Deutsche Bank

Q4/FY 2022 results

February 2, 2023

Five decisive actions executed since July 2019 have transformed the Group

Create four client-centric divisions	Exit businesses	Cut costs	Invest in technology and growth	Manage and liberate capital
〉Focus on four core businesses with strong competitive positioning and attractive market opportunities 〉Balanced and comple-mentary portfolio across and within divisions creating resilient profile	〉Simplified setup driven by exit of Equities trading, refocused Rates and non-strategic asset wind-down 〉€ 227bn reduction of leverage exposure from CRU de-risking	〉Generated more than € 3bn in savings, reducing cost/income ratio (CIR) by 18ppt compared to 2018 〉Incurred significant transformation charges to accelerate change and reposition the bank	〉€ 15bn of IT spend, including start of Cloud migration, tech simplification and German platform migration 〉€ 4bn in internal controls spend with significantly improved staffing and capabilities	〉Maintained stable and robust CET1 ratio, absorbing around 270bps of regulatory and transformation impacts since 2018 〉Started on capital return path towards commitments

Note: Throughout this presentation totals may not sum due to rounding differences and percentages may not precisely reflect the absolute figures

Positioned the Group for sustainable profitability, growth and greater resilience

FY 2022

Performance	Profitability	Resilience
› Revenues significantly above original expectations, reflecting business focus and momentum › Competitively positioned with our clients, leading to sustainable revenue growth and increasing operating leverage[3] for the Group	› Progress on reducing expenses, with CIR in line with 2022 guidance › Improvement in pre-provision profit, with € 6.8bn recorded in FY 2022	› Maintaining disciplined risk management throughout market cycles › Delivered on capital targets despite significant pressure from regulatory changes and transformation-related effects
9% RoTE[1,2]	75% CIR	13.4% CET1

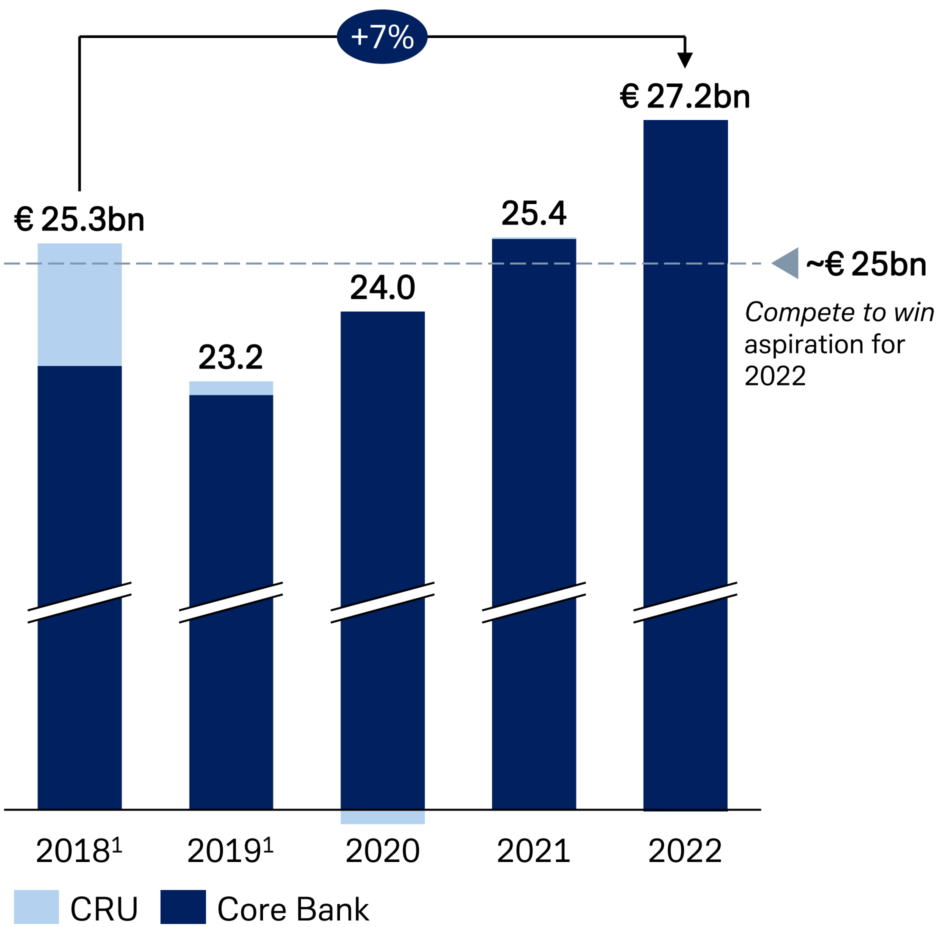
[1] Throughout this presentation post-tax return on average tangible shareholders' equity (RoTE) is calculated on net income after AT1 coupons; Group average tangible shareholders' equity: FY 2022: € 53.7bn, FY 2021: € 50.4bn; Group post-tax return on average shareholders' equity (RoE) FY 2022: 8.4%

[2] Includes € 1.4bn tax benefit from a deferred tax asset valuation adjustment driven by strong US performance

[3] Defined on slide 47

Revenue performance has exceeded expectations, reflecting refocused core businesses

Group revenue development



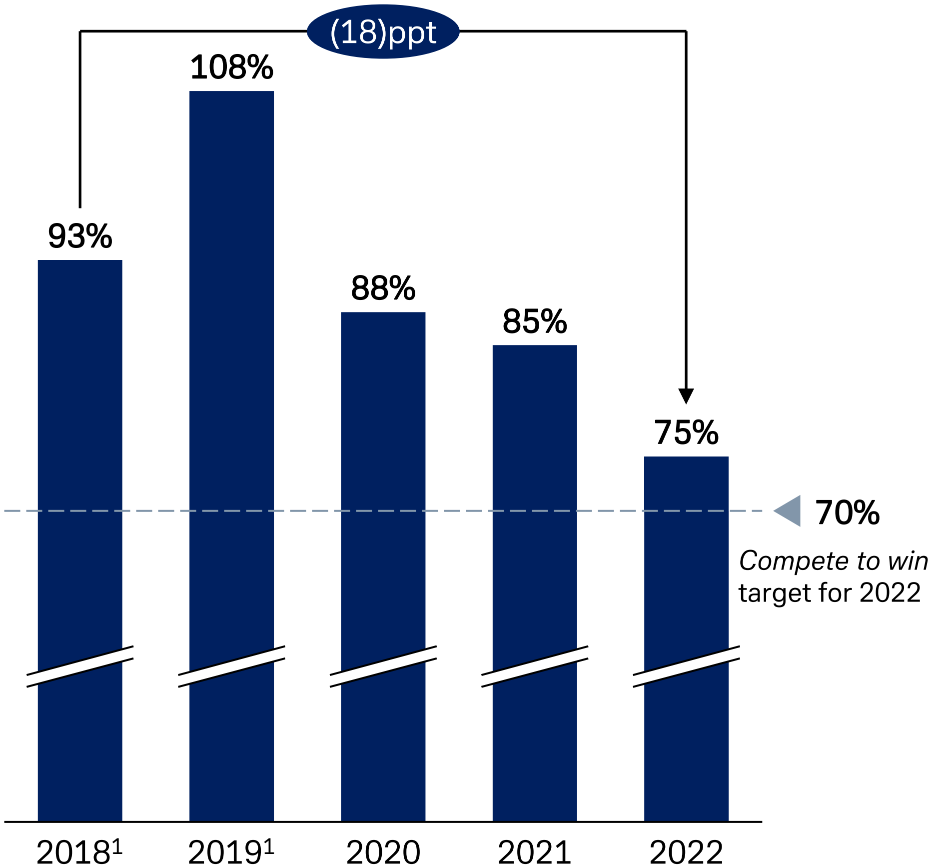
Achievements since 2018

- Group revenues at € 27.2bn are 9% higher than originally planned as part of *Compete to win* strategy for 2022
- Revenues are higher than prior to the transformation, with Core Bank growth more than offsetting forgone revenues from discontinued businesses
- Divisional CAGRs[2] of all Core Bank businesses above original *Compete to win* aspirations
- Group revenues per employee have grown by 16% since 2018

1 2018 figures based on reporting structure as disclosed in Annual Report 2020; 2019 figures based on reporting structure as disclosed in Annual Report 2021
2 Compound annual growth rates (CAGRs); detailed on slide 6

Reduced CIR by 18 percentage points since 2018

Cost/income ratio (CIR) development



Achievements since 2018

- Significantly reduced costs, while self-funding transformation and platform investments
- Generated run-rate savings of more than € 3bn by executing *Compete to win* transformation despite headwinds
- Higher efficiency in all Core Bank businesses driving operating leverage at Group level
- Restructuring and improved governance and controls have sustainably reduced nonoperating costs

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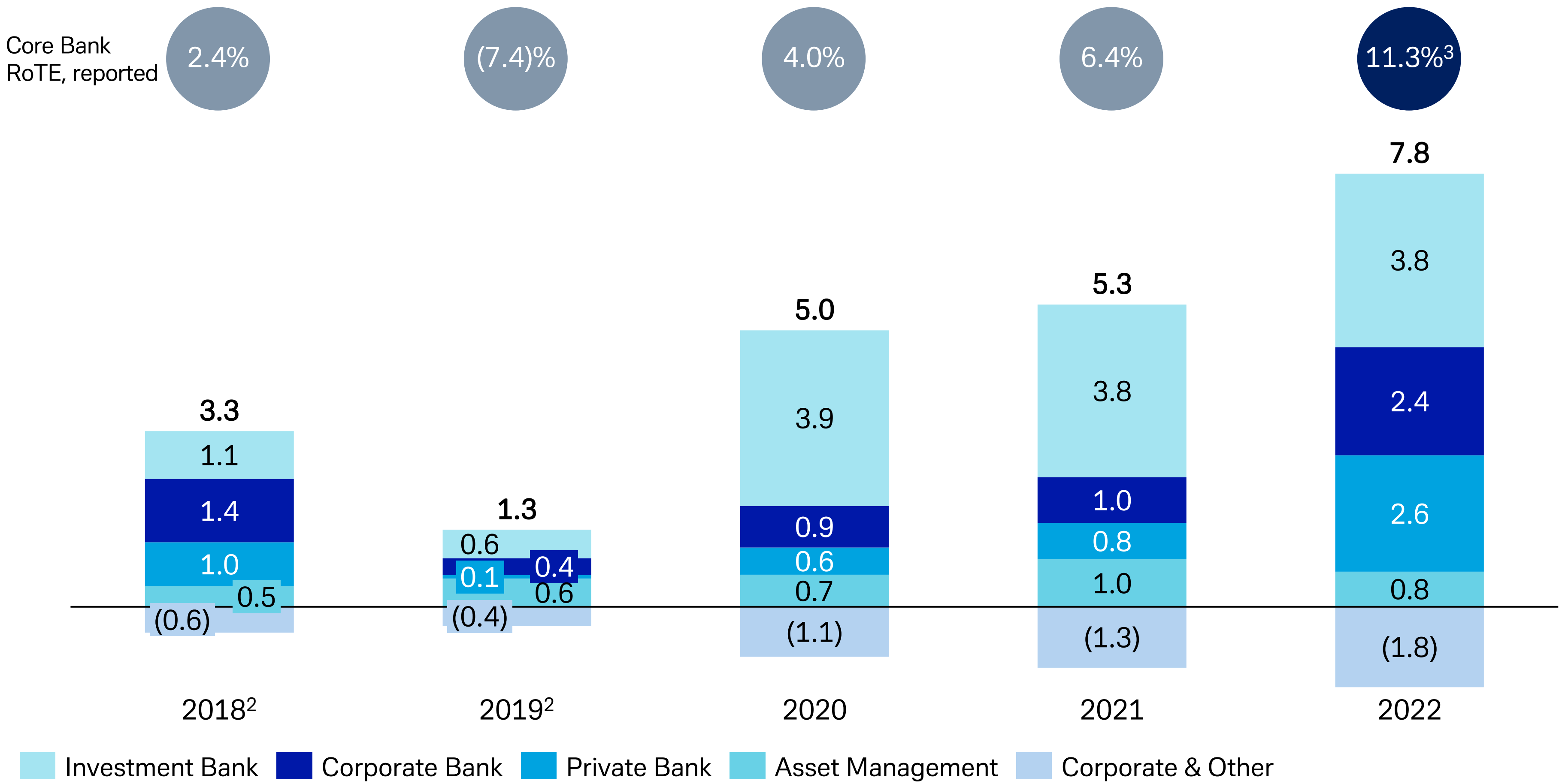
- In addition to the announced € 2bn efficiency measures, we focus on incremental savings through workforce optimization, streamlining of infrastructure, automation and renewed cost mentality and discipline

[1] 2018 figures based on reporting structure as disclosed in Annual Report 2020; 2019 figures based on reporting structure as disclosed in Annual Report 2021

Diversified business with greater resilience

Core Bank pre-provision profit[1], in € bn, unless stated otherwise



Note: Pre-provision profit defined as net revenues less noninterest expenses; detailed on slide 50

[1] Core Bank provision for credit losses: FY 2018: € 561m, FY 2019: € 738m, FY 2020: € 1.8bn, FY 2021: € 557m, FY 2022: € 1.2bn

[2] 2018 figures based on reporting structure as disclosed in Annual Report 2020; 2019 figures based on reporting structure as disclosed in Annual Report 2021

[3] Includes € 1.4bn tax benefit from a deferred tax asset valuation adjustment driven by strong US performance

Four client-centric businesses with improved revenue growth and profitability

		Revenue CAGR[1]	CIR 2018	CIR 2022	RoTE 2018	RoTE 2022
Corporate Bank	Enhanced value proposition, with global network and capabilities, and strengthened client franchise	5% 2018[2] to 2022	74%	62%	9%	12%
Investment Bank	Transformation of FIC business, with increased client activity has delivered market share growth	7% 2018 to 2022	86%	62%	3%	9%
Private Bank	Established franchise to serve changing client needs resulting in growing business volumes and increased efficiency	2% 2018 to 2022	89%	72%	4%	11%
Asset Management	Strong progress towards establishing independent business platform with demonstrated resilience and increased cost efficiency	5% 2018 to 2022	79%	70%	14%	17%

Note: Divisional post-tax return on average tangible shareholders' equity (RoTE) calculated applying a 28% tax rate; detailed on slides 33, 35, 37 and 39

[1] Detailed on slide 50

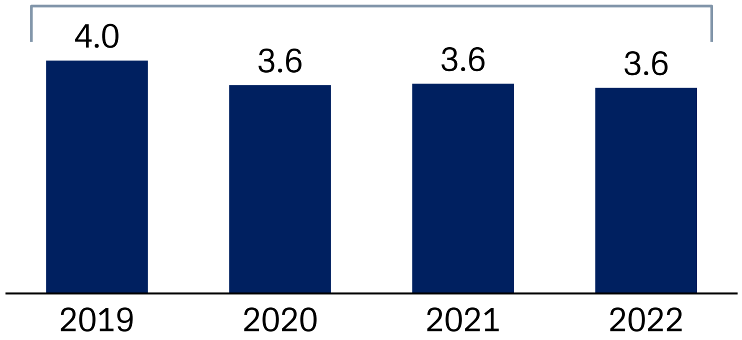
[2] All 2018 figures in the slide based on reporting structure as disclosed in Annual Report 2020

Targeted investments in technology and internal controls

In € bn, unless stated otherwise

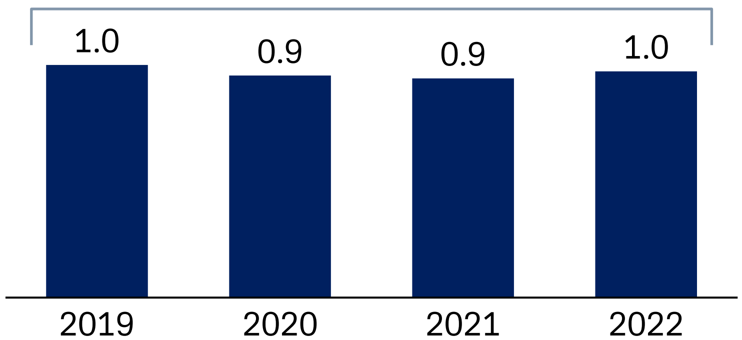
IT spend[1]

~€ 15bn cumulative since 2019



Controls spend

~€ 4bn cumulative since 2019



Key achievements

Empowering business

- **Reengineering of FIC platform** improves client interaction and automates flow trading capability
- Ongoing transfer of **DWS** to an **independent platform** leads to increase in flexibility and growth
- Migration of **200+ apps**[2] to Google Cloud improves developer productivity and increases tech availability while building future platforms

Increasing efficiency

- Disciplined simplification of Tech landscape, with **1,500+ apps** retired since 2019
- Streamlined Tech operating model leading to over **€ 300m cost reduction** in 2022 vs. 2021
- Migration of Postbank IT systems will result in **annual savings of ~€ 300m** in Private Bank by 2025
- Migration of **1,000+ databases** to Oracle Private Cloud improves efficiency and increases IT stability

Improving controls

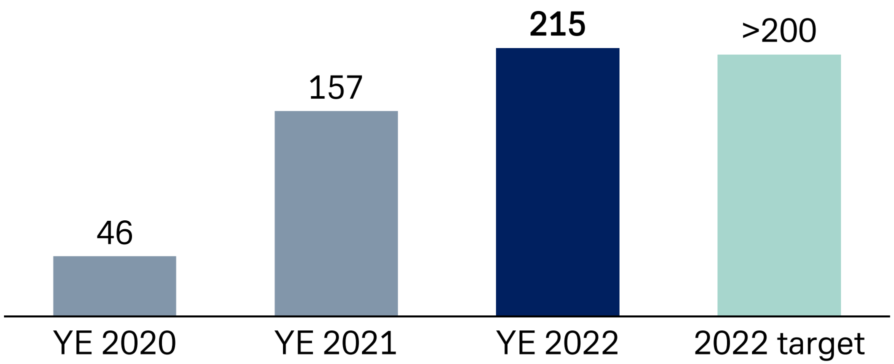
- Strong emphasis on talent acquisition and development, with **26% more employees** working in control functions compared to 2019
- Investments in **security controls** based on the evolving threat landscape
- **Improved KYC** file processing capacity with significantly increased quality assurance

[1] Based on reporting structure as disclosed in Annual Report 2020
[2] Including applications in development, testing and production

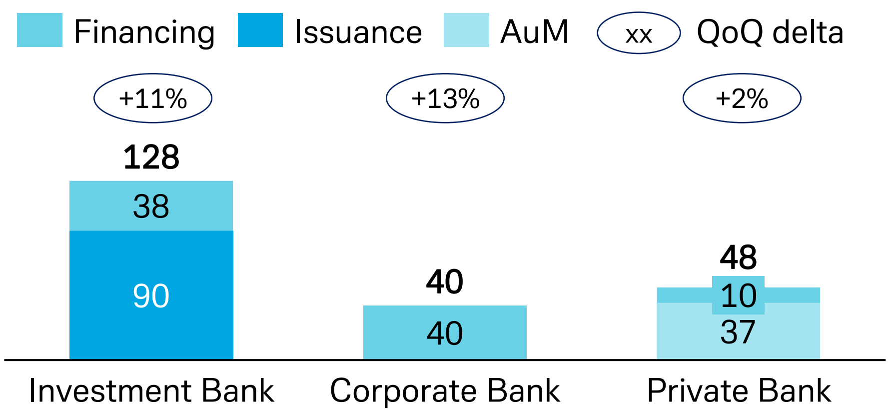
Sustainable Finance volume target for 2022 exceeded

In € bn, cumulative since 2020

Sustainable Finance[1] volumes vs. target



Reported volumes by business and product type



Key sustainability highlights

- Importance of sustainability continues to grow in management and businesses' agenda
- Overachieved Sustainable Finance volume target for 2022
- Created Chief Sustainability Office responsible for driving ESG strategy
- Released glide path to net zero for most CO_2-emission-heavy industry sectors

[1] Sustainable financing and investment activities as defined in Deutsche Bank's Sustainable Finance Framework, which is published on our website; given the cumulative definition of our target, in cases where validation against the Framework cannot be completed in the reporting quarter, volumes may be disclosed in the subsequent quarters after validation completion

Positioning as *Global Hausbank* enables sustainable growth

Key themes	Platform positioned for growth
Macro shifts	❯ Leverage tailwinds from interest rate sensitive products ❯ Deploy risk management expertise to support clients in volatile markets
Sustainability	❯ Intensify transition dialogue with corporate and private clients ❯ Further extend Sustainable Finance product proposition, investing in data and advisory capabilities
Technology	❯ Investments in client front-end and automation to accelerate transition to further digitalization ❯ Innovation supported by strategic partnerships, e.g., with Google, Oracle and Nvidia

❯ **Platform positioned for growth, supported by disciplined resource allocation**

Confirmation of 2025 targets

Financial targets

>10%

Post-tax RoTE
in 2025

Confirm 2025 target based on sustained operating leverage over the period

3.5-4.5%

Revenue CAGR
2021-2025

Increased revenue momentum supported by interest rate environment

<62.5%

Cost/income ratio
in 2025

Reiterate CIR target, with continued focus on structural cost savings and targeted investments

Capital objectives

~13%

CET1 ratio

Aim to operate with a buffer of 200bps above MDA[1], as we build capital and absorb regulatory changes

50%

Total payout ratio
from 2025

Confirm 2025+ payout guidance and € 8bn[2] anticipated cumulative payout in respect of FY 2021-2025

1 Maximum distributable amount
2 Anticipated cumulative payout in respect of FY 2021-2025 (i.e. including distributions in respect of 2025, payable in 2026) subject to meeting strategic targets and German corporate law requirements, AGM authorization and regulatory approvals

Risk update

Ongoing disciplined risk management and strong balance sheet metrics

- **Strong and stable balance sheet and sound liquidity metrics**, positioned to navigate uncertainty
- **Investments in risk framework, controls and technology** facilitate timely and proactive risk management
- **Well-diversified loan book,** with strong collateral and active hedging to mitigate downside risks
- Close **monitoring of key emerging risks, through robust modeling, scenario analysis and consistent client dialogue**
- **Contained provision for credit losses**, in line with recent guidance

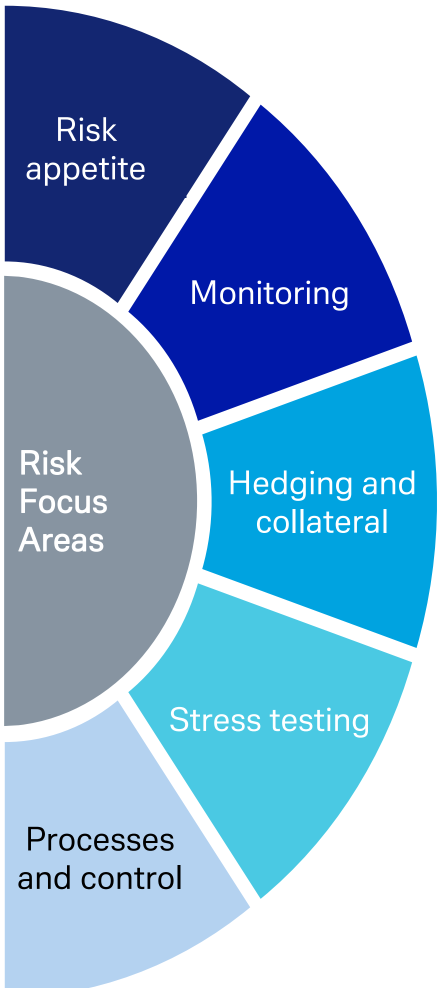
	2022
CET1 ratio	13.4%
Provision for credit losses as % of loans[1]	25bps
Average Value-at-Risk[2]	€ 47m
Liquidity coverage ratio	142%
Net stable funding ratio	119%

[1] Provision for credit losses as basis points of average loans gross of allowances for loan losses
[2] Trading book Value-at-Risk (VaR) at 99% confidence level and a 1-day holding period

Navigating through an evolving risk environment

External themes	Impact
Geopolitical developments	— **War in Ukraine** has the potential to drive continued uncertainty — Although not the base case, an escalation of **further geopolitical conflicts** could cause significant downside effects
Market volatility	— **Macro-economic developments,** particularly from a rising interest rate environment and inflation, could create further market dislocation
Credit outlook	— **Current energy crisis** outlook improving amid lower prices in Europe — **Inflation and recession risks** remain elevated, with moderate impact on credit portfolio expected in 2023 — **Leveraged Lending portfolio** expected to be impacted by macro developments; however, refinancing pressure is low in 2023 — **Commercial Real Estate** (CRE) valuations expected to be impacted by higher rates, market adjustments and economic headwinds
Other risks	— **ESG** risks are increasing, leading to additional levels of complexity — **Regulatory landscape** remains dynamic, with scope for greater global divergence — Continually evolving threat landscape related to **information security**

Disciplined risk framework provides the basis for managing through times of stress and uncertainty



- **Group risk appetite calibrated** to earnings capacity, capital adequacy and operational stability; appetite cascaded down to businesses
- **Comprehensive credit and market risk limits** across country, industry, asset class and single names to manage concentration risk
- **Climate-specific targets** introduced as part of the risk appetite framework

- **Dynamic monitoring and management** of emerging risks
- **Daily liquidity risk monitoring** across key currencies, entities, businesses and products
- **Comprehensive monitoring of non-financial risks**, underpinned by >1,200 key controls

- **Hedging mainly via € 39bn CLO and CDS**[1] on ~2k names to reduce single name concentration risks[2]
- Further risk mitigation through **asset and structural collateral**
- **Market risk hedge strategies regularly adjusted** to ensure effectiveness

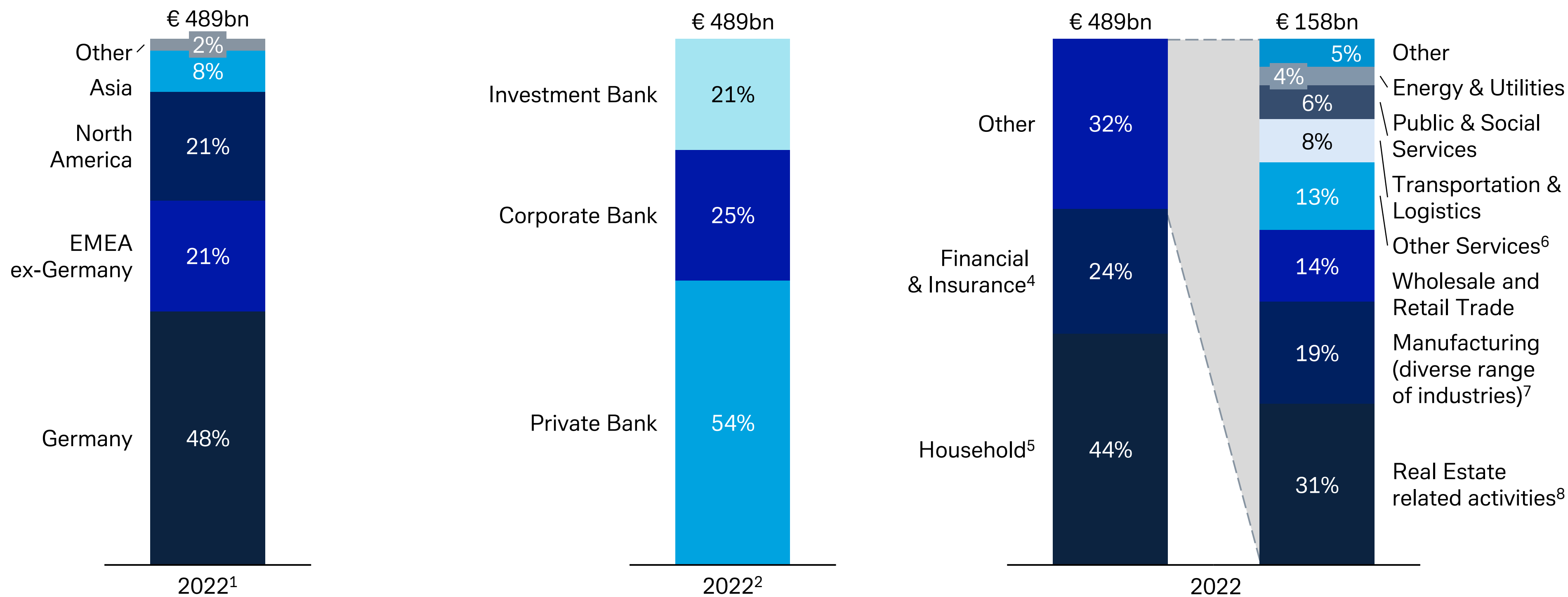
- **Regular stress tests** across range of scenarios and severities
- **Scenario analysis tests** emerging risks and supports control assessments in NFR

- **Well-established risk management and control processes**
- **Continuous adaptation of information security controls** based on evolving threat landscape
- **Significant investments** to establish and manage towards **net zero targets**
- **Regular staff training** on risk culture, conduct and integrity

1 Collateralized loan obligation and credit default swaps
2 Private Risk Insurance / Export Credit Agency cover also utilized to manage noncollateralized exposures

Conservative risk profile and diversified loan book across geographies, businesses and sectors

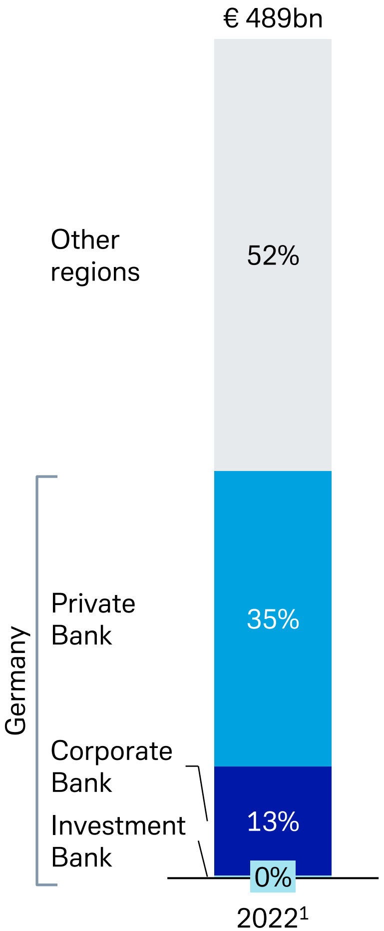
Majority of lending in G7… …to lower risk obligors/products… …with strong collateral and diversification[3]



Note: Loans gross of allowance at amortized costs
1 Based on the counterparty domicile
2 Remaining balance is with Capital Release Unit and Corporate & Other
3 Loan exposure as per Annual Report based on NACE code (standard European industry classification system)
4 Includes exposure to Corporates including Holding Companies of € 35bn, Asset-Backed Securities of € 25bn, Banks of € 9bn, Insurance of € 1bn and Public Sector of € 1bn based on internal client classification
5 Activities of households predominantly include Private Bank exposures (incl. mortgages and consumer finance)
6 Including Media & Telecommunications
7 Including Chemicals, Consumer Goods, Automotive
8 Non-recourse Commercial Real Estate ‘focus’ portfolio is € 33bn; detailed on slide 17

Confidence in German loan book driven by conservative lending standards and well-diversified exposures

Loan book breakdown



Note: Loans gross of allowance at amortized costs

[1] Based on the counterparty domicile

[2] Aggregated at parent level

[3] Based on internal rating bands

Commentary

- Portfolios (mortgages of € 156bn and consumer finance of € 16bn) display a sound risk profile, with **stable default and recovery rates** to date despite rising inflation and interest rates
- Ongoing **robust and tight credit lending standards**
- Impact of interest rate rises more limited due to **long fixed interest period** (99% fixed loans, average duration of 13 years interest fixing) for German mortgages
- **Strong historical payment discipline** with limited days past due above 90 days (dpd90+, 0.2% mortgages, 1.4% consumer finance), in line with pre-COVID level

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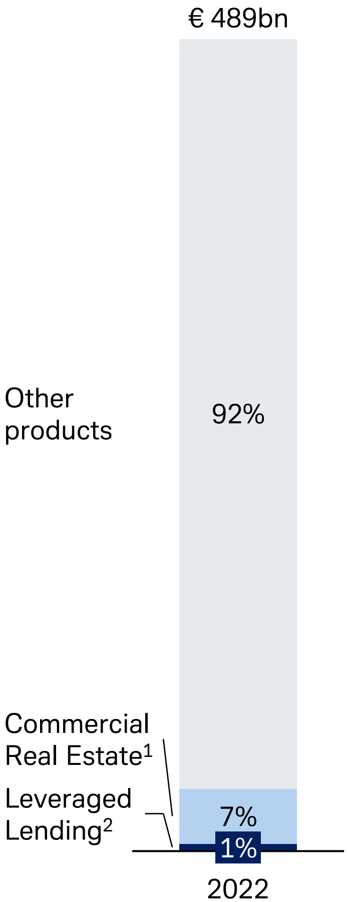
- Risk **exposures managed under comprehensive risk appetite framework**, subject to threshold-based hedging and other risk mitigation
- **Diversified loan book** with average exposure per client[2] of ~€ 260k across ~240k clients
- **No undue concentration risk,** with 6% of loan book across top 15 names[2]
- 71% of loans are **Investment Grade**[3] rated
- **Low stage 3** exposures of 2%
- Increased and broad-based client dialogue to **proactively monitor risk and support clients**

- **Immaterial loan exposure to German-domiciled counterparties** of <1%

Well-managed exposure across Commercial Real Estate and Leveraged Lending

Focus area[1]



Commentary

- **Spread across regions**: 51% in the US, 36% in Europe and 13% in Asia
- **High credit quality** and **manageable exposure** in diversified **IB CRE**, accounting for € 28.1bn with an LTV[3] of 61%
- **Strong resilience** through recent volatility demonstrated by CB CRE portfolio (€ 5.3bn, LTV[3] of 53%)
- Increased Stage 3 provision for credit losses impact in 2022 remaining **well within businesses' earnings capacity**
- **Tight management** of underwriting pipeline (reduced market risk limits) and refinancing risk in hold book

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- **~79% in the form of first lien secured credit facilities, mostly revolving**; remaining in asset-based lending with negligible loss history
- **Well-diversified portfolio** across industry sectors
- **Active risk management** and ongoing focus on de-risking of remaining pipeline
- **Selective underwriting risk appetite** driven by uncertainty about market liquidity and interest rate risks
- Low market-wide loan maturities in 2023 **minimizing near-term refinancing risks**

Note: Loans gross of allowance at amortized costs
1 CRE exposure represents 'focus' portfolio comprised of FIC and CB non-recourse CRE lending
2 Leveraged Lending represents O&A Leveraged Debt Capital Market exposure
3 Loan-to-Value; all LTV indicated are weighted-average per loan sizes

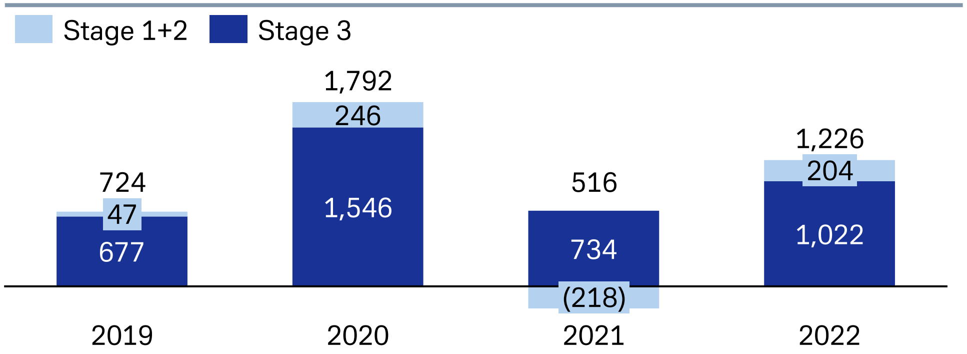
Continued active management of other risks

Focus area	Commentary
Market risk exposure[1]	— **Successfully navigated an extremely volatile market**; managing through a pandemic, the war in Ukraine as well as responding to rate changes and recession risks — **Continue supporting clients** while managing exposures and staying within risk appetite — **RWA higher over the year due to increased VaR** on elevated levels of market volatility, supporting higher trading revenues in Rates and FX businesses — **Balance sheet interest risk dynamically managed** protecting both our net interest income and capital profiles during fast moving rate environment
Non-financial risk exposure	— **Strong progress on remediation:** focus on remediating highest risks has led to a 47% reduction in the number of highest-category risks since January 2021 — **Year-on-year increase in the number of key controls covered by individual assessment and assurance:** provides robustness and transparency to the assessment of the control environment — **Proactive identification of potential risk exposures:** scenario analysis and deep dives (e.g. energy planning / macro environment / security) led to greater understanding of threats and potential control vulnerabilities for remediation — **Continuous review of the bank's security framework:** employ threat-driven approach to direct and adjust the security investment

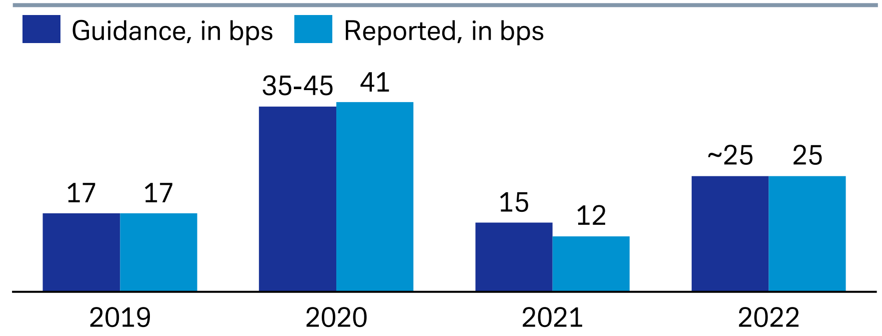
[1] Risk-weighted assets Q4 2022: € 26bn, +32% YoY; Value-at-Risk Q4 2022: € 47m, +38% YoY

Sound track record in managing provision for credit losses through challenging and volatile period

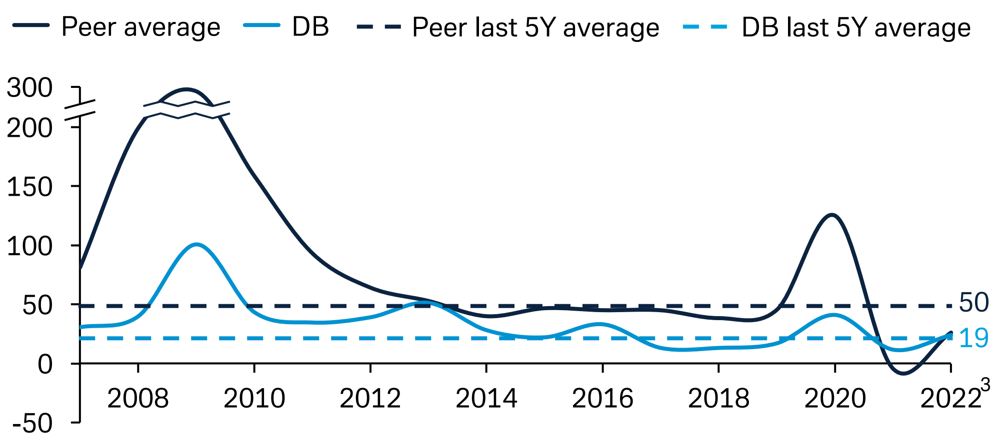
Net provision for credit losses development, in € m



Provision for credit losses guidance[1] vs. reported



Net provision for credit losses peer[2] comparison, in bps



Comment

- 2022 provision for credit losses **elevated, but contained** despite challenging environment
- **Confidence in guidance** for provision for credit losses reflects portfolio quality and strong framework
- Historical **peer outperformance** reflects disciplined risk management and well-diversified loan book
- 2023 **outlook elevated** due to persistent risk that major economies enter a recessionary environment
- 2023 provision for credit losses expected to be on the low end of **range between 25 and 30bps**

[1] DB guidance given at earnings calls; figures refer to the mid-point of the provided guidance range
[2] Source: company reports; peers include Bank of America, Barclays, BNP Paribas, Citigroup, Credit Suisse, JP Morgan, UBS
[3] Based on 9M 2022 due to unavailability of full year data

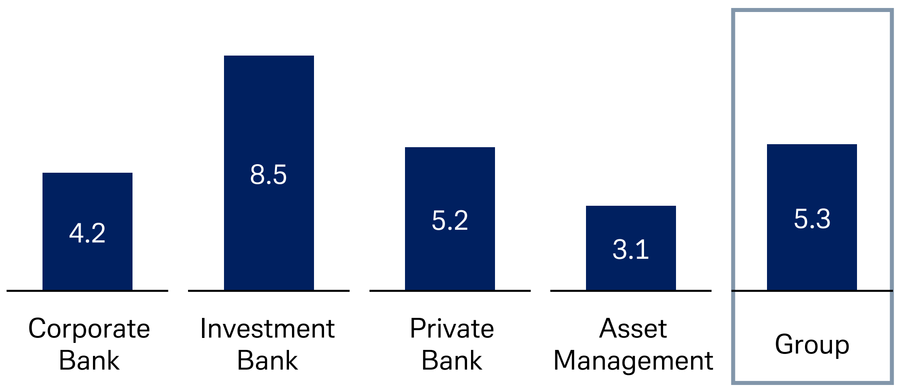
Summary

- Proactive and continuous identification and monitoring of risks
- Disciplined risk management provides a strong foundation to manage through times of stress and uncertainty
- Conservative risk profile and well-diversified loan book across clients, regions, products and businesses
- Low-risk and high-quality German portfolio and effective management of emerging risk areas
- **Resilient balance sheet with proactive and disciplined risk management results in contained provision for credit losses expectations on the low end of 25-30bps range for 2023**

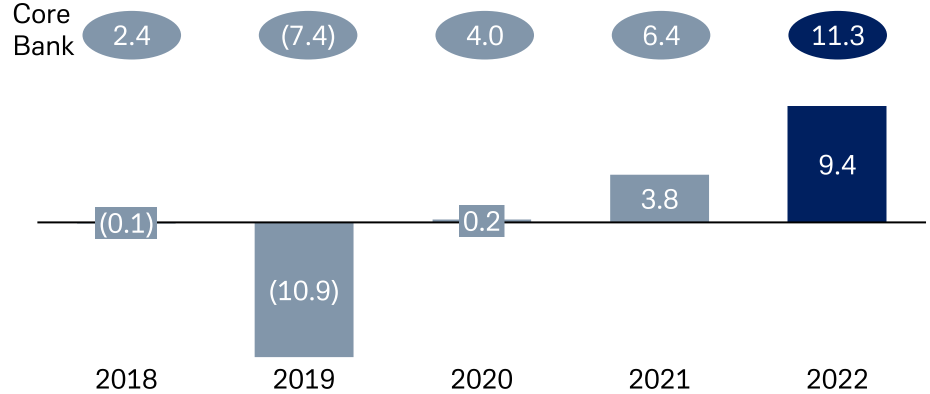
Financials

Delivering our transformation plan

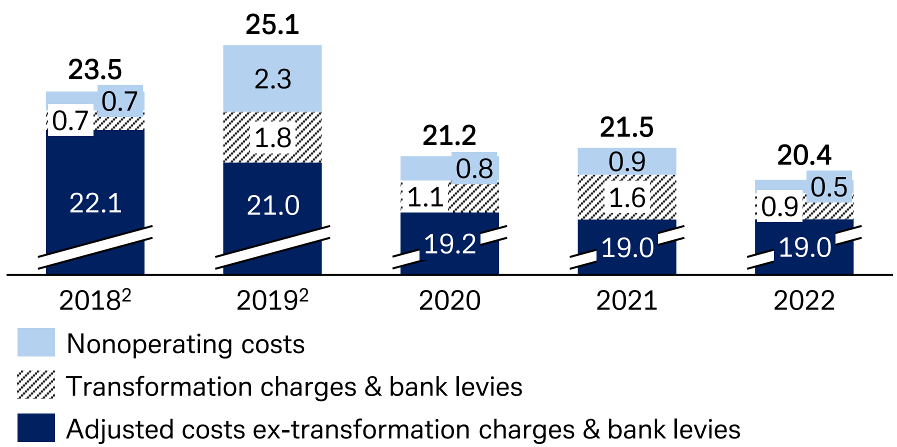
2018 to 2022 annual operating leverage[1], in %



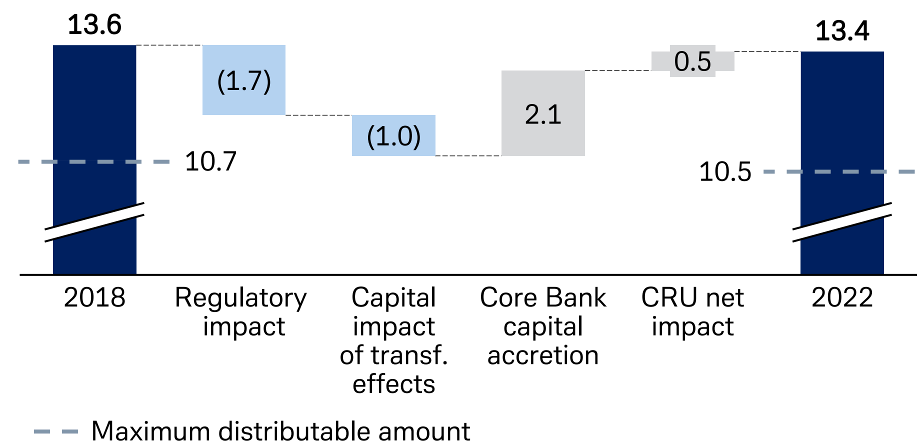
Group RoTE development, in %



Noninterest expenses, in € bn



CET1 ratio, in %



[1] Operating leverage calculation based on four-year CAGR of net revenues and noninterest expenses; detailed on slide 50
[2] All 2018 figures on the slide based on reporting structure as disclosed in Annual Report 2020; 2019 figures based on reporting structure as disclosed in Annual Report 2021

Q4/FY 2022 Group financial highlights

In € m, unless stated otherwise

		Q4 2022	Change in % vs. Q4 2021	FY 2022	Change in % vs. FY 2021
Revenues	Revenues	6,315	7	27,210	7
	Revenues ex-specific items[1]	6,053	3	26,737	6
Costs	Noninterest expenses	5,189	(7)	20,390	(5)
	Adjusted costs	4,885	(5)	19,915	(3)
Profitability	Profit (loss) before tax	775	n.m.	5,594	65
	Profit (loss)	1,978	n.m.	5,659	125
	RoTE (in %)[2]	13.1	11.9 ppt	9.4	5.5 ppt
	Cost/income ratio (in %)	82	(12) ppt	75	(10) ppt
Risk and Capital	Provision for credit losses (in bps of average loans)[3]	28	6 bps	25	14 bps
	CET1 ratio (in %)	13.4	13 bps	13.4	13 bps
	Leverage ratio (in %)[4,5]	4.6	9 bps	4.6	9 bps
Per share metrics	Diluted earnings per share (in €)	0.92	n.m.	2.37	154
	Tangible book value per share (in €)	26.70	8	26.70	8

1 Detailed on slide 48 and 49

2 Average tangible shareholders' equity Q4 2022: € 55.2bn, Q4 2021: € 51.7bn, FY 2022: € 53.7bn and FY 2021: € 50.4bn; Group RoE Q4 2022: 11.7% and FY 2022: 8.4%

3 Quarterly provision for credit losses annualized as basis points of average loans gross of allowances for loan losses (€ 498bn for Q4 2022 and € 489bn for FY 2022)

4 Throughout this presentation and starting with Q1 2022, leverage ratio is presented as reported, as the fully loaded definition has been discontinued due to immaterial differences; comparative information for earlier periods is unchanged and based on DB's earlier fully loaded definition

5 Q4 2021 pro-forma leverage exposure includes certain central bank balances, here included for like for like comparison purposes; Q4 2021 reported leverage ratio excluding these balances amounts to 4.9%

Q4/FY 2022 Core Bank financial highlights

In € bn, unless stated otherwise

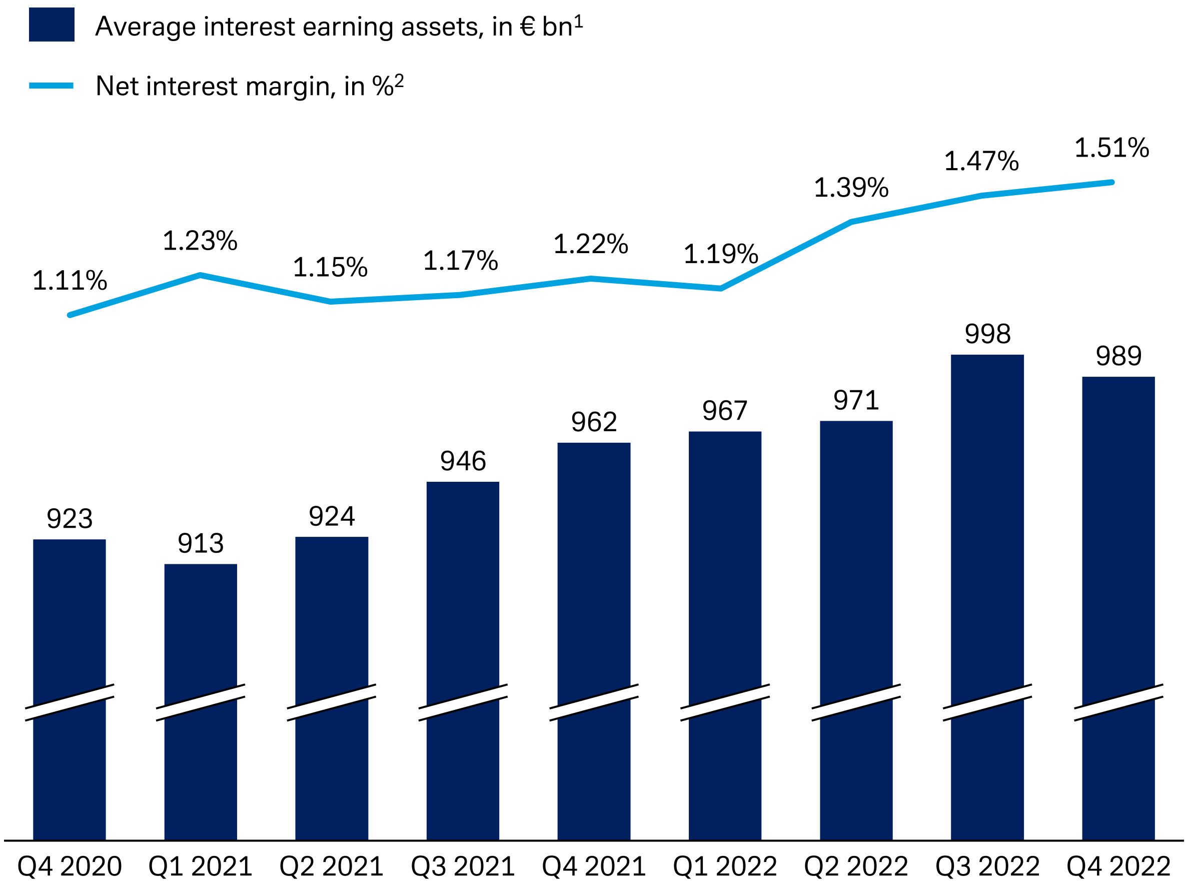
	Q4 2022	Change in % vs. Q4 2021	FY 2022	Change in % vs. FY 2021
Revenues	6.3	7	27.2	7
Revenues ex-specific items[1]	6.1	3	26.8	6
Noninterest expenses	5.0	(4)	19.5	(3)
Adjusted costs	4.7	(4)	19.1	(1)
Profit (loss) before tax	1.0	124	6.5	37
Profit (loss)	2.1	n.m.	6.3	81
RoTE (in %)[2]	14.9	11.4 ppt	11.3	4.9 ppt
Cost/income ratio (in %)	79	(9) ppt	71	(8) ppt
Risk-weighted assets	336	4	336	4
Leverage exposure	1,218	3	1,218	3

[1] Detailed on slide 48 and 49

[2] Core Bank average tangible shareholders' equity Q4 2022: € 52.5bn, Q4 2021: € 47.7bn, FY 2022: € 50.7bn and FY 2021: € 46.0bn; Core Bank RoE Q4 2022: 13.2% and FY 2022: 10.0%

Net interest margin (NIM)

Evolution of Group NIM and average interest earning assets



Commentary

- NIM continues favorable trend driven by material EUR and USD rate rises in Q4 2022
- Strong underlying growth offset loss of one-off buyback benefits in Q3 2022
- NIM expected to stabilize as client rates normalize but will provide material year-on-year benefit
- Decrease in average interest earning assets in Q4 2022 driven by weaker USD in December and partial prepayment of TLTRO

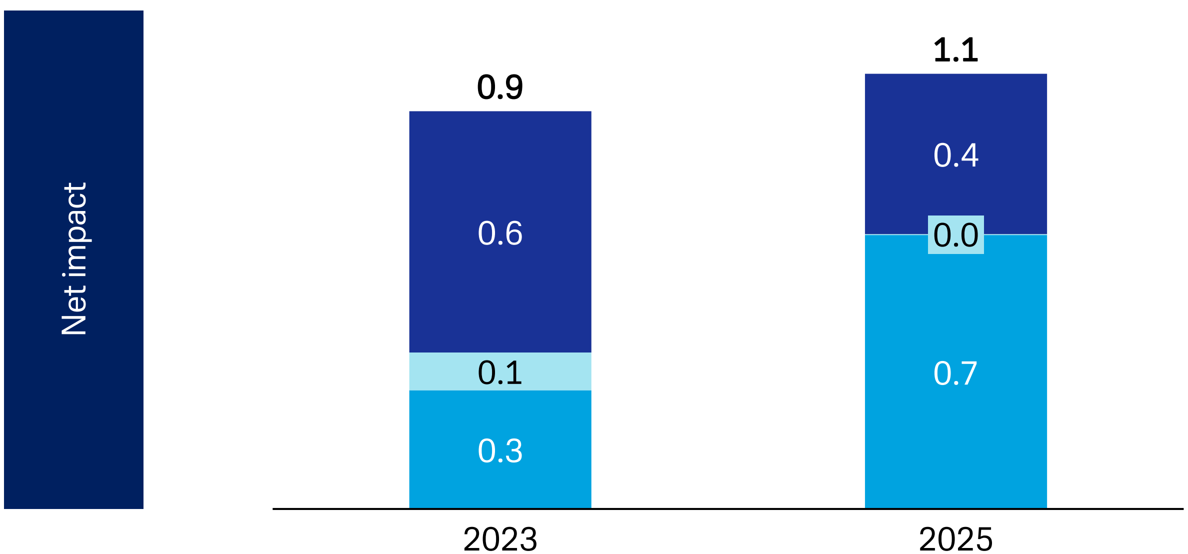
1 Average balances for each quarter are calculated based upon month-end balances
2 Reported net interest income expressed as a percentage of average interest earning assets

Net interest income (NII)

In € bn, unless stated otherwise

Evolution of interest-sensitive revenues at current forward rates vs. FY 2022

Gross impact	2023	2025
Rate impact[1]	1.4	2.1
Funding offset[2]	(0.5)	(1.1)

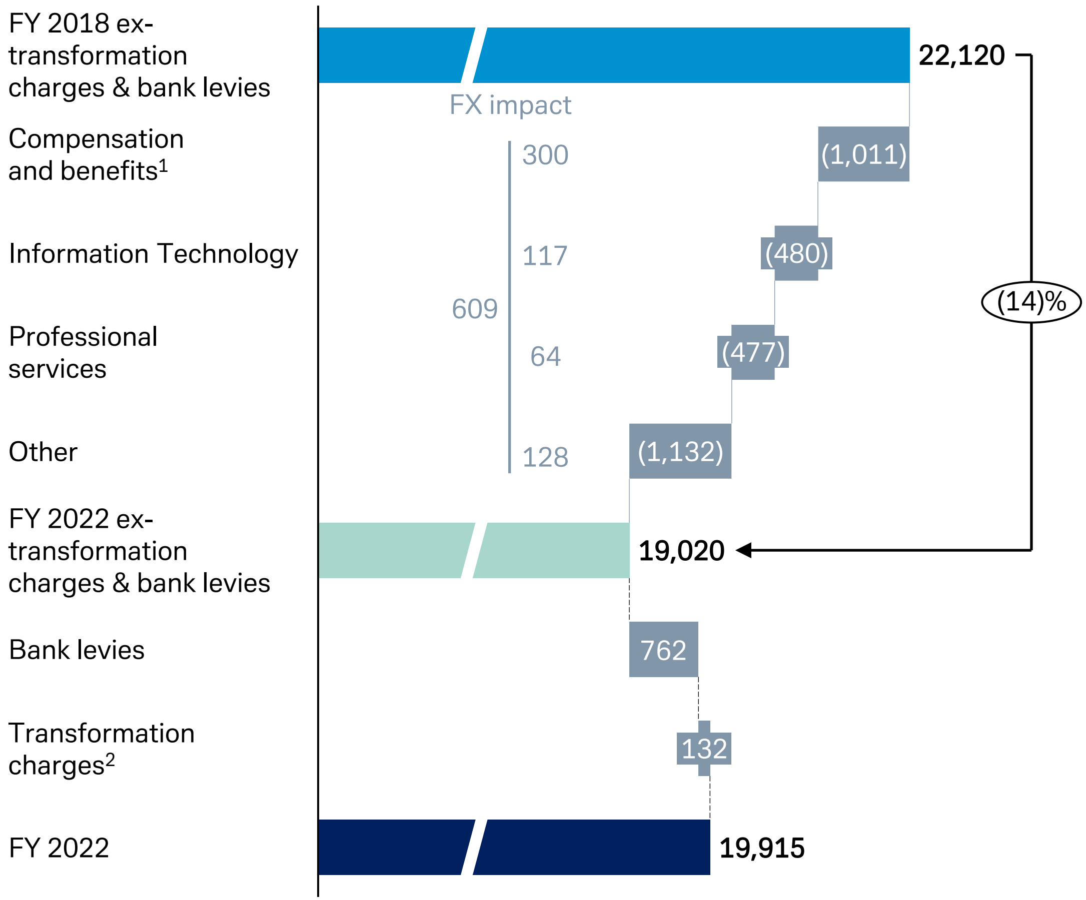


Division	Contribution to 2022 – 2025 CAGR net of funding impacts[2]
Corporate Bank	~2%
Investment Bank	~0%
Private Bank	~2.5%
Group	**~1.5%**

[1] Market-implied forward rates as of January 20, 2023, based on planned funding stack and income from static asset side; excludes impact of loan book growth
[2] Driven by TLTRO roll-off, spreads on capital markets issuance, cross-currency and funding basis on cash reserves and FX/XCCY swaps and yield on liquidity reserves

Adjusted costs – 2018 to 2022

In € m, unless stated otherwise



2018 to 2022 comments

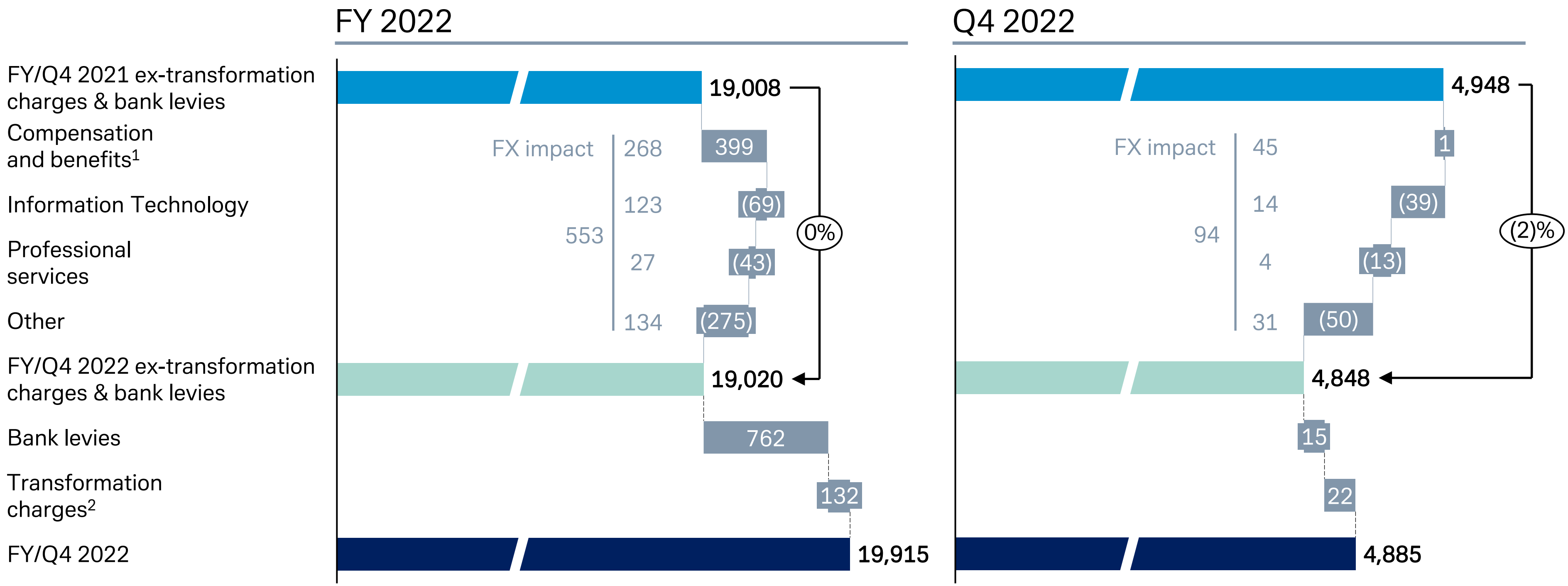
- Adjusted costs excluding transformation charges and bank levies reduced by € 3.1bn or 14% since 2018, or 16% excluding the impact of FX movements
- Compensation and benefits down € 1.0bn, reflecting changes in workforce size and composition
- IT spend reductions of € 0.5bn are in line with overall cost reduction; cumulative IT spend 2018 to 2022 is at € 15bn
- € 1.1bn lower costs in Other reflects reductions across a number of different categories including building costs, regulatory, operational tax, insurance, and travel and marketing expenses

[1] Excludes severance of € 203m in FY 2018, € 112m in FY 2022 as this is excluded from adjusted costs as defined on slide 47

[2] Transformation charges in FY 2022 include the following: information technology of € 117m, professional services of € 12m, communication, data services, marketing of € 1m and other of € 3m

Adjusted costs – FY 2022 and Q4 2022 (YoY)

In € m, unless stated otherwise



— Adjusted costs excluding transformation charges and bank levies decreased by 2% in Q4 and stayed flat in FY 2022

— Exchange rate movements had a negative impact on cost development; on an FX neutral basis, costs decreased 4% in Q4 and 3% for the full year

— Movements in compensation and benefits are driven by higher salary costs; performance-related compensation is up for the full year but down in Q4

— Reductions in non-compensation cost across most categories reflect the bank's ongoing cost management efforts

[1] Excludes severance of € 209m in FY 2021, € 112m in FY 2022, € 98m in Q4 2021, € 43m in Q4 2022, as this is excluded from adjusted costs as defined on slide 47

[2] Transformation charges in FY 2022 include the following: information technology of € 117m, professional services of € 12m, communication, data services, marketing of € 1m and other of € 3m; transformation charges in Q4 2022 include the following: information technology of € 22m

Efficiency measures: >€ 2bn cost saves planned for 2022-2025

In € bn

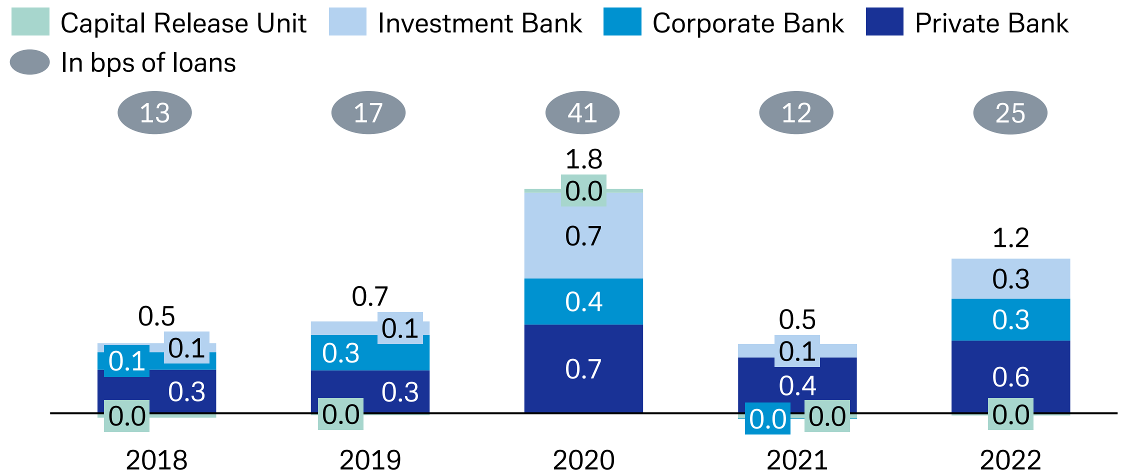
	Savings and distribution[1]	2022 drivers	2023 – 2025 drivers
Germany optimization	**0.6** Linear	〉 Closed >110 retail branches in Germany and established 6 Private Banking Centers 〉 Migrated ~8m Postbank contracts corresponding to ~€ 65bn in client business volume to the Deutsche Bank IT platform[2]	〉 Closure of additional retail branches 〉 Implementation of new branch formats incl. remote advisory, co-location set-up and increase in customer self-service 〉 Complete IT migration of Postbank and decommission Postbank IT systems
Technology architecture	**0.6** Back-end loaded	〉 Decommissioned 9% of the total application stack[3] 〉 Migration of key applications to the Cloud, reducing on-premise footprint: 5% delivered in 2022[4]	〉 Decommissioning of a minimum of 15% additional applications by 2025[3] 〉 Plan to move 90% of the total targeted applications to the Cloud by end-2025[4]
Front-to-back process re-design	**0.5** Linear	〉 Simplified workflow and tech stack across FX and Rates trading businesses, resulting in fewer manual interventions and better controls and client interactions	〉 Build-out a modernized loans stack "front-to-back", aligned across our Corporate Bank and Investment Bank lending businesses, to automate our controls and processes 〉 Improving KYC process efficiency
Infrastructure efficiency	**0.5** Back-end loaded	〉 Optimized office spaces and disposed of 170,000 unutilized square meters in 2022 (total global footprint reduced by 6%) 〉 Reduced global spend on vendor contracts through rate negotiation, usage redefinition and contract termination	〉 Stricter management of workforce cost via improved role framework and enhanced skills and location management

1 Total savings expected to be realized between 2022 and 2025
2 Includes second migration at year-end 2022
3 Baseline is defined as total application stack for YE 2021
4 Baseline is defined as total application stack in scope of migration to Google Cloud Platform

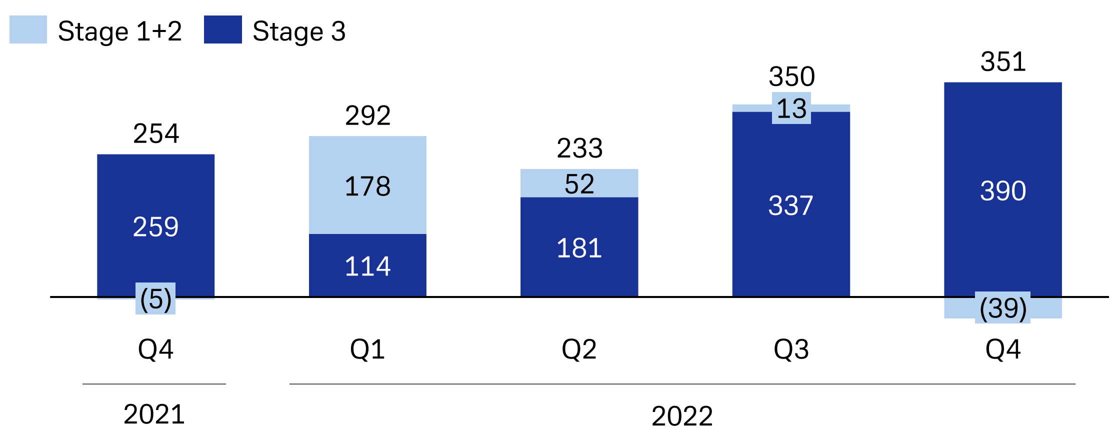
Provision for credit losses

In € bn, unless stated otherwise

Annual development



Quarterly development, in € m



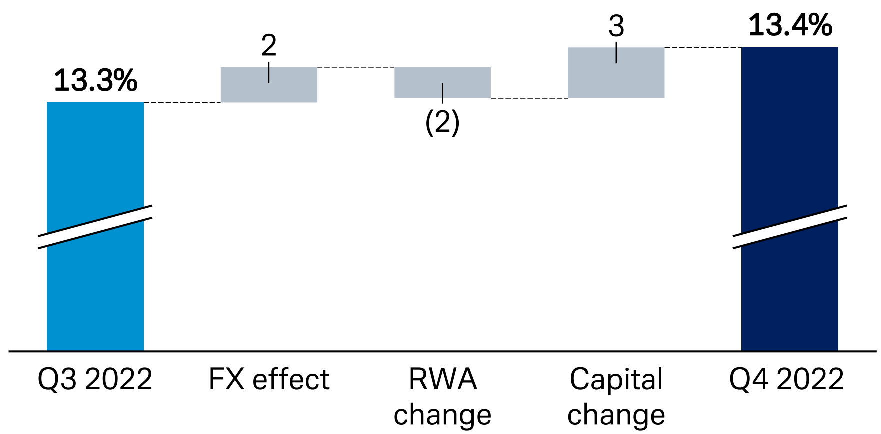
Comments

- FY provisions elevated vs. 2021 reflecting the impact of the war in Ukraine and a weaker macroeconomic environment
- Level of provisions of 25bps in line with FY guidance and confirming resilience of the loan book in the second half of the year
- Q4 provisions remain in line with previous quarter
- Stage 3 provisions spread across all regions and segments with no notable trends emerging
- Stage 1+2 provisions benefited from a stabilization of macroeconomic forecasts, release of overlay from previous periods and improved portfolio parameters

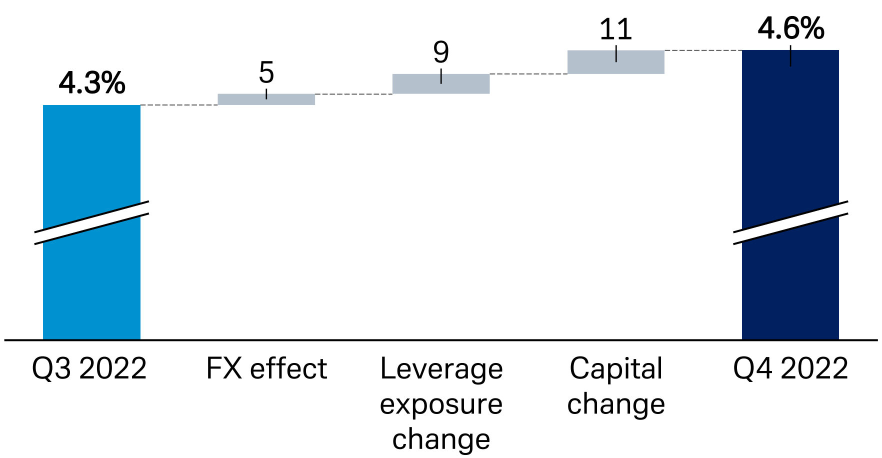
Capital ratios

Movements in basis points (bps), period end

CET1 ratio



Leverage ratio



Comments

- CET1 ratio up by 3bps compared to Q3 2022:
  - 2bps from FX translation effects
  - (2)bps from RWA changes, reflecting higher market risk RWA partly offset by net reductions in credit risk RWA
  - 3bps from capital changes, with strong Q4 2022 earnings largely offset by dividend/AT1 deduction and DTA deduction

- Leverage ratio of 4.6%, in line with 2022 target of ~4.5% and 25bps increase vs. Q3 2022:
  - 5bps from FX translation effects
  - 9bps from leverage exposure, mainly driven by seasonally lower trading activities
  - 11bps Tier 1 capital change, principally driven by CET1 capital accretion and AT1 issuance in November 2022

Segment results

Corporate Bank

In € m, unless stated otherwise

		Q4 2022	Change in % vs. Q4 2021	FY 2022	Change in % vs. FY 2021
Revenues	Revenues	1,760	30	6,335	23
	Revenues ex-specific items[1]	1,760	30	6,335	23
Costs	Noninterest expenses	978	(9)	3,949	(5)
	Adjusted costs	984	(3)	3,933	(2)
Profitability	Profit (loss) before tax	726	n.m.	2,051	103
	RoTE (in %)[2]	16.6	10.7 ppt	12.5	5.7 ppt
	Cost/income ratio (in %)	56	(24) ppt	62	(18) ppt
Balance sheet (in € bn)	Loans[3]	122	(1)	122	(1)
	Deposits	289	7	289	7
	Leverage exposure	321	7	321	7
Risk	Risk-weighted assets (in € bn)	74	14	74	14
	Provision for credit losses (in bps of average loans)[4]	18	2 bps	27	27 bps

FY 2022 year-on-year comments

- Revenues higher driven by increased interest rates and continued pricing discipline, higher commission and fee income as well as deposit growth and favorable FX movements
- Noninterest expenses slightly lower as a positive contribution from non-compensation initiatives and lower nonoperating costs were partly offset by FX movements
- Positive operating leverage[5] of 28%
- RWA increase principally reflecting regulatory inflation
- Increase of provisions driven by weakened macroeconomic environment after extra-ordinary low provisioning levels in 2021

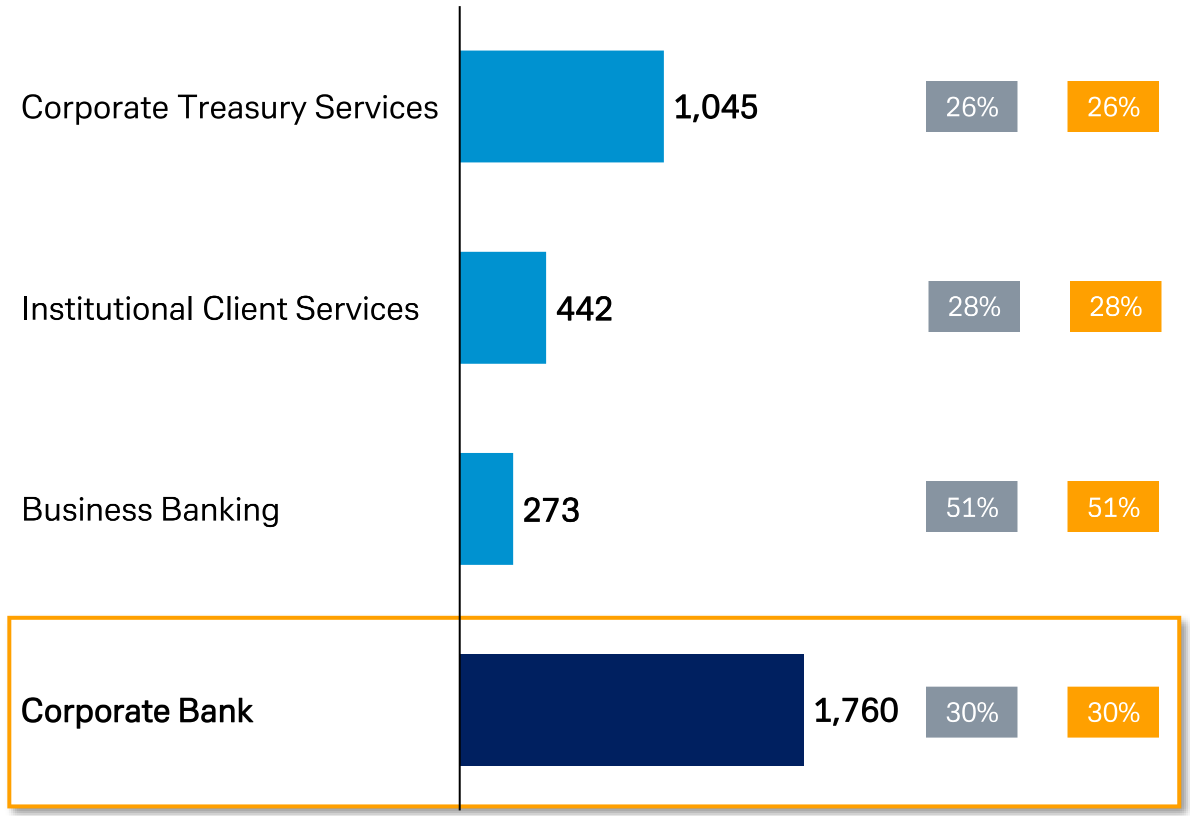
1 Detailed on slide 48 and 49
2 Post-tax return on average tangible shareholders' equity applying a 28% tax rate; allocated average tangible shareholders' equity Q4 2022: € 11.8bn, Q4 2021: € 9.7bn, FY 2022: € 11.0bn and FY 2021: € 9.6bn; RoE: Q4 2022: 15.3% and FY 2022: 11.6%
3 Loans gross of allowance at amortized cost
4 Quarterly provision for credit losses annualized as basis points of average quarterly loans gross of allowance at amortized cost
5 Defined on slide 47

Q4 2022 Corporate Bank revenue performance

In € m, unless stated otherwise

Change vs. Q4 2021

X% Excluding specific items[1]



Q4 2022 year-on-year comments

Corporate Treasury Services:

— Revenues higher driven by increased interest rates across all markets and higher deposits

Institutional Client Services:

— Increased revenues from higher interest rates and deposit growth

Business Banking:

— Revenues significantly higher reflecting transition to a positive interest rate environment in Germany

[1] Detailed on slide 48

Investment Bank

In € m, unless stated otherwise

		Q4 2022	Change in % vs. Q4 2021	FY 2022	Change in % vs. FY 2021	FY 2022 year-on-year comments
Revenues	Revenues	1,675	(12)	10,016	4	— Revenues slightly higher, as significantly higher revenues in FIC were partially offset by a material decline in O&A
	Revenues ex- specific items[1]	1,722	(10)	9,968	3	
Costs	Noninterest expenses	1,483	(3)	6,196	6	— Noninterest expenses were slightly higher due to the impact of FX translation and increased bank levies
	Adjusted costs	1,414	(1)	5,986	6	
Profitability	Profit (loss) before tax	106	(67)	3,487	(6)	— Loans increased driven by higher originations, primarily in Financing, combined with the impact of currency translation
	RoTE (in %)[2]	0.1	(2.8) ppt	9.2	(1.6) ppt	— Leverage and RWA were both essentially flat YoY, as underlying business reductions were offset by the impact of FX movements
	Cost/income ratio (in %)	89	8 ppt	62	1 ppt	
Balance sheet (in € bn)	Loans[3]	103	11	103	11	
	Leverage exposure	530	(0)	530	(0)	— Increase of provisions driven by weakened macroeconomic environment, while prior year benefitted from a post-COVID recovery and lower levels of impairments
Risk	Risk-weighted assets (in € bn)	139	(1)	139	(1)	
	Provision for credit losses (in bps of average loans)[4]	30	(0) bps	32	18 bps	

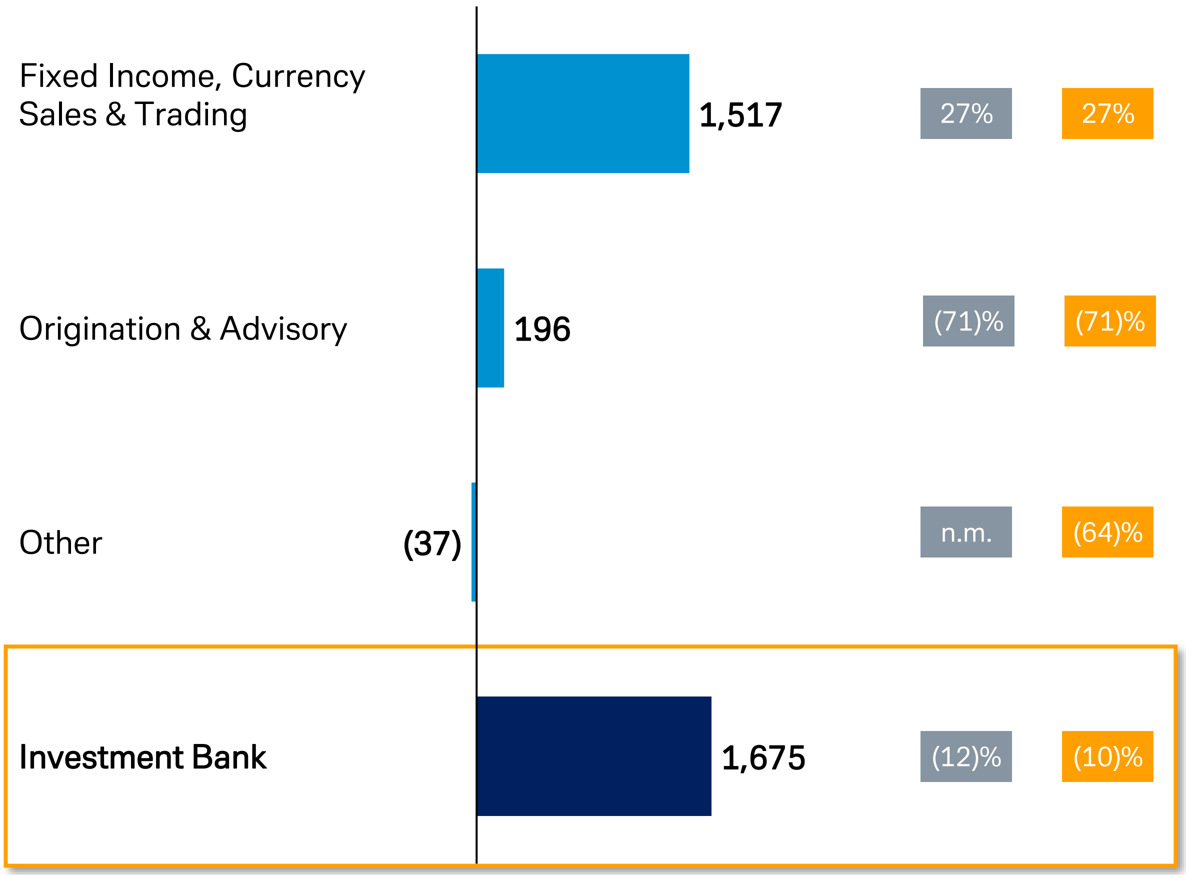
[1] Detailed on slide 48 and 49
[2] Post-tax return on average tangible shareholders' equity applying a 28% tax rate; allocated average tangible shareholders' equity Q4 2022: € 25.5bn, Q4 2021: € 24.1bn, FY 2022: € 24.9bn and FY 2021: € 23.1bn; RoE: Q4 2022: 0.1% and FY 2022: 8.8%
[3] Loans gross of allowance at amortized cost
[4] Quarterly provision for credit losses annualized as basis points of average quarterly loans gross of allowance at amortized cost

Q4 2022 Investment Bank revenue performance

In € m, unless stated otherwise

Change vs. Q4 2021

X% Excluding specific items[1]



Q4 2022 year-on-year comments

Fixed Income, Currency Sales & Trading:

- Macro trading and Emerging Markets revenues significantly higher, driven by increased client flows and ongoing market volatility
- Financing revenues lower, driven by reduced activity in both CRE and APAC more broadly, partially offset by increased NIM
- Significantly lower Credit Trading revenues due to non-repeat of distressed performance and a continued challenging market environment

Origination & Advisory:

- Significantly lower Debt Origination reflecting a leveraged debt market that continues to be largely inactive
- Equity Origination revenues significantly lower, primarily due to a materially reduced fee pool
- Advisory revenues significantly lower reflecting substantially smaller industry fee pool relative to last year's record Q4

[1] Detailed on slide 48 and 49

Private Bank

In € m, unless stated otherwise

		Q4 2022	Change in % vs. Q4 2021	FY 2022	Change in % vs. FY 2021
Revenues	Revenues	2,507	23	9,155	11
	Revenues ex-specific items[1]	2,196	8	8,725	7
Costs	Noninterest expenses	1,631	(17)	6,593	(11)
	Adjusted costs	1,652	(9)	6,740	(5)
Profitability	Profit (loss) before tax	651	n.m.	1,979	n.m.
	RoTE (in %)[2]	13.6	15.9 ppt	10.6	9.2 ppt
	Cost/income ratio (in %)	65	(31) ppt	72	(18) ppt
Business volume (in € bn)	Loans[3]	265	4	265	4
	Deposits	317	1	317	1
	Assets under management[4]	518	(6)	518	(6)
Risk	Risk-weighted assets (in € bn)	88	3	88	3
	Provision for credit losses (in bps of average loans)[5]	34	12 bps	22	4 bps

FY 2022 year-on-year comments

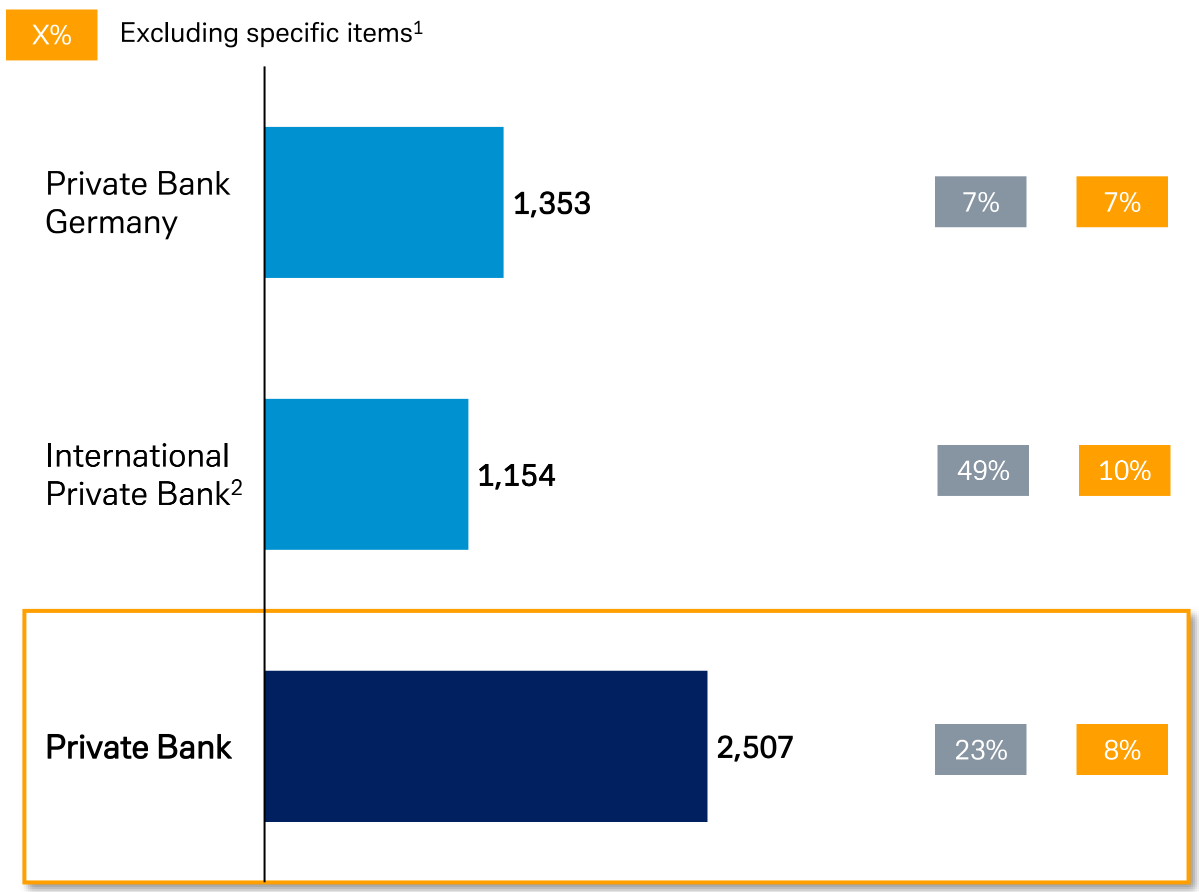
- Revenues up 6% ex-specific items and the net impact of the BGH ruling[6], due to growing interest income and volumes
- Noninterest expenses declined on lower litigation and restructuring provisions
- Adjusted costs down due to benefits from reorganization measures, ongoing cost management and lower internal service cost allocations
- Continued operating leverage[7] driving 72% CIR and 11% RoTE
- Net new business volumes of € 41bn: € 30bn AuM net inflows and € 11bn net new client loans
- Provision for credit losses slightly higher reflecting single exposures in the IPB and a stable retail portfolio

1 Detailed on slide 48 and 49
2 Post-tax return on average tangible shareholders' equity applying a 28% tax rate; allocated average tangible shareholders' equity Q4 2022: € 12.8bn, Q4 2021: € 11.7bn, FY 2022: € 12.4bn and FY 2021: € 11.4bn; RoE: Q4 2022: 12.6% and FY 2022: 9.6%
3 Loans gross of allowance at amortized cost
4 Includes deposits if they serve investment purposes; detailed on slide 66
5 Quarterly provision for credit losses annualized as basis points of average quarterly loans gross of allowance at amortized cost
6 Detailed on slide 51
7 Defined on slide 47

Q4 2022 Private Bank revenue performance

In € m, unless stated otherwise

Change vs. Q4 2021



Q4 2022 year-on-year comments

Private Bank Germany:

- Revenues up 10% adjusted for net impacts related to the BGH ruling[3]
- Growth driven by higher net interest income in part offset by lower fee income primarily from insurance products reflecting long-term contractual changes
- Net inflows into investment products of € 2bn

International Private Bank:

- Revenues include ~€ 310m gain on sale related to the Financial Advisors business in Italy
- Wealth Management & Bank for Entrepreneurs revenues ex-specific items up 11% reflecting growth in deposit revenues and benefits from FX movements
- Premium Banking revenues up 6% driven by higher deposit revenues partially offset by lower revenues from loans and investment products
- Net AuM inflows of € 4bn with € 3bn in investment products

1 Detailed on slide 48 and 49

2 Includes revenues from Premium Banking of € 252m, up 6% year on year, and Wealth Management & Bank for Entrepreneurs revenues of € 902m, up 68%; excluding specific items, Wealth Management & Bank for Entrepreneurs revenues up 11%, or 6% on an FX adjusted basis

3 Detailed on slide 51

Asset Management

In € m, unless stated otherwise

		Q4 2022	Change in % vs. Q4 2021	FY 2022	Change in % vs. FY 2021
Revenues	Revenues	609	(23)	2,608	(4)
	Revenues ex-specific items[1]	609	(23)	2,608	(4)
Costs	Noninterest expenses	500	11	1,836	10
	Adjusted costs	399	(9)	1,708	4
Profitability	Profit (loss) before tax	81	(69)	598	(27)
	RoTE (in %)[2]	8.6	(24.2) ppt	17.1	(12.6) ppt
	Cost/income ratio (in %)	82	25 ppt	70	9 ppt
	Mgmt fee margin (in bps)	28.1	0.4 bps	28.2	0.3 bps
AuM (in € bn)	Assets under management[3]	821	(11)	821	(11)
	Net flows	(2)	n.m.	(20)	n.m.

FY 2022 year-on-year comments

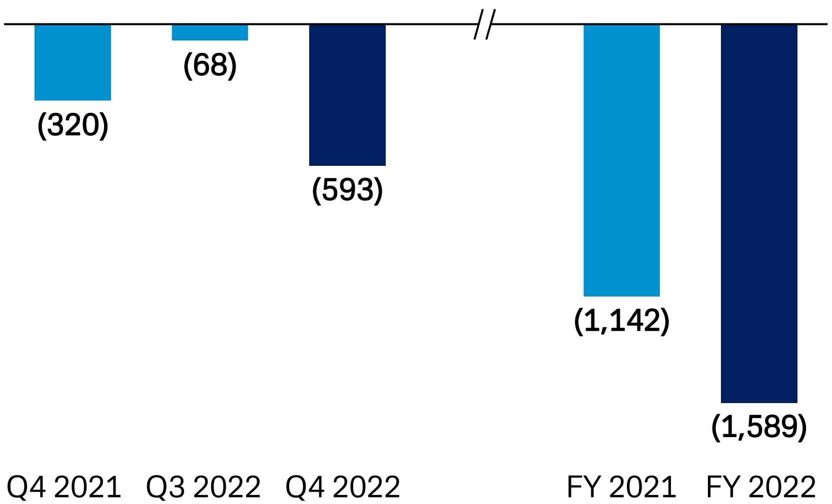
- Revenues down 4% as higher management fees were more than offset by lower performance fees and other revenues
- Adjusted costs up 4% reflecting strategic hires, platform investments and a normalization of non-compensation expenses
- Assets under management declined € 106bn in the year due to negative market performance of € 108bn with net outflows of € 20bn more than offset by FX movements
- Net outflows largely in lower margin products while higher margin products such as Multi Asset and Alternatives saw net inflows

1 Detailed on slide 48 and 49
2 Post-tax return on average tangible shareholders' equity applying a 28% tax rate; allocated average tangible shareholders' equity Q4 2022: € 2.4bn, Q4 2021: € 2.2bn, FY 2022: € 2.4bn and FY 2021: € 1.9bn; RoE: Q4 2022: 3.7% and FY 2022: 7.5%
3 Detailed on slide 67

Corporate & Other

In € m

Profit (loss) before tax



	Q4 2022	Change vs. Q4 2021	FY 2022	Change vs. FY 2021
Profit (loss) before tax	**(593)**	**(274)**	**(1,589)**	**(447)**
Funding & liquidity	(56)	55	(334)	(72)
Valuation & timing differences[1]	48	34	(122)	(280)
Shareholder expenses	(123)	19	(506)	(45)
Noncontrolling interests[2]	38	(33)	190	(16)
Other[3]	(500)	(349)	(817)	(34)

1 Valuation & timing reflects the mismatch in revenue from instruments accounted for on an accrual basis under IFRS that are economically hedged with derivatives that are accounted for on a mark-to-market basis
2 Reversal of noncontrolling interests reported in operating business segments (mainly Asset Management)
3 FY 2021 Other mainly driven by transformation charges of € 603m booked in Corporate & Other (C&O); FY 2022 Other mainly reflecting higher-than-planned infrastructure expenses retained in C&O

Capital Release Unit

In € m, unless stated otherwise

		Q4 2022	Absolute change vs. Q4 2021	FY 2022	Absolute change vs. FY 2021
Revenues	Revenues	(12)	(16)	(28)	(54)
	Revenues ex-specific items[1]	(9)	(13)	(22)	(50)
Costs	Noninterest expenses	187	(177)	922	(510)
	Adjusted costs	160	(96)	781	(414)
Profitability	Profit (loss) before tax	(197)	156	(932)	431
Balance sheet and Risk (in € bn)	Leverage exposure	22	(17)	22	(17)
	Risk-weighted assets	24	(4)	24	(4)
	of which: operational risk RWA	19	(1)	19	(1)

FY 2022 year-on-year comments

- Revenues were lower as the non-recurrence of Prime Finance cost recovery more than offset lower de-risking and funding impacts
- Noninterest expenses declined by 36% primarily driven by a reduction in adjusted costs, reflecting lower internal service charges and direct compensation and non-compensation costs
- Leverage exposure declined by € 17bn driven by de-risking, market impacts and portfolio run-off
- Risk-weighted assets declined by € 4bn driven by lower operational risk and de-risking

[1] Detailed on slide 48 and 49

Expected re-segmentation of Capital Release Unit in Corporate & Other

Delivery on targets

€ 227 bn
leverage exposure reduction[1]

€ 40 bn
RWA reduced[1] to enable re-investment by Core Bank

~45 bps
Group CET1 ratio benefit through RWA reduction after all expenses[2]

€ 2.5 bn
reduction in adjusted cost base compared to FY 2018

Capital Release Unit (CRU) integration plan

- The CRU has achieved all the goals set for the division at the 2020 Investor Deep Dive, outperforming against its RWA and leverage targets and meeting its cost target
- CRU will cease to be reported as a separate divisional segment and historic and future financials will be reported in the Corporate & Other segment from Q1 2023
- No assets will be transferred to or from the Core businesses with this change
- The remaining CRU assets will roll off over time; these are mostly interest rate derivatives but also include the Polish FX mortgage portfolio and certain other FIC & Equities assets[3]

1 Q2 2019 to Q4 2022
2 Improvement to CET1 ratio from the YE 2018 to YE 2022 due to CRU from reduction in RWA, inclusive of net income and release of capital deduct items; equivalent improvement to Group leverage ratio due to CRU from reduction in leverage exposure, inclusive of net income and release of capital deduct items of ~55bps
3 Detailed on slide 53

Transitioning to best practice Driver-Based Cost Management methodology effective from Q1 2023

- Implementation of new industry best practice Driver-Based Cost Management (DBCM) from Q1 2023
- New allocation methodology applies to all infrastructure costs allocated to businesses including some costs previously held centrally in C&O
- Methodology provides greater transparency on infrastructure cost drivers supporting focus on cost management and further bank-wide efficiency
- DBCM will impact divisional RoTE and CIR going forward, while Group key profitability metrics remain unchanged

Our transformation created a solid foundation for further sustainable growth

- Strategic objectives through *Compete to win* have delivered a transformed bank
- Complementary business mix has created a strong step-off to achieve further organic business growth; 2023 revenue expected to be in between of the € 28-29bn range
- Disciplined risk management supports guidance for provision for credit losses to be essentially flat compared to 2022
- Operating leverage delivered throughout *Compete to win* supports 2025 targets
- Confirm capital distribution plans in line with guidance provided in March 2022

Confirmation of financial targets and capital objectives for 2025

Appendix

Sustainability at Deutsche Bank

Q4 2022 highlights

Our key focus areas	Recent achievements
Sustainable Finance	— Increase of cumulative volumes in sustainable financing and investment by € 18bn to € 215bn[1], reaching our three-year-target, announced 2020 — Deal highlights: Deutsche Bank acted as structuring advisor and joint lead manager on New Zealand's inaugural € 1.8bn Green Bond (IB O&A) and as sustainability bond structuring advisor, joint bookrunner and marketing coordinator on State Street Corporation's inaugural € 504m sustainability bond offering (IB O&A) — Corporate Bank supported Knorr-Bremse in integrating sustainability aspects into its Supply Chain Finance (SCF) program and won two SCF Community Awards 2022 for the sustainability-linked SCF Program of Henkel
Policies & Commitments	— Deutsche Bank announced net zero aligned targets for 2030 and 2050 in four carbon-intensive sectors representing a core element of its commitment as a founding member of the Net Zero Banking Alliance (NZBA) — Published its annual Green Financing Instruments Report 2021/2022 incl. renewed Second Party Opinion (SPO)
People & Own Operations	— Deutsche Bank achieved externally communicated targets on its own operations (e.g., energy reduction (H1 2022 reported of 21% vs. 2025 target of 20%), renewable electricity (YE 2022 reported of 95% vs. 2025 target of 100%)) — Established a Net Zero Alignment Forum to assess carbon-intense transactions, client transition strategies and respective impact on the bank's financed emissions — Launched a "Sustainability Hub" internally in December as single point of access to all ESG activities in Deutsche Bank
Thought Leadership & Stakeholder Engagement	— Deutsche Bank was represented at the UN Climate Change Conference (COP27) in collaboration with the Resilience Hub — Joined the Glasgow Financial Alliance for Net Zero (GFANZ) private finance working group supporting Egypt's ambition under its Nexus for Water, Food & Energy initiative as well as GFANZ working group to support mobilization of private capital for Indonesia's Just Energy Transition Partnership, co-led by the US and Japan — DB's Investment Bank and International Private Bank published a paper on the power of UNFCCC REDD+[2] Sovereign Carbon

We support all the major international standards and guidelines:

UNITED NATIONS
Sustainable Development Goals
International Bill of Human Rights
Guiding Principles for Business and Human Rights
UNEP FI Principles for Responsible Banking

PARIS2015 UN CLIMATE CHANGE CONFERENCE COP21·CMP11
Paris Pledge for Action

EU Transparency Register

ILO
Core Labor Standards of the International Labor Organization

GRI
Global Reporting Initiatives

IFC International Finance Corporation WORLD BANK GROUP
Environmental and Social Performance Standards

EQUATOR PRINCIPLES

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

PCAF
Partnership for Carbon Accounting Financials

[1] Cumulative sustainable financing and investing volumes since 2020, as of December 31, 2022; defined in Deutsche Bank's Sustainable Finance Framework, which is published on our website; given the cumulative definition of our target, in cases where validation against the Framework cannot be completed in the reporting quarter, volumes may be disclosed in the subsequent quarters after the validation completion
[2] United Nations Framework Convention on Climate Change; reducing emissions from deforestation and forest degradation in developing countries

Definition of certain financial measures

Revenues excluding specific items	Revenues excluding specific items are calculated by adjusting net revenues under IFRS for specific revenue items which generally fall outside the usual nature or scope of the business and are likely to distort an accurate assessment of the divisional operating performance. Excluded items are Debt Valuation Adjustment (DVA) and material transactions or events that are either one-off in nature or belong to a portfolio of connected transactions or events where the P&L impact is limited to a specific period of time as shown on slides 48 and 49
Revenues on a currency adjusted basis	Revenues on a currency-adjusted basis is calculated by translating prior-period revenues that were generated in non-euro currencies into euros at the foreign exchange rates that prevailed during the current year period. These adjusted figures, and period-to-period percentage changes based thereon, are intended to provide information on the development of underlying business volumes
Adjusted costs	Adjusted costs are calculated by deducting (i) impairment of goodwill and other intangible assets, (ii) net litigation charges and (iii) restructuring and severance (in total referred to as nonoperating costs) from noninterest expenses under IFRS as shown on slides 48 and 49
Transformation charges	Transformation charges are costs, included in adjusted costs, that are directly related to Deutsche Bank's transformation as a result of the strategy announced on 7 July 2019 and certain costs related to incremental or accelerated decisions driven by the changes in our expected operations due to the COVID-19 pandemic. Such charges include the transformation-related impairment of software and real estate, the accelerated software amortization and other transformation charges like onerous contract provisions or legal and consulting fees related to the strategy execution
Transformation-related effects	Transformation-related effects are financial impacts, in addition to transformation charges (as defined above), which are recorded outside of adjusted costs. These include goodwill impairments in the second quarter 2019, as well as restructuring and severance expenses from the third quarter 2019 onwards. In addition to the aforementioned pre-tax items, transformation-related effects on a post-tax basis include pro-forma tax effects on the aforementioned items and deferred tax asset valuation adjustments in connection with the transformation of the Group as shown on slide 54
Operating leverage	Operating leverage is calculated as the difference between year-on-year change in percentages of reported net revenues and year-on-year change in percentages of reported noninterest expenses

Specific revenue items and adjusted costs – Q4 2022

In € m

		Q4 2022								Q4 2021								Q3 2022							
		CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Core Bank	CRU	Group
Revenues		1,760	1,675	2,507	609	(225)	6,326	(12)	6,315	1,352	1,913	2,040	789	(199)	5,895	5	5,900	1,564	2,372	2,268	661	71	6,935	(17)	6,918
Specific revenue items	DVA - IB Other / CRU	-	(47)	-	-	-	(47)	(3)	(49)	-	8	-	-	-	8	1	9	-	91	-	-	-	91	2	93
	Sal. Oppenheim workout – IPB	-	-	5	-	-	5	-	5	-	-	3	-	-	3	-	3	-	-	110	-	-	110	-	110
	Gain on sale Financial Advisors business Italy – IPB	-	-	305[2]	-	-	305	-	305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Revenues ex-specific items		1,760	1,722	2,196	609	(225)	6,062	(9)	6,053	1,352	1,905	2,037	789	(199)	5,884	4	5,888	1,564	2,280	2,158	661	71	6,734	(19)	6,715

		Q4 2022								Q4 2021								Q3 2022							
		CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Core Bank	CRU	Group
Noninterest expenses		978	1,483	1,631	500	411	5,003	187	5,189	1,074	1,535	1,955	452	185	5,200	364	5,564	991	1,423	1,660	476	196	4,746	208	4,954
Nonoperating costs	Impairment of goodwill and other intangible assets	-	-	-	68	-	68	-	68	2	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-
	Litigation charges, net	11	56	(9)	9	134	202	25	227	(1)	63	(3)	1	(10)	49	106	155	7	(7)	14	3	(26)	(9)	54	45
	Restructuring & severance	(17)	12	(13)	23	2	8	2	9	59	46	134	11	1	250	1	251	6	21	(4)	5	2	30	0	30
Adjusted costs		984	1,414	1,652	399	275	4,725	160	4,885	1,015	1,426	1,824	440	195	4,899	256	5,155	977	1,409	1,650	468	220	4,724	154	4,878
Transformation charges[1]		3	-	19	-	-	22	-	22	23	23	80	0	59	185	19	204	4	-	28	-	-	32	-	32
Adjusted costs ex-transformation charges		981	1,414	1,633	399	275	4,703	160	4,863	992	1,403	1,744	439	136	4,714	237	4,951	973	1,409	1,622	468	220	4,692	154	4,846
Bank levies									15								3								11
Adjusted costs ex-transformation charges and bank levies									4,848								4,948								4,835

[1] Defined on slide 47

[2] Gain on sale of € 312m, net of transaction-related fees of € 6m

Specific revenue items and adjusted costs – FY 2022

In € m

		FY 2022								FY 2021							
		CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Core Bank	CRU	Group
Revenues		6,335	10,016	9,155	2,608	(877)	27,238	(28)	27,210	5,151	9,631	8,234	2,708	(340)	25,384	26	25,410
Specific revenue items	DVA - IB Other / CRU	-	49	-	-	-	49	(6)	43	-	(28)	-	-	-	(28)	(2)	(30)
	Sal. Oppenheim workout – IPB	-	-	125	-	-	125	-	125	-	-	103	-	-	103	-	103
	Gain on sale Financial Advisors business Italy – IPB	-	-	305[2]	-	-	305	-	305	-	-	-	-	-	-	-	-
Revenues ex-specific items		6,335	9,968	8,725	2,608	(877)	26,759	(22)	26,737	5,151	9,660	8,132	2,708	(340)	25,309	28	25,337

		FY 2022								FY 2021							
		CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Core Bank	CRU	Group
Noninterest expenses		3,949	6,196	6,593	1,836	893	19,468	922	20,390	4,143	5,831	7,433	1,664	1,002	20,073	1,432	21,505
Nonoperating costs	Impairment of goodwill and other intangible assets	-	-	-	68	-	68	-	68	5	-	-	-	-	5	-	5
	Litigation charges, net	23	166	(60)	24	122	274	139	413	2	99	134	2	1	236	230	466
	Restructuring & severance	(6)	44	(87)	37	5	(8)	2	(6)	111	87	237	21	7	464	6	470
Adjusted costs		3,933	5,986	6,740	1,708	767	19,134	781	19,915	4,025	5,645	7,062	1,641	995	19,368	1,195	20,564
Transformation charges[1]		16	-	116	-	-	132	-	132	58	60	221	3	603	945	57	1,003
Adjusted costs ex- transformation charges		3,917	5,986	6,624	1,708	767	19,001	781	19,782	3,967	5,585	6,841	1,638	391	18,423	1,138	19,561
Bank levies									762								553
Adjusted costs ex-transformation charges and bank levies									19,020								19,008

1 Defined on slide 47

2 Gain on sale of € 312m, net of transaction-related fees of € 6m

Pre-provision profit, CAGR and operating leverage

In € m, unless stated otherwise

	FY 2018[2]	FY 2019[2]	FY 2020	FY 2021	FY 2022	CAGR[3] 2018 - 2022
Net revenues						
Corporate Bank	5,278	5,247	5,146	5,151	6,335	4.7%
Investment Bank	7,561	7,023	9,286	9,631	10,016	7.3%
Private Bank	8,520	8,239	8,126	8,234	9,155	1.8%
Asset Management	2,187	2,332	2,229	2,708	2,608	4.5%
Corporate & Other	(142)	107	(534)	(340)	(877)	
Core Bank	23,405	22,948	24,253	25,384	27,238	3.9%
Capital Release Unit	1,911	217	(225)	26	(28)	
Group	25,316	23,165	24,028	25,410	27,210	1.8%
Noninterest expenses						
Corporate Bank	(3,882)	(4,877)	(4,235)	(4,143)	(3,949)	0.4%
Investment Bank	(6,509)	(6,397)	(5,418)	(5,831)	(6,196)	(1.2)%
Private Bank	(7,556)	(8,159)	(7,522)	(7,433)	(6,593)	(3.4)%
Asset Management	(1,735)	(1,711)	(1,526)	(1,664)	(1,836)	1.4%
Corporate & Other	(428)	(531)	(568)	(1,002)	(893)	
Core Bank	(20,110)	(21,675)	(19,269)	(20,073)	(19,468)	(0.8)%
Capital Release Unit	(3,351)	(3,400)	(1,947)	(1,432)	(922)	
Group	(23,461)	(25,076)	(21,216)	(21,505)	(20,390)	(3.4)%
Pre-provision profit[1]						**Operating leverage based on CAGR[4]**
Corporate Bank	1,396	369	911	1,008	2,386	4.2%
Investment Bank	1,052	626	3,868	3,800	3,820	8.5%
Private Bank	965	80	603	801	2,562	5.2%
Asset Management	452	621	703	1,044	771	3.1%
Corporate & Other	(570)	(424)	(1,102)	(1,343)	(1,770)	
Core Bank	3,295	1,272	4,984	5,311	7,769	4.7%
Capital Release Unit	(1,440)	(3,183)	(2,172)	(1,405)	(949)	
Group	1,855	(1,911)	2,812	3,905	6,820	5.3%

1 Pre-provision profit defined as net revenues less noninterest expenses
2 2018 figures based on reporting structure as disclosed in Annual Report 2020; 2019 figures based on reporting structure as disclosed in Annual Report 2021
3 Compound annual growth rates of revenues and noninterest expenses over the four years between 2018 and 2022
4 Operating leverage defined as the difference between compound annual growth rates of revenues and noninterest expenses over the four years between 2018 and 2022

Private Bank – Impact of BGH ruling[1]

In € m, unless stated otherwise

	Q4 2021	Q3 2022	Q4 2022	FY 2021	FY 2022
Revenues					
Net revenues	2,040	2,268	2,507	8,234	9,155
BGH ruling - impact of forgone revenues (net)	(34)	4	3	154	22
of which: Private Bank Germany - BGH ruling - impact of forgone revenues (net)	(34)	4	3	152	23
Net revenues ex-BGH ruling	2,006	2,272	2,509	8,388	9,177
of which: Private Bank Germany net revenues ex-BGH ruling	1,234	1,295	1,356	5,160	5,351
Revenue specific items[2]	(3)	(110)	(311)	(103)	(430)
Net revenues ex-specific items ex-BGH ruling	2,003	2,162	2,199	8,285	8,747
of which: Private Bank Germany net revenues ex-specific items ex-BGH ruling	1,234	1,295	1,356	5,160	5,351
Post-tax RoTE					
Profit (loss) before tax	(54)	447	651	355	1,979
Revenue specific items[2]	(3)	(110)	(311)	(103)	(430)
Transformation charges[2]	80	28	19	221	116
Impairment of goodwill / other intangibles	-	-	-	-	-
Restructuring & severance	134	(4)	(13)	237	(87)
Adjusted profit (loss) before tax	157	361	347	711	1,578
BGH ruling – total impact (net)	(33)	5	(12)	284	(60)
of which: impact of forgone revenues	(34)	4	3	154	22
of which: impact of additional adjusted costs	2	1	1	2	4
of which: impact of litigation charges	(1)	-	(15)	128	(86)
Adjusted profit (loss) before tax ex-BGH ruling	124	366	335	994	1,518
Adjusted profit (loss) ex-BGH ruling[3]	89	264	241	716	1,093
Profit (loss) attributable to noncontrolling interests	-	-	-	-	-
Profit (loss) attributable to additional equity components	27	22	34	97	116
Adjusted profit (loss) attributable to Deutsche Bank shareholders ex-BGH ruling	63	241	207	619	977
Average allocated tangible shareholders' equity	11,670	12,655	12,762	11,408	12,409
Adjusted post-tax RoTE ex-BGH ruling (in %)	2.1	7.6	6.5	5.4	7.9
Reported post-tax RoTE (in %)	(2.2)	9.5	13.6	1.4	10.6

1 Ruling by the German Federal Court of Justice (Bundesgerichtshof, or BGH) in April 2021 relating to customer consent for pricing changes on current accounts
2 Detailed on slides 48 and 49
3 Pre-tax adjustments taxed at a rate of 28%

Capital Release Unit pro-forma reconciliation

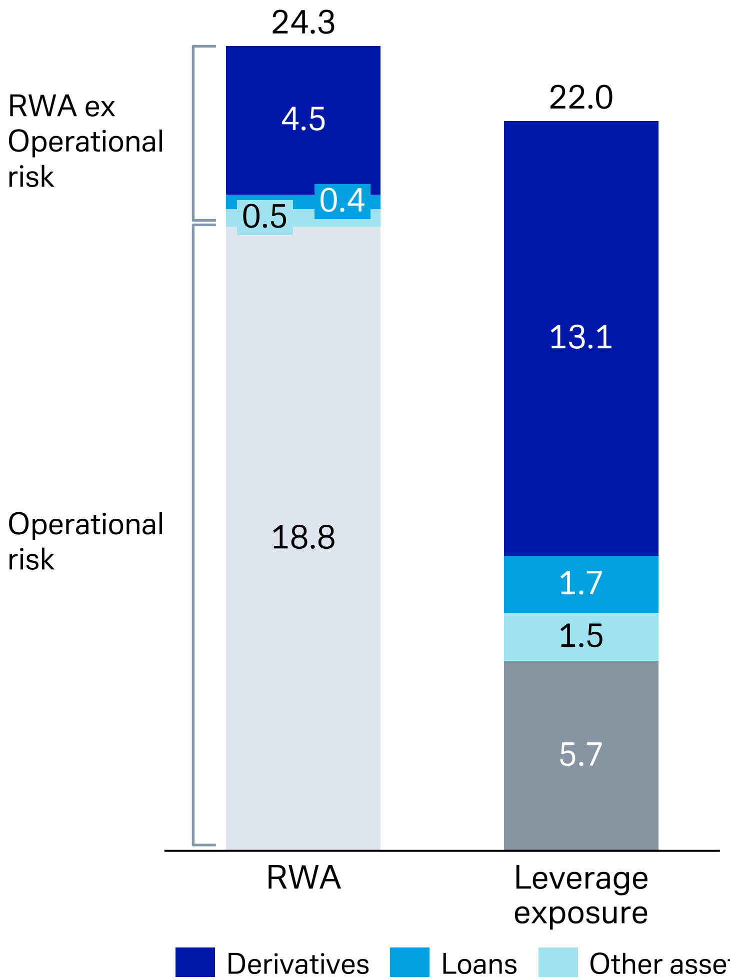
In € m, unless stated otherwise, FY 2022

	As reported								Pro-forma					
	CB	IB	PB	AM	C&O	Core Bank	CRU	Group	CB	IB	PB	AM	C&O	Group
Revenues	6,335	10,016	9,155	2,608	(877)	27,238	(28)	27,210	6,335	10,016	9,155	2,608	(904)	27,210
Noninterest expenses	3,949	6,196	6,593	1,836	893	19,468	922	20,390	3,949	6,196	6,593	1,836	1,815	20,390
Profit (loss) before tax	2,051	3,487	1,979	598	(1,589)	6,527	(932)	5,594	2,051	3,487	1,979	598	(2,521)	5,594
Risk-weighted assets (in € bn)	74	139	88	13	22	336	24	360	74	139	88	13	46	360
of which: Operational Risk	5	23	8	3	-	40	19	58	5	23	8	3	19	58
Leverage exposure (in € bn)	321	530	344	9	14	1,218	22	1,240	321	530	344	9	36	1,240
Total assets (in € bn)	258	677	333	10	(2)	1,275	62	1,337	258	677	333	10	60	1,337
Total employees (in #)	13,980	7,657	26,951	4,283	31,865	84,736	194	84,930	13,980	7,657	26,951	4,283	32,059	84,930

Capital Release Unit financial resources profile

Risk-weighted assets and leverage exposure by product type, in € bn, as of Q4 2022

Year-end 2022 profile by product type



	Approx. weighted average life[1], in years
— Derivatives portfolio (mainly Rates) including associated collateral impacts	7
— Loans mainly legacy FX mortgage portfolio in Poland	6
— Other trading assets	4
— Mainly allocated liquidity reserves	n/a

[1] Weighted based on leverage exposure equating to period over which half of the portfolio is estimated to have rolled off (including derivative PV amortization); longest maturity assets materially longer dated

Transformation-related effects

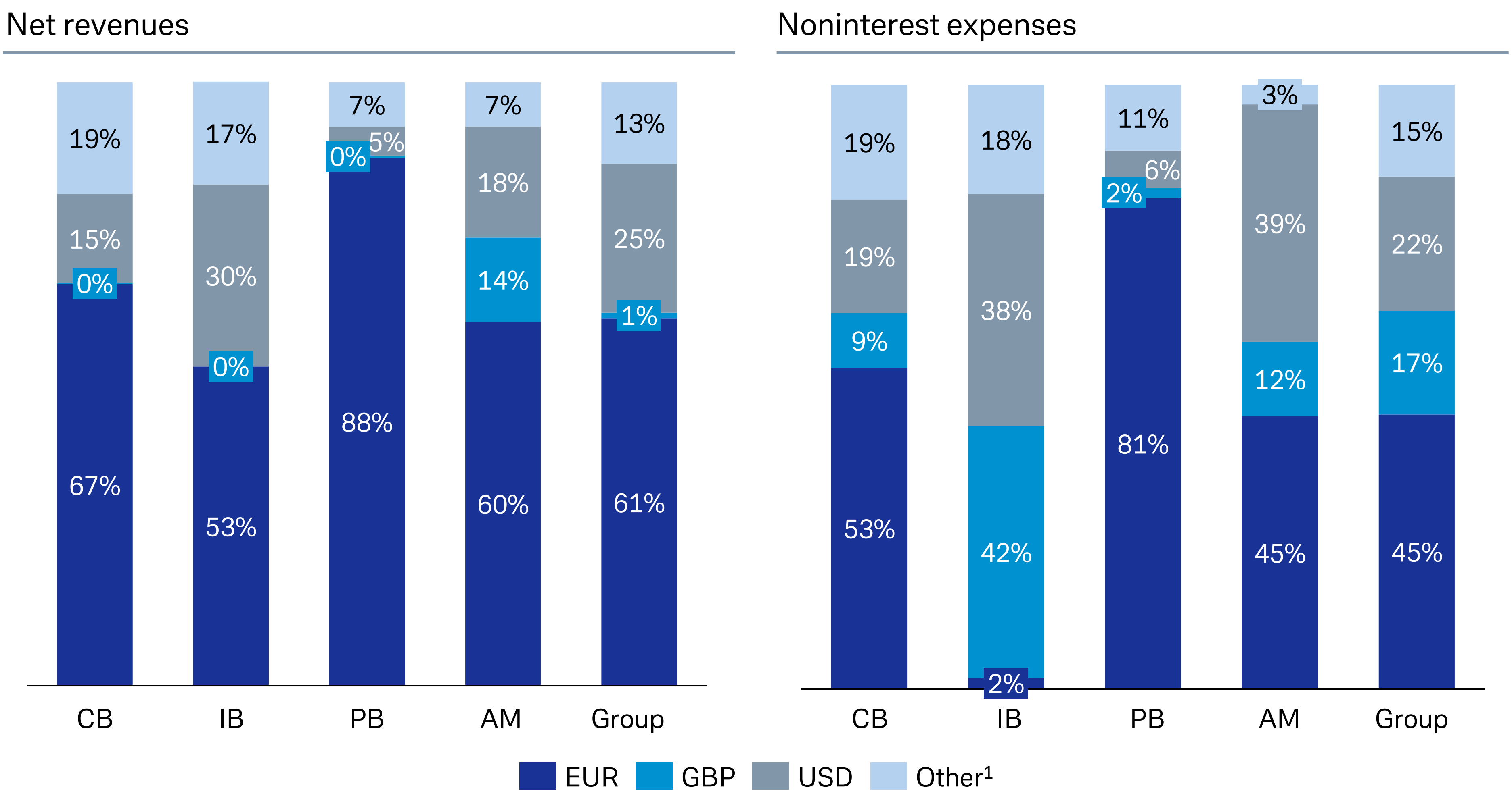
In € bn

			2019	2020	2021	2022	2019 to 2022 cumulative impact
Pre-tax items	Nonoperating costs[1]	Goodwill impairment[3]	1.0	-	-	-	1.0
		Restructuring & severance[4]	0.7	0.7	0.5	(0.0)	1.9
	Transformation charges[2]	Real estate charges	0.1	0.2	0.3	-	0.6
		Software impairment/ accelerated amortization	1.0	0.2	0.2	-	1.4
		Other[5]	0.0	0.1	0.5	0.1	0.8
		Deferred Tax Asset valuation adjustments	2.8	0.0	-	-	2.8
		Total	5.7	1.2	1.5	0.1	8.5

Note: Non-tax items are shown on a pre-tax basis; defined on slide 47
[1] Excluded from adjusted costs; definition of adjusted costs provided on slide 47
[2] Included in adjusted costs
[3] Non tax-deductible
[4] Excludes H1 2019 restructuring & severance of € 0.1bn, prior to the strategic announcement on July 7, 2019
[5] Other mainly driven by IT platform transformation charges

Indicative divisional currency mix

Q4 2022

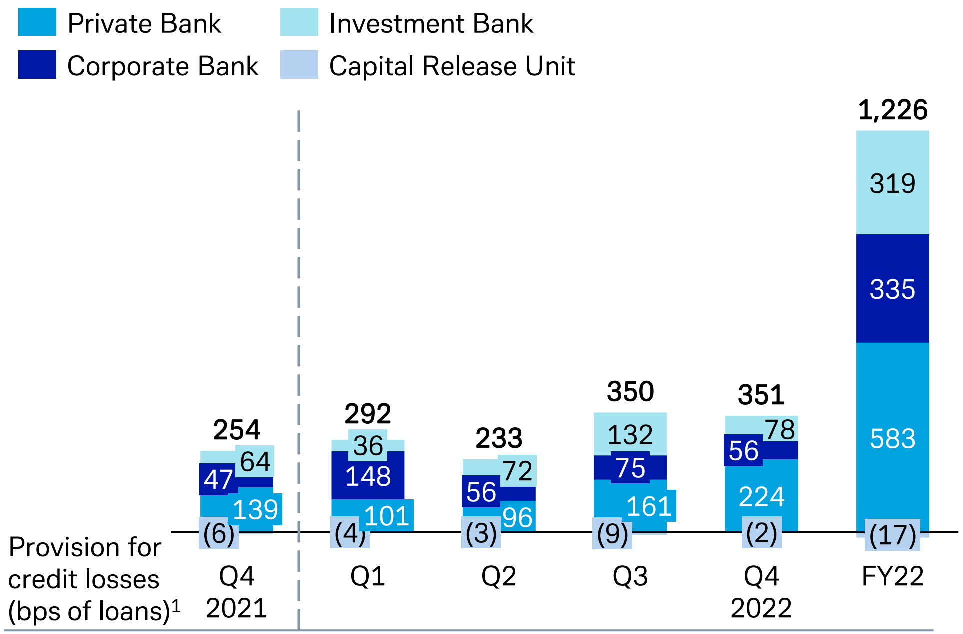


Note: Classification is based primarily on the currency of Deutsche Bank Group's office, in which the revenues and noninterest expenses are recorded and therefore only provide an indicative approximation

[1] For net revenues primarily includes Indian Rupee (INR), Singapore Dollar (SGD) and Swiss Franc (CHF); for noninterest expenses primarily includes SGD, INR and Hong Kong Dollar (HKD)

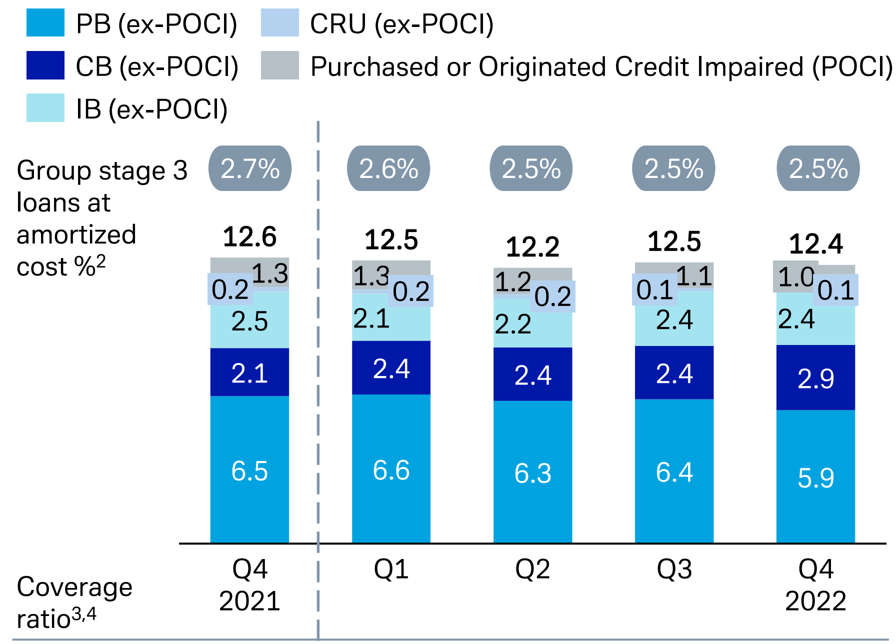
Provision for credit losses and stage 3 loans

Provision for credit losses, in € m



Provision for credit losses (bps of loans)[1]	Q4 2021	Q1	Q2	Q3	Q4 2022	FY22
Group	22	24	19	28	28	25
CB	16	48	18	24	18	27
IB	30	15	30	52	30	32
PB	22	16	15	24	34	22

Stage 3 at amortized cost, in € bn



Coverage ratio[3,4]	Q4 2021	Q1	Q2	Q3	Q4 2022
Group	33%	33%	33%	33%	32%
CB	43%	42%	40%	42%	33%
IB	14%	16%	16%	21%	21%
PB	37%	36%	36%	36%	37%

Note: Provision for credit losses in the Corporate & Other and Asset Management segments are not shown on this chart but are included in Group totals

1 Quarterly provision for credit losses annualized as basis points of average quarterly loans gross of allowance at amortized cost

2 IFRS 9 stage 3 assets at amortized cost including POCI as % of loans at amortized cost (€ 489bn as of December 31, 2022)

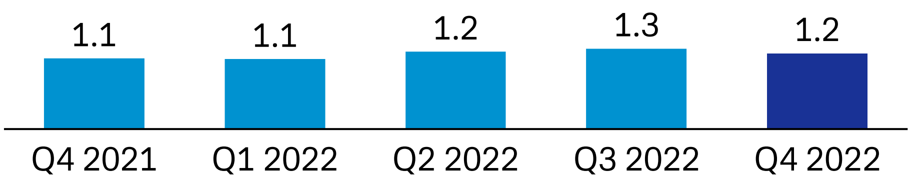
3 IFRS 9 stage 3 allowance for credit losses for assets at amortized cost excluding POCI divided by stage 3 assets at amortized cost excluding POCI

4 IFRS 9 stage 1 coverage ratio for assets at amortized cost (excluding country risk allowance) is 0.1% and IFRS 9 stage 2 coverage ratio for assets at amortized cost (excluding country risk allowance) is 1.4% as of December 31, 2022

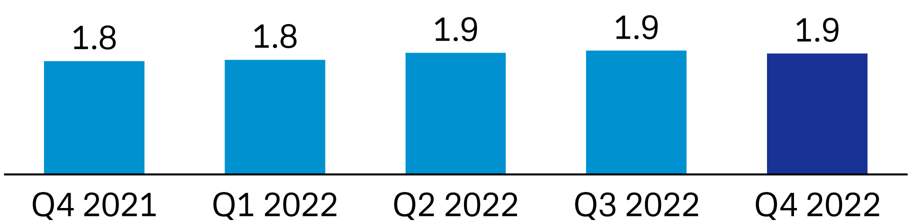
Litigation update

In € bn, period end

Litigation provisions[1]



Contingent liabilities[1]



Comments

- Provisions decreased modestly by € 0.1bn quarter on quarter
- Contingent liabilities remained stable quarter on quarter; contingent liabilities include possible obligations where an estimate can be made and outflow is more than remote, but less than probable
- Provisions in the fourth quarter reflect settlements and other developments in certain litigation and regulatory enforcement matters, including ongoing regulatory discussions to resolve matters concerning adherence to prior orders and settlements related to sanctions and embargoes and AML compliance, and remedial agreements and obligations related to risk management issues

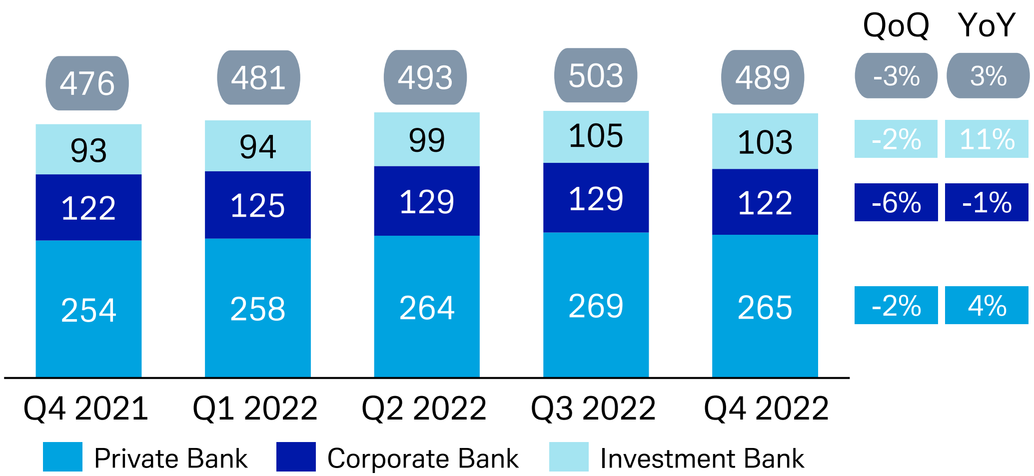
Note: Figures reflect current status of individual matters and provisions; litigation provisions and contingent liabilities are subject to potential further developments

[1] Includes civil litigation and regulatory enforcement matters

Q4 2022 loan and deposit development

In € bn

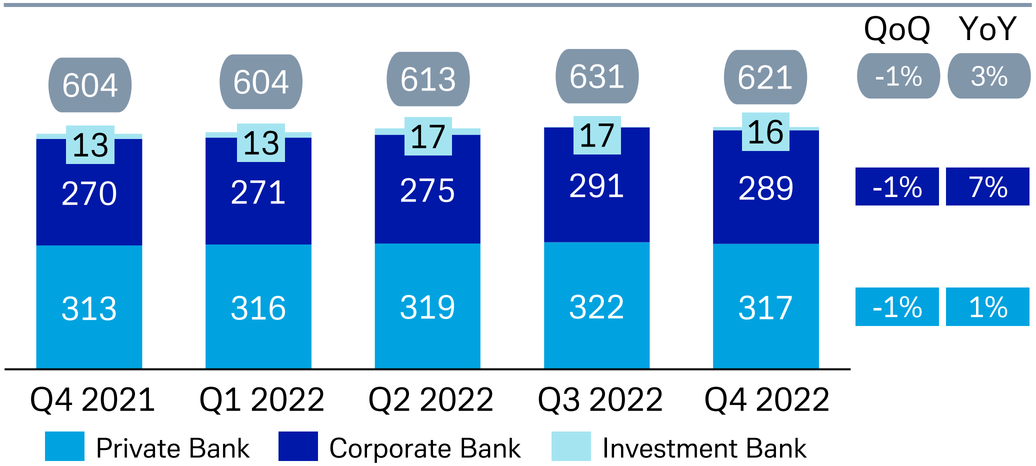
Loan development



Comments

- Lending reduction of € 2bn in the quarter adjusted for FX effects due to episodic effects
  - € 5bn reduction in Corporate Bank lending from active portfolio management including € 2bn of episodic effects
  - Offset by € 4bn growth in high quality lending in FIC Financing with moderate growth in Origination & Advisory
  - Loans in the Private Bank have remained essentially flat

Deposit development

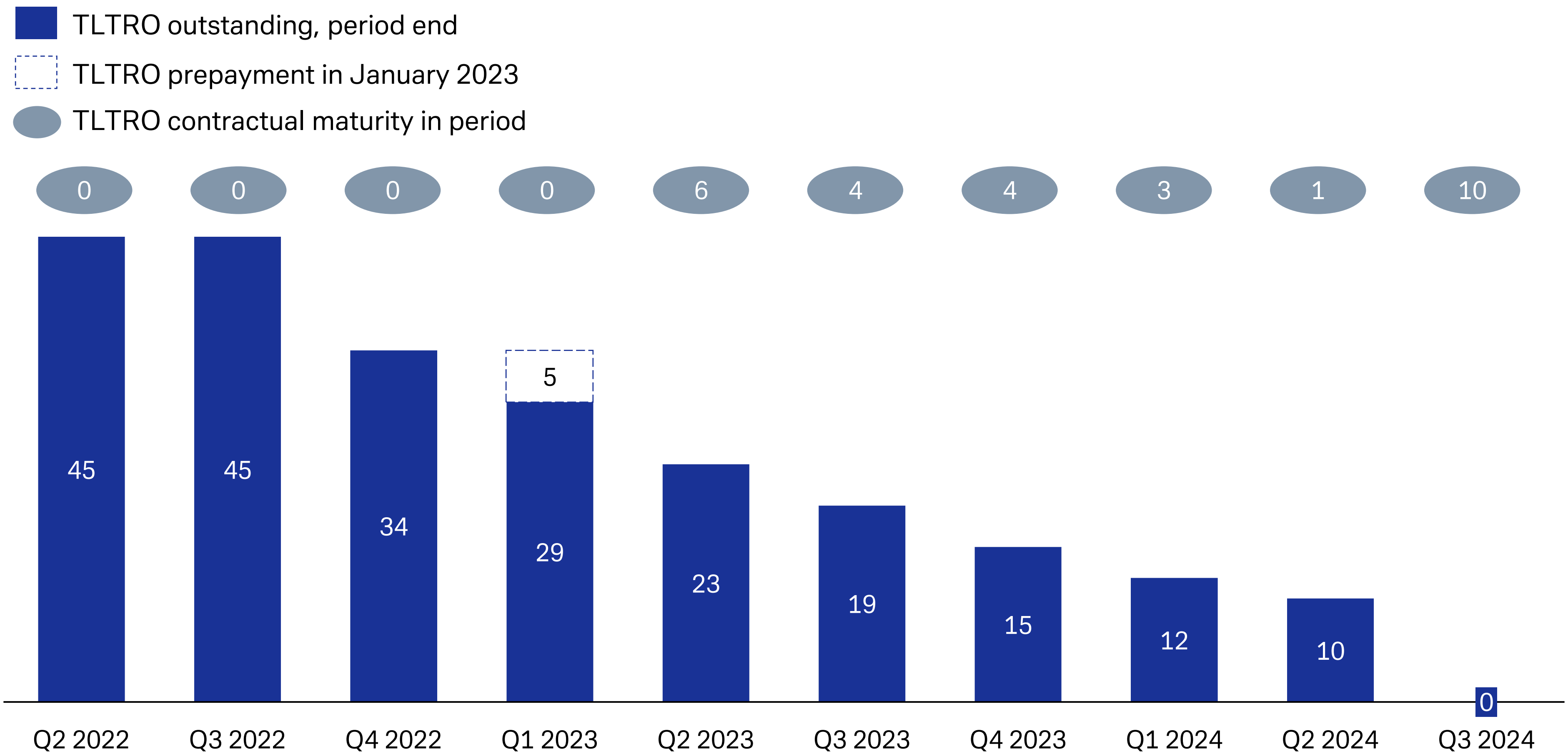


- Deposit growth of € 4bn in the quarter adjusted for FX effects, mostly driven by targeted measures in Corporate Bank
- Deposits in the Private Bank are essentially flat in the quarter
- Aim to continue targeted deposit growth in 2023 across Corporate Bank and Private Bank

Notes: Loans gross of allowances at amortized costs (IFRS 9); totals represent Group level balances whereas the graph shows only PB, CB and IB exposure for materiality reasons

TLTRO development and forecast

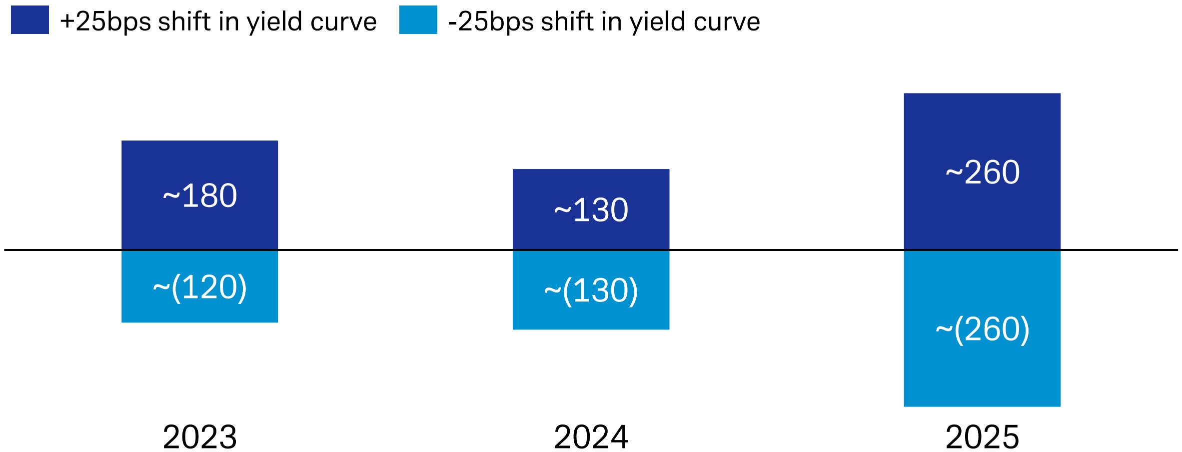
In € bn



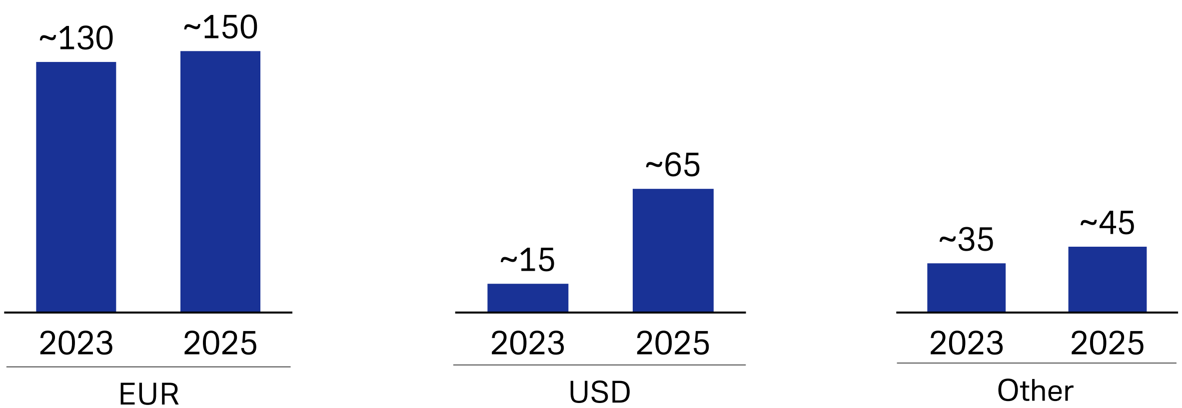
Net interest income sensitivity

Hypothetical +/-25bps shift in yield curve, in € m

Net interest income (NII) sensitivity[1]



Breakdown of sensitivity by currency for +25bps shift in yield curve[1]



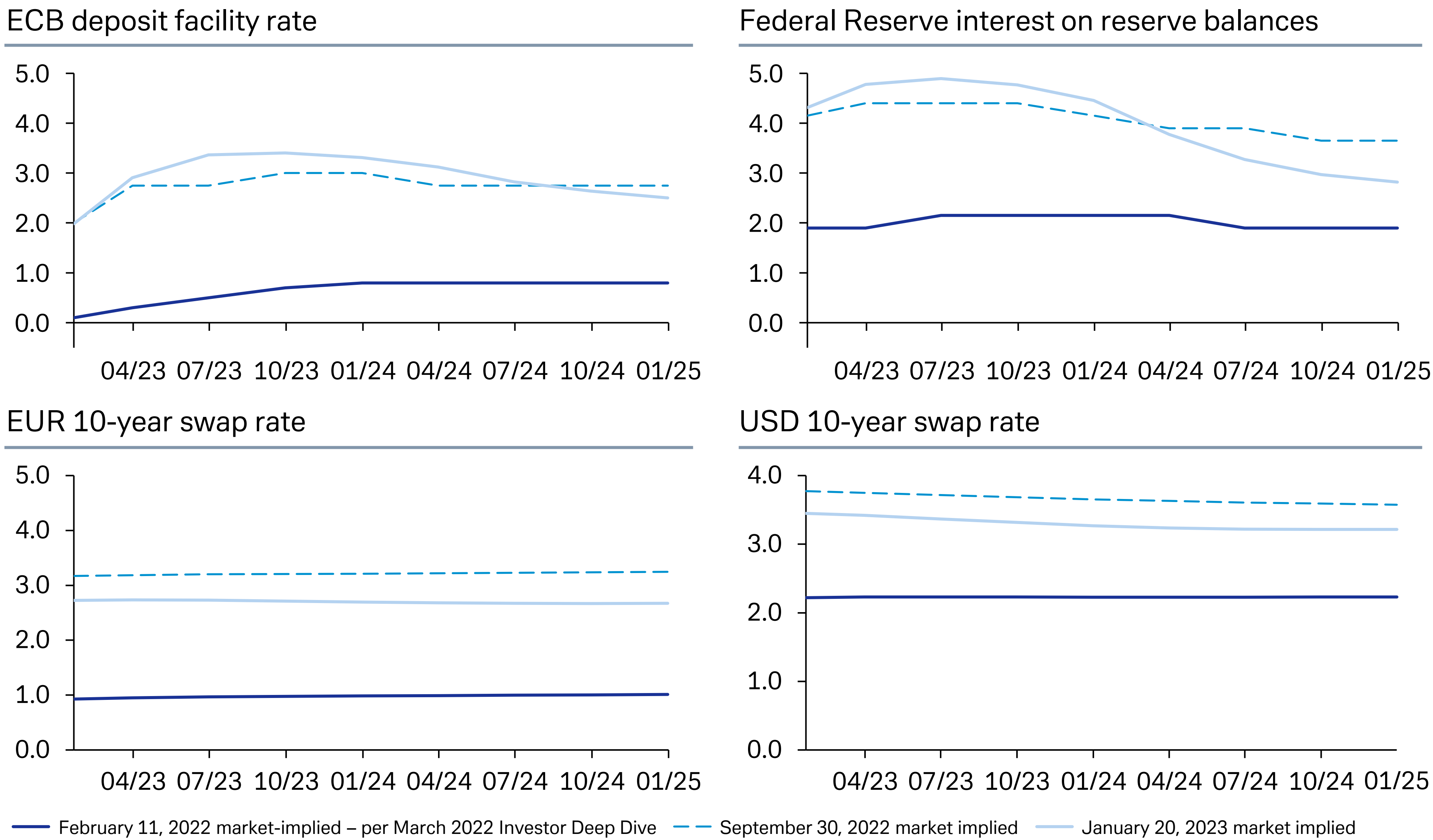
Comments

- NII increases with higher rates
- Longer term, the impact is dominated by higher EUR rates
- Sensitivity is high in 2023 as the rapid pace of increases in the market-implied curve temporarily amplifies the impact of incremental moves
- Current observations on client pricing indicate a higher than anticipated pricing lag, which would positively impact NII as well as temporarily increase NII sensitivity

[1] Based on a static balance sheet per November 2022 vs. current market-implied forward rates as of January 20, 2023

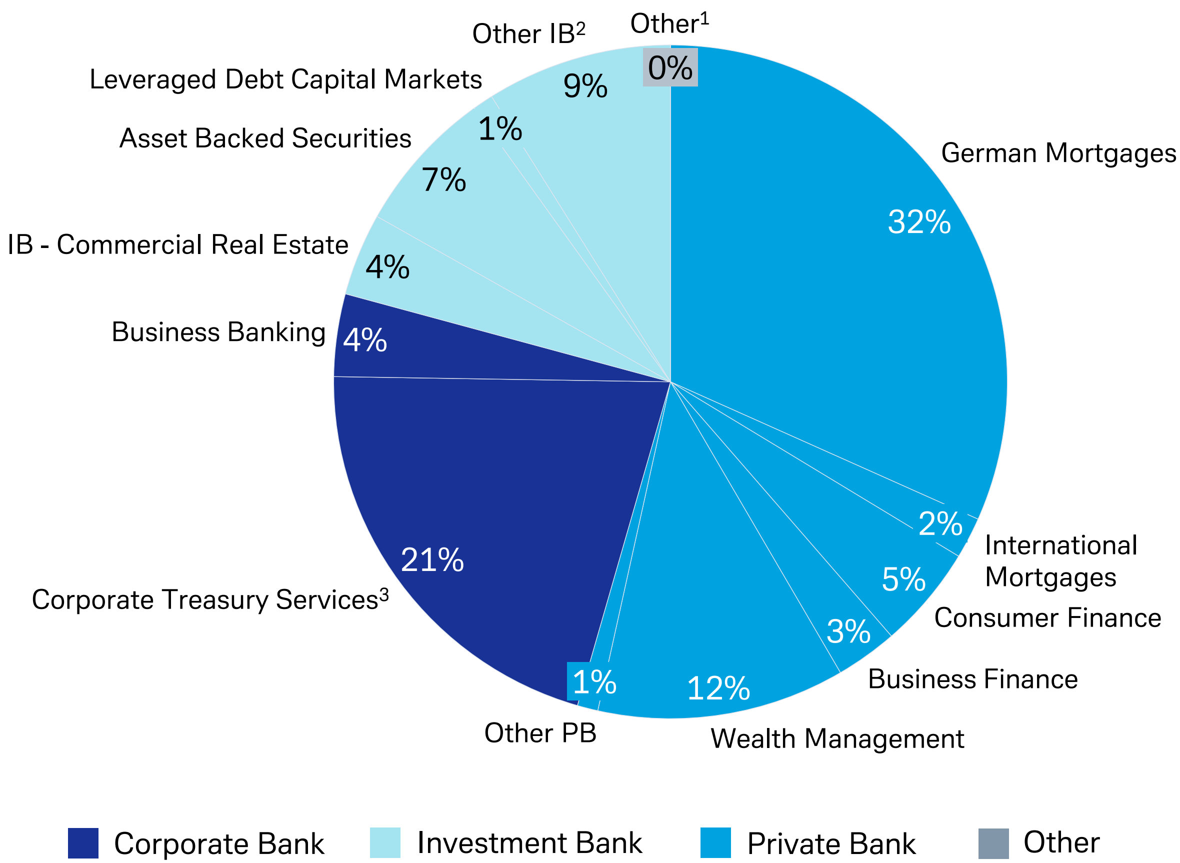
Evolution of market-implied interest rates

In %



Loan book composition

Q4 2022, IFRS loans: € 489bn



Comments

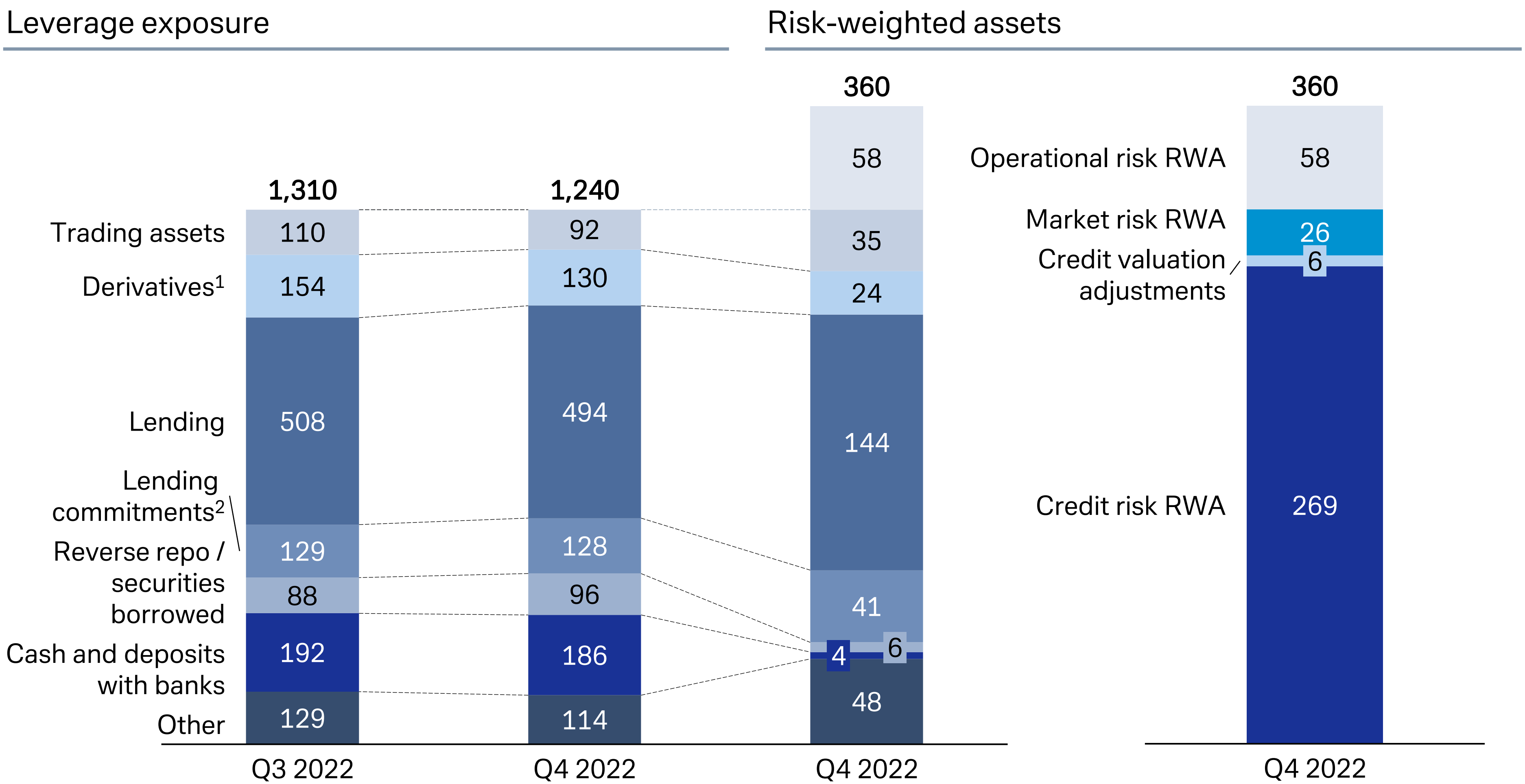
- Well diversified loan portfolio
- YTD FX impact on loan book is € 6.5bn
- 54% of loan portfolio in Private Bank, mainly consisting of retail mortgages in Private Bank Germany and collateralized lending in International Private Bank
- 25% of loan portfolio in Corporate Bank, predominantly in Corporate Treasury Services (Trade Finance & Lending and Cash Management); followed by Business Banking (SME clients in Germany)
- 21% of loan portfolio in Investment Bank, comprising well-secured, mainly asset backed loans, commercial real estate loans and collateralized financing; well-positioned to withstand downside risks due to conservative underwriting standards and risk appetite frameworks limiting concentration risk

Note: Loan amounts are gross of allowances for loans
[1] Mainly includes Corporate & Other, Institutional Client Services in the Corporate Bank and Capital Release Unit
[2] Other businesses with exposure less than 2% each, including APAC Commercial Real Estate
[3] Includes Strategic Corporate Lending and recourse & non-recourse Commercial Real Estate business

Leverage exposure and risk-weighted assets

CRD4, in € bn, period end

Leverage exposure / Risk-weighted assets



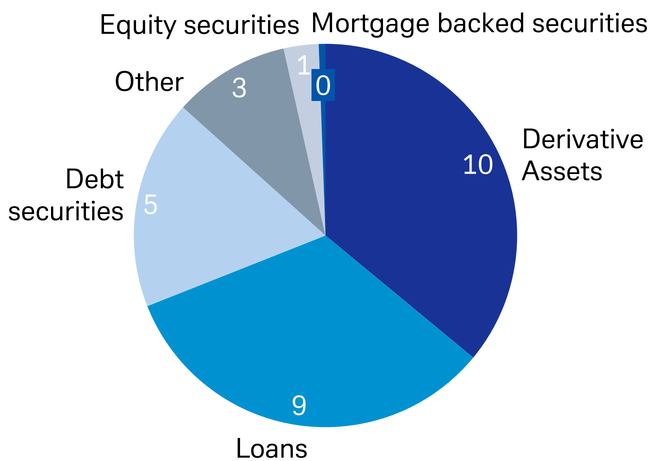
[1] Excludes any derivatives-related market risk RWA, which have been fully allocated to non-derivatives trading assets

[2] Includes contingent liabilities

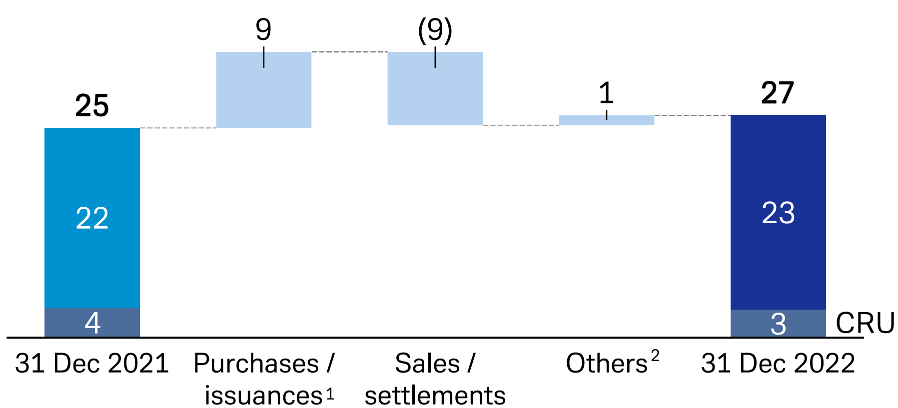
Level 3 assets

In € bn, as of December 31, 2022

Assets (total: € 27bn)



Movements in balances



Comments

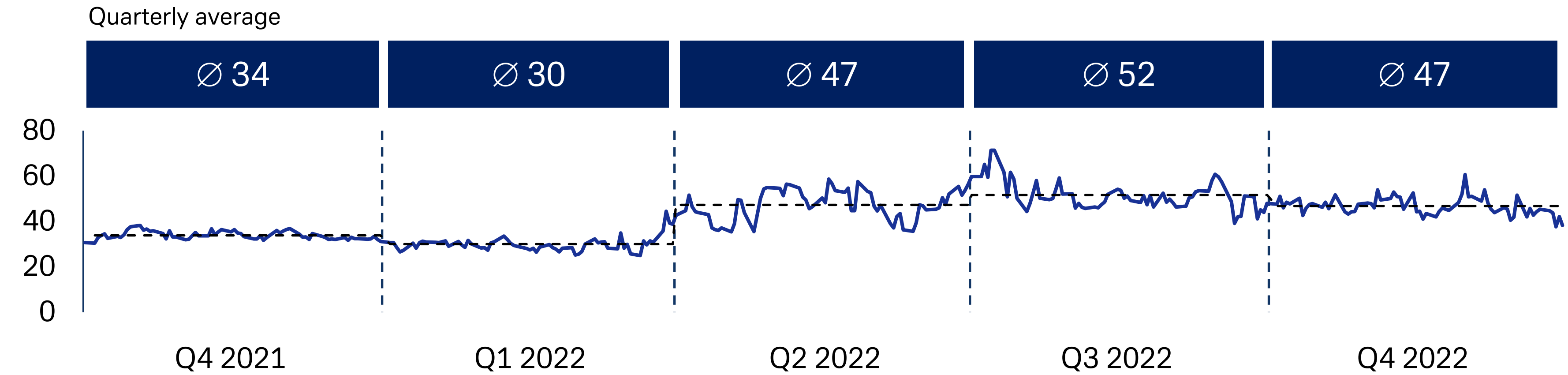
- Level 3 is an indicator of valuation uncertainty and not of asset quality
- The Group classifies financial instruments as Level 3 if an unobservable element impacts the fair value by 5% or more
- The movements in Level 3 assets reflect that the portfolios are not static with significant turnover during the period
- Variety of mitigants to valuation uncertainty:
  - Prudent Valuation capital deductions[3] specific to Level 3 balances of ~€ 0.8bn
  - Uncertain inputs often hedged, e.g. in Level 3 liabilities
  - Exchange of collateral with derivative counterparties

[1] Issuances include cash amounts paid on the primary issuance of a loan to a borrower
[2] Includes other transfers into / out of Level 3, including methodology refinements on opening balance and mark-to-market adjustments
[3] Additional value adjustments deducted from CET1 capital pursuant to Article 34 of Regulation (EU) No. 2019/876 (CRR)

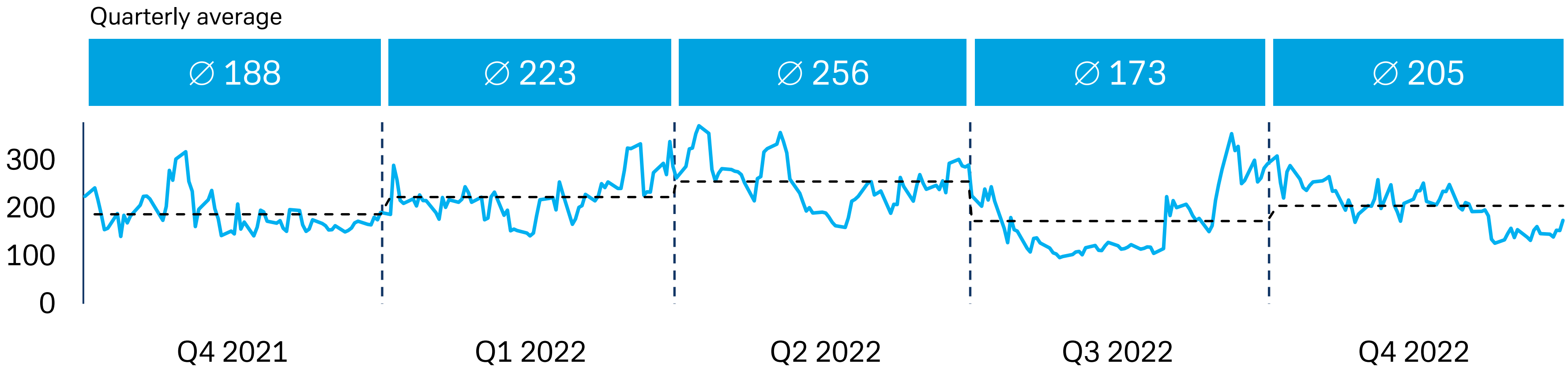
Value-at-Risk/stressed Value-at-Risk (VaR/sVaR)

In € m, unless stated otherwise

VaR, DB Group Trading book, 99%, 1 day



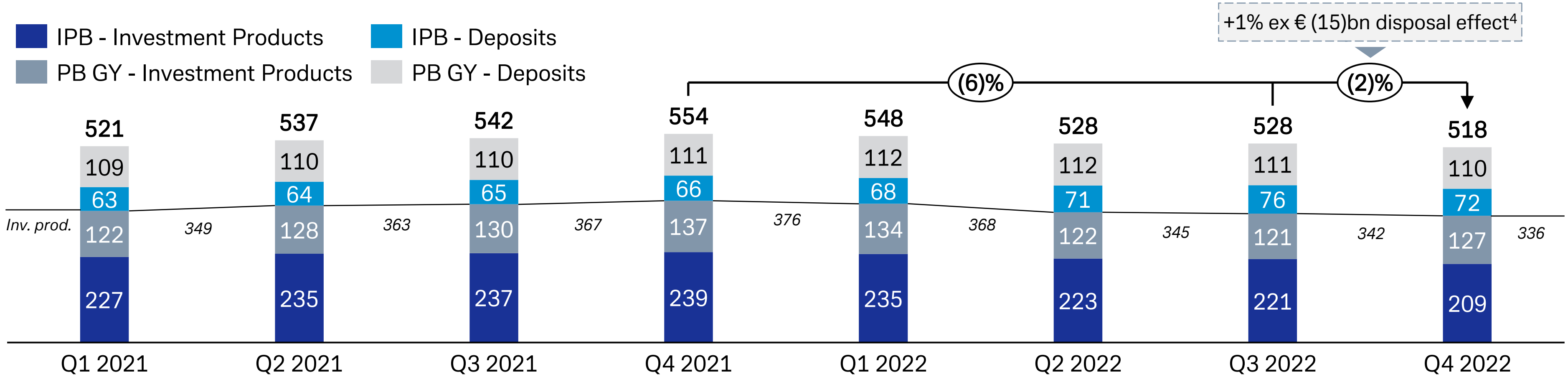
Stressed VaR, DB Group Regulatory scope, 99%, 10 days



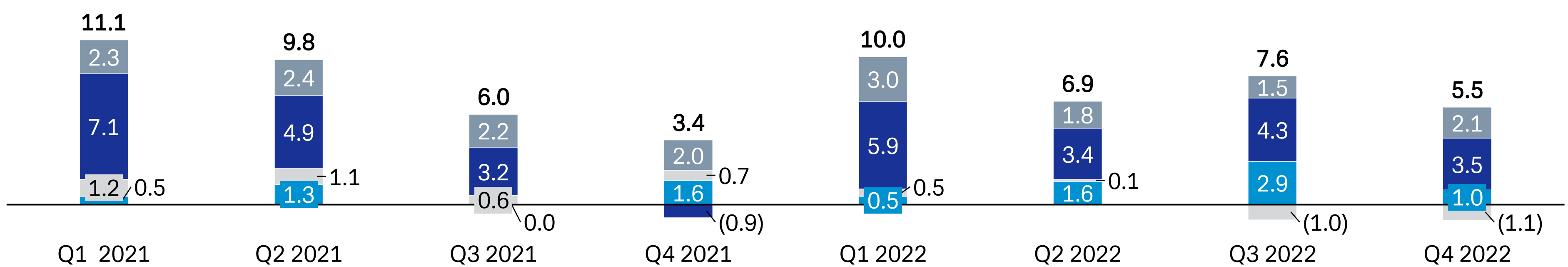
Assets under management (AuM) – Private Bank

In € bn, unless stated otherwise

AuM[1,2] – by business unit and product group



AuM – net flows[3]

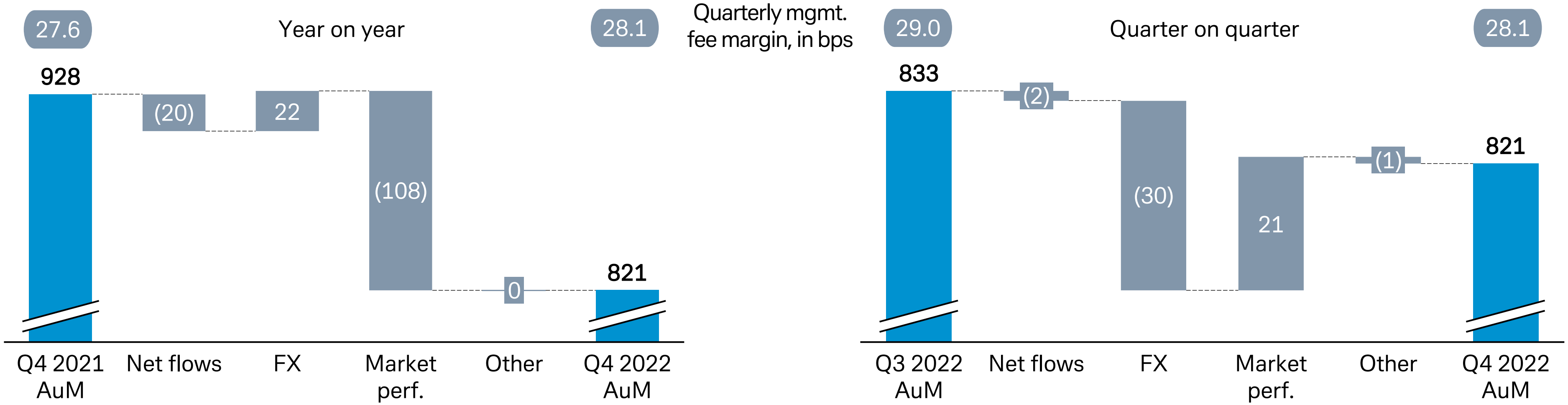


1 Investment Products also include insurances as well as cash positions under discretionary and wealth advisory mandate in IPB Wealth Management
2 Deposits are considered assets under management if they serve investment purposes; in the Private Bank Germany (PB GY) and in International Private Bank (IPB) Premium Banking, this includes term- and savings deposits; in IPB Wealth Management & Bank for Entrepreneurs it is assumed that all customer deposits are held primarily for investment purposes
3 Net flows also include shifts between deposits and investment products
4 Q4 2022 AuM impacted by a € 15bn disposal effect after the sale of the Financial Advisors business in Italy; on a like for like basis, AuM would have increased by 1% versus Q3 2022 and decreased by 4% versus Q4 2021

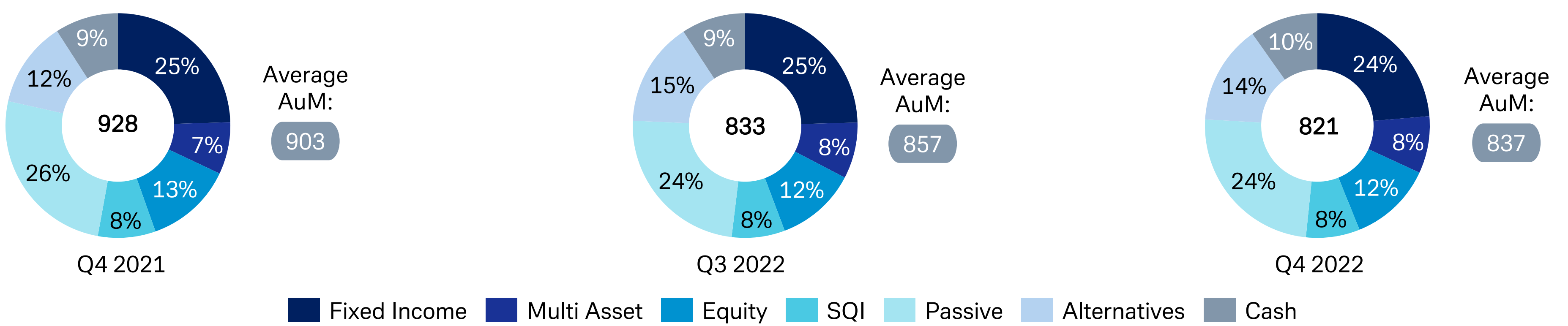
Assets under management (AuM) – Asset Management

In € bn, unless stated otherwise

AuM development



AuM by asset class[1]



1 Average AuM are generally calculated using AuM at the beginning of the period and the end of each calendar month (e.g. 13 reference points for a full year, 4 reference points for a quarter)

Cautionary statements

The figures in this presentation are preliminary and unaudited. Our Annual Report 2022 and SEC Form 20-F are scheduled to be published on March 17, 2023.

Forward-looking statements

This presentation contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of Deutsche Bank. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our revenues and in which we hold a substantial portion of our assets, the development of asset prices and market volatility, potential defaults of borrowers or trading counterparties, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks referenced in our filings with the U.S. Securities and Exchange Commission. Such factors are described in detail in our SEC Form 20-F of 11 March 2022 under the heading "Risk Factors." Copies of this document are readily available upon request or can be downloaded from investor-relations.db.com.

Non-IFRS financial measures

This presentation also contains non-IFRS financial measures. For a reconciliation to directly comparable figures reported under IFRS, to the extent such reconciliation is not provided in this presentation, refer to the Q4 2022 Financial Data Supplement, which is accompanying this presentation and available at investor-relations.db.com.

EU carve out

Results are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board ("IASB") and endorsed by the European Union ("EU"), including application of portfolio fair value hedge accounting for non-maturing deposits and fixed rate mortgages with pre-payment options (the "EU carve-out"). Fair value hedge accounting under the EU carve-out is employed to minimize the accounting exposure to both positive and negative moves in interest rates in each tenor bucket thereby reducing the volatility of reported revenue from Treasury activities. For the three-month period ended December 31, 2022, application of the EU carve-out had a positive impact of € 304 million on profit before taxes and of € 227 million on profit. For the same time period in 2021, the application of the EU carve-out had a positive impact of € 148 million on profit before taxes and of € 102 million on profit. For the full-year 2022, application of the EU carve out had a positive impact of € 147 million on profit before taxes and of € 105 million on profit. For the same time period in 2021, the application of the EU carve out had a negative impact of € 128 million on profit before taxes and of € 85 million on profit. The Group's regulatory capital and ratios thereof are also reported on the basis of the EU carve-out version of IAS 39. For the full-year 2022, application of the EU carve-out had a positive impact on the CET1 capital ratio of about 3 basis points and a negative impact of about 2 basis points for the same time period in 2021. In any given period, the net effect of the EU carve-out can be positive or negative, depending on the fair market value changes in the positions being hedged and the hedging instruments.

ESG Classification

We defined our sustainable financing and investment activities in the "Sustainable Financing Framework – Deutsche Bank Group" which is available at investor-relations.db.com. Given the cumulative definition of our target, in cases where validation against the Framework cannot be completed before the end of the reporting quarter, volumes are disclosed upon completion of the validation in subsequent quarters.

In Asset Management DWS introduced its ESG Product Classification Framework ("ESG Framework") in 2021 taking into account relevant legislation (including Regulation (EU) 2019/2088 – SFDR), market standards and internal developments. The ESG Framework is further described in the Annual report 2021 of DWS under the heading "Our Product Suite – Key Highlights / ESG Product Classification Framework" which is available at group.dws.com/ir/reports-and-events/annual-report/. There is no change in the ESG Framework in Q4 2022. DWS will continue to develop and refine its ESG Framework in accordance with evolving regulation and market practice.