

BASEL II and its implications

Hazel Taylor

Head of Regulatory
Reporting

David Robertson

Head of Programme
Delivery

Alan Smith

Head of Risk
Strategy

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Forward-looking statements



This presentation and subsequent discussion may contain certain forward-looking statements with respect to the financial condition, results of operations and business of the Group.

These forward-looking statements represent the Group's expectations or beliefs concerning future events and involve known and unknown risks and uncertainty that could cause actual results, performance or events to differ materially from those expressed or implied in such statements.

Additional detailed information concerning important factors that could cause actual results to differ materially is available in our Annual Report.

Content



- The journey to Basel II (David Robertson)
- HSBC Basel II analysis and disclosure (Hazel Taylor)
- Pillar 2 and stress testing in a Basel II environment (Alan Smith)

The journey to Basel II

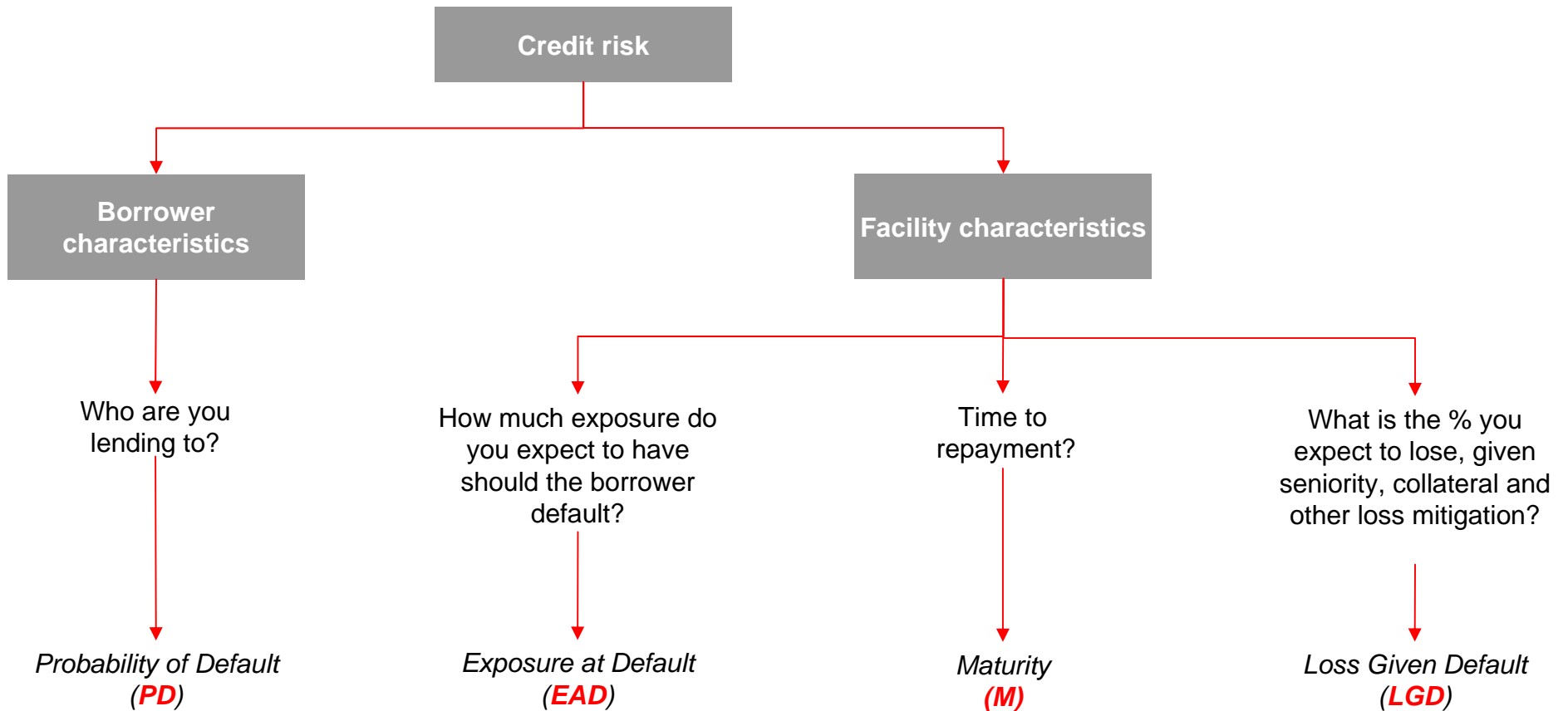
The journey to Basel II



Major five-year infrastructure programme

- Development of Group and local models for PD, LGD and EAD
- Central system to capture granular data from 83 countries and generate RWA calculations
- Contrast with relative simplicity of Basel I process
- FSA approval given for majority IRBA approach for credit risk

Credit risk building blocks



Basel II capital calculations



Expected Loss (EL)

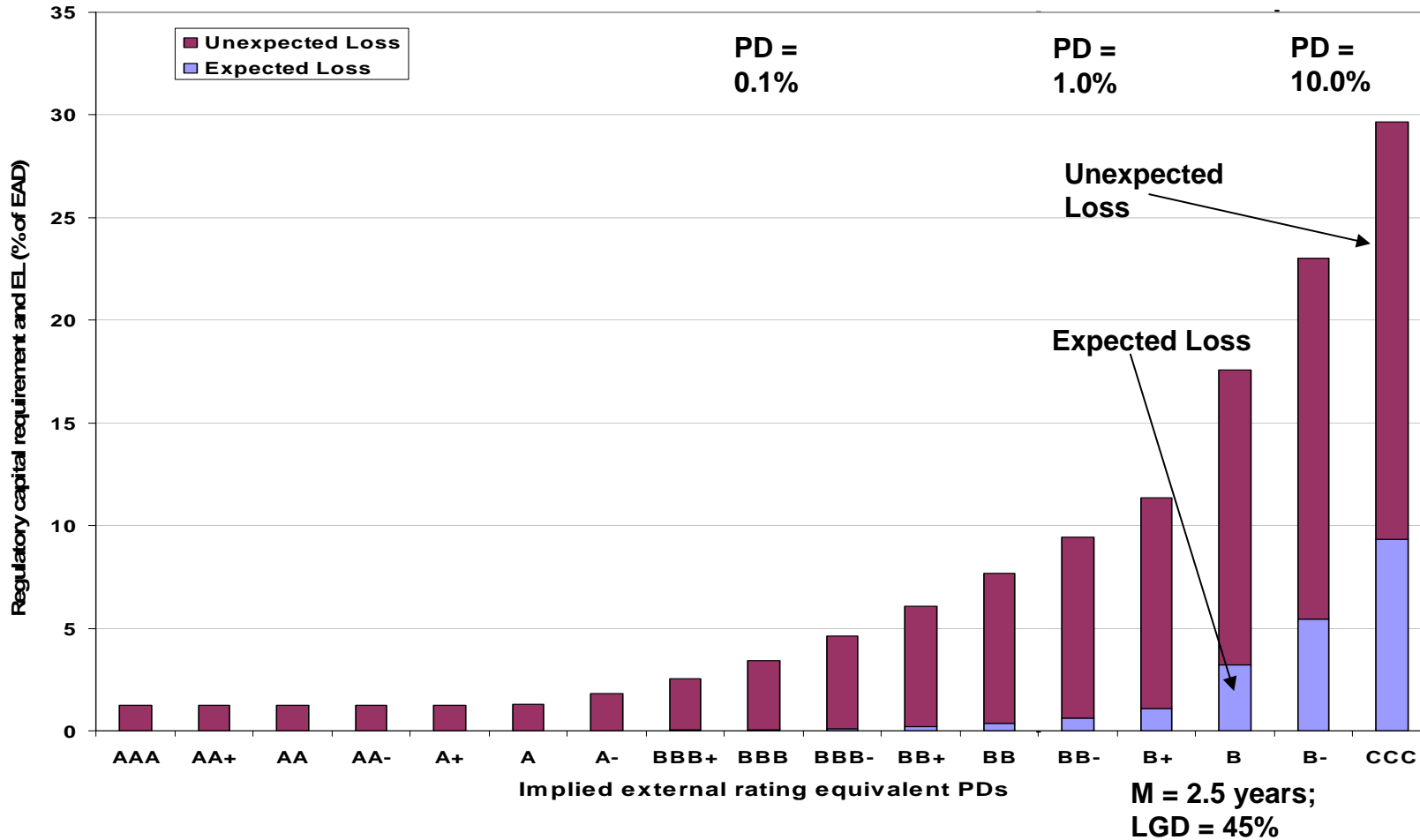
- $PD \times LGD \times EAD$
- Excess of EL over impairment allowances is a deduction from capital

Unexpected Loss (UL)

- Capital requirement (K) determined by regulatory formulae for each asset type
- PD, LGD and Maturity are factors
- $RWA = K \times 12.5 \times EAD \times 1.06$ (scaling factor)

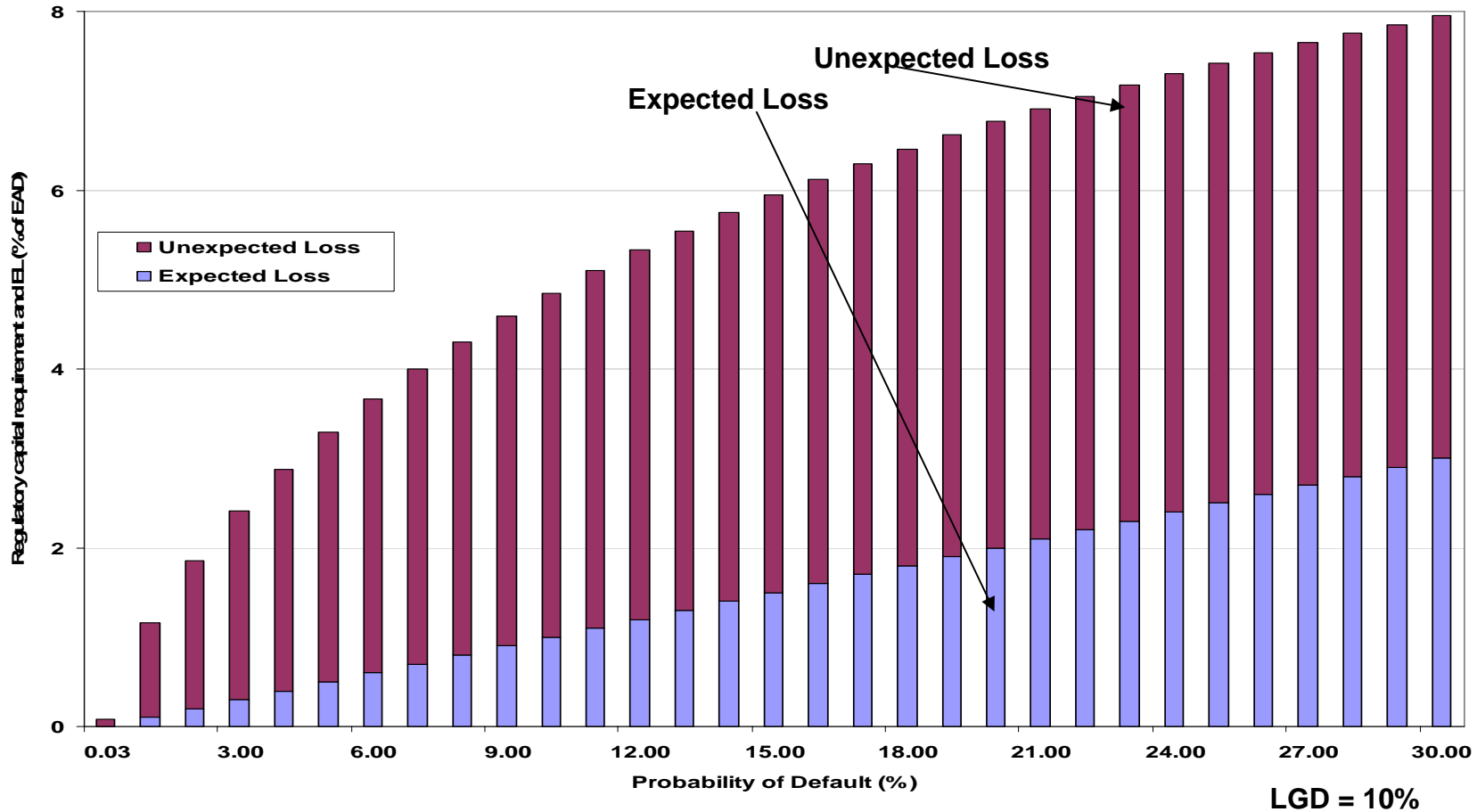
Generic example 1

Corporate: Unexpected and Expected Loss



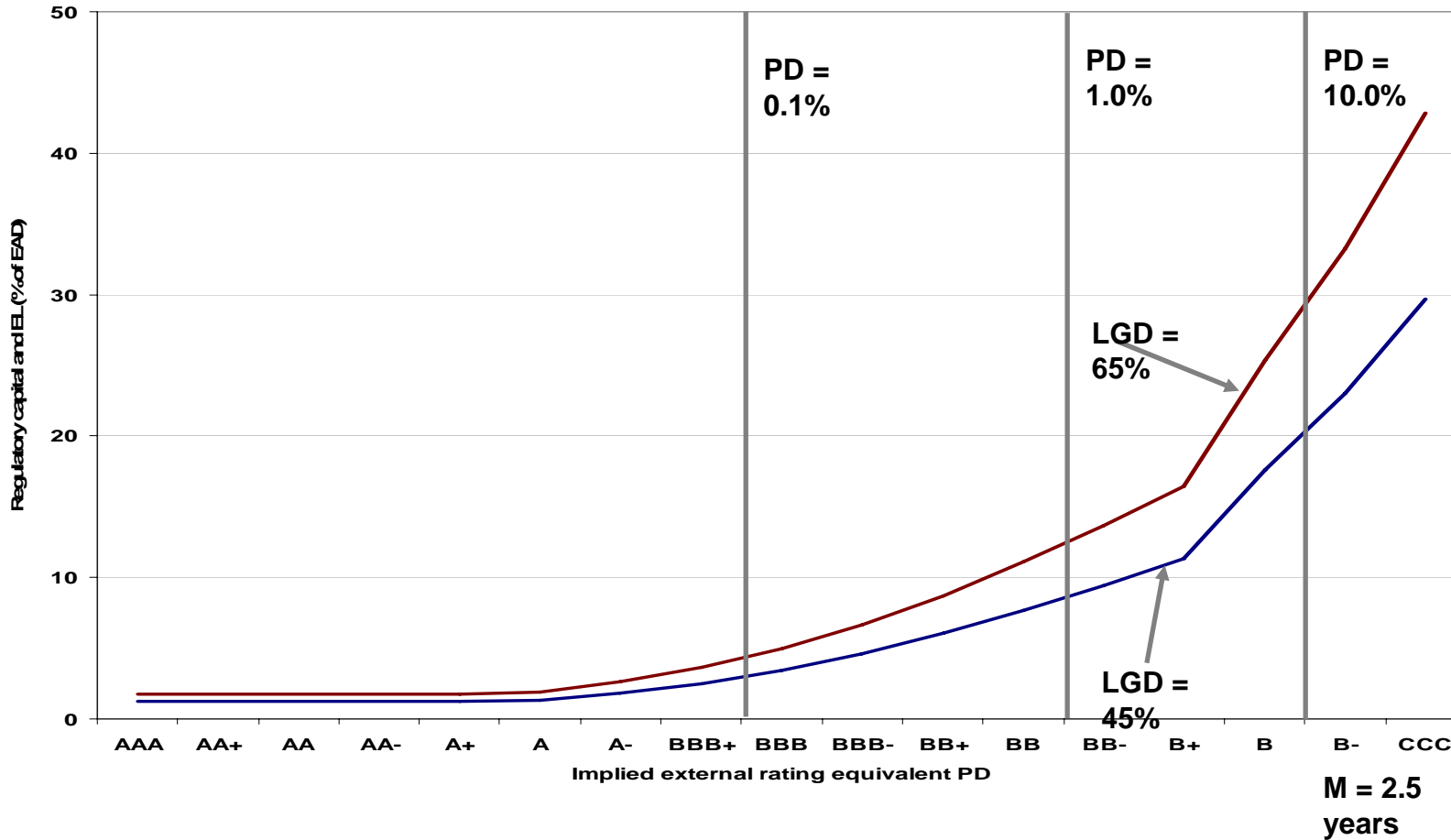
Generic example 2

Residential mortgages: Unexpected and Expected Loss



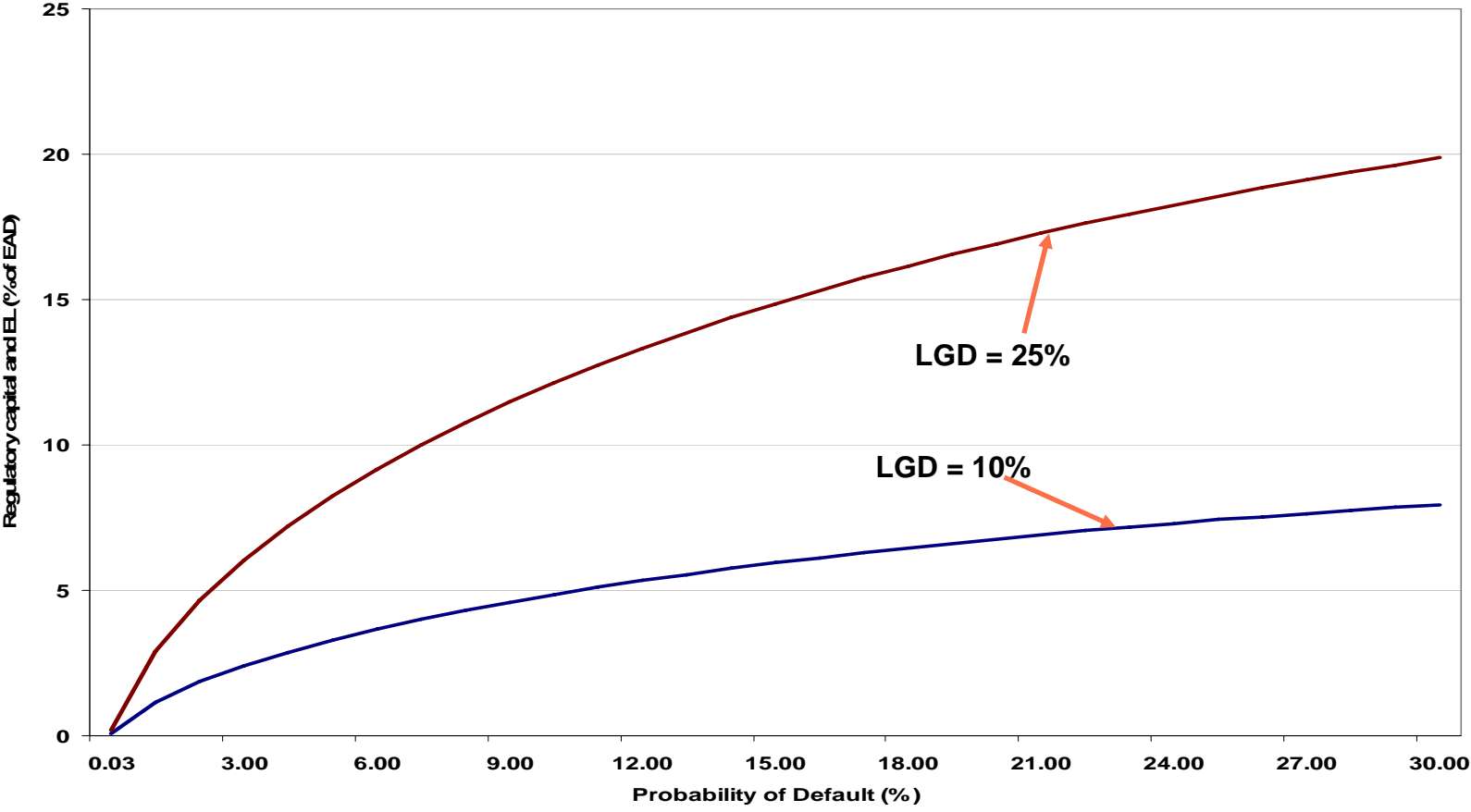
Generic example 3

Corporate: impact of increasing LGDs



Generic example 4

Residential mortgages: impact of increasing LGDs



HSBC Basel II analysis and disclosure

Disclosures



Narrative disclosures:

- Capital management and allocation
- Capital measurement
 - What the FSA requires
 - Local requirements may differ
 - Not all on Basel II locally
 - But must do Basel II for Group reporting

Disclosures



Narrative disclosures (cont'd)

- IRBA for majority of businesses wef 1 January 2008
- IRBA is more risk-sensitive and relies on the bank's own assessment of risk
- There is no going back! (from IRBA to STDA)
- Operational risk – using standardised approach for Group
- Capital base impacts
 - Collective impairment allowances
 - Expected losses less impairment allowances
- Pillar 2 – linked to capital management framework
- Pillar 3 – first disclosures qualitative during 2008, quantitative during first half of 2009 as at 31 December 2008

Analysis



Basel I versus Basel II (as at 31Dec07)

- Capital base reduced by USD20 billion due to collective impairment allowances removed and EL adjustment
- RWAs at a similar level to Basel I (less than 1% difference)
- Overall impact was to reduce the tier 1 ratio from 9.3% to 9.0%
- And total capital ratio from 13.6% to 11.8%

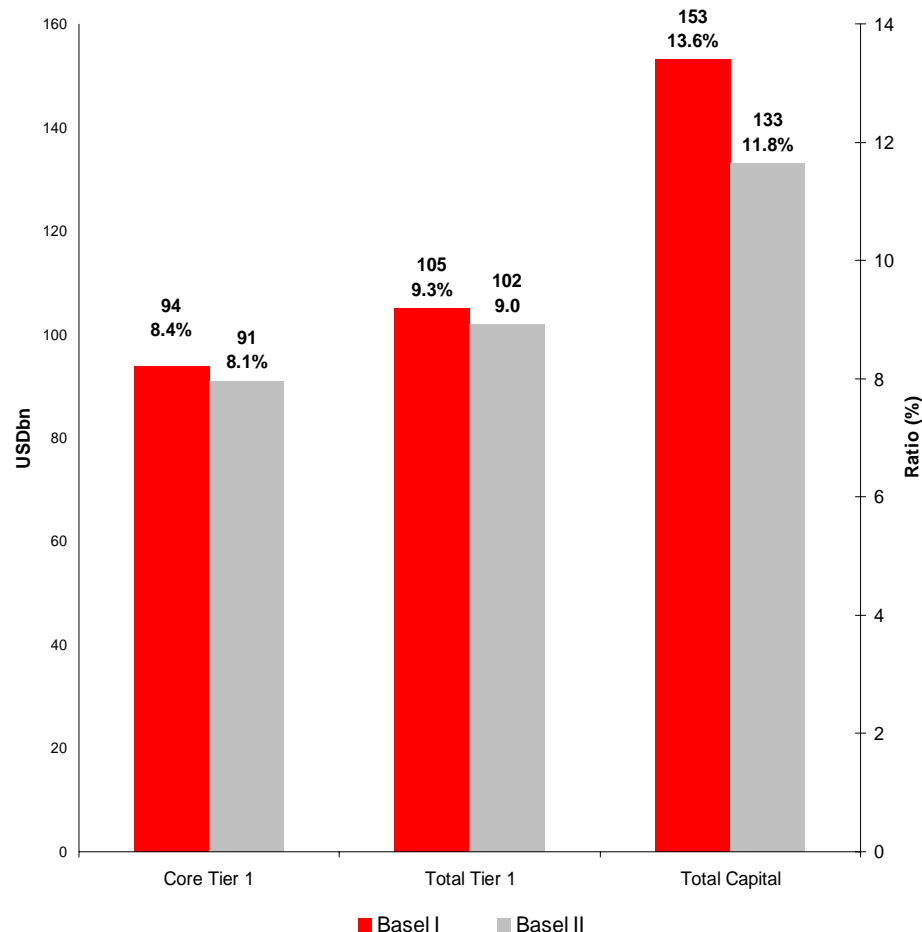


Disclosures



Numerical disclosures on a pro-forma Basel II basis (as at 31Dec07):

- Composition of regulatory capital table
 - Core tier 1 USD91 billion, ratio 8.1%
 - **After** 50% of EL adjustment USD4.5 billion
- Total tier 1 USD102 billion, ratio 9.0%
- Total capital USD133 billion, ratio 11.8%
 - **After** total EL adjustment of USD9 billion
 - **After** removal of collective impairment allowances of USD11 billion
- Target
 - Tier 1 target range: 7.5% to 9.0%

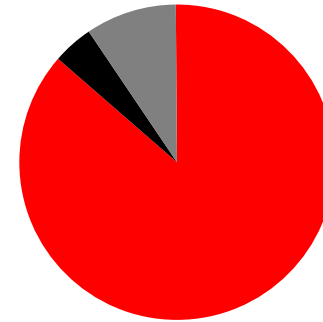


Analysis

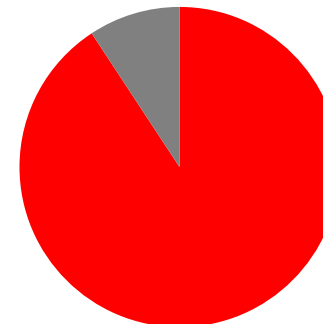


Basel II pro-forma RWAs of USD1,129 billion (as at 31Dec07)

- Analysis by risk type:
 - Credit risk USD976 billion (86%)
 - Market risk USD46 billion (4%)
 - Operational risk USD107 billion (10%)
- Basel I RWAs of USD1,124 billion
 - Analysis by type of book:
 - Banking book USD1,021 billion (91%)
 - Trading book USD103 billion (9%)
 - Includes counterparty credit risk and market risk



■ Credit risk ■ Market risk ■ Operational risk



■ Banking book ■ Trading book

Pillar 2 and stress testing in a Basel II environment

Basel Pillar 2, HSBC ICAAP and Stress Testing



Pillar 1	Pillar 2	Pillar 3
Minimum capital	Supervisory review	Market discipline
Minimum regulatory capital requirements for credit, market and operational risk	Internal capital adequacy assessment process and supervisory review	Regulatory requirements for external disclosure of risk information

CAPITAL: Relationship between Pillar 1, Pillar 2 and the ICAAP

Pillar 1	Pillar 2	ICAAP
<ul style="list-style-type: none"> • Minimum capital requirement • Calculated using prescribed parameters (advanced or standardised) • Point-in-time assessment 	<ul style="list-style-type: none"> • Supervisory assessment – via the Individual Capital Guidance (ICG) – of amount of regulatory capital considered necessary to cover: <ul style="list-style-type: none"> – Pillar 1 risks (including any uncertainties in their calculation); and – Risks not included in Pillar 1 • Capital planning and stress testing is an important part of the assessment 	<ul style="list-style-type: none"> • Firm's own assessment of its capital needs • Economic capital is an important part of the framework to supplement the Pillar 1 regulatory capital analysis • Stress analysis is carried out for the '1 in 25' scenario

HSBC capital principles and stress testing



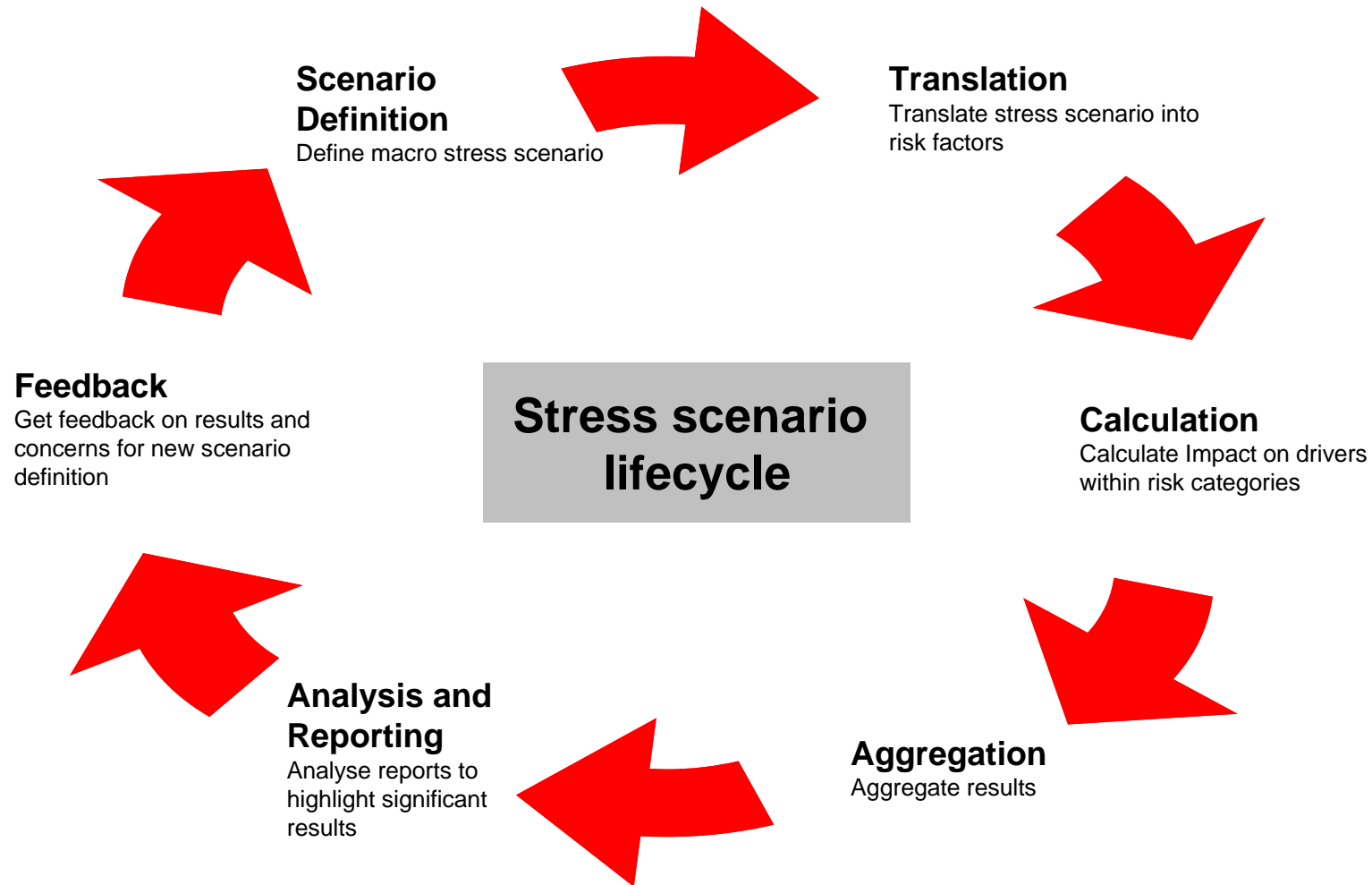
- Embodied in HSBC Capital Management Principles approved by the Group Management Board
- Capital – “the resources necessary to cover unexpected losses arising from the risk which HSBC accepts in the form of discretionary risk or runs in the form of non-discretionary risk”

HSBC stress testing framework and principles



- Stress testing covers the techniques used to assess all facets of risk vulnerability facing the HSBC Group and its operations
- HSBC stress testing approaches fall into two categories:
 - Sensitivity analysis (where the impact of a single factor is considered with all others being held unchanged); and
 - Scenario analysis (where the impact of changing multiple simultaneous factors are considered)
- Stress testing allows HSBC senior management to:
 - Build an understanding of the sensitivities around the core assumptions in the strategic and capital plans, allowing senior management to formulate proactive mitigating management action should actual conditions start to reflect the stress scenario conditions
 - Ensure that HSBC can meet its financial obligations across an economic cycle and it has sufficient capital to withstand a severe correction and/or a period of prolonged negative trading conditions
- Stress testing scenarios consider the full range of risks within the HSBC risk framework

Scenario stress testing process – critical features



Stress testing governance



- Global stress testing oversight forum – group and regional level
- Scenarios – mandatory and optional
- Pillar 1 versus Pillar 2
- Mitigating actions and early warning indicators
- Benchmarks/Tolerance

Question & Answer