



Loan impairment modeling according to IAS 39 by using Basel II parameters

KPMG Romania

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RISK ADVISORY SERVICES

Basel II & IFRS -High Level Characteristics

Basel II approach

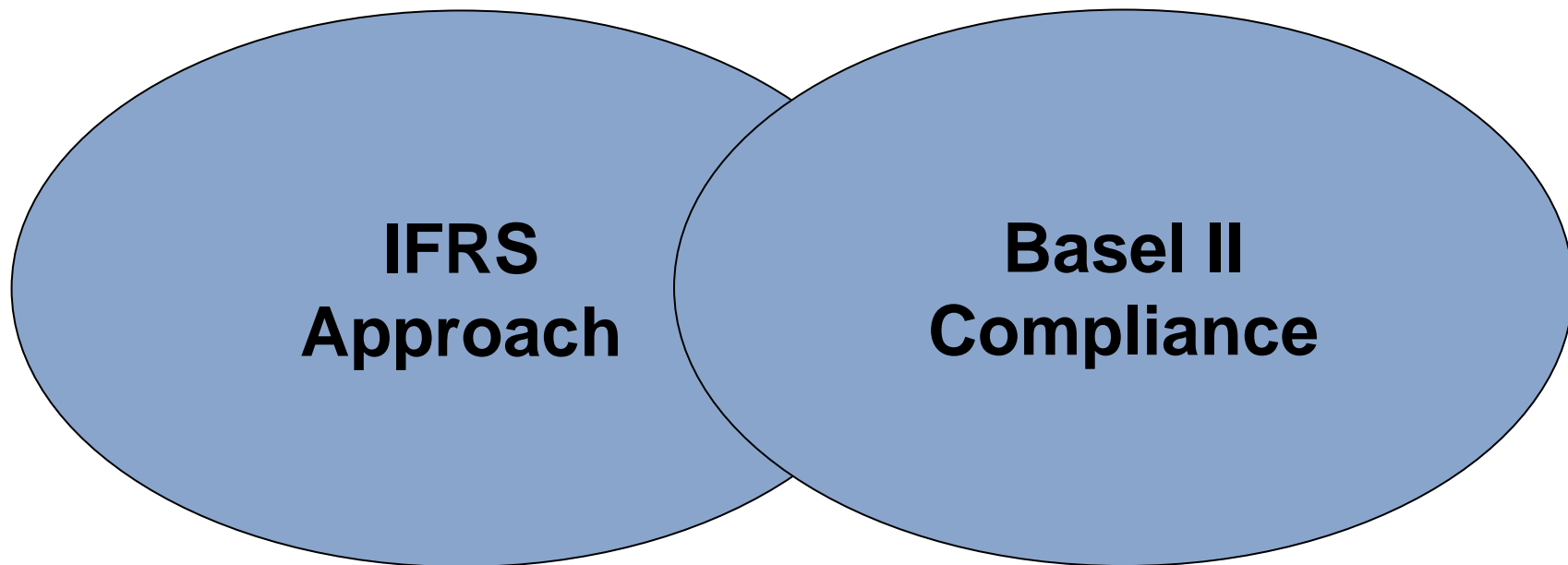
- Evaluations are basically “model driven”
- Conservative estimates
- Intention of regulation – Stability of the banking sector
- Consider entire life of portfolio –including future losses
- Basel has alternative approaches for credit (and operational) risk, which impact similarities and differences, depending on which approach is adopted

IFRS approach

- Evaluations are basically “market driven”
- Realistic case estimate -“Central” estimate
- Intention of regulation – performance report to shareholders on current period through to reporting date
- Consider state of portfolio today –future losses are not taken into consideration
- IFRS financial statements are focused on the current financial position, cash flows and financial performance

Main question

- Can banks use the Basel II models for the purposes of performing their provisioning calculations?

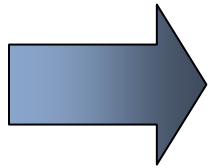


Credit Loss Models

- Both Basel II and IFRS use the concept of credit loss
- However there are differences:
 - Intentions: The aim of Basel II is to determine capital charges to cover unexpected future losses and un-provisioned expected losses whereas the aim of IFRS is to ensure that loan loss provisions reflect adequately the current risk of losses
 - Loss-related definitions: Basel II uses a borrower-oriented default definition for the transactions whereas IFRS uses a transaction-oriented and portfolio impairment definition
 - Methods: Basel II uses a credit risk measurement method to forecast risks whereas IFRS uses historical provisioning evidence adjusted to economic circumstances at the time of reporting; IFRS uses the concept of discounted cash flows whereas Basel II does not explicitly

“Formula-based approaches or statistical methods may be used to determine impairment losses in a group of financial assets”

IAS 39 AG92

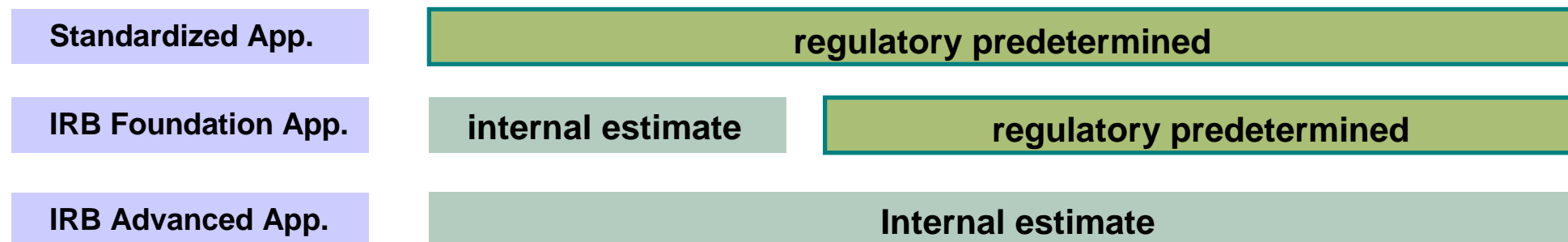
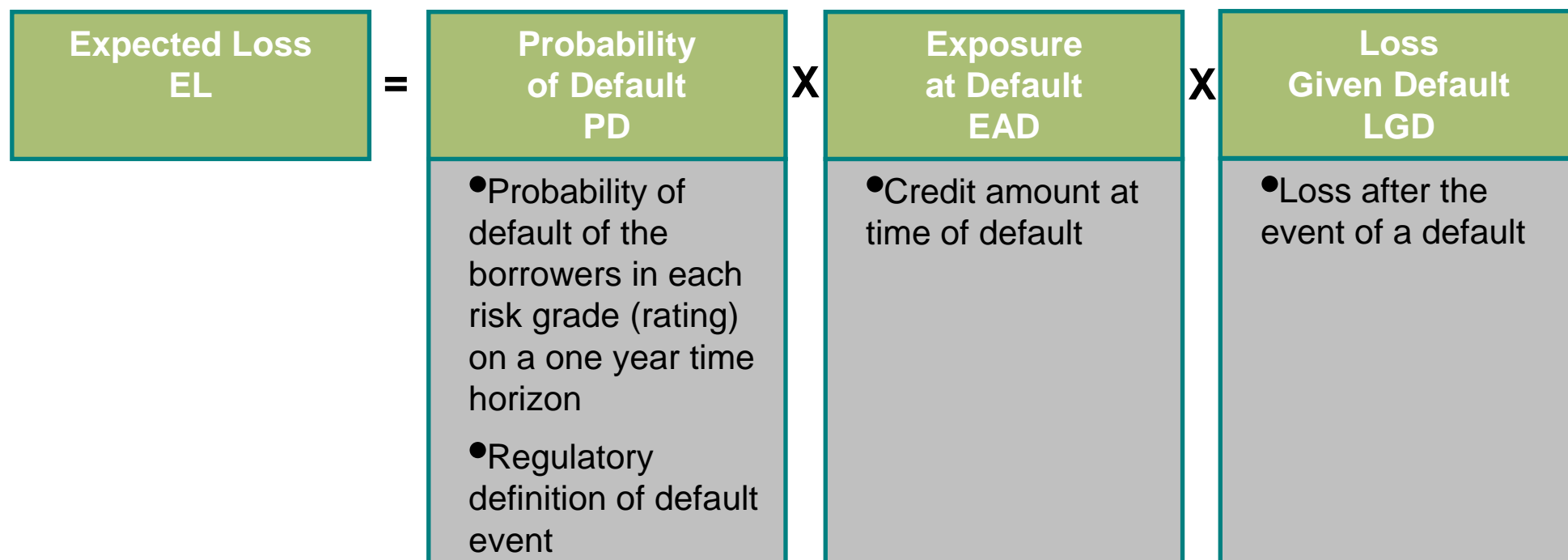


Historical loss experience can be used for both capital and provision calculations...

Expected / unexpected losses following Basel II versus incurred losses according to IFRS

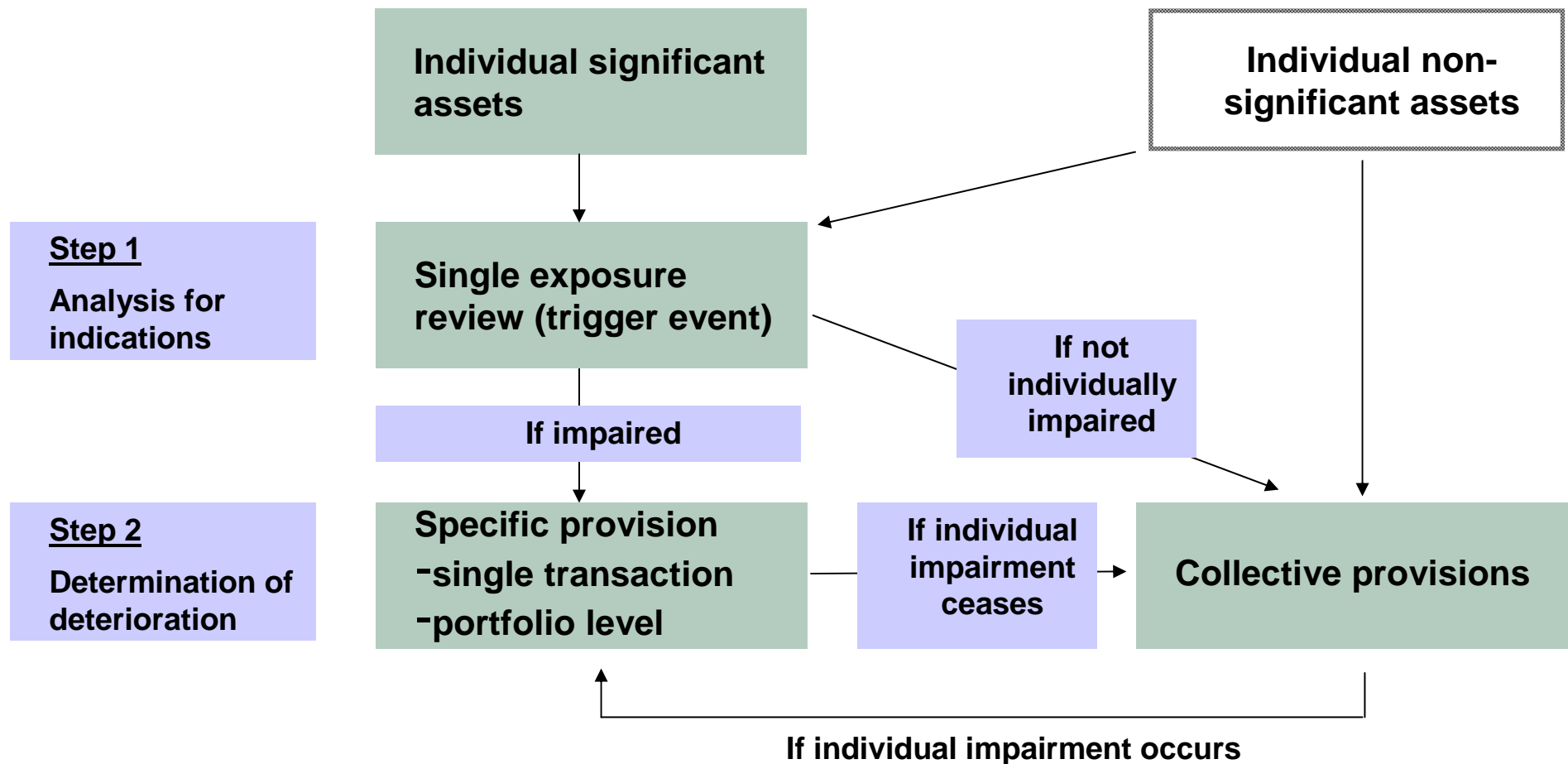
		Total Losses		
Expected to take place	Basel II	Expected losses		Unexpected losses
	<i>(risk coverage by)</i>	<i>provision</i>	<i>"shortfall" tier ½ capital</i>	<i>capital</i>
Already happened	IFRS	Incurred losses		
	<i>(risk coverage by)</i>	<i>specific provision</i>	<i>collective provision</i>	
	Local GAAP	specific provision	general provision	

Expected / unexpected losses following Basel II versus incurred losses according to IFRS



Credit Loss Models – Overview Impairment process acc. IAS 39

IAS 39 impairment process differs between single view (specific provisions) and portfolio view (portfolio or general provisions)



Step 1: Using Basel II default events as trigger events according to IFRS

- A financial asset is impaired, if there is objective evidence of a decrease in value
- There are clearly defined criteria, so-called Trigger Events, for objective evidence of impairment
- Possible Trigger Events according to IAS 39.59 and IAS 39.61
 - Substantial financial difficulty of the issuer
 - Breach of contract, such as default or delinquency in interest or principal payments
 - Concessions granted from the lender to the borrower that the lender would not have considered normally
 - High probability of insolvency
 - Recognition of an impairment loss on that asset in a previous reporting period
 - Disappearance of an active market for the financial asset due to financial difficulties of the issuer
 - A decrease in the market value of an issuer's debt securities significantly beyond factor explainable by changes in the market interest rates

Step 1: Using Basel II default events as trigger events according to IFRS

The default trigger events in Basel II are less strictly defined and slightly different.

A default is considered to have occurred with regard to a particular obligor (N.B. – not loan) when either or both of the following events have taken place:

- The bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security (if held); or
- The obligor is past due more than 90 days on any material credit obligation to the banking group.

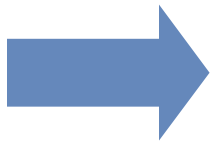
Step 1: Using Basel II default events as trigger events according to IFRS – Details

The elements to be taken as indications of unlikelihood to pay include:

- 1. The bank puts the credit obligation on non-accrued status;*
- 2. The bank makes a charge-off or account-specific provision resulting from a significant perceived decline in credit quality subsequent to the bank taking on the exposure;*
3. The bank sells the credit obligation at a material credit-related economic loss;
4. The bank consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees;
5. The bank has filed for the obligor's bankruptcy or a similar order in respect of the obligor's credit obligation to the banking group; and
6. The obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligation to the banking group.

The Basel II default trigger events no. 3 to 6 can be used to initialise an impairment test.

Step 1: Using Basel II default events as trigger events according to IFRS - Conclusion



Although Basel II default criteria are different (less strict than IAS) Basel II Criteria could be used as minimum trigger events for IFRS purposes

Advantage: many banks have started to develop credit loss databases based on these criteria

Also: as IAS demands banks to provision against impaired loans, those loans would automatically fulfil the Basel criteria

Step 2: Specific Loan Loss Provision: Requirements

Book Value of Asset

- Present Value of expected Cash Flows from Contract

- Present Value of Cash Flows from Collateral

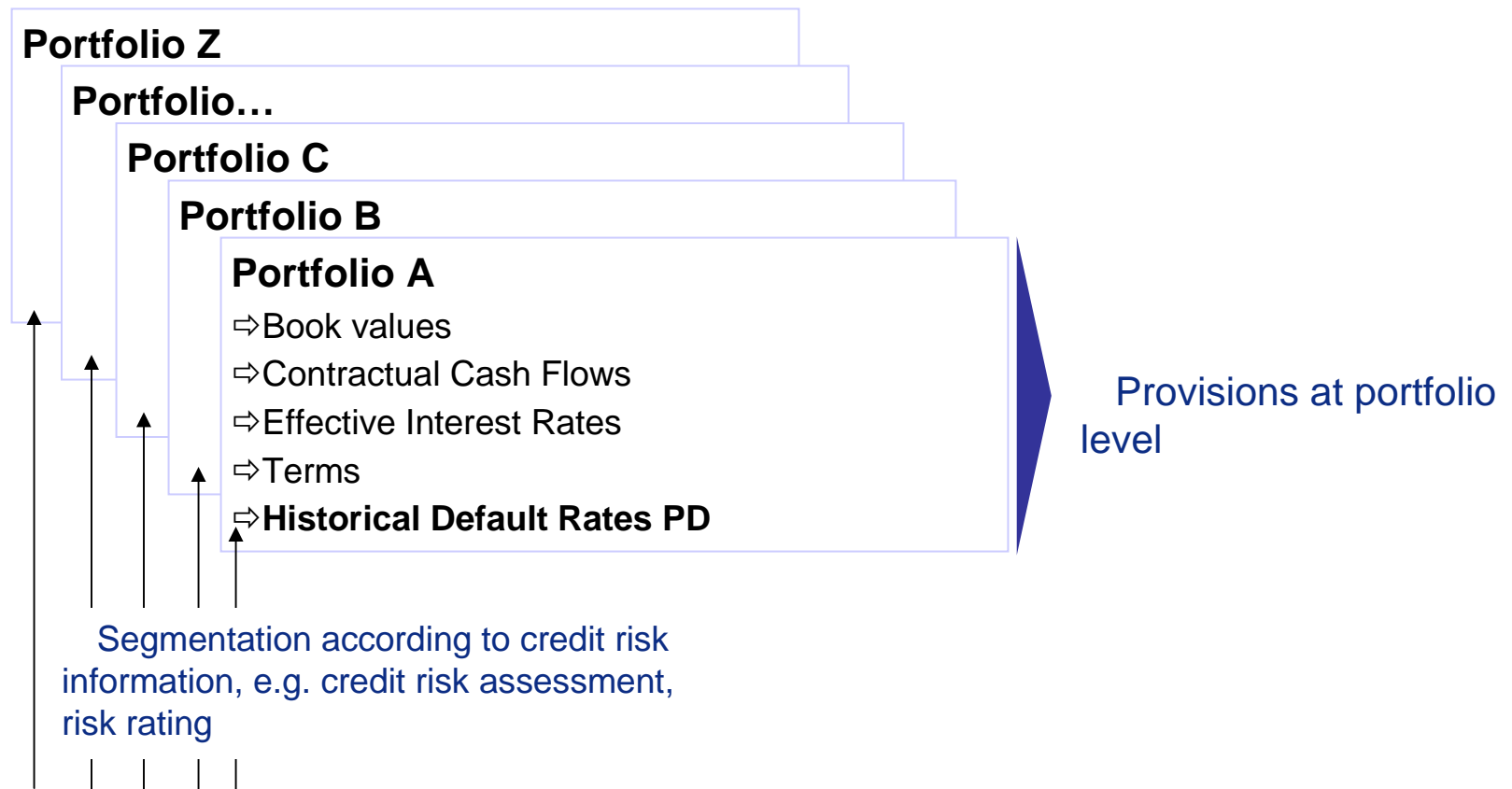
= Size of Specific Loan Loss Provision

- Expected Cash Flows from Contract
 - Size of expected Payment
 - Time of expected Payment
- Cash Flow from Collateral
 - Recovery from sale of collateral
 - Revenue from foreclosure
 - Costs of recovery/workout
- Discount Factor
 - For fixed rate loans the originally agreed effective interest rate is to be used
 - For variable interest rate loans the current effective interest rate is to be used
- Time period for discounting cash flow from sale of collateral
 - Estimated period of recovery

Step 2: Specific Loan Loss Provision: Requirements

- Basis for collective provisioning:
 - All non-significant assets as well as those significant assets that have been classified „non-impaired“ when examined individually
- Portfolio-Segmentation
 - Segmentation of the portfolio is done based on an assessment of the corresponding credit risk, e.g. a rating process (IAS 39 AG87)
 - Factor to take into account: product category, industry/sector, geography, collateral, default status, other relevant factors
 - Portfolio segments should have similar risk characteristics
- Calculation of collective provisioning:
 - Size of provisions = Book Value – Present Value (Expected Cash Flows)
 - Discounting forecast future cash flows using the original effective interest rate.
 - Future cash flows are estimated based on historical default rates that have been observed for assets with similar credit risk properties
- Historical default rates
 - . . . have to be corrected by current conditions that did not exist in the past
 - . . . have to be supplemented by „peer group“ experience for similar loans
 - . . . have to be back tested regularly

Step 2: Specific Loan Loss Provision: Portfolio definition



Total portfolio: Provisions at portfolio level

- Individually non significant assets
- Assets that are not individually impaired

Step 2: Exposure at Default

Basel II

- On a financial asset with a limit facility (e.g. an overdraft) the EAD will take in consideration an expectation of future draw downs until the default event has occurred by using CCF

IFRS

- Under IFRS, it is the loan amount outstanding at the balance sheet date that is considered in the calculation and not any future movements and draw downs

Step 2: Provisioning at Portfolio level – Conclusions

IFRS

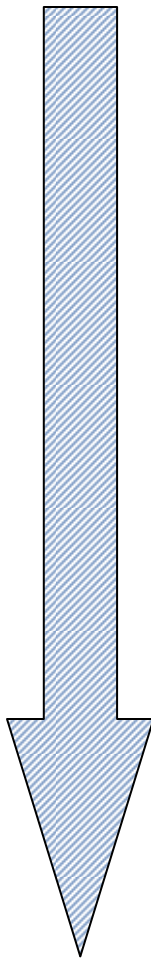
- Provisions on Portfolio-level are only considered for exposures, which are not individually impaired or significant (immaterial)
- Therefore all exposures (assets) have to be assigned to defined portfolios
- Calculation of the provisions on portfolio level for each individual portfolio through comparison of the discounted cash flows

Basel II

- Individual capital calculation according to the supervisory formula for each exposure
- Segmentation of the exposures necessary for the LGD as well as PD determination
- On aggregated level comparison of the EL with the risk provisions (single and portfolio)
 - Excess can be added to the capital
 - Shortage has to be deducted from the capital

Segmentation according to Basel II supports the valid calculation of IFRS provision on portfolio level; the use of Basel II PD/LGD Estimation and the default-/loss history is permissible

A possible project approach to create synergies



**Basel II & IFRS
convergence assessment**

**Definition Basel II & IFRS
reconciliation methodology**

**Set up of unified risk reporting
strategy and format**

**Synchronising of data
requirements**

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