



Results of the 2022 LSI stress test

Press conference

28 September 2022

Agenda

- I. Survey
- II. LSI stress test 2022

Background to the 2022 LSI stress test survey

Overview of the survey





General

- Bundesbank and BaFin surveyed **1,299 credit institutions and 17 building and loan associations**, representing 91% of banks in Germany and 45% of total assets
- **Fifth survey** since 2013 (last survey: 2019)
- Focus on development of **earnings in various interest rate scenarios** as well as on institutions' **budgeted figures** and questions on current topics
- Survey covers quantitative and qualitative aspects

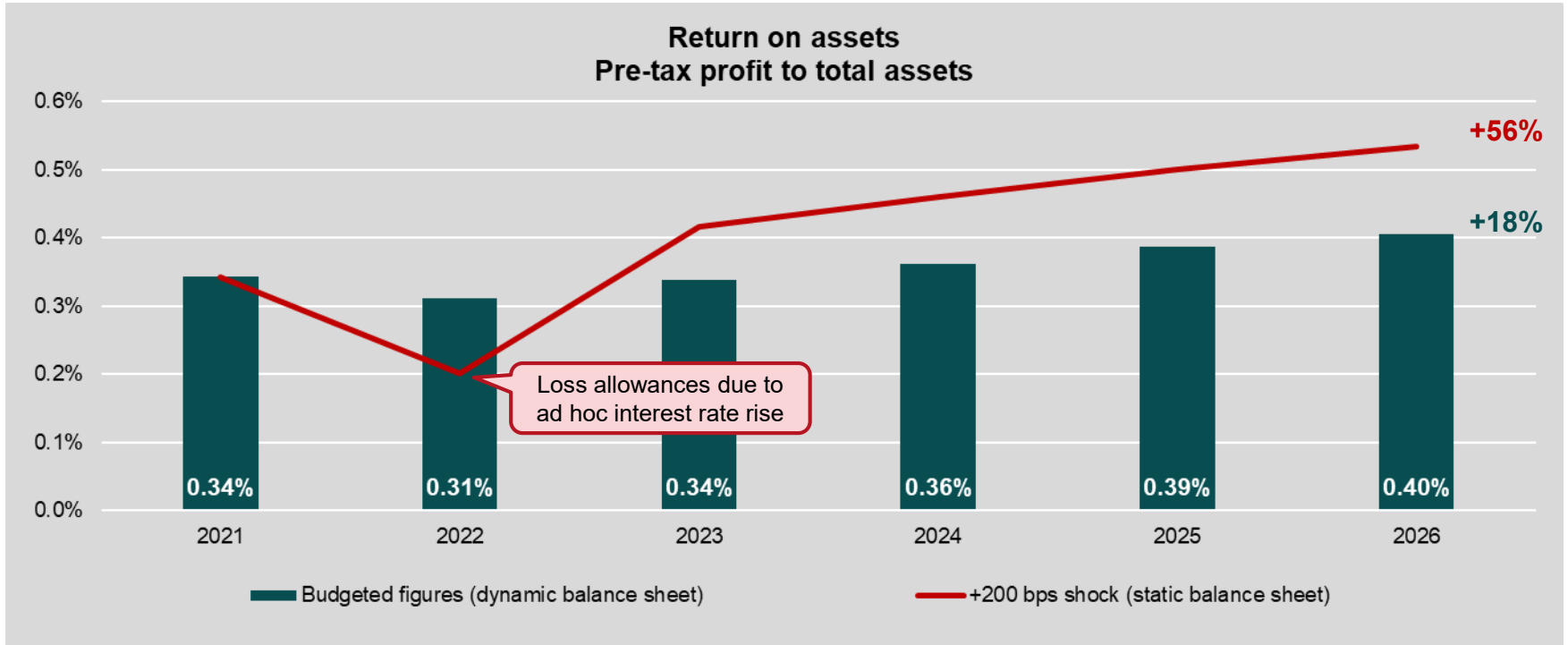
Key findings

- Institutions planning for slightly **declining, but solid capital ratios**
- Interest rate rise leading to strains in short term, but greater profitability in medium term
- Planning is potentially too pessimistic in medium term given rising interest rates
- Overview of institutions' assessments of **IT and climate risks**

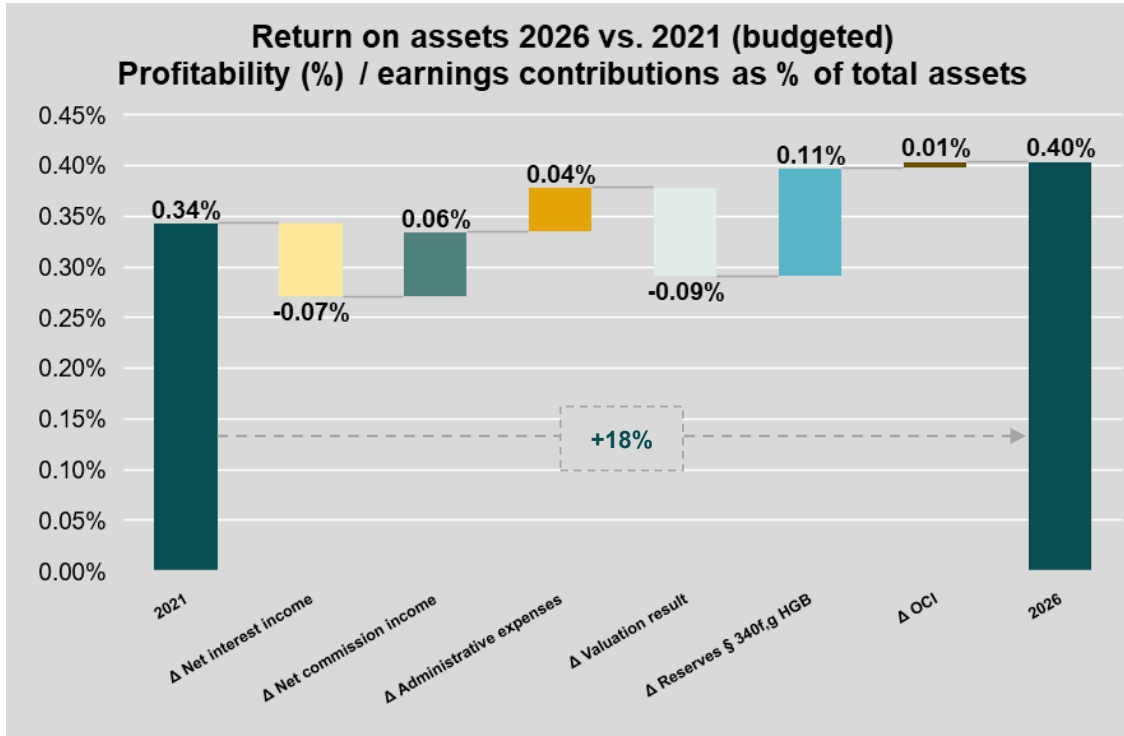
Overview of survey results

	Institutions' five-year budgeted figures	Assessment
Planning quality	<ul style="list-style-type: none">Majority of institutions have only planned for a moderate interest rate rise; plans thus too pessimistic in medium termGiven the interest rate reversal and the announced interest rate steps, planned net interest income, in particular, seems too lowHowever, adverse macroeconomic effects – e.g. from energy price shocks – may cloud the overall picture	 <p>Conservative plans contain buffers for negative deviations from planning</p>
Profitability	<ul style="list-style-type: none">Institutions are planning for an increase in return on assets from 0.34% to 0.40% (due, inter alia, to lower build-up of reserves)Profitability could recover in medium term as interest rates rise	 <p>Profitability at historically low level, but bolstered by interest rate rise in medium term</p>
Risk-taking	<ul style="list-style-type: none">Risk-weighted assets (RWAs) growing faster than total assetsThis development was already observed in previous stress tests	 <p>Planned higher risk-taking without rising profitability</p>
Solvency	<ul style="list-style-type: none">Capital ratios are historically good overallPlanned Common Equity Tier 1 (CET1) ratio to fall on aggregate from 17.7% currently to 16.9% in 2026Institutions largely planning for slight decline in CET1 ratios	 <p>CET1 ratios falling slightly, but at high level overall</p>

Institutions provided information on their own budgeted figures as well as on interest rate scenarios defined by supervisors

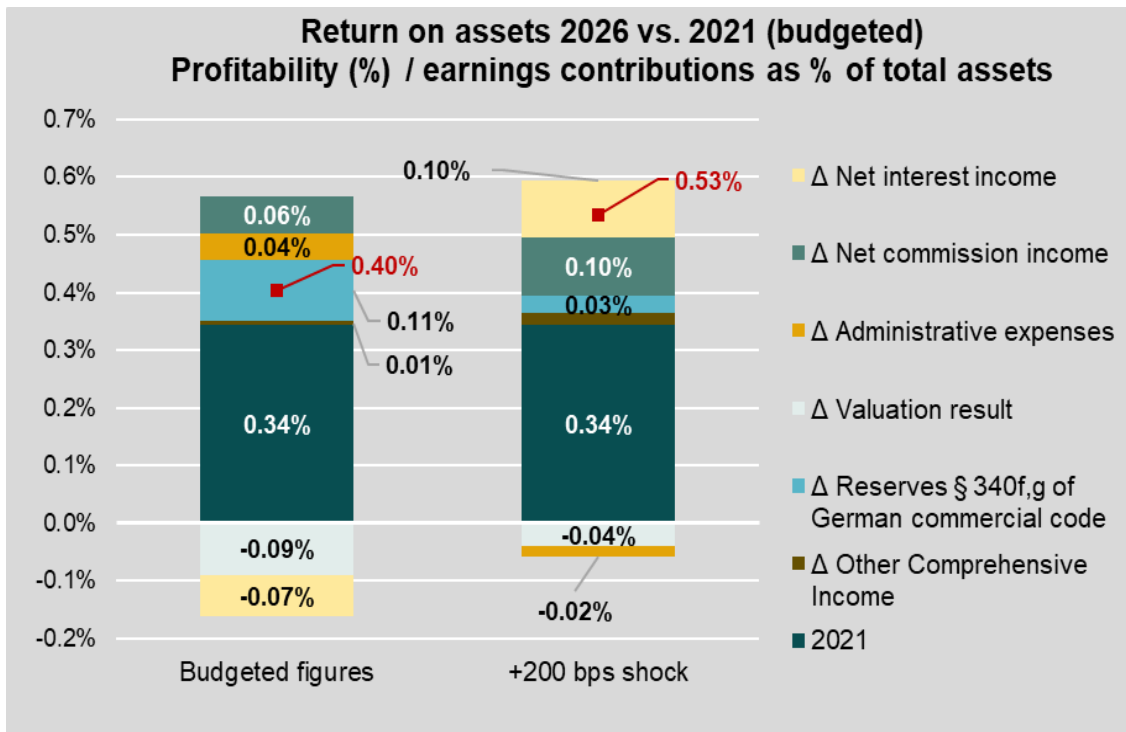


Interest rate reversal and worse economic setting are not yet included in plans for return on assets



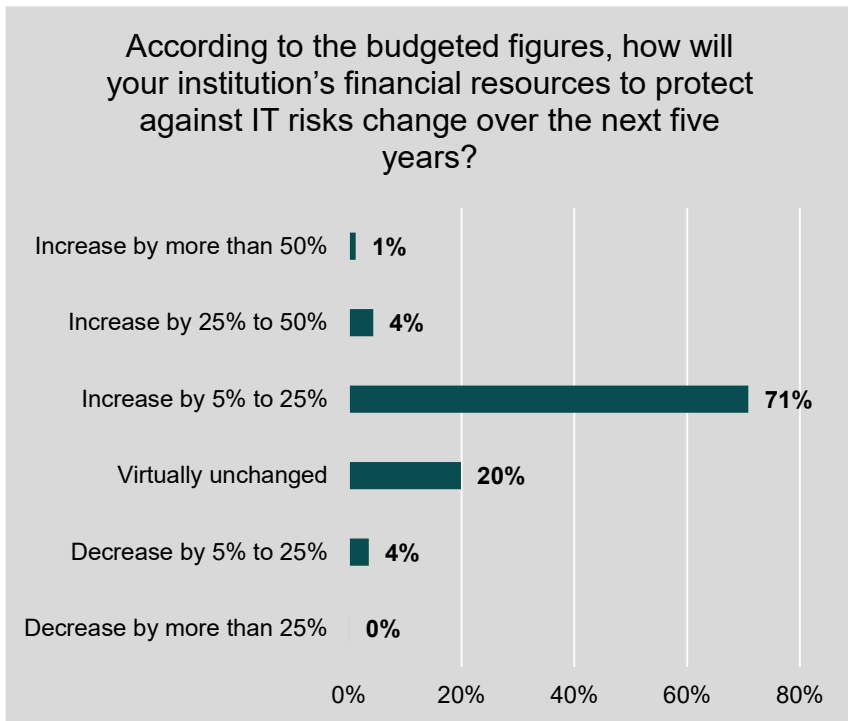
- Current pre-tax return on assets is historically low
- Institutions' forecasts largely based on persistently low interest rates
- As interest rates rise, institutions may achieve higher net interest income in the future
- Scenario of sudden interest rate rise of +200 bps (next slide) paints a much more optimistic picture in medium to long term despite static balance sheet assumption

Conservative planning based on low interest rate environment, more positive outlook when considering an interest rate rise



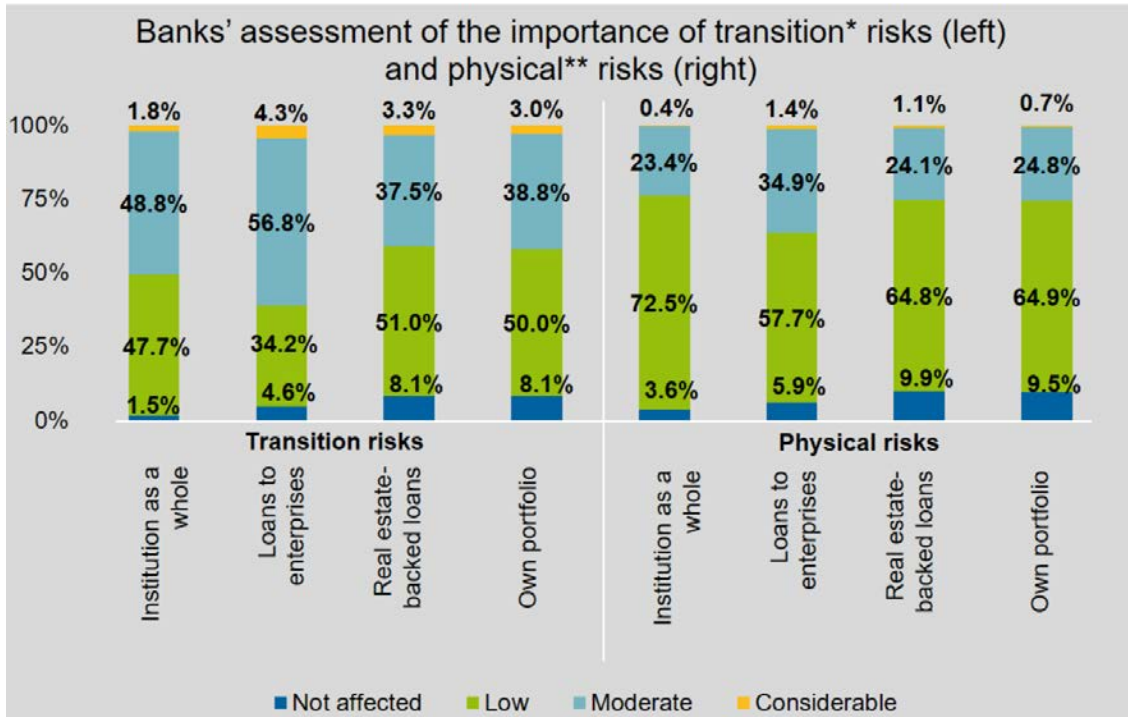
- Comparison of budgeted figures with interest rate rise scenario (ad hoc interest rate rise +200 bps) shows that **net interest income and return on assets recover with interest rate reversal**
- In reality, given an interest rate rise, institutions would be able to further adapt their business strategies and thus further optimise their result

Over 75% of institutions plan to increase their spending to protect against IT risks over the next five years



- Many institutions are still planning on an increase in spending to protect against IT risks
 - By comparison, in 2019, 65% of institutions planned to increase spending and 35% to keep it constant; no institution envisaged a reduction
- Just under 80% of institutions are already insured against cyber attacks and a further 8% plan to take out insurance
- 72% report that they incurred no losses from IT incidents in 2021
 - Among the institutions which recorded losses, these were mainly non-financial losses
- During the coronavirus pandemic, the majority (71%) registered no change in the number of cyber attacks (successful attacks in the sense of incidents)

The importance of climate risks is mostly seen as low to moderate – transition risks more significant than physical risks



- Most institutions currently incorporate climate risks at most indirectly in risk management
- Transition risks are generally given more importance than physical risks
- Corporate lending business is somewhat more strongly affected than real estate lending and business in own portfolio
- Low importance of reputational and operational risks (not shown in chart)

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Stress test: procedure and results

Stress test procedure

- In the stress test, banks simulate the **entire profit and loss account (P&L)** over a **three-year horizon** under **predefined assumptions**
- The adverse scenario assumes a **severe economic downturn**
- Supervisors check the submissions comprehensively

Analysis of all material risks

Credit risk

- Macroeconomic scenario (including significant fall in GDP and increase in unemployment rate) is translated into initial value-dependent PD/LGD dynamics* in the projection horizon

Market risk

- Credit spread increases and interest rate shocks for bonds
- Percentage discounts on market values of other positions
- Consideration of hedges and reversals of valuation reserves

Net interest income

- Predefined shocks to the yield curve
- Run-off business must be reinvested at the then applicable terms and conditions

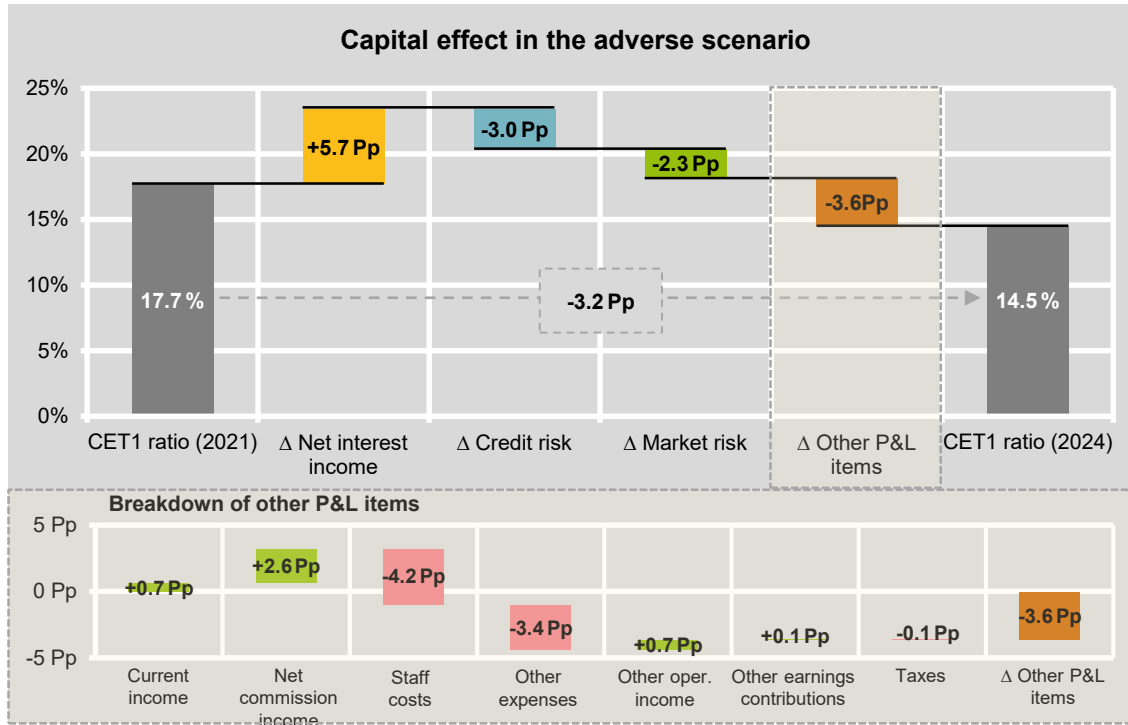
Other P&L

- Historical P&L contributions carried forward, partly taking into account percentage discounts
- One-off effects considered on case-by-case basis

Result

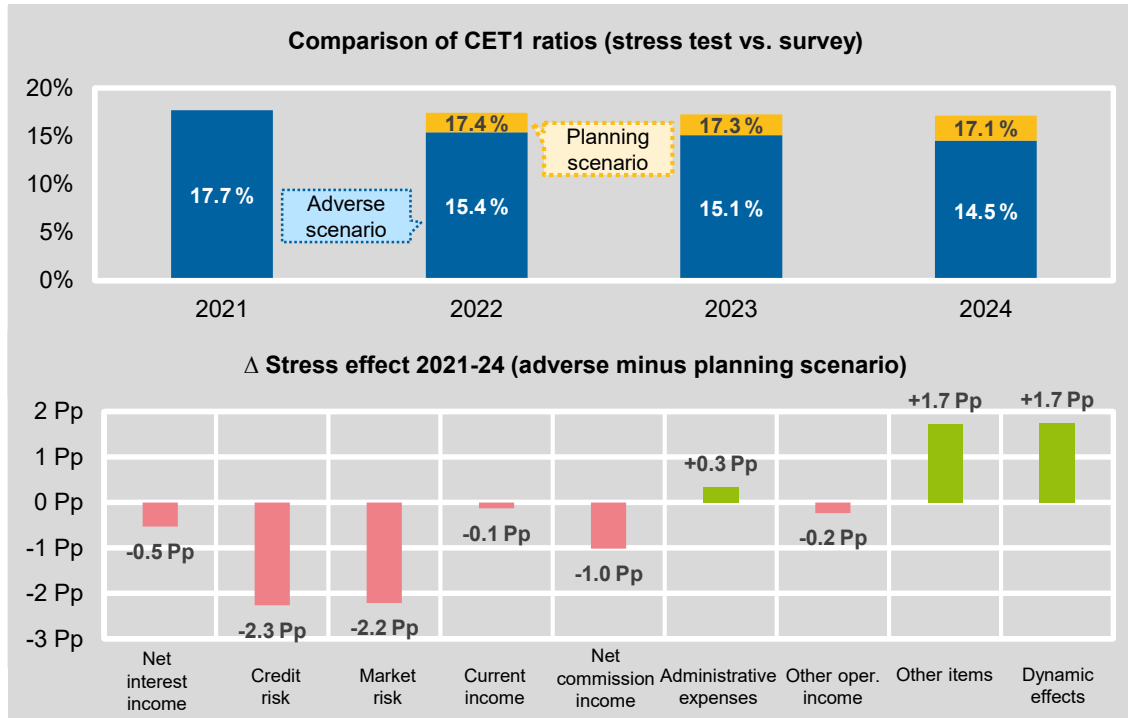
- German **institutions** are **resilient in the adverse scenario**
- The aggregate CET1 ratio declines by around **3.2 percentage points**
- The **stress effect** feeds into the determination of the future Pillar 2 Guidance

German institutions are mostly well-capitalised in the adverse scenario of the stress test



- The **CET1 ratio** falls over the three-year stress horizon by **3.2 pp** (from 17.7% to 14.5%)
- Losses in the adverse scenario largely result from **increased credit and market risk**
- **Positive contribution from net interest income**
- Other P&L items dominated by **staff costs and other administrative expenses**

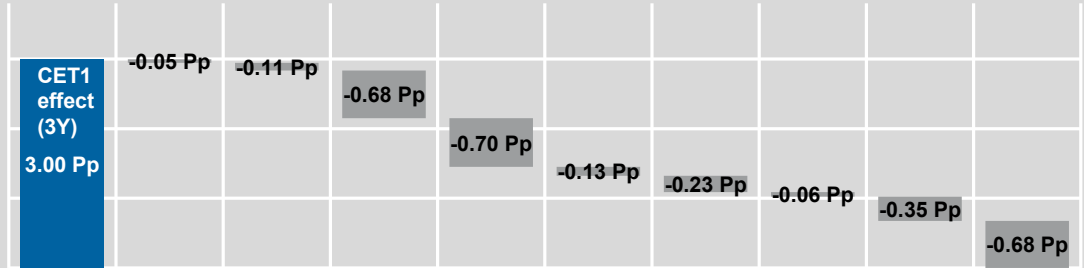
Capital loss in the adverse scenario vs. the planning scenario



- CET1 ratio falls in planning scenario by 0.6 pp
- Significantly smaller losses from counterparty and market risk in the planning scenario
- Higher tax payments in the planning scenario drive other items
- Dynamic effects result from growth in total assets, which is excluded in the adverse scenario

Unsecured exposures drive effects in counterparty risk

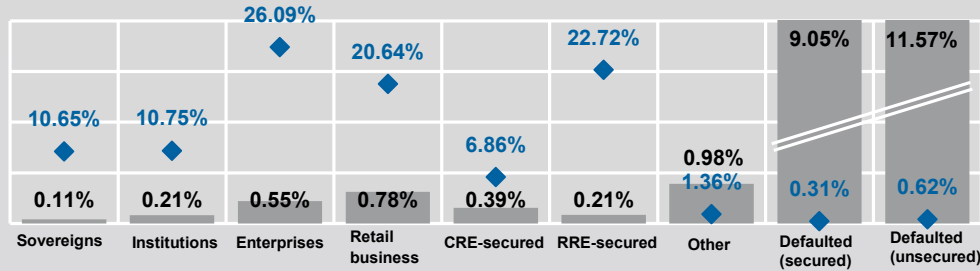
Drivers of CET1 effect



- Main drivers of the capital effect in counterparty risk are unsecured defaulted exposures, retail exposures and exposures to enterprises
- Despite their large share in the risk volume, exposures to institutions and exposures secured by residential real estate show low capital depletion and have a low loss allowance ratio

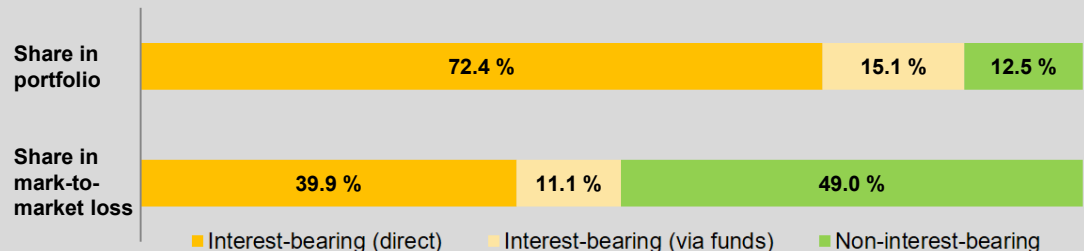
Loss allowances vs. risk volume

■ Loss allowance ratio 2022-24 ◆ Share of exposure classes in risk volume as at 2021

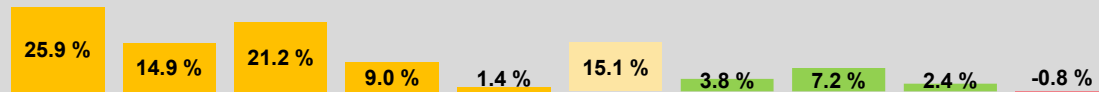


Significant stress effect in market risk from non-interest-bearing positions

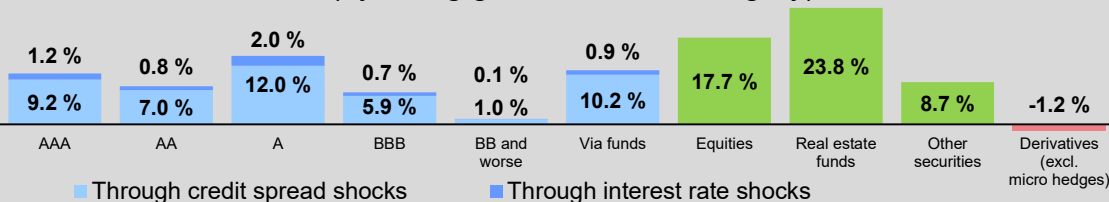
Shares in overall portfolio and in mark-to-market loss*



Shares in portfolio (by rating grade and risk category)



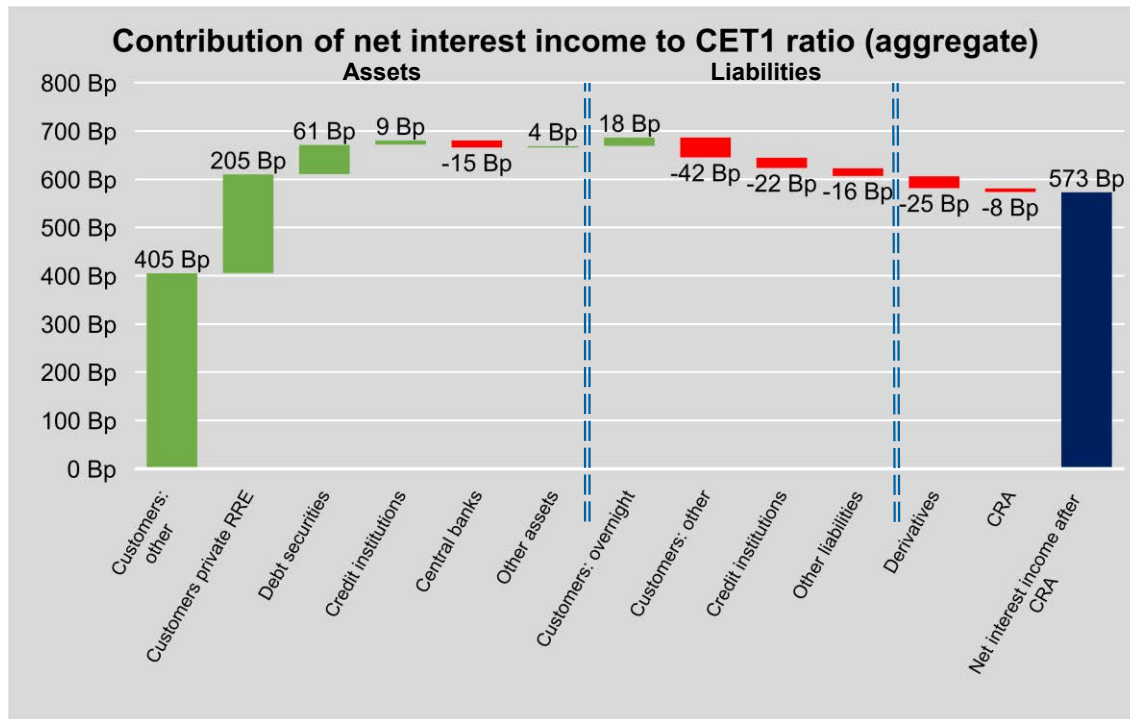
Shares in CET1 effect (by rating grade and risk category)



- Interest-bearing positions make up the largest share of the overall portfolio at 87%, but account for only 51% of the mark-to-market loss
- Non-interest-bearing positions make a disproportionately large contribution to capital depletion in market risk
- Compared with the 2019 stress test, the share of equities and real estate funds in the mark-to-market loss is higher in particular

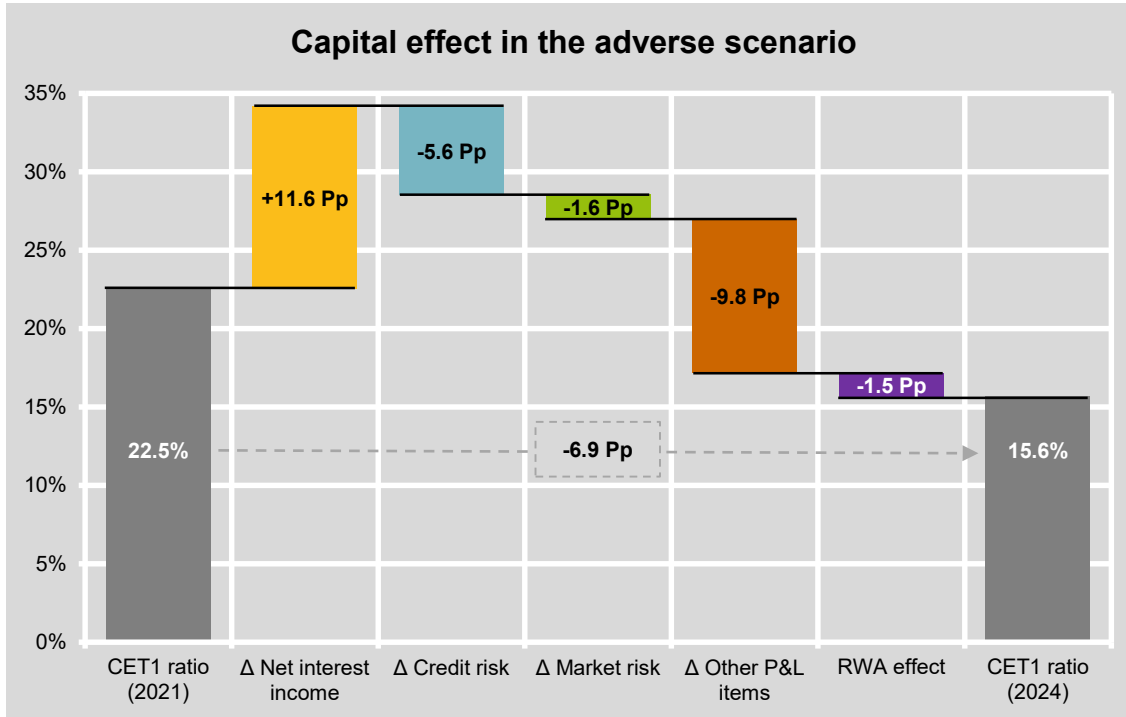
* The shares of the components of the summary item (especially funds) in the mark-to-market loss after hedging and reversal of valuation reserves were approximated via their share in the mark-to-market loss before hedging and reversal of valuation reserves.

Net interest income is still a major contributor to institutions' earnings



- Total contribution of net interest income to change in CET1 ratio of 573 bps
- Largest positive contribution: receivables from customers (610 bps)
 - Of which 205 bps related to RRE
- Largest negative contribution: other liabilities to customers (-42 bps)
- The greatest volumes are in the items receivables from and liabilities to customers

Despite high capital depletion, building and loan associations are largely well-capitalised in the adverse scenario



- In the building and loan association stress test, the CET1 ratio falls by 6.9 pp up to 2024
- Losses arise mainly from increased counterparty risk; contribution of market risk low
- Much more positive contribution from net interest income than for LSIs; contribution of other P&L items much more negative
- Deviation in depletion relative to LSIs largely driven by low RWA density (building and loan associations: 24.3% vs. LSIs: 50.5%)