Zanders Webinar

Deposit interest rate risk management in uncertain times for banks

Martijn Wycisk, René Andersen and Geert Jan den Hertog
The Netherlands / Switzerland / Nordics • 14 May 2020
Agenda

1. Introduction

2. Impact of Covid-19 on bank deposits

3. Behavioural deposit modelling and focus points in crisis times

4. Q&A
About Zanders

Zanders is a consultancy firm specialized in Treasury, Risk and Finance.

We employ over 200 professionals in 7 countries, and have an extensive track record with corporate, financial and public sector clients.
Agenda

1. Introduction
2. Impact of Covid-19 on bank deposits
3. Behavioural deposit modelling and focus points in crisis times
4. Q&A
Impact of Covid-19 on bank deposits

**ING Retail Germany**: “[...] net customer deposits declined by €1.2 billion, reflecting lower savings volumes which clients partly shifted to investment products.”

**Skandinaviska Enskilda Banken**: fluctuation in deposits and borrowings from the public

**SEB (Sweden)**: “[...] corporate customer deposits increased as their equity investments were realised”

**UBS (Switzerland)**: “Average net cash outflows decreased due to reduced secured financing transactions and higher average inflows from customer lending, which were partially offset by higher average outflows from customer deposits.”

* Based on 2020 Q1 results
Poll questions
Please participate in answering the polling questions
1. Introduction

2. Impact of Covid-19 on bank deposits

3. Behavioural deposit modelling and focus points in crisis times

4. Q&A
Behavioural deposit modelling

Bank optionality and client optionality determine behavioural maturity of variable deposits

**Earnings risk**
Decision on modelled maturity of deposits impacts margin (earnings). Margin stabilization and minimum margin requirements are key decision criteria impacting the modelled behavioural maturity.

**Economic Value (EV) risk**
Modelled behavioural maturity has an impact on EVE measures.
- Economic Value of Equity (EVE), ΔEVE
- Equity duration / PV01

Utilization of risk limits (ΔEVE, SOT).

Modelled behavioural maturity impacts both earnings (NII) volatility as well as EVE sensitivity.

**Bank optionality**
Product characteristics influence repricing behaviour, i.e. the bank has the right to adjust the client rate when market rates move.

**Client optionality**
Clients have the right to withdraw deposit volume. Customer type (e.g. retail/corporate) is expected to drive volume outflow behaviour and potentially impacts the split between stable and non-stable deposits.
Significant amount of regulatory guidance on IRRBB and deposit modelling (EBA/BCBS 368)

1. Internal, regulatory and stressed scenarios must be defined, impact on key behavioural assumptions assessed.
2. Periodically perform sensitivity analyses for key assumptions to monitor impact on measured IRRBB.
4. Behavioural assumptions reflect volume migration between deposits under interest rate scenarios.
5. Maintain strict model risk and validation guidance as well as documentation of key behavioural assumptions.
6. Review key assumptions at least annually, and more frequent under changing market circumstances.

“50% of banks indicate their behavioural models do not meet regulations”

* 2017 survey Interest Rate Risk in the Banking Book, “DTTL”
## Consequences of Covid-19 crisis

### A. Highly uncertain economic outlook
- Different economic scenarios (V, U, W, L) exist
- Uncertainty about future development in market rates and B/S development

### B. Past experience is not reliable anymore
- Not sufficient new data is available
- Models calibrated on historical data are not representative for estimating future behaviour

### C. Material replication imbalances can occur
- Non-core and core deposit portions change
- Volume inflows (non-core) will be gradually replicated into longer-term tenors over time

### D. Lack of call for action
- Lack of transparency what the behavioural assumptions during the crisis imply
- No trigger to review behavioural model

## Behavioural modelling advice

### 1. Redefine new base-line scenario
- Redefine and update market rate, client rate and deposit volume development (forecasts) depending on economic outlook scenarios
- Apply new base-line and (at-risk) scenarios in deposit modelling

### 2. Apply behavioural overwrites
- Reassess all relevant behavioural model assumptions
- Rely on expert judgement to define overwrites, e.g. client rate and volume forecast, (non-)core portion, term-out

### 3. Intervene in replication rollover (ad-hoc)
- Ringfence deposit inflows in short-term replication tenors
- Rebalance replicating portfolios more frequently (material outflows)
- Recalibrate and understand impact (sensitivity) of overwrites

### 4. Monitor deposit volume development strictly
- Daily monitoring of deposit volume in- and outflows over time
- Imminent deviation from modelled outflows could trigger rebalancing
- Material deviations result in (more frequent) recalibration of deposits
Poll questions
Please participate in answering the polling questions
Key take-aways


1. Apply broad range of interest rate scenarios
2. Assess repricing behaviour and impact of 0% floor on client rates
3. Use appropriate segmentation in behavioural modelling
4. Include volume migration among different types of deposits
5. Provide transparency on earnings and economic value risk when assessing behavioural maturity of deposits
6. Review model soundness and documentation by periodic validation

Most important aspects during Covid-19 crisis:

A. Redefine (internal) scenarios conform economic outlook
B. Assess behavioural assumptions underlying deposit models
C. More active management of replicating portfolios
D. Strict monitoring and back testing of volume behaviour
Agenda

1. Introduction
2. Impact of Covid-19 on bank deposits
3. Behavioural deposit modelling and focus points in crisis times
4. Q&A
Q&A
Please send your questions via the chat box
Contact Us

**Bussum**
Brinklaan 134
1404 GV Bussum
The Netherlands
T: +31 35 692 8989

**Antwerp**
Schuttershofstraat 9
2000 Antwerpen
Belgium
T: +32 35 020 710

**London**
26 Grosvenor Gardens
SW1W 0GT London
United Kingdom
T: +44 20 7730 2510

**Zurich**
Gessnerallee 36
8001 Zurich
Switzerland
T: +41 44 577 70 10

**Stockholm**
Mäster Samuelsgatan 60
Stockholm 11121
Sweden

**New York**
230 Park Avenue
New York, NY 10169
United States
T: +1 917 853 3220

**Tokyo**
1F & 2F Frances Building
2-19-9 Ebisu Nishi Shibuya-ku,
Tokyo 150-0021, Japan

www.zanders.eu
Zanders

Disclaimer
This information, included pictures, illustrations, graphic material, names and logos are the property of Zanders and its companies and is protected by copyright, trademark law or any other intellectual property rights. These rights are not, in any way, transferred to the person or company having access to this information. The content can only be used for non-commercial private purposes. The user is not allowed to copy, send, distribute or against payment make available to a third party, without explicit approval of Zanders.

This information in this presentation was composed carefully and is not legally binding and not meant as advice. Zanders cannot be held responsible or liable for the damage caused by uncomplete or unjust information in this presentation. The presented information on possible transactions is an example and does not give any warranty on actual transactions. Actual transactions will be performed under specific provisions and (market) conditions.