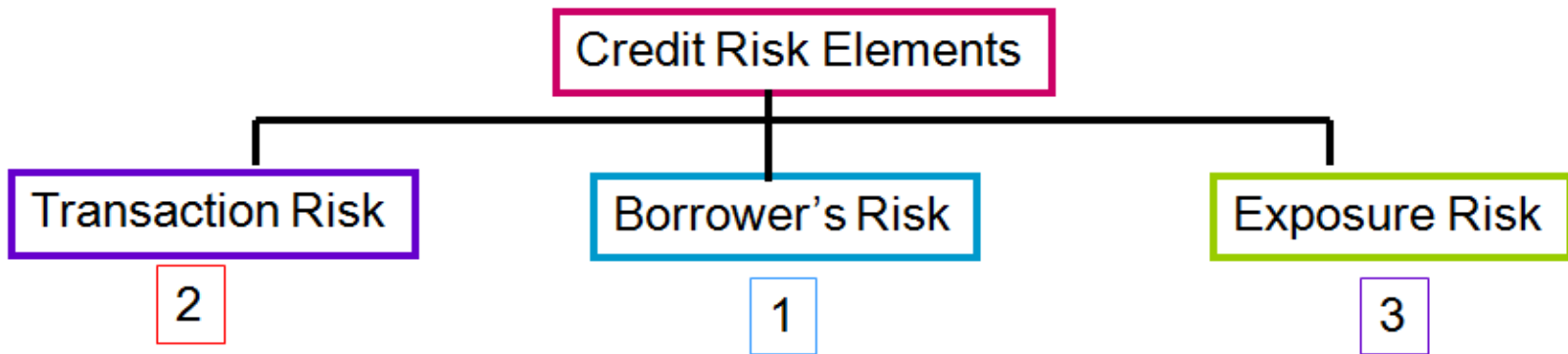


3. Bagaimana Menghitung Risiko Kredit? PARAMETER RISIKO (PD, LGD DAN EAD).

Risk Components: Drivers of Credit Risk

Driver of Credit Risk	Standardised Approach	IRB Approach
Obligor risk	Credit assessment institutions	Probability of Default (PD)
Transaction risk	Credit risk mitigation techniques	Loss Given Default (LGD)
Likely size of exposure	Credit conversion factors	Exposure at Default (EAD)
Maturity	Limited recognition	Maturity (M)

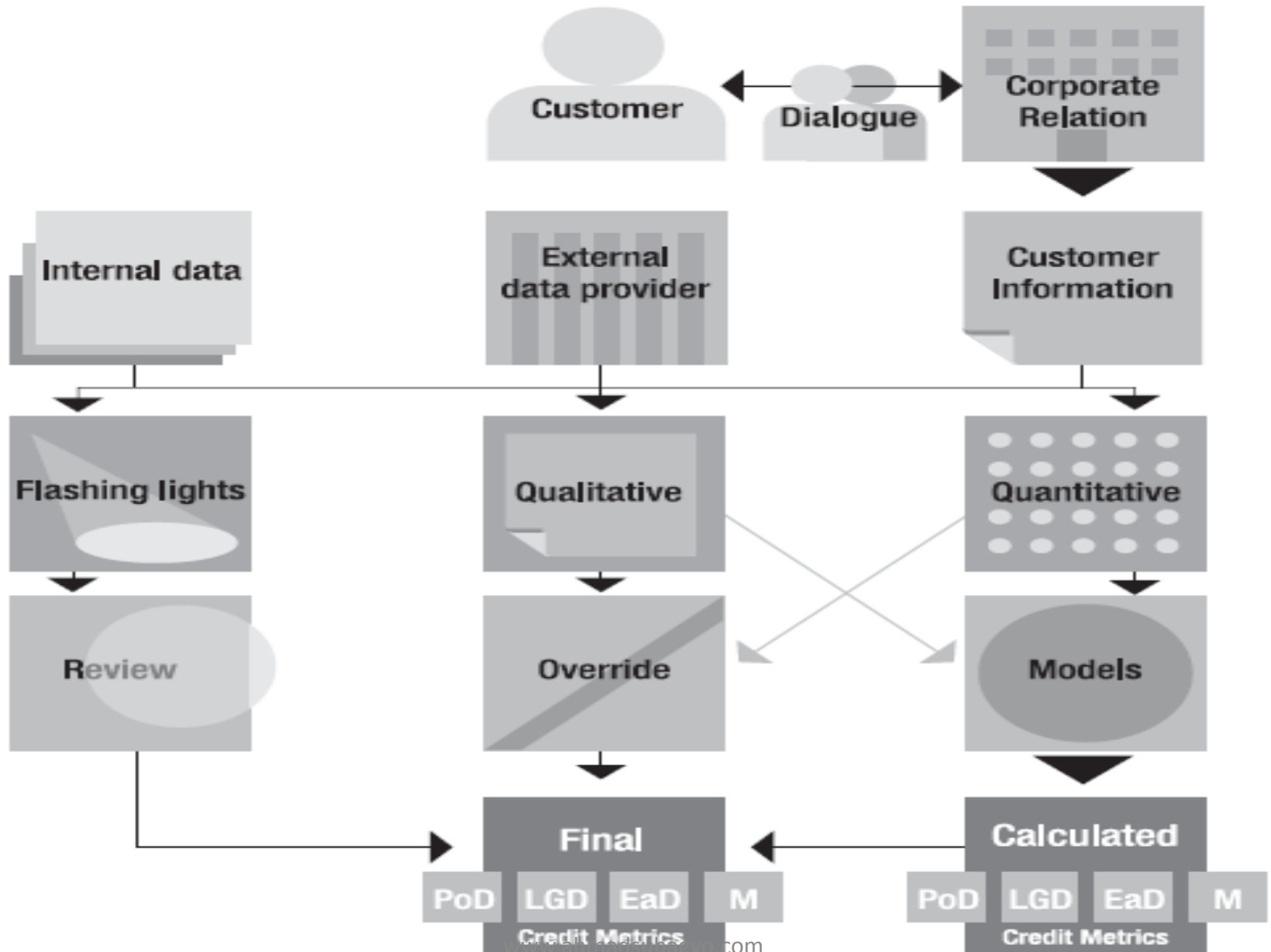
Key Components of Credit Risk under Basel II



1. The probability of default (PD) being assessed using both quantitative & qualitative information about the borrower and the market.
2. Loss given default assessed on actual details such as: recovery time, collateral, market value of debt, and also within the perceived risk of the borrower.
3. Exposure at default of the loan (EAD). This component takes into consideration value of the outstanding debt at the time of default (t), and also any committed by unused line of credit.

Note: Other factors such as: the amount outstanding, borrower's position within the Industry, degree of concentration risk involved, scope of diversification, and maturity

Credit Risk Driver



Component of Credit Risk

Size of
Expected Loss

1
What
is the probability
of a counterparty going
into default?

2
How much
will that customer owe
the bank in the case of
default?
(Expected Exposure)

3
How much
of that exposure is
the bank going to lose?

Borrower Risk

Facility Risk Related

“Expected Loss”

“Probability
of Default”

“Loan
Equivalency”

“Severity”

EL =

PD

×

EAD

×

LGD

Expected Loss

Probability of Default

Exposure at Default

Loss Given Default

Public rating map
Rating model

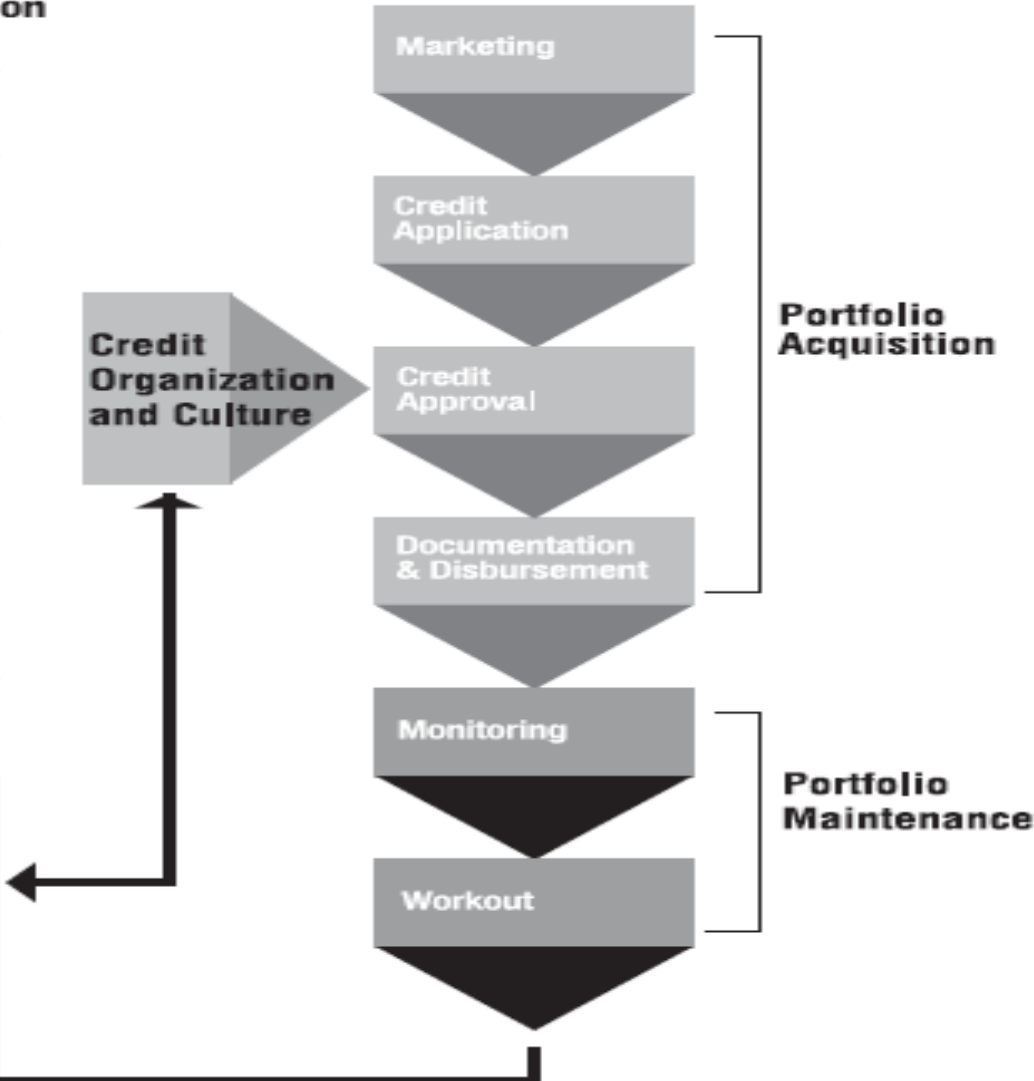
MTM
Potential Exposure
Facility structure
Use of commitment

Seniority
Collateral
Guarantees

Linking the Credit Process to the Credit Equation

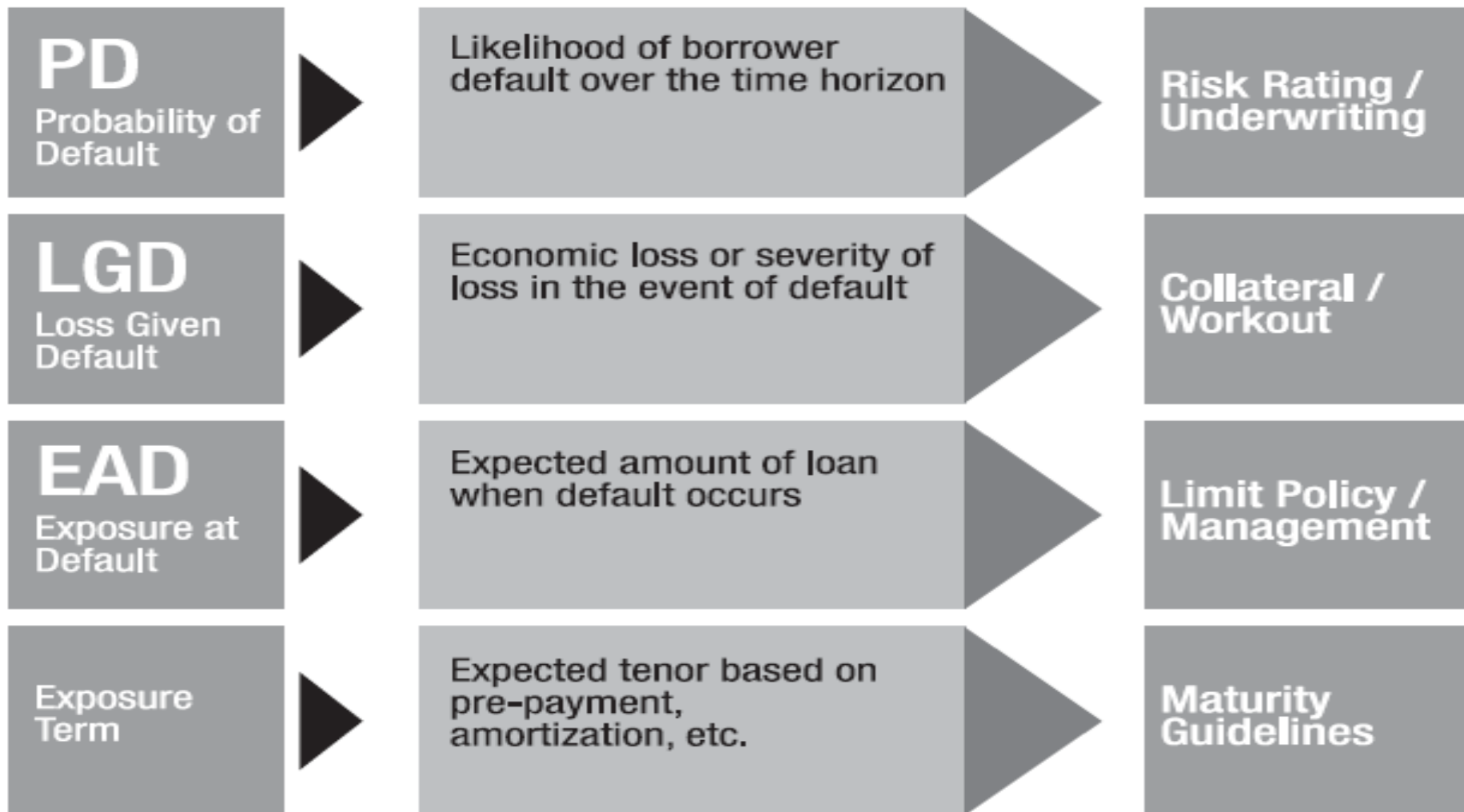
Process Element	Term of Credit Equation
Credit Policy	Process Elements
Marketing	Based on Policy
Credit Application	PD
Credit Approval	PD
Documentation & Disbursement	LGD
Monitoring	EAD, PD
Workout	LGD

Credit Policy & Portfolio Management



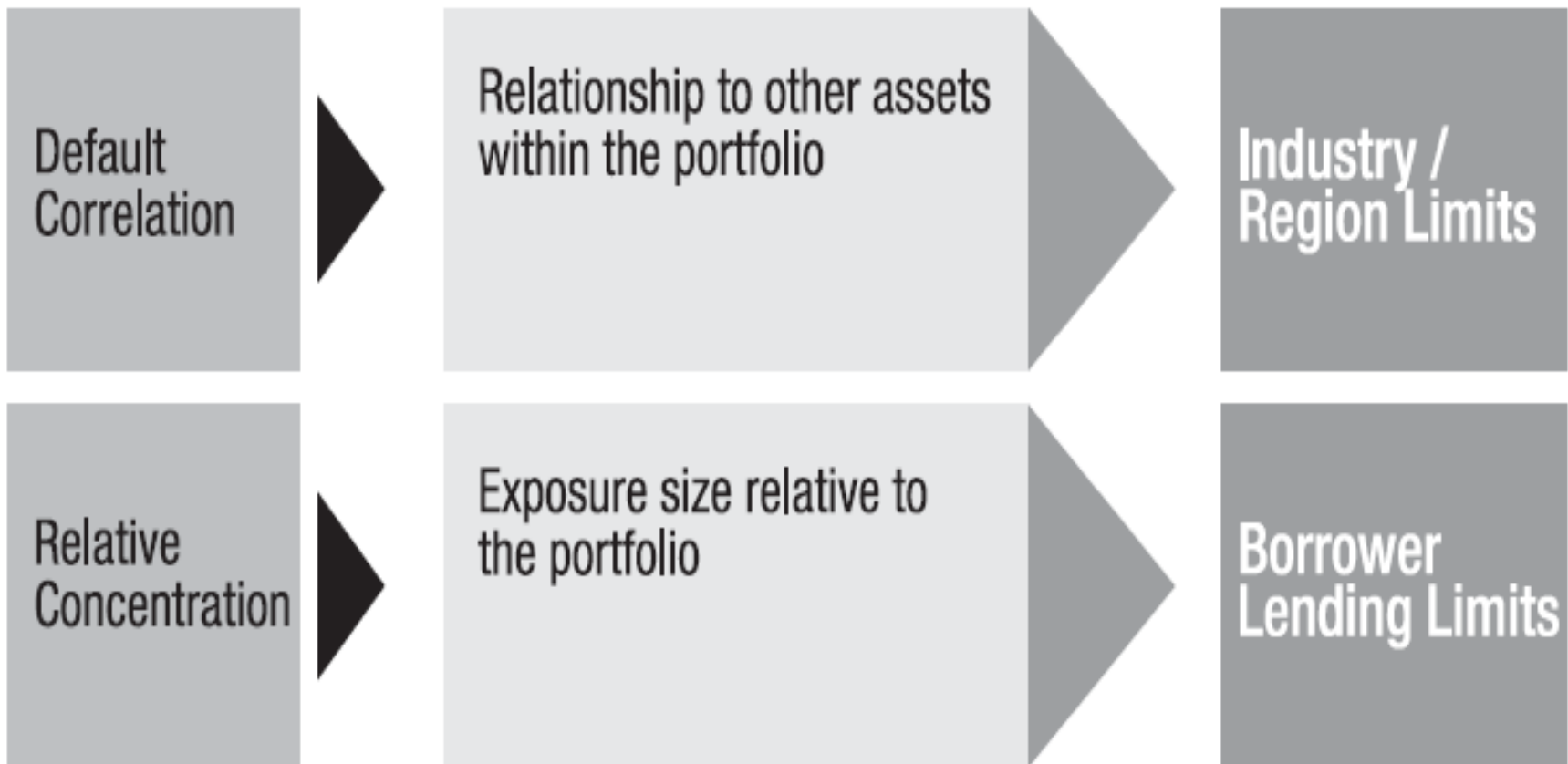
Portfolio Credit Risk Measurements Linked to the Credit Policy

Transaction Credit Risk Attributes



Portfolio Credit Risk Measurements Linked to the Credit Policy

Portfolio Credit Risk Attributes



Credit Portfolio Management Links to the Credit Process on Three Levels

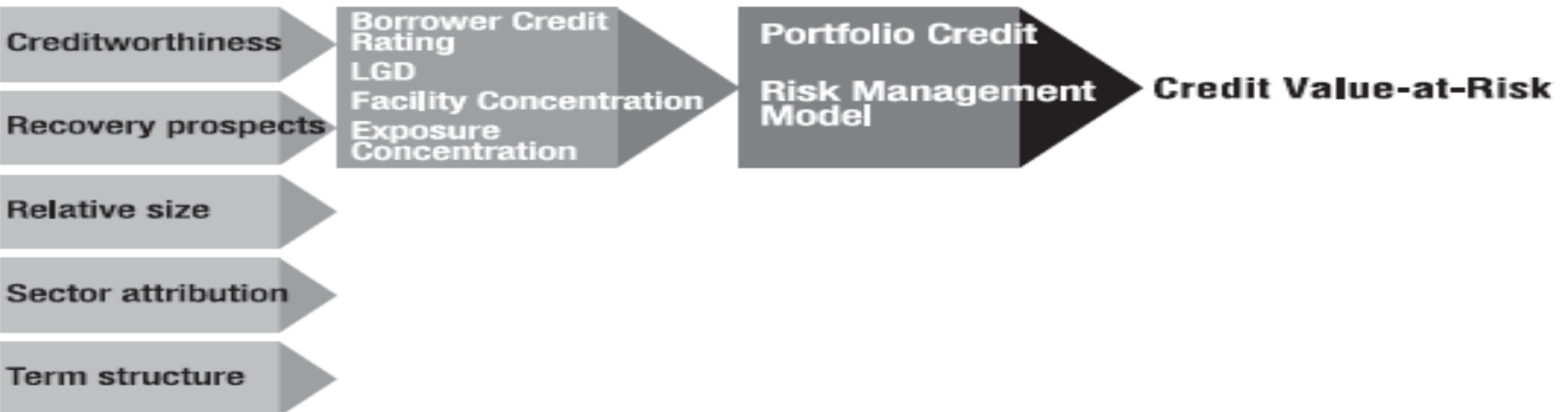
Obligor level



Transaction level



Portfolio level



What has changed ?

Risk parameters

- Default rates
- Loss rates
- Exposure at Default
- Correlations



Operative fields of application

Risk adjusted view on

- Credit pricing
- Credit portfolio management
- Process optimization (Credit approval / supervision)
- Risk- / equity strategy
- Management Information
- Regulatory issues

The ability to quantify credit risk – both on counterparty and on portfolio level – has become a strategic factor of success in banks credit business.

Standard Loan Capital Calculation, Basel I

- Example: Banking book loan of 200 Mio (Exposure At Default – EAD) with a Corporate (Ext. Rating A-, Int. Rating C3) of 3 years Original Maturity and 2.5 years Residual Maturity, covered with a AAA Corporate Bond, Market Value 90 Mio.

$$\text{EAD} = f(\text{200mio}, \text{No Risk mitigation}, \text{Loan})$$

Exposure Amount (CCF: 1)

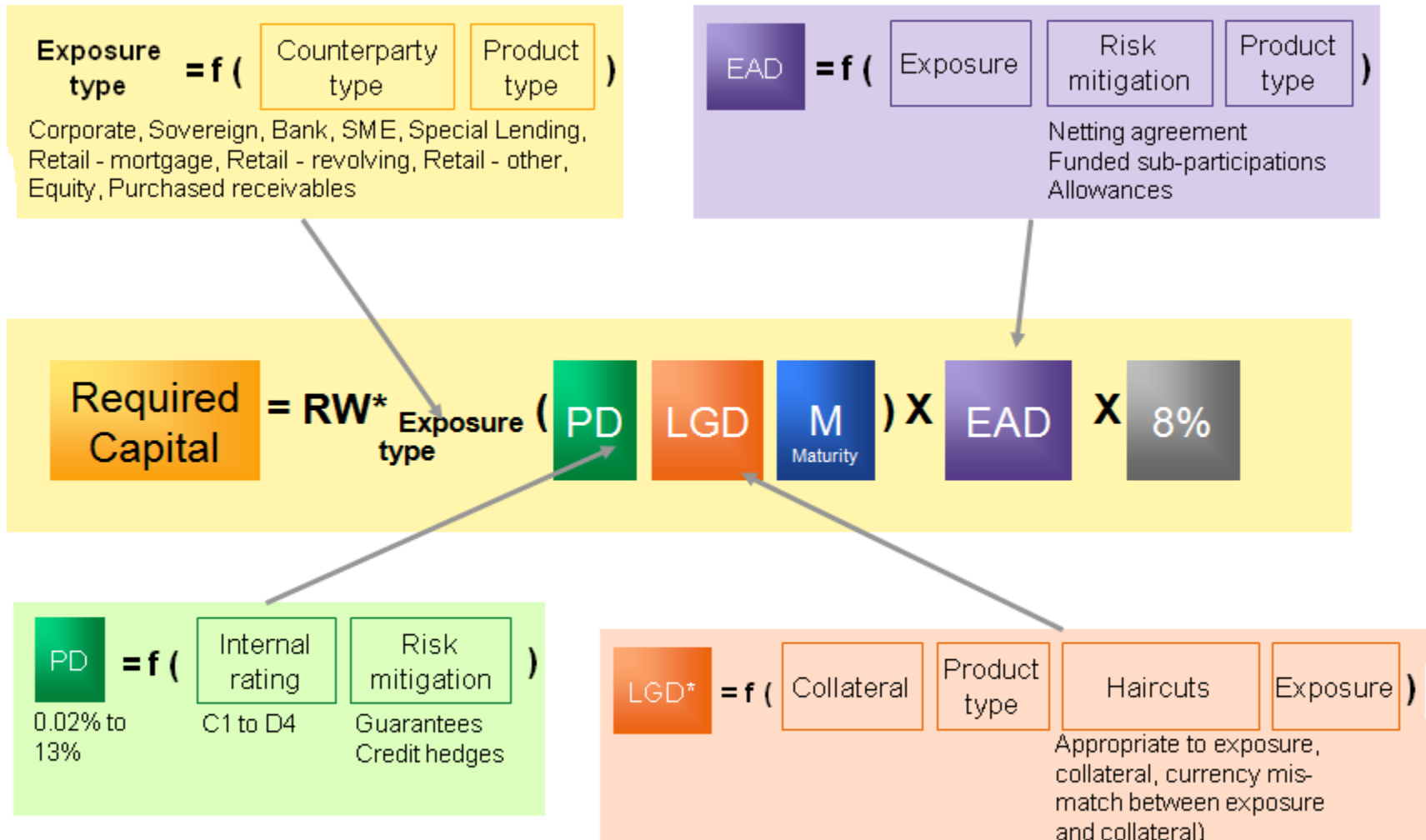
$$\text{Required Capital} = 100\% \times 200 \times 8\% = 16.00 \text{ Mio}$$

Allocated RW*

* Riskweighting allocated based on Counterparty

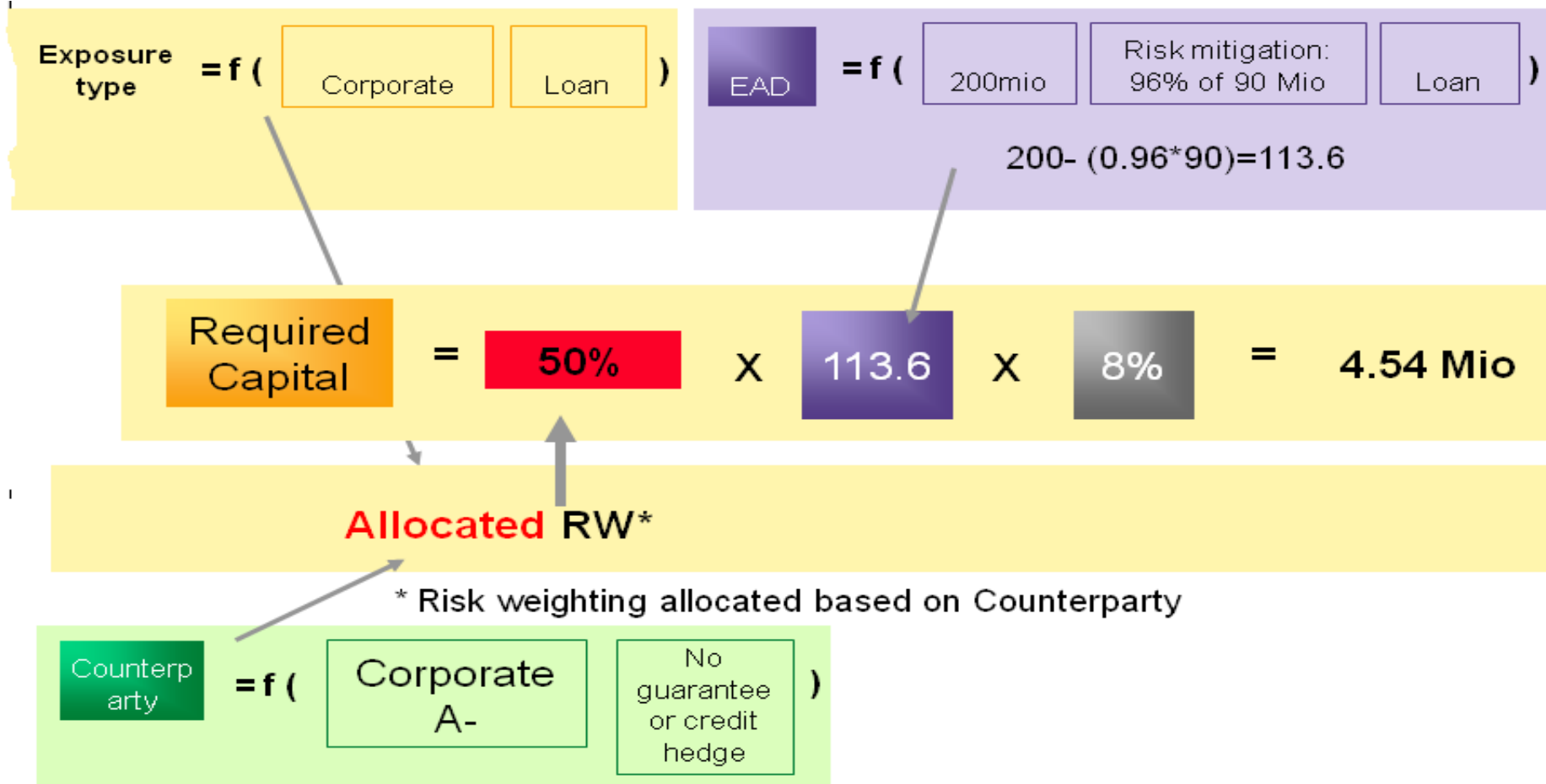
$$\text{Counterparty} = f(\text{Corporate}, \text{No guarantee or credit hedge})$$

Inputs for Credit Risk Calculators – Basel II

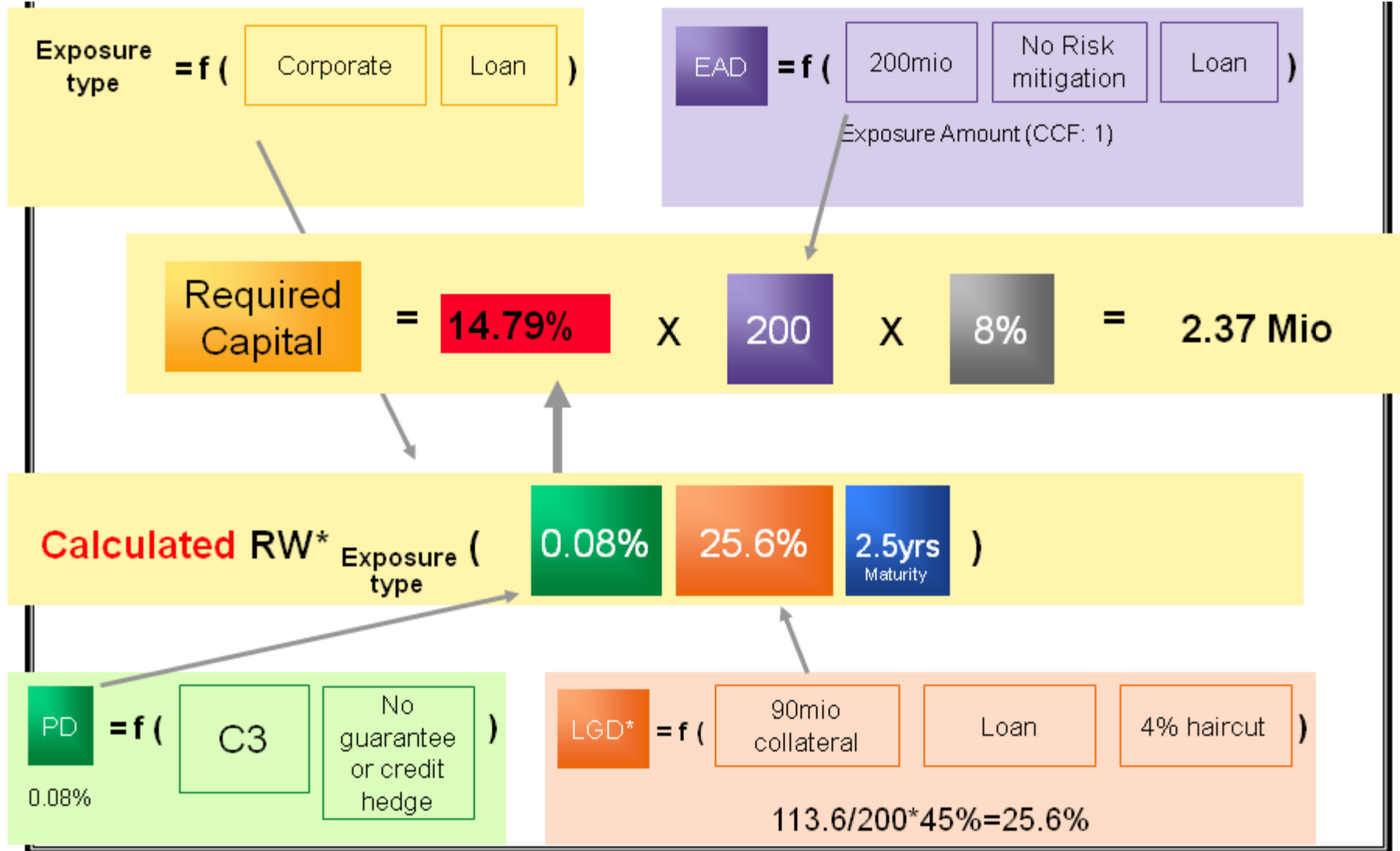


* Formula for risk weighting is derived from statistical distribution for a standard normal random variable.

Basel II - Standardized Approach



Basel II - Advanced Approach



* Formula for risk weighting is derived from statistical distribution for a standard normal random variable