Bank AG Deutsche Zentral-Genosschenschaftsbank, Frankfurt am Main	ICR: A+	A-	A-

ICR--Issuer credit rating. N/A--Not applicable.

## **Transaction Summary**

- S&P Global Ratings has assigned its preliminary credit rating to Silver Arrow S.A., Compartment 17's asset-backed floating-rate class A notes. At closing, Silver Arrow Compartment 17 will also issue unrated class B notes and a subordinated loan.
- This will be Mercedes-Benz Bank AG's 17th German publicly rated ABS transaction and the eighth that we have rated. The underlying collateral comprises German loan receivables for cars and vans. Mercedes-Benz Bank originated and granted the loans to its private and commercial retail customers. According to the preliminary pool, 83.28% of the current principal

#### PRIMARY CREDIT ANALYST

#### Sebastian Mauersberger

Frankfurt + 49 1729 913944 sebastian.mauersberger @spglobal.com

#### RESEARCH CONTRIBUTOR

#### Ajit Thomas

CRISIL Global Analytical Center, an S&P affiliate, Mumbai

#### www.spglobal.com

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## Research

balance on contracts amortizes with a final balloon payment.

- The loan receivables will be sold to the issuer using a discount rate which is the greater of the contractual rate paid on the loan and 3.75%.
- Like its predecessor, Silver Arrow Compartment 17 will not contain any receivables financing the purchase of trucks.
- Similar to its rated predecessors, the transaction is amortizing as of day one. A general reserve will also be in place. Collections will be distributed monthly according to a combined waterfall paying interest and principal strictly sequentially.
- A combination of excess spread, subordination, and the general reserve provides credit enhancement. Commingling and setoff risk will be mitigated through separate reserves. While we deemed setoff risk as minimal and we did not stress it in our cash flow model, we did account for the commingling reserve's amortizing features in our cash flow model.
- The structure benefits from a conditional servicing fee reserve, introduced in Silver Arrow, S.A., Compartment 15. The reserve can be used to cover any servicer replacement costs and the servicing fee payable to a successor servicer.
- The issuer can fully redeem the notes if the seller exercises a clean-up call on the payment date on which the balance of the collateral pool is lower than 10% of the balance of the collateral pool at closing.
- The assets pay a monthly fixed interest rate, the class A notes pay one-month Euro Interbank Offered Rate (EURIBOR) plus a margin, subject to a floor of zero, and the class B notes pay a fixed interest coupon. Consequently, the rated notes will benefit from an interest rate swap until the payment date when the class A notes have been fully redeemed.
- Our preliminary rating addresses timely payment of interest and ultimate payment of principal on the class A notes.
- Our preliminary rating in this transaction is not constrained by our structured finance sovereign risk criteria. We expect the final documentation and the presented remedy provisions at closing to adequately mitigate counterparty risk in line with our counterparty criteria. We expect the final documentation at closing to adequately mitigate legal risk in line with our legal criteria. Our counterparty and operational risk criteria do not cap our rating in this transaction.

## **The Credit Story**

#### Strengths, concerns, and mitigating factors

Strengths	Concerns and mitigating factors
In our view, Mercedes-Benz Bank is an experienced and established originator and servicer in global and, especially, European securitization markets. This is the bank's 17th German publicly rated ABS transaction but the eighth that we have rated. The previous transactions have performed well.	Mercedes-Benz Bank services the securitized assets, and the transaction will not have a back-up servicer at closing. We rely on the general availability of servicing in the German market to mitigate the risk of servicing disruption. Furthermore, the general, servicing fee, and commingling reserves will provide additional liquidity and will mitigate servicer disruption risk.

## Strengths, concerns, and mitigating factors (cont.)

Strengths	Concerns and mitigating factors
The preliminary portfolio is highly granular and well-diversified across Germany's federal states. As of the Feb. 29, 2024, cutoff date, the largest single obligor represented about 0.05%, and the top 15 obligors comprised 0.49% of the portfolio.	About 83.3% of the current principal balance of the loans in the preliminary pool are balloon loans that have a final installment payment that is significantly higher than previous installments. In a stressed environment, the balloon payment could result in the obligor experiencing a payment shock, if the vehicle's value declines and the originator does not provide follow-up financing. We have accounted for the additional losses resulting from payment shock after a market value decline of the underlying vehicles under our ratings scenario.
As of the Feb. 29, 2024, cutoff date, the portfolio did not contain any delinquent or defaulted contracts.	The transaction is exposed to commingling risk if the originator becomes insolvent. A specific commingling risk reserve will be funded to mitigate commingling risk. However, considering the commingling reserve's amortizing features, which allow for a reduction over the transaction's life, we deem commingling risk not to be fully mitigated. Therefore, we have tested various scenarios in our cash flow analysis.
The notes amortize sequentially. If the transaction incurs defaults, it uses excess spread and ultimately the general reserve to amortize the notes.	The originator is a deposit-taking entity. A setoff risk reserve will be funded to cover any setoff exposure that exceeds 0.5% of the portfolio's initial outstanding amount. Considering this, the low setoff exposures reported in predecessor deals, and the support from the German deposit protection insurance, we believe the setoff risk is minimal and we did not size any additional losses.
Given the difference between the assets' interest and the senior expenses, interest on the notes, and swap costs, the transaction benefits from excess spread to cure defaults.	
There is no replenishment period; therefore, the notes amortize after closing. In our baseline scenario, this causes credit enhancement to build up quickly. Additionally, the portfolio's quality will not deteriorate through adverse replenishment.	
The structure benefits from a conditional servicing fee reserve, which can be used to cover any servicer replacement costs and the servicing fee payable to a successor servicer.	

## Environmental, Social, And Governance

Our rating analysis considers a transaction's potential exposure to environmental, social, and governance (ESG) credit factors. For the auto ABS sector, we view the exposure to environmental credit factors as above average, social credit factors as average, and governance credit factors as below average (see "ESG Industry Report Card: Auto Asset-Backed Securities," published on March 31, 2021). In our view, the exposure to ESG credit factors in this transaction is in line with our sector benchmark. The transaction's above average exposure to environmental credit factors results from the collateral pool primarily comprising vehicles with internal combustion engines (ICE), which create emissions of pollutants including greenhouse gases. While the adoption of electric vehicles and future regulation could in time lower the value of ICE vehicles, we believe that our current approach to evaluating recovery and residual values adequately account for vehicle values over the transaction's result, we have not separately identified this as a material ESG credit factor in our analysis.

## **Asset Description**

As of the cutoff date, the preliminary collateral pool backing the notes comprised 21,554 loans, with a total current discounted principal balance of about €531.9 million.

The entire portfolio comprises auto loan contracts that Mercedes-Benz Bank distributed to commercial and private individuals in Germany. The products include:

- The Option Financing (Plus3) contracts (balloon contracts that include a vehicle put option to the dealer);
- Standard fully amortizing contracts; and
- Amortizing contracts, with a final balloon payment.

At closing, the securitized pool will comply with the eligibility criteria as per the transaction documents.

### **Collateral key features**

#### **Collateral key features**

	Silver Arrow 17	Silver Arrow 16	Silver Arrow 14	Silver Arrow 13
Pool cutoff date	Feb. 29, 2024	Sept. 30, 2023	Feb. 28, 2022	Feb. 28, 2021
Principal outstanding of the pool (mil. €)	531.9*	745.5*	750.0	750.0
Average remaining loan principal balance (€)	24,678*	22,905*	22,135	21,771
WA original LTV ratio (%)	79.61	79.83	80.07	80.14
WA seasoning (months)	17.1	17.5	15.8	14.7
WA remaining term (months)	32.7	32.3	33.3	33.9
Discount rate or weighted-average yield (%)	4.80	5.28	2.98	2.92
Top 15 borrower concentration (%)	0.49	0.35	0.34	0.30
Top 3 geographic concentration (%)	22.97 (NRW), 14.59 (BW), and 12.69 (Bayern)	22.89 (NRW), 15.57 (BW), and 13.11 (Bayern)	22.2(NRW), 15.5 (BW), and 12.6 (Bayern)	21.88 (NRW), 15.94 (BW), and 12.55 (Bayern)
Loan type (%)				
Amortizing	16.7	15.8	17.5	17.4
Balloon	83.3	84.2	82.5	82.6
Balloon payment portion (%)	53.2	53.6	51.6	51.6
Vehicle type (%)				
New	44.3	37.5	39.3	44.8
Used	55.7	62.5	60.7	55.2

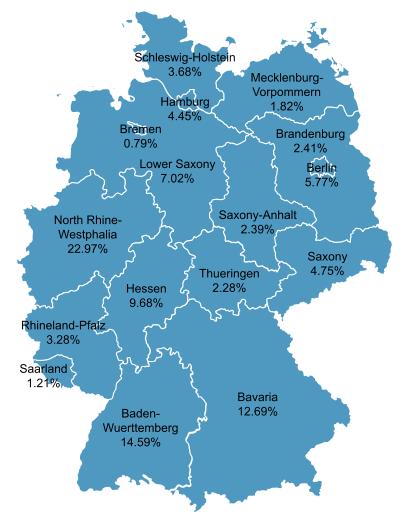
## Collateral key features (cont.)

	Silver Arrow 17	Silver Arrow 16	Silver Arrow 14	Silver Arrow 13
Customer type (%)				
Private	49.6	53.3	55.9	57.5
Commercial	50.4	46.7	44.1	42.5
Financed vehicle type (%)				
Cars	70.1	74.1	70.4	70.2
Truck	N/A	N/A	N/A	N/A
Bus	N/A	N/A	N/A	N/A
Others	29.9 (Vans)	25.9 (Vans)	29.6 (Vans)	29.8 (Vans)
Engine type (%)				
Petrol	25.8	30.1	33.8	38.2
Diesel	49.1	49.4	56.9	56.5
Others (plug-ins, hybrids, etc.)	25.1 (4.0 EV, 13.1 hybrid, 8.1 plug-in hybrid)	20.5 (3.1 EV, 11.8 hybrid, 5.6 plug-in hybrid)	9.3	5.3

\*Calculations are according to S&P Global Ratings' methodology and based on the outstanding discounted principal balance. WA--Weighted average. LTV--Loan-to-value. NRW--North Rhine-Westphalia. BW--Baden-Wuerttemberg. EV--Electric vehicle. N/A--Not available.

#### Chart 1

#### **Geographic distribution**



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#### Originator/seller

Mercedes-Benz Bank is a German captive car-financing provider for the country's second-largest car manufacturer, Mercedes-Benz Group AG. The bank was first established in 1967 and is now a directly and wholly owned subsidiary of Mercedes-Benz Group. Mercedes-Benz Bank employs more than 2,000 employees, and its outstanding contract volume was €23.77 billion as of 2023.

Mercedes-Benz Bank originates the loans included in this asset pool through its dealer network. Most new vehicles benefit from an interest subsidy provided by the manufacturer. Mercedes-Benz Bank receives applications through the dealership via an online interface. Credit decisions are performed centrally, and Mercedes-Benz Bank scores all applications using internal (contract

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data, payment history, and customer information) and external (credit bureaus and bank enquiries) data.

## Servicing

In February 2024, we conducted an overview of Mercedes-Benz Bank's origination, underwriting, collections, and risk management practices. We consider these to be in line with general market practice and our criteria for assessing operational risk (see "Global Framework For Assessing Operational Risk In Structured Finance Transactions," published on Oct. 9, 2014 and "Standard & Poor's Revises Criteria Methodology For Servicer Risk Assessment," published on May 28, 2009). In our operational risk analysis, we look at the risk that cash flows may be disrupted following an operational failure of the servicer.

The transaction will not have a back-up servicer at closing. We rely on the general availability of servicing in the German market to mitigate the risk of servicing disruption and have applied a stressed servicing fee in our cash flow analysis, in line with market standards. Furthermore, the general, servicing fee, and commingling reserves will provide additional liquidity and will mitigate servicer disruption risk.

## **Credit Analysis**

We analyzed the transaction's credit risk under various stress scenarios by applying our European auto ABS criteria.

We received quarterly static gross loss and recovery data from the fourth quarter of 2018 to the fourth quarter of 2023, split into subportfolios. We have also used the performance information available from the predecessor transactions. The quality of data provided is in line with our standards regarding quality, timeliness, and reliability.

## **Economic outlook**

In our analysis, we considered the following economic data and its baseline effect on collateral credit quality in determining our credit assumptions (see "Related Research").

Table 1

#### Macroeconomic and sector outlook

	2024f	2025f	2026f
Real GDP (y/y growth, %)	0.3	1.2	1.2
CPI (y/y growth, %)	2.7	2.2	1.9
Unemployment rate (annual average, %)	3.3	3.2	3.0

Sources: S&P Global Ratings. y/y--Year over year. CPI--Consumer price index. f--Forecast.

In our base-case scenario for Germany, we forecast economic growth to be positive (0.3%) in 2024 after declining (-0.1%) in 2023. In each of 2025 and 2026, we forecast GDP growth of 1.2%. We expect inflation to cool down slowly after a peak of 8.7% in 2022 and 6.0% in 2023, with rates of 2.7%, 2.2%, and 1.9% in 2024, 2025, and 2026, respectively. At the same time, we expect the unemployment rate to increase marginally to 3.3% in 2024 from 3.0% in 2023 and to decline to 3.2% and 3.0% in 2025 and 2026, respectively. We believe changes in GDP growth, inflation, and

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the unemployment rate largely determine portfolio default performance. In our view, the credit assumptions we considered in our analysis account for this economic outlook.

### Defaults

A loan is considered defaulted if it has more than six overdue installments or if the servicer declared it defaulted earlier. Based on our review of historical delinquencies, which have remained low, and macroeconomic conditions, we do not expect any sudden increase in defaults in the near future.

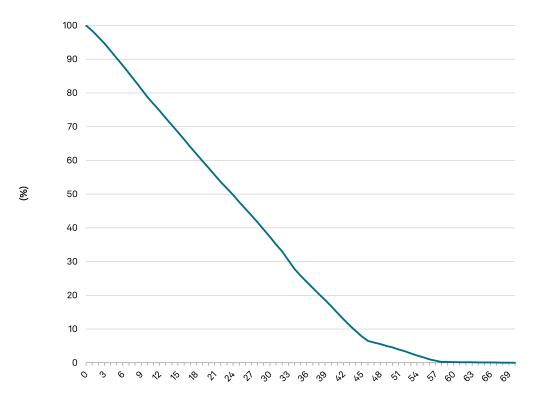
#### Gross loss base case

Based on the subportfolios' historical stability in origination volumes, we decided to size our base cases from the total book.

Chart 2 shows that the scheduled amortization is rather gradual.

Chart 2

#### Scheduled amortization of the securitized pool

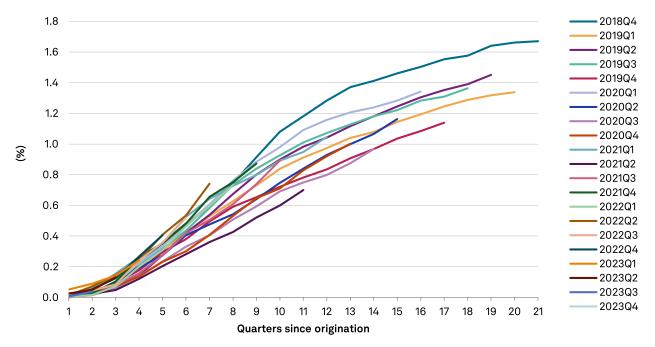


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Chart 3 shows yearly averages of quarterly static cumulative gross loss data from the first quarter of 2018 to the fourth quarter of 2023 for the total portfolio.

#### Chart 3

#### Cumulative quarterly gross losses



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Our base-case assumptions reflect performance trends based on historical data in Mercedes-Benz Bank's book. Additionally, they also include the current macroeconomic environment.

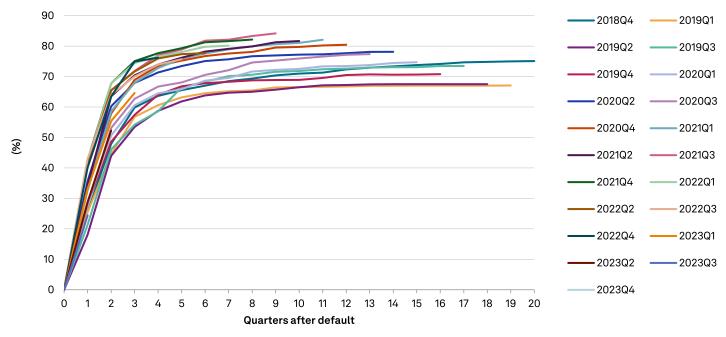
Based on this, we have reduced our gross loss base case for the securitized pool to 1.6% from 1.8% in Silver Arrow S.A., Compartment 16. We increased our 'AAA' gross loss multiple to 4.8x from 4.3x. The lower base case reflects the low historic gross losses of the book and previous transactions and considers the high seasoning. The increase in the multiple reflects that our 'AAA' gross loss assumptions remain unchanged.

#### **Recoveries and recovery timing**

Chart 4 shows quarterly averages of quarterly static recovery data from the fourth quarter of 2018 to the fourth quarter of 2023 for the total portfolio.

#### Chart 4

#### Cumulative quarterly recovery curves



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Recoveries are a combination of vehicle sale proceeds and ancillary payments received from the borrowers. Under our global auto ABS criteria, we establish recovery rate assumptions based primarily on an analysis of historical recovery rates for the issuer and the market, the volatility of past performance as well as credit, operational, or other factors that might affect the timing, amount, and sustainability of recovery rates. After considering all this information we set the base-case recovery rate at 70%.

We expect the transaction's performance to be in line with its peer auto loan originators in Germany. On this basis, and considering the historical data, we have assumed a 40% haircut at 'AAA' and a base case of 70%. The resulting 'AAA' recovery rate is 42%. This is in line with the stressed recovery rate applied in Silver Arrow S.A., Compartment 16.

Table 2

### Peer comparison at 'AAA'

Rating level	Silver Arrow 17	Silver Arrow 16	Silver Arrow 14	Silver Arrow 13
Stressed combined cumulative gross loss (%)	7.68	7.74	10.12	10.40
Stressed recovery rate (%)	42.00	42.00	42.00	42.00
Stressed combined cumulative net loss (%)	4.45	4.49	5.87	6.00

## Balloon loan risk

Balloon contracts may introduce additional obligor default risk to the transaction, if we assume that obligors expect to be able to finance the final balloon payment through the sale of the vehicle at contract maturity. In a stressed economic environment, these obligors may default on the balloon payment because the vehicle's market value could have declined to below the amount needed to pay the final balloon payment.

The balloon loans (other than Plus3 contracts) that Mercedes-Benz Bank originated do not feature a dealer buyback obligation. So, if an obligor defaults on the balloon payment, Silver Arrow, Compartment 17 will incur an additional loss equal to the difference between the balloon installment and the vehicle's sale proceeds. The Plus3 contracts contain a dealer buyback obligation, which is a side agreement between the obligor and the dealer. If a dealer becomes insolvent, the buyback obligation may become invalid so that the obligor must pay the final installment.

We have set our balloon loan gross loss assumption at a 'AAA' level at 7.5%, based on the significant vehicle type diversification, Mercedes-Benz Bank's balloon setting policy, the engine types of the vehicles and the overall size and concentration of maturing balloon payments. Our stressed balloon loss assumptions are unchanged from Silver Arrow S.A., Compartment 16.

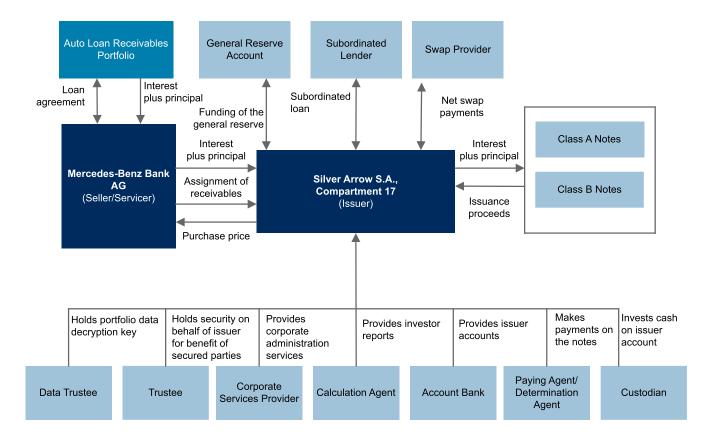
In applying the additional loss rate in our cash flow analysis, the aggregate balloon payments on loans securitized are adjusted to reflect stress scenario defaults and prepayments to establish an adjusted balloon payment amount. The applicable additional balloon loss rate is multiplied by the adjusted balloon payment amount as a percentage of the total pool balance to calculate the incremental balloon gross loss rate.

## **Transaction Structure**

In this transaction, Mercedes-Benz Bank sells auto loan receivables to Silver Arrow, Compartment 17, which issues notes to fund such purchase. The receivables comprise the loan installments from the underlying obligors.

#### Chart 5

#### Transaction structure



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The issuer is a Luxembourgian special-purpose entity, which we consider to be bankruptcy remote under our legal criteria (see "Structured Finance: Asset Isolation And Special-Purpose Entity Methodology," published on March 29, 2017). We expect that the transaction legal opinion at closing will confirm that the sale of the assets would survive the seller's insolvency. We expect the final documentation at closing to adequately mitigate legal risk in line with our legal criteria.

## **Cash Flow Mechanics**

The transaction has a combined interest and principal waterfall. Cash flows redeem strictly sequentially in accordance with the priority of payments.

If the security trustee delivers an enforcement notice to the issuer following an event of default, all funds from the enforced security are distributed according to the post-enforcement priority of payments. We have reviewed the issuer events of defaults and have concluded that they are remote in our ratings scenarios. As a result, our analysis solely focuses on the pre-enforcement

priority of payments.

## Clean-up call

Mercedes-Benz Bank can exercise a clean-up call option as soon as the outstanding principal balance on the collateral is below 10% of the principal balance at closing. The repurchase price is at least equal to the outstanding principal amount of the class A notes plus any accrued interest thereon and any other claims which rank prior to the claims of the class A noteholders. The issuer will need to be notified of the intention to exercise the clean-up call at least 10 days ahead.

## Payment waterfall

On any monthly interest payment date, the issuer allocates to the payment waterfall the available distribution amount comprising the following:

- All interest and principal collections;
- Recoveries;
- Net swap receipts;
- Amounts standing to the credit of the general reserve;
- The amount standing to the credit of the commingling reserve to the extent necessary to cover any servicer shortfall;
- The amount standing to the credit of the servicing fee reserve to the extent necessary to cover any replacement costs and the servicing fee payable to a successor servicer; and
- The amount standing to the credit of the setoff reserve.

#### Table 3

#### Simplified payment waterfall

1	Due and payable taxes owed by the issuer
2	Due and payable amounts to the trustee
3	Administration expenses and servicing fees
4	Swap payments
5	The class A notes' interest
6	Liquidity reserve up to its general reserve required amount
7	The class A notes' principal redemption amount
8	The class B notes' interest
9	The class B notes' principal redemption amount
10	The subloan interest
11	The subloan principal redemption amount
12	Indemnity payments to third-party
13	Remaining swap payments
14	Final success fee to the seller

The interest accrued on monies held in the issuer account bank with Elavon Financial Services

DAC does not incorporate a floor. In a negative interest rate environment, the issuer would be exposed to additional costs. Due to the current increasing interest rate environment, we do not assume negative interest on monies held at the account bank in our cash flow modelling.

## **Target amortization conditions**

Through the payment waterfall, the transaction redeems the class A notes' principal up to an amount equaling the difference between the aggregate of the outstanding balance of the rated notes and the assets' discounted outstanding performing balance. This means that the transaction uses excess spread to cure defaults, as defaulted receivables reduce the performing asset balance.

## **Excess spread**

Excess spread results from the difference between:

- The interest income received from the assets; and
- The interest on the rated notes plus any senior fees, servicing fees, and swap expenses.

For the preliminary pool, this unstressed difference will equal about 1.5%. In our analysis, we sized for yield compression risk by modeling a gradual decline of the portfolio yield to 4.36% from 4.80%.

#### **General reserve**

At closing, the seller will fund a non-amortizing general reserve through the proceeds of the subordinated loan. The reserve's required amount is €5.0 million, equaling 1.0% of the Class A closing balance. The general reserve is limited to senior expenses, swap payments and liquidity shortfalls for the class A notes.

The general reserve is refilled on each payment date through the priority of payments up to its required amount, under the transaction documents, before the payment of the class A notes' principal.

When the portfolio balance reduces zero, the required level of the general reserve becomes zero and the amounts standing to credit to the reserve can be used to repay principal amounts of the notes.

## Servicing fee reserve

To cover potential servicer replacement costs and the servicing fee payable to a successor servicer, Mercedes-Benz Bank will fund a servicing fee reserve if certain triggers are breached, in particular one of the below:

- A servicer termination event has occurred and is continuing; or
- We notify the issuer and the servicer that Mercedes-Benz Bank is no longer deemed eligible under our applicable rating criteria; or
- Mercedes-Benz Group ceases to own Mercedes-Benz Bank, or a termination of the profit and loss transfer agreement between Mercedes-Benz Group and Mercedes-Benz Bank occurs.

The reserve will be funded within 14 calendar days of the payment date immediately following the occurrence of a servicing fee trigger event.

Once one of the above triggers occurs, the required amount will be equal to the product of the aggregate outstanding loan principal amount on the preceding determination date and 1.75%.

On each payment date after the reserve has been funded, the issuer will repay to the seller any servicing fee reserve excess amount that is above the required amount outside of the priority of payments.

## Interest rate hedging

The issuer, acting for Compartment 17, and the swap counterparty have entered into a balance guaranteed swap agreement that is in line with our current counterparty criteria. We expect the final documentation and the presented remedy provisions at closing to adequately mitigate counterparty risk in line with our counterparty criteria. Our counterparty risk criteria do not cap our rating in this transaction. Under our current criteria, we consider a combination of the replacement framework and collateral-posting requirement as mitigants to counterparty risk. Under the swap documents, if the swap counterparty is downgraded and does not put in place the remedies within the remedy period, termination payments are subordinated to payments to noteholders, and the issuer has the right to terminate the swap.

The swap hedges the issuer's exposure to interest rate risk resulting from the fixed interest of the receivables and the floating-rate obligations on the rated notes, up to the earlier of the clean-up call date or redemption of rated notes. Under this swap agreement, the issuer will pay a fixed rate on the outstanding principal balance of the rated notes. In exchange, the swap counterparty will pay to the issuer a floating interest rate based on one-month EURIBOR (i.e., the same index that the notes pay).

## **Mitigation Of Seller Risks**

## **Commingling reserve**

The transaction benefits from a commingling reserve, which Mercedes-Benz Bank will fund if a commingling reserve trigger event occurs. If the servicer becomes insolvent, any collections in its collection accounts--plus collections that it receives directly afterward--may become commingled with the funds of the insolvent estate. We accounted for commingling risk, considering the transaction's monthly cash-sweeping mechanism and the obligor-notification process, which is triggered by servicer insolvency. To mitigate this risk, the originator funds a commingling reserve. Nevertheless, the reserve is amortizing as credit enhancement builds up during the transaction's life. To account for the commingling loss timings. For this, we have run various cash flow runs to determine if the transaction continues to have enough enhancement and structural protections to maintain credit stability of the rated notes (see "S&P Global Ratings Definitions," published on June 9, 2023). In all our scenarios, the class A notes are still able to withstand our 'AAA' stresses.

The commingling reserve will initially be funded by cash deposited in the issuer account. The servicer will be able to replace cash with eligible securities provided that the rating on the notes is not negatively impacted.

In our view, the commingling reserve does not fully mitigate the commingling risk, and a potential credit and liquidity risk remains, which we have sized for in our analysis.

## Setoff risk

In general, if the servicer becomes insolvent, setoff risk may arise. This is because obligors can set off their loan installments against:

- Their salary (employee setoff);
- Insurance obligations (if the insurance provider becomes insolvent); or
- Their deposits (deposit setoff).

The transaction's eligibility criteria for the pool exclude loans granted to Mercedes-Benz Bank's employees, mitigating employee setoff risk. Mercedes-Benz Bank is a deposit-taking institution. It will fund a reserve, mitigating deposit setoff risk if the exposure exceeds 0.5% of the initial outstanding assets. The servicer notifies the obligors if the reserve is not fully funded. That said, the potential deposit-related setoff risk is minimal in our view, based on the deposit setoff reserve and historical low setoff reported amounts, and in light of the support from the German deposit protection insurance. Therefore, we have not sized any additional losses.

Additionally, obligors may exercise their right to set off loan payments because some of the contracts have been sold with insurance products. Their right to reduce their installments by an amount equal to the insurance premium cannot be excluded. If the insurer becomes insolvent, Mercedes-Benz Bank mitigates the related shortfalls. The risk cannot be excluded if Mercedes-Benz Bank and the insurer simultaneously become insolvent. We consider this risk to be remote in our analysis.

## **Cash Flow Analysis**

Table 4

### **Cash flow assumptions**

Recession start	Closing
Length of recession	Weighted average life (25 months)
Cumulative gross loss curve	Evenly distributed and back-loaded over weighted-average life
Recovery lag	12 months
Delinquency	Two-thirds of credit losses recovered six months later
Stressed servicing fees (%)	1.0 per year
Fixed fees (€)	120,000 per year
Replacement bank cost (€)	86,000
Prepayments (high/low)(%)	20/0.5
Interest rate	Up, down, up/down and down/up§
Initial WAC (%)	4.80
WAC after compression (%)	4.36
Commingling stress	1.3 months of collections

Table 4

#### Cash flow assumptions (cont.)

\*Calculations are according to S&P Global Ratings' methodology. WAC--Weighted-average coupon. §In line with our criteria: "Methodology To Derive Stressed Interest Rates In Structured Finance", published on Oct. 18, 2019.

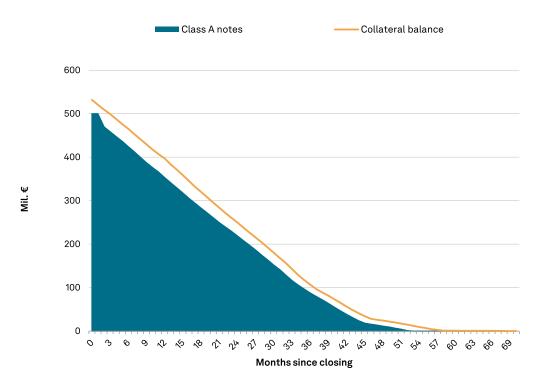
We have tested the classes' ability to pay timely interest and ultimate principal on the class A notes under the above stress assumption through a cash flow model.

We have stressed bank account provider replacement costs to the extent the issuer may be expected to incur at the time of replacement. Based on the assumptions discussed above, the low prepayment, low interest, and equally loaded default scenarios have proved to be more stressful, mostly because they lead to higher balloon losses.

To account for the commingling reserve's amortizing feature, we have also tested the structure's sensitivity to different commingling loss timings. For this, we have run various cash flow runs to determine if the transaction continues to have enough enhancement to maintain credit stability of the rated notes.

Chart 6

#### Collateral and note balances (EOP) in the 'AAA' most stressful scenario



EOP--End of period.

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## Sovereign Risk

Our long-term unsolicited sovereign credit rating on Germany is 'AAA'. Therefore, our rating in this transaction is not constrained by our structured finance sovereign risk criteria (see "Incorporating Sovereign Risk In Rating Structured Finance Securities," published on Jan. 30, 2019).

## Forward-Looking View

We consider the transaction's resilience to additional stresses to some key variables, in particular defaults and recoveries, to determine our forward-looking view.

In our view, borrowers' ability to repay their auto loans is highly correlated with macroeconomic conditions, particularly unemployment and, to a lesser extent, consumer price inflation and interest rates. Given the loans are fixed-rate, we believe rising interest rates will have a lower effect on these borrowers in the near term, while longer term, they will likely further stretch household finances.

Furthermore, a decline in second-hand car values typically lowers realized recoveries. Although used car prices may decline moderately in Germany in 2024, we do not expect them to fall significantly.

Given our current macroeconomic forecast and forward-looking view of Germany's auto market, our sensitivity scenarios consider, all else being equal, the hypothetical effect on our credit rating of:

An increased gross default base case of up to 30%; and

a maximum haircut of 30% to the recovery rate base case.

We therefore ran eight scenarios with increased gross defaults and/or reduced expected recoveries, as shown in chart 7 below.

### Sensitivity analysis

Class	Base case	1	2	3	4	5	6	7	8
Default rate base-case increase (%)	-	10	30	-	-	10	30	10	30
Recovery rate base-case decrease (%)	-	-	-	10	30	10	10	30	30
Gross default rate (%)	1.6	1.8	2.1	1.6	1.6	1.8	2.1	1.8	2.1
Recovery rate (%)	70	70	70	63	49	63	63	49	49
Class of notes	Initial rating	1	2	3	4	5	6	7	8
A	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AA+

No change
One-notch downgrade
Two-notch downgrade
Three-notch or more downgrade

Source: S&P Global Ratings.

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The results of the above sensitivity analysis indicate a deterioration of no more than one notch on the notes, which is in line with the credit stability considerations in our rating definitions. Transaction features such as initial subordination levels and a liquidity reserve enhance the stability of the rating under each scenario.

The transaction also embeds some other strengths that may offset a sudden increase in defaults. The transaction has a short weighted-average life and delivers fast build-up of additional credit enhancement as the transaction amortizes. The underlying receivables pay a fixed rate of interest, limiting the impact of increasing interest rates on the performance in the near term.

## **Monitoring And Surveillance**

We assess quarterly the underlying portfolio's performance, including defaults and delinquencies.

Additionally, we also assess annually:

- The supporting ratings;
- The servicer's operations and its ability to maintain minimum servicing standards; and
- Whether the then-available credit enhancement for the class A notes is sufficient to withstand losses that are commensurate with the current rating assigned.

## Appendix

## **Transaction participants**

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Issuer	Silver Arrow S.A., Compartment 17				
Originator, seller, and servicer	Mercedes-Benz Bank AG				
Arranger	BofA Securities Europe S.A.				
Security trustee	Wilmington Trust SP Services (Frankfurt) GmbH				
Data trustee	Data Custody Agent Services B.V.				
Corporate service provider	Intertrust (Luxembourg) S.a.r.l.				
Swap provider	DZ Bank AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main				
Bank account provider, paying agent, interest determination agent, and custodian	Elavon Financial Services DAC				
Calculation agent	U.S. Bank Global Corporate Trust Ltd.				
Joint lead managers	BofA Securities Europe S.A. and ING Bank N.V.				

## **Related Criteria**

- Criteria | Structured Finance | ABS: Global Auto ABS Methodology And Assumptions, March 31, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- Criteria | Structured Finance | General: Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities, Dec. 22, 2020
- Criteria | Structured Finance | General: Methodology To Derive Stressed Interest Rates In Structured Finance, Oct. 18, 2019
- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions, Jan. 30, 2019
- Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- Criteria | Structured Finance | General: Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- Criteria | Structured Finance | General: Global Derivative Agreement Criteria, June 24, 2013
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Structured Finance | General: Methodology For Servicer Risk Assessment, May 28,

2009

## **Related Research**

- European Auto ABS Index Report Q4 2023, Feb. 7, 2024
- New Issue: Silver Arrow S.A., Compartment 16, Nov. 17, 2023
- S&P Global Ratings Definitions, June 9, 2023
- Germany 'AAA/A-1+' Ratings Affirmed; Outlook Stable, March 24, 2023
- European ABS Outlook 2023, Jan. 12, 2023
- Asset Price Risks: European Auto ABS Appear Resilient To A Potential Fall In Used Car Prices, Nov. 29, 2022
- ESG Industry Report Card: Auto Asset-Backed Securities, March 31, 2021
- How Much Is Enough? Information Quality Standards For The EMEA RMBS And ABS Rating Process, Jan. 8, 2019
- 2017 EMEA ABS Scenario And Sensitivity Analysis, July 6, 2017
- European Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- Global Structured Finance Scenario And Sensitivity Analysis 2016: The Effects Of The Top Five Macroeconomic Factors, Dec. 16, 2016
- Scenario Analysis: Gross Default Rates And Excess Spread Hold The Answer To Future European Auto ABS Performance, May 12, 2009

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