

# Credit VaR at a Glance

Expected loss · WCDR · Dependence · Capital

₹0.90 → ₹10.18 crore

Average loss versus 99.9% loss VaR.  
The ₹9.28 crore difference is capital above EL.

Expected loss

EAD × PD × LGD

The average loss, not the tail

Credit VaR

Loss quantile at α

Not the maximum possible loss

WCDR

Default-rate quantile

Conditional tail threshold, not average PD

Dependence

Defaults cluster

Asset correlation ≠ default correlation

Loss VaR

EAD × LGD × WCDR

For a granular Vasicek portfolio

Economic capital

VaR – EL

Buffer above separately covered EL

Exposure at default

Drawn + CCF × undrawn

Unused commitments can create risk

Loss severity

LGD = 1 – recovery

Recoveries may worsen in downturns

Confidence level

99.9% over one year

A model threshold, not a guarantee

Expected shortfall

Mean of worst 0.1%

At 99.9% confidence; handle atoms carefully

Concentration

One borrower ≠ many

Several facilities do not diversify default

Biggest challenge

Model assumptions

Test dependence, recovery and tail risk

FROM AVERAGE LOSS TO CAPITAL

₹100 cr EAD · PD 2% · LGD 45% · asset correlation 20%

₹0.90 cr

Expected loss

₹9.28 cr

Capital above EL

₹10.18 cr

Total loss VaR

₹0.90 + ₹9.28 = ₹10.18 crore

TEACHING MOMENT

EL · What do we lose on average?

PD 2% gives expected loss of ₹0.90 crore.

WCDR · How high is the tail default fraction?

At 99.9% confidence, the model gives 22.63%.

CAPITAL · What buffer sits above average loss?

Loss VaR less EL gives ₹9.28 crore.

Try the three interactive caselets →

Education only · One-year horizon · Infinitely granular, homogeneous one-factor Gaussian model; fixed EAD and LGD. This example uses 20% asset correlation; the article’s running example uses 15%. Credit VaR means total loss VaR. Capital shown is not a complete regulatory requirement. Values rounded.