

Challenges in financial accounting of a lessor related to a finance lease are linked to the calculation of

- the "Interest rate implicit in the lease (EIR)" and the
- the "Probability weighted expected credit losses (ECL)".

The solution expects the delivery of the following information:

Contractual data:

The financial leasing contract, just like an annuity loan, is to be delivered to the solution.

This entails information such as:

- Leasing period
- Selling price / fair value
- Carrying amount of the leased object
- Direct costs
- Guaranteed amount
- Expected value of the lease object and term date of leasing contract
- Interest rate (if available)
- Unguaranteed amount
- Amount of leasing rate
- Payment frequency

Customer data

The lessee is delivered as a customer.

Market data

Depending on the currency and agreed interest, currency rates and interest rate structure curves need to be provided to the solution.

Based on the information provided, the solution generates / calculates the following data finance leases:

- **Estimated cash flow plan:** Based on the parameters provided, the solution calculates the estimated cash flow plan which forms the basis for the calculation of
 - Discount rate / interest rate implicit in the lease
 - Expected credit losses
- **Initial capital:** The initial capital of the financial leasing contract is equal to the fair value of the leased object (machine).
- **Discount rate / interest rate implicit in the lease:** For lessors, the discount rate will always be the interest rate implicit in the lease. The interest rate implicit in the lease is defined in IFRS 16 as "the rate of interest that causes the present value of (a) the lease payments and (b) the unguaranteed residual value to equal the sum of (i) the fair value of the underlying asset and (ii) any initial direct costs of the lessor." The interest rate implicit in the lease can be compared with the effective interest rate of an annuity loan, taking the lease payments, the unguaranteed residual value, the fair value of the underlying asset as well as initial direct costs of the lessor into account.
- **Amortisation schedule:** The amortisation schedule is based on the applied discount factor and contains information about periodical amortisation for each period as well as open amortisation for further periods.
- **Expected credit losses:** The calculation of expected credit losses for financial leasing follows IFRS 9 and is, in general, similar to the calculation of probability weighted expected credit losses for loans, taking various macroeconomic scenarios into account. For details, please refer to the section "[IFRS 9 Impairment Blueprint](#)". If requested, specific segmentation and staging rules can be applied to leasing deals. Also, specific models for PD, LGD and EAD calculation can be provided.

For finance lease, the solution covers the entire process chain necessary to calculate probability weighted expected credit losses (pwECL).

This includes:

- Calculation of exposure at default (EAD) based on the estimated cash flow plan
- For stage 1 and stage 2:
 - Usage of the EIR to discount the EAD (stage 1 and stage 2) or discount the expected recoveries (stage 3) while calculating the recoverable amount
 - Calculation of PD and LGD based on historic payment information
 - Calculation of probability weighted ECL taking into account macroeconomic parameters in alternative scenarios
- For stage 3:
 - Applying a significance test
 - Calculation of the probability weighted ECL taking into account:
 - Macroeconomic parameters in alternative scenarios for lump sum specific provision
 - Alternative expectations about individual expected regular/irregular recoveries for specific provisioning
 - Consideration of ECL and unwinding for financial accounting

From this point of view, for financial leasing contracts the IFRS process chain is applied in a similar manner as for loan contracts.