Solis Real Assets Luxemburg - Compartment I

Lease ABS

Ratings

Series	Rating	Notional (EURm)	Notional (% assets)	CE* (% assets)	Coupon	Final maturity
Fixed rate note	BBB-$_{SF}$	30.0	90.5%	9.50%	4.50%	1 April 2027

Scope's quantitative analysis is based on the eligibility criteria of the transaction documentation. Scope's Structured Finance Ratings constitute an opinion about relative credit risks and reflect the expected loss associated with the payments contractually promised by an instrument on a particular payment date or by its legal maturity. See Scope's website for the SF Rating Definitions.

*Credit enhancement (CE) reflects overcollateralization.

Transaction details

Purpose	Liquidity/Funding
Issuer	Solis Real Assets Luxemburg – Compartment I
Originator and servicer	Hofmann Leasing GmbH (HL)
Operational servicer	BLS Bikeleasing-Service GmbH & Co. KG (BLS)
Issuer account bank	Baden-Württembergische Bank (BW Bank)
Servicer account bank	Kreis-Sparkasse Northeim
Calculation agent	Greenium Service GmbH
Corporate servicer	Altum Luxembourg S.A.
Issue date	3 November 2023
Ramp-up period end date	31 December 2023
Payment frequency	Monthly

The transaction is a cash securitisation of bicycle leases with residual value exposure, originated by Hofmann Leasing GmbH and granted to SMEs in Germany and Austria. The issuance of the EUR 30m fixed rate notes will fund the purchase of the securitised portfolio, at a 9.5% discount over the nominal value of the future outstanding lease payments and the bicycles' estimated residual value. The asset portfolio will increase over a ramp-up period ending in December 2023, while the notes' notes were fully issued on 3 November 2023.

The securitised assets are lease receivables composed of lease instalments and the bicycles' residual value. The lessee pays monthly instalments, based on a lease factor on the net purchase price of the bicycle plus the mandatory insurance fees, optional additional insurance payments and service charges.

The 9.5% purchase price discount on the securitised portfolio provides a level of overcollateralisation sufficient to cover for the potential portfolio losses commensurate with the assigned rating, after paying for senior costs and the notes' coupon. In addition, the assets must satisfy some eligibility criteria, including concentration limits and minimum credit quality requirements. Furthermore, the criteria impose limits on exposure to top obligors and sectors.

The transaction features an amortisation schedule for the fixed rate notes, adjusted for the level of cumulative observed defaults and remaining length of the amortisation period. The notes' principal repayment starts following the ramp-up period. The fixed coupon rate on the notes is 4.5% per annum.

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Bloomberg: RESP SCOP

Rating rationale (summary)

The rating reflects the legal and financial structure of the transaction; the credit quality of the collateral in the context of the macroeconomic conditions and historical performance of bike lease receivables in Germany; the ability of the originator and servicer Hofmann Leasing; and the counterparty exposures to BLS as operational servicer, Kreis-Sparkasse Northeim as the servicer account bank, Baden-Württembergische Bank as the issuer account bank and Greenium Service GmbH as the calculation agent.

The notes will benefit from the 9.5% transfer value discount on the non-interest-bearing receivables. Portfolio proceeds will be used to pay senior fees, interests and principal on the notes. Periodic excess collections will be stored in the issuer cash account and can be used to cover amounts due on subsequent payment dates.

To assess the issuer's exposure to credit counterparty risks, we considered counterparty ratings from Scope, when available, or public ratings.

Rating drivers and mitigants

Positive rating drivers

Positive portfolio selection. Obligor selection is based on third-party credit scores. Concentration limits on lower credit quality score bands and a floor on the weighted average credit quality of the portfolio results in a positive bias in obligor credit quality.

Guaranteed residual value of collateralised assets. The operational servicer has provided a guarantee that the issuer will receive at least 10% of the net purchase price of the leased bikes at the end of the term as residual value payment.

Negative rating drivers and mitigants

Servicer default risk. In the event of a servicer default, cash in the servicer account may be lost. Moreover, there is no back-up servicer appointed at closing. In the event of a servicer default, this may lead to delays in the resumption of cash flows from receivables and lead to higher costs related to the reappointment of a replacement servicer.

Liquidity risk. The structure does not have any dedicated reserves that can be used to cover shortfall of collections for the payment of senior costs and interests. The interconnected priority of payments in combination with the expected highly granular receivables portfolio partially mitigate the risk. Moreover, at-closing-contracted servicing costs are zero and available excess funds will be trapped and can build a buffer to cover for portfolio payment shortfalls.

Upside rating-change drivers

A better-than-expected portfolio at the end of the ramp-up period could positively affect the rating.

Faster-than-expected portfolio amortisation could positively affect the rating.

Downside rating-change drivers

Worse-than-expected asset performance, reflected in a higher-than-expected default rate or lower-than-expected recovery upon asset default, could negatively impact the ratings.

Significant deterioration in servicer's credit quality could negatively affect the rating as it will increase commingling and liquidity risk.

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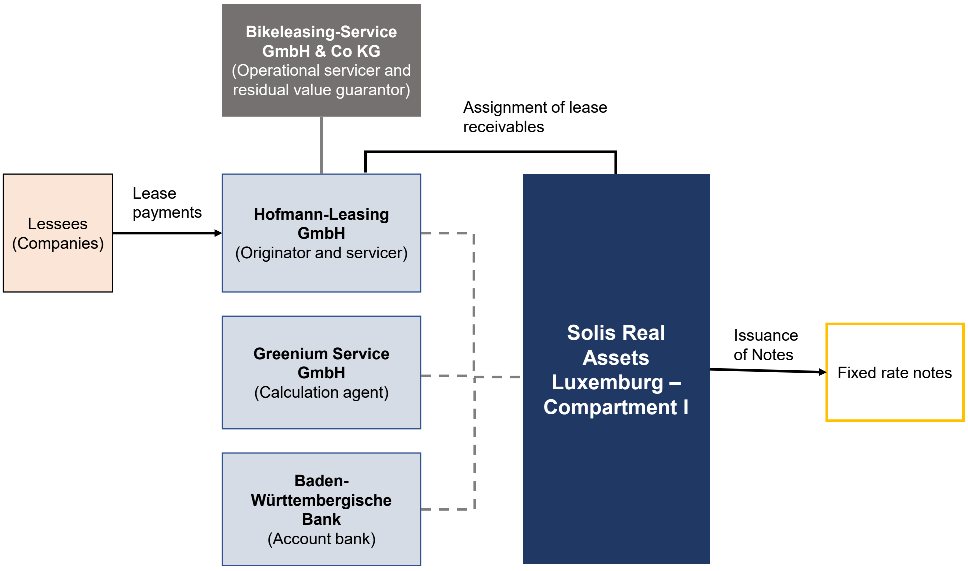
1. Transaction diagram



Source: Transaction documents and Scope.

2. Asset analysis

2.1. Securitised assets

2.1.1. Product type

The transaction securitises lease receivables composed of the lease instalments and the bicycles' residual value. Monthly instalments are the sum of i) a share of the net purchase price, ii) the mandatory insurance fees, iii) any optional additional insurance payments, and iv) service charges. Monthly instalments are paid directly to the lessor by the employer of the bike user. Payments are directly deducted from the bike user's monthly salary.

The originator finances the purchase price of a bike, the upfront commissions to BLS, the upfront payment to the insurance company as well as the service charges. The benefit of paying the insurance premium upfront is that the bike is insured over the whole term of the lease, even if the lessee stops payments for any reason.

2.1.2. Customer type

BLS, the operational servicer, targets mid-sized companies in Germany and Austria. This is to ensure the economic feasibility in terms of envisaged conversion rate of the resulting relationship with the companies.

2.1.3. Term, amortisation, and seasoning

The standard term for bike leasing contracts in Germany and Austria is three years. There is no turn-in option for the lessee.

2.1.4. Payment frequency

Lessees must pay monthly. There is no explicit principal and interest component in the lease instalments embedded since the instalment itself is calculated based on the lease factor plus any insurance and admin costs.

2.1.5. Linked contracts

There is the mandatory insurance linked as well as the mandatory employer insurance. Additional optional insurances regarding maintenance etc. can be contracted. All insurance payments are paid upfront by the originator to the insurance, refinanced by the insurance component embedded in the lease instalments.

2.1.6. Securities and guarantees

BLS provides a guarantee of 10% of the residual value at the end of the lease term.

2.1.7. Residual value risk and voluntary termination options

The payment of the residual value can happen in the following ways depending on the respective scenario:

Case 1: Lease term reaches its end (no defaulting parties). The bike is offered to the employee at the end of the contract for a certain residual value. If not purchased by the employee, the bike is sold in the market.

Case 2: The employee sickens, contract terminated or maternity leave (no defaulting parties). The bike can be offered to the employee priced at all open lease instalments plus the residual value. Since December 2020 this is insured in every lease contract. All outstanding lease instalments and residual value are covered by the insurance.

Case 3: The lessee (employer) defaults. There are three potential outcomes.

A) The employee is granted a grace period of up to three months if they can prove to have a new job with an employer who already has a framework agreement with BLS or intends to have such a framework. Unpaid lease instalments are then made up for with the new salary conversion.

B) The bike can be offered to and purchased by the employee (all open lease instalments plus the residual value)

C) The bike is repossessed and sold in the market

Case 4: BLS is incapable. No impact on the contract. In this case the servicing activities cannot longer be carried out by BLS. Customers would have to contact HL directly.

2.1.8. Eligibility criteria

Eligibility criteria for the leases are summarised in Figure 1. The key covenant relates to concentration limits and a minimum average credit quality requirement, assessed using a third-party credit score. Furthermore, there are single exposure and sectoral concentration limits to mitigate idiosyncratic risk.

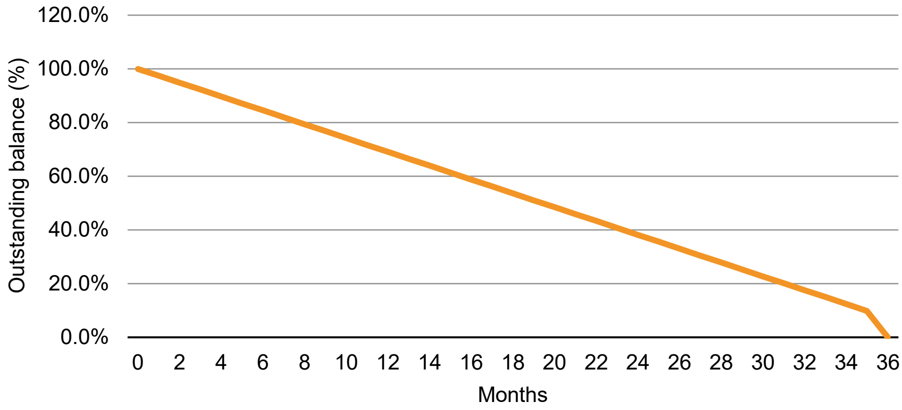
Figure 1. Asset and portfolio covenants

Covenants	
Asset type	Bicycle leases to corporate clients in Germany and Austria
Lessee classification	
Credit quality concentration limits and minimum average credit quality requirements implied by a third-party credit score	
Maximum individual corporate exposure	0.5% Exception for 10 companies at 1.9% each
Maximum economic segment (as per NACE 2008, Level 1) concentration	30%

2.2. Amortisation profile

The standard term for a bike lease in Germany and Austria is three years. The standard lease plan therefore includes 36 instalments. At the end of the term, a bullet payment reflecting the residual value is covered by BLS' guarantee. This results in the portfolio amortisation profile shown in Figure 2.

Figure 2. Portfolio amortisation profile



Source: HL, Scope

2.3. Portfolio modelling assumptions

We considered the portfolio eligibility criteria, such as the portfolio concentration limits by sector, and inferred obligors' credit quality based on these criteria to model a representative portfolio. We determined: i) pairwise asset correlations with the other borrowers in the pool; ii) a one-year default probability extrapolated in accordance with Scope's idealised default probability tables over the transaction's lifetime; and iii) a recovery rate upon default.

We expect the notes will be exposed to the full contemplated portfolio only at the end of the ramp-up period. At the issue date, only a portion of the proceeds of the notes were used to purchase assets. Remaining proceeds were transferred to the issuer's account and will be used to finance further purchases of assets. We considered the mismatch between asset and liabilities during the ramp-up period by applying an additional cost in the structure.

We assumed an aggregate annual portfolio yield of 6.33% (IRR) under no defaults implicit in the receivables' transfer value. The transfer value of the receivables reflects a 9.5% discount to the nominal value of the contracts' cash-flows.

Figure 3. Portfolio assumptions for the projected portfolio

	Assumption
Mean default rate	1.83%
Coefficient of variation for default rate	113.63%
Base case recovery rate	50%
BBB conditional recovery rate	42%
Constant prepayment rate	0%

2.3.1. Portfolio default rate analysis

Our assumptions regarding the average credit quality (in terms of default rate) of the underlying borrowers is commensurate with a BB+ rating. This reflects the targeted borrowers' characteristics, i.e., German and Austrian small-to-medium size, general risky credit profile. The assumed rating for the underlying borrowers also reflects our view on the portfolio's positive selection criteria due to credit quality concentration limits and minimum average credit quality requirements based on a third-party credit score. The obligor credit profile combined with the asset maturity date enables us to derive each asset's default rate and timing (see section 5 Figure 5).

For this transaction, we assumed pairwise asset correlations ranging from 2% to 27%, composed of additive factors including a general factor of 2%, a country factor of 5% and an industry factor of 20%. The asset correlation reflects the assets' exposure to common factors such as the general economic environment, their jurisdiction and the respective industry sector.

Following the portfolio's concentration limits, we assume a relatively small portfolio of 210 obligors. The 10 largest positions account for 19% whereas the rest accounts for 0.5% of the portfolio each. Obligors are assumed to be in four different industries following the minimum portfolio criteria. To maximise the impact from correlation, we grouped the largest positions in one single industry. Furthermore, all borrowers are assumed to be German companies, to maximise the correlation effect.

2.3.2. Recovery rate analysis

We sized our recovery rate for the portfolio assuming that the major share of leased assets will be pedelecs. The value of such bikes is mostly composed of the motor and battery which are exposed to significantly higher depreciation compared to the other bike's parts over a three-year term. We assumed an initial value drop of 30% and a further 20% decline p.a. reaching a 10% after three years, which is line with the residual value guaranteed by BLS. Since the recovery depends also to a large part on the time of default of the lessee, the depreciation profile is blended with our assumed default timing. The derived base case recovery rate is 50% (see Figure 3).

We believe the recovery rate also incorporates additional costs that may arise in connection with repossession and sale of bikes in the market, should the assigned parties no longer exist.

2.3.3. Constant prepayment rate (CPR)

We have not modelled a CPR since lessees are not allowed to prepay.

3. Financial structure

3.1. Capital structure

The capital structure features a single tranche of fixed rate notes of EUR 30m. The notes pay a monthly coupon of 4.5% per annum. Principal payments are only due and payable following the end of the ramp-up period.

3.2. Reserve funds

There is no dedicated cash reserve. However, any remaining funds after payment of senior fees, interests and principal on the notes will be trapped in the cash account as reserve funds. These funds can be used to cover any shortfall of payments in the subsequent payment dates. At final maturity, all remaining funds, including the reserve funds, will be distributed to noteholders.

3.3. Priority of payments

Payments to the issuer consist of instalments from the lease receivables. The structure's priority of payments provides protection against payment interruption, as collections from the assets are first used to pay timely interest on the notes.

Figure 4. Simplified priority of payments and available funds

	Simplified priority of payments
Available funds	Payments made under the lease receivables plus amounts in the issuer's accounts
Pre-enforcement	Senior cost and expenses
	Interest on the notes
	At the end of the ramp-up period, the principal amortisation amount
	At final maturity, the principal outstanding amount
	Variable payment to the noteholders following full repayment of the notes' interest and principal

3.4. Amortisation

The notes are amortised after the payment of interest up to the principal amortisation amount defined as follows:

$$\textbf{Principal amortisation amount} = \frac{(\textbf{Notes outstanding} - \textbf{Residual value of the leases, adjusted for defaults})}{(\textbf{Remaining periods until maturity})}$$

Amounts available in the issuer's account after any payment period are also available to amortise the notes on the following payment date.

4. Originator, servicer, and insurer

HL is the originator of the bike lease receivables as well as the servicer. The company is a fully owned subsidiary of BLS. Beside bikes, HL had originated in the past leases for other moveable assets. Since 2022, HL focussed only on bikes. New customers (lessees) are acquired by BLS and connected with HL (lessor). Procedural aspects, such as managing of applications, customer (bike user) support and the purchasing process from the retailers are performed by BLS. Customer (lessee) support and billing process are performed by Hofmann Leasing as originator and servicer.

BLS acts as the operational servicer in the transaction, serving as a procedural link in the triangular relationship between supplier, lessees, and lessors. It is the second largest bike leasing company in Germany, with around 25% market share and has framework agreements with over 56,000 companies with more than 3.2 million employees. The company works with a network of over 6,000 bike retailers in German-speaking countries.

To ensure operational efficiency, BLS strives to digitise most aspects of its process that includes several customer-facing portals. Suppliers, lessees and employees are all directed to these fully digital interfaces to manage business relationships. These digital customer services are provided free-of-charge to its customers, as BLS has a separate commission agreement with the respective lessors.

BLS Versicherungs GmbH & Co. KG, a subsidiary of BLS, acts as an insurance broker and provides services relating to the settlement of damages such as theft of bikes for BLS/HL customers. The insurance products are provided as a mandatory or optional component as part of the leasing contract. The originator HL acts as the policyholder.

4.1. Sanctioning and underwriting

HL uses a third-party credit score in their underwriting decisions. Contracts up to EUR 500k in value follow a standardised process, with various internal reviews such as the four eyes principle or additional approval from the respective team leader. Contracts above EUR 500k in value are assessed based on standardised preliminary examination and additional employer's business documents. In addition, the originator's management is involved for commitments larger than EUR 500k.

BLS shall be the only origination channel for this transaction. The company screens the market for companies and approaches them directly. In the context of this transaction, all leases must fulfil the eligibility requirements described in section 2.1.8.

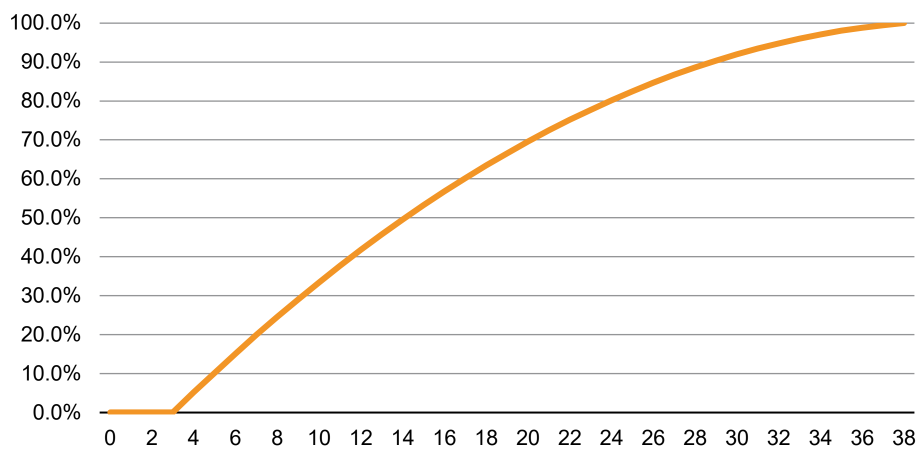
4.2. Servicing and recovery

Monitoring is done by sending payment reminders in case of any dues. The lessees are contacted directly in case of larger contracts. Debt collection is conducted by the servicer or appointed external parties.

5. Quantitative analysis

We analysed the reference portfolio's performance using a single-step Monte Carlo simulation that implements a Gaussian-copula dependency framework, as per the analysis described in section 2.3. The resulting default distribution and default timings were then used together with rating-conditional recovery assumptions in a cash flow model to determine the expected loss and expected weighted average life of the notes, reflecting the structural features of the transaction.

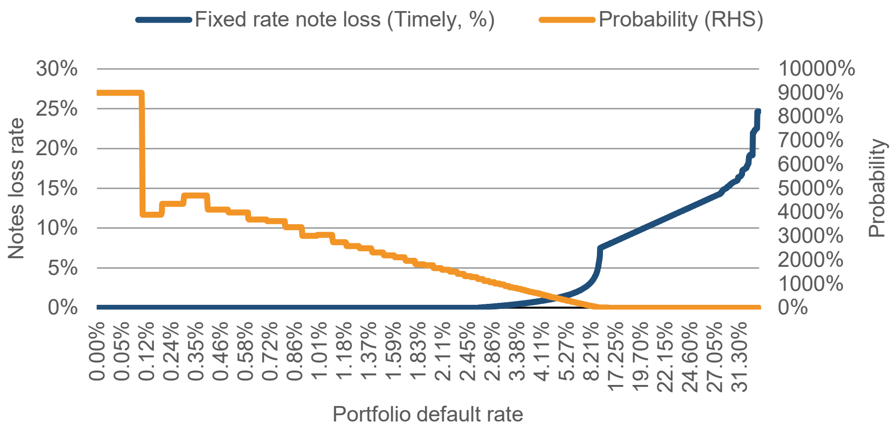
Figure 5. Default timing



Source: Scope

Figure 5 shows the assumed timing of defaults in our analysis. Figure 6 shows the losses for the noteholders across the default rate distribution. The chart shows how overcollateralisation provides protection to the noteholders, as well as recovery proceeds in case of default.

Figure 6. Cash flow analysis results for mean default rate, coefficient of variation and rating case recovery rate



Source: Scope

Note: The probabilities displayed on the right-hand side axis must be considered in the context of the calculation of the probability density.

6. Rating stability

We tested the resilience of the ratings against deviations in the main input parameters: the portfolio mean default rate and the portfolio recovery rate. This analysis has the sole purpose of illustrating the sensitivity of the ratings to input assumptions and is not indicative of expected or likely scenarios.

The following shows how the results would change when the portfolio's expected default rate is increased by 50% and the portfolio's expected recovery rate is reduced by 50%, respectively:

- Sensitivity to mean default rate, one notch.
- Sensitivity to recovery rate, one notch.

7. Sovereign risk

Sovereign risk does not limit the note's rating

Sovereign risk does not limit the rating. The risks of an institutional framework meltdown, legal insecurity or currency convertibility risk is considered extremely unlikely, especially in the context of the expected life of the rated notes.

The rating analysis factors in the resilient economic outlook for Germany, which reflects our expectation of slowing, but ongoing economic growth and a stable low unemployment rate. The biggest challenge faced by the German economy relates to demographics: an ageing population, insufficient population growth and the growing lack of skilled workers.

8. Counterparty risk

The transaction is exposed to BW Bank as the issuer account bank. We assess the counterparty risk associated with BW Bank as the account bank to be minimal considering public information. HL, the originator and servicer of the transaction portfolio, is a subsidiary of BLS. The financial risk arising from this counterparty role is due to the potential commingling of funds in the servicer's account.

We considered the situation of a servicer default and replacement through accounting for commingling losses and increased service charges. We size the commingling losses in case of servicer default to be approximately 34 basis points of the total initial lease balance. This is primarily due to absence of any back-up servicer arrangement and disruption of payments in case the replacement of servicer takes more than a month.

Replacement servicers with capacity and capability to operate the leasing portfolio are widely available in the German market.

9. Legal structure

9.1. Legal framework

This securitisation is governed by two different legal regimes. Leases are originated and transferred under German law. The issuer is incorporated in Luxembourg and governed by Luxembourg law.

We did not receive a legal opinion. However, the legal documentation provide comfort on the transaction's legal structure and support Scope's general legal analytical assumptions.

We did not receive a tax opinion. However, the nature and purpose of the vehicle and the legal structure of the issuer effectively results in a tax-efficient issuer. The transaction has a tax-efficient structure, i.e., no taxes apply except for value-added tax on contracted services, which remain a cost for the issuer.

10. Monitoring

Scope analysts are available to discuss all the details surrounding the rating analysis

We will monitor this transaction based on the performance reports from the management company as well as other available information. The ratings will be monitored continuously and reviewed at least once a year, or earlier if warranted by events.

Scope analysts are available to discuss all the details surrounding the rating analysis, the risks to which this transaction is exposed and the ongoing monitoring of the transaction.

11. Applied methodology and data adequacy

For the analysis of this transaction, we applied our Consumer and Auto ABS Rating Methodology, the General Structured Finance Rating Methodology and the Counterparty Risk Methodology. All are available on our website, www.scoperatings.com. Data provided was adequate for our analysis.

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