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IFRS 9 ECL Guide for Investment Finance Companies

Practical Implementation Guide, Industry Best Practices, and Regulatory Expectations



Probmatrix Analytics Pvt Ltd
Advisory Services

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Disclaimer

This guide has been prepared to assist Investment Finance Companies in understanding and implementing the impairment requirements of IFRS 9 Financial Instruments. The guide is intended for educational and implementation support purposes and should not replace professional judgment, accounting standards, regulatory requirements, or external audit guidance.

Executive Summary

Investment Finance Companies (IFCs) play a critical role in providing medium and long-term financing to corporate entities, SMEs, infrastructure projects, and strategic sectors of the economy. The implementation of IFRS 9 presents unique challenges due to the nature of IFC portfolios, which are typically characterized by:

- Low default frequencies
- Large individual exposures
- Long contractual maturities
- Collateralized facilities
- Project and structured finance transactions
- Limited historical default observations

The introduction of IFRS9 requires development, validation, and documentation for an Expected Credit Loss model. In lieu of the Prudential Regulations, where loss allowance calculations are based on incurred losses, the new IFRS 9 regime uses the expected loss concept, i.e. under the impairment approach in IFRS 9 it is no longer necessary for a credit event to have occurred before credit losses are recognized in the financial statements. The computation of ECL requires the following three key components:

- Probability of Default (“PD”)
- Loss Given Default (“LGD”)
- Exposure at Default (“EAD”)

This guide provides practical guidance on developing, implementing, validating, and maintaining an IFRS 9 ECL framework tailored to the specific operational and risk management realities of IFCs.

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1.Understanding IFRS 9 Impairment Requirements

Objective

The objective of IFRS 9 impairment requirements is to ensure timely recognition of credit losses by incorporating:

- Historical information
- Current conditions
- Forward-looking information

Investment Finance companies are required to estimate credit losses before actual defaults occur.

Core Principle

Entities shall recognize Expected Credit Losses on financial assets measured at:

- Amortized Cost
- Fair Value Through Other Comprehensive Income (FVOCI)
- Loan Commitments
- Financial Guarantee Contracts

2. Financial Assets Commonly Held by IFC

Assets Typically Subject to IFRS 9

Asset Type	IFRS 9 Impairment Applicable
Corporate Loans	General Approach
SME Financing	General Approach
Project Finance	General Approach
Term Finance Certificates	General Approach
Sukuk Investments	General Approach
Bonds	General Approach
Placements with Banks	General Approach
Loan Commitments & Financial Guarantees	General Approach
Staff Loans	General Approach

Assets Typically Outside Scope

Asset Type	IFRS 9 Impairment Not Applicable
Strategic investments	IFRS 10, IAS 27, IAS 28, IAS 36
Property and physical assets	IAS 40, IAS 16, IFRS 16, IFRS 5, IAS 36
Intangible and operating assets	IAS 38, IFRS 3, IAS 2, IAS 41, IAS 36
Other non-financial assets	IAS 12, IAS 19

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3. Selection of ECL Approach

Under IFRS 9, there are two approaches for impairment assessment:

- Simplified Approach
- General Approach

The key difference between the two approaches is the requirement to assess Significant Increase in Credit Risk (SICR) and apply staging.

Under the Simplified Approach, Lifetime Expected Credit Losses are recognized from initial recognition, and no staging assessment is required.

Under the General Approach, financial assets are classified into three stages:

- Stage 1 (Performing Assets): Recognition of 12-month ECL.
- Stage 2 (Assets with Significant Increase in Credit Risk): Recognition of Lifetime ECL.
- Stage 3 (Credit-Impaired Assets): Recognition of Lifetime ECL, with interest revenue generally calculated on the net carrying amount.

In practice, the credit exposures held by IFCs fall within the scope of the General Approach due to their financing nature, longer contractual tenors, and exposure to ongoing credit risk. Accordingly, institutions should establish robust methodologies for assessing credit risk deterioration, staging, and Significant Increase in Credit Risk.

4. Portfolio Segmentation

Potential segmentation:

- Corporate Lending
- SME Financing
- Investments
  - Sovereign Exposures
  - Financial Institutions
  - Corporate Bonds
  - Sukuk
- Project Finance
- Staff Loans
- Loan Commitments & Financial Guarantees

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5. Default Definition

IFCs must establish a documented default definition. Common indicators include:

- 90 Days Past Due
- Bankruptcy
- Liquidation
- Restructuring due to financial distress

IFRS 9 Rebuttable Presumption:
Default = 90 Days Past Due

Note: The definition of "default" depends on local regulations and prevailing practices and may vary from country to country.

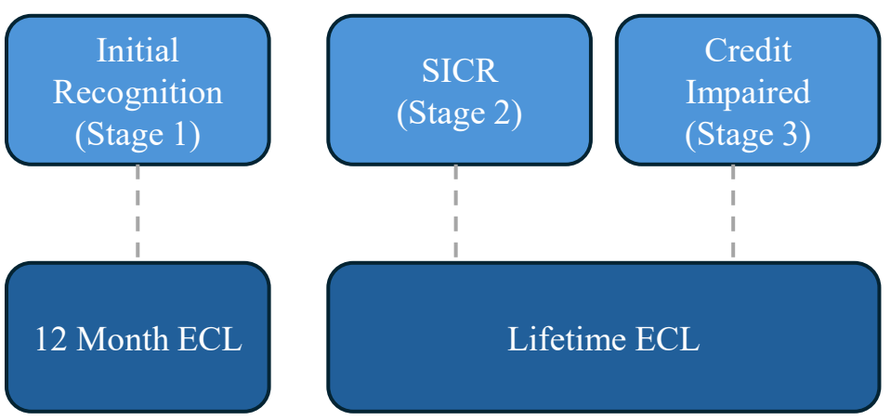
6. Significant Increase in Credit Risk (SICR)

As IFCs predominantly apply the General Approach under IFRS 9, the assessment of Significant Increase in Credit Risk (SICR) is a key component of the impairment framework. SICR is evaluated by comparing the credit risk of the financial asset at the reporting date with its credit risk at initial recognition.

SICR indicators may include deterioration in external credit ratings, adverse changes in the financial condition of the issuer or counterparty, significant changes in economic or market conditions, breach of contractual terms, or other qualitative and quantitative factors indicating an increased likelihood of default. IFRS 9 includes a rebuttable presumption that a financial asset has experienced a Significant Increase in Credit Risk when contractual payments are more than 30 days past due.

Where a SICR is identified, the financial asset is transferred from Stage 1 to Stage 2 and Lifetime Expected Credit Losses are recognized.

In the absence of a SICR, the asset remains in Stage 1 and a 12-month ECL is recognized. Financial assets that become credit-impaired are classified in Stage 3 and continue to be measured using Lifetime ECL.



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7. Expected Credit Loss Methodologies

TTC PD Estimation Techniques for Corporate, SME & Project Finance

The selection of a TTC PD methodology depends on the nature of the portfolio, the availability of historical data, portfolio segmentation, and the institution's internal risk-rating framework. Commonly used methodologies include:

Markov chain Migration Matrix: This methodology is particularly suitable for portfolios with an established internal credit rating framework and sufficient historical default data. Historical transitions between rating grades are analyzed to construct a migration matrix that captures the probability of borrowers moving from one rating grade to another over a specified horizon. A key advantage of the migration matrix approach is that it incorporates both rating deteriorations and rating improvements (curing behavior) observed in historical experience. As a result, it provides a comprehensive representation of portfolio credit dynamics than methodologies based solely on default observations.

The following transition matrix illustrates the general probability of migration between credit states

Transition Probabilities		Ending of Observation Period									
		AAA	AA	A	BBB	BB	B	CCC	CC	C	D
Beginning of Observation Period	AAA	PAAA,AAA	PAAA,AA	PAAA,A	PAAA,BBB	PAAA,BB	PAAA,B	PAAA,CCC	PAAA,CC	PAAA,C	PAAA,D
	AA	PAA,AAA	PAA,AA	PAA,A	PAA,BBB	PAA,BB	PAA,B	PAA,CCC	PAA,CC	PAA,C	PAA,D
	A	PA,AAA	PA,AA	PA,A	PA,BBB	PA,BB	PA,B	PA,CCC	PA,CC	PA,C	PA,D
	BBB	PBBB,AAA	PBBB,AA	PBBB,A	PBBB,BBB	PBBB,BB	PBBB,B	PBBB,CCC	PBBB,CC	PBBB,C	PBBB,D
	BB	PBB,AAA	PBB,AA	PBB,A	PBB,BBB	PBB,BB	PBB,B	PBB,CCC	PBB,CC	PBB,C	PBB,D
	B	PB,AAA	PB,AA	PB,A	PB,BBB	PB,BB	PB,B	PB,CCC	PB,CC	PB,C	PB,D
	CCC	PCCC,AAA	PCCC,AA	PCCC,A	PCCC,BBB	PCCC,BB	PCCC,B	PCCC,CCC	PCCC,CC	PCCC,C	PCCC,D
	CC	PCC,AAA	PCC,AA	PCC,A	PCC,BBB	PCC,BB	PCC,B	PCC,CCC	PCC,CC	PCC,C	PCC,D
	C	PC,AAA	PC,AA	PC,A	PC,BBB	PC,BB	PC,B	PC,CCC	PC,CC	PC,C	PC,D
	D	PD,AAA	PD,AA	PD,A	PD,BBB	PD,BB	PD,B	PD,CCC	PD,CC	PD,C	PD,D

Notes:

- The diagonal elements represent the probability of remaining in the same rating grade.
- The upper Off-diagonal elements represent rating downgrades or forward transitions.
- The Lower Off-diagonal elements represent rating Upgrades or backward transitions.
- The "D" column represents the probability of default over the horizon.
- Default is generally treated as an absorbing state unless a separate cure or re-entry framework is explicitly defined.

Typical Application:

- Corporate portfolios
- SME portfolios
- Project Finance

Data Requirement:

- Generally 5 years or more of rating transition history

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The Pluto-Tasche: This methodology is widely used for portfolios with very few observed defaults or no defaults at all. Rather than relying solely on observed default rates, the methodology estimates conservative PDs by accounting for statistical uncertainty surrounding the limited default observations at a selected confidence level.. This approach is particularly valuable for low-default portfolios where traditional estimation techniques may produce unreliable or unstable results.

Following table Illustrates the Rating wise PDs based on different confidence levels:

Rho	50.0%	75.0%	90.0%	95.0%	99.0%	99.9%
Ratings	PDs	PDs	PDs	PDs	PDs	PDs
AAA	0.31%	0.40%	0.49%	0.55%	0.68%	0.84%
AA	0.33%	0.42%	0.51%	0.58%	0.71%	0.88%
A	0.36%	0.46%	0.57%	0.64%	0.79%	0.97%
BBB	0.43%	0.55%	0.68%	0.76%	0.94%	1.16%
BB	0.58%	0.74%	0.91%	1.03%	1.26%	1.56%
B	0.87%	1.14%	1.42%	1.61%	2.00%	2.51%
CCC	1.33%	1.79%	2.27%	2.60%	3.28%	4.16%
CC	2.44%	3.38%	4.40%	5.09%	6.54%	8.42%
C	5.31%	7.69%	10.30%	12.06%	15.77%	20.49%
D	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Note:

- Confidence levels used to estimate the upper confidence bound of the PD. A higher confidence level produces a more conservative PD estimate.
- The 99.9% confidence level represents the highest degree of conservatism and is commonly used for regulatory or highly risk-sensitive applications, whereas lower confidence levels produce less conservative estimates.
- The selection of an appropriate confidence level should be based on the institution's risk appetite, portfolio characteristics, governance framework, and applicable regulatory or internal policy requirements.

Typical Application:

- Low Default portfolios
- Newly originated portfolios

Data Requirement:

- Suitable for low-default and zero-default portfolios

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PD Calibration Techniques for Corporate, SME & Project Finance

In certain portfolios, such as corporate, SME, commercial lending, and project finance the estimated PD across credit grades sometimes may not exhibit a monotonic relationship due to statistical variation, data characteristics, or model estimation outcomes. Consequently, higher risk grades may occasionally have lower estimated PDs than lower risk grades, which is inconsistent with the underlying credit risk profile.

Where credit scores or internal risk scores are available and the estimated PDs are non-monotonic, a Logit Calibration approach may be applied to derive a smooth and monotonic PD curve.

Logit Calibration applies a logistic transformation to the estimated PDs and establishes a calibration relationship between the borrower credit score (or internal rating score) and the transformed PD values. The calibrated PDs are then obtained by applying the inverse logistic transformation, resulting in a continuous and monotonic PD curve across the entire score range.

$$PD_k = \frac{1}{1 + e^{-(\alpha + \beta X_k)}}$$

The methodology is designed to:

- Establish a monotonic relationship between credit scores (or risk grades) and Probability of Default.
- Eliminate inconsistencies in the estimated PD distribution while preserving the underlying risk ranking.
- Maintain the discriminatory power of the internal credit score or rating model.
- Align the calibrated PDs with the portfolio's observed default experience.

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TTC LGD Estimation Techniques for Corporate, SME & Project Finance

Loss Given Default represents the proportion of an exposure that is expected to be lost if a borrower defaults, after considering recoveries from collateral, guarantees, repayments, and other recovery sources. LGD is expressed as a percentage of the Exposure at Default.

Several methodologies are available for estimating LGD depending on portfolio characteristics and data availability, including:

Workout LGD: The Workout LGD approach is the most widely adopted methodology in practice. It estimates LGD as the shortfall between the Exposure at Default (EAD) and the present value of expected future recoveries.

The methodology considers:

- Timing and amount of post-default recoveries;
- Realization of collateral or other credit enhancements (where applicable);
- Direct and indirect recovery costs; and
- Discounting of recovery cash flows using the original EIR.

The Workout LGD is calculated as:

$$LGD = \frac{EAD - PV(Net\ Recoveries)}{\text{EAD}}$$

Benchmark LGD: The Benchmark LGD approach uses externally available regulatory or industry benchmark LGD values where sufficient internal recovery data is unavailable. Benchmark values may be obtained from the Basel Framework, supervisory guidance, external credit rating agencies, or industry studies. These benchmark LGDs are typically used as proxies for new portfolios, low-default portfolios, or during the initial stages of IFRS 9 implementation until institution-specific recovery data becomes available.

Benchmark PD X LGD Methodology for Sovereign Exposures, Financial Institutions, Corporate Bonds, & Sukuk

For Sovereign Exposures, Financial Institutions, Corporate Bonds, and Sukuk, ECL will be determined using the benchmark PD × LGD methodology in accordance with IFRS 9 requirements.

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As entity-specific default and recovery data is typically not available for these portfolios, the assessment will utilize benchmark credit risk parameters derived from reputable external sources.

PD estimates will be based on external credit ratings assigned by recognized rating agencies such as S&P Global Ratings, Moody's, Fitch Ratings, or equivalent regulatory and market-based benchmarks. Where external ratings are unavailable, appropriate benchmark PDs will be applied based on the counterparty type, industry, and risk profile.

Below is the Illustration of the Ratings and PDs:

External Rating	Illustrative PD
AAA	0.01%
AA	0.03%
A	0.05%
BBB	0.20%
BB	1.00%
B	5.00%
CCC and below	Higher risk category

"PDs are illustrative only. Actual PDs will be sourced from the latest available external rating agency or approved benchmark sources at the reporting date."

LGD will be determined using industry-standard benchmark assumptions, taking into consideration the nature of the instrument, recovery expectations, seniority of claims, and prevailing market practices.

Exposure at Default (EAD)

Exposure at Default represents the amount that the entity is expected to be exposed to at the time a counterparty defaults.

For facilities where the entire amount has already been disbursed and no additional utilization is contractually permitted, EAD is generally based on the expected outstanding balance at the time of default.

This category typically includes:

- Corporate Term Loans
- SME Loans
- Project Finance
- Sukuk
- Corporate Bonds
- Placements with Banks

The expected exposure should consider:

- Outstanding principal
- Accrued contractual interest or profit (where applicable)
- Expected contractual repayments before default

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For revolving facilities or financing arrangements with undrawn commitments, borrowers may utilize additional funds before default. Consequently, EAD should include both the current outstanding exposure and the expected future utilization of undrawn commitments.

Typical examples include:

- Revolving Credit Facilities
- Working Capital Lines
- Overdraft Facilities
- Committed Credit Lines & Guarantees

Historical utilization patterns should be analyzed to estimate an appropriate Credit Conversion Factor (CCF), which represents the expected proportion of undrawn commitments likely to be utilized before default.

Also, for revolving facilities, the contractual maturity may not adequately represent the period over which the entity is exposed to credit risk, as these facilities are typically renewed, rolled over, or remain available at the borrower's discretion. In such cases, the expected maturity (or behavioural life) of the facility should be estimated based on historical customer behaviour rather than contractual terms alone. The estimation may be performed using statistical techniques such as survival analysis or historical closure analysis, which assess the period over which revolving facilities remain active before closure or default.

Forward Looking Information

a) Macroeconomic Model Framework

In accordance with IFRS 9, Expected Credit Losses must incorporate reasonable and supportable forward-looking information that reflects both current and anticipated future economic conditions.

Accordingly, relevant macroeconomic indicators such as GDP growth, inflation, unemployment rates, interest rates, and other economic factors can be considered when assessing the impact of economic changes on credit risk and expected losses.

Historical and forecast economic data obtained from reliable external sources may be used to quantify the relationship between macroeconomic conditions and credit losses.
Multiple economic scenarios needs to be developed and probability-weighted to ensure

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that the resulting ECL estimates reflect a range of possible future outcomes and remain consistent with the requirements of IFRS 9.

The Base scenario represents the most likely economic outlook, while the Upside and Downside scenarios reflect potential economic improvement and deterioration, respectively.

The following table illustrates the economic scenarios and their respective probability weightings:

Base	Upturn	Downturn
60%	20%	20%

b) Point In Time (PiT)

The impact of forward-looking macroeconomic information is incorporated into the PD & LGD estimates. This process converts long-term or TTC credit risk estimates into PiT PDs & LGDs that reflect current and expected future economic conditions. As a result, the estimated likelihood of default is adjusted to capture the effects of changes in the economic environment.

Various statistical and econometric techniques can be used to establish the relationship between macroeconomic variables and credit risk. The selected methodology is then used to adjust the TTC PD estimates and derive forward-looking PDs & LGDs for the relevant portfolios. These forward-looking PDs & LGDs are subsequently used in the ECL calculation.

The following tables present illustrative scenario-weighted PiT PD and PiT LGD estimates forecast over a five-year horizon.

Note: *The PDs & LGDs presented below are scenario-weighted for illustration purposes only. For ECL estimation, separate PDs & LGDs should be calculated for each macroeconomic scenario, with the final ECL determined as the probability-weighted average of the scenario-specific ECLs.*

Corporate Scenario Weighted PIT PDs					
Ratings	**Year1**	**Year2**	**Year3**	**Year4**	**Year5**
AAA	0.09%	0.17%	0.34%	0.49%	0.39%
AA	0.22%	0.35%	0.63%	0.88%	0.71%
A	0.24%	0.38%	0.67%	0.93%	0.75%
BBB	0.26%	0.41%	0.72%	0.98%	0.80%
BB	0.56%	0.79%	1.24%	1.61%	1.34%
B	2.26%	2.73%	3.46%	4.05%	3.54%
CCC	4.81%	5.46%	6.40%	7.19%	6.42%
CC	14.35%	15.38%	16.64%	17.90%	16.42%
C	21.10%	22.21%	23.45%	24.87%	23.06%
D	100.00%	100.00%	100.00%	100.00%	100.00%

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Corporate Scenario Weighted PIT LGDs					
	Year1	Year2	Year3	Year4	Year5
LGD	61.12%	62.05%	63.31%	64.15%	63.45%

8. Management Overlay

Management overlays may be applied when:

- Emerging risks exist
- Historical data becomes less relevant
- Economic conditions change significantly

Overlays should be:

- Quantifiable
- Supported by evidence
- Approved by governance committees

9. Governance Framework

Recommended governance structure:



Key Responsibilities

Board of Directors – Approves the overall IFRS 9 governance framework, ensures adequate resources, and oversees the institution's credit risk management strategy.

Board Risk Committee – Reviews the effectiveness of the ECL framework, approves key methodologies and assumptions, and monitors significant changes to models and provisioning outcomes.

Risk Function – Develops PD, LGD, EAD, SICR and staging methodologies, performs portfolio monitoring, and recommends model enhancements where necessary.

Finance Function – Calculates and records ECL provisions, prepares financial disclosures, and ensures compliance with IFRS 9 reporting requirements.

Independent Model Validation – Independently validates methodologies, assumptions, model performance, data quality, and implementation, and reports findings to the appropriate governance committee.

Internal Audit – Provides independent assurance over the effectiveness of the IFRS 9 governance framework, internal controls, and compliance with approved policies.

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10. Model Validation

Independent validation should assess:

- Methodology appropriateness
- Data quality
- Assumptions
- Mathematical accuracy
- Scenario design

Validation should be performed at least annually.

11. Common Audit Findings

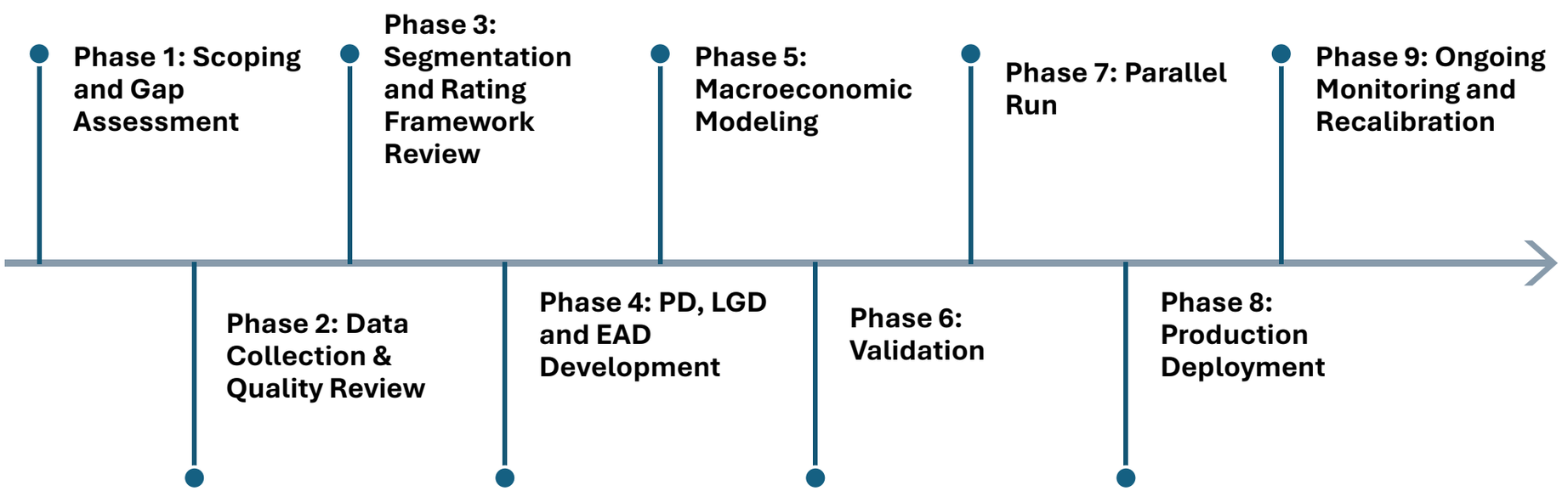
The most common findings include:

- Failure to use data covering a complete economic cycle.
- Limited data granularity affecting the reliability of default and recovery estimates.
- Selection of inappropriate performance windows for the portfolio characteristics.
- Non-monotonic PD estimates across internal rating grades.
- Forward-looking adjustments or management judgments that are not supported by quantitative analysis or statistical evidence.
- Selection of macroeconomic variables without sufficient business rationale.
- Macroeconomic relationships that are statistically significant but inconsistent with expected economic behaviour.
- Assignment of macroeconomic scenario weightings based solely on management judgment without appropriate analytical support.
- Recovery periods that do not reflect observed recovery behaviour.
- Inappropriate treatment of cured accounts within LGD estimation.
- Misalignment between the granularity of TTC LGD calibration and PiT LGD adjustments.
- Absence of a formal IFRS 9 methodology document outlining model design, key assumptions, methodologies, and implementation processes.

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12. Implementation Roadmap



13. Conclusion

A successful IFRS 9 implementation for Investment Finance companies requires a balance between technical compliance, operational practicality, and governance. The chosen methodologies should be proportionate to the nature, complexity, and materiality of exposures while ensuring consistency with IFRS 9 principles and industry best practices.

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About Probmatrix

Probmatrix provides specialized IFRS 9 solutions and advisory services to financial institutions, insurance companies, leasing entities, NBFCs, MFIs, DFIs, and corporate organizations.

Our services include:

- IFRS 9 Model Development
- Model Validation
- ECL Calculation Frameworks
- Audit Support
- Regulatory Advisory
- IFRS 9 Excel Add-In

Complimentary IFRS 9 Readiness Assessment

Request a free IFRS 9 maturity assessment covering:

- ✓ Methodology Assessment
- ✓ Data Gap Analysis
- ✓ SICR Framework Review
- ✓ Forward-Looking Adjustment Assessment
- ✓ Validation Readiness Review

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