

SNS REAAL

Stress testing credit risk of a retail portfolio *Experiences and further developments*

Marcel den Hollander

Marcel.denHollander@SNSREAAL.nl

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Agenda

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Objective

- Contribute to improvements in stress testing credit risk

Contents

- SNS REAAL
- Stress Testing
- Credit Risk
- Challenges

SNS REAAL

REAAL 

SNS  Securities

BLG  Hypotheek

SNS  Property Finance


SNS REAAL

RegioBank 

GOED VOOR ELKAAR

SNS  Fundcoach



 **Proteq.nl**
DIRECT VERZEKEREN

- SNS REAAL: Banking, Pensions, Insurance
- Balance sheet total of € 128 billion (end of 2010)
- Approximately 7,100 (FTE)
- SNS: 4th bank of the Netherlands, core business is retail mortgages

ZwitserLeven 

SNS  Bank

SNS  Asset Management

ASN  BANK
VOOR DE WERELD VAN MORGEN

Introduction



SNS REAAL

Press Release

PERSBERICHT

SNS Bank meets the capital benchmark set out for the EU-wide stress test

The Netherlands, Utrecht, 15 July 2011

SNS Bank N.V. (SNS Bank), the banking activities of SNS REAAL, was subject to the 2011 EU-wide stress test conducted by the European Banking Authority (EBA), in cooperation with the Dutch Central Bank (DNB), the European Central Bank (ECB), the European Commission (EC) and the European Systemic Risk Board (ESRB).

SNS Bank notes the announcements made today by the EBA and the DNB on the EU-wide stress test and fully acknowledges the outcomes of this exercise.

Quotes from EBA press release 15 July 2011

- ***“The stress test exercise.*** The 2011 EBA’s EU wide stress test had the objective of assessing the resilience of a large sample of banks in the EU against an **adverse but plausible** scenario. The scenario assesses banks against a deterioration from the baseline forecast in the main macroeconomic variables such as **GDP, unemployment and house prices”**
- ***“The process.*** The exercise has been conducted in a constrained bottom-up fashion by the 90 banks whose results are published in this report. The results were scrutinised and challenged by home country supervisors before a peer review and quality assurance process was conducted by EBA staff with a team of experts from national supervisory authorities, the European Central Bank (ECB) and the European Systemic Risk Board (ESRB). This process resulted in **three rounds** of submissions and changes to the outcomes, in some cases materially, as the EBA made efforts to apply the methodology consistently and in some areas applied caps or averages. However, the EBA has relied on the quality review work of **national authorities** and on the **internal processes of the banks** to assess such areas as earnings trends, asset quality, model outcomes and the magnitude of the impact on assets and liabilities.”

Stress Testing

What is a Stress Test?

“ **Stress testing** is a form of testing that is used to determine the stability of a given system or entity. It involves testing beyond normal operational capacity, often to a breaking point, in order to observe the results.” - *Wikipedia*

Stress Testing for Banks: *What-If* scenarios for changes in

- Risk factors (e.g. PD, LGD)
- Extreme events (e.g. Recession)
- Historical scenarios (e.g. 9/11, 30's)

Why perform a Stress Test?

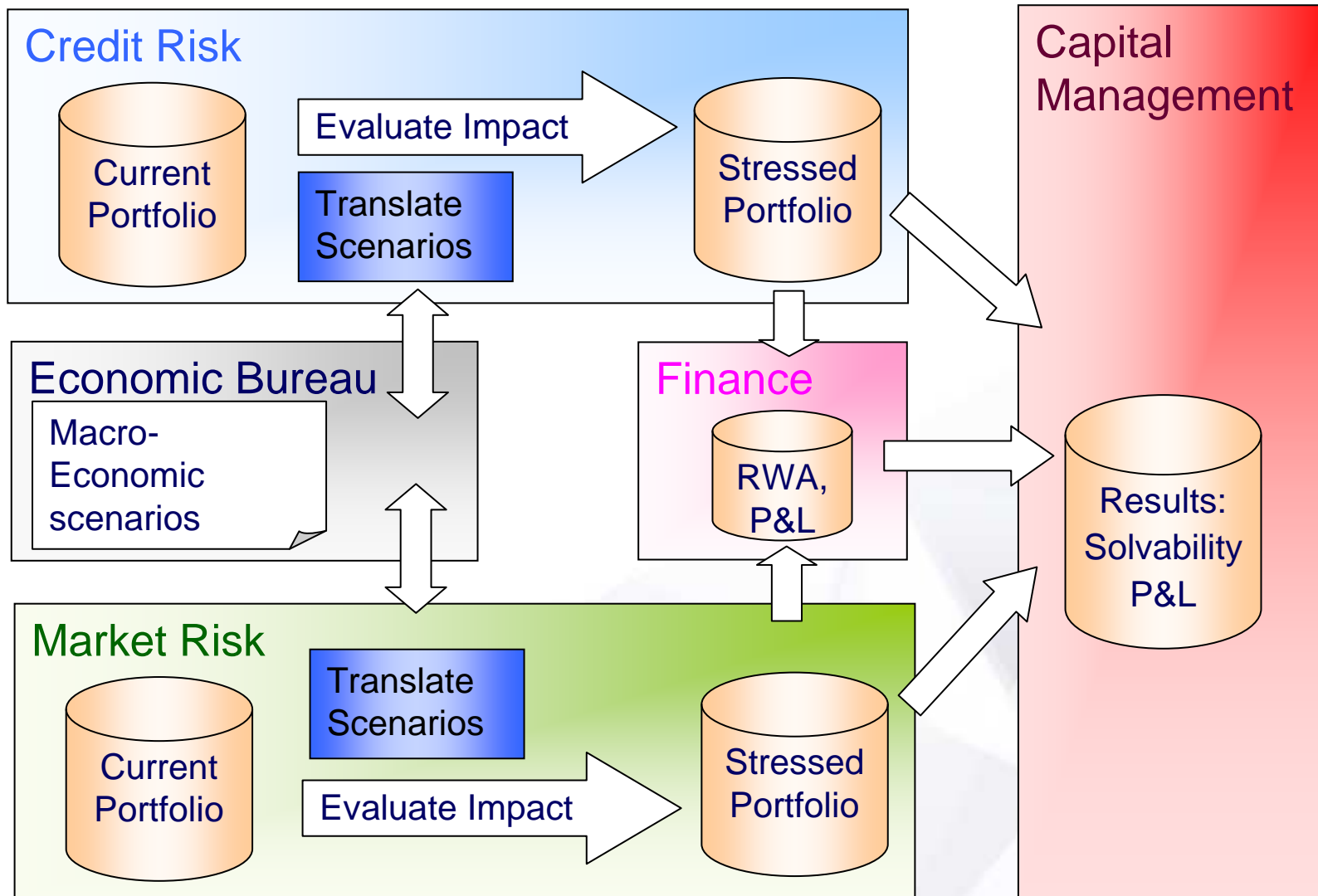
Method to see impact for the entire system

- Within the bank
- For the banks in Europe
- Ensure adequate capital
- Ground for discussion between departments and management
- Gain insight in sensitivities of portfolio

Examples

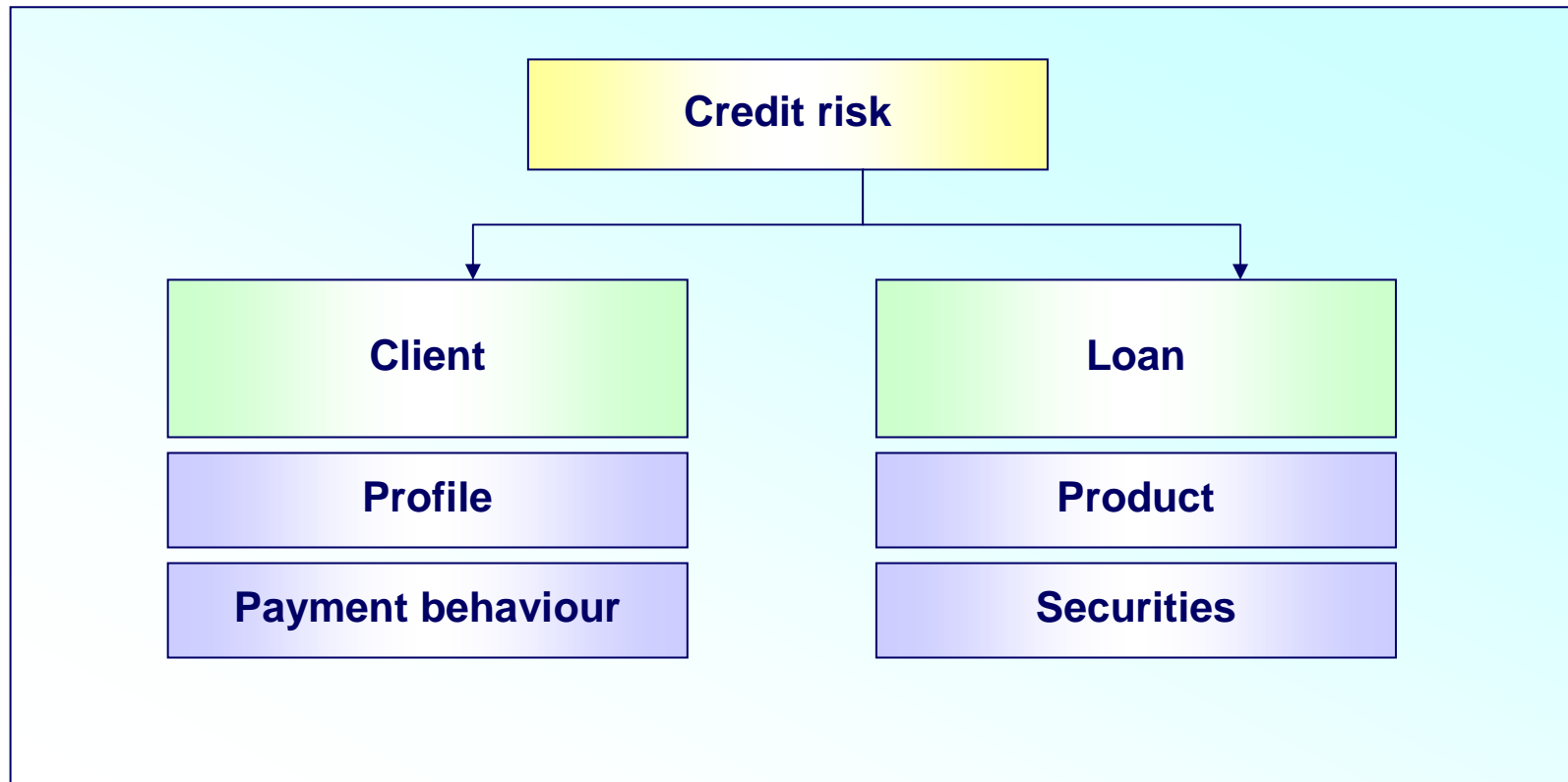
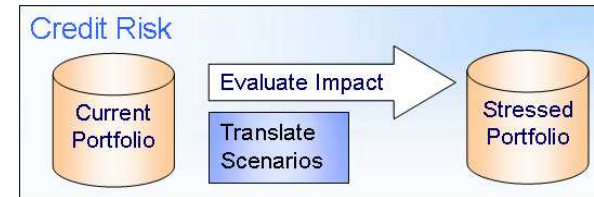
- Regulator (e.g. EBA, DNB, FSA, BaFin)
 - Scenarios and format predefined
 - Time – pressure
 - Many iterations
 - Stresssss!
- Internal for ICAAP
 - Own scenarios
 - Also reverse stress testing
- Internal
 - Own scenarios

Organisation (simplified)



Credit Risk

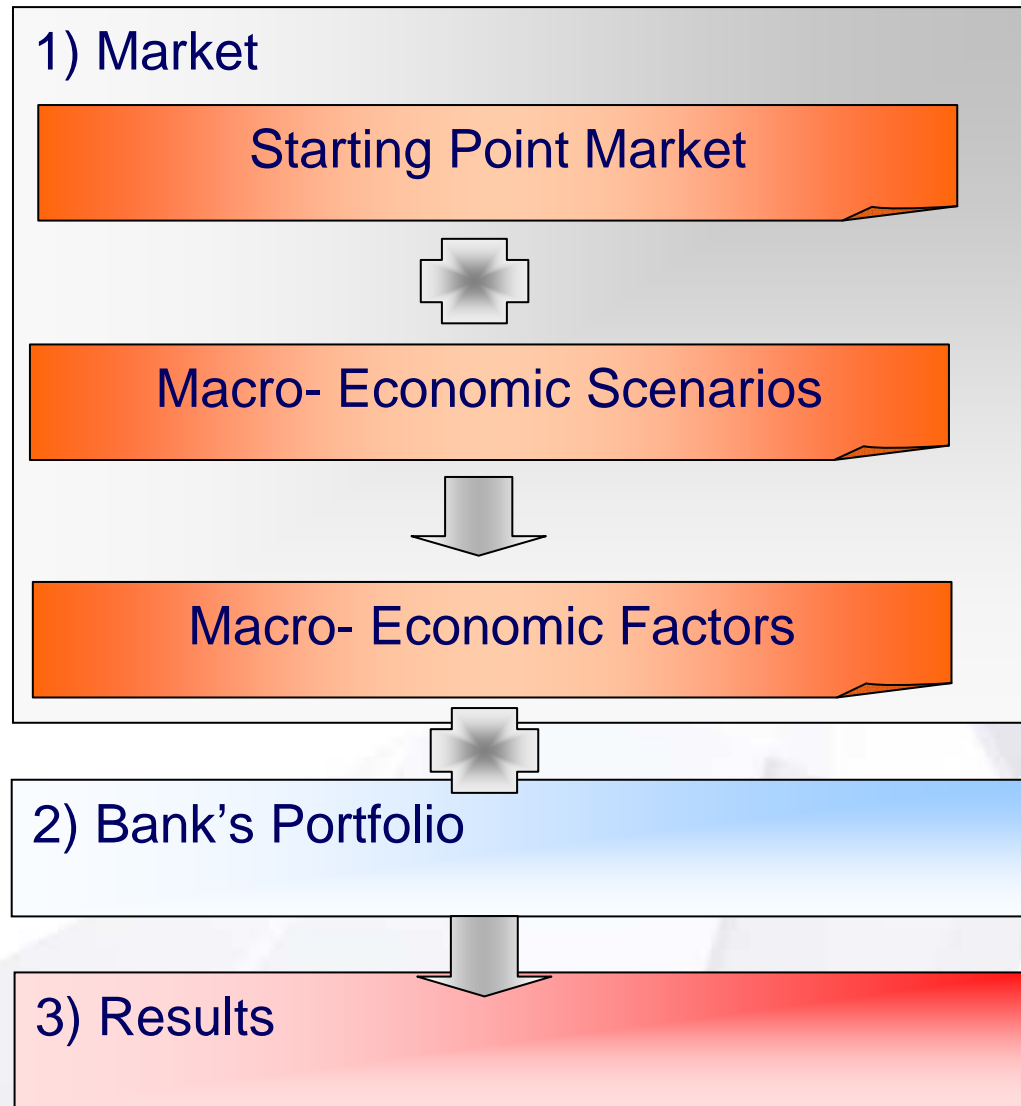
Credit Risk Factors



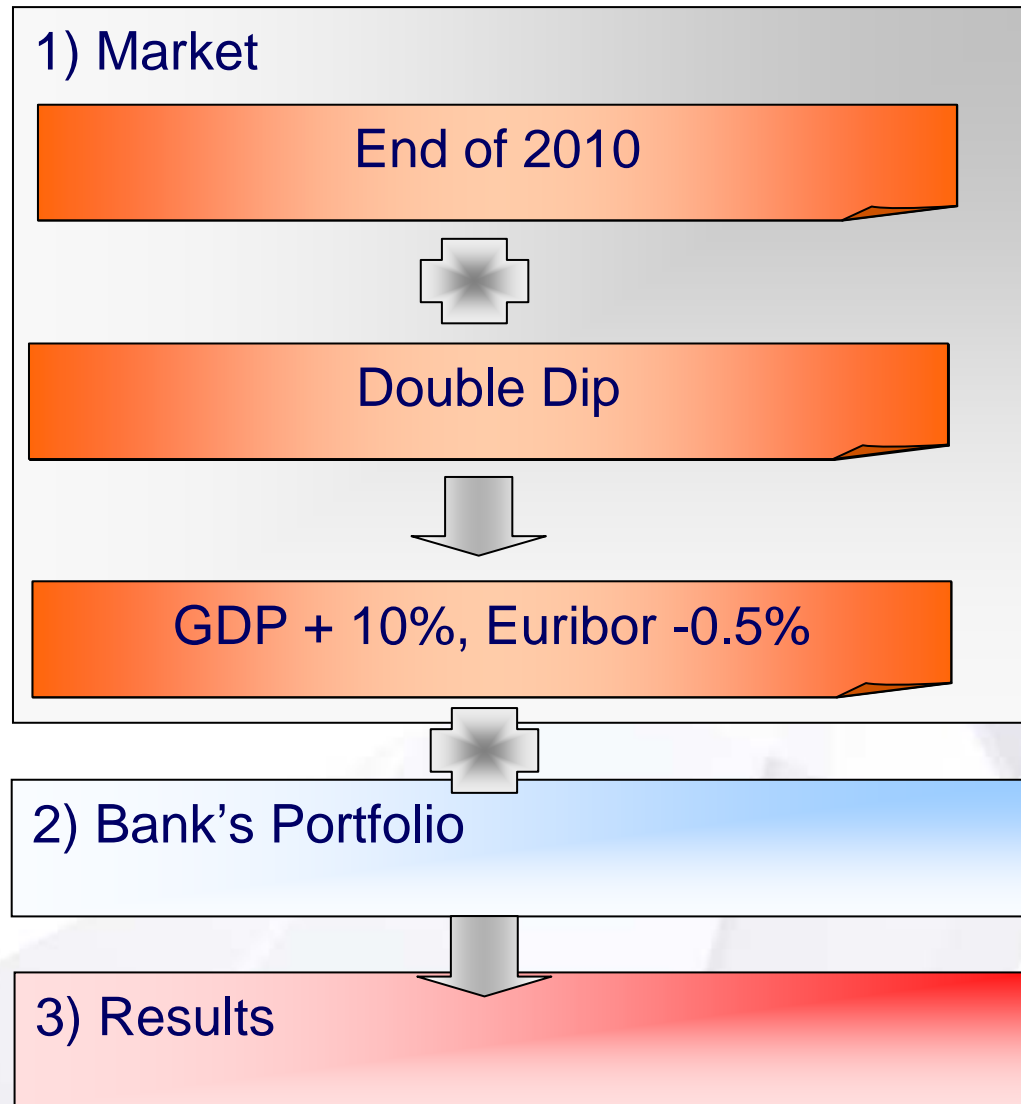
Basel II Framework

EL =	Non- Defaults	Defaults
LGD X	Loss Given Default model	LGD Best Estimate model
PD X	Probability of Default model	PD fixed 100%
EAD	Exposure at Default estimate	

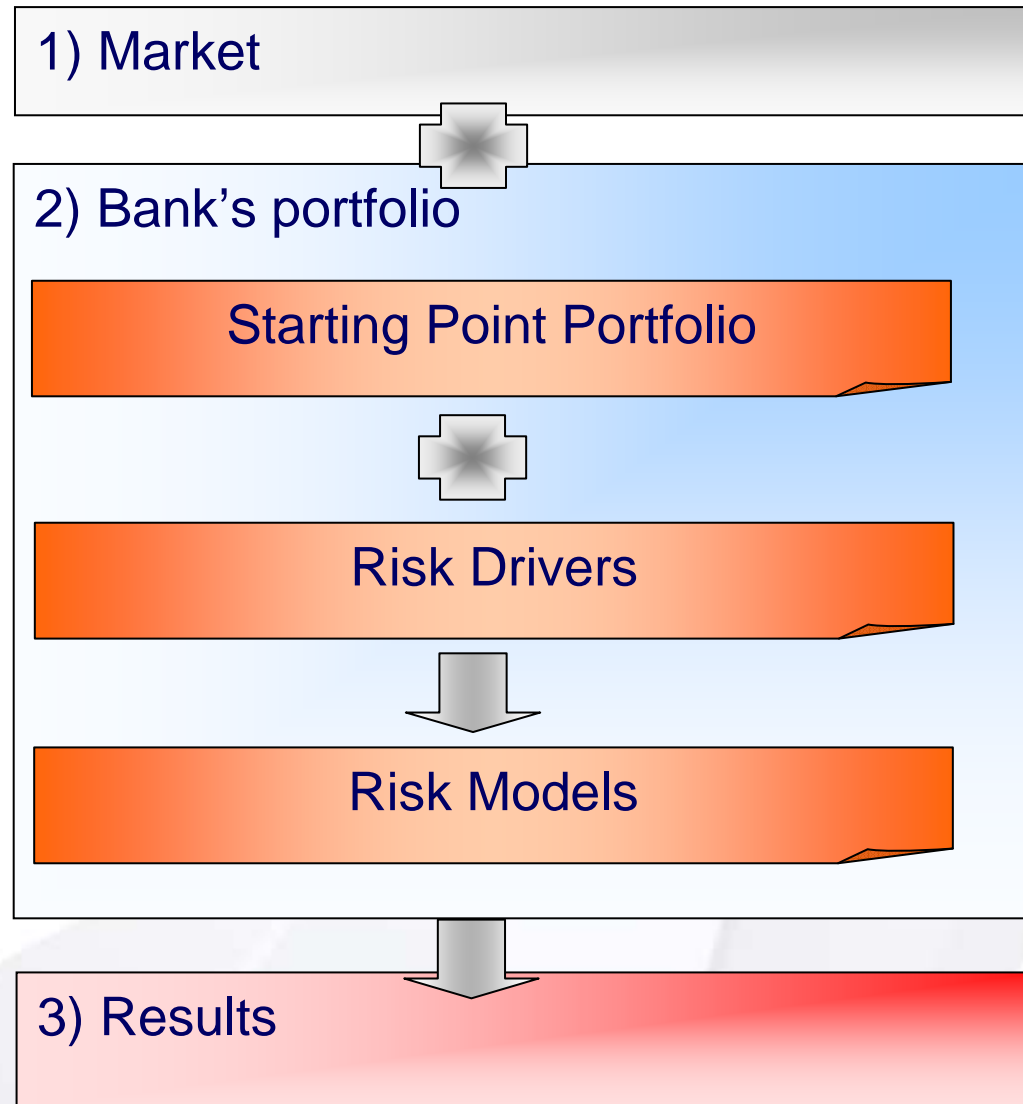
Evaluating a stress scenario (1/3)



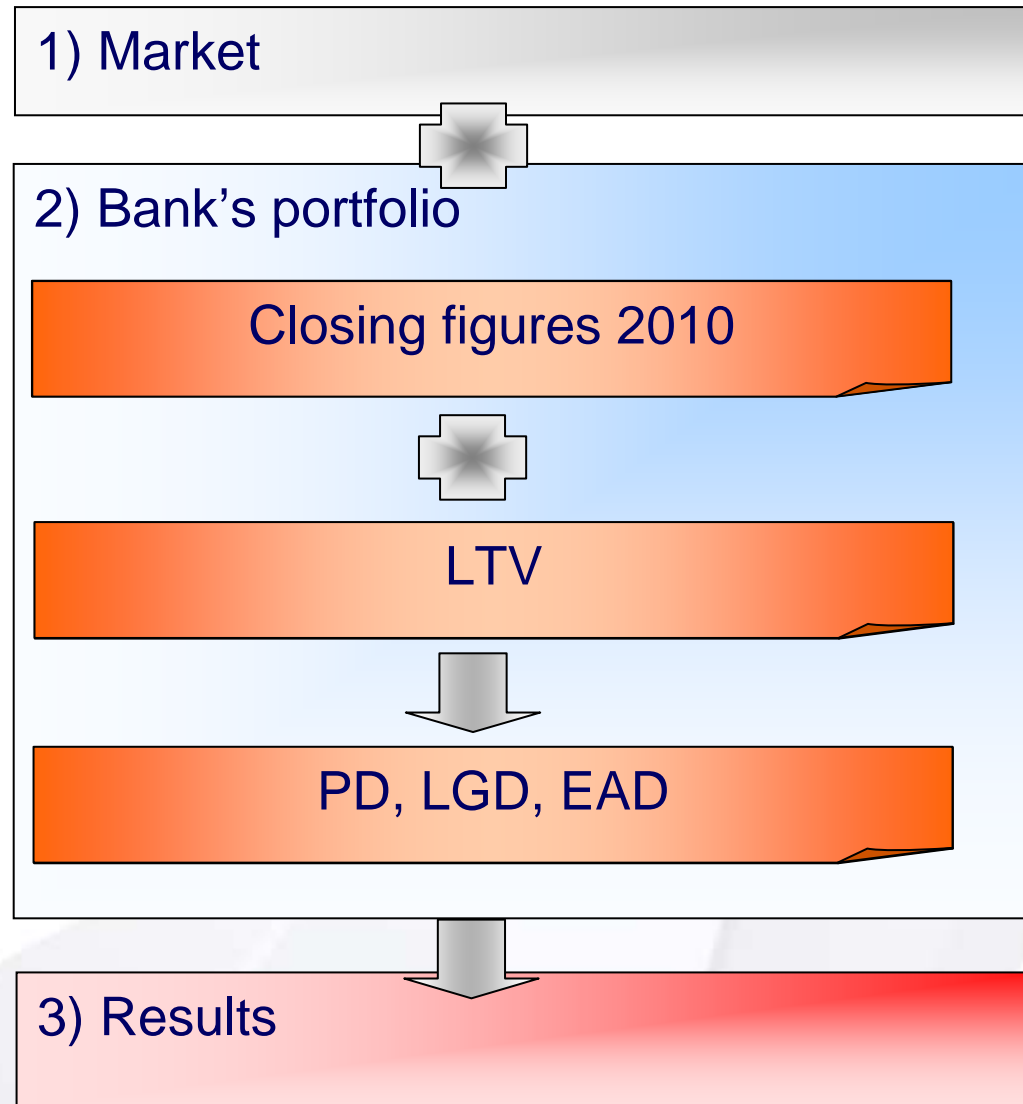
Evaluating a stress scenario (1/3)



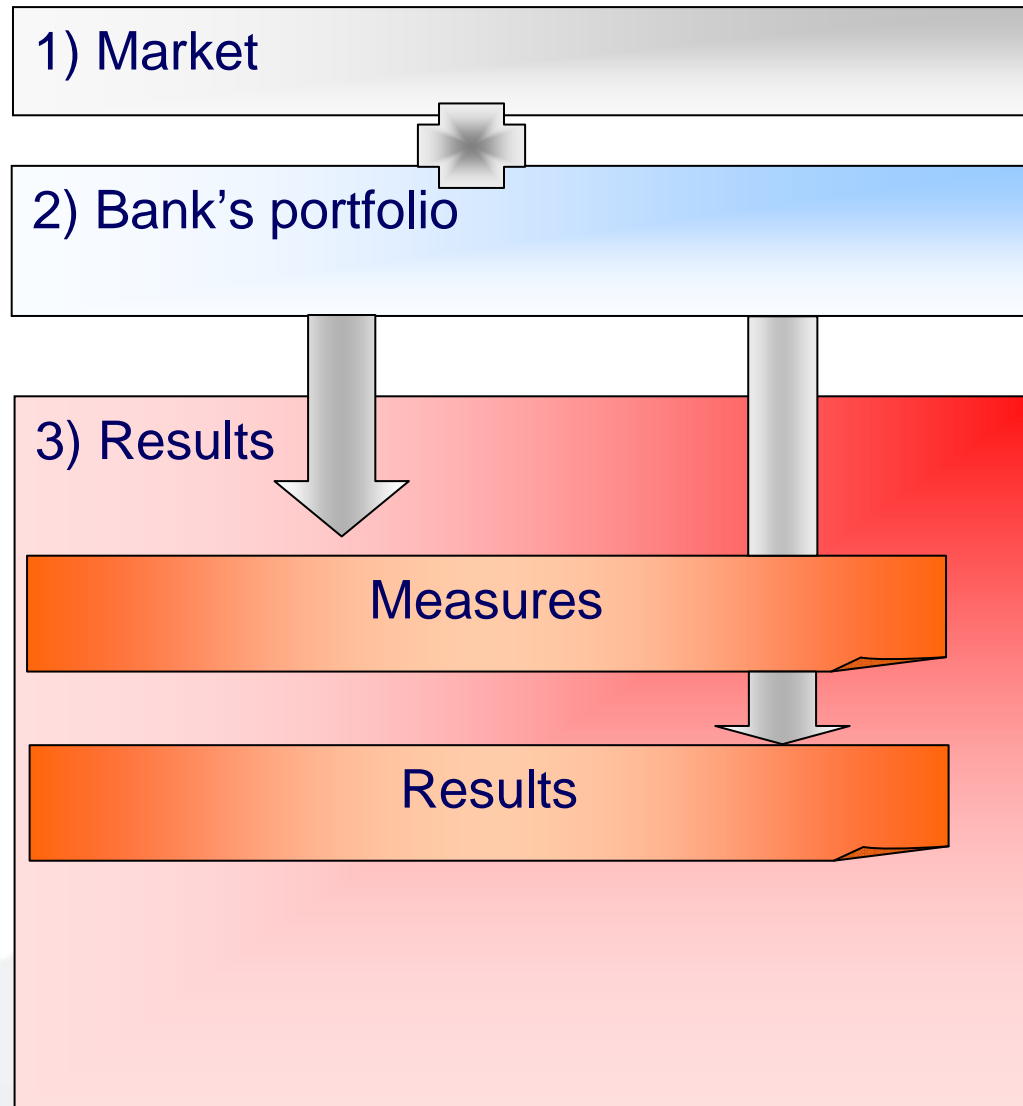
Evaluating a stress scenario (2/3)



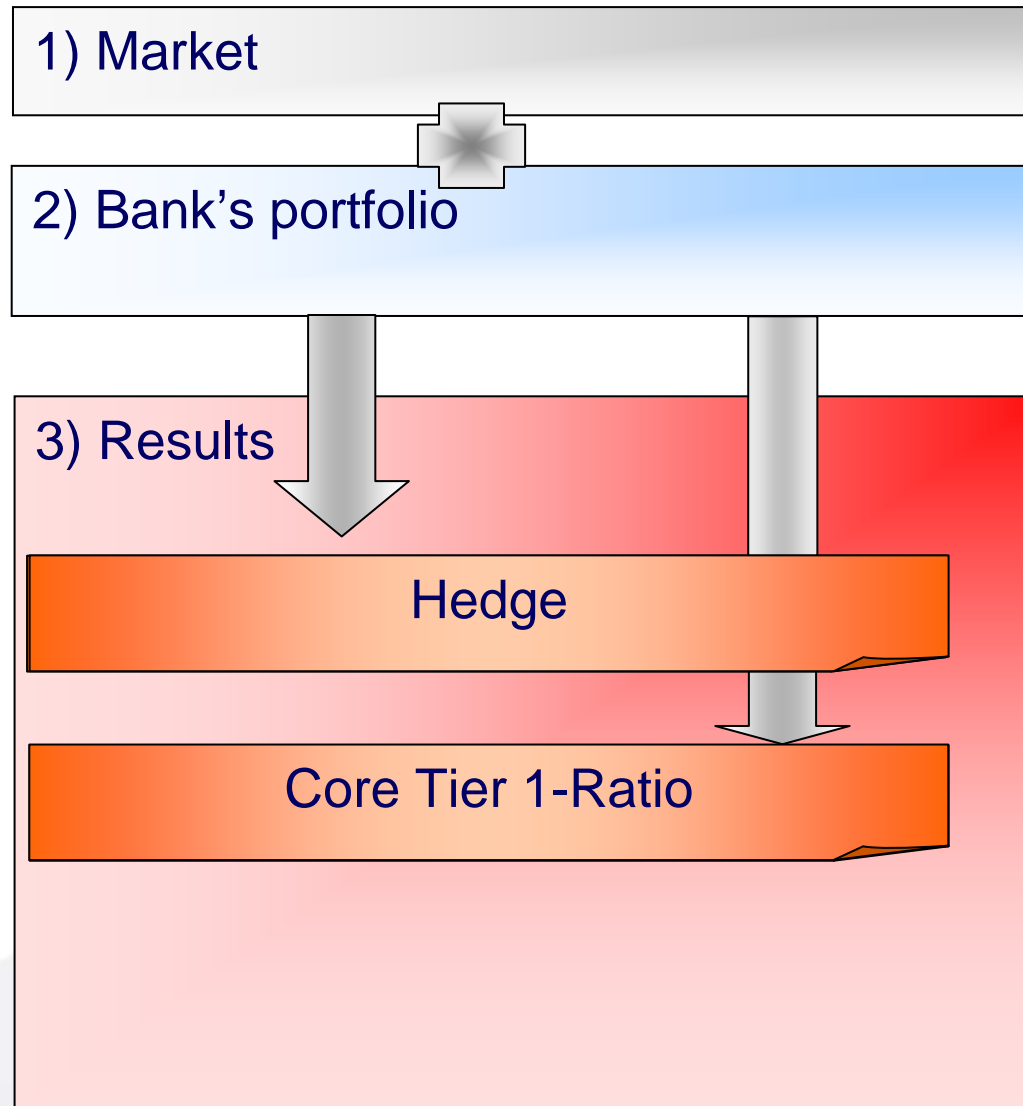
Evaluating a stress scenario (2/3)



Evaluating a stress scenario (3/3)



Evaluating a stress scenario (3/3)



Challenges

Challenges (1/2)

- How to deal conflicting requirements?
 - Flexible, Accurate, Fast, Sufficient detail
 - Explainable to management en regulator
 - Comparable to previous Stress Tests
 - Meeting changing requirements of regulators
- How to interpret results?
 - Subjective by definition
 - Numbers over underlying risk
 - Focus on one scenario
 - Black swans
 - Pass-fail interpretation in media and politics

Challenges (2/2)

- How to quantifying macro-economic effects?
 - Outside regular model scope
 - Estimating macro economic effects is hard to start with
- What method to use?
 - Heuristics on aggregated data
 - Monte Carlo
 - Calculation at customer level
- Reverse stress testing?

Our Solution

- Standardise basics
 - Core process
 - Methodology
 - Tools
- Separate levels
 - Methodology definition
 - Execution
- Streamline overall process
 - Internal
 - External

In Conclusion

In conclusion

Summary

- Provides insights
- No future telling
- Many challenges ahead

Contact

- **Marcel.denHollander@SNSREAAL.nl**
+31 6 510 23 963