

BASEL I...N

EXCERCISE

DATA WAREHOUSE LECTURE

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TOPICS

- The Problem: Basel and the financial crisis
 - Why?
 - The I, II, III of Basel
- What does that mean for me as a big bank?
- Data Mart for Basel
 - What data do we need?
 - Where do we get it from?
 - Is it necessary to merge data?
- Sources

BASEL AND THE CRISIS

- Basel I (1974, 1988):
 - German Herstatt-Bank goes bankrupt
 - Basler Ausschuss für Bankenaufsicht gets founded
 - Equity of 8% necessary when giving credit to someone
- Basel II (2004, 2007):
 - Calculation method was too crude
 - Provisions now stronger tied to the actual credit risk
- Basel III (2009, 2014):
 - 2008 happened...
 - More core capital needed
 - Securities must now consist of a mix of assets
 - Capital conservation buffer, ...
- Basel IV (vrs. 2023):
 - Even more core capital needed

EFFECTS AND OBLIGATIONS

- Calculate size of credit risk (RWA)
 - Information about the client
 - Information about the own financial situation
 - 2 ways of calculation
 - KSA - standardized
 - IRBA – intern
- Credit assessment
 - Much stricter
 - Rating-System for Companies
- We need DATA, DATA, DATA!

Minimum
capital
requirements

Supervisory
review

Market
discipline

Die drei Säulen von Basel II

WHY DATA WARHOUSE?

- Comprehensive picture of customer has to be made
 - Data privacy?
 - Controlling access
- Big volume of data from different sources required

EIN DATA MART FÜR BASEL II

- Bank should structure their data according to data warehouse principles
- Creation of a Data Mart containing relevant data
 - Credit history
 - Assets (client and bank)
 - Current credit
 - Information from rating companies
 - ...

EIN DATA MART FÜR BASEL II

- Source-to-target-mapping
- ETL-Phase – how to unify data?
- Interfaces for the Systems
- Physical data model
- Testing!

BASEL III AND IV

- New methods of data analysis needed
- For data mining and machine learning we need well structured data
- -> Data warehouse is a perfect foundation

SOURCES

- Bank for International Settlements – Homepage, <https://www.bis.org/>, last checked 23.02.2021
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- Capgemini Invent: Umsetzung von Basel IV (German), <https://www.capgemini.com/de-de/2020/04/invent-umsetzung-basel-iv/>, last checked 24.02.2021
- A credit risk data warehouse for Basel II compliance, *BearingPoint, Inc.*, McLean, VA, 2007, http://www.dwlogic.com/community/articles/c4080_bank_crdw_cs.pdf