

# Investor Deep Dive

## Stuart Lewis Chief Risk Officer

9 December 2020

Deutsche Bank



Active and disciplined risk management framework provides the foundation for managing through stress

Resilient loan portfolios reflecting conservative underwriting framework

Market and liquidity risks actively managed and tightly controlled

Continue to invest in systems and processes to enhance control environment capabilities with focus on Anti-Financial Crime

Low risk and conservatively managed balance sheet



	Q4 2019	Q3 2020
Common Equity Tier 1 capital ratio	13.6%	13.3%
Provision for credit losses as % of loans <sup>(1)</sup>	17bps	47bps
Average Value-at-Risk <sup>(2)</sup>	€25m	€ 42m
Most Stable Funding <sup>(3)</sup>	83%	81%
Liquidity Reserves	€ 222bn	€ 253bn

(1) Year-to-date provision for credit losses annualized as % of loans at amortized cost (€ 433bn as of 30 September 2020)

(2) Trading Book Value-at-Risk at 99% confidence level and a 1 day holding period.

(3) Defined as funds from Capital Markets & Equity, Private Bank and Corporate Bank as a proportion of the total external funding. 85% including TLTRO

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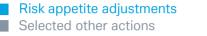


### Active and conservative risk framework provides the basis for managing through stress

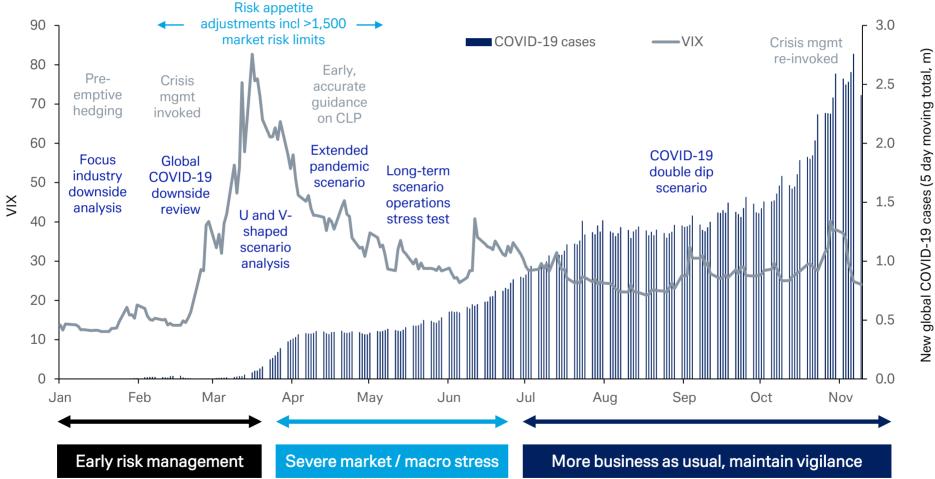
<ul> <li>Group risk appetite calibrated to earnings capacity, capital adequacy, operational stability and culture. Appetite cascaded down to businesses</li> <li>&gt;400k credit and market risk limits across country, industry, asset class and clients</li> <li>Strictly controlled risk appetite for top group non-financial risks (NFR)</li> </ul>
<ul> <li>Credit and market risk: Dynamic monitoring and management of risk limits</li> <li>Liquidity risk: Daily monitoring across key currencies, entities, businesses, products</li> <li>AFC<sup>(1)</sup> / Compliance: Daily monitoring ~3m transactions and &gt;1m communications</li> </ul>
<ul> <li>Comprehensive and dynamic credit and market risk hedging frameworks</li> <li>€ 44bn CLO &amp; CDS hedges on 1.7k names; 4 of 5 largest 2020 CLPs hedged</li> <li>Market risk hedges provided effective mitigation to select portfolios</li> </ul>
<ul> <li>Regular stress tests across range of scenarios &amp; severities</li> <li>NFR scenario analysis used to test emerging risks and support control assessments</li> </ul>
<ul> <li>Well-established crisis management procedures</li> <li>Comprehensive NFR and control assessments</li> <li>Regular staff training on risk culture, conduct, integrity</li> </ul>

(1) Anti-Financial Crime

### Proactive crisis management through COVID-19







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## Investments have further strengthened our foundations

~€ 1.2bn investments in technology across Risk, Anti Financial Crime and Compliance in 2017 – 2020

$\checkmark$	$\checkmark$	$\checkmark$	$\mathbf{\vee}$	$\checkmark$
Credit Risk	Market Risk	Liquidity Risk	AFC / Compliance	Climate / ESG
<ul> <li>Introduced advanced risk monitoring analytics</li> <li>New system with integrated workflow</li> <li>More granular and better integrated data supports portfolio management capabilities</li> </ul>	<ul> <li>Full revaluation VaR introduced from Q4 2020</li> <li>30bn valuations and 12 terabytes of data analysed daily</li> <li>Front to back alignment, strengthening controls</li> </ul>	<ul> <li>New front-to-back architecture</li> <li>Enhanced stress test methodologies</li> <li>Position level funds transfer pricing to optimize allocation decisions</li> <li>Daily T+1 liquidity risk and regulatory reporting</li> </ul>	<ul> <li>Improved control environment e.g. enhanced name list screening, upgraded client rating methodology, automated investigation process</li> <li>Advanced machine learning capabilities to help identify fraud attempts</li> </ul>	<ul> <li>Scenario analysis, climate taxonomy, carbon intensity and emissions analysis under development</li> <li>Participation in UNEP FI, EBA Pilot Sensitivity Exercise</li> <li>Tightened ESG standards in place (i.e. arctic and oil sands projects)</li> </ul>

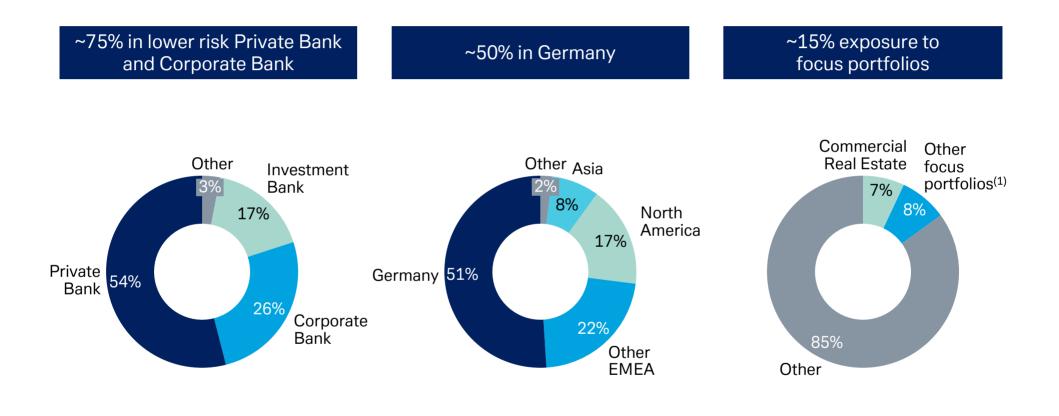


Pace of technology and control improvements being maintained into 2021

## Conservative loan portfolio

Loans at amortized cost gross of allowances for loan losses (€ 433bn as of 30 Sep 2020)

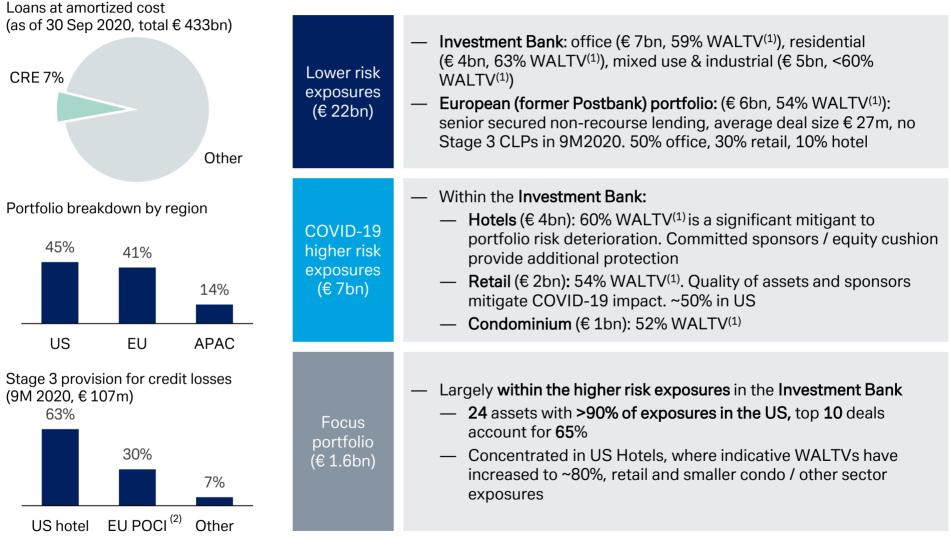




# CRE: high quality portfolio, challenging conditions



Commercial Real Estate portfolio



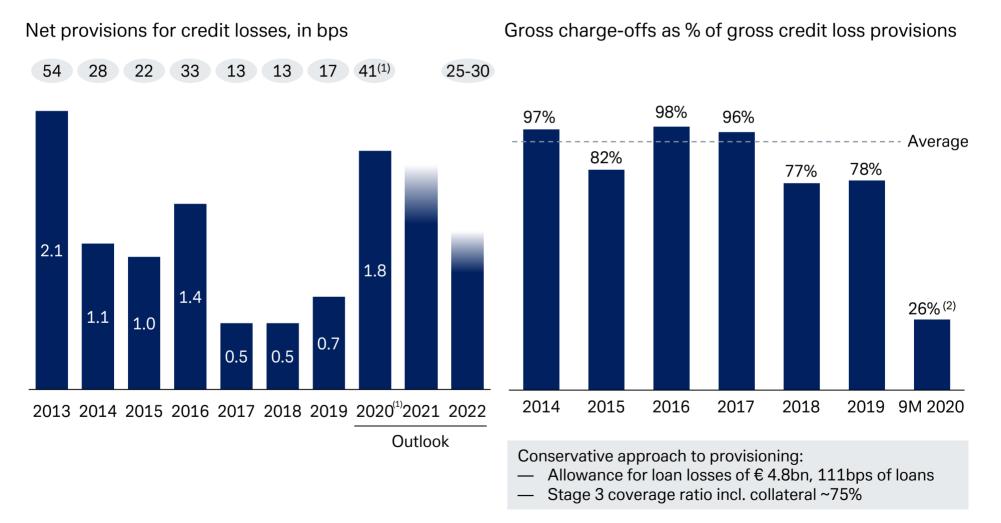
Weighted average loan to value (WALTV) based on pre COVID-19 valuations. Current indicative market value updates suggest higher LTVs
 Purchased or Originated Credit Impaired

## Other focus portfolios: continue to perform resiliently



Loans at amortized cost (as of 30 Sep 2020, total € 433 bn) Values impacted by severe stress on lessors, airlines & financiers Largely secured by core aircraft. Well positioned for reduction of **Aviation** fleets and faster recovery versus other aviation (€ 3bn) Aviation <1% 83% of loans performing LDCM ~1% Commitments reduced by 18% since February 2020 Consumer Finance 6% Other High Yield bond & loan market conditions remain supportive Stage 3 provision for credit losses (9M 2020, in € m) Activity moved from waivers and amendments to primary issuance **I DCM** Diversified: largest sectors Industrials (43%), Consumer (14%) 305 (€ 5bn) ~20% asset based lending with low loss history, remainder first lien 166 59 senior secured mainly revolving credit facilities LDCM Aviation Consumer Finance **Consumer Finance delinguency ratios** Primarily unsecured loans to private households, credit cards <10% 90dpd+ Exposure concentrated in Germany (€ 15bn) and Italy (€ 7bn) Consumer 1.3% 1.4% <sup>1.5%</sup> 1.4% Finance Currently 27k Private Bank clients (€ 0.4bn) under moratoria, down 1.2% (€ 24bn) from 62k (€ 1.2bn) in June 2020 - >90% of clients previously in moratoria have resumed payments Q4 18 Q4 19 Q1 20 Q2 20 Q3 20 Q4 20

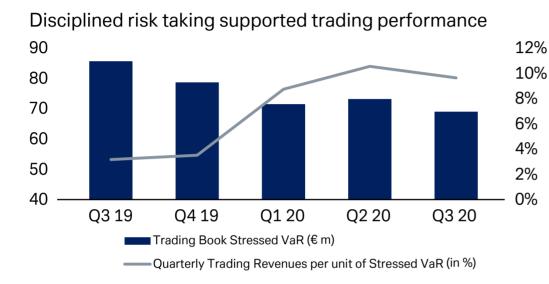




(1) Calculated based on expected loan balances at year-end

(2) 9M 2020 figure reflects timing differences between charge-offs realized and booking of provisions for credit losses

# Market and liquidity risk actively managed in the crisis



#### Sufficient capacity to manage liquidity drawdowns



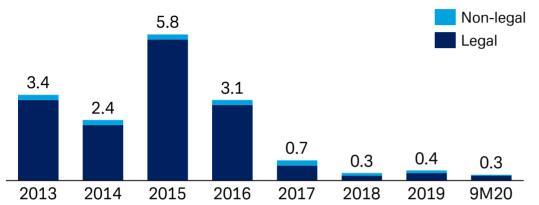
- Lower market risk stress loss utilisation driven by derisking and pre-emptive hedging going into COVID-19 crisis
- Proactive market risk hedges provided effective mitigation to select portfolios
- Additional stress testing throughout the crisis with risk appetite dynamically reviewed across 16k limits
  - Effective NII risk management framework reduced downside of lower interest rates while maintaining upside earnings generation

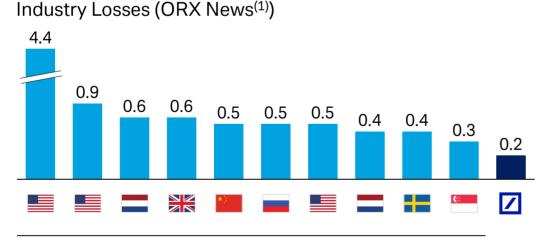
- Liquidity impact from drawdowns of committed facilities well managed in H1 2020, supported by conservative positioning going into the COVID-19 crisis
  - Liquidity coverage ratio and reserves now above pre-crisis levels supported by committed facility repayments and deposit growth

### Non-financial risk 9M 2020, in € bn



Internal Losses





Top 10 banks

- COVID-19 stretched the control environment for non-standard, manual process management during a period of significant market volatility
- Supported by improved control environment, no material operational events directly attributable to COVID-19 observed
- 9M 2020 losses in line with previous years despite COVID-19 challenges and well below top 10 banks
- AFC control environment strengthened with upgraded client risk rating methodology and machine learning capabilities
- Further progress targeted in 2021 under front-to-back AFC strategic transformation program

(1) Based on public data available in the ORX News database and may differ from the losses reported by banks. ORX News is an industry-leading provider of publicly-reported operational risk loss events

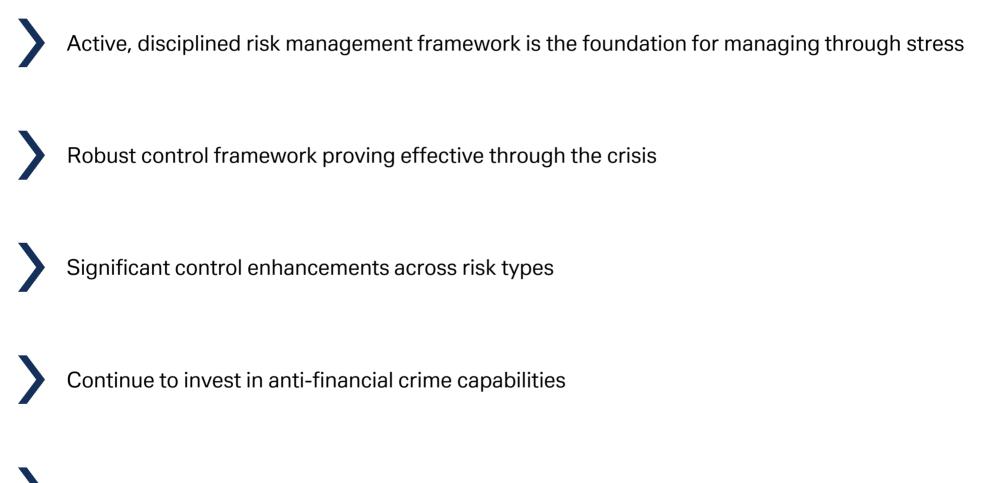
Risk outlook: challenging, but we are well prepared



Credit outlook	<ul> <li>Defaults to remain elevated versus pre COVID-19 levels as Government support measures are scaled back even if a vaccine is widely rolled out</li> <li>Focus sectors likely to be impacted by COVID-19 driven structural changes</li> </ul>
Financial markets	<ul> <li>Lower for longer interest rates increases clients' need to preserve wealth, increasing leverage and valuations</li> <li>Risk of further bouts of volatility and tightening of financial conditions</li> </ul>
Geopolitical / country risks	<ul> <li>US relations with Russia / China; Hong Kong protests; Middle East tensions</li> <li>Near-term risks: Brexit; Political transition in the US</li> </ul>
COVID-19 as a catalyst for structural changes	<ul> <li>Digitalisation: Acceleration raises risks for sectors reliant on physical sales</li> <li>Supply chains: Glocalization may impact regional trade flows, Emerging Markets potentially impacted by re-shoring of production</li> <li>Sustainability: Accelerated shift from fossil fuels</li> </ul>
Non-financial risks	<ul> <li>Higher market volatility, client stress and split operations / working from home increase inherent risks in areas including information security, fraud, transaction processing, conduct</li> </ul>







Capital and liquidity buffers sufficient to withstand unexpected downside events

Deutsche Bank



THURSDAY

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# Appendix

## Speaker biography – Stuart Lewis





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 reported under IFRS, to the extent such reconciliation not provided herein, please refer to the Financial Data Supplement which can be downloaded from <u>www.db.com/ir</u>.

#### 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 20 March 2020 under the heading "Risk Factors." Copies of this document are readily available upon request or can be downloaded from <u>www.db.com/ir</u>.