UBS Public

2020 Dodd-Frank Act Annual Stress Test (DFAST)

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Cautionary statement

This 2020 Dodd-Frank Act Stress Test Disclosure presents stress test results conducted by UBS Americas Holding LLC ("AH" or "Americas Holding") in accordance with the regulation, issued by the Board of Governors of the Federal Reserve System (the "Federal Reserve"), which implements the Dodd-Frank Act Stress Testing ("DFAST") requirements for covered companies. The results summarized in this presentation contain forward-looking projections prepared by Americas Holding, based on the hypothetical, severely adverse economic scenario prescribed by the Federal Reserve and summarized in this presentation. The estimates also reflect certain required assumptions regarding Americas Holding's capital actions. The quantitative outputs and qualitative discussion herein should not be viewed as forecasts of expected pre-provision net revenue ("PPNR"), income, capital, risk-weighted assets ("RWAs"), capital or leverage ratio outcomes as a measure of the solvency or actual financial performance or condition of Americas Holding. Instead, the outputs and discussions are estimates from forward-looking exercises that consider possible outcomes based on hypothetical, highly adverse economic scenarios and therefore are more adverse than expected results.

The outputs of the analyses and the discussion contained herein may not align with those produced by the Federal Reserve Board or other financial institutions conducting similar exercises, even if similar hypothetical stress scenarios were used, due to differences in business mix.

Requirements for Annual Dodd-Frank Act Stress Test

- The stress testing regulation of the Board of Governors of the Federal Reserve System ("Federal Reserve") requires firms subject to the annual stress testing requirement to disclose the results of their company-run stress tests, under the Federal Reserve's Supervisory Severely Adverse Stress Test scenario, within 15 days of the date the Federal Reserve discloses their DFAST results[1].
- Covered companies must disclose capital and leverage ratios projected by the company under the Federal Reserve's Supervisory Severely Adverse Stress Test scenario, which describes the hypothetical evolution of certain specific macroeconomic and market variables consistent with a severely adverse recession. The principal assumptions in the 2020 Supervisory Severely Adverse Stress Test scenario are described on page 5.
- The planning horizon begins with UBS Americas Holding LLC's ("AH LLC") actual position as of December 31st, 2019 and includes a nine quarter forecast beginning with the first quarter of 2020 and ending with the first quarter of 2022.
- AH LLC is required to assume the following capital actions (the "Company-run Stress Test Capital Actions") to estimate its projected capital level and ratios over the nine quarter forecast horizon[2]:
  - Actual capital actions completed for the first quarter of the planning horizon.
  - Payment of common dividends equal to the quarterly average dollar amount of common stock dividends paid over the past four quarters.
  - Payments on any other instrument eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest or principal due on such instrument.
  - No redemption or repurchase of any capital instrument eligible for inclusion in the numerator of a regulatory capital ratio; and
  - No issuances of common stock or preferred stock, except for issuances related to expensed employee compensation or in connection with a planned merger or acquisition.
- The results of AH LLC's stress test, under the Federal Reserve's Severely Adverse Stress Test scenario assuming the Company-run Stress Test Capital Actions enumerated above, are presented on pages 6 through 10.

[1] Comprehensive Capital Analysis and Review 2020 Summary Instructions, March 2020.

[2] See 12 CFR 252.56(b).

Requirements for Annual Dodd-Frank Act Stress Test

- In addition to the six BHCs and as one of five IHCs with significant trading activity, AH LLC is subject to the global market shock component in the Federal Reserve's Supervisory Severely Adverse Stress Test scenario[1].
  - For the company-run stress projections under the Federal Reserve's Stress Test scenario, AH LLC must estimate trading and counterparty losses in the Supervisory Severely Adverse Stress Test scenario using a company-run market risk shock that is applied to the Firm's exposures as of October 18th, 2019 pursuant to the Federal Reserve's 2020 supervisory instructions[1] and prescribed global market shocks.
  - AH LLC is also subject to the counterparty default scenario, which requires AH LLC to estimate and report potential losses associated with instantaneous default of the counterparty that would generate the largest losses across its derivative and securities financing transactions by applying the global market shock to exposures as of October 18th, 2019.
- Under the Federal Reserve Board's tailoring rule, adopted in October 2019, AH LLC is categorized as a Category III FBO due to our non-bank asset threshold. Under the final rule, while UBS remains subject to the annual capital plan submission and supervisory stress testing requirement, two key changes are i) the removal of the adverse scenario requirement from both supervisory and company-run stress testing and ii) the removal of the requirement for mid-cycle submission of the stress tests. AH LLC is required to assume capital calculation simplification rule changes beginning in the second quarter of the planning horizon[2]. The simplification rule provides regulatory relief to non-advanced approach institutions by increasing some CET1 capital threshold deduction percentages and eliminating others[3]. The simplification related to the threshold deduction for temporary differences on Deferred Tax Assets entered into effect on April 1, 2020.
- AH LLC is a non-advanced approach banking organization and was not subject to the Supplementary Leverage Ratio ("SLR") as of December 31st, 2019. In accordance with Category III banking organization standards, AH LLC is subject to SLR requirements as of April 1st, 2020. As such, the SLR was not applicable to AH LLC for the 2020 Dodd-Frank Act Annual Stress Test.
- AH LLC has not early adopted CECL, so the application of that accounting standard is not reflected in the forecasts.

[1] 2020 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule, March 2020 (p.7).

[2] 2020 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule, March 2020 (p.8).

[3] See 84 FR 35234 (simplifications final rule).

Implementation of the Stress Capital Buffer ("SCB")

- For CCAR 2020, the Federal Reserve finalized the stress capital buffer ("SCB")[1] requirement which varies by Company based on a firm's risk profile and replaces the fixed 2.5% of risk weighted assets portion of its capital conservation buffer ("CCB") requirement. The SCB formally incorporates the Federal Reserve's modeled stress test results into ongoing capital requirements. In implementing the SCB and subject to a qualitative non-objection of our Capital Plan for CCAR 2020, the Federal Reserve will no longer object to capital plans on quantitative grounds during CCAR. The Federal Reserve will use the results of its supervisory stress test to determine a firm's stress capital buffer requirement.
- A firm that does not maintain capital ratios above its minimums plus its buffer requirements faces restrictions on its capital distributions and discretionary bonus payments. On the other hand, a firm is no longer required to seek prior approval if it makes capital distributions in excess of those included in its capital plan (so long as the firm is otherwise in compliance with the capital rule's automatic restrictions on distributions). The firm must provide the Board and appropriate Reserve Bank with notice within 15 days after making any such capital distributions.
- The Federal Reserve will determine large banks' (i.e. those with greater than $100b in total assets) individual SCBs based on their start-to-trough stressed capital depletions as projected by the Federal Reserve during the annual CCAR review. The final rule adjusted the distribution assumptions used in CCAR by no longer presuming that a firm will make all planned capital distributions, including common stock dividends and repurchases, over the nine-quarter planning horizon. Instead, a firm's stress capital buffer requirement includes four quarters of planned common stock dividends (in the fourth through seventh quarters of the nine-quarter planning horizon).
- The SCB has a floor of 2.5% to ensure that it is at least as conservative as the CCB it replaces.

[1]For further details on the stress capital buffer requirements and calculations see 84 FR 35234 (simplifications final rule).

Description of the Federal Reserve's Supervisory Severely Adverse Stress Test Scenario

The Federal Reserve's Supervisory Severely Adverse Stress Test scenario[1] is characterized by a severe global recession accompanied by a period of heightened stress in commercial real estate markets and corporate debt markets.

- Real US GDP declines by 8½ percent from its pre-recession peak and the unemployment rate increases to 10 percent. Consumer price inflation falls to about 1¼ percent after the first quarter of 2020, before gradually rising to an average 1¾ percent in 2022.
- As a result of the severe decline in real activity, the interest rate for 3-month Treasury bills immediately falls near zero and remains at that level through the end of the scenario. The 10-year Treasury yield immediately falls to ¾ percent during the first quarter of 2020 and rises gradually thereafter to 2¼ percent by the end of the stress-test period. The result is a gradual steepening of the yield curve over most of the stress-test period.
- Financial conditions in corporate and real estate lending markets are stressed severely. The spread between yields on investment-grade corporate bonds and yields on long-term Treasury securities widens to 5½ percentage points by the third quarter of 2020, an increase of 4 percentage points relative to the fourth quarter of 2019.
- Equity prices fall 50 percent through the end of 2020, accompanied by a rise in the VIX, which reaches a peak of 70.
- House prices and commercial real estate prices also experience large overall declines of about 28 percent and 35 percent, respectively, during the first nine quarters of the scenario.
- The Federal Reserve’s Supervisory Severely Adverse Stress Test scenario was released prior to the COVID-19 outbreak in the United States. As such, the scenario does not reflect any impact from COVID-19.

[1] 2020 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule, February 2020. https://www.federalreserve.gov/publications/2020-february-supervisory-scenarios.htm

UBS Americas Holding LLC Dodd-Frank Stress Test – Risk Based Capital Ratio, RWA and Leverage Ratio Projections

Actual Q4 2019 and Projected Capital Ratios[1] through Q1 2022
Under the Federal Reserve's Supervisory Severely Adverse Stress Test Scenario

Regulatory Ratio	Actual Ratio at 12/31/19[2]	Hypothetical Stressed Ratios at 03/31/22	Hypothetical Stressed Minimum Ratios	Regulatory Minimum[3]
Common Equity Tier 1 Ratio (%)	22.1	11.4	11.4	4.5
Tier 1 Capital Ratio (%)	27.7	16.6	16.6	6.0
Total Capital Ratio (%)	29.1	18.1	18.1	8.0
Tier 1 Leverage Ratio (%)	11.8	7.6	7.6	4.0

Risk-Weighted Assets[4]		
in $ billion	Actual RWA at 12/31/19[2]	Hypothetical Stressed RWA at 03/31/22
US Basel III RWA	54.1	59.1

[1]The capital ratios are calculated using capital action assumptions prescribed under 12 CFR 252.56(b). The minimum ratios reflect the lowest value for each ratio over the 9 quarter forecast horizon for the period Q1 2020 to Q1 2022.

[2]As reported in UBS Americas Holding LLC Form FR Y-9C as of December 31, 2019.

[3]12 CFR 217.10 (a) Board-regulated institution must maintain a minimum common equity tier 1 capital ratio of 4.5 percent, a minimum tier 1 capital ratio of 6 percent, a minimum total capital ratio of 8 percent, and a minimum leverage ratio of 4 percent.

[4]Risk-weighted assets are calculated by applying the standardized approach under the Federal Reserve's Regulatory Capital Rules: 12 CFR Parts 208, 217, and 225.

UBS Americas Holding LLC Dodd-Frank Stress Test PPNR and Net Income Projections

Projected Pre-Provision Net revenue, Losses and Net (Loss)/Income Before Taxes from Q1 2020 through Q1 2022 Under the Federal Reserve's Supervisory Severely Adverse Stress Test Scenario

in $ millions	Cumulative Results Over 9 Quarters	% of Average Assets
PPNR[1]	($1,240)	(0.9%)
Less:		
Provision for Loan and Lease Losses	$884	
Realized Losses (Gains) on Securities (AFS/HTM)	($38)	
Trading and Counterparty Losses[2]	$1,349	
Other Losses[3]	$72	
Net Income Before Taxes	($3,507)	(2.5%)

[1]Pre-provision net revenue includes losses from operational-risk events.

[2]Trading and counterparty losses include mark-to-market losses, changes in credit valuation adjustments ("CVA"), incremental default losses and interim market risk components.

[3]Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair value option, goodwill impairment losses and other non-credit losses.

UBS Americas Holding LLC Dodd-Frank Stress Test Projected Loan Losses

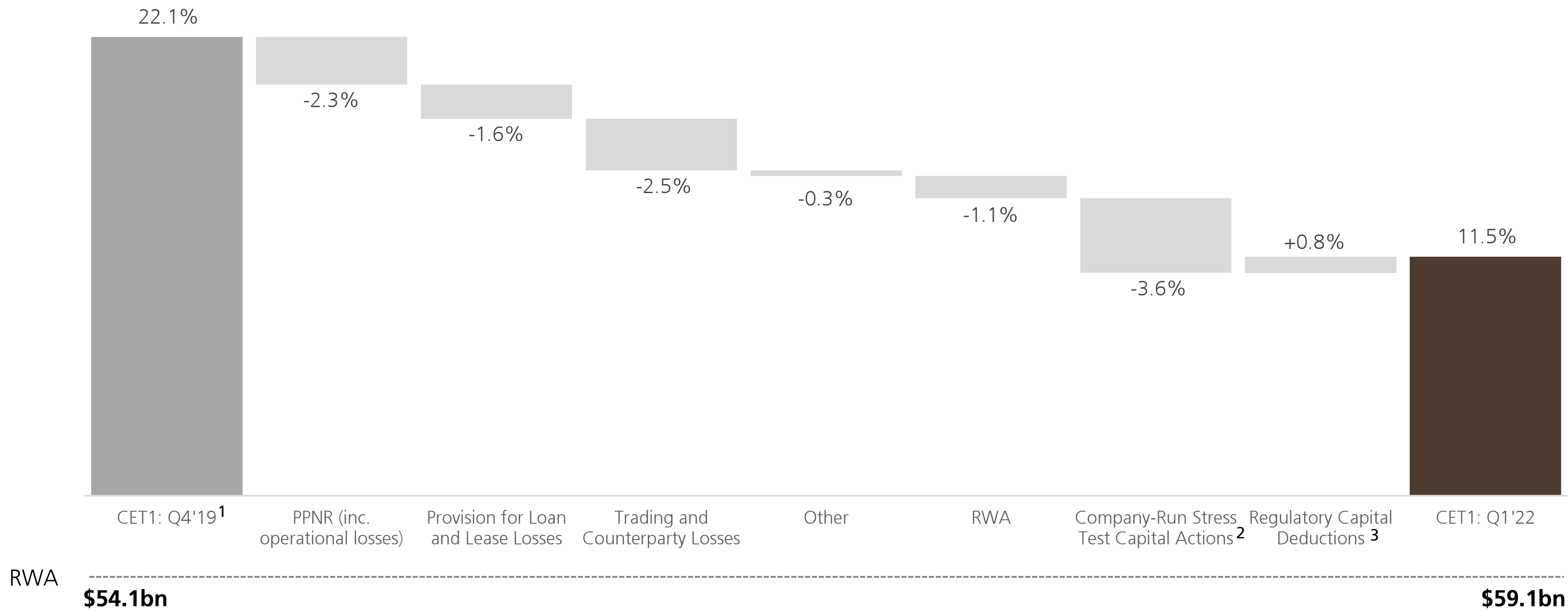
Projected Loan Losses by Type of Loan from Q1 2020 through Q1 2022 under the Federal Reserve's Supervisory Severely Adverse Stress Test Scenario

Loan Type[1] in $ millions	Cumulative Results Over 9 Quarters	Portfolio Loss Rates Over 9 Quarters
Estimated Loan Losses	$717	1.3%
First Lien Mortgages, Domestic	$389	2.0%
Junior Lien Mortgages, Domestic	$0	0.0%
Commercial and Industrial	$3	0.1%
Commercial Real Estate	$21	3.7%
Credit Cards	$25	10.0%
Other Consumer	$65	0.3%
Other Loans	$213	2.8%

[1]Loan categories follow FR Y-14A reporting requirements. Percentage of average balance of the identified type of loans represented by projected aggregate loan losses. Loan balances are averaged over the nine-quarter planning horizon. Average loan balance used to calculate portfolio loss rates excludes loans held for sale and loans held for investment under the fair value option, and are calculated over nine quarters.

UBS Americas Holding LLC Dodd-Frank Stress Test

Key Drivers of Common Equity Tier 1 Capital Ratio (“CET1”)
Under the Federal Reserve's Supervisory Severely Adverse Stress Test Scenario



[1]As reported in UBS Americas Holding LLC Form FR Y-9C as of December 31, 2019.

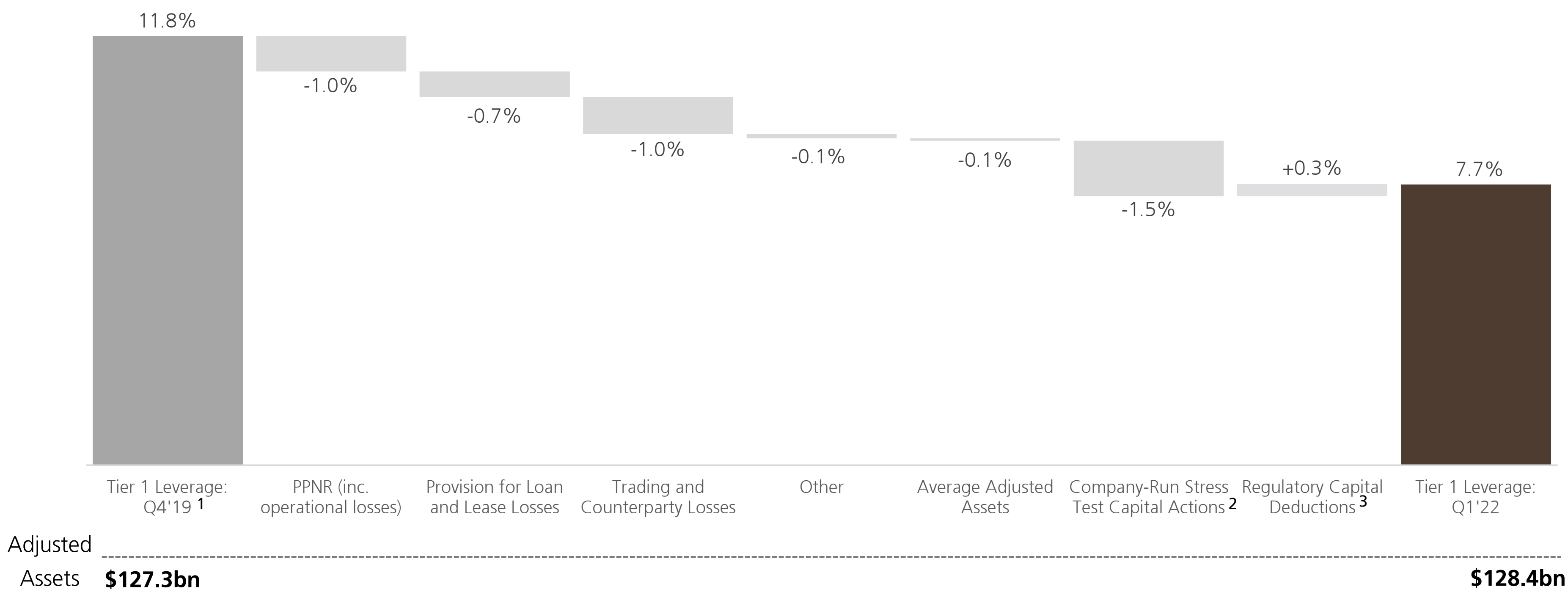
[2]Dodd Frank Capital Actions reflect cash dividends in accordance with the assumptions prescribed in the Dodd-Frank Act Stress Testing Capital Actions, which are outlined on page 3 of this presentation.

[3]Decrease in Regulatory Capital Deductions primarily due to the implementation of the Simplification Rule.

UBS Americas Holding LLC Dodd-Frank Stress Test

Key Drivers of Tier 1 Leverage Ratio

Under the Federal Reserve's Supervisory Severely Adverse Stress Test Scenario



[1]As reported in UBS Americas Holding LLC Form FR Y-9C as of December 31, 2019.

[2]Dodd Frank Capital Actions reflect cash dividends in accordance with the assumptions prescribed in the Dodd-Frank Act Stress Testing Capital Actions, which are outlined on page 3 of this presentation.

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Material risks impacting capital adequacy assessment projections

The below risks are those inherent in AH LLC's business activities and its capital stress tests reflect these risks:

Business/ Strategic Risk	The potential negative impact on earnings from lower-than-expected business volumes and/or margins, to the extent they are not offset by a decrease in expenses.
Compliance and Operational Risk	*Compliance risk:* The financial or reputational risk incurred by AH LLC by not adhering to the applicable laws, rules and regulations, local and international best practice (including ethical standards) and AH LLC's own internal standards. *Operational risk:* Inadequate or failed internal processes, people and systems, or external causes which have an impact to AH LLC, its clients or the markets in which it operates. Operational risk incorporates conduct risk.
Credit Risk	The risk of loss resulting from the failure of a client or counterparty to meet its contractual obligations toward AH LLC. This risk arises from a variety of business activities, including lending commitments, mortgages, traded products, and includes country risk.
Legal Risk[1]	The risk of AH LLC being held liable for a breach of applicable law, rule or regulation, contractual or other legal obligations, or inability or failure to enforce or protect contractual or non-contractual rights sufficiently to protect AH LLC's interests.
Market Risk	The risk of loss resulting from adverse movements in market variables. Market variables include observable variables, such as interest rates, foreign exchange rates, equity prices, credit spreads and commodity prices, and variables that may be unobservable or indirectly observable, such as volatilities and correlations.
Model Risk	The risk of adverse consequences resulting from inadequate model governance, model development, model implementation, model use or model validation processes.
Pension Risk	The risk of a negative impact on capital as a result of deteriorating funded status from decreases in the fair value of assets held in defined benefit pension funds and changes in the value of defined benefit pension obligations due to changes in actuarial assumptions (e.g., discount rate, life expectancy, rate of pension increase) or changes to plan designs.
Reputational Risk[2]	The risk of damage to our reputation from the point of view of our stakeholders, such as clients, shareholders, staff and the general public.
Treasury Risk	The risk of increased cost or reduced access to funding sources. It includes liquidity risk, funding risk and interest rate risk in the banking book.

[1] Legal risks are captured under the Compliance and Operational Risk category.

[2] Losses from historical events that may have caused reputational risk are generally captured through the firm's operational loss forecasting framework.

Forecasting Methodologies Used for the Company-Run Supervisory Severely Adverse Stress Test Scenario

- AH LLC's projected capital ratios under the Company-Run Supervisory Severely Adverse Stress Test Scenario (described on page 5) reflect the effect of the hypothetical macroeconomic and market environment on sources and uses of capital as well as market, credit and operational risk loss projections.
- Under the Company-Run Supervisory Severely Adverse Stress Test Scenario, AH LLC developed the following forecast methodologies to estimate the impact of the hypothetical assumptions over the nine quarter forecast time horizon.

PPNR

- AH LLC's forecast reflects the results of a detailed process in which each major business developed a projection of PPNR over the nine-quarter forecast horizon using a mix of quantitative models, qualitative estimates, and expert judgment-driven approaches.

Losses

- AH LLC's loss projection processes and methodologies consider all identified material risks. These estimation methodologies project the IHC's material exposures to credit, market, and operational risks. The estimation of losses is a key component of the capital planning process and is executed using both quantitative and qualitative projection methodologies. Loss estimation methodologies are organized to cover the exposures below:
  - Banking Book (Retail and Wholesale credit, Securities)
  - Trading
  - Operational risk
  - Counterparty credit risk
- Losses for the banking book are mainly calculated through an expected loss framework, using stressed probability of default, loss given default and exposure at default. Losses for AH LLC's securities-backed lending portfolio are calculated through security-level revaluation of collateral followed by an approximation of the margining process.
- Operational Risk's methodology to project operational losses employs a quantitative approach based on historical losses and a qualitative approach based on estimates of forward looking losses.
- Trading losses are derived as a function of the Federal Reserve's Global Market Shock ("GMS") scenario and the market risk exposures in the AH LLC's Trading Book. The Trading Incremental Default Risk ("IDR") result is computed as an incremental loss arising from issuer defaults following the GMS calculation.
- Counterparty losses are derived as a function of the GMS scenario and measured as credit valuation adjustment ("CVA") impacts under stress and the impact from the default of AH LLC's largest counterparty.

Balance Sheet

- Balance sheet forecasts were developed based on a product-specific projection approach using quantitative regression-based models, which are sensitive to the macroeconomic factors and project behaviors associated with the Supervisory Severely Adverse Stress Test Scenario conditions, which are supported by expert judgment-based assumptions.

Risk-Weighted Assets ("RWAs")

- RWAs are projected under the Basel III standardized approach.
- Credit Risk RWA: Risk weights as prescribed by regulatory rules are applied to projected balances.
- Market Risk RWA: Simulation calculations and forecasting frameworks are used, as appropriate, to project the computation of RWA for general Value at Risk ("VaR") and stressed VaR. Standardized specific risk add-ons are also computed by applying the risk weights prescribed by regulatory rules. De Minimis exposures are also considered.

Capital Position

- AH LLC's capital position was projected by aggregating revenue, loss estimates, balance sheet and RWA projections as outlined above and deriving their respective impacts on the levels of CET1 Capital, Tier 1 Capital and Total Capital and their respective ratios on a quarterly basis over the nine-quarter forecast horizon.