



Investor Deep Dive

Stuart Lewis
Chief Risk Officer

10 December 2019

Deutsche Bank

Summary



➤ Significantly reduced and transformed balance sheet

➤ Strengthened risk control environment and enhanced capabilities through investments

➤ Maintaining conservative risk profile with high underwriting standards and controlled risk appetite

Strengthened key balance sheet and risk metrics



	2007	2015	9M 2019
Common Equity Tier 1 capital ratio ⁽¹⁾	8.6% ⁽²⁾	11.1%	13.4%
Provision for credit losses as % of loans	31bps	22bps	15bps
Average Value-at-Risk ⁽³⁾	€ 86m	€ 43m	€ 30m
Most Stable Funding ⁽⁴⁾	30%	74%	80%
Liquidity Reserves	€ 65bn	€ 215bn	€ 243bn

(1) Fully loaded

(2) 2007 ratio includes hybrid instruments as definition of CET1 ratio did not exist under the previous Basel regime

(3) Trading Book VAR @ 99% / 1 day

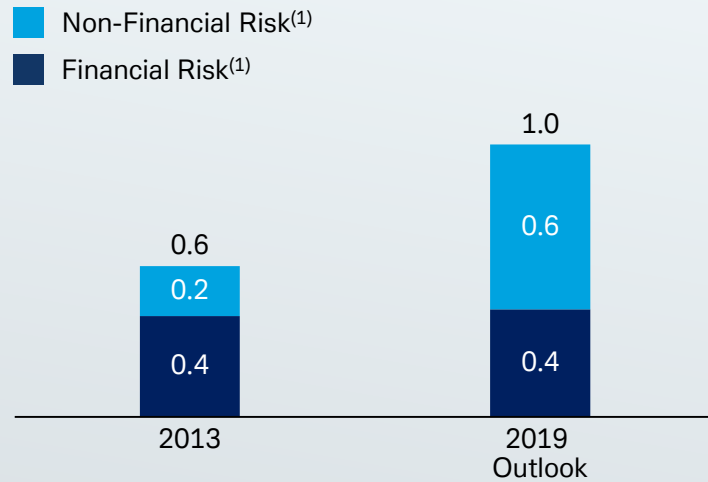
(4) Most stable funding as a proportion of the total external funding profile. Most stable funding is defined as funds from Capital Markets & Equity, Private Bank and Corporate Bank

Further strengthening our control environment

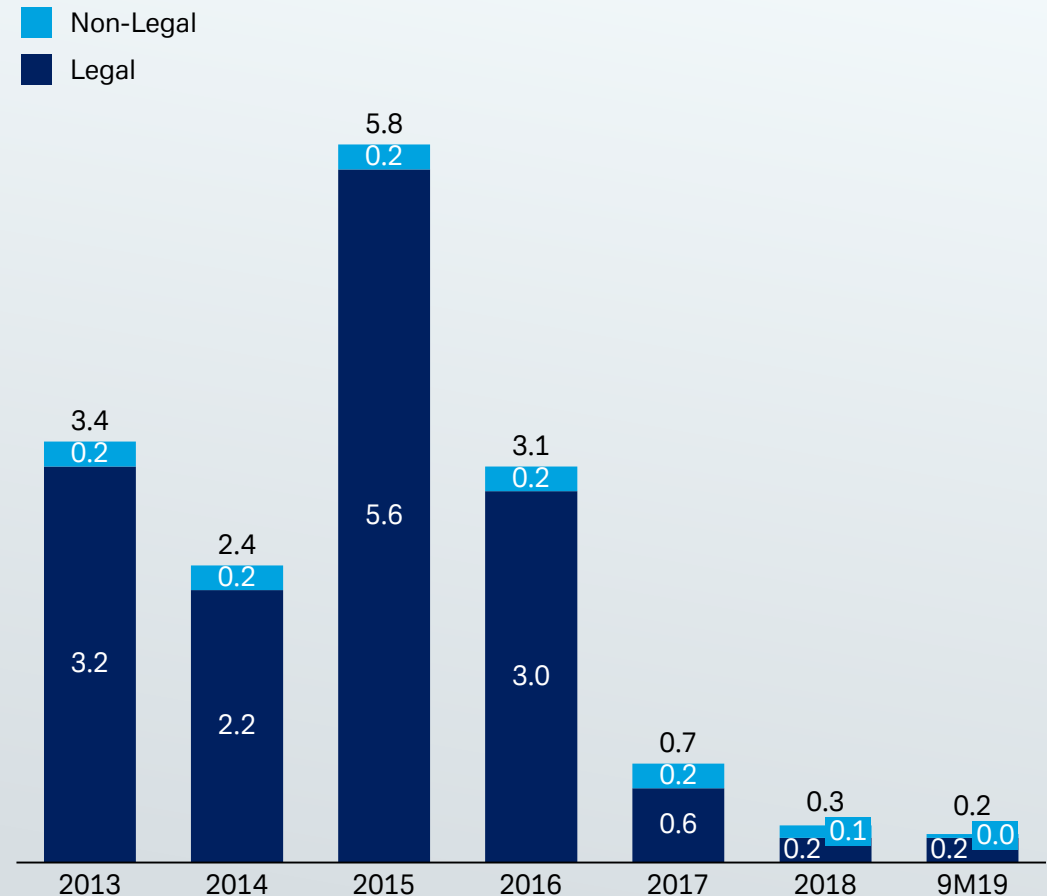
In € bn, unless otherwise stated



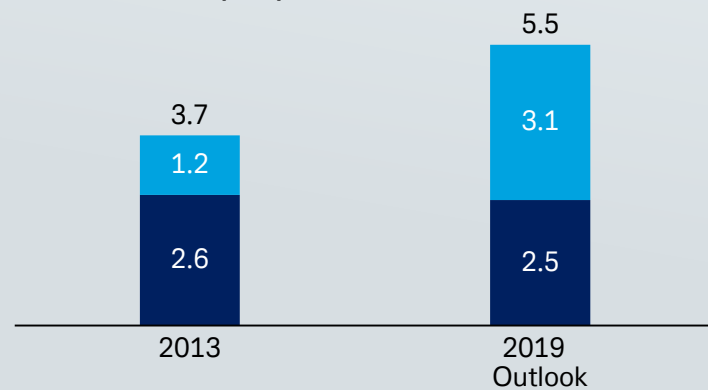
Adjusted costs



Operational risk losses⁽²⁾



Full time employees⁽¹⁾, in 000s



Note: Totals may not sum due to rounding differences

(1) Includes the following areas within the Risk division: Non-Financial Risk: Compliance, Anti-Financial Crime, Non-Financial Risk Management and Model Risk; Financial Risk: Credit Risk, Market & Valuation Risk, Enterprise Risk, Liquidity Risk; Full time employees are internal

(2) Legal includes losses and provisions arising from civil litigation and regulatory enforcement matters

Increasing technology investments



~€ 900m investments in Technology across Risk, Anti Financial Crime and Compliance in 2017 – 2019

Aggregate investments in Risk, Anti Financial Crime & Compliance Technology to increase further in 2020



Anti-Financial Crime

Daily name list screening of all our clients against sanctioned entities, politically exposed persons and our internal criteria

Compliance

We now monitor over **1 million communications on a daily basis** across email, chats and voice communications **across 12 languages**

Credit Risk

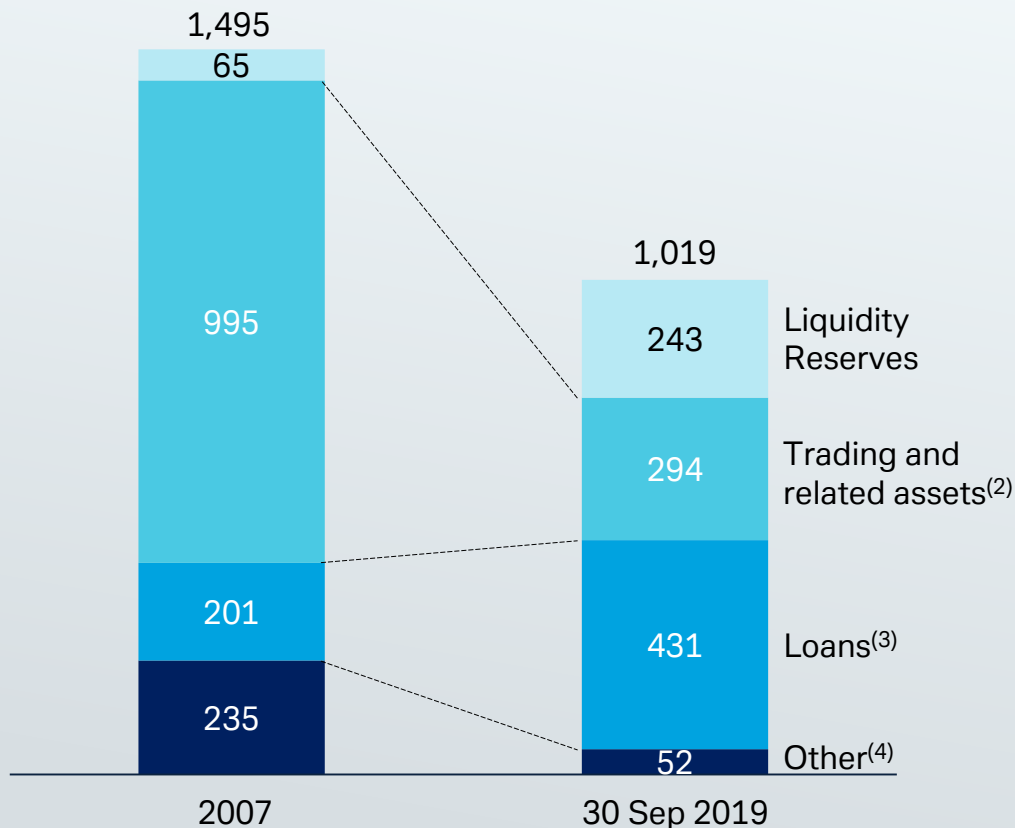
Implemented new **Global Credit Rating System**, improving data timeliness and monitoring capabilities, **~4,200 counterparties have been migrated** onto GCRS

Market Risk

Historical Simulation Risk Management launched, improving accuracy, granularity, control and risk management through **~15bn trade revaluations daily**

Significantly reduced and transformed balance sheet

After netting⁽¹⁾, in € bn



✓ Around a quarter of net balance sheet held in Liquidity Reserves

✓ Trading assets significantly reduced to less than 30% of net balance sheet

✓ Derivative book benefits from netting/ collateral and strong stress testing capabilities

✓ Strong loan book quality with ~90% Investment Grade

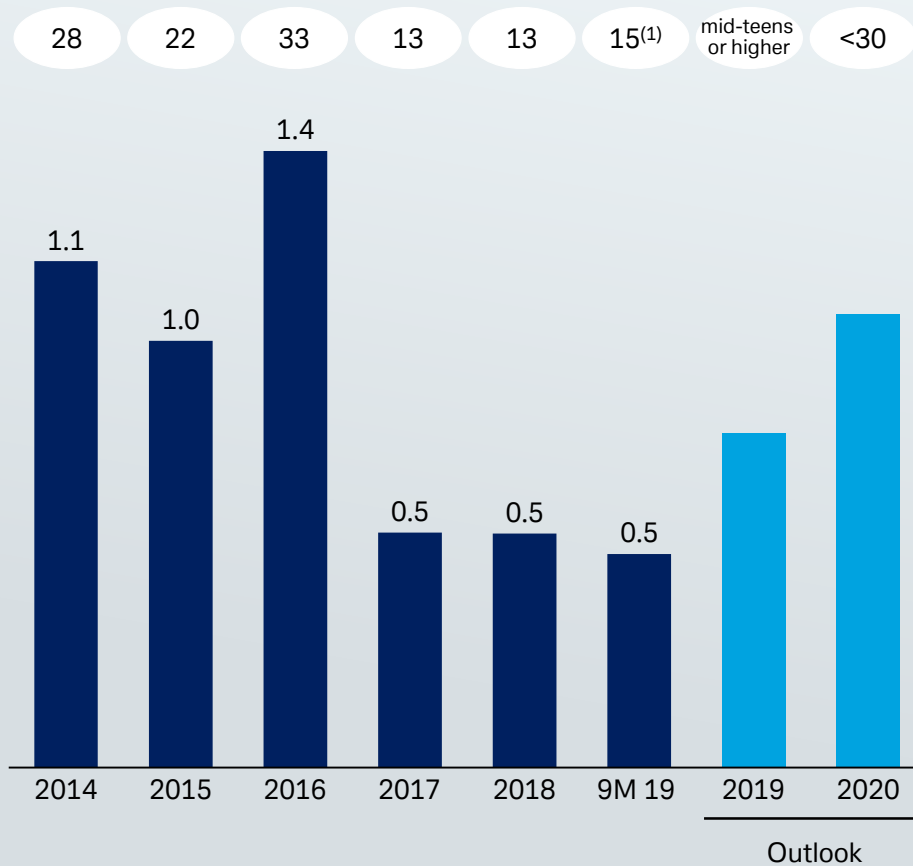
- (1) Net balance sheet of € 1,019bn is defined as IFRS balance sheet (€ 1,501bn) adjusted to reflect the funding required after recognizing (i) legal netting agreements (€ 355bn), cash collateral received (€ 53bn) and paid (€ 41bn) and offsetting pending settlement balances (€ 34bn)
- (2) Trading and related assets includes debt and equity securities (excluding highly liquid securities), derivatives, repos, securities borrowed and lent, brokerage receivables and payables, loans measured at fair value
- (3) Loans at amortized cost, gross of allowances
- (4) Other assets include goodwill and other intangible, property and equipment, tax assets, cash and equivalents which are not part of liquidity reserve, and other receivables

Managing Credit Risk: high credit quality

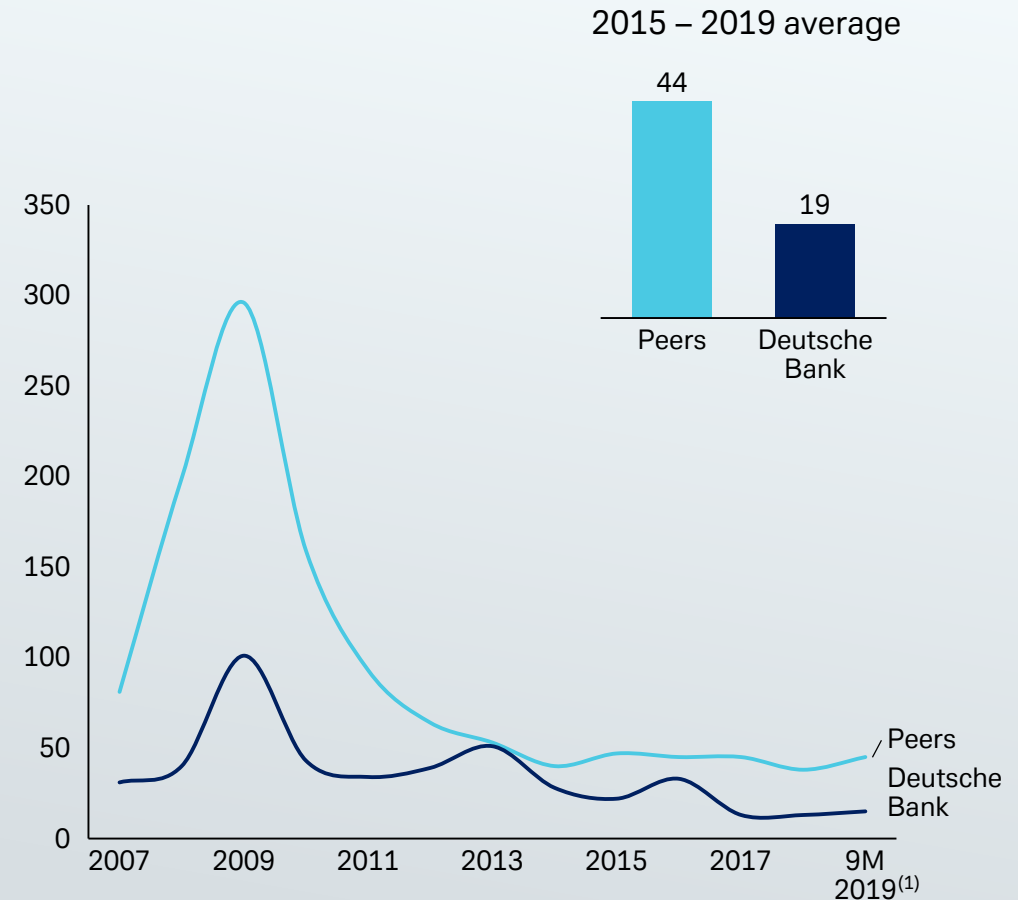


Net Credit Loss Provisions, in € bn

Net CLP, in bps⁽¹⁾



Net Credit Loss Provision peer⁽²⁾ comparison, in bps



(1) 2019 year-to-date net provision for credit losses annualized as % of loans at amortized cost

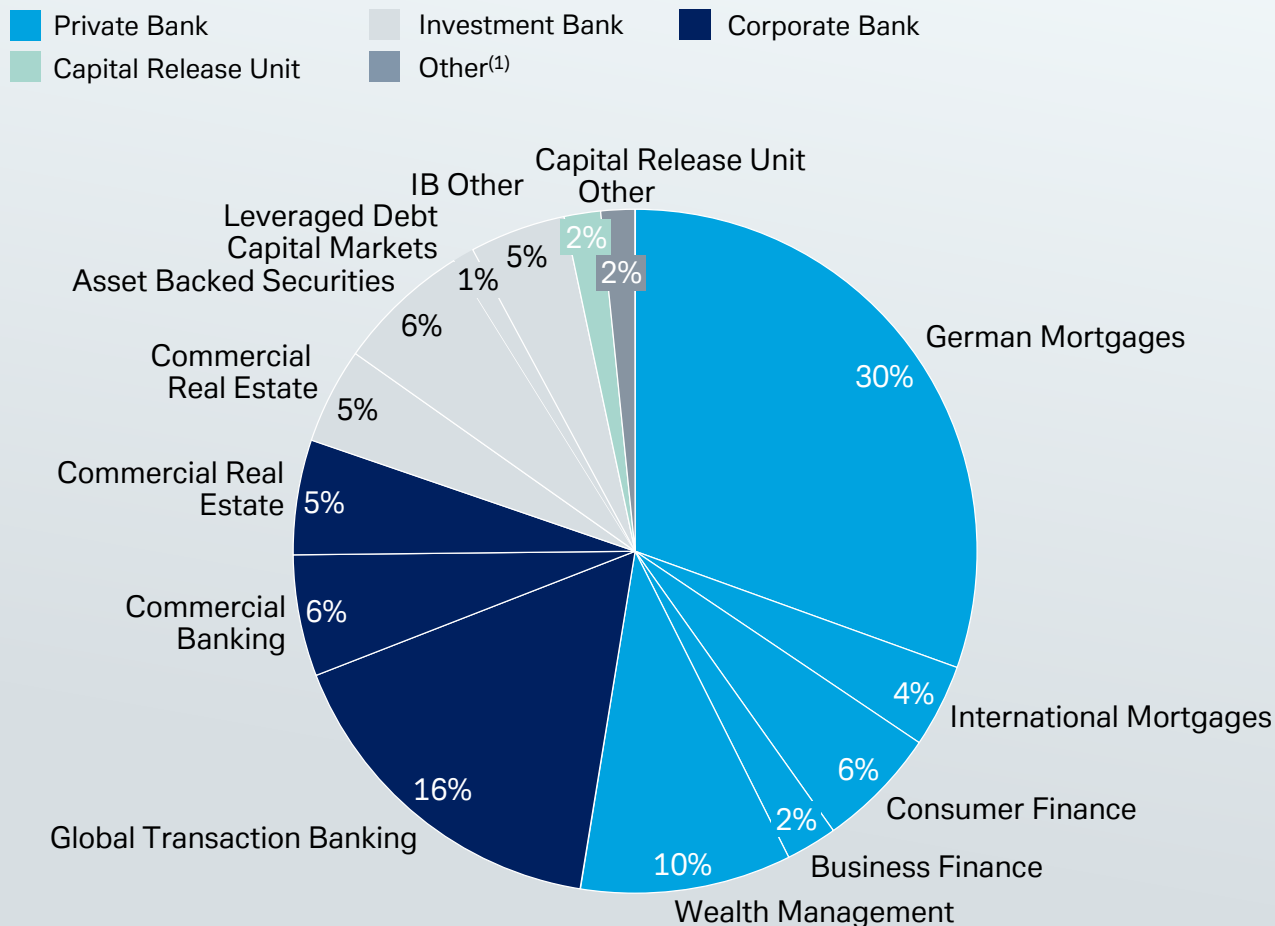
(2) Peers: Citigroup, Bank of America, JPMorgan, Barclays, BNP Paribas, UBS, Credit Suisse; Source: Company reports

A low risk, well diversified loan portfolio

IFRS loans at amortized cost, 30 September 2019



~90% of our Loan Book is Investment Grade



Largest three portfolios

German Mortgages

- Average loan to value: 75%
- 90+ Days past Due: 0.2%
- Average 5 year CLPs⁽²⁾: 0bps

Wealth Management

- ~98% collateralized loans
- Median rating: iA+
- Average 5 year CLPs⁽²⁾: 3bps

Global Transaction Banking

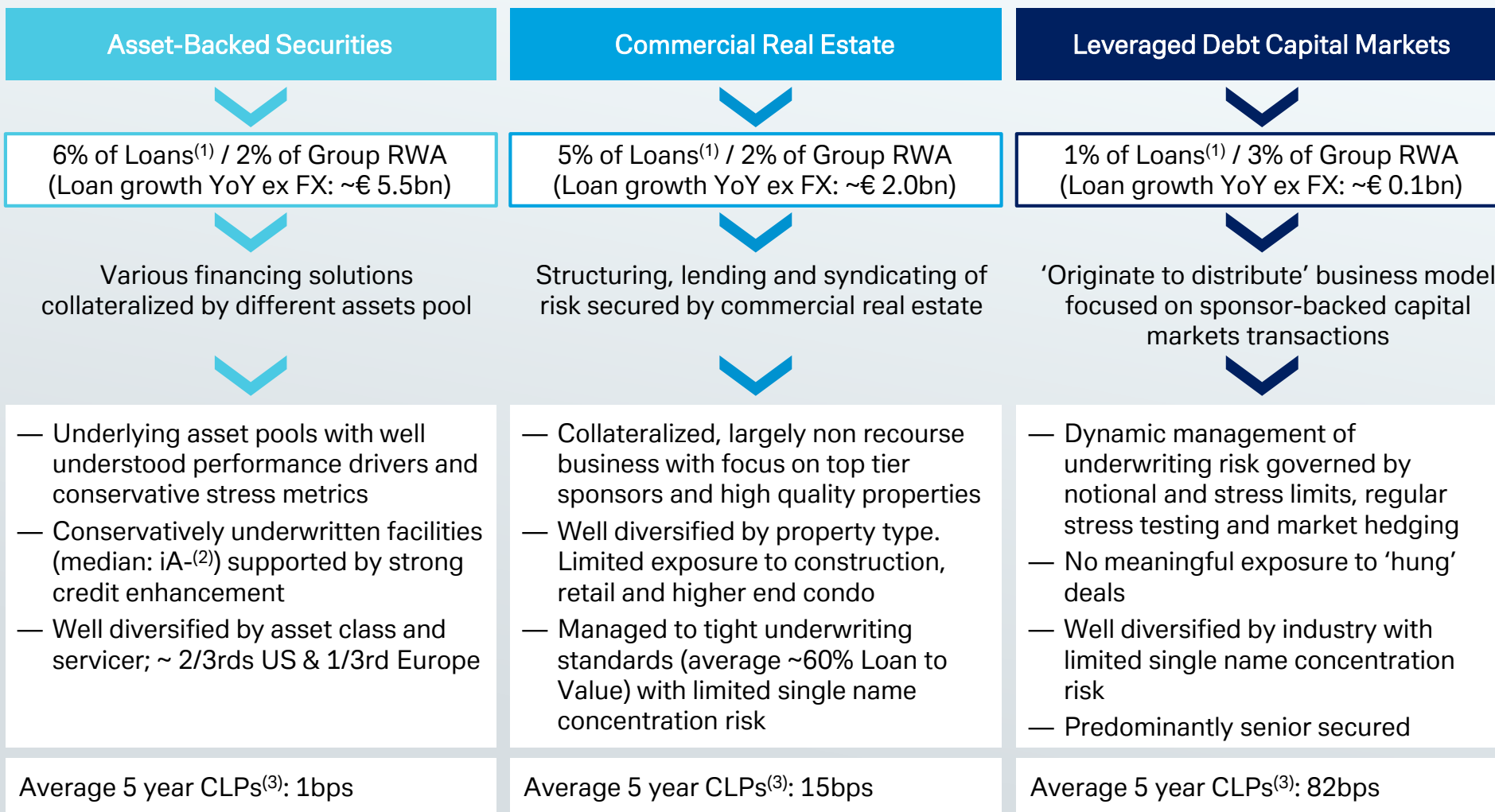
- Share of portfolio short-term (<1yr): ~50%
- Share of portfolio secured: ~50%
- Average 5 year CLPs⁽²⁾: 14bps

Note: Loan amounts are gross of allowances

(1) Mainly relates to Corporate & Other

(2) Average net provision for credit losses annualized as % of loans at amortized cost (2015 – YTD Sep 19)

Deep Dive: Investment banking portfolios



(1) Loans at amortized cost; numbers do not include off balance sheet commitments

(2) Based on Deutsche Bank internal rating assessment

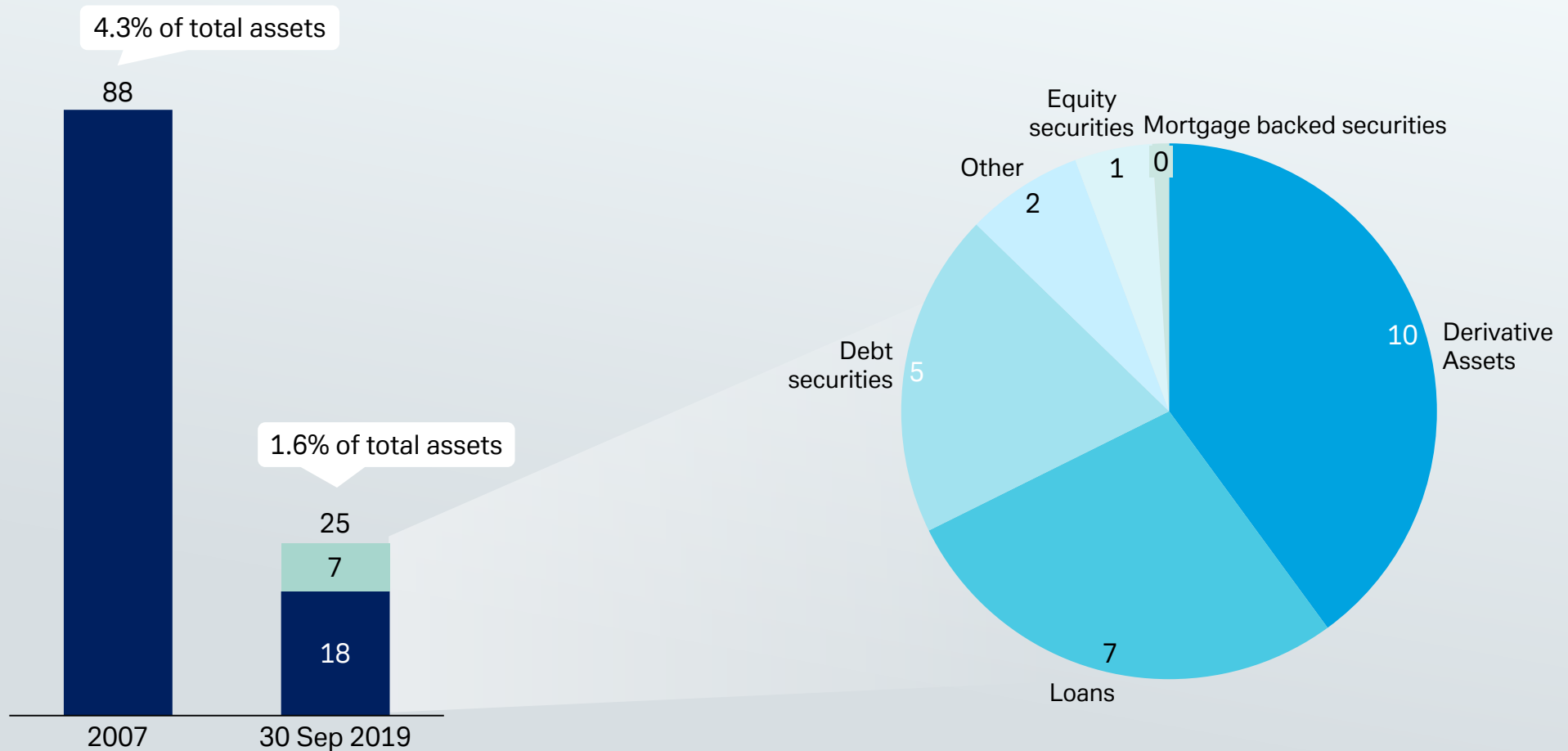
(3) Average net provision for credit losses annualized as % of loans at amortized cost (2015 – YTD Sep 19)

Level 3 assets: A small, but natural part of our business



In € bn

■ Core Bank ■ Capital Release Unit



Comprehensive stress testing to proactively manage downside risk



Comprehensive stress testing framework in place

Group wide stress test
Frequency: Quarterly / Ad-Hoc

Severe Market Correction / Delta Net Interest Income
Frequency: Weekly / Monthly

Liquidity stress testing
Frequency: Daily

Regulatory stress tests (EBA, CCAR)
Frequency: Varied

Key known and emerging risks

(US – China) Trade War

Crash Brexit

Lower-for-longer interest rates

Other geopolitical events (Hong Kong, Middle East)

Mitigating actions



Reviewed cyclical portfolios with selective de-risking



Weekly stress test for Brexit; portfolios defensively positioned



Net Interest Income mitigation measures in place



Hong Kong real estate review evidenced limited impact

Key take-aways



➤ Balance sheet and risk profile to remain robust through transformation period

➤ Improvements in controls and investments in non-financial risk function to reduce risk profile

➤ Maintain conservative underwriting standards and controlled risk appetite to support Group returns

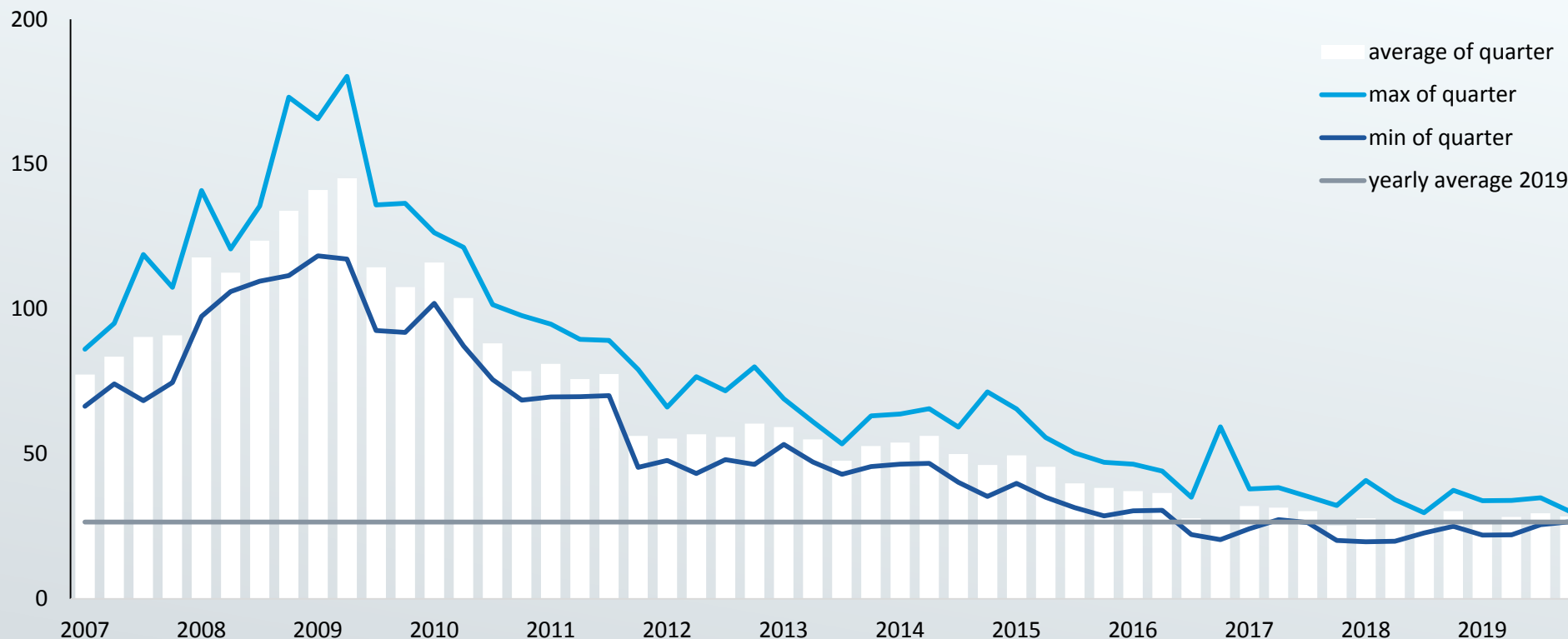


Appendix



Managing Market Risk: Trading book Value at Risk

DB Group, 99%, 1 day, in € m, unless otherwise stated



Trading VaR during 2019 ranged between € 22m and € 35m, similar to 2018 print ranging between € 20m and € 41m

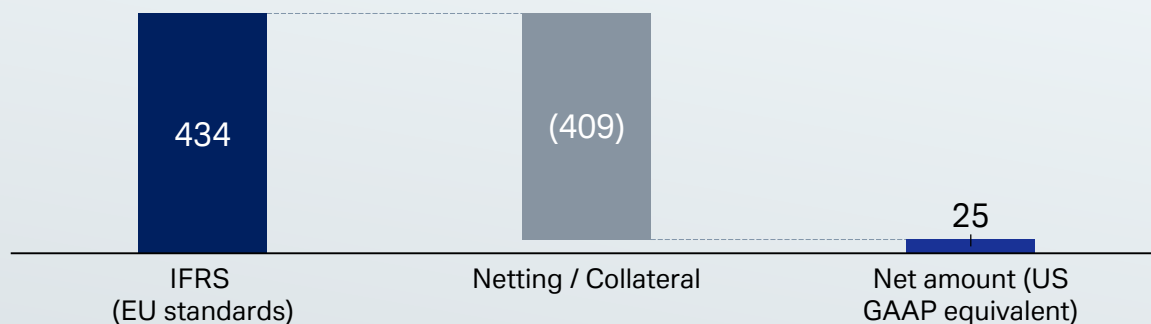
— Q3 2019 average VaR at € 30m

— Historical Simulation Risk Management launched, moving to a full revaluation based model fundamentally improving DB's risk management capability

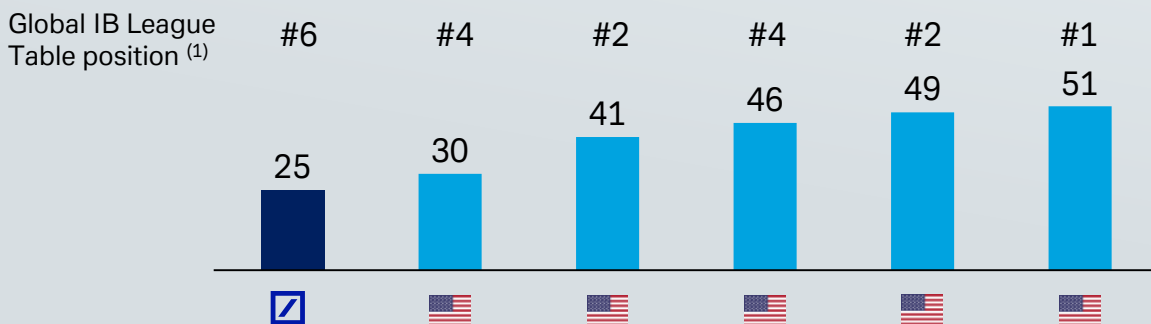
Economic risk from derivatives exposure significantly smaller than headline number



EU accounting standards inflate disclosed derivative assets, Q3 2019, in € bn



Net derivative assets are a function of market share, Q3 2019, in € bn



Commentary

- Unlike US GAAP, IFRS accounting does not allow for all Master Netting Agreements⁽²⁾ to reduce derivative assets shown on the balance sheet
- On a US GAAP equivalent basis, derivative assets represent ~2% of total assets, of which
 - 80% to Investment Grade counterparties
 - 67% relates to interest-rate products, 27% related to currency, 5% related to Equity/index.
- Derivative assets consistent with global Investment Banking market share

(1) Source: Coalition Global Investment Bank League Table FY 2018

(2) Master Netting Agreements allow counterparties with multiple derivative contracts to settle through a single payment

Speaker biography



Stuart Wilson Lewis became a member of our Management Board on June 1, 2012 and is our Chief Risk Officer. On July 7, 2019 he assumed responsibility for Compliance, Anti-Financial Crime and the Business Selection and Conflicts Office.

He joined Deutsche Bank in 1996. Prior to assuming his current role, Stuart Lewis was the Deputy Chief Risk Officer and Chief Risk Officer of the Corporate & Investment Bank from 2010 to 2012. Between 2006 and 2010 he was Chief Credit Officer. Before joining Deutsche Bank in 1996, he worked at Credit Suisse and Continental Illinois National Bank in London.

Stuart Lewis studied at the University of Dundee, where he obtained an LLB (Hons), and he holds an LLM from the London School of Economics. He also attended the College of Law, Guildford.

Cautionary statements



Non-IFRS Financial Measures

This document contains non-IFRS financial measures. For a reconciliation to directly comparable figures under IFRS, to the extent not provided herein, please refer to the Financial Data Supplement which can be downloaded from www.db.com/ir.

Forward-Looking Statements

This document 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 22 March 2019 under the heading “Risk Factors”. Copies of this document are readily available upon request or can be downloaded from www.db.com/ir.