Exposure at Default (EAD)

The topic Exposure at Default (EAD) has two aspects that influence the calculation of the ECL:

- Period of exposure that limits the period over which possible defaults are considered and thus affects the determination of other components in the calculation of ECLs.
- Exposure at Default that is linked to the question of how loan exposures are expected to change over time. This value is crucial for an unbiased measurement of ECLs.

In addition, the calculation of exposure at default can be split into two sub-groups:

- Exposure for on-balance financial assets, for example loans, money market or other debt instruments. For on-balance items, the contractual payment schedule, the payment behaviour such as early repayment or prolongation will have an impact on the exposure for different periods.
- Exposure for off-balance financial assets including the undrawn portion of revolving credits and commitment. For an off-balance item, the credit conversion factor has a significant impact on the estimated exposure at default.

The following components are provided for on-balance sheet items as well as for a simplified approach. Components for off-balance sheet items and more complex requirements are available on request.

Component 'EAD Import'

In a simplified approach, the EAD is assumed to be equal to the Gross Carrying Amount (GCA). This unadjusted 'exposure' is calculated with the implied assumption that the customer will follow the expected cash flow plan. The component 'EAD Import' imports the GCA from a source.

Model 'EAD Cash Flow'

This component calculates the EAD for different time periods over the lifetime of a financial instrument, e.g. EAD in 3 months, 6 months, 1 year, 2 years etc. This approach takes into account that for a financial instrument with a regular repayment plan, e.g. annuity, the EAD for future periods will be different to the current book value due to repayments.

To reflect possible repayments, the estimated cash flow plan over the lifetime of a financial instrument is generated on the basis of the contractual agreement.

On the basis of the cash flow plan, the EAD for different periods in the future is calculated using the amortised cost and the adjustment of 3 months overdue which may occur before default.

To calculate the EAD for different time periods in the future, the contractual data for a financial instrument must be delivered to the component, e.g. contractual loan agreement.